# THE SANCTUARY ON EDWARDS

SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

#### SPECIAL INSPECTIONS

ALL EARTHWORK SHALL BE MONITORED BY A SOILS ENGINEER ONCE SITE IS STRIPPED OF TOPSOIL THE SUBGRADE SHALL BE TESTED, PROOFROLLED & APPROVED FOR ADDITION OF COMPACTED

- SUPERVISE COMPACTION WORK TESTING, LIFTS AS REQUIRED. ENGINEER SHALL PROVIDE APPROVAL OF FINAL SUBGRADE OF BUILDING PAD & PAVING SUBGRADE.
- INSPECT ALL FOOTING TRENCHES & PROVIDE TESTING & APPROVAL OF BEARING CAPACITY OF FOOTING BOTTOM.

#### CONCRETE

- INSPECT ALL REINFORCING INSTALLATIONS IN FOOTINGS. INSPECT VAPOR BARRIER INSTALLATION ALONG WITH THICKENED
- INSPECT ALL FOOTING & SLAB CONCRETE POURS. VERIFY CONCRETE MIX & SLUMP & TAKE CONCRETE CYLINDERS FOR
- EXTERIOR CONCRETE DOES NOT NEED SPECIAL INSPECTION.

- INSPECT INSTALLATION OF STAIR & ELEVATOR TOWERS. THE SUBCONTRACTOR SHALL INFORM THE INSPECTOR OF THE ANTICIPATED SCHEDULE & ANY ADJUSTMENTS BEING MADE TO ALLOW THE INSPECTOR TO SCHEDULE THE INSPECTIONS.
- INSPECT INSTALLATION OF DOWELS. INSPECT REINFORCING, GROUTING & BOND BEAMS, VERIFY THAT PROPER GROUT IS BEING USED & INSTALLED WITH THE PROPER

- GENERAL FRAMING SHALL BE INSPECTED AS WORK PROGRESSES & AS REQUESTED BY THE CONTRACTOR SHEARWALL PLYWOOD & EXTERIOR SHEATHING NAILING SHALL BE
- INSPECTED. INSPECT HOLD-DOWNS AT LOCATIONS SHOWN ON DRAWINGS.
- INSPECT JOIST HANGERS TO VERIFY NAILING & MODEL NUMBER INSPECT LEDGER LAG BOLTS & ANCHOR BOLTS FOR COMPLIANCE WITH DRAWINGS.
- EXTERIOR WALL FRAMING AT OUTSIDE CORNERS & "T" WALL INTERSECTIONS WITH INTERIOR PARTITIONS SHALL BE INSPECTED TO INSURE THE FULL WALL INSULATION CAN BE INSTALLED. ANY DEAD SPACES SHALL BE DRILLED & FOAMED FULL OR DISASSEMBLE THE STUDS & REFRAME.

SEE SPECIAL TESTING/ INSPECTIONS FOR INTERNATIONAL ENERGY CODE COMPLIANCE.

#### **FREQUENCY**

(1) INSPECT EACH AREA AS WORK PROGRESSES. (2) INSPECTIONS AS SOILS ENGINEER DEEMS NECESSARY TO PROVIDE FINAL APPROVAL OF

(3) INSPECT PRIOR TO EACH CONCRETE POUR

(1) PRIOR TO CONCRETE POUR. (2) PRIOR TO CONCRETE POUR. (3) EACH CONCRETE POUR.

(1) PERIODIC

(2) AT TIME OF CONCRETE POUR. (3) PERIODIC AS REQUIRED BASED ON INSTALLATION SCHEDULE. INSPECT BOND BEAM @ EACH FLOOR

(1) EXTERIOR SHEATHING SHALL BE INSPECTED PRIOR TO HOUSE WIRING INSTALLATION. SHEAR WALLS SHALL BE INSPECTED & APPROVED PRIOR TO DRYWALL. (2) INSPECT PRIOR TO INSULATION & DRYWALL (3) AS WORK PROGRESSES, PRIOR TO DRYWALL.

(4) AS WORK PROGRESSES, PRIOR TO DRYWALL.

(5) AS WORK PROGRESSES, PRIOR TO DRYWALL

(1) INSPECT WHEN NOTIFIED THAT WORK IS COMPLETE PRIOR TO DRYWALL.

		UNIT A	REA SU	JMMAR'	Y			
UNIT	NET UNIT AREA	GROSS UNIT AREA	1ST FLOOR	2ND FLOOR	3RD FLOOR	TOTAL UNITS	TOTAL NET UNIT AREA	TOTAL GROSS UNIT AREA
A - ONE BEDROOM APT.	613 SQ.FT.	648 SQ.FT.	3	4	4	11	6,743 SQ.FT.	7,128 SQ.FT.
A1 - ONE BEDROOM APT. (504)	650 SQ.FT.	687 SQ.FT.	2			2	1,300 SQ.FT.	1,374 SQ.FT.
A2 - ONE BEDROOM APT.	650 SQ.FT.	687 SQ.FT.		3	3	6	3,900 SQ.FT.	4,122 SQ.FT.
A3 - ONE BEDROOM APT.	650 SQ.FT.	687 SQ.FT.	1	1	1	3	1,950 SQ.FT.	2,061 SQ.FT.
SUB-TOTAL			6	8	8	22	13,893 SQ.FT.	14,685 SQ.FT.
B - TWO BEDROOM APT.	829 SQ.FT.	878 SQ.FT.	1	1	1	3	2,487 SQ.FT.	2,634 SQ.FT.
B - TWO BEDROOM APT. (ALT)	817 SQ.FT.	866 SQ.FT.	1	1	1	3	2,451 SQ.FT.	2,598 SQ.FT.
B1 - TWO BEDROOM APT. (504)	805 SQ.FT.	857 SQ.FT.	1	1		2	1,610 SQ.FT.	1,714 SQ.FT.
B2 - TWO BEDROOM APT.	805 SQ.FT.	857 SQ.FT.			1	1	805 SQ.FT.	857 SQ.FT.
B3 - TWO BEDROOM APT.	812 SQ.FT.	858 SQ.FT.	1	1	1	3	2,436 SQ.FT.	2,574 SQ.FT.
B4 - TWO BEDROOM APT.	876 SQ.FT.	923 SQ.FT.		1	1	2	1,752 SQ.FT.	1,846 SQ.FT.
B5 - TWO BEDROOM APT.	807 SQ.FT.	853 SQ.FT.	1	1	1	3	2,421 SQ.FT.	2,559 SQ.FT.
B6 - TWO BEDROOM APT.	807 SQ.FT.	849 SQ.FT.	1	2	2	5	4,035 SQ.FT.	4,245 SQ.FT.
SUB-TOTAL			6	8	8	22	17,997 SQ.FT.	19,027 SQ.FT.
TOTAL			12	16	16	44	31,890 SQ.FT.	33,712 SQ.FT.

### **BUILDING GROSS AREA SUMMARY**

FIRST FLOOR	14,179 SQ. FT.
SECOND FLOOR	14,179 SQ. FT.
THIRD FLOOR	14,179 SQ. FT.
TOTAL GROSS AREA	42,537 SQ. FT.

### UNIT BREAKDOWN

ONE BEDROOM	19
ONE BEDROOM (504)	
ONE BEDROOM (SENSORY)	,
TWO BEDROOM	20
TWO BEDROOM (504)	:
TOTAL NUMBER OF UNITS	4

### **BUILDING AREA BREAKDOWN**

ELEVATORS - 3 FLOORS

80 SQ. FT.

234 SQ. FT.

375 SQ. FT.

242 SQ. FT.

2,014 SQ. FT.

### **CIRCULATION:**

LOUNGE

ACTIVITY ROOM

TOTAL COMMON AREAS

ELEVATOR LOBBIES STAIRS - 3 FLOORS CORRIDORS:	66 SQ. FT. 1,365 SQ. FT.
1st FLOOR	1,330 SQ. FT.
2 <sup>nd</sup> FLOOR	1,036 SQ. FT.
3 <sup>rd</sup> FLOOR	1,036 SQ. FT.
TOTAL CIRCULATION	5,147 SQ. FT.
SUPPORT SPACE:	
TRASH ROOM	60 SQ. FT.
STORAGE	144 SQ. FT.
MECHANICAL	250 SQ. FT.
MAINTENANCE	231 SQ. FT.
WATER ROOM	250 SQ. FT.
RENTAL OFFICE	234 SQ. FT.
MAIL	36 SQ. FT.
SOCIAL SERVICE	106 SQ. FT.
OFFICE/STORAGE	145 SQ. FT.
RESTROOMS	99 SQ. FT.
TOTAL SUPPORT	1,664 SQ. FT.
RESIDENT COMMON AREAS	
EXERCISE	350 SQ. FT.
LAUNDRY	279 SQ. FT.
DOG WASH	87 SQ. FT.
COMMUNITY ROOM	681 SQ. FT.
LOUNIOF	075 00 FT

### LIST OF DRAWINGS NO SHEET TITLE

NO.	SHEET	TITLE	NO.	SHEET	TITLE
1.	COVER		50.	P2-1	ENLARGED FIRST FLOOR PLUMBING PLAN
			51.	P2-2	ENLARGED SECOND FLOOR PLUMBING PLAN
2.	CD-1	CODA DATA	52.	P2-3	ENLARGED UNIT PLUMBING PLANS
3.	FR-1	FIRE RESISTANCE RATINGS	53.	P3-1	PLUMBING FIXTURE SCHEDULE, NOTES & DETAILS
4.	FR-2	FIRE RESISTANCE RATINGS	54.	P3-2	PLUMBING FIRE STOP SYSTEMS
5.	FR-3	FIRE RESISTANCE RATINGS			
6.	FR-4	FIRE RESISTANCE RATINGS	55.	H1-1	BUILDING FIRST FLOOR HVAC PLAN
7.	FR-5	FIRE RESISTANCE RATINGS	56.	H1-2	BUILDING SECOND FLOOR HVAC PLAN
			57.	H1-3	BUILDING THIRD FLOOR HVAC PLAN
8.	AS-1	ACCESSIBLE SIGNAGE DETAILS	58.	H2-1	ENLARGED FIRST FLOOR HVAC PLAN
9.	AC-1	ACCESSIBLE STANDARDS	59.	H2-2	ENLARGED SECOND FLOOR HVAC PLAN
10.	FH-1	FAIR HOUSING & ANSI A 117.1 DETAILS	60.	H2-3	ENLARGED UNIT HVAC PLANS
11.	FH-2	ANSI / FAIR HOUSING (TYPE "B" UNITS)	61.	H2-4	ENLARGED UNIT HVAC PLANS
			62.	H3-1	HVAC EQUIPMENT, NOTES & DETAILS
12.	AF-1	BUILDING FOUNDATION PLAN	63.	H3-2	HVAC FIRESTOP SYSTEMS
13.	AF-2	FOUNDATION DETAILS			
14.	A1-1	BUILDING FIRST FLOOR PLAN	64.	E1-1	BUILDING FIRST FLOOR ELECTRICAL PLAN
15.	A1-2	BUILDING SECOND FLOOR PLAN	65.	E1-2	BUILDING SECOND FLOOR ELECTRICAL PLAN
16.	A1-3	BUILDING THIRD FLOOR PLAN	66.	E1-3	BUILDING THIRD FLOOR ELECTRICAL PLAN
17.	A1-4	BUILDING ROOF PLAN	67.	E1-4	BUILDING CABLE & CAMERA PLAN
18.	A2-1	ENLARGED FIRST FLOOR PLAN	68.	E2-1	ENLARGED FIRST FLOOR ELECTRICAL PLAN
19.	A2-2	ENLARGED SECOND FLOOR PLAN	69.	E2-2	ENLARGED SECOND FLOOR ELECTRICAL PLAN
20.	A2-3	ENLARGED UNITS PLANS	70.	E2-3	ENLARGED UNIT ELECTRICAL PLANS
21.	A3-1	INTERIOR ELEVATIONS	71.	E3-1	ELECTRICAL LIGHT FIXTURE SCHEDULE, NOTES & DETAILS
22.	A3-2	INTERIOR ELEVATIONS	72.	E3-2	ELECTRICAL PANELS
23.	A3-3	INTERIOR ELEVATIONS	73.	E3-3	ELECTRICAL FIRESTOP SYSTEMS
24.	A4-1	BUILDING REFLECTED CEILING PLAN	74.	E3-4	ELECTRICAL FIRESTOP SYSTEMS
25.	A5-1	DOOR, WINDOW & FINISH SCHEDULES			
26.	A6-1	EXTERIOR ELEVATIONS			
27.	A6-2	EXTERIOR ELEVATIONS			
28.	A7-1	TYPICAL WALL SECTIONS & DETAILS			
29.	A7-2	TYPICAL WALL SECTIONS & DETAILS			
30.	A7-3	WALL SECTIONS & DETAILS			
31.	A7-4	ENLARGED STAIR PLANS & SECTIONS			
32.	A7-5	ELEVATOR PLAN & SECTIONS			
33.	A7-6	WALL SECTIONS & DETAILS			
34.	A7-7	WALL & STAIR SECTIONS & DETAILS			
35.	A7-8	BUILDING SECTION			
36.	F1-1	BUILDING SECOND FLOOR FRAMING PLAN			
37.	F1-2	BUILDING THIRD FLOOR FRAMING PLAN			
38.	F1-3	BUILDING ROOF FRAMING PLAN			
39.	F2-1	ENLARGED SECOND FLOOR FRAMING PLAN			CVMDOLC LECEND
40.	F2-2	ENLARGED SECOND FLOOR FRAMING PLAN			SYMBOLS LEGEND
41.	F2-3	ENLARGED SECOND & THIRD FLOOR FRAMING PLANS			
42.	F3-1	FLOOR PLAN (HOLD DOWNS, SHEAR WALLS & STUD SPACING)			CODED NOTE - SEE CODED LIST
43.	F3-2	FRAMING DETAILS			
44.	F3-3	STRUCTURAL NOTES & DETAILS			DOOR NUMBER - SEE DOOR SCHEDULE HEADER/COLUMN NUMBER - SEE FRAMING PLANS
45.	P1-1	BUILDING FIRST FLOOR PLUMBING PLAN			SPECIAL OUTLET - SEE ELECTRICAL PLANS
46.	P1-2	BUILDING SECOND FLOOR PLUMBING PLAN			WINDOW NUMBER - SEE WINDOW SCHEDULE
47.	P1-3	BUILDING THIRD FLOOR PLUMBING PLAN			<u> </u>
48.	P1-4	BUILDING WATER SUPPLY PLAN			REVISION MARKER
40	D4 5	DUIL DING DADON DI ANG			<del></del>

### APPLICABLE CODES & STANDARDS

KENTUCKY BUILDING CODE FAIR HOUSING OF 1988 SECTION 504 OF REHABILITATION ACT OF 1973 AMERICANS WITH DISABILITIES ACT OF 2010 ANSI A117.1

2012 IECC KENTUCKY HOUSING MINIMUM DESIGN STANDARDS

### BUILDING CODE INFORMATION

- WOOD FRAME SLAB ON GRADE 3 STORIES
- REINFORCED GRADE BEAM FOUNDATION WITH THICKENED SLABS FOR INTERIOR BEARING WALLS.
- USE GROUP R2, CONSTRUCTION TYPE 5A PROTECTED WITH SPRINKLERS. (NFPA 13R)

OPEN WEB FLOOR TRUSSES AND CONVENTIONAL

- THROUGHOUT WITH RESILIENT CHANNELS ON BUILDING TO HAVE A MANUAL FIRE ALARM SYSTEM
- PER 2018 KENTUCKY BUILDING CODE & NFPA 72.

ROOF TRUSSES, 5/8" FIRE CODE DRYWALL

BUILDING SHALL HAVE A NFPA 13R (RESIDENTIAL) SPRINKLER SYSTEM. (SHOP DRAWINGS TO BE A DELAYED SUBMISSION)

**BUILDING RADON PLANS** 

2. ALL KITCHEN AND VANITY CABINETS PROVIDED WITH LEVER-SHAPED HANDLES OR STANDARD U-SHAPED PULLS, ON ALL DRAWERS AND CABINET DOORS. BATHROOM MEDICINE CABINETS, ABOVE A SINK, ARE NOT INCLUDED.

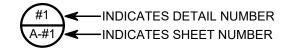
ENRICHED DESIGN QUALITIES (TOTAL OF 5)

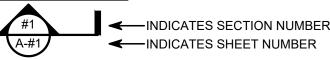
- 3. EITHER (A) A 30-INCH WIDE COMBINATION RANGE/OVEN APPLIANCE WITH FRONT CONTROLS. THE RANGE MUST BE FLUSH WITH THE COUNTERTOP SO ITEMS BEING PULLED OFF THE RANGE CAN SMOOTHLY TRANSITION TO THE COUNTERTOP. CLEAR SPACE FOR A WHEELCHAIR SIDE/PARALLEL APPROACH CENTERED
- ON THE RANGE MUST ALSO BE PROVIDED. 5. BATHROOM LAVATORY WITH REMOVABLE BASE CABINET, PEDESTAL STYLE SINK, OR WALL HUNG SINK THAT ACCOMMODATES A FORWARD SEATED POSITION FROM A WHEELCHAIR. THE FLOOR AND WALL UNDER REMOVABLE CABINETRY MUST BE FINISHED PRIOR TO INSTALLATION OF CABINETRY. PROTECTION FROM HOT AND ABRASIVE HAZARDS IS REQUIRED FOR ALL
- LAVATORIES, SINKS, AND UNDER REMOVABLE CABINETRY. 6. CENTRAL COMMON AREAS THAT CAN BE USED FOR RESIDENT ACTIVITIES TO SUPPORT SOCIAL ENGAGEMENT AND WELLNESS (E.G. FITNESS CLASSES,
- 7. LOBBY TO SUPPORT SOCIAL CONNECTIONS WITH AGE-FRIENDLY SEATING (FIRM SEAT CUSHIONS 18" HIGH AND 18" DEEP, WITH ARMS, BACKS AND WASHABLE FABRIC).

**←**INDICATES DIRECTION 

### Sheet # INDICATES SHEET NUMBER

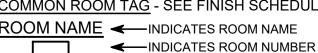
Optional INDICATES OPPOSITE HAND OR SIMILAR DETAIL MARKER



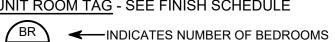


✓—INDICATES SHEET NUMBER

OMMON ROOM TAG - SEE FINISH SCHEDULE



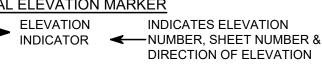
UNIT ROOM TAG - SEE FINISH SCHEDULE

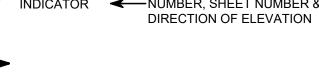


✓—INDICATES UNIT TYPE ✓—INDICATES ROOM NUMBER ✓—INDICATES (504) OR SENSORY UNIT



PARTIAL ELEVATION MARKER







GROUP MEALS).

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SUBMISSION SET PERMIT SET 07/31/2023

BID SET 11/08/2023 CONSTRUCTION SET

#### 1. FIRE RATING & SEPARATION REQUIREMENTS **BUILDING & CODE DATA** CONSTRUCTION TYPE

1 HR

UL U356

UL U305

UL U305

UL U305

UL U906

UL U906

UL L563

UL L512

UL L512

UL P522

VA WOOD FRAME PROTECTED WITH CONSTRUCTION TYPE VA NFPA-13R SPRINKLER SYSTEM 3 STORIES USE GROUP R-2 (MULTI-FAMILY APARTMENTS) BUILDING SHALL BE FULLY SPRINKLERED IN ACCORDANCE WITH NFPA-13R **FIRE RATING TYPES** (RESIDENTIAL)

#### FIRE ALARM

AUDIBLE FIRE ALARM APPLIANCES IN SLEEPING AREA SHALL PRODUCE A LOW FREQUENCY ALARM SIGNAL. THE ALARM SIGNAL SHALL BE A SQUARE WAVE OR EQUIVALENT WAKING ABILITY. THE WAVE SHALL HAVE A FUNDAMENTAL FREQUENCY OF 520Hz PLUS/MINUS 10 PERCENT. SECTION 18.4.5.3 OF THE 2013 NFPA 72 FIRE ALARM CODE.

#### ALLOWABLE AREA PER 506.3.3

FRONTAGE AREA INCREASE (THE BUILDING HAS 100% OF AREA FACING ON A STREET OR DRIVE OR ACCESSIBLE FROM A STREET OR DRIVE):

 $I_f = [F/P - 0.25]W/30$ 

 $I_f = [617/617 - 0.25] 30 / 30$ 

 $I_f = [1 - 0.25] \times 1$ 

 $I_f = .75 \times .9 = 67.5\%$ 

AREA PER FLOOR = 14,179 ALLOWABLE = 12,000 x 1.657 = 20,100 SQ.FT. - OKAY

#### ALLOWABLE AREA PER 506.2.3

 $A_a = [A_t + (NS \times I_f)] \times S_a$  $A_a = [12,000 + (12,000 \times .675] \times 3$  $A_a = [12,000 + 8,100] \times 3$ 

 $A_a = [20,100] \times 3 \text{ SQ.FT.}$ 

 $A_A = 60,300 \text{ SQ.FT.}$ 

ACTUAL AREA = 42,537 SQ.FT. - (OKAY)

ALLOWABLE BUILDING HEIGHT &NUMBER OF STORIES PER 504.4:

R-2, S13R, VA = 60 FEET & 4 STORIES

ACTUAL BUILDING HEIGHT & NUMBER OF STORIES = 35 FEET & 3 STORIES (OKAY)

ONE (1) HOUR RATED

**EXTERIOR WALL** 

ONE (1) HOUR RATED

ASSEMBLY PER UL L563

FLOOR/ CEILING

**BUILDING AREA:** FIRST FLOOR = 14,179 SQ.FT. SECOND FLOOR = 14,179 SQ.FT. = 14,179 SQ.FT = 42,537 SQ.F1

#### ADOPTED BUILDING CODES **USE GROUP R-2 APARTMENT UNITS**

2018 KENTUCKY BUILDING CODE BASED ON 2015 IBC 2012 INTERNATIONAL ENERGY CONSERVATION 2017 NATIONAL ELECTRIC CODE

**ACCESSIBILITY** 

2. EXTERIOR BEARING WALLS

CORRIDOR WALLS (R-2)

ELEVATOR ENCLOSURE

STAIR ENCLOSURES

INTERIOR BEARING WALLS

TENANT SEPARATION WALLS

FLOOR / CEILING ASSEMBLY

(SECOND FLOOR CORRIDORS)

(STAIR & ELEVATION SHAFT CEILING)

9. FLOOR / CEILING ASSEMBLY

10. FLOOR / CEILING ASSEMBLY

11. ROOF / CEILING ASSEMBLY

2010 ADA

ICC A117.1-2009 ACCESSIBLE & USEABLE BUILDING & **FACILITIES** 

504 UNITS (UFAS)

FAIR HOUSING ACT

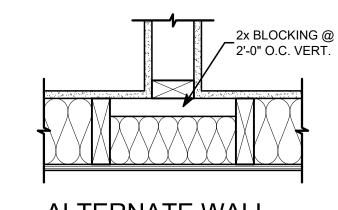
- SUPPLEMENTARY HEAT OPERATION WHEN THE HEAT PUMP COMPRESSOR CAN MEAT THE HEATING LOAD.
- 3. SUPPLY DUCTS IN ATTICS SHALL BE INSULATED TO (R=8). ALL OTHERS SHALL BE INSULATED TO (R=6) UNLESS DUCTS,
- OR PORTIONS THEREOF, ARE LOCATED COMPLETELY INSIDE THE THERMAL ENVELOPE. 4. DUCTS, AIR HANDLERS AND FILTER BOXES SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH CODE. DUCT

**TYPICAL** 

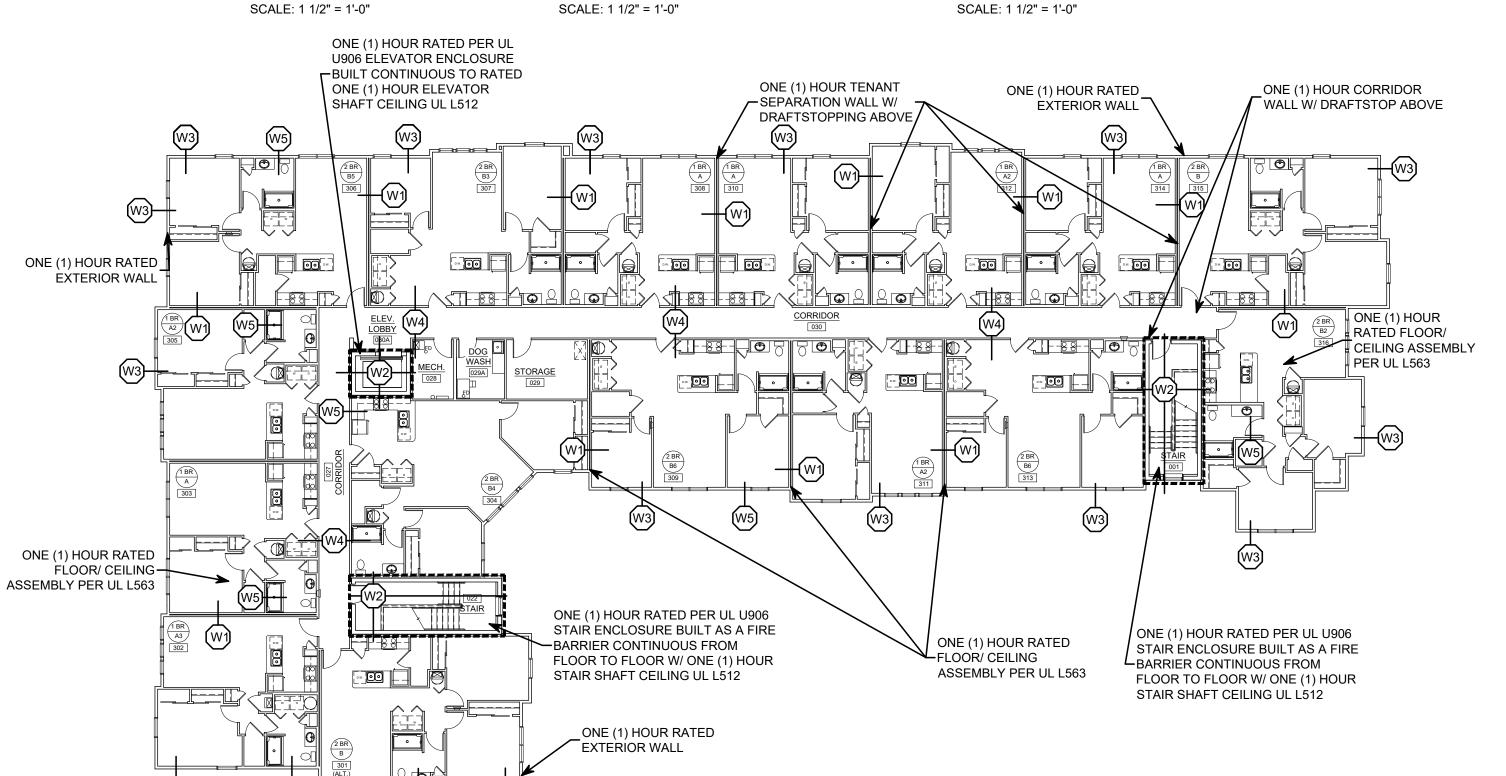
**CORNER DETAIL** 

TYPICAL WALL

INTERSECTION DETAIL



**ALTERNATE WALL** INTERSECTION DETAIL SCALE: 1 1/2" = 1'-0"



SPECIAL TESTING / INSPECTION

INTERNATIONAL ENERGY CONSERVATION CODE

ONE (1) HOUR RATED PER UL

U906 ELEVATOR ENCLOSURE

BUILT CONTINUOUS TO RATED

ONE (1) HOUR ELEVATOR

SHAFT CEILING UL L512

W5

ONE (1) HOUR RATED PER UL

**U906 ELEVATOR ENCLOSURE** 

-BUILT CONTINUOUS TO RATED

ONE (1) HOUR ELEVATOR

SHAFT CEILING UL L512

THIS BUILDING MUST COMPLY WITH THE IECC ESPECIALLY SECTION 400 FOR R-2 MULTI-FAMILY, THREE STORIES OR OF PARTICULAR NOTE ARE:.

401.3 CERTIFICATE. A PERMANENT CERTIFICATE SHALL BE POSTED ON OR IN THE ELECTRICAL DISTRIBUTION PANEL. THE CERTIFICATE SHALL NOT COVER OR OBSTRUCT THE VISIBILITY OF THE CIRCUIT DIRECTORY LABEL, SERVICE DISCONNECT LABEL OR OTHER REQUIRED LABELS. THE CERTIFICATE SHALL BE COMPLETED BY THE BUILDER OR REGISTERED DESIGN PROFESSIONAL. THE CERTIFICATE SHALL LIST THE PREDOMINANT R-VALUES OF INSULATION INSTALLED IN OR ON CEILING/ROOF, WALLS, FOUNDATION (SLAB, BASEMENT WALL, CRAWLSPACE WALL AND/OR FLOOR) AND DUCTS OUTSIDE CONDITIONED SPACES; U-FACTORS FOR FENESTRATION AND THE SOLAR HEAT GAIN COEFFICIENT (SHGC) OF FENESTRATION. WHERE THERE IS MORE THAN ONE VALUE FOR EACH COMPONENT, THE CERTIFICATE SHALL LIST THE VALUE COVERING THE LARGEST AREA. THE CERTIFICATE SHALL LIST THE TYPES AND EFFICIENCIES OF HEATING, COOLING AND SERVICE WATER HEATING EQUIPMENT. WHERE A GAS-FIRED UNVENTED ROOM HEATER, ELECTRIC FURNACE, OR BASEBOARD ELECTRIC HEATER IS INSTALLED IN THE RESIDENCE, THE CERTIFICATE SHALL LIST "GAS-FIRED UNVENTED ROOM HEATER," "ELECTRIC FURNACE" OR "BASEBOARD ELECTRIC HEATER," AS APPROPRIATE. AN EFFICIENCY SHALL NOT BE LISTED FOR GAS-FIRED UNVENTED ROOM HEATERS, ELECTRIC FURNACES OR ELECTRIC BASEBOARD HEATERS.

402.4.1 BUILDING THERMAL ENVELOPE. THE BUILDING THERMAL ENVELOPE SHALL BE DURABLY SEALED TO LIMIT INFILTRATION. THE SEALING METHODS BETWEEN DISSIMILAR MATERIALS SHALL ALLOW FOR DIFFERENTIAL EXPANSION AND CONTRACTION. SEE TABLE R402.4.1.1 OF THE 2012 IECC FOR AIR BARRIER AND INSULATION INSTALLATION.

402.4.2 AIR SEALING AND INSULATION. BUILDING ENVELOPE AIR TIGHTNESS AND INSULATION INSTALLATION SHALL BE DEMONSTRATED TO COMPLY WITH 2012 IECC & ASHRAE STANDARDS FOR VENTILATION & ACCEPTABLE INDOOR AIR QUALITY. TESTING SHALL VERIFY COMPLIANCE & SHALL BE PROVIDED TO KENTUCKY HOUSING CORPORATION. TESTING SHALL BE PERFORMED PER 2012 IECC R402.4.1.2. THE UNITS SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF 3 AIR CHANGES PER HOUR. TESTING SHALL BE PERFORMED WITH A BLOWER DOOR AT A PRESSURE OF 0.2 INCHES W.G. A WRITTEN REPORT SHALL BE PROVIDED BY AN APPROVED THIRD PARTY.

ONE (1) HOUR TENANT

-SEPARATION WALL W/

ONE (1) HOUR RATED PER UL U906

FLOOR TO FLOOR W/ ONE (1) HOUR

-BARRIER CONTINUOUS FROM

STAIR SHAFT CEILING UL L512

ONE (1) HOUR RATED

EXTERÍOR WALL

STAIR ENCLOSURE BUILT AS A FIRE

DRAFTSTOPPING ABOVE

ONE (1) HOUR TENANT

-SEPARATION WALL W/

DRAFTSTOPPING ABOVE/

#### WALL TYPES

- DOUBLE 2x4 STUD WALL W/ 1" AIR SPACE W/ 5/8" F.C. DW ON OUTSIDE OF EACH STUD WALLS FOR A ONE (1) HOUR RATING PER UL341.
- STAIR & ELEVATOR WALLS 8" CONCRETE BLOCK, GROUTED, FOR A ONE (1) HOUR RATING PER UL U906.
- EXTERIOR BEARING WALL SUPPORTING RATED FLOOR/ CEILING ASSEMBLY 2x6 STI ID WALL AT 46" O O OR 75" ASSEMBLY - 2x6 STUD WALL AT 16" O.C. OR 12" O.C. IN LOCATIONS SHOWN ON DWG'S WITH 5/8" FIRE CODE DRYWALL, 7/16" OSB WALL SHEATHING AND SIDING OR BRICK PER UL U356 . RATED FOR FIRE FROM INTERIOR SIDE ONLY.
- CORRIDOR WALLS 2x4 STUDS @ 12" OR 16" O.C. WITH 5/8" FIRE CODE DRYWALL EACH SIDE FOR A ONE (1) HOUR RATING PER UL U305.
- STUD WALLS WITHIN 6 FEET OF A WATER SOURCE (BATH, LAV, KITCHEN SINK, WASHER & WATER HEATER) SHALL HAVE 5/8" MOLD/ MOISTURE RESISTANT FIRE CODE DRYWALL ON THE SIDE OF THE WATER SOURCE RATED WALLS WILL BE SIMILAR TO W1 OR W4 WALL TYPES.

### WALL TYPES SEE SHEET CD-1 FOR ALL WALL TYPES WALLS SHADED TO RECEIVE W5 WALL

ONE (1) HOUR RATED

ONE (1) HOUR RATED

ASSEMBLY PER UL L563

**BUILDING SECOND FLOOR PLAN** 

SCALE: 1/16" = 1'-0" SECOND FLOOR GROSS AREA = 14,179 SQ.FT.

ONE (1) HOUR RATED

EXTERIOR WALL

-FLOOR/ CEILING

EXTERIOR WALL

TYPE ON THE WATER SOURCE SIDE ONLY. STUD WALLS WITHIN 6 FEET OF A WATER SOURCE (BATH, LAV, KITCHEN SINK, WASHER & WATER HEATER) SHALL HAVE 5/8" MOLD / MOISTURE RESISTANT FIRE CODE DRYWALL ON THE SIDE OF THE WATER SOURCE.

ONE (1) HOUR RATED PER UL U906

STAIR ENCLOSURE BUILT AS A FIRE

FLOOR TO FLOOR W/ ONE (1) HOUR

ONE (1) HOUR CORRIDOR

WALL W/ DRAFTSTOP ABOVE

 $\cdot$  ONE (1) HOUR

RATED FLOOR

CEILING ASSEMBLY PER UL L563

BARRIER CONTINUOUS FROM

STAIR SHAFT CEILING UL L512

ONE (1) HOUR CORRIDOR

WALL W/ DRAFTSTOP ABOVE

ONE (1) HOUR

PER UL L563

RATED FLOOR/

CEILING ASSEMBLY

**KONTOGIANNIS** & ASSOCIATES

**ARCHITECTURE PLANNING DESIGN** 

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

**PROJECT:** 

SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B"

11125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: CODE DATA

DATE: 07/31/2023 REVISED:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023 CONSTRUCTION SET

SCALE: 1/16" = 1'-0" THIRD FLOOR GROSS AREA = 14.179 SQ.FT.

**BUILDING THIRD FLOOR PLAN** 

ONE (1) HOUR RATED\_ **EXTERIOR WALL** 

ONE (1) HOUR RATED FLOOR/ CEILING ASSEMBLY PER UL L563 .w. 00

ONE (1) HOUR RATED PER UL U906 BARRIER CONTINUOUS FROM STAIR SHAFT CEILING UL L512

STAIR ÉNCLOSURE BUILT AS A FIRE FLOOR TO FLOOR W/ ONE (1) HOUR

> ONE (1) HOUR RATED EXTERÍOR WALL

ONE (1) HOUR RATED -FLOOR/ CEILING ASSEMBLY PER UL L563

STAIR ÉNCLOSURE BUILT AS A FIRE BARRIER CONTINUOUS FROM FLOOR TO FLOOR W/ ONE (1) HOUR STAIR SHAFT CEILING UL L512

ONE (1) HOUR RATED PER UL U906

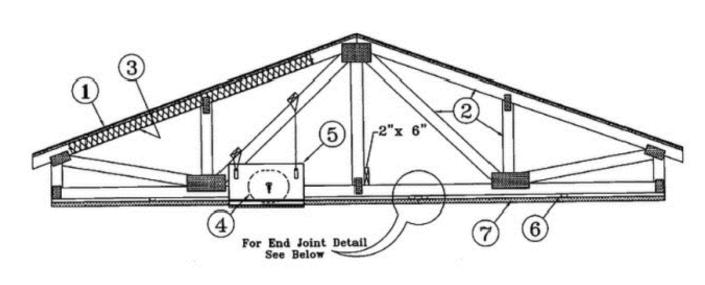
BUILDING FIRST FLOOR PLAN SCALE: 1/16" = 1'-0" FIRST FLOOR GROSS AREA = 14,179 SQ.FT.

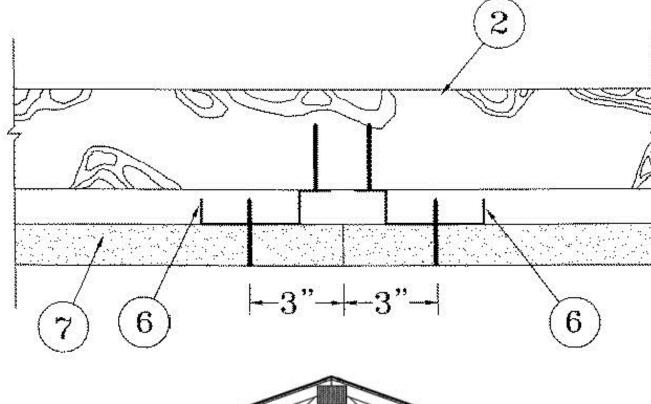
#### Design No. P522 May 22, 2021 Unrestrained Assembly Rating -- 1 H

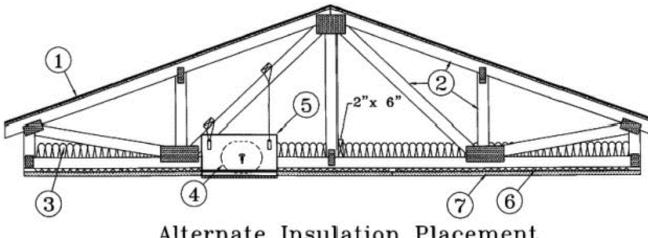
#### Finish Rating -- 25 Min (See Items 3 or 3A)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used -- See Guide <u>BXUV</u> or <u>BXUV7</u>

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively







Alternate Insulation Placement

Roofing System\* -- Any UL Class A. B or C Roofing System (TGFU) or Prepared Roof Covering (TFWZ) acceptable for use over nom 15/32 in. thick wood structural panels. nin, grade "C-D" or "Sheathing". Nom 15/32 in, thick wood structural panels secured to trusses with No. 6d ringed shank nails spaced 12 in, OC along each truss. Staples having egual or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Construction adhesive may be used with either the nails or staples Trusses -- Pitched or parallel chord wood trusses, spaced a max of 24 in, OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Truss members secured together with min. 0.0356 in. thick galv steel plates. Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type plate. Each tooth has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs are repeated on approximately 7/8 in. centers with four rows of teeth per inch of plate width. Minimum parallel chord truss depth shall be 18 in. Where the truss intersects with the interior face of the exterior walls, the min truss depth shall be 5-1/4 in. with a min roof slope of 3/12 and a min. area in the plane of the truss of 21 sq/ft. Where the truss intersects with the interior face of the exterior walls, the min truss depth may be reduced to 3 in. if the batts

Batts and Blankets\* -- (Optional) -- Required when Item 6B is used -- Glass fiber insulation, secured to the wood structural panels with staples spaced 12 in. OC or to the russes with 0.090 in. diam galv steel wires spaced 12 in. OC. Any glass fiber insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance, having a min density of 0.5 pcf. As an option, the insulation may be fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. When Steel Framing Members (Item 6B) are used, max 3-1/2 in. thick insulation shall be draped over the furring channels (Item 6Ba) and gypsum board ceiling membrane, and friction-fitted between trusses and Steel Framing Members (Item 6Bd). The inished rating has only been determined when the insulation is secured to the decking.

3A. Fiber, Sprayed\* -- As an alternate to Item 3 (not evaluated for use with Item 6B) -- Any thickness of spray-applied cellulose insulation material, having a min density of 0.5 lb/ft<sup>3</sup>, applied with water, over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Fiber, Sprayed is applied with moisture in accordance with the application instructions supplied with the product. The finish rating when Fiber Sprayed is used has not been determined. Alternate application method: The fiber is applied without water or adhesive in accordance with the application instructions supplied with a minimum density of 0.5 lb/ft<sup>3</sup> over the resilient channel/gypsum board ceiling membrane when resilient channels and gypsum board attachment is modified as specified in Items 6 and 7. Alternate application method: The fiber is applied without water or adhesive to a nominal density of 3.5 lb/ft<sup>3</sup> behind netting (Item 9) stapled to the rafters. The netting is stapled at both lower edges of the rafters creating a cavity to accept the cellulose fiber.

USGREENFIBER LLC-- INS735, INS745, INS750LD, and SANCTUARY for use with wet or dry application. INS510LD, INS515LD, INS735, INS765LD, and INS773LD are

3B. Foamed Plastic\* -- (As an alternate to Item 3 or 3A, Not Shown) -- Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft<sup>3</sup> density, while maintaining a minimum 8-1/2 in. clearance between the spray foam nsulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt oints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 1. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 through 5K) in the concealed space, minimum 1 in. clearance to be maintained between damper housing and spray foam insulation. Not evaluated for use with Items 6A through 6F. **SES FOAM INC** -- Sucraseal

3C. Cavity Insulation - Batts and Blankets\* or Fiber, Sprayed\* -- (As described above) in Items 3 and 3A -- (For Use with Item 7B, Not Shown) -- Min. 3-1/2 in thick with no limit on maximum thickness fitted in the concealed space, draped over the resilient channel (Item 6G)/gypsum board (Item 7B) ceiling membrane

3D. Foamed Plastic\* -- (As alternate to Item 3, 3A, or 3B, Not Shown) -- Spray foam insulation applied directly to the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 10 in. at a nominal 0.5 lb/ft<sup>3</sup> or 2.0 lb/ft<sup>3</sup> density, depending on the product installed. When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) spaced maximum 3 in. away from gypsum butt joints. Gypsum board (Item 7) to be installed using minimum 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 through 5H) in the concealed space, minimum 1 in. clearance to be naintained between damper housing and spray foam insulation. Not evaluated for use with Items 6A through 6F.

3E, Foamed Plastic\* -- (As an alternate to Item 3, 3A, 3B, 3C, or 3D, Not Shown) -- Spray foam insulation applied directly to the underside of the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 17 in, at a nominal 0.5 lb/ft<sup>3</sup> density, while maintaining a minimum 1-1/2 in, clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is used, resilient channels (Item 6) shall be installed maximum 12 in. OC, with channels adjacent to butt joints of gypsum board (Item 7) installed at 6 in. OC to allow for maximum 3 in. spacing off ends of the gypsum board joints. Gypsum board (Item 7) to be installed using 1-1/4 in. long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 through 5K) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Not evaluated for use with Items 6A through 6F.

BASF CORP -- Enertite® NM, Enertite® G, FE178®, Spraytite® 178, Spraytite® 81206, Walltite® 200, Walltite® US, Walltite® US-N, and Walltite® HP+

3F. Foamed Plastic\* -- (As alternate to Item 3 - not to be used in combination with any alternates to item 3) -- Spray foam insulation applied directly to the underside of the roofing system (Item 1). Spray foam insulation installed to a maximum thickness of 11 in. at a nominal 1.0 lb/ft3 - 2.5 lb/ft3 density, while maintaining a minimum 7 in. clearance between the spray foam insulation and the gypsum board (Item 7). When spray foam insulation is installed, resilient channels (Item 6) shall be installed maximum 12 in, OC, with channels adjacent to butt joints of gypsum board spaced maximum 3 in, away from gypsum butt joints, Gypsum board to be installed using minimum 1-1/4 in, long Type S screws, spaced maximum 8 in. OC, and butted end joints shall be staggered min. 2 ft within the assembly, and occur midway between the continuous furring channels. If used with a fire damper (Items 5 through 5K) in the concealed space, no clearance is necessary between damper housing and spray foam insulation. Only for use with item 6 not evaluated for use with alternates to item 6.

CARLISLE SPRAY FOAM INSULATION -- Types SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Trim 21, SealTite Pro One Zero, oamsulate Closed Cell, Foamsulate OCX, Foamsulate 70, and Foamsulate HFO.

Air Duct\* -- Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer Ceiling Damper\* -- Max nom area, 324 sq in. Max square size, 18 in. by 18 in. rectangular sizes not to exceed 324 sq in. with a max width of 18 in. Max damper height is 4 in. Installed in accordance with manufacturers installation instructions provided with the damper. Max damper openings not to exceed 162 sq in. per 100 sq ft of ceiling area. C&S AIR PRODUCTS -- Model RD-521

5A. Alternate Ceiling Damper\* -- Max nom area, 196 sq in. Max square size, 14 in. by 14 in. Rectangular sizes not to exceed 196 sq in. with a max width of 26 in. Max overall damper height is 7 in. Installed in accordance with the manufacturers installation instructions provided with the damper. Max damper openings not to exceed 98 sq in. per 100 sq

C&S AIR PRODUCTS -- Model RD-521-B **POTTORFF** -- Model CFD-521-BT.

SES FOAM INC -- EasySeal.5

5B. Alternate Ceiling Damper\* -- Max nom area shall be 256 sq in. with the length not to exceed 24 in. and the width not to exceed 20 in. Max height of damper shall be 17 in. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille shall be installed in accordance with installation instructions. **C&S AIR PRODUCTS** -- Model RD-521-IP, RD-521-NP

POTTORFF -- Models CFD-521-IP. CFD-521-NP

5C. Alternate Ceiling Damper\* -- Ceiling damper & fan assembly. Max nom area shall be 75 sq in. with the length not to exceed 8-9/16 in. and the width not to exceed 8-3/4 in. Max height of damper shall be 9-7/8 in. Aggregate damper openings shall not exceed 38 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturers installation instructions provided with the damper. A plastic grille shall be installed in accordance with

**DELTA ELECTRONICS INC** -- Models CRD2, GBR-CRD, ITG-CRD 5D. Alternate Ceiling Damper\* -- Ceiling damper & fan, Max nom area shall be 75 sg in, with the length not to exceed 9-1/4 in, and the width not to exceed 9-3/4 in, Max height of damper shall be 9-7/8 in. Aggregate damper openings shall not exceed 45 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with

nstallation instructions. DELTA ELECTRONICS INC -- Model SIG-CRD

E. Alternate Ceiling Damper\* -- Max nom area shall be 144 sq in. with the length not to exceed 14 in. and the width not to exceed 12 in. Max height of damper shall be 17-7/8 n. Aggregate damper openings shall not exceed 74 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille shall be installed in accordance with installation instructions. C&S AIR PRODUCTS -- Model RD-521-90, RD-521-NP90

POTTORFF -- Models CFD-521-90, CFD-521-90NP F. Alternate Ceiling Damper\* -- Ceiling damper & fan assembly. Max nom area shall be 131 sq in. with the length not to exceed 11-1/16 in. and the width not to exceed 11-7/8 n. Aggregate damper openings shall not exceed 66 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in cordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.

**DELTA ELECTRONICS INC** -- Model SMT-CRD

G. Alternate Ceiling Damper\* -- Ceiling damper & fan assembly. Max nom area shall be 103 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 10-1/8 n. Aggregate damper openings shall not exceed 52 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in cordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions. ANASONIC CORPORATION. PANASONIC CORPORATION OF NORTH AMERICA -- Model PC-RD05C5

4. Alternate Ceiling Damper\* -- Ceiling damper & fan assembly. Max nom area shall be 113 sq in. with the length not to exceed 10-1/8 in. and the width not to exceed 11-1/8 n. Aggregate damper openings shall not exceed 57 sg in, per 100 sg ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in cordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions. BROAN-NUTONE L L C -- Model RDFUWT

I. Alternate Ceiling Damper\* -- Ceiling damper & fan. Max nom area shall be 79 sg in. with the length not to exceed 10 in. and the width not to exceed 7-15/16 in. Aggregate damper openings shall not exceed 40 sq in, per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in accordance vith, the manufacturer's installation instructions provided with the damper. A metallic grille shall be installed in accordance with installation instructions. ROAN-NUTONE L L C -- Models RDJ1 and RDH

J. Alternate Ceiling Damper\* -- Ceiling damper & fan assembly. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sg in, per 100 sg ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in ccordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions. BROAN-NUTONE L L C -- Model RDMWT

5K. Alternate Ceiling Damper\* -- Ceiling damper & fan assembly. Max nom area shall be 87 sq in. with the length not to exceed 9 in. and the width not to exceed 9-11/16 in. Aggregate damper openings shall not exceed 44 sq in. per 100 sq ft of ceiling area. Damper shall be installed in combination with one of the fan models described in, and in ccordance with, the manufacturer's installation instructions provided with the damper. A plastic grille shall be installed in accordance with installation instructions.

Furring Channels -- Resilient channels formed of 25 MSG thick galv steel. Installed perpendicular to the trusses (Item 2), spaced a max of 16 in. OC when no insulation (Item 3 or 3A) is fitted in the concealed spaced, or a max of 12 in. OC when insulation (Item 3 or 3A) is fitted in the concealed space, draped over the resilient channel/gypsum board ceiling membrane, or when insulation (Item 3B, 3D or 3E) is applied to the underside of the roofing system (Item 1). Two courses of resilient channel positioned 6 in. OC at wallboard butt-joints (3 in. from each end of wallboard). Channels oriented opposite at wallboard butt-joints. Channel splices overlapped 4 in. beneath wood trusses. Channels

A. Steel Framing Members\* -- (Not Shown) -- As an alternate to Item 6, furring channels and Steel Framing Members as described below: Furring Channels -- Formed of No. 25 MSG galv steel, 2-9/16 in, or 2-23/32 in, wide by 7/8 in, deep, spaced 16 in, OC perpendicular to trusses when no insulation (Items or 3A) is fitted in the concealed space or 12 in, OC when insulation (Items 3 or 3A) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling nembrane or 24 in, OC when insulation (Items 3 or 3A) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane and a second laver o vosum board is attached as described in Item 7 for steel framing members. Channels secured to trusses as described in Item 6Ab. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap.

Steel Framing Members -- Used to attach furring channels (Item a) to trusses (Item 2), Clips spaced 48 in, OC, RSIC-1 and RSIC-1 (2.75) clips secured to alternating usses with No. 8 by 2-1/2 in. coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to alternating trusses with No. 8 by 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips, RSIC-1 and RSIC-V clips for use with 2-9/16 in, wide furring channels, RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item 6Aa. As an alternate, ends of adjoining channels may be verlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the hannel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7. AC INTERNATIONAL L L C -- Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75).

B. Steel Framing Members\* -- (Not Shown) -- As an alternate to Items 6 and 6A. Furring Channels -- Hat-shaped furring channels, 7/8 in. deep by 2-5/8 in. wide at the base and 1-1/4 in. wide at the face, formed from No. 25 ga. galv steel, spaced max 6 in. OC perpendicular to trusses and Cold Rolled Channels (Item 6Bb). Furring channels secured to Cold Rolled Channels at every intersection with a 1/2 in. pan head elf-drilling screw through each furring channel leg. Ends of adjoining channels overlapped 4 in. and tied together with two double strand No. 18 SWG galv steel wire ties, one at each end of overlap. Supplemental furring channels at base layer and outer layer gypsum board butt joints are not required. Batts and Blankets draped over furring channels as escribed in Item 3. Two layers of gypsum board attached to furring channels as described in Item 7

teel Framing Members (Item 6Bd). Adjoining lengths of cold rolled channels lapped min. 6 in. and wire-tied together with two double strand 18 SWG galv steel wire ties, one at Blocking -- Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 6 in. long to permit full ntact of the hanger bracket, to be secured vertically to the side of the truss (Item 2) at the top and bottom of the blocking at each Steel Framing Member (Item 6Bd) location

Cold Rolled Channels -- 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the

Steel Framing Members\* -- Hangers spaced 48 in. OC. max along truss, and secured to the Blocking (Item 6Bc) on alternating trusses with a single 5/16 in. by 2 in. hex ead lag bolt or four #6 1-1/4 in. drywall screws through mounting hole(s) on the hanger bracket. The two 1/4 in. long steel teeth on the hanger are embedded in the side of the ocking. Hanger positioned on blocking and leveling bolt height adjusted such that furring channels are flush with bottom of trusses before gypsum board installation. Spring gauge of hanger chosen per manufacturer's instructions KINETICS NOISE CONTROL INC -- Type ICW.

C. Steel Framing Members\* -- (Not Shown) -- As an alternate to Items 6, 6A and 6B.

Furring Channels -- Formed of No. 25 MSG galv steel, 2-3/8 in. wide by 7/8 in. deep installed perpendicular to wood structural members. Channels spaced a max of 16 in. OC when no insulation (Item 3 or 3A) is fitted in the concealed space or a max of 12 in. OC when insulation (Item 3 or 3A) is fitted in the concealed space. Channels secured to russes as described in Item 6Cb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire near each end of overlap. Steel Framing Members\* -- Used to attach furring channels (Item 6Ca) to trusses (Item 2). Clips secured to the bottom chord of each truss (48 in. OC) with one No. 8 by 1/2 in. long coarse drywall screw through center grommet. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item 6Ca. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7. LITEQ INC -- Type Genie Clip

D. Steel Framing Members\* -- (Not Shown) -- As an alternate to Items 6, 6A, 6B and 6C. Main runners -- Installed perpendicular to trusses -- Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft OC. Main runners hung a min of 2 in. from bottom nord of trusses with 12 SWG galv steel wire. Wires located a max of 48 in. OC.

Cross tees or channels -- Nom 4 ft long, 15/16 in. or 1-1/2 in. wide face or cross channels, nom 4 ft long, 1-1/2 wide face, installed perpendicular to the main runners,

aced 16 in. OC. Additional cross tees or channels used at 8 in. from each side of butted gypsum board end joints. The cross tees or channels may be riveted or screw-attached the wall angle or channel to facilitate the ceiling installation. Wall angles or channels -- Used to support steel framing member ends and for screw-attachment of the gypsum wallboard -- Min 0.016 in. thick painted or galvanized eel angle with 1 in. legs or min. 0.016 in. thick painted or galvanized steel channel with a 1 by 1-1/2 by 1 in. profile, attached to walls at perimeter of ceiling with fasteners 16 in

**USG INTERIORS LLC** -- Type DGL or RX Furring Channels -- Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When insulation, Items 3 or 3A is used, e furring channel spacing shall be reduced to 12 in, OC. Channels secured to joists as described in Item b.

Steel Framing Members\* -- Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 7. STUDCO BUILDING SYSTEMS -- RESILMOUNT Sound Isolation Clips - Type A237 or A237R

F. Steel Framing Members\* -- (Not Shown) -- As an alternate to Items 6 through 6E- Not for use with Items 3 or 3A. Main runners nom 12 ft long, spaced 72 in. OC. Main nners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC. Cross tees, nom 6 ft long, installed perpendicular to main runners and spaced 24 in. OC. Additional 6 ft long cross tees required at each gypsum board end joint with butted gypsum board end joints centered between cross tees spaced 8 in. OC. The main runners and cross tees may be riveted or screw attached to the wall angle or channel to facilitate the ceiling installation. **USG INTERIORS LLC** -- Type DGL or RX

5. Resilient Channels -- For Use With Item 7B - Formed from min 25 MSG galv steel installed perpendicular to trusses and spaced 16 in. OC. Channels secured to each truss ith 1-5/8 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint. Iditional channels shall extend min 6 in, beyond each side edge of panel, Insulation, Item 3C is applied over the resilient channel/gypsum panel ceiling membrane.

Alternate Steel Framing Members\* -- (Not Shown) -- As an alternate to items 6 through 6G, furring channels and Steel Framing Members as described below. Furring Channels -- Formed of No. 25 MSG galv steel, 2-1/2 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to trusses. When insulation, Items 3 or 3A is used, furring channel spacing shall be reduced to 12 in, OC. Channels secured to joists as described in Item b. Steel Framing Members\* -- Used to attach furring channels (Item a) to the wood trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with

ine 2-1/2 in. Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in Item 7. EGUPOL AMERICA -- Type SonusClip

Gypsum Board\* -- One layer of nom 5/8 in. thick by 48 in. wide boards, installed with long dimension parallel to trusses. Attached to the resilient channels using 1 in. g Type S bugle-head screws. Screws spaced a max of 12 in. OC along butted end-joints and in the field when no insulation (Item 3 or 3A) is fitted in the concealed spaced, o max of 8 in, OC along butted end-joints and in the field when insulation (Item 3 or 3A) is fitted in the concealed space, draped over the resilient channel/gypsum board ceiling embrane. When insulation (Item 3B, 3D or 3E) is installed in the concealed space, spray-applied to the underside of the roofing system (Item 1), screws are spaced a max of 8 in OC along resilient channels, fasteners are increased in length to 1-1/4 in, and gypsum board butt joints shall be staggered min. 2 ft within the assembly, and occur between the ain furring channels.

When Steel Framing Members\* (Item 6A or 6C) are used, sheets installed with long dimension perpendicular to furring channels and side joints of sheet located beneath

trusses. Gypsum board screws are driven through channel spaced 12 in, OC in the field when no insulation (Item 3 or 3A) is fitted in the concealed space, or 8 in, OC in the field when insulation (Item 3 or 3A) is fitted in the concealed space, draped over the furring channel/gypsum board ceiling membrane. Gypsum board butt joints shall be staggered min. 2 ft within the assembly, and occur between the main furring channels. At the gypsum board butt joints, each end of the gypsum board shall be supported by a single ength of furring channel equal to the width of the wallboard plus 6 in. on each end. The furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to the russes with one clip at each end of the channel. Screw spacing along the butt joint to attach the gypsum board to the furring channels shall be 8 in. OC. Second (outer) layer of /psum board required when furring channels (Item 6A, a) are spaced 24 in. OC and insulation is fitted in the concealed space, draped over the furring channel/gypsum board illing membrane. Outer layer of gypsum board attached to the furring channels using 1-5/8 in. long Type S bugle-head screws spaced 8 in. OC at butted joints and 12 in. OC in he field. Butted end joints of outer layer to be offset a minimum of 8 in. from base layer end joints. Butted side joints of outer layer to be offset minimum 18 in. from butted side

(hen Steel Framing Members (Item 6B) are used, two layers of nom 5/8 in. thick, 4 ft wide gypsum board are installed with long dimensions perpendicular to furring channels em 6Ba). Base layer attached to the furring channels using 1 in. long Type S bugle head steel screws spaced 8 in. OC along butted end joints and 12 in. OC in the field of the ard. Butted end joints centered on the continuous furring channels. Butted base layer end joints to be offset a min of 16 in. in adjacent courses. Outer layer attached to the ing channels using 1-5/8 in. long Type S bugle head steel screws spaced 8 in. OC at butted end joints and 12 in. OC in the field. Butted end joints centered on the continuou ing channels and offset a min of 16 in. from butted end joints of base layer. Butted side joints of outer layer to be offset min 16 in. from butted side joints of base layer.

(hen Steel Framing Members (Item 6C) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. ypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be aggered minimum 72 in. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the osum board plus 3 in. on each end, spaced approximately 2 in. in from joint. Screw spacing along the gypsum board butt joint shall be 8 in. OC. Butt joint furring channels shal e attached with a RESILMOUNT Sound Isolation Clip secured to underside of every truss that is located over the butt joint. Over all Gypsum Board side joints, approximately 20 1. lengths of furring channel shall be installed parallel to trusses (Item 2) between main furring channels. Side joint furring channels shall be attached to underside of the joist with RESILMOUNT Sound Isolation Clips - located approximately 2 in. from each end of the approximate 20 in. length of channel. Both Gypsum Boards at side joints fastened into nannel with screws spaced 8 in. OC, approximately 1/2 in. from joint edge.

/hen Steel Framing Members (Item 6E) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end ioints shall be taggered minimum 48 in, and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 3 in. on each end. The two support furring channels shall be spaced approximately 3 in. in from end joint. Screw pacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Additional screws shall be placed in the adjacent section of gypsum board into e aforementioned 3 in. extension of the extra butt joint channels as well as into the main channel that runs between. Butt joint furring channels shall be attached with one RESILMOUNT Sound Isolation Clip at each end of the channel.

When alternate **Steel Framing Members\*** (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board sheets installed with long dimension (side joints) perpendicular to the 6 ft long cross tees with the end joints staggered min 4 ft and centered between cross tees which are spaced 8 in. OC. Gypsum board side joints may occu eneath or between main runners. Prior to installation of the gypsum board sheets, backer strips consisting of nom 7-3/4 in. wide pieces of gypsum board are to be laid atop the ross tee flanges and centered over each butted end joint location. The backer strips are to be secured to the flanges of the cross tees at opposite corners of the backer strip with nold down clips to prevent the backer strips from being uplifted during screw-attachment of the gypsum board sheets. Gypsum board fastened to cross tees with 1 in. drywall crews spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. The butted end joints are to be secured to the backer strip with No. 10 by 1-1/2 in. ng Type G laminating screws located 1 in. from each side of the butted end joint and spaced 1 in. and 4 in. from the side joints and max 8 in. OC in the field of the board. Vhen Steel Framing Members (Item 6H) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels.

ypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be ggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be paced approximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at every truss involved with the butt

CGC INC -- Types C. IP-X2, IPC-AR UNITED STATES GYPSUM CO -- Types C, IP-X2, IPC-AR **USG BORAL DRYWALL SFZ LLC** -- Type C

**USG MEXICO S A DE C V** -- Types C, IP-X2, IPC-AR

'A. Gypsum Board\* -- For use with Steel Framing Members (Item 6D) when Batts and Blankets\* (Item 3) are not used - One layer of nom 5/8 in. thick by 48 in. wide boards, istalled with long dimension parallel to the main runners. Gypsum board fastened to each cross tee or channel with five wallboard screws, with one screw located at the midspan of the cross tee or channel, one screw located 12 in. from and on each side of the cross tee or channel mid span and one screw located 1-1/2 in. from each gypsum board side joint. Except at wallboard end joints, wallboard screws shall be located on alternating sides of cross tee flange. At gypsum board end joints, gypsum board screws shall be located 1/2 in. from the joint. Gypsum board fastened to main runners with wallboard screws 1/2 in. from side joints, midway between intersections with cross tees or channels (16 in, OC). End joints of adjacent gypsum board sheets shall be staggered not less than 32 in, Gypsum board sheets screw attached to leg of wall angle with wallboard screws spaced 12 in. OC. Joints treated as described in Item 7. For use with Steel Framing Members\* (Item 6D) when Batts and Blankets\* (Item 3) are used - Ratings limited to Hour - 5/8 in. thick, 4 ft wide; installed with long dimension perpendicular to cross tees with side joints centered along main runners and end joints centered along cross tees. Fastened to cross tees with 1 in. long steel gypsum board screws spaced 8 in. OC in the field and 8 in. OC along end joints. Fastened to main runners with 1 in. long gypsum board screws spaced midway between cross tees. Screws along sides and ends of boards spaced 3/8 to 1/2 in. from board edge. End joints of the sheets shall be staggered with spacing between joints on adjacent boards not less than 4 ft OC.

CGC INC -- Type C or IP-X2 UNITED STATES GYPSUM CO -- Type C or IP-X2

USG BORAL DRYWALL SFZ LLC -- Type C USG MEXICO S A DE C V -- Type C or IP-X2

7B. **Gypsum Board\*** -- For use with Items 3C and 6G. Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 8 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. Finish Rating with this ceiling system is 20 min. CGC INC -- Type ULIX

UNITED STATES GYPSUM CO -- Type ULIX

Finishing System -- (Not Shown) -- Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads; paper tape, 2 in. wide, embedded in first layer f compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board. Alternate Ceiling Membrane -- No

Netting -- Fibrous, woven netting material fastened to underside of each joist with staples, with side joints overlapped.

Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively. Last Updated on 2021-05-22

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## **KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE **PLANNING DESIGN** 

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

PROJECT:

SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B'

11125 EDWARDS RD. ELSMERE, KY 41018

RATINGS

REVISED:

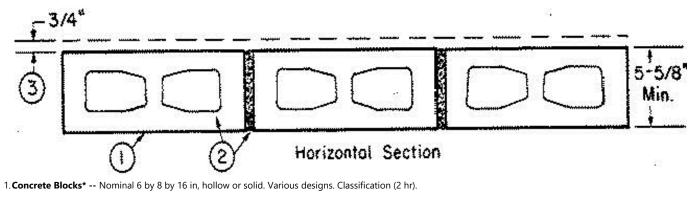
DATE: 07/31/2023

Nonbearing Wall Rating -- 2 HR. This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used -- See DRAWING TITLE: Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such FIRE RESISTANCE

Design No. U906

Bearing Wall Rating -- 2 HR.



See **Concrete Blocks** category for list of eligible manufacturers. ANCHOR CONCRETE PRODUCTS INC GAGNE & SON CONCRETE BLOCK INC

**GLENWOOD MASONRY PRODUCTS** Allowable compressive stress of 57% of max allowable compressive stress in accordance with the empirical design method **OLDCASTLE APG SOUTH INC, DBA ADAMS PRODUCTS** 

WESTBROOK CONCRETE BLOCK CO INC

Allowable compressive stress of 75.6% of max allowable compressive stress in accordance with the empirical design method. 2.Mortar -- Blocks laid in full bed of mortar, nom. 3/8 in. thick, of not less than 2-1/4 and not more than 3-1/2 parts of clean sharp sand to 1 part Portland cement (proportioned by volume) and not more than 50 percent hydrated lime (by cement volume). Vertical joints staggered

3.Portland Cement Stucco or Gypsum Plaster -- Add 1/2 hr to Classification if used. Attached to concrete blocks (Item 1). 4.Foamed Plastic\* -- (Optional-Not Shown) -- 1-1/2 in. thick max, 4 ft wide sheathing attached to concrete blocks (Item 1). ATLAS ROOFING CORP -- "EnergyShield Pro Wall Insulation", "EnergyShield Pro 2 Wall Insulation", EnergyShield CGF Pro and EnergyShield Ply Pro

DUPONT DE NEMOURS, INC. -- Types Thermax Sheathing, Thermax Light Duty Insulation, Thermax Heavy Duty Insulation, Thermax Metal Building Board, Thermax Whit Finish Insulation, Thermax ci Exterior Insulation, Thermax XARMOR ci Exterior Insulation, Thermax IH Insulation, Thermax Plus Liner Panel, Thermax Heavy Duty Plus (HDP), TUFF-R™ ci Insulation, Thermax Butler Stylwall Insulation Board and Thermax Morton Heavy Duty Insulation Board

FIRESTONE BUILDING PRODUCTS CO L L C -- "Enverge™ CI Foil Exterior Wall Insulation" and "Enverge™ CI Glass Exterior Wall Insulation"

HUNTER PANELS, A DIVISION OF CARLISLE CONSTRUCTION MATERIALS, LLC -- Types "Xci-Class A", "Xci 286", "Xci Foil (Class A)" RMAX, A BUSINESS UNIT OF SIKA CORPORATION -- Types "TSX-8500", "ECOMAXci FR", "TSX-8510", "ECOMAX xi FR White", "ECOMAXci", "ECOMAXci FR Air Barrier' 'Thermasheath-XP", "Thermasheath", "Durasheath", "Thermasheath-3", "Durasheath-3". JOHNS MANVILLE -- Type "AP Foil-Faced Foam Sheathing"

4A. Building Units\* -- As an alternate to Item 4, min. 1-in thick polyisocyanurate composite foamed plastic insulation boards, nom. 48 by 48 or 96 in. RMAX, A BUSINESS UNIT OF SIKA CORPORATION -- "Thermasheath-SI", "ECOBASEci", "ThermaBase-CI", "ECOMAXci FR Ply", "ECOMAXci Ply" \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification

(such as Canada), respectively.

<u>Last Updated</u> on 2020-11-09

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CARLISLE COATINGS & WATERPROOFING INC -- Type R2+ SHEATHE

GEORGE J. KONTOGIANNIS, LICENSE #1636

GEORGE J. KONTOGIANNIS & ASSOCIATES

EXPIRATION DATE 06/30/2024

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SUBMISSION SET

BID SET 11/08/2023

CONSTRUCTION SET

PERMIT SET 07/31/2023

FIRE RATING FOR 1 HOUR ROOF/CEILING ASSEMBLY U.L. DESIGN NO. P522

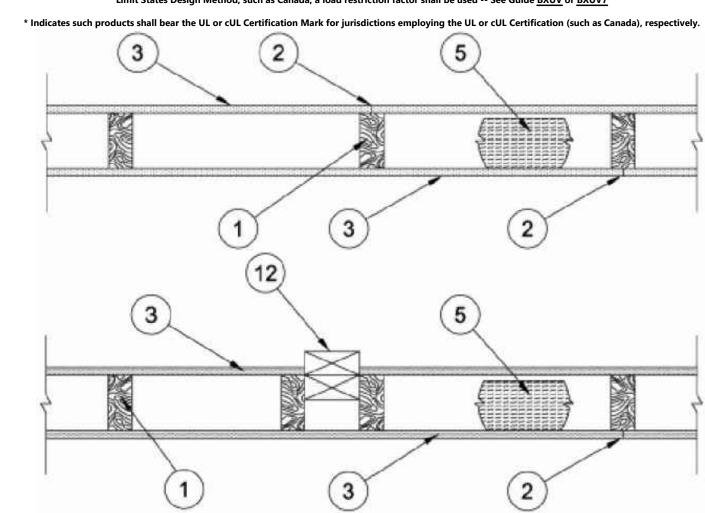
FIRE RATING FOR 1 HOUR ROOF/CEILING ASSEMBLY U.L. DESIGN NO. P522

FIRE RATING FOR 1 HOUR ROOF/CEILING ASSEMBLY U.L. DESIGN NO. P522

FIRE RATING FOR 2 HOUR BEARING WALL RATING U.L. DESIGN NO. U906

Design No. **U305** February 14, 2022 Bearing Wall Rating -- 1 H Finish Rating -- See Items 3, 3A, 3D, 3E, 3F, 3G, 3H, 3J and 3L. STC Rating - 56 (See Item 9)

nis design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the NATIONAL GYPSUM CO -- Type FSW-3 (finish rating 20 min), Type Limit States Design Method, such as Canada, a load restriction factor shall be used -- See Guide BXUV or BXUV7



Wood Studs -- Nom 2 by 4 in. spaced 16 in. OC max, effectively firestopped.

2 Joints and Nail-Heads -- Joints covered with joint compound and paper tape, Joint compound and paper tape may be omitted when square edge boards are used. As an alternate, nom 3/32 in, thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with the joints reinforced with paper tape. Nailheads exposed or covered with joint compound

3. **Gypsum Board\*** -- 5/8 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC with 6d AMERICAN GYPSUM CO -- Types AGX-1 cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths other than 48 in., gypsum panels are to be installed horizontally. For an alternate method of attachment of gypsum panels, refer to Items 6 through 6F, Steel Framing Members\*.

When Items 6, 6B, 6C, 6D, 6E, or 6F, Steel Framing Members\*, are used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in.

When Item 6A, Steel Framing Members\*, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers aggered with joints in base layers. One layer of gypsum board attached to opposite side of wood stud without furring channels as described in Item 3.

When Item 7, resilient channels are used, 5/8 in. thick, 4 ft wide gypsum panels applied vertically. Screw attached furring channels with 1 in. long, self-drilling, self-tapping Type S-12 steel screws spaced 8 in. OC, vertical joints located midway between studs. AMERICAN GYPSUM CO -- Types AGX-1(finish rating 23 min.), M-Glass (finish rating 23 min.), Type AGX-11 (finish rating 26 min), Type AGX-12 (finish rating 22 min), Type LightRoc (finish rating 23 min.) or Type AG-C

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO -- Type DBX-1 (finish rating 24 min) CABOT MANUFACTURING ULC -- Type X (finish rating 22 min), 5/8 Type X, Moisture Resistant Type X, Gypsum Sheathing Type X, Mold & Mildew Resistant Type X and Mold & dew Resistant AR Type X, Type Blueglass Exterior Sheathing

CERTAINTEED GYPSUM INC -- Type C, Type X or Type X-1 (finish rating 26 min); Type EGRG or GlasRoc (finish rating 23 min), GlasRoc-2, Type Habito (finish rating 26 min). CGC INC -- Type AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SCX (finish rating 24 min), Type WRX (finish rating 24 min), Typ 24 min), Type ULIX (finish rating 20 min)

CERTAINTEED GYPSUM INC -- Type LGFC6A (finish rating 34 min), Type LGFC-C/A, Type LGFC-WD, Type LGLLX (finish rating 21 min), Type CLLX (finish rating 24

GEORGIA-PACIFIC GYPSUM L L C -- Type 5 (finish rating 26 min), Type 6 (finish rating 23 min), Type 9 (finish rating 26 min), Type C (finish rating 26 min), Type DGG 20 min), Type GPFS1 (finish rating 20 min), Type GPFS2 (finish rating 20 min), Type GPFS6 (finish rating 26 min), Type DS, Type DAP, Type DD (finish rating 20 min), Type DA, Type DAPC, Type LS (finish rating 23 min), Type X, Veneer Plaster Base - Type X, Water Rated - Type X, Sheathing - Type X, Soffit - Type X, Type LWX (finish rating 22 min), Veneer Plaster JOHNS MANVILLE Base-Type LWX (finish rating 22 min), Water Rated-Type LWX (finish rating 22 min), Sheathing Type-LWX (finish rating 22 min), Soffit-Type LWX (finish rating 22 min), Type DGLW (finish rating 22 min), Water Rated-Type DGLW (finish rating 22 min), Sheathing Type- DGLW (finish rating 22 min), Soffit-Type DGLW (finish rating 22 min), Type LWX 22 min), Type LW2X (finish rating 22 min), Veneer Plaster Base - Type LW2X (finish rating 22 min), Water Rated - Type LW2X (finish rating 22 min), Sheathing - Type LW2X (finish rating 22 min), Soffit - Type LW2X (finish rating 22 min), Type DGL2W (finish rating 22 min), Water Rated - Type DGL2W (finish rating 22 min), Sheathing - Type DGL2W (finish

NATIONAL GYPSUM CO -- Type FSK (finish rating 20 min), Type FSK-G (finish rating 20 min), Type FSW (finish rating 20 min), Type FSW-2 (finish rating 24 min), Type FSW-3 (finish rating 20 min) rating 20 min), Type FSW-5 (finish rating 20 min), Type FSW-G (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSW-G (finish rating 20 min), finish rating 20 min), Type FSL (finish rating 24 min), Type FSW-8, Type FSLX (finish rating 21 min), Type RSX (finish rating 26 min). NATIONAL GYPSUM CO -- Riyadh, Saudi Arabia -- Type FR, or WR.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Types C, PG-2 (finish rating 20 min), PG-3 (finish rating 20 min), Types PG-3W, PG-5W (finish rating 20 min), Types W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions supplied with 1-1/4 in. long, Type W, bugker in accordance with the application instructions are accordance with the accordance w ish rating 20 min), Types PG-5, PG-9 (finish rating 26 min), PG-11 PG-13 (Nails increased to 2 in.), Type PG-C or PGI (finish rating 26 min)

PANEL REY S A -- Type ARX, GREX, GRIX, PRX, PRC, PRC2; Types RHX, Guard Rey, MDX, ETX (finish rating 22 min), PRX2 (finish rating 21 min)

**SIAM GYPSUM INDUSTRY (SARABURI) CO LTD** -- Type EX-1 (finish rating 26 min) THAI GYPSUM PRODUCTS PCL -- Type C, Type X (finish rating 26 min)

UNITED STATES GYPSUM CO -- Type AR (finish rating 24 min), Type C (finish rating 24 min), Type FRX-G (finish rating 29 min), Type IPC-AR (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SCX (finish rating 24 min), Type min), Type ULX (finish rating 22 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type ULIX (finish rating 20 min) **USG BORAL DRYWALL SFZ LLC** -- Type SGX (finish rating 24 min).

USG MEXICO S A DE C V -- Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (f 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IP-A A. Gypsum Board\* -- (As an alternate to Item 3) -- 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels

fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths of other than 48 in., gypsum boards are to be installed horizontally

AMERICAN GYPSUM CO -- Types AGX-1 (finish rating 25 min.), M-Glass (finish rating 25 min.), AG-C (finish rating 25 min.), LighttRoc (finish rating 25 min.) CERTAINTEED GYPSUM INC -- Type C, Type X, Type X-1 (finish rating 26 min), Type EGRG or GlasRoc.

CGC INC -- Type AR (finish rating 24 min), Type IP-AR (finish rating 24 min), Type IP-IP-X2 (finish rating 24 min), Type SCX (finish rating 24 min), Type SHX (finish rating 24 min), Type WRX (finish rating 24 min) NATIONAL GYPSUM CO -- Type FSW (finish rating 24 min)

UNITED STATES GYPSUM CO -- Type AR (finish rating 24 min), Type SCX (finish rating 24 min), Type SGX (finish rating 24 min), Type C (finish rating 24 min), Type WRX (finish rating 24 min), Type WRC (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type FRX-G (finish rating 24 min), Type IP-X2 (finish rating 24 min), Type IP-X1 (finish rating 24 min), Type min), Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min) **USG BORAL DRYWALL SFZ LLC** -- Types C, SCX, SGX (finish rating 24 min).

USG MEXICO S A DE C V -- Type AR (finish rating 24 min), Type C (finish rating 24 min), Type WRX (f 24 min), Type IP-X2 (finish rating 24 min), Type SHX (finish rating 24 min), Type SCX, Type IP-AR (finish rating 24 min), Type IPC-AR (finish rating 24 min) 3B. **Gypsum Board\*** -- (As an alternate to Item 3) -- Nom 3/4 in. thick, installed with 1-7/8 in. long cement coated nails as described in Item 3 or 1-3/8 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A.

UNITED STATES GYPSUM CO -- Types AR, IP-AR **USG MEXICO S A DE C V** -- Types AR, IP-AR

CGC INC -- Types AR, IP-AR

C. Gypsum Board\* -- (As an alternate to Items 3, 3A and 3B) -- 5/8 in. thick, 2 ft wide, tongue and groove edge, applied horizontally to one side of the assembly. Installed with -7/8 in. long cement coated nails as described in Item 3 or 1-1/4 in. long Type W coarse thread gypsum panel steel screws as described in Item 3A. Joint covering (Item 2) not CGC INC -- Type SHX

UNITED STATES GYPSUM CO -- Type SHX

USG MEXICO S A DE C V -- Type SHX 3D. **Gypsum Board\* --** (As an alternate to Items 3, 3A, 3B, or 3C -- Not Shown) -- For Direct Application to Studs Only- Nom 5/8 in. thick lead backed gypsum panels with beveled, b. **Steel Framing Members\* --** Used to attach furring channels (Item 6a) to studs. Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to studs with No. 8 x 2-1/2 in. square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead batten strips, min 1-1/2 in. wide, max 10 ft long with a max thickness of 0.125 in. placed on the face of studs and attached

to the stud with two 1 in. long Type S-12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs or tabs may be used in lieu of or in PAC INTERNATIONAL L L C -- Types RSIC-1, RSIC-V, RSIC-1 (2.75), RSIC-V (2.75) addition to the lead batten strips or optional at other locations. Max 3/4 in. diam by max 0.125 in. thick lead discs compression fitted or adhered over steel screw heads or max 1/2 in. by 1-1/4 in. by max 0.125 in. thick lead tabs placed on gypsum boards underneath screw locations prior to the installation of the screws. Lead batten strips to have a purity of 6A. Steel Framing Members\* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members on one side of studs as described below: 99.9% meeting the Federal specification QQ-L-201f, Grade "C". **RAY-BAR ENGINEERING CORP** -- Type RB-LBG (finish rating 24 min)

E. Gypsum Board\* -- (As an alternate to Items 3, 3A, 3B, 3C, and 3D) -- 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed 7 in. OC b. Steel Framing Members\* -- Used to attach furring channels (Item 6Aa) to one side of studs only. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. When used in widths of other than 48 in., gypsum boards are to be installed drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips. **KINETICS NOISE CONTROL INC -- Type Isomax** 

GEORGIA-PACIFIC GYPSUM L L C -- Type DGG (finish rating 20 min), GreenGlass Type X (finish rating 23 min)

F. Gypsum Board\* -- (As an alternate to Items 3, 3A, 3B, 3C, 3D, and 3E) -- 5/8 in. glass-mat faced with square edges, applied either horizontally or vertically. Gypsum panels nailed 7 in. OC around the perimeter and in the field with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Nails shall be placed 1 inch and 3 inch from horizontal joints and 7 inch OC thereafter

CGC INC -- Type USGX (finish rating 22 min) **UNITED STATES GYPSUM CO** -- Type USGX (finish rating 22 min.)

**USG BORAL DRYWALL SFZ LLC** -- , Type USGX (finish rating 22 min.)

USG MEXICO S A DE C V -- Type USGX (finish rating 22 min.) 3G. Gypsum Board\* -- (As an alternate to Items 3 through 3F) -- 5/8 in. thick paper surfaced applied vertically. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in

long, 0.0915 in. shank diam and 15/64 in. diam heads. **GEORGIA-PACIFIC GYPSUM L L C** -- Type X ComfortGuard Sound Deadening Gypsum Board (finish rating 27 min) 3H. Gypsum Board\* -- (As an alternate to Items 3) -- Not to be used with items 6 or 7. 5/8 in. thick paper surfaced applied vertically only. Gypsum panels nailed 7 in. OC with 6d

ement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. NATIONAL GYPSUM CO -- Type SBWB

81. Gypsum Board\* -- (As an alternate to Items 3 through 3H, Not Shown) -- Nominal 5/8 in. thick, 4 ft wide panels, applied vertically. Panels nailed 7 in. OC with 6d cement coate nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads covered with two layers of

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type QuietRock ES (finish rating 20 min) J. Gypsum Board\* -- (As an alternate to Item 3) -- 5/8 in. thick paper surfaced applied vertically or horizontally. Gypsum panels secured with 1-1/4 in. Type W coarse thread

gypsum panel steel screws spaced a maximum of 12 in. OC **CERTAINTEED GYPSUM INC** -- Type SilentFX

used in widths other than 48 in., gypsum panels are to be installed horizontally.

RADIATION PROTECTION PRODUCTS INC -- Type RPP - Lead Lined Drywall

on opposite sides of studs. Secured as described in Item 3 or 3A.

NATIONAL GYPSUM CO -- Type FSW (finish rating 25 min)

with two layers of joint compound.

spaced 8 in. OC starting with a 4" stagger

CABOT MANUFACTURING ULC -- Type

THAI GYPSUM PRODUCTS PCL -- Type X

paced 8 in. OC at perimeter and in the field.

ottom plate using No. 6d cement coated nails.

THERMAFIBER INC -- Type SAFB, SAFB FF

NU-WOOL CO INC -- Cellulose Insulatio

THERMAFIBER INC -- Type SAFB, SAFB FF

supplied with the product. See Fiber, Sprayed (CCAZ)

inimum dry density shall be 4.30 lbs/ft<sup>3</sup>. INTERNATIONAL CELLULOSE CORP -- Celbar-RL

AMERICAN ROCKWOOL MANUFACTURING, LLC -- Type Rockwool Premium Plus

either face of the studs. The minimum dry density shall be 5.79 lbs/ft<sup>3</sup>.

**SES FOAM INC** -- Nexseal™ 2.0 or Nexseal™ 2.0 LE Spray Foam and Sucraseal Spray Foam.

APPLEGATE HOLDINGS L L C -- Applegate Advanced Stabilized Cellulose Insulation

pamsulate Closed Cell, Foamsulate OCX, Foamsulate 70, and Foamsulate HFO.

ayers of gypsum board attached to furring channels as described in Item 3.

f the channel. Gypsum board attached to furring channels as described in Item 3.

through the center hole. Furring channels are friction fitted into clips.

washer through the center hole. Furring channels are friction fitted into clips

through the center hole. Furring channels are friction fitted into clips.

STUDCO BUILDING SYSTEMS -- RESILMOUNT Sound Isolation Clips - Type A237 or A237R

PLITEQ INC -- Type Genie Clip

pounds per cubic ft.

ROCKWOOL MALAYSIA SDN BHD -- Type Acoustical Fire Batts

**USG MEXICO S A DE C V** -- Type SCX

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD -- Type EX-1

UNITED STATES GYPSUM CO -- Types SCX and SGX

**USG BORAL DRYWALL SFZ LLC** -- Types SCX and SGX

**CERTAINTEED GYPSUM INC -- Type X** 

PANEL REY S A -- Type ARX, PRX

CGC INC -- Type SCX

over the screw heads. Lead batten strips to have a purity of 99.5% meeting the Federal specification QQ-L-201f, Grades "B, C or D".

4, 4A or 4B) when installed over lead backed board to be min 2-1/2 in. Type S-12 bugle head steel screws spaced as described in Item 4.

CERTAINTEED GYPSUM INC -- Type LGFC6A (finish rating 21 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX

poard when applied as the base layer. When used in widths other than 48 in., gypsum panels are to be installed horizontally.

prizontally. Fastened with #6 x 2 in, long drywall screws spaced 8 in. OC along the perimeter and 12 in. OC in the field.

Item 6A is used, glass fiber or mineral wool insulation shall be friction-fitted to completely fill the stud cavities.

**ROCKWOOL** -- Types Acoustical Fire Batts and Type AFB, min. density 1.69 pcf / 27.0 kg/m<sup>3</sup>

CERTAINTEED GYPSUM INC -- Easi-Lite Type X (finish rating 24 min), Easi-Lite Type X-2 (finish rating 24 min)

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type QuietRock 527 (finish rating 24 min).

board. When used in widths other than 48 in., gypsum panels are to be installed horizontally

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type PG-13

PABCO BUILDING PRODUCTS L L C. DBA PABCO GYPSUM -- Type OuietRock 545

3N. Gypsum Board\* -- (As an alternate to Item 3) -- 5/8 in. thick, 4 ft. wide, applied horizontally or vertically with vertical joints centered over studs and staggered one stud cavity

3O. Wall and Partition Facings and Accessories\* -- (As an alternate to Item 3, Not Shown) -- Nominal 5/8 in. thick, 4 ft wide panels, applied vertically. Panels nailed 7 in. OC with

P. Gypsum Board\* -- (As an alternate to Item 3, Not Shown) -- Two layers nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal edge joints and

astened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 10 in. OC with the last two screws 4 and 1 in. from the edges of the

and screwed to panels with 1-5/8 in. long Type W coarse thread steel screws at 8 in. OC at perimeter and in the field with the last two screws 4 and 3/4 in. from the edges of the

S. Gypsum Board\* -- 3/4 in. thick paper or vinyl surfaced, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels secured as described in

T. Wall and Partition Facings and Accessories\* -- (As an alternate to 5/8 in. thick board as outlined in Item 3) -- Nominal 1-3/8 in. thick, 4 ft wide panels, applied vertically or

U. Gypsum Board\* -- (As an alternate to Item 3 - For use with Foamed Plastic products, Item 5J) -- 5/8 in. thick, 4 ft. wide, applied vertically with vertical joints centered over st

V. Gypsum Board\* -- (As an alternate to Item 3. For use with Item 5K) -- Any 5/8 in, thick, 4 ft. wide, Gypsum Board listed in Item 3 above, Applied vertically with vertical joints

4. Steel Corner Fasteners -- (Optional) -- For use at wall corners. Channel shaped, 2 in. long by 1 in. high on the back side with two 1/8 in. wide cleats protruding into the 5/8 in.

of gypsum board, max spacing 16 in. OC. Nailed to adjacent stud through tab using one No. 6d cement coated nail per fastener. Corners of wall board shall be nailed to top and

. Batts and Blankets\* -- (Optional -- Required when Item 6A is used (RC-1)) -- Glass fiber or mineral wool insulation. Placed to completely or partially fill the stud cavities. When

water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3

5D. Glass Fiber Insulation -- (As an alternate to Item 5C) -- 3 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance,

flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of

H. Foamed Plastic\* -- (Optional -For use with Item 3R) -- Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

E. Batts and Blankets\* -- (Required for use with Wall and Partition Facings and Accessories, Item 3D) -- Glass fiber insulation, nom 3-1/2 in, thick, min, density of 0.80 pcf, with a

F Fiber, Sprayed\* -- (Ontional, Not Shown -- Not for use with Items 6, 6A, 6B, 6C, or 6D) -- As an alternate to Batts and Blankets (Item 5) and Item 5A - Spray applied granulated

mineral fiber material. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions

5G. Fiber, Sprayed\* -- (Optional, Not Shown -- Not for use with Items 6, 6A, 6B, 6C, or 6D). -- As an alternate to Batts and Blankets (Item 5) and Item 5A - Brown Colored Spray

applied cellulose fiber. The fiber is applied with water to completely fill the enclosed stud cavity in accordance with the application instructions supplied with the product. The

I. Fiber, Sprayed\* -- (Not Shown -- Not for use with Item 6) -- As an alternate to Batts and Blankets (Item 5) - Spray-applied cellulose material. The fiber is applied with water to

on-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials or

. Foamed Plastic\* -- (Optional, Not Shown - For use with Item 3U) -- Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity.

K. Foamed Plastic\* -- (Optional, Not Shown - For use with Item 3V) -- Spray applied, foamed plastic insulation, at any thickness from partial fill to completely filling stud cavity. CARLISLE SPRAY FOAM INSULATION -- Types SealTite Pro Closed Cell (CC), SealTite Pro Open Cell (OC), SealTite Pro OCX, SealTite Pro No Trim 21, SealTite Pro One Zero,

a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as

coarse drywall screw through the center grommet. RSIC-V and RSIC-V (2.75) clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring

channels are friction fitted into clips. RSIC-1 and RSIC-V clips for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) and RSIC-V (2.75) clips for use with 2-23/32 in. wide furring

. Furring Channels -- Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are

overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Batts and Blankets placed in stud cavity as described in Item 5. Two

a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b.

nds of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining

channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange

Steel Framing Members\* -- Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw

s. Steel Framing Members\* -- Used to attach furring channels (Item 6Ca) to studs. Clips spaced 48 in. OC., and secured to studs with No. 2 in. coarse drywall screw with 1 in. diam

a. Furring Channels -- Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels

a. Furring Channels -- Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining

annels overlapped 6 in. and secured in place with a double strand of No. 18 AWG twisted steel wire. Gypsum board attached to furring channels as described in Item 3. . Steel Framing Members\* -- Used to attach furring channels (Item 6Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw

erlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 3.

described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one

GACO WESTERN L L C -- Types GacoEZSpray F4500, GacoProFill FR6500R, Gaco 052N, GacoOnePass F1850, GacoOnePass Low GWP F1880, and Gaco WallFoam 183M

ompletely fill the enclosed cavity in accordance with the application instructions supplied with the product. To facilitate the installation of the material, any thin, woven or

C. Batts and Blankets\* -- Required for use with resilient channels, Item 7, 3 in. thick mineral wool batts, friction-fitted to fill interior of wall.

iction-fitted to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) Categories for names of Classified companies.

s. Steel Framing Members\* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members as described below:

B. Steel Framing Members\* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members as described below:

ic. Steel Framing Members\* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members as described below:

6D. Steel Framing Members\* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members as described below:

screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 3.

and staggered one stud cavity on opposite sides of studs. Gypsum panels nailed 7 in. OC with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam

nish rating 20 min), Type FSL (finish rating 24 min).

MAYCO INDUSTRIES INC -- "X-Ray Shielded Gypsum"

E. Steel Framing Members\* -- (Optional, Not Shown) -- Resilient channels and Steel Framing Members as described below: Resilient Channels -- Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining innels overlapped 6 in, and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in, from the center of the overlap, Gypsum board attached to K. Gypsum Board\* -- (As an alternate to Item 3) -- 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels

ient channels as described in Item 3 fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 8 in. OC with the last screw 1 in. from the edge of the board. When Steel Framing Members\* -- Used to attach resilient channels (Item 6Ea) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw

rating 20 min), Type FSW-5 (finish rating 22 min), Type FSW-G (finish rating 20 min), Type FSK-C (finish rating 20 min), Type FSW-C (finish rating 20 min), Type FSW-6 Steel Framing Members\* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members as described below:

.. Gypsum Board\* -- (As an alternate to Item 3) -- For Direct Application to Studs Only -- Nom 5/8 in. thick lead backed gypsum panels with beveled, square or tapered edges, a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in. long Type W coarse b. Ends of adjoining channels are overlapped 6 in, and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange naining stud locations. Lead batten strips, min 2 in. wide, max 10 ft long with a max thickness of 0.140 in. placed on the face of studs and attached to the stud with two 1 in. long of the channel. Gypsum board attached to furring channels as described in Item 3.

Type S-8 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, max 5/16 in. diam by max 0.140 in. thick. compression fitted or adhered . Steel Framing Members\* -- Used to attach furring channels (Item 6Fa) to studs. Clips spaced 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. **CLARKDIETRICH BUILDING SYSTEMS** -- Type ClarkDietrich Sound Clip

M. Gypsum Board\* -- (As an alternate to Items 3) -- For Direct Application to Studs Only -- For use as the base layer or as the face layer. Nom 5/8 in. thick lead backed gypsum 6G. Steel Framing Members\* -- (Optional, Not Shown) -- Used as an alternate method to attach resilient channels to wall studs. A resilient sound isolation accessory shall be used panels with beveled, square or tapered edges, applied vertically. Vertical joints centered over studs and staggered min 1 stud cavity on opposite sides of studs. Wallboard secured to studs with 1-5/8 in, long Type W coarse thread gypsum panel steel screws spaced 8 in. OC at perimeter and in the field when applied as the base layer. When applied as the face each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The ayer screw length to be increased to 2-1/2 in. Lead batten strips required behind vertical joints of lead backed gypsum wallboard and optional at remaining stud locations. Lead accessory and resilient channel are fastened to the structural members with the screws supplied with the accessory and per the accessory manufacturer's installation instructions. atten strips, min 2 in, wide, max 8 ft long with a max thickness of 0.14 in, placed on the face of studs and attached to the stud with construction adhesive and two 1 in, long Type

PAC INTERNATIONAL L L C -- Type RC-1 Boost -12 pan head steel screws, one at the top of the strip and one at the bottom of the strip. Lead discs, nominal 3/8 in. diam by max 0.085 in. thick. Compression fitted or adhered ver the screw heads. Lead batten strips and discs to have a purity of 99.9% meeting the Federal specification QQ-L-201f, Grade "C". Fasteners for face layer gypsum panels (Items '. Furring Channel -- Optional -- Not Shown -- For use on one side of the wall - Resilient channels, 25 MSG galv steel, spaced vertically 24 in. OC, flange portion screw attached to one side of studs with 1-1/4 in. long diamond shaped point, double lead Phillips head steel screws. When resilient channels are used, insulation, Items 5C or 5D is required. Caulking and Sealants -- (Not Shown, Optional) -- A bead of acoustical sealant applied around the partition perimeter for sound control.

9. STC Rating -- The STC Rating of the wall assembly is 56 when it is constructed as described by Items 1 through 6, except: A. Item 2, above -- Nailheads Shall be covered with joint compound.

Item 2, above -- Joints As described, shall be covered with fiber tape and joint compound. 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 15/64 in. diam heads. Panel joints covered with paper tape and two layers of joint compound. Nailheads covered C. Item 5, above -- Batts and Blankets\* The cavities formed by the studs shall be friction fit with R-19 unfaced fiberglass insulation batts measuring 6-1/4 in. thick and 15-1/4 in.

> Item 6, above -- Steel Framing Members\* Type RSIC-1 clips shall be used to attach gypsum board to studs on either side of the wall assembly. Item 8, above -- Caulking and Sealants (Not Shown) A bead of acoustical sealant shall be applied around the partition perimeter for sound control.

lenath shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

horizontal butt joints on opposite sides of studs need not be staggered or backed by wood studs. Horizontal joints on the same side between face and base layers need not be staggered. Base layer gypsum panels fastened to studs with 1-1/4 in. long drywall nails spaced 8 in. OC. Face layer gypsum panels fastened to studs with 1-7/8 in. long drywall nails . Steel Corner Fasteners (Item 4), Fiber, Sprayed (Items 5A and 5B) and Steel Framing Members (Item 6A), not evaluated as alternatives for obtaining STC rating D. Wall and Partition Facings and Accessories\* -- (Optional, Not Shown) -- Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides o ne assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL assified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener Q. Gypsum Board\* -- (As an alternate to Item 3) -- 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type QuietRock QR-500 and QR-510 I. Cementitious Backer Units\* -- (Optional Item Not Shown -- For Use On Face Of 1 Hr Systems With All Standard Items Required) - 7/16 in., 1/2 in., 5/8 in., 3/4 in. or 1 in. thick, in. 32 in. wide. Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with cement board screws of adequate length to penetrate R. Gypsum Board\* -- (As an alternate to Item 3. For use with Item 5H) -- Any 5/8 in. thick, 4 ft. wide, Gypsum Board listed in Item 3 above. Applied either horizontally or vertically, stud by a minimum of 3/8 in. for steel framing members, and a minimum of 3/4 in. for wood framing members spaced a max of 8 in. OC. When 4 ft. wide boards are used,

zontal joints need not be backed by framing. NATIONAL GYPSUM CO -- Type DuraBacker, PermaBase, DuraBacker Plus, or PermaBase Plus 2. Non-Bearing Wall Partition Intersection -- (Optional) -- Two nominal 2 by 4 in, studs or nominal 2 by 6 in, studs nailed together with two 3 in, long 10d nails spaced a max. 16 n. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Intersection between partition wood studs to

e flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the bearing

400 SOUTH FIFTH ST vall.

13. Mesh Netting -- (Not Shown) -- Any thin, woven or non-woven fibrous netting material attached with staples to the outer face of one row of studs to facilitate the installation

SUITE 400 of the sprayed fiber from the opposite row. 14. Mineral and Fiber Board\* -- (Optional, Not Shown) -- For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with 2 in. long Type W steel screws, spaced 12 in. OC. The required UL Classified gypsum board layer(s) is/are to be installed as indicated COLUMBUS, OHIO as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required

**HOMASOTE CO** -- Homasote Type 440-32 14A. Mineral and Fiber Board\* -- (Optional, Not Shown) -- For use with Items 14B-14E) -- For optional use as an additional layer on one side of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with minimum 1-3/8 in. long ring shanked nails or 1-1/4 in. long Type W steel screws, spaced 12 in. OC along board edges and 24 in. OC in field of board along intermediate framing. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board. **HOMASOTE CO** -- Homasote Type 440-32

14B. Glass Fiber Insulation -- (For use with Item 14A) -- 3-1/2 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed E-MAIL: architects@kontogiannis.com to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) categories for names of Classified companies. 14C. Batts and Blankets\* -- (As an alternate to Item 14B, For use with Item 14A), 3 in. thick mineral wool batts, placed to fill interior of wall, attached to the 3-1/2 in. face of the THERMAFIBER INC -- Type SAFB, SAFB FF

14D. Adhesive -- (For use with Item 14A) -- Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Fiber Board (Item 14A).

entered over studs and staggered one stud cavity on opposite sides of studs. Gypsum panels secured to studs with 1-5/8 in. long Type W coarse thread gypsum panel steel screws 4E. Gypsum Board\* -- (For use with Item 14A) -- 5/8 in, thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item 14A) with vertical joints located anywhere over stud avities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 14A). Secured to outermost studs and bearing plates with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint

> AMERICAN GYPSUM CO -- Type AG-0 **CERTAINTEED GYPSUM INC -- Type (** CGC INC -- Types C, IP-X2, IPC-AR **CERTAINTEED GYPSUM INC -- Type LGFC-C/A**

GEORGIA-PACIFIC GYPSUM L L C -- Types 5, DAPC, TG-C NATIONAL GYPSUM CO -- Types FSK-C, FSW-C

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type PG-0 PANEL REY S A -- Type PRC

layer(s) of UL Classified Gypsum Board

THAI GYPSUM PRODUCTS PCL -- Type C UNITED STATES GYPSUM CO -- Types C, IP-X2, IPC-AR

**USG BORAL DRYWALL SFZ LLC -- Type C** 5A. Fiber, Sprayed\* -- (Not Shown -- Not for use with Item 6) -- As an alternate to Batts and Blankets (Item 5) -- Spray applied cellulose material. The fiber is applied with water to USG MEXICO S A DE C V -- Types C, IP-X2, IPC-AR completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft<sup>3</sup>. Alternate Application Method: 14F. **Mineral and Fiber Board --** (Optional, Not Shown) -- For optional use as an additional layer on one side of wall - Nom 1/2 in. thick, 4 ft wide, square edge fiber boards

ead, coarse thread gypsum board screws spaced 12 in. OC max, with the last screws spaced 2 in. and 6 in. from edge of board. Gypsum board (Item 3) installed as indicated as fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board. U S GREENFIBER L L C -- INS735, INS745, INS750LD and SANCTUARY for use with wet or dry application. INS515LD, INS541LD, INS735, INS765LD, and INS773LD are to be used BLUE RIDGE FIBERBOARD INC -- SoundStop

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively. B. Fiber, Sprayed\* -- (Not Shown - Not for use with Item 6) -- As an alternate to Batts and Blankets (Item 5) - Spray applied cellulose insulation material. The fiber is applied with

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11125 EDWARDS RD. ELSMERE, KY 41018

SANCTUARY

ON EDWARDS

SENIOR HOUSING

(BUILDING "B'

**KONTOGIANNIS** 

& ASSOCIATES

**ARCHITECTURE** 

**PLANNING** 

PHONE: 614-224-2083

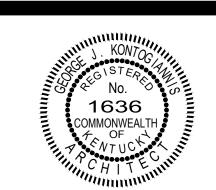
FAX: 614-224-4736

PROJECT

DRAWING TITLE: FIRE RESISTANCE

DATE: 07/31/2023 REVISED:

RATINGS



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023

CONSTRUCTION SET

**REGUPOL AMERICA** -- Type SonusClip FIRE RATING FOR 1 HOUR BEARING WALL RATING U.L. DESIGN NO. U305

FIRE RATING FOR 1 HOUR BEARING WALL RATING U.L. DESIGN NO. U305

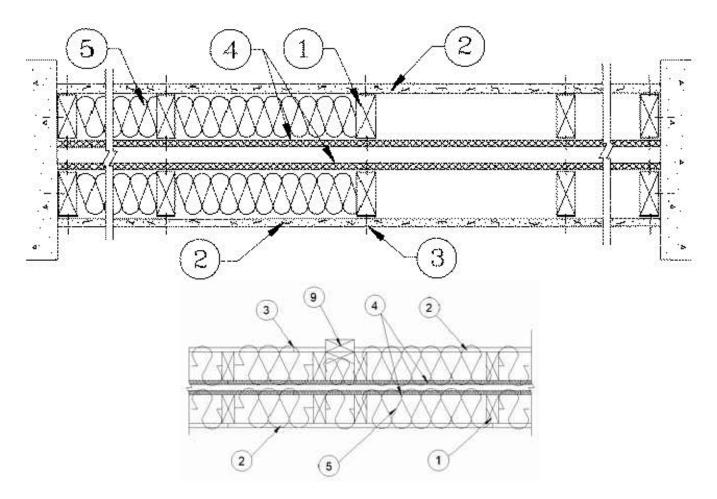
FIRE RATING FOR 1 HOUR BEARING WALL RATING U.L. DESIGN NO. U305

#### Design No. **U341** February 14, 2022

Bearing Wall Rating -- 1 Hr. Finish Rating -- Min 20 min.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used -- See Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



1. Wood Studs -- Nom 2 by 4 in., spaced 24 in. OC max. Cross braced at mid-height and effectively firestopped at top and bottom of wall. No min. air space between stud rows except to accommodate attachment of sheathing, where required. See items 4 and 5

2. Gypsum Board\* -- Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305. Nom 5/8 in. thick 4 ft wide. Gypsum board applied horizontally or vertically, unless specified below, and nailed to studs and bearing plates 7 in. OC with 6d cement coated nails, 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam head. As an alternate, No. 6 bugle head drywall screws, 1-7/8 in. long, may be substituted for the 6d cement coated nails. When Steel Framing Members\* (Item 6 or any alternate clips) are used, wallboard attached to furring channels with 1 in. long Type S bugle-head steel screws spaced

When used in widths other than 48 in., gypsum board to be installed horizontally. **AMERICAN GYPSUM CO (View Classification)** -- CKNX.R14196

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) -- CKNX.R19374

**CABOT MANUFACTURING ULC (View Classification)** -- CKNX.R25370 CERTAINTEED GYPSUM INC (View Classification) -- CKNX.R3660

CGC INC (View Classification) -- CKNX.R19751

CERTAINTEED GYPSUM INC (View Classification) -- CKNX.R18482

**GEORGIA-PACIFIC GYPSUM L L C** (View Classification) -- CKNX.R2717

**LOADMASTER SYSTEMS INC** (View Classification) -- CKNX.R11809 NATIONAL GYPSUM CO (View Classification) -- CKNX.R3501

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) -- CKNX.R7094

PANEL REY S A (View Classification) -- CKNX.R21796 SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) -- CKNX.R19262

THAI GYPSUM PRODUCTS PCL (View Classification) -- CKNX.R27517

UNITED STATES GYPSUM CO (View Classification) -- CKNX.R1319

USG BORAL DRYWALL SFZ LLC (View Classification) -- CKNX.R38438

**USG BORAL DRYWALL SFZ LLC** (View Classification) -- CKNX.R38438 **USG MEXICO S A DE C V** (View Classification) -- CKNX.R16089

2A. Gypsum Board\* -- (As an alternate to Item 2, not shown) -- Nominal 5/8 in. thick, 4 ft wide panels, applied vertically to studs and bearing plates on one side of the assembly with 1-5/8 in. long Type S screws spaced 12 in. OC at perimeter of panels and 8 in. OC in the field. Horizontal joints of vertically applied panels need not be backed by studs. Panel joints covered with paper tape and two layers of joint compound. Screwheads covered with two layers of joint compound. Batts and Blankets placed in stud cavity as described in Item 5C. Not evaluated for use with Steel Framing Members, Furring Channels or Fiber, Sprayec

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type QuietRock QR-530 (finish rating 23 min 2B. Gypsum Board\* -- (As an alternate to Item 2, not shown) -- Any 5/8 in, thick gypsum panels that are eligible for use in Design Nos, L501, G512 or U305, supplied by the Classified companies listed below shown in the **Gypsum Board\*** (CKNX) category. Applied horizontally or vertically and attached to studs and bearing plates with 1-1/4 in, long Type W coarse thread gypsum panel steel screws spaced a max 8 in, OC, with last screw 1 in, from edge of board. When used in widths other than

UNITED STATES GYPSUM CO

48 in., gypsum board to be installed horizontally

USG BORAL DRYWALL SFZ LLC

USG MEXICO S A DE C V 2C. Gypsum Board\* -- (As an alternate to Item 2, Not Shown) -- 5/8 in. thick gypsum panels applied horizontally or vertically and attached to studs and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths other than 48 in., gypsum board to be installed horizontally

AMERICAN GYPSUM CO -- Types AGX-1, M-Glass, AG-C, LightRoc CERTAINTEED GYPSUM INC -- Type C, Type X or Type X-1

GEORGIA-PACIFIC GYPSUM L L C -- GreenGlass Type X, Type DGC

NATIONAL GYPSUM CO -- Type FSK, Type FSK-G, Type FSW, Type FSW-3, Type FSW-5, Type FSW-G, Type FSK-C, Type FSM-C, Type FSM-C, Type FSM-C, Type FSM-B, Type FSW-6, Type FSW-7, Type FSW-7, Type FSW-7, Type FSW-7, Type FSW-8, THAI GYPSUM PRODUCTS PCL -- Type C or Type X

2D. Gypsum Board\* -- (As an alternate to Items 2, 2A, 2B and 2C) -- 5/8 in. thick gypsum panels, with square edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last 2 screws 1 and 4 in. from edge of board or nailed as described in Item 2. When used in widths of other than 48 in., gypsum boards are to be installed horizontally.

2E. Gypsum Board\* -- (As an alternate to Items 2 through 2D) -- 5/8 in. thick, 4 ft. wide, paper surfaced applied vertically only and secured as described in Item 2. **GEORGIA-PACIFIC GYPSUM L L C** -- Type X ComfortGuard Sound Deadening Gypsum Board.

2F. Gypsum Board\* -- (As an alternate to Items 2 through 2E) - Installed as described in Item 2. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and plates with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam heads, 7 in. OC. Not for use with item #6.

NATIONAL GYPSUM CO -- Type SBWE 2G. Gypsum Board\* -- (As an alternate to Items 2 through 2F) -- Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as described in Item 2.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Types QuietRock ES. 2H. Gypsum Board\* -- (As an alternate to Items 2 through 2G) -- Installed as described in Item 2. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or

horizontally fastened to the studs and plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 12 in. OC. CERTAINTEED GYPSUM INC -- Type SilentFX

described in Item 2. PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type QuietRock 527 2J. Gypsum Board\* -- (As an alternate to 5/8 in. Type FSW in Item 2) -- 2 layers nom. 5/16 in. thick gypsum panels applied vertically or horizontally. Horizontal joints

2I. Wall and Partition Facings and Accessories\* -- (As an alternate to Items 2 through 2H) -- Nominal 5/8 in. thick, 4 ft wide panels, applied vertically and secured as

on the same side need not be staggered. Inner layer attached with fasteners, as described in item 2, spaced 24 in. OC. Outer layer attached per Item 2. 2K. Gypsum Board\* -- (As an alternate to Item 2) -- 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically.

in. from the edges of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally. CERTAINTEED GYPSUM INC -- Type LGFC6A (finish rating 21 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX 3. Joints and Nailheads -- Gypsum board joints of outer layer covered with tape and joint compound. Nail heads of outer layer covered with joint compound. As an

Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 10 in. OC with the last two screws 4 and 1

alternate, nom 3/32 in. thick gypsum veneer plaster may be applied to the entire surface of Classified veneer baseboard with joints reinforced with paper tape. 4. Sheathing -- (Optional) -- Septum may be sheathed with min 7/16 in. thick wood structural panels min grade "C-D" or "Sheathing" or min 1/2 in. thick Mineral and Fiber Boards\*.

See Mineral and Fiber Boards (CERZ) category for names of Classified companies. 5. Batts and Blankets\* -- 3-1/2 in. max thickness glass or mineral fiber batt insulation. Optional when sheathing (Item 4) is used on both halves of wall.

See Batts and Blankets (BZJZ) category for list of Classified companies.

5A. Fiber, Sprayed\* -- As an alternate to Batts and Blankets (Item 5) -- Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft<sup>3</sup>. Alternate Application Method: The fiber is applied without water or adhesive at a nominal dry density of 3.5 lb/ft<sup>3</sup>, in accordance with the application instructions supplied with the product.

U S GREENFIBER L L C -- INS735, INS745, INS750LD and SANCTUARY for use with wet or dry application. INS515LD, INS541LD, INS735, INS765LD, and INS773LD are 5B. Fiber, Sprayed\* -- As an alternate to Batts and Blankets (Item 5) when Sheathing (Item 4) is used on both halves of wall - Spray applied cellulose insulation

material. The fiber is applied with water to interior surfaces in accordance with the application instructions supplied with the product. Applied to completely fill the enclosed cavity. Minimum dry density of 4.3 pounds per cubic ft. NU-WOOL CO INC -- Cellulose Insulation

5C. Batts and Blankets\* -- (Required for use with Wall and Partition Facings and Accessories, Item 2A. Use of Sheathing, Item 4, does not nullify requirement of Item 5C for use with Item 2A) -- Glass fiber insulation, nom 3-1/2 in. thick, min. density of 0.80 pcf, with a flame spread of 25 or less and a smoke developed of 50 or less, friction-fitted to completely fill the stud cavities. See Batts and Blankets Category (BKNV) for names of manufacture 5D. Fiber. Sprayed\* -- As an alternate to Batts and Blankets (Item 5) and Item 5A when Sheathing (Item 4) is used on both halves of wall - Spray applied cellulose

fiber. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft<sup>3</sup>. INTERNATIONAL CELLULOSE CORP -- Celbar-RI

5E. Fiber, Sprayed\* -- As an alternate to Batts and Blankets (Item 5) - Spray-applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. To facilitate the installation of the material, any thin, woven or non-woven netting may be attached by any means possible to the outer face the studs. The material shall reach equilibrium moisture content before the installation of materials on either face of the studs. The minimum dry density shall be 5.79 lbs/ft<sup>3</sup>.

APPLEGATE HOLDINGS L L C -- Applegate Advanced Stabilized Cellulose Insulation

6. Steel Framing Members\* -- (Optional, Not Shown) -- Furring channels and Steel Framing Members as described below: A. Furring Channels -- Formed of No. 25 MSG galy steel, 2-9/16 in, or 2-23/32 in, wide by 7/8 in, deep, spaced 24 in, OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of

overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Wallboard attached to furring channels as described in Item 2. B. Steel Framing Members\* -- Used to attach furring channels (Item a) to studs (Item 1). Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse

drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in. wide furring channels. PAC INTERNATIONAL L C -- Types RSIC-1, RSIC-1 (2.75).

6A. Steel Framing Members\* -- (Optional, Not Shown, As an alternate to Item 6) -- Furring channels and Steel Framing Members as described below: a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in, and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2.

b. Steel Framing Members\* -- Used to attach furring channels (Item a) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. **PLITEQ INC** -- Type Genie Clip

6B. Steel Framing Members\* -- (Optional, Not Shown, As an alternate to Item 6) -- Furring channels and Steel Framing Members as described below: a. Furring Channels -- Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item

b. Steel Framing Members\* -- Used to attach furring channels (Item 6Ba) to studs. Clips spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diam washer through the center hole. Furring channels are friction fitted into clips. STUDCO BUILDING SYSTEMS -- RESILMOUNT Sound Isolation Clips - Type A237R

6C. Steel Framing Members\* -- (Optional, Not Shown, As an alternate to Item 6) -- Furring channels and Steel Framing Members as described below: A. Furring Channels -- Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 6Cb. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as

B. Steel Framing Members\* -- Used to attach furring channels (Item 6CA) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. **REGUPOL AMERICA** -- Type SonusClip

6D. Steel Framing Members\* -- (Optional, Not Shown, As an alternate to Item 6) -- Resilient channels and Steel Framing Members as described below: a Resilient Channels -- Formed of No. 25 MSG galv steel, spaced 24 in OC, and perpendicular to study. Channels secured to study as described in Item b. Ends of adjoining channels overlapped 6 in. and secured in place with two No. 8 15 x 1/2 in. Philips Modified Truss screws spaced 2-1/2 in. from the center of the overlap. Gypsum board attached to resilient channels as described in Item 2.

b. Steel Framing Members\* -- Used to attach resilient channels (Item 6Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No.  $10 \times 1/2$  in. pan-head self-drilling screw. KEENE BUILDING PRODUCTS CO INC -- Type RC+ Assurance Clip

6E. Steel Framing Members\* -- (Optional, Not Shown, As an alternate to Item 6) -- Used as an alternate method to attach resilient channels to wall studs. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 24 in. O.C. Channel ends butted and centered under the structural members and attached with one accessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient channel. The accessory and resilient channel are fastened to the structural members with the screws supplied with the accessory and per the accessory manufacturer's installation instructions. PAC INTERNATIONAL L L C -- Type RC-1 Boost

6F Steel Framing Members\* -- (Optional, Not Shown, As an alternate to Item 6) -- Furring channels and Steel Framing Members as described below: a Furring Channels -- Formed of No. 25 MSG galv steel. 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2.

b Steel Framing Members\* -- Used to attach furring channels (Item 6Fa) to studs. Clips spaced maximum 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.

**CLARKDIETRICH BUILDING SYSTEMS** -- Type ClarkDietrich Sound Clip 7. Wall and Partition Facings and Accessories\* -- (Optional, Not shown) -- Nominal 1/2 in. thick, 4 ft wide panels, for optional use as an additional layer on one or both sides of the assembly. Panels attached in accordance with manufacturer's recommendations. When the QR-500 or QR-510 panel is installed between the wood framing and the UL Classified gypsum board, the required UL Classified gypsum board layer(s) is/are to be installed as indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type QuietRock QR-500 and QR-510 8. Mineral and Fiber Board\* -- ((Optional, Not Shown) -- For optional use as an additional layer on one or both sides of wall. Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing as described in Item 2. The required UL Classified gypsum board layer(s) is/are to be installed as

indicated as to fastener type and spacing, except that the required fastener length shall be increased by a minimum of 1/2 in. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board. **HOMASOTE CO** -- Homasote Type 440-32 9. Non-Bearing Wall Partition Intersection -- (Optional) -- Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed together with two 3in. long 10d nails spaced

a max. 16 in, OC, vertically and fastened to one side of the minimum 2 by 4 in, stud with 3 in, long 10d nails spaced a max 16 in, OC, vertically, Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a max. 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of the bearing wall.

(Optional, Not Shown) Alternate Construction For Use On One Side Of The Wall.

10. Mineral and Fiber Board\* -- For use with Items 10A-10D) -- Nom 1/2 in. thick, 4 ft wide with long dimension parallel and centered over studs. Attached to framing with minimum 1-3/8 in. long ring shanked nails or 1-1/4 in. long Type W steel screws, spaced 12 in. OC along board edges and 24 in. OC in field of board along intermediate framing. Not evaluated or intended as a substitute for the required layer(s) of UL Classified Gypsum Board.

10A. Glass Fiber Insulation -- (For use with Item 10) -- 3-1/2 in. thick glass fiber batts bearing the UL Classification Marking as to Surface Burning and/or Fire Resistance, placed to fill the interior of the wall. See Batts and Blankets (BKNV or BZJZ) categories for names of Classified companies.

IB. **Batts and Blankets\* --** (As an alternate to Item 10B. For use with Item 10), 3 in, thick mineral wool batts, placed to fill interior of wall, attached to the 3-1/2 in face of the studs with staples placed 24 in. OC. THERMAFIBER INC -- Type SAFB, SAFB FF

10C. Adhesive -- (For use with Item 10) -- Construction grade adhesive applied in vertical, serpentine, nominal 3/8 in. wide beads down the length of both vertical edges of Mineral and Fiber Board (Item 14A)

10D. Gypsum Board\* -- (For use with Item 10) -- 5/8 in. thick, 4 ft wide, applied vertically over Mineral and Fiber Board (Item 14A) with vertical joints located anywhere over stud cavities. Secured to mineral and fiber boards with 1-1/2 in. Type G Screws spaced 8 in. OC along edges of each vertical joint and 12 in. OC in intermediate field of the Mineral and Fiber Board (Item 10). Secured to outermost studs and bearing plates with 2 in. long Type S screws spaced 8 in. OC. Gypsum Board joints covered with paper tape and joint compound. Screw heads covered with joint compound. Finish Rating 30 Min. AMERICAN GYPSUM CO -- Type AG-C

**CERTAINTEED GYPSUM INC** -- Type C **CERTAINTEED GYPSUM INC** -- Type LGFC-C/A

GEORGIA-PACIFIC GYPSUM L L C -- Types 5, DAPC, TG-C

NATIONAL GYPSUM CO -- Types FSK-C, FSW-C

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type PG-C PANEL REY S A -- Type PRC

THAI GYPSUM PRODUCTS PCL -- Type C UNITED STATES GYPSUM CO -- Type CTypes C, IP-X2, IPC-AR

**USG BORAL DRYWALL SFZ LLC** -- Type C

**USG MEXICO S A DE C V** -- Types C, IP-X2, IPC-AR \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively

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#### Design No. **U356** February 14, 2022

Bearing Wall Rating - 1 Hr Rating Exposed to Fire on Interior Face Only Bearing Wall Rating -- 1 Hr Rating Exposed to Fire on Exterior Face (See Item 6E)

Finish Rating -- 23 Min or 25 Min (See Item 2C)

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing

the Limit States Design Method, such as Canada, a load restriction factor shall be used -- See Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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. Wood Studs -- Nom 2 by 4 in, spaced 16 in, OC with two 2 by 4 in, top and one 2 by 4 in, bottom plates. Studs laterally-braced by wood structural panel sheathing (Item 5).

When Mineral and Fiber Boards\* (Item 5A) are considered as bracing for the studs, the load is restricted to 76% of allowable axial load. Walls effectively fire stopped at top

Gypsum Board\* -- Any 5/8 in. thick UL Classified Gypsum Board that is eligible for use in Design Nos. L501, G512 or U305. Nom 5/8 in. thick, 4 ft wide, applied

When Item 7A Steel Framing Members\*, is used, two layers of gypsum panels attached to furring channels. Base layer attached to furring channels with 1 in. long Type S

bugle-head steel screws spaced 12 in. OC. Face layer attached to furring channels with 1-5/8 in. long Type S bugle-head steel screws spaced 12 in. OC. All joints in face layers

2A. Gypsum Board\* -- (As an alternate to Item 2, Not Shown) -- Any 5/8 in. thick 4 ft wide gypsum panels that are eligible for use in Design Nos. L501, G512 or U305, supplied

by the Classified Companies listed below shown in the Gypsum Board\* (CKNX) category. Applied vertically and attached to studs and bearing plates with 1-1/4 in. long Type

2B. Gypsum Board\* -- (As an alternate to Item 2, Not Shown) -- 5/8 in. thick 4 ft wide gypsum panels applied vertically and attached to studs and bearing plates with 1-1/4 in.

GEORGIA-PACIFIC GYPSUM L L C -- Types X, Veneer Plaster Base-Type X, Water Rated-Type X, Sheathing Type-X, Soffit-Type X, Type X ComfortGuard Sound Deadening

2C. Gypsum Board\* -- (As an alternate to Item 2, Not Shown) -- For Use with Item 5A only - 5/8 in. thick 4 ft wide gypsum panels applied horizontally and attached to studs

and bearing plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screws 1 in.and 4 in. from edges of board. Finish Rating

D. Gypsum Board\* -- (As an alternate to Item 2) -- Not to be used with item 7. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically only and fastened to the studs and

2F. Gypsum Board\* -- (As an alternate to Item 2) -- Not to be used with item 7. 5/8 in. thick, 4 ft. wide, paper surfaced, applied vertically or horizontally and fastened to the

G. Wall and Partition Facings and Accessories\* -- (As an alternate to Items 2 through 2F) -- Nominal 5/8 in. thick, 4 ft wide panels, secured as described in Item 2.

2H. Gypsum Board\* -- (As an alternate to Item 2) -- 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a maximum 10 in. OC with the last two screws 4 and 1 in. from the

I. Gypsum Board\* -- (As an alternate to Item 2) -- 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels fastened to framing with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board. When used in widths

J. Gypsum Board\* -- (As an alternate to Item 2) - 5/8 in. thick gypsum panels, with beveled, square, or tapered edges, applied either horizontally or vertically. Gypsum panels

fastened to framing with 1-1/4 in. long Type W coarse thread steel screws spaced a max 8 in. OC with the last screw 1 in. from edge of board. When used in widths other than

**CERTAINTEED GYPSUM INC** -- Type C, Type X or Type X-1(finish rating 26 min), Easi-Lite Type X (finish rating 24 min), Easi-Lite Type X-2, Type EGRG or GlasRoc or GlasRoc

4. Batts and Blankets\* -- Mineral fiber or glass fiber insulation, 3-1/2 in. thick, pressure fit to fill wall cavities between studs and plates. Mineral fiber insulation to be unfaced and to have a min density of 3 pcf. Glass fiber insulation to be faced with aluminum foil or kraft paper and to have a min density of 0.9 pcf (min R-13 thermal insulation rating).

See Batts and Blankets\* (BKNV) Category in the Building Materials Directory and Batts and Blankets\* (BZJZ) Category in the Fire Resistance Directory for names of Classified

4A. Fiber, Sprayed\* -- As an alternate to Batts and Blankets (Item 4) -- Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in

accordance with the application instructions supplied with the product with a nominal dry density of 2.7 lb/ft<sup>3</sup>. Alternate Application Method: The fiber is applied without water

4B. Fiber, Sprayed\* -- As an alternate to Item 4 and 4A -- Spray applied cellulose material. The fiber is applied with water to completely fill the enclosed cavity in accordance

4C. Fiber, Sprayed\* -- As an alternate to Batts and Blankets (Item 4) -- Spray applied cellulose fiber. The fiber is applied with water to completely fill the enclosed cavity in

U S GREENFIBER L L C -- INS735 and INS745 for use with wet or dry application. INS515LD, INS541LD, INS735, INS745, INS765LD, and INS773LD are to be used for dry

When Item Steel Framing Members\* (Item 7 or any alternate clips), is used, gypsum panels attached to furring channels with 1 in. long Type S bugle-head steel screws spaced

ertically and nailed to studs and bearing plates 7 in. OC with 6d cement-coated nails, 1-7/8 in. long with 1/4 in. diam head.

FIRE SIDE

FIRE SIDE

AMERICAN GYPSUM CO (View Classification) -- CKNX.R14196

**CERTAINTEED GYPSUM INC** (View Classification) -- CKNX.R3660

CERTAINTEED GYPSUM INC (View Classification) -- CKNX.R18482

**LOADMASTER SYSTEMS INC** (View Classification) -- CKNX.R11809

THAI GYPSUM PRODUCTS PCL (View Classification) -- CKNX.R27517

UNITED STATES GYPSUM CO (View Classification) -- CKNX.R1319

**USG BORAL DRYWALL SFZ LLC** (View Classification) -- CKNX.R38438

AMERICAN GYPSUM CO -- Types AGX-1, M-Glass, AG-C, LightRoc

THAI GYPSUM PRODUCTS PCL -- Type C or Type X

NATIONAL GYPSUM CO -- Type SBWB

**CERTAINTEED GYPSUM INC** -- Type SilentFX

**CERTAINTEED GYPSUM INC** -- Type C, Type X, Type X-1, Easi-Lite Type X-2

**CABOT MANUFACTURING ULC** -- 5/8 Type X, Type Blueglass Exterior Sheathing

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type QuietRock ES.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type QuietRock 527.

of other than 48 in., gypsum boards are to be installed horizontally

48 in., gypsum boards are to be installed horizontally

Sheathing (finish rating 23 min)

NU-WOOL CO INC -- Cellulose Insulation

INTERNATIONAL CELLULOSE CORP -- Celbar-RL

CABOT MANUFACTURING ULC -- Type X, 5/8 Type X, Type Blueglass Exterior Sheathing

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Types PG-11, PGS-WRS, PGI.

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Types PG-11, PGS-WRS, PGI

plates with 6d cement coated nails 1-7/8 in. long, 0.0915 in. shank diam and 1/4 in. diam heads, 7 in. OC.

edges of the board. When used in widths other than 48 in., gypsum panels are to be installed horizontally

NATIONAL GYPSUM CO (View Classification) -- CKNX.R3501

PANEL REY S A (View Classification) -- CKNX.R21796

**UNITED STATES GYPSUM CO** 

USG BORAL DRYWALL SFZ LLC

USG MEXICO S A DE C V

**GEORGIA-PACIFIC GYPSUM L L C** (View Classification) -- CKNX.R2717

**CGC INC** (View Classification) -- CKNX.R19751

**CABOT MANUFACTURING ULC (View Classification)** -- CKNX.R25370

BEIJING NEW BUILDING MATERIALS PUBLIC LTD CO (View Classification) -- CKNX.R19374

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM (View Classification) -- CKNX.R7094

W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.

long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.

GEORGIA-PACIFIC GYPSUM L L C -- Type X, Veneer Plaster Base-Type X, Water Rated-Type X, Sheathing Type-X, Soffit-Type X

CERTAINTEED GYPSUM INC -- Type LGFC6A (finish rating 21 min), Type LGFC2A, Type LGFC-C/A, Type LGFC-WD, Type LGLLX

r adhesive at a nominal dry density of 3.5 lb/ $ft^3$ , in accordance with the application instructions supplied with the product.

accordance with the application instructions supplied with the product. The minimum dry density shall be 4.30 lbs/ft<sup>2</sup>

with the application instructions supplied with the product. Nominal dry density of 4.58 lb/ft<sup>-3</sup>

E Gypsum Board\* -- (As an alternate to Items 2 through 2D) -- Nominal 5/8 in. thick, 4 ft wide panels, secured as described in Item 2.

studs and plates with 1-1/4 in. long Type W coarse thread gypsum panel steel screws spaced a max 8 in. OC, with last screw 1 in. from edge of board.

AMERICAN GYPSUM CO -- Types AGX-1 (finish rating 25 min.), M-Glass (finish rating 25 min.), AG-C (finish rating 25 min.), LightRoc (finish rating 25 min.)

. Joints and Fastener Heads -- (Not Shown) -- Gypsum board joints covered with tape and joint compound. Fastener heads covered with joint compound.

NATIONAL GYPSUM CO -- Type FSK, Type FSK-G, Type FSW-5, Type FSW-5, Type FSW-6, Type FSW-C, Type FSM-C, Type FSM-C

SIAM GYPSUM INDUSTRY (SARABURI) CO LTD (View Classification) -- CKNX.R19262

4D. Fiber, Sprayed\* -- As an alternate to Batts and Blankets (Item 4) -- Spray applied, granulated mineral fiber material. The fiber is applied with adhesive, at a minimum density of 4.0 pcf, to completely fill the enclosed cavity in accordance with the application instructions supplied with the product. See Fiber, Sprayed (CCAZ). AMERICAN ROCKWOOL MANUFACTURING, LLC -- Type Rockwool Premium Plus

5. Wood Structural Panel Sheathing -- Min 7/16 in. thick, 4 ft wide wood structural panels, min grade "C-D" or "Sheathing". Installed with long dimension of sheet (strength axis) or face grain of plywood parallel with or perpendicular to studs. Vertical joints centered on studs. Horizontal joints backed with nom 2 by 4 in. wood blocking. Attached to studs on exterior side of wall with 6d cement coated box nails spaced 6 in. OC at perimeter of panels and 12 in. OC along interior studs.

5A. Mineral and Fiber Boards\* -- As an alternate to Item 5 - Min 1/2 in. thick, 4 ft wide sheathing, installed vertically to studs. Vertical joints centered on studs. Horizontal oints backed with nom 2 by 4 in. wood blocking. Attached to studs on exterior side of wall with 1-1/2 in. long galvanized roofing nails spaced 6 in. OC at perimeter of panels

and 12 in. OC along interior studs. As an option a weather resistive barrier may be applied over the Mineral and Fiber Boards. . Exterior Facings -- Installed in accordance with the manufacturer's installation instructions. One of the following exterior facings is to be applied over the sheathing:

A. Vinyl Siding -- Molded Plastic\* -- Contoured rigid vinyl siding having a flame spread value of 20 or less.

See **Molded Plastic** (BTAT) category in the Building Materials Directory for names of manufacturers.

B. **Particle Board Siding** -- Hardboard exterior sidings including patterned panel or lap siding.

. Wood Structural Panel or Lap Siding -- APA Rated Siding, Exterior, plywood, OSB or composite panels with veneer faces and structural wood core, per PS 1 or APA Standard PRP-108, including textured, rough sawn, medium density overlay, brushed, grooved and lap siding. D. Cementitious Stucco -- Portland cement or synthetic stucco systems with self-furring metal lath or adhesive base coat. Thickness from 3/8 to 3/4 in., depending on system.

E. Brick Veneer -- Any type on nom 4 in. wide brick veneer. When brick veneer is used, the rating is applicable with exposure on either face. Brick veneer fastened with corrugated metal wall ties attached over sheathing to wood studs with 8d nail per tie: ties spaced not more than each sixth course of brick and max 32 in. OC horizontally. One in, air space provided between brick veneer and sheathing

F. Exterior Insulation and Finish System (EIFS) -- Nom 1 in. Foamed Plastic\* insulation bearing the UL Classification Marking, attached over sheathing and finished with coating system, or Portland cement or synthetic stucco systems, in accordance with manufacturer's instructions. See Foamed Plastic (BRYX and CCVW) categories for names of

G. **Siding** -- Aluminum or steel siding attached over sheathing to studs.

washer through the center hole. Furring channels are friction fitted into clips.

I. Fiber-Cement Siding -- Fiber-cement exterior sidings including smooth and patterned panel or lap siding.

Wall and Partition Facings and Accessories\* -- Stone veneer is mortar bonded to a lath, scratch coat and water resistant barrier applied to sheathing, installed in ccordance with the manufacturers installation instructions, and meeting the requirements of local code agencies. **ELDORADO STONE OPERATIONS L L C** -- Type Eldorado Stone

J. Cementitious Backer Units -- 1/2 in. or 5/8 in., min. 32 in. wide.- Applied vertically or horizontally with vertical joints centered over studs. Fastened to studs and runners with ARCHITECTURE cement board screws of adequate length to penetrate stud by a minimum 3/4 in., spaced a max of 8 in. OC. Horizontal joints need not be backed by framing. When Cementitious Backer Units are used, the rating is applicable with exposure on either face. Cementitious Backer Units for use as substrate for exterior finishes such as ceramic tile, slate, marble, natural stone, manufactured stone, thin brick, or Portland cement or synthetic stucco. NATIONAL GYPSUM CO -- Type PermaBase

6A. **Building Units\*** -- **As an alternate to Exterior Facing Item 6** -- Insulated steel panels, 12 through 42 in. wide. Attached over sheathing through retainer clips to study or support steel with No. 14 hex head self-tapping screws located at each joint in the concealed lip of the units and spaced in accordance with the structural design requirements. KINGSPAN INSULATED PANELS INC -- Types 200, 300, 400, 900, or KS series, 2 through 6 in. thickness; CWP-V, H, 2 through 3 in. nominal thickness or Designwall 2000 or Designwall 4000, 2 and 3 in. nominal thickness.

. Steel Framing Members\* -- (Optional, Not Shown) -- Furring Channels and Steel Framing Members as described below:

a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as lescribed in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2.

. Steel Framing Members\* -- Used to attach furring channels (Item 7A) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clip for use with 2-9/16 in. wide furring channels. RSIC-1 (2.75) clip for use with 2-23/32 in.

400 SOUTH FIFTH ST PAC INTERNATIONAL L L C -- Types RSIC-1, RSIC-1 (2.75).

7A. **Steel Framing Members\* --** (Optional, Not Shown, As an alternate to Item 7) -- Furring channels and Steel Framing Members as described below: a. Furring Channels -- Formed of No. 25 MSG galv steel, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. Two layers of gypsum board attached to furring channels as 43215–5492

. Steel Framing Members\* -- Used to attach furring channels (Item 7Aa) to interior side of studs. Clips spaced 48 in. OC., and secured to studs with two No. 8 x 2-1/2 in. coarse drywall screws, one through the hole at each end of the clip. Furring channels are friction fitted into clips. KINETICS NOISE CONTROL INC -- Type Isomax.

7B. Steel Framing Members\* -- (Optional, Not Shown, As an alternate to Item 7) -- Furring channels and Steel Framing Members as described below: a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-3/8 in. wide by 7/8 in. deep, spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item E-MAIL: architects@kontogiannis.com

b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw each flange of the channel. Gypsum board attached to furring channels as described in Item 2. . Steel Framing Members\* -- Used to attach furring channels (Item a) to studs. Clips spaced 48 in. OC. Genie clips secured to studs with No. 8 x 1-1/2 in. coarse drywall screw

through the center hole. Furring channels are friction fitted into clips.

7C. Steel Framing Members\* -- (Optional, Not Shown, As an alternate to Item 7) -- Furring channels and Steel Framing Members as described below: a. Furring Channels -- Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channel overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 2. o. Steel Framing Members\* -- Used to attach furring channels (Item 7Ca) to studs. Clips spaced 48 in. OC., and secured to studs with 2 in. coarse drywall screw with 1 in. diar

STUDCO BUILDING SYSTEMS -- RESILMOUNT Sound Isolation Clips - Type A237R 7D. Steel Framing Members\* -- (Optional, Not Shown, As an alternate to Item 7) -- Furring channels and Steel Framing Members as described below: a. Furring Channels -- Formed of No. 25 MSG galv steel. Spaced 24 in. OC perpendicular to studs. Channels secured to studs as described in Item 7Db. Ends of adjoining

channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire. Gypsum board attached to furring channels as described in Item 2. b. Steel Framing Members\* -- Used to attach furring channels (Item 7Da) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Furring channels are friction fitted into clips. **REGUPOL AMERICA** -- Type SonusClip

7E. Steel Framing Members\* -- (Optional, Not Shown, As an alternate to Item 7) -- Resilient channels and Steel Framing Members as described below: a. Resilient Channels -- Formed of No. 25 MSG galv steel, spaced 24 in. OC, and perpendicular to studs. Channels secured to studs as described in Item b. Ends of adjoining channels overlapped 6 in, and secured in place with two No. 8 15 x 1/2 in, Philips Modified Truss screws spaced 2-1/2 in, from the center of the overlap, Gypsum board attached to resilient channels as described in Item 2.

o. Steel Framing Members\* -- Used to attach resilient channels (Item 7Ea) to studs. Clips spaced 48 in. OC., and secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center hole. Resilient channels are secured to clips with one No. 10 x 1/2 in. pan-head self-drilling screw.

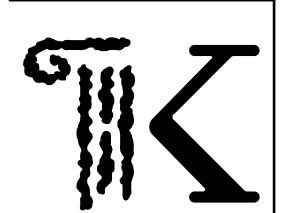
KEENE BUILDING PRODUCTS CO INC -- Type RC+ Assurance Clip F Steel Framing Members\* -- (Optional, Not Shown, As an alternate to Item 7) -- Furring channels and Steel Framing Members as described below: a Furring Channels -- Formed of No. 25 MSG galv steel, 2-23/32 in, wide by 7/8 in, deep, spaced 24 in, OC perpendicular to study. Channels secured to study as described in Item b. Ends of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of

adjoining channels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel. Gypsum board attached to furring channels as described in Item 2. b Steel Framing Members\* -- Used to attach furring channels (Item 7Fa) to studs. Clips spaced maximum 48 in. OC. Clips secured to studs with No. 8 x 2-1/2 in. coarse drywall screw through the center grommet. Furring channels are friction fitted into clips.

**CLARKDIETRICH BUILDING SYSTEMS** -- Type ClarkDietrich Sound Clip 8. Non-Bearing Wall Partition Intersection -- (Optional) -- Two nominal 2 by 4 in. stud or nominal 2 by 6 in. stud nailed together with two 3in. long 10d nails spaced a max. 16 in. OC. vertically and fastened to one side of the minimum 2 by 4 in. stud with 3 in. long 10d nails spaced a max 16 in. OC. vertically. Intersection between partition wood studs to be flush with the 2 by 4 in. studs. The wall partition wood studs are to be framed by with a second 2 by 4 in. wood stud fastened with 3 in. long 10d nails spaced a ma 16 in. OC. vertically. Maximum one non-bearing wall partition intersection per stud cavity. Non-bearing wall partition stud depth shall be at a minimum equal to the depth of

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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& ASSOCIATES

SUITE 400 COLUMBUS, OHIO

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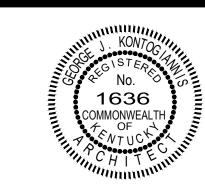
**ISANCTUARY** ION EDWARDS (BUILDING "B"

|125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:

FIRE RESISTANCE RATINGS

DATE: 07/31/2023 REVISED:



GEORGE J. KONTOGIANNIS. LICENSE #1636 EXPIRATION DATE 06/30/2024

GEORGE J. KONTOGIANNIS & ASSOCIATES

SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023

CONSTRUCTION SET

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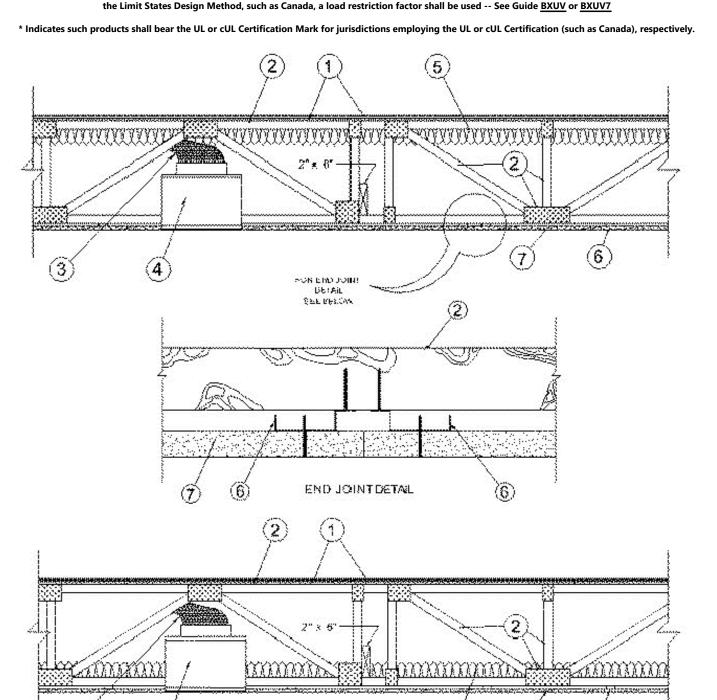
FIRE RATING FOR 1 HOUR BEARING WALL RATING

FIRE RATING FOR 1 HOUR BEARING WALL RATING U.L. DESIGN NO. U356

FIRE RATING FOR 1 HOUR BEARING WALL RATING

April 14, 2022 Unrestrained Assembly Rating - 1 Hr

Finish Rating - 25 Min (See Items 5 or 5A and 7), 20 Min. (See Items 6E and 7A) This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing



. **Flooring System --** The flooring system shall consist of one of the following:

Subflooring -- Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. | Alternate Floor Mat Materials\* -- (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Vapor Barrier - (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

ALTERNATE INSULATION PLACEMENT

Finish Flooring -- Min 1 by 4 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face gr of plywood or strength axis of panel to be perpendicular to trusses with joints staggered.

Subflooring -- Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured

to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be ubstituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Floor Mat Materials\* - (Optional) -- Floor mat material nom 5/64 in. (2 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat

prior to the placement of a min 1 in. of floor-topping mixture. HACKER INDUSTRIES INC -- Type Hacker Sound-Mat Alternate Floor Mat Materials - (Optional) -- Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of

the mat prior to the placement of a min 1-1/4 in. (32 mm) of floor-topping mixture. **HACKER INDUSTRIES INC** -- Type Hacker Sound-Mat II. Iternate Floor Mat Materials - (Optional)-- Floor mat material nom 1/8 in. (3 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19 mm)

HACKER INDUSTRIES INC -- FIRM-FILL SCM 125 Alternate Floor Mat Materials - (Optional) -- Floor mat material nom 1/4 in. (6 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25 mm)

HACKER INDUSTRIES INC -- Type FIRM-FILL SCM 250, Quiet Qurl 55/025

Alternate Floor Mat Materials - (Optional) -- Floor mat material nom 3/8 in. (10 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in. (32

HACKER INDUSTRIES INC -- FIRM-FILL SCM 400, Quiet Qurl 60/040

Alternate Floor Mat Materials - (Optional) -- Floor mat material nom 3/4 in. (19 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in. (38

HACKER INDUSTRIES INC -- Type FIRM-FILL SCM 750, Quiet Qurl 65/075

Metal Lath (Optional) -- For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat. Finish Flooring - Floor Topping Mixture\* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of water to 80 lbs of floor topping mixture to 1.9 cu ft of sand.

HACKER INDUSTRIES INC -- Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant

Subflooring -- Min 23/32 in, thick T & G wood structural panels installed perpendicular to trusses with end joints staggered 4 ft, Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be ubstituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Finish Floor - Mineral and Fiber Board\* -- Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of 12 in. with adjacent

**HOMASOTE CO** -- Type 440-32 Mineral and Fiber Board

Subflooring -- Min Nom 23/32 in, thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood or panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

**Vapor Barrier - (Optional)** -- Nom 0.010 in. thick commerical asphalt saturated felt. Finish Flooring - Floor Topping Mixture\* -- Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's

instructions accompanying the material for specific mix design. UNITED STATES GYPSUM CO -- Types LRK, HSLRK, CSD

LATICRETE SUPERCAP L L C -- Types LRK, HSLRK **USG MEXICO S A DE C V** -- Types LRK, HSLRK, CSD

Floor Mat Materials\* -- (Optional) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

UNITED STATES GYPSUM CO -- Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25 **Alternate Floor Mat Materials\* - (Optional)** -- Nom 3/8 in. thick floor mat material loose laid over the subfloor.

GRASSWORX L L C -- Type SC50

Subflooring -- Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured of plywood or strength axis of panel to be perpendicular to trusses with joints staggered. o trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. ound head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be ubstituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Vapor Barrier - (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture\* -- Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 UNITED STATES GYPSUM CO -- Types STRUCTO-CRETE, USGSP lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

**ELASTIZELL CORP OF AMERICA** -- Type FF

Subflooring -- Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with end joints staggered 4 ft. Plywood or nonveneer APA rated panels secur to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Vapor Barrier - (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring - Floor Topping Mixture\* -- Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5.5 gal of water. **AERIX INDUSTRIES** -- Floor-Topping Mixture

Subflooring -- Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with end joints staggered 4 ft. Plywood or nonveneer APA rated panels secured o trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. ound head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be ubstituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Finish Flooring - Floor Topping Mixture\* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of

water to 80 lbs of floor topping mixture to 2.1 cu ft of sand. ULTRA QUIET FLOORS -- Types UQF-A, UQF-Super Blend, UQF-Plus 200

U.L. DESIGN NO. L563

iberglass Mesh Reinforcement -- (Optional) -- Coated non-woven glass fiber mesh grid loose laid over floor mat material.

Metal Lath -- (Optional) -- Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement -- (Optional) -- Coated non-woven glass fiber mesh grid loose laid over floor mat material.

**Vapor Barrier -- (Optional)** -- Nom 0.030 in. thick commercial asphalt saturated felt.

nix design and minimum thickness recommended for use with eligible floor mat(s).

are repeated on approx. 7/8 in. centers with four rows of teeth per inch of plate width.

LOYD INDUSTRIES INC -- Model CRD 50-BT, CRD 50-EA-BT, CRD 55-BT, CRD 55 EA-BT

LLOYD INDUSTRIES INC -- Model CRD 50-95BT, CRD 50-EA-95BT, CRD 55-95BT, CRD 55 EA-95BT

CROWN PRODUCTS CO INC -- Models CRD50-FGPB-4.2-CP, -6.0-CP; CRD50-FGPB-4.2-EA-CP, -6.0-EA-CP

LLOYD INDUSTRIES INC -- Models CRD 50- FGPB-4.2, - 4.2 NI, -6.0, -6.0 NI; CRD50-EA-FGPB-4.2, -4.2 NI, -6.0, -6.0 NI.

UNITED ENERTECH CORP -- Model C-S/R-WT-L, C-S/R-EA-L, C-S/R-BT, C-S/R-EA-BL

LLOYD INDUSTRIES INC -- Models 45-CRD-LT-BT and 45-CRD-LTD-BT

LLOYD INDUSTRIES INC -- Model CRD50-W X-BT

when loose fill material is used has not been determined

To support steel framing member ends and for screw-attachment of the gypsum panel.

5B. **Steel Framing Members\* --** (Not Shown) -- As an alternate to Items 6 and 6A.

C. **Steel Framing Members\* --** (Not Shown) - As an alternate to Items 6, 6A and 6B.

diditional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.

METAL-FAB INC -- Model MCCD

CGC INC -- Type DGL or RX.

PLITEQ INC -- Type Genie Clip

**USG INTERIORS LLC** -- Type DGL or RX.

PRP-108. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP<sup>™</sup> nails are used - Any loose fill material bearing the UL Classification Marking for Surface Burning Characteristics. There is no limit in the overall thickness of insulation. The finished rating

PRP-108. Plywood or nonveneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails

B. Cross Tees -- Nom 4 ft long, 1-1/2 in. wide face, installed perpendicular to the main runners, spaced 16 in. OC. Additional cross tees or cross channels used at 8 in. from each

Alternate Floor Mat Materials\* -- (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. | a. Furring Channels -- Formed of No. 25 MSG galv steel, 2-9/16 in. or 2-23/32 in. wide by 7/8 in. deep, spaced 16 in. OC perpendicular to wood structural members. When

Finish Flooring -- Min 1 by 4 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 4 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 4 in. T & G lumber fastened diagonally to trusses, or min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 5 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 5 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 5 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 5 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 5 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 5 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 5 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 5 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 5 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 5 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 5 in. thick wood structural panels, min grade "Underlayment" or "Single Floor". Face grain by 5 in. thick wood structural panels with the single Floor" or "Single Floor" or "Sing

with 1-5/8 in. long, No. 8, self- countersinking wood screw spaced a max of 12 in. OC in the field with a screw located 1 in. and 2 in. from each edge, and 8 in. OC on the perimeter a. Furring Channels -- Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to the trusses. Channels secured to

**REGUPOL AMERICA** -- Type SonusClip

inimum 2-1/2 in. screws.

greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted | C. Cross Channels -- Nom 4 or 12 ft long, installed perpendicular to main runners, spaced 16 in. OC.

Wall and Partition Facings and Accessories\* - Sound Barrier (Optional) -- Acoustic Sleeper pads stapled to the top of the subfloor, the bottom of the finish floor, or to 5/16 in. | PAC INTERNATIONAL L L C -- Types RSIC-1, RSIC-1 (2.75).

to trusses with end joints staggered. Panels fastened to the trusses with #10 self-drilling, self-tapping cement board screws 1-3/4 in. long. Screws shall be spaced 6 in. OC along

| STUDCO BUILDING SYSTEMS -- RESILMOUNT Sound Isolation Clips - Type A237R

and grooved. Long dimension of panels to be perpendicular to wood trusses with end joints staggered a min of 2 ft and centered over the trusses. Panels secured to wood trusses (66, Steel Framing Members\* -- -- (Optional, Not Shown) -- As an alternate to Item 6.

each floor mat material.

structions provided with the damper

nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or | Plates have 5/16 in. long teeth projecting perpendicular to the plane of the plate. The teeth are in pairs facing each other (made by the same punch), forming a split tooth type

Subflooring -- Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with 4A. Alternate Ceiling Damper\* -- For use with min 18 in. deep trusses Max plenum box size nom 13 in. long by 13 in. wide and 11-7/8 in. high fabricated from galv steel.

greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted plate. Each tool has a chisel point on its outside edge. These points are diagonally opposite each other for each pair. The top half of each tooth has a twist for stiffness. The pairs

ibflooring -- Nom 23/32 in, thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically readed shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails. ples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Floor Mat Reinforcement -- (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Air Duct\* (Optional) -- Any UL Class 0 or Class 1 flexible air duct installed in accordance with the instructions provided by the damper manufacturer

AIRE TECHNOLOGIES INC -- Models: CRD model 50 w/Boot, CRD model 50EA w/Boot, CRD model 55 w/Boot, CRD model 55 EA w/Boot

AIRE TECHNOLOGIES INC -- Models: CRD model 50 w/Boot, CRD model 50EA w/Boot, CRD model 55 w/Boot, CRD model 55 EA w/Boot

exceed 128 sg in, per 100 sg ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the damper.

D. Alternate Ceiling Damper\* -- For use with min 18 in, deep trusses Max plenum box size nom 15 in, long by 15 in, wide and 11-7/8 in, high fabricated from galy steel.

Aggregate damper openings shall not exceed 50 sq in. per 100 sq ft of ceiling area. Installed in accordance with the manufacturer's installation instructions provided with the

F. Alternate Ceiling Damper\* -- For use with min 18 in, deep trusses Max plenum box size nom 19 in, long by 15 in, wide and 11-7/8 in, high fabricated from galy steel.

Aggregate damper openings shall not exceed 96 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided w

4G. Alternate Ceiling Damper\* -- For use with min. 18 in. deep trusses. Max. nom area shall be 349 sq in. Max. overall length and width shall not exceed 18-11/16 in. by 18-11/7

n. with max. 16 in. by 16 in. register opening. Aggregate damper openings shall not exceed 175 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the

H. Alternate Ceiling Damper\* -- For use with min 18 in. deep trusses Max plenum box size nom 19 in. long by 19 in. wide and 11-7/8 in. high fabricated from galv steel.

4l. Alternate Ceiling Damper\* -- For use with min 18 in. deep trusses Max plenum box size nom 14 in. long by 16 in. wide and 15 in. high fabricated from galv steel. Aggregate

damper openings shall not exceed 112 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with the

Batts and Blankets\* -- (Optional) - Glass fiber or mineral wool insulation bearing the UL Classification Marking as to Surface Burning Characteristics and/or Fire Resistance

5A. Loose Fill Material\* -- (Optional) - As an alternate to Item 5, when the resilient channels (Item 6) are spaced a max of 12 in. OC, or when the Steel Framing Members (Item 6A

5B. Cavity Insulation - Batts and Blankets\* or Loose Fill Material\* - (Not Shown) -- (As described above in Items 5 and 5A) -- For Use with Item 7A -- Min. 3-1/2 in thick with

Resilient Channels -- Formed from min 25 MSG galv steel installed perpendicular to the trusses. When insulation (Item 5) is secured to the underside of the subfloor, the

resilient channels are spaced 16 in. OC. When insulation (Items 5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane, the resilient channels are spaced 12

in. OC. Channels secured to each truss with 1-1/4 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite

A. Main Runners -- Nom 10 or 12 ft long, 15/16 in. or 1-1/2 in. wide face, spaced 4 ft. OC. Main runners suspended by min 12 SWG galv steel hanger wires spaced 48 in. OC.

side of butted gypsum panel end joints. The cross tees or cross channels may be riveted or screw attached to the wall angle or channel to facilitate the ceiling installation.

Hanger wires to be located adjacent to main runner/cross tee intersections. Hanger wires wrapped and twist-tied on 16d nails driven in to side of trusses at least 5 in. above the

. Wall Angle or Channel -- Painted or galv steel angle with 1 in. legs or channel with 1 in. legs, 1-9/16 in. deep attached to walls at perimeter of ceiling with fasteners 16 in. OC.

a. Furring Channels -- Formed of No. 25 MSG galv steel, 2-3/8 in, wide by 7/8 in, deep, spaced 16 in, OC perpendicular to wood structural members. When insulation, Items 5 or

5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item

. Steel Framing Members\* -- Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC, and secured to the bottom chord of alternating trusses with one

No. 8 x 2-1/2 in. coarse drywall screw through center grommet. When insulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the clip

spacing shall be reduced to 24 in. OC and secured to consecutive trusses. Furring channels are friction fitted into clips. Adjoining channels are overlapped as described in Item a.

As an alternate, ends of adjoining channels may be overlapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the

ulation, Items 5 or 5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to

. Steel Framing Members\* -- Used to attach furring channels (Item a) to trusses (Item 2). Clips spaced 48 in. OC. RSIC-1 and RSIC-1 (2.75) clips secured to alternating trusses

with No. 8 x 2-1/2 in. course drywall screw through the center grommet. Furring channels are friction fitted into clips. RSIC-1 clips for use with 2-9/16 in. wide furring channels.

lapped 6 in. and secured together with two self-tapping No. 6 framing screws, min 7/16 in. long at the midpoint of the overlap, with one screw on each flange of the channel

Furring Channels -- Formed of No. 25 MSG galv steel, 2-5/8 in. wide by 7/8 in deep, spaced 16 in OC, perpendicular to wood structural members. When insulation, Items 5 or

Steel Framing Members\* -- Used to attach furring channels (Item a) to the trusses (Item 2). Clips spaced at 48" OC and secured to the bottom of the trusses with one 2 in.

Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with

E. Resilient Channels - (Not Shown) -- For Use With Item 7A - Formed from min 25 MSG galv steel installed perpendicular to trusses and spaced 16 in. OC. Channels secured to

each truss with 1-5/8 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in. OC, oriented opposite each gypsum panel end joint.

a. Furring Channels -- Formed of No. 25 MSG galv steel, 2-1/2 in, wide by 7/8 in deep, spaced 16 in OC, perpendicular to wood structural members. When insulation, Items 5 or

5A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in, OC. Channels secured to trusses as described in Item

Coarse Drywall Screw with 1 in. diam washer through the center hole. Furring channels are then friction fitted into clips. Ends of channels are overlapped 6" and tied together with

Cold Rolled Channels at every intersection with a 3/4 in. TEK screw through each furring channel leg. Ends of adjoining channels overlapped 12 in. and fastened together with two

p. Cold Rolled Channels -- 1-1/2 in. by 1/2 in., formed from No. 16 ga. galv steel, positioned vertically and parallel to trusses, friction-fitted into the channel caddy on the Steel

double strand No. 18 SWG galv steel wire ties, one at each end of overlap, or with two 3/4 in. TEK screws in each leg of the overlap section. Two furring channels used at end joints

Framing Members (Item 6Gd) and secured with two 3/4 in. TEK screws. Adjoining lengths of cold rolled channels lapped min. 12 in. and secured along bottom legs with four 3/4 in.

Blocking -- Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact

. Steel Framing Members\* -- Spaced 48 in. OC. max along truss, and secured to the truss on alternating trusses with two, #10 x 1-1/2 in. screws through mounting holes on the

of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Gd) location with 16d nails or

a. Furring Channels -- Formed of No. 25 MSG galv steel, nominal 2-1/2 in. wide by 7/8 in. deep, spaced as indicated in Item 6, perpendicular to trusses and friction fit into Steel

raming Members (Item 6Hc). Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap or with

wo TEK screws along each leg of the 6 in. overlap. Two furring channels used at end joints of gypsum board (Item 7). Butt joint channels held in place by strong back channels

eximum 48 in. OC. Strong back channels secured to every intersection of primary furring channels with four 7/16 in. pan head screws, two along each of the legs at intersection

Blocking -- Where truss design does not permit direct, full contact of the hanger bracket, a piece of nominal 2 by 4 in. lumber (blocking), min. 12 in. long to permit full contact

of the hanger bracket, to be secured vertically to the side of the trusses at the top and bottom of the blocking at each Steel Framing Member (Item 6Hc) location with 16d nails or

Steel Framing Members\* -- Used to attach furring channels (Item 6Ha) to trusses. Clips spaced 48 in. OC and secured along truss webs at each furring channel intersection with

placed upside down, on top of, and running perpendicular to primary furring channels, extending 6 in. longer than length of gypsum side joint. Strong back channels spaced

Butt joint channels run perpendicular to strong back channels and shall be minimum 6 in. longer than length of joint, secured to strong back channels with 7/16 in. pan head

Additional channels shall extend min 6 in. beyond each side edge of panel. Insulation, Item 5B is applied over the resilient channel/gypsum panel (Item 7A) ceiling membrane.

A is applied over the furring channel/gypsum panel ceiling membrane, the furring channel spacing shall be reduced to 12 in. OC. Channels secured to trusses as described in Item

RSIC-1 (2.75) clips for use with 2-23/32 in. wide furring channels. Adjoining channels are overlapped as described in Item a. As an alternate, ends of adjoining channels may be

D. Alternate Steel Framing Members\* -- (Not Shown) As an alternate to items 6 to 6C, furring channels and Steel Framing Members as described below.

F. Alternate Steel Framing Members\* -- (Not Shown) As an alternate to items 6 to 6E, furring channels and Steel Framing Members as described below.

b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap.

o. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap

min. 3/4 in. long self-drilling #10 x 1-1/2 in. screws through each of the provided hole locations. Furring channels are friction fitted into clips.

ouble strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in item 7.

gypsum board (Item 7), each extending a min of 6 in. beyond both side edges of the board.

TEK screws and wire-tied together with two double strand 18 SWG galv steel wire ties, one at each end of overlap.

double strand of No. 18 AWG galvanized steel wire. Additional clips are required to hold the Gypsum Butt joints as described in item 7.

usses as described in Item b. Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galv steel wire near each end of overlap.

verlap, with one screw on each flange of the channel. Additional clips required to hold furring channel that supports the gypsum board butt joints, as described in Item 7.

eel Framing Members) and gypsum panel membrane. The finished rating has only been determined when the insulation is secured to the subflooring.

o limit on maximum thickness fitted in the concealed space, draped over the resilient channel (Item 6E)/gypsum board (Item 7A) ceiling membrane.

5A. Alternate Steel Framing Members -- (Not Shown) - As an alternate to Items 6, main runners, cross tees, cross channels and wall angle as listed below:

Ends of adjoining channels overlapped 6 in. and tied together with double strand of No. 18 AWG galvanized steel wire near each end of overlap.

ach gypsum panel end joint as shown in the above illustration. Additional channels shall extend min 6 in. beyond each side edge of panel.

nanufacturer's installation instructions provided with the damper. An aluminum or steel grille (Item 9) shall be installed in accordance with installation instructions.

LLOYD INDUSTRIES INC -- Model CRD 50-BT-6, CRD 50-EA-BT-6, CRD 55-BT-6, CRD 55 EA-BT-6, CRD50-W X-BT-6

Ceiling Dampers\* are not used. Min truss depth is 18 in. when Ceiling Damper\* is used. Truss members secured together with min 0.036 0356 in. thick galvanized steel plates.

Steel Framing Members\* -- (Optional - Not Shown) -- Used to attach resilient channels (Item 6) to trusses (Item 2). Clins spaced 48 in OC and secured to trusses with one Not 3 x 2-1/2 in. coarse drywall screw through center grommet hole. Channels secured to clips with one #10 x 1/2 in. pan-head self-drilling screw. Ends of adjoining channels apped 6 in. and secured together with two #8 15 x 1/2 in. Philips Modified screws spaced 2-1/2 in. from the center of the overlap. Gypsum board butt joints require additional silient channels spaced 1-1/2 in. from the butt joint on either side. One edge of the extra channels will extend to an adjacent truss where it is secured with a clip.

J. Steel Framing Members\* -- (Optional, Not Shown) -- Used as an alternate method to attach resilient channels to structural members. A resilient sound isolation accessory shall be used at each attachment point of the resilient channels and spaced max 24 in. O.C. Channel ends butted and centered under the structural members and attached with one cessory at each end. Additional accessories used to hold resilient channels that support the gypsum board end joints. The accessory envelops the mounting edge of the resilient Floor Mat Materials\* -- (Optional) -- Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over

istructions. Gypsum Board butt joints staggered minimum 24 in. OC and Gypsum Board screws spaced 8 in. OC when used. PAC INTERNATIONAL L L C -- Type RC-1 Boost 6K. Resilient Channels -- For use with American Gypsum Co. Type AG-C gypsum board only. Resilient channels, formed of 25 MSG thick galv steel, spaced 16 in. OC Finish Flooring\* -- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) erpendicular to trusses. When insulation (Items 5, 5A, 5B) is applied over the resilient channel/gypsum board ceiling membrane, the spacing may remain at 16 in. OC. Channels category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific

ecured to each truss with 1-1/4 in. long Type S bugle head steel screws. Channels overlapped 4 in. at splices. Two channels, spaced 6 in OC, oriented opposite each gypsum board end joint as shown in the above illustration. Additional channels shall extend 6 in beyond each side edge of board.

annels may be overlapped 6 in. and secured together with two self-tapping #6 framing screws, min. 7/16 in. long at the midpoint of the overlap, with one screw on each flange

L. Steel Framing Members\* -- (Optional, Not Shown, As an alternate to Item 6) -- Furring channels and Steel Framing Members as described below: a. Furring Channels -- Formed of No. 25 MSG galv steel. 2-23/32 in, wide by 7/8 in, When there is no insulation installed in the concealed space the furring channels are spaced 24 in. OC max perpendicular to trusses. When insulation (Item 5) is secured to the underside of the subfloor the furring channels are spaced 16 in. OC max. When insulation (Item ) is applied over the furring channel/gypsum panel ceiling membrane, the furring channels are spaced 12 in. OC max. Channels secured to trusses as described in Item 6Lb. Ends 2. Trusses -- Parallel chord trusses, spaced a max of 24 in. OC, fabricated from nom 2 by 4 lumber, with lumber oriented vertically or horizontally. Min truss depth is 12 in, when of adjoining channels are overlapped 6 in. and tied together with double strand of No. 18 SWG galv steel wire near each end of overlap. As an alternate, ends of adjoining

> . Steel Framing Members\* -- Used to attach furring channels (Item 6La) to trusses (Item 2). Clips spaced 48 in. OC max with No. 8 x 2-1/2 in. course drywall screw through the center grommet. Furring channels are friction fitted into clips.

f the channel. Additional clips required to hold furring channel that supports the wallboard butt joints, as described in Item 7

4. Ceiling Damper\* (Optional). To be used with Air Duct Item 3. -- For use with min 18 in. deep trusses Max plenum box size nom 19 in. long by 19 in. wide and 11-7/8 in. high CLARKDIETRICH BUILDING SYSTEMS -- Type ClarkDietrich Sound Clips fabricated from galv steel. Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed with long dimension perpendicular to resilient channels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 12 in. OC and located a min of 1/2 in. from side joints and 3 in. from end joint When insulation (Items 5 or 5A) is applied over the resilient channel/gypsum panel ceiling membrane the screw spacing shall be reduced to 8 in. OC. End joints secured to both esilient channels as shown in end joint detail. When Steel Framing Members (Item 6A) are used, gypsum panels installed with long dimension perpendicular to cross tees with side oints centered along main runners and end joints centered along cross tees. Panels fastened to cross tees with 1 in. long Type S bugle-head screws spaced 8 in. OC in the field and ng end joints. Panels fastened to main runners with 1 in. long Type S bugle-head screws spaced midway between cross tees. Screws along sides and ends of panels spaced 3/8 o 1/2 in. from board edge. End joints of panels shall be staggered with spacing between joints on adjacent panels not less than 2 ft OC. When Steel Framing Members (Item 6B) Aggregate damper openings shall not exceed 50 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided w e used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring channels. Gypsum board secured to furring channels with nom 1 in, long No. 6 Type S bugle-head steel screws spaced 12 in. OC in the field of the board. Screw spacing is reduced to 8 in. OC when insulation is applied over the urring channel/gypsum panel ceiling membrane. Gypsum board butted end joints shall be staggered minimum 16 in. within the assembly. At the gypsum board butt joints, eacl end of each gypsum board shall be supported by a single length of furring channel equal to the width of the gypsum board plus 6 in. on each end. These additional furring 4B. Alternate Ceiling Damper\* -- For use with min 18 in. deep trusses Max size ceiling outlet in plenum box nom 12 in. long by 12 in. wide. Plenum box fabricated from galv ster channels shall be attached to underside of the truss with Genie clips as described in Item 6B. Screw spacing along the gypsum board butt joint shall be 6 in. OC. When Steel Aggregate damper openings shall not exceed 72 sq in. per 100 sq ft of ceiling area. Installed in accordance with the manufacturer's installation instructions provided with the Framing Members (Item 6C, 6L) are used, gypsum panels installed with long dimensions perpendicular to furring channels. Panels attached to the furring channels using 1 in, long Type S bugle-head steel screws spaced 8 in, OC along butted end joints and in the field of the panel, Butted end joints shall be staggered min, 2 ft within the assembly, and occur nidway between the continuous furring channels. Each end of each gypsum panel shall be supported by a single length of furring channel equal to the width of the gypsum panel plus 6 in. on each end. The two support furring channels shall be spaced approximately 3-1/2 in. OC and he attached to underside of the truss with one client as each end of the plus 6 in. on each end. The two support furring channels shall be spaced approximately 3-1/2 in. OC, and be attached to underside of the truss with one clip at each end of the channel. When Steel Framing Members (Item 6D) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring C. Alternate Ceiling Damper\* -- For use with min 18 in. deep trusses. Max size ceiling outlet in plenum box nom 16 in. long by 16 in. wide. Aggregate damper openings shall not channels. Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints

Aggregate damper openings shall not exceed 72 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with When Steel Framing Members (Item 6F) are used, one layer of nom 5/8 in. thick, 4 ft wide gypsum board is installed with long dimensions perpendicular to furring chann Gypsum board secured to furring channels with nom 1 in. long Type S bugle-head steel screws spaced 8 in. OC in the field of the board. Gypsum board butted end joints shall be red minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, an additional single length of furring channel shall be installed and be spaced Alternate Floor Mat Materials\* -- (Optional) - Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. | 4E. Alternate Ceiling Damper\* -- For use with min 18 in. deep trusses Max size ceiling outlet in plenum box nom 10 in. long by 10 in. wide. Plenum box fabricated from galv steel. oximately 3 in. from the butt joint (6 in. from the continuous furring channels) to support the floating end of the gypsum board. Each of these shorter sections of furring channel shall extend one truss beyond the width of the gypsum panel and be attached to the adjacent trusses with one SonusClip at every truss involved with the butt joint. (hen Steel Framing Members (Item 6G) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 7. Adjacent butt joints staggered minimum 48 in. OC (hen Steel Framing Members (Item 6H) are used, nom 5/8 in. thick, 4 ft wide gypsum board, installed as described in Item 7. Butt joints staggered minimum 24 in. OC.

shall be staggered minimum 48 in. and centered over main furring channels. At the gypsum board butt joints, each end of each gypsum board shall be supported by a single

ength of furring channel equal to the width of the gypsum board plus 3 in. on each end joint. The two support furring channels shall be spaced approximately 3 in. in from joint. trew spacing along the gypsum board butt joint and along both additional channels shall be 8 in. OC. Additional screws shall be placed in the adjacent section of gypsum board

to the aforementioned 3 in. extension of the extra butt joint channels as well as into the main channel that runs between. Butt joint furring channels shall be attached with one

AMERICAN GYPSUM CO -- Type AG-C **CGC INC** -- Types C, IP-X2, IPC-AR

CERTAINTEED GYPSUM INC -- Type LGFC-C/A NATIONAL GYPSUM CO -- Types eXP-C, FSW-G, FSW-C, FSK-G, FSK-C.

ESILMOUNT Sound Isolation Clip at each end of the channel.

JNITED STATES GYPSUM CO -- Types C, IP-X2, IPC-AR JSG BORAL DRYWALL SFZ LLC -- Type C

Aggregate damper openings shall not exceed 128 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturer's installation instructions provided with A. Gypsum Board\* - (Not Shown) -- For use with Items 5B and 6E. Nom 5/8 in. thick, 48 in. wide gypsum panels installed with long dimension perpendicular to resilient annels. Gypsum panels secured with 1 in. long Type S bugle head steel screws spaced 8 in. OC and located a min of 1/2 in. from side joints and 3 in. from the end joints. Finish Rating with this ceiling system is 20 min

UNITED STATES GYPSUM CO -- Type ULIX

inishing System - (Not Shown) -- Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads. Nom 2 in. wide paper tape embedded in first layer compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board. . Grille -- Aluminum or Steel grille, installed in accordance with the installation instructions provided with the ceiling damper. When no insulation is installed in the concealed space resilient channels (Item 6) are spaced 24 in. OC. When the resilient channels (Item 6) are spaced 16 in. OC, the insulation shall be a max of 3-1/2 in. thick, and shall be secured against the subflooring with staples at 12 in. OC or held suspended in the concealed space with 0.090 in. diam galv steel

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively wires attached to the wood trusses at 12 in. OC. When the resilient channels are spaced a max of 12 in. OC or when the Steel Framing Members (Item 6A) are used, there is no limit n the overall thickness of insulation, and the insulation can be secured against the subflooring, held suspended in the concealed space or draped over the resilient channels (or inted from the Online Certifications Directory with permission from UL" "© 2022 UL LLC

**KONTOGIANNIS** 

**ARCHITECTURE PLANNING** 

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

PROJECT:

SANCTUARY ION EDWARDS SENIOR HOUSING (BUILDING "B'

11125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:

FIRE RESISTANCE RATINGS

DATE: 07/31/2023 REVISED:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023 CONSTRUCTION SET

FIRE RATING FOR 1 HOUR FLOOR/CEILING ASSEMBLY

FIRE RATING FOR 1 HOUR FLOOR/CEILING ASSEMBLY

FIRE RATING FOR 1 HOUR FLOOR/CEILING ASSEMBLY

U.L. DESIGN NO. L563

FIRE RATING FOR 1 HOUR FLOOR/CEILING ASSEMBLY U.L. DESIGN NO. L563

/apor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

taples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Finish Flooring - Floor Topping Mixture\* -- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and

System No. 9

Subflooring -- Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue, or non-veneer APA Rated "Sturd-I-Floor" T & G panels per APA specifications

PRP-108. Plywood or non-veneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™

Finish Flooring - Floor Topping Mixture\* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions

Finish Flooring\* -- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX)

Alternate Floor Mat Materials\* -- (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

Alternate Floor Mat Materials\* -- (Optional) - Floor mat material Nom. 3/4 in, thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

Alternate Floor Mat Materials\* -- (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

Finish Flooring -- Min 3/4 in. thickness of lightweight insulating concrete with Perlite Aggregate\* or Vermiculite Aggregate\*, or gypsum concrete.

Alternate Floor Mat Materials\* -- (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

Alternate Floor Mat Materials\* -- (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

ernate Floor Mat Materials\* -- (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

Subflooring -- Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue, or nonveneer APA Rated "Sturd-I-Floor" T & G panels per APA specifications

greater withdrawal and lateral resistance strength may be substituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Finish Flooring - Floor Topping Mixture\* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions

measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or

Finish Flooring - Floor Topping Mixture\* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Refer to manufacturer's instructions

Alternate Floor Mat Materials\* -- (Optional) - Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

Alternate Floor Mat Materials\* -- (Optional) - Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in.

Alternate Floor Mat Materials\* -- (Optional) - Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panel to be perpendicular to

joists with joints staggered. Plywood or non-veneer APA rated panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each

thick by 1-1/2 in. wide wood strips and centered over wood trusses. Acoustic Sleeper pads are to be spaced appropriately so that the finish floor panels are fastened through

Finish Floor -- Min 15/32 in. thick wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panel to be perpendicular to

Subflooring - Structural Cement-Fiber Units\* -- Nominal 19 mm (3/4 in.) thick tongue and groove structural cement-fiber units. Long dimension of panels to be perpendicular

Subflooring (Alternate) -- Building Units\* -- Nom 3/4 in, thick, tongue and grooved boards. Long dimension of boards to be perpendicular to trusses with end joints staggered

Structural Cement-Fiber Units\* -- For use with UNITED STATES GYPSUM CO Types C, IP-X2, IPC-AR and ULIX gypsum boards only. Nom 3/4 in. thick, with long edges tongue

Subflooring -- Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood panels secured to trusses with construction

Finish Flooring - Floor Topping Mixture\* -- Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions

System No. 19 ıbflooring -- Nom 23/32 in. thick wood structural panels installed perpendicular to trusses with end joints staggered. Plywood panels secured to trusses with construction

threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically

nreaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round head, and helically

a min of 4 ft. and centered over the trusses. Boards secured to trusses with 1-1/4 in. long self-drilling, self- tapping screws or 2 in. x 0.113 in. Ring Shank nails spaced a max of 12

joists with joints staggered. Butt joints of panels have the option of being sealed with any UL Classified caulk or sealant found under - Fill, Void or Cavity Materials\* (XHHW).

ARCOSA SPECIALTY MATERIALS -- AccuCrete® Types NexGen, Green, Prime and PrePour, AccuRadiant®, AccuLevel® Types G40, G50 and SD30

Floor Mat Material\* -- (Optional) -- Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in.

Floor Mat Materials\* -- (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

the perimeter of each sheet and 12 in. OC in the field of each sheet. Screws shall be spaced 1/2 in. from end joints and 1 in. from side joints.

in. OC in the field with screws/nails located 1 in. from long edge, and max 8 in. OC along the end joints with screws/nails located 1/2 in. from end joint.

ARCOSA SPECIALTY MATERIALS -- AccuQuiet® Types D13, D-18, D25, DX38, EM.125, EM.125S, EM.250, EM.250S, EM.375, EM.375S, EM.750, and EM.750S

Floor Mat Materials\* -- (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

ubflooring -- Min 23/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with

ategory for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific

Floor Mat Materials\* - (Optional) -- Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over

Subflooring -- Min 23/32 in. thick T & G wood structural panels installed perpendicular to trusses with joints staggered 4 ft. Plywood or nonveneer APA rated panels secured to

trusses with construction adhesive and No. 6d ring shank nails spaced 12 in. OC along each truss. TetraGRIP™ nails measuring 2-3/8 in. long, 0.113 in. diameter, 0.272 in. round

head, and helically threaded shank with barbed features on the helix meeting ASTM F1667 and having equal or greater withdrawal and lateral resistance strength may be

Finish Flooring - Floor Topping Mixture\* -- Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's

Floor Mat Reinforcement -- (Optional) Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Fiber Glass Reinforcement -- (Optional) - 0.015 in. thick PVC coated non-woven fiberglass mesh, 0.368 lbs./sq. yd loose laid over the floor mat material.

loor Mat Material\* -- (Optional) Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in.

Floor Mat Materials\* -- (Optional) - Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

bstituted for the 6d nails. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Metal Lath - (Optional) 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.

Vapor Barrier - (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Vapor Barrier -- (Optional) Nom 0.030 in. thick commercial asphalt saturated felt.

**FORMULATED MATERIALS LLC** -- Types M1, M2, M3, Elite, Duo, R1, and R2

**Vapor Barrier** -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

Vapor Barrier -- (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

**KEENE BUILDING PRODUCTS CO INC** -- Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

KEENE BUILDING PRODUCTS CO INC -- Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

**Vapor Barrier** -- (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

**KEENE BUILDING PRODUCTS CO INC** -- Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

**KEENE BUILDING PRODUCTS CO INC** -- Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

Vapor Barrier -- (Optional) -- Nom 0.030 in, thick commercial asphalt saturated felt.

**Vapor Barrier** -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

KEENE BUILDING PRODUCTS CO INC -- Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

STC ARCHITECTURAL PRODUCTS L L C DBA STC SOUND CONTROL -- Acoustic Sleeper

/apor Barrier - (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

with a screw located 2 in. from each edge, located 1/2 in. from the end edges of the panel.

Subflooring -- Min 23/32 in. thick plywood with T & G edges along the 8 ft sides and exterior glue.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

See Perlite Aggregate (CFFX) and Vermiculite Aggregate (CJZZ) categories for names of manufacturers.

Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick.

mix design and minimum thickness recommended for use with eligible floor mat(s).

**DRMULATED MATERIALS LLC** -- Types FR-25, FR-30, and SiteMix

structions accompanying the material for specific mix design.

MAXXON CORP -- Type Encapsulated Sound Mat

ccompanying the material for specific mix design

oor topping thickness shall be a minimum of 1 in.

Floor topping thickness shall be a minimum of 1 in.

accompanying the material for specific mix design.

accompanying the material for specific mix design.

Floor topping thickness shall be a minimum of 1 in.

ECTEK INTERNATIONAL INC -- Armoroc Panel

**ECTEK INTERNATIONAL INC** -- Type MegaBoard

accompanying the material for specific mix design.

SIKA DEUTSCHLAND GMBH -- Type SCHONOX AP Rapid Plus

Acoustic Sleeper pads to trusses.

DEPENDABLE LLC -- GSL M3.4, GSL K2.6, GSL-CSD and GSL RH

each floor mat material.

MAXXON CORP -- Type Maxxon Standard and Maxxon High Strength

Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s). Floor Mat Materials\* -- (Optional, Not Shown) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor

LOW & BONAR INC -- EnkaSonic® by Colbond a member of the Low & Bonar group Types 125, 250, 250 Plus, 400, 400 Plus, 750 and 750 Plus. Floor Mat Reinforcement -- (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath -- (Optional) -- Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

U.L. DESIGN NO. L563

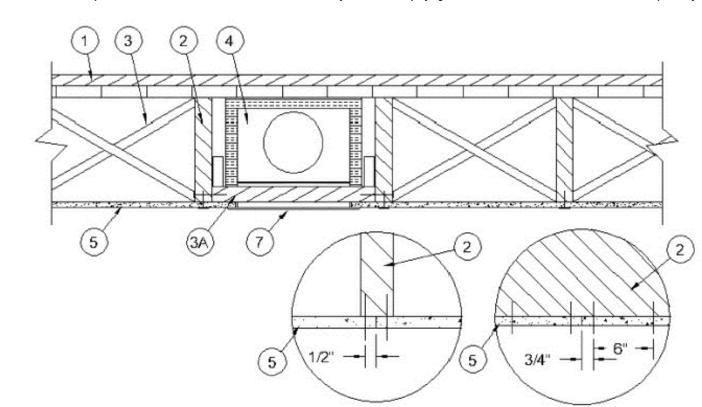
PAC INTERNATIONAL L L C -- Type RSIC-SI-CRC EZ Clip

H. Steel Framing Members\* -- (Not Shown) -- As an alternate to Item 6.

Unrestrained Assembly Rating -- 1 Hr.

This design was evaluated using a load design method other than the Limit States Design Method (e.g., Working Stress Design Method). For jurisdictions employing the Limit States Design Method, such as Canada, a load restriction factor shall be used -- See Guide BXUV or BXUV7

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.



I. Flooring Systems -- The flooring system shall consist of one of the following

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered

End Joint Detai

Side Joint Detail

Vapor Barrier -- Nom 0.010 in. thick commercial rosin-sized building paper. Finish Flooring -- Min 1 by 3 in. T & G and end matched laid perpendicular to joists, or 19/32 in. plywood, min grade "Underlayment". Face grain of plywood to be perpendicular to joists with joints staggered.

with joints staggered. Vapor Barrier -- (Optional) -- Nom 0.010 in. thick commercial asphalt saturated felt.

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists

Finish Flooring - Floor Topping Mixture\* -- Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1800 psi. Refer to manufacturer's structions accompanying the material for specific mix design

UNITED STATES GYPSUM CO -- Types LRK, HSLRK, CSD USG MEXICO S A DE C V -- Types LRK, HSLRK, CSD

**GRASSWORX L L C** -- Type SC50

Floor Mat Materials\* -- (Optional) -- Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping UNITED STATES GYPSUM CO -- Types SAM, LEVELROCK® Brand Sound Reduction Board, LEVELROCK® Brand Floor Underlayment SRM-25

Alternate Floor Mat Materials\* -- (Optional) -- Nom 3/8 in. thick floor mat material loose laid over the subfloor. Floor topping thickness shall be as specified under Floor Topping Mixture.

Subflooring -- Min 19/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Floor Mat Materials\* -- (Optional) -- Floor mat material nom 5/64 in. (2 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1 in. of floor-topping mixture HACKER INDUSTRIES INC -- Type Hacker Sound-Mat

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 1/4 in. (6 mm) thick adhered to subfloor with Hacker Floor Primer. Primer to be applied to the surface of the mat prior to the placement of a min 1-1/4 in. (32 mm) of floor-topping mixture. HACKER INDUSTRIES INC -- Type Hacker Sound-Mat II.

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 1/8 in. (3 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 3/4 in. (19

HACKER INDUSTRIES INC -- FIRM-FILL SCM 125 Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 1/4 in. (6 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1 in. (25 mm)

HACKER INDUSTRIES INC -- Type FIRM-FILL SCM 250, Quiet Qurl 55/025 Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 3/8 in. (10 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/4 in.

HACKER INDUSTRIES INC -- FIRM-FILL SCM 400, Quiet Qurl 60/040

Alternate Floor Mat Materials -- (Optional) -- Floor mat material nom 3/4 in. (19 mm) thick loose laid over the subfloor. Floor topping thickness shall be a min of 1-1/2 in.

HACKER INDUSTRIES INC -- Type FIRM-FILL SCM 750, Quiet Qurl 65/075

Metal Lath (Optional) -- For use with 3/8 in. (10 mm) floor mat materials, 3/8 in. expanded steel diamond mesh, 3.4 lbs/sq yd placed over the floor mat material. Hacker Floor Primer to be applied prior to the placement of the metal lath. When metal lath is used, floor topping thickness a nom 1-1/4 in. over the floor mat. Finish Flooring -- Floor Topping Mixture\* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1100 psi. Mixture shall consist of 6.8 gal of

water to 80 lbs of floor topping mixture to 1.9 cu ft of sand. HACKER INDUSTRIES INC -- Firm-Fill Gypsum Concrete, Firm-Fill 2010, Firm-Fill 3310, Firm-Fill 4010, Firm-Fill High Strength, Gyp-Span Radiant

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture\* -- Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.4 cu feet of preformed foam concentrate to 94 lbs Type I Portland cement, 300 lbs of sand with 5-1/2 gal of water.

**ELASTIZELL CORP OF AMERICA** -- Type FF

ubflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists

Vapor Barrier-(Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture\* -- Min 1-1/2 in. thickness of floor topping mixture having a min compressive strength of 1000 psi and a cast density of 100 plus or minus 5 pcf. Foam concentrate mixed 40:1 by volume with water and expanded at 100 psi through nozzle. Mixture shall consist of 1.2 cu feet of preformed foam concentrate to

**AERIX INDUSTRIES** -- Floor Topping Mixture

System No. 7

Subflooring -- Min 19/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt

Finish Flooring -- Floor Topping Mixture\* -- Min 3/4 in. thickness of floor topping mixture having a min compressive strength of 1000 psi. Mixture shall consist of 5 to 8 gal of water to 80 lbs of floor topping mixture to 2.1 cu ft of sand.

**ULTRA QUIET FLOORS** -- UQF-A, UQF-Super Blend, UQF-Plus 2000

System No. 8 ubflooring -- Min 15/32 in. wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists with joints

Vapor Barrier -- (Optional) -- Nom 0.030 in thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture\* -- Min 3/4 thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's structions accompanying the material for specific mix design. MAXXON CORP -- Type Maxxon Standard and Maxxon High Strength

Floor Mat Materials\* -- (Optional) -- Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping over each floor mat material.

MAXXON CORP -- Type Encapsulated Sound Mat. Floor Mat Reinforcement -- (Optional) Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath (Optional) -- 3/8 in. expanded galvanized steel diamond mesh, 3.4 lbs/sq yd loose laid over the floor mat material.

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

**Vapor Barrier** -- (Optional) Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture\* -- Min 3/4 in. thickness of floor topping mixture having a minimum compressive strength of 1500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design

FORMULATED MATERIALS LLC -- Types FR-25, FR-30, and SiteMix UNITED STATES GYPSUM CO -- Levelrock SLC

Alternate Floor Mat Material\* -- (Optional) Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

FORMULATED MATERIALS LLC -- Types M1, M2, M3, Elite, Duo, R1, and R2

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick plywood or min 7/16 in. thick oriented strand board (OSB) wood structural Finish Floor -- Mineral and Fiber Board\* -- Min 1/2 in. thick, supplied in sizes ranging from 3 ft by 4 ft to 8 ft by 12 ft. All joints to be staggered a min of 12 in. with adjacent

FIRE RATING FOR 1 HOUR FLOOR/CEILING ASSEMBLY

U.L. DESIGN NO. L512

HOMASOTE CO -- Type 440-32 Mineral and Fiber Board

System No. 11 Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt.

Finish Flooring -- Floor Topping Mixture\* -- Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

NCA MFG INC -- Models CD-S/R-HC, CD-S/R-HC-A, CD-RD-HC, CD-RD-HC-A

5. Gypsum Board\* -- Nom 1/2 or 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists and secured with 5d and 6d cement coated cooler

5A. Gypsum Board\* -- (Finish Rating - 16 min.) Required when Air Balance Inc. Type 299 ceiling damper (Item 4) is installed. Nom 5/8 in. thick, 48 in. wide gypsum board,

installed with long dimension perpendicular to joists. Gypsum board secured with 1-7/8 in. long, 6d cement coated nails spaced 6 in. OC with the first nails located 1/2 in. and 3

5B. Gypsum Board\* -- (As an alternative to Items 5 and 5A) Nom 5/8 in. thick, 48 in. wide gypsum board installed, as described in Items 5 and 5A, with max screw spacing 6 in.

6. Finishing System -- (Not Shown) -- Vinyl, dry or premixed joint compound, applied in two coats to joints and screw-heads. Nom 2 in. wide paper tape embedded in first

8. Discrete Products Installed in Air-handling Spaces\* -- Automatic Balancing Valve/Damper -- (Not Shown - Optional) -- For use with item 4, Ruskin Company's Model

FIRE RATING FOR 1 HOUR FLOOR/CEILING ASSEMBLY

U.L. DESIGN NO. L512

CFD7 damper (CABS). Ceiling damper to be provided with plenum box per damper manufacturer's instructions with side outlet only. Entire assembly to be installed into any UL

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

layer of compound over all joints. As an alternate, nom 3/32 in. thick veneer plaster may be applied to the entire surface of gypsum board.

Class 0 or Class 1 flexible air duct in accordance with the instructions provided by the automatic balancing valve/damper manufacturer

7. Grille -- Steel grille, installed in accordance with the installation instructions provided with the ceiling damper

nails, spaced 6 in. OC, for the 1/2 in. board and 5/8 in. thick board, respectively. Nails spaced 3/4 and 1/2 in. from side and end joints, respectively.

BRISK MFG INC -- Model BMI-50-CRD-S/R-WT

RUSKIN COMPANY -- Model CFD7

AMERICAN GYPSUM CO -- Types AG-C

**CABOT MANUFACTURING ULC** -- Type C

CERTAINTEED GYPSUM INC -- Type LGFC-C/A

**GEORGIA-PACIFIC GYPSUM L L C** -- Types 5, DAPC, TG-C

PABCO BUILDING PRODUCTS L L C, DBA PABCO GYPSUM -- Type C or PG-C

NATIONAL GYPSUM CO -- Types eXP-C, FSK-C, FSW-C

PANEL REY S A -- Types PRC, PRC2, 5/8 in. Type PRX2

UNITED STATES GYPSUM CO -- Types C, IP-X2, IPC-AR

**USG MEXICO S A DE C V** -- Types C, IP-X2, IPC-AR

THAI GYPSUM PRODUCTS PCL -- Type C

**USG BORAL DRYWALL SFZ LLC** -- Type C

**UNITED STATES GYPSUM CO -- Type C** 

USG MEXICO S A DE C V -- Type C

UNITED STATES GYPSUM CO -- ULIX

METAL INDUSTRIES INC -- Model ABV-4, ABV-5, ABV-6

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**USG BORAL DRYWALL SFZ LLC** -- Type C

in. from the board edges.

CGC INC -- Type ULIX

**CERTAINTEED GYPSUM INC** -- Type C

CGC INC -- Types C, IP-X2, IPC-AR

PRICE INDUSTRIES LTD -- Models CD-S/R-HC, CD-RD-HC

UNITED ENERTECH CORP -- Models C-S/R-HC(-A), C-RD-HC(-A)

ARCOSA SPECIALTY MATERIALS -- AccuCrete® Types NexGen, Green, Prime and PrePour, AccuRadiant®, AccuLevel® Types G40, G50 and SD30

UNITED STATES GYPSUM CO -- Levelrock SLC Alternate Floor Mat Material\* -- (Optional) - Floor mat material nominal 2 - 9.5 mm thick loose laid over the subfloor. Floor topping shall be a min of 3/4 in. or 1 in. thickness

of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively. ARCOSA SPECIALTY MATERIALS -- AccuQuiet® Types D13, D-18, D25, DX38, EM.125, EM.125, EM.250, EM.250S, EM.375, EM.375S, EM.750, and EM.750S.

Subflooring -- 15/32 or 19/32 in. thick wood structural panels, min. grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to joists

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt. Finish Flooring -- Floor Topping Mixture\* -- Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min

compressive strength of 2100 psi. Refer to manufacturer's instructions accompanying the material for specific mix design. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists

**Vapor Barrier** -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick. Vapor Barrier -- (Optional) - Nom 0.010 in. thick commercial rosin-sized building paper.

Finish Flooring\* -- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.

Floor Mat Materials\* -- (Optional) -- Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N Alternate Floor Mat Materials\* -- (Optional) -- Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in. KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials\* -- (Optional) -- Floor mat material Nom. 3/4 in, thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in. KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials\* -- (Optional) -- Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in. KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials\* -- (Optional) -- Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

Subflooring -- Min 23/32 in. thick T&G wood structural panels, min grade "Underlayment" or "Single-Floor". Face grain of plywood or strength axis of panels to be perpendicular to the trusses with end joints staggered 4 ft. Panels secured to trusses with construction adhesive and No. 6d ringed shank nails spaced 12 in. OC along each truss. Staples having equal or greater withdrawal and lateral resistance strength may be substituted for the 6d nails.

Gypsum Board\* -- One layer of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists. Gypsum board secured with 1 in. long No. 6 Type W bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches from the joints of the subfloor.

GEORGIA-PACIFIC GYPSUM L L C -- Type DS Floor Mat Materials\* -- (As an alternate to the single layer gypsum board) -- Floor mat material loose laid over the subfloor.

MAXXON CORP -- Type Encapsulated Sound Mat. Gypsum Board\* -- (For use when floor mat is used) Two layers of nom 5/8 in. thick, 4 ft wide gypsum board, installed with long dimension perpendicular to joists on top of the floor mat material. Gypsum board secured to each other with 1 in. long No. 6 Type G bugle head steel screws spaced 12 in. OC and located a min of 1-1/2 in. from side and end joints. The joints of the gypsum board are to be staggered a minimum of 12 inches in between layers and from the joints of the subfloor.

System No. 15 Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt. Finish Flooring -- Floor Topping Mixture\* -- Min 3/4 or 1 in. thickness of floor topping mixture for 19/32 or 15/32 in. thick wood structural panels respectively, having a min compressive strength of 1000 psi. Refer to manufacturer's instructions accompanying the material for specific mix design.

**DEPENDABLE LLC** -- GSL M3.4, GSL K2.6, GSL-CSD and GSL RH UNITED STATES GYPSUM CO -- Levelrock SLC

GEORGIA-PACIFIC GYPSUM L L C -- Type DS

Floor Mat Materials\* -- (Optional) -- Nom. 1/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in.

KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 55/025 and Quiet Qurl 55/025 N

Alternate Floor Mat Materials\* -- (Optional) -- Floor mat material Nom. 3/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in. KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 60/040 and Quiet Qurl 60/040 N

Alternate Floor Mat Materials\* -- (Optional) -- Floor mat material Nom. 3/4 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 1-1/2 in. KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 65/075, Quiet Qurl 65/075 N

Alternate Floor Mat Materials\* -- (Optional) -- Floor mat material Nom. 1/8 in. thick loose laid over the subfloor. Floor topping thickness shall be a minimum of 3/4 in. KEENE BUILDING PRODUCTS CO INC -- Type Quiet Qurl 52/013 and Quiet Qurl 52/013 N

Alternate Floor Mat Materials\* -- (Optional) -- Floor mat material Nom. 1/4 in. entangled net core with a compressible fabric attached to the bottom loose laid over the subfloor. Floor topping thickness shall be a minimum of 1 in.

KEENE BUILDING PRODUCTS CO INC -- Quiet Qurl 55/025 MT and Quiet Qurl 55/025 N MT

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered. Finish Flooring\* -- Floor Topping Materials -- Min 3/4 in. to 1-1/2 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance with

See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Floor Mat Materials\* -- (Optional) -- Floor mat material nom 1/8 in. to 3/4 in. thick. Loose laid over the subfloor. When used, Acousti-flor CSM (crack suppression mat) is loose

laid over the floor mat material. Floor topping material thickness is dependent on thickness of floor mat used. WALFLOR INDUSTRIES INC -- Type Acousti-flor, Acousti-flor CSM. Floor topping thickness depends on products used as follows:

Acousti-flor (1/8 in. thick) - Floor topping thickness shall be a minimum of 3/4 in. Acousti-flor (1/4 in. thick) - Floor topping thickness shall be a minimum of 1 in. Acousti-flor (3/8 in. thick) - Floor topping thickness shall be a minimum of 1 in.

Acousti-flor (3/4 in. thick) - Floor topping thickness shall be a minimum of 1-1/2 in. Metal Lath -- (Optional) -- Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material.

Fiberglass Mesh Reinforcement -- (Optional) -- Coated non-woven glass fiber mesh grid loose laid over floor mat material.

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered.

Finish Flooring - Floor Topping Mixture\* -- Min 1 in. thickness of floor topping mixture having a min compressive strength of 4500 psi. Refer to manufacturer's instructions accompanying the material for specific mix design. SIKA DEUTSCHLAND GMBH -- Type SCHONOX AP Rapid Plus

Subflooring -- Min 1 by 6 in. T & G lumber fastened diagonally to joists, or min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists with joints staggered. Vapor Barrier -- (Optional) - Commercial asphalt saturated felt, 0.030 in. thick

Vapor Barrier -- (Optional) - Nom 0.010 in. thick commercial rosin-sized building pape Finish Flooring - Floor Topping Mixture\* -- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies. Refer to the manufacturer's instructions accompanying the material and/or contact the manufacturer's technical support for specific mix design and minimum thickness recommended for use with eligible floor mat(s).

Floor Mat Materials\* -- (Optional, Not Shown) - Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor LOW & BONAR INC -- EnkaSonic® by Colbond a member of the Low & Bonar group Types 125, 250, 250 Plus, 400, 400 Plus, 750, and 750 Plus. Floor Mat Reinforcement -- (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement.

Metal Lath -- (Optional) -- Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material. Fiberglass Mesh Reinforcement -- (Optional) -- Coated non-woven glass fiber mesh grid loose laid over floor mat material.

Subflooring -- Min 15/32 in. thick wood structural panels, min grade "C-D" or "Sheathing". Face grain of plywood or strength axis of panels to be perpendicular to the joists

Vapor Barrier -- (Optional) -- Nom 0.030 in. thick commercial asphalt saturated felt. Floor Mat Materials\* -- (Optional) -- Floor mat material loose laid over the subfloor. Refer to manufacturer's instructions regarding the minimum thickness of floor topping

**GRASSWORX L L C** -- SC Types Finish Flooring\* -- Min 3/4 in. thickness of any Floor Topping Mixture bearing the UL Classification Marking as to Fire Resistance. See Floor- and Roof-Topping Mixtures (CCOX) category for names of Classified Companies.

Floor Mat Reinforcement -- (Optional) - Refer to manufacturer's instructions regarding minimum thickness of floor topping for use with floor mat reinforcement. Metal Lath -- (Optional) -- Expanded steel diamond mesh, 2.5 lb / sq yd loose laid over floor mat material. Fiberglass Mesh Reinforcement -- (Optional) -- Coated non-woven glass fiber mesh grid loose laid over floor mat material.

2. Wood Joists -- Min 2 by 10, spaced 16 in. OC and effectively fireblocked in accordance with local codes. 3. **Cross Bridging** -- Min 1 by 3 in. or min 2 by 10 solid blocking. 3A. Horizontal Bridging -- Used in lieu of Item 3 in same joist bay as ceiling damper (Item 4), when ceiling damper is employed. Wood 2 by 4 in. secured between joists with

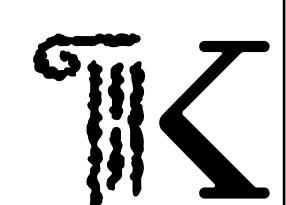
4. Ceiling Damper\* -- (Optional) -- Max nom area shall be 198 sq in. Max rectangular size shall be 12 in. wide by 16-1/2 in. long. Max height of damper shall be 8-3/4 in. Aggregate damper openings shall not exceed 99 sq in. per 100 sq ft of ceiling area. Damper installed in accordance with the manufacturers installation instructions provided with the damper. A steel grille (Item 7) shall be installed in accordance with installation instructions. AIR BALANCE INC -- Type 299 (See Item 5A)

AIR KING VENTILATION PRODUCTS -- Series FRAS, Series FRAK, Series FRAKV CENTRAL VENTILATION SYSTEMS CO L L C -- Models C-S/R-HC(-A), C-RD-HC(-A) GREENHECK FAN CORP -- Model CRD-1WJ

over each floor mat material.

METAL-FAB INC -- Models MSCDHC, MRCDHC METAL INDUSTRIES INC -- Models CD-S/R-HC, CD-S/R-HC-A, CD-RD-HC, CD-RD-HC-A

FIRE RATING FOR 1 HOUR FLOOR/CEILING ASSEMBLY U.L. DESIGN NO. L512



**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE **PLANNING DESIGN** 

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

PROJECT:

**ISANCTUARY ION EDWARDS** SENIOR HOUSING (BUILDING "B'

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: FIRE RESISTANCE RATINGS

DATE: 07/31/2023 REVISED:



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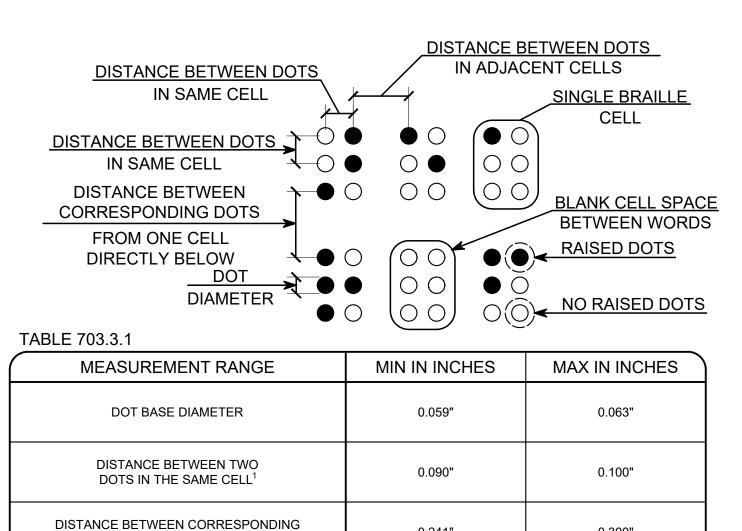
SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023 CONSTRUCTION SET

SCALE: N.T.S.

FIRE EXTINGUISHER

EXIT FLOW FIRE PULL FIRE ALARM PULL

LEGEND



0.241"

0.025"

0.395"

1. MEASURED FROM CENTER OF DOT

**EVACUATION PLANS:** 

PROVIDE EVACUATION PLANS FOR

EACH FLOOR AND MOUNT NEAR ELEVATOR IN 8 1/2"x11" FRAME. 2ND

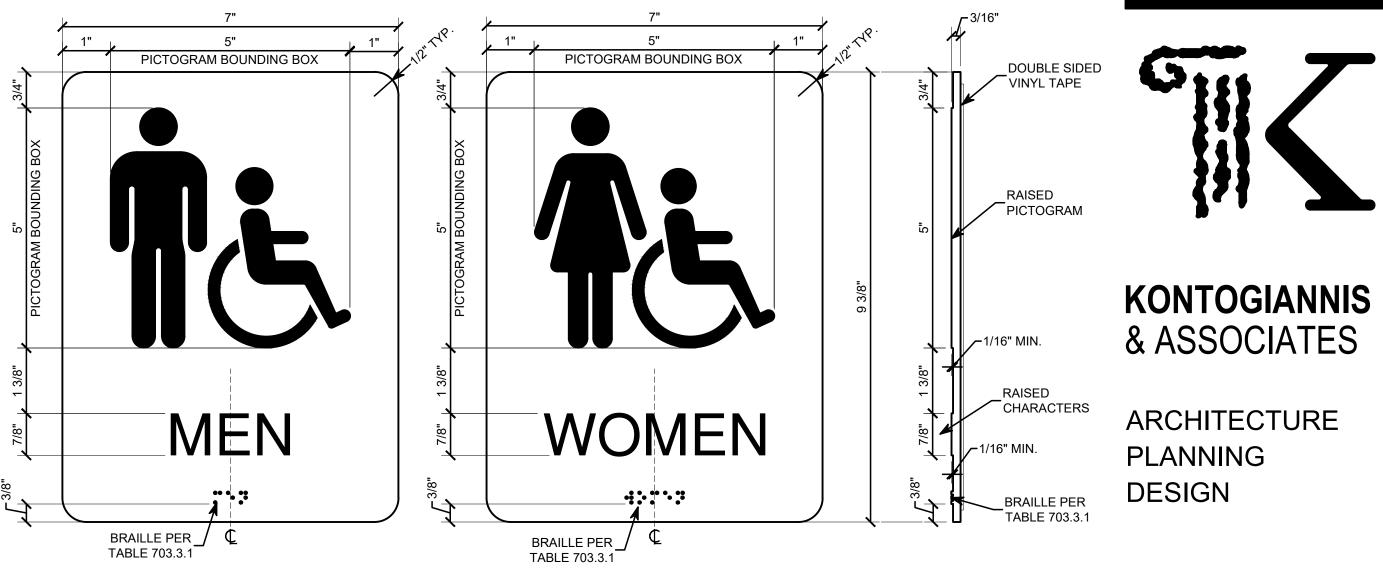
& 3RD FLOOR ARE SIMILAR.

DOTS IN ADJACENT CELLS<sup>1</sup>

DOT HEIGHT

DISTANCE BETWEEN CORRESPONDING

DOTS FROM ONE CELL DIRECTLY BELOW



# TYPICAL SIGN W/ PICTOGRAM, CHARACTERS, & BRAILLE

SCALE: N.T.S.

**ACCESSIBILITY** 

**BRAILLE PER** 

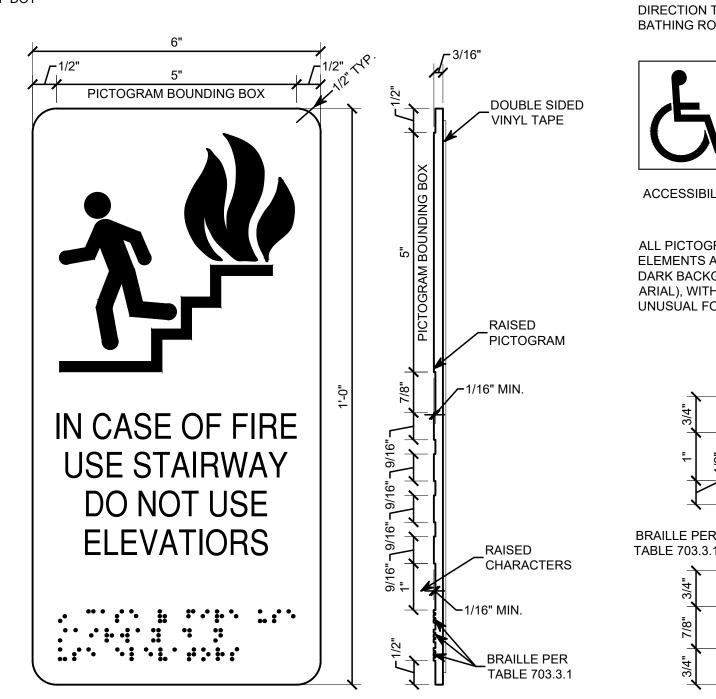
SCALE: N.T.S.

SCALE: N.T.S.

LOCATIONS THAT NEED SIGNAGE WITH PICTOGRAMS AND/OR THE USE OF INTERNATIONAL SYMBOLS ARE AS FOLLOWS: ENTRANCES, DIRECTION TO ACCESSIBLE ENTRANCE, EXIT PASSAGEWAYS, EXIT STAIRWAYS, EXIT DISCHARGE LOCATION, ELEVATORS, TOILET &

ELEMENTS AS SHOWN ABOVE. ALL SIGNAGE IS TO HAVE A CONTRASTING BACKGROUND COLOR, I.E. LIGHT SIGN ELEMENTS WITH A

DARK BACKGROUND OR DARK SIGN ELEMENTS WITH A LIGHT BACKGROUND. ALL TEXT IS TO BE SANS SERIF FONT (HELVETICA OR ARIAL), WITH THE PROPORTIONS DESCRIBED IN SECTION 703.2.3. OF ADA, NO ITALIC, OBLIQUE, SCRIPT, HIGHLY DECORATIVE, OR



0.300"

0.037"

0.400"

# TYPICAL ELEVATOR SIGN



B. PROHIBIT SMOKING WITHIN 25' FEET OF BUILDING ENTRANCE C. PROHIBIT SMOKING ON ENTIRE PROPERTY



RAISED

CHARACTERS

**HEARING LOSS** 

\_REPLACEABLE NAME PLATE CHANNEL, TEXT MIN HEIGHT 5/8"

TYPICAL RESIDENT ROOM SIGN

CHARACTERS

THIS TYPE OF SIGN ALSO APPLIES TO THOSE STATING RULES OF CONDUCT, ROOM OCCUPANCY LOADS FOR

AREAS OF ASSEMBLY AND SIMILAR SIGNS. VERTICAL AND HORIZONTAL DIMENSIONS OF THESE SIGNS ARE

PER OFC-605.3.1 DOORS LEADING INTO ELECTRICAL CONTROL PANEL ROOMS SHALL BE MARKED WITH A PLAINLY VISIBLE AND LEGIBLE SIGN STATING "ELECTRICAL ROOM" OR SIMILAR APPROVED SIGNAGE.

VARIABLE BUT THE SEPARATION DIMENSION BETWEEN SIGN ELEMENTS AND THE SIGN PERIMETER

OFC-510.1/ OBC-914.2 ROOMS CONTAINING CONTROLS FOR AIR CONDITIONING SYSTEMS, SPRINKLEF RISERS AND VALVES OR OTHER FIRE DETECTION OR SUPPRESSION CONTROL EQUIPMENT SHALL BE

IDENTIFIED FOR USE OF THE FIRE DEPARTMENT. THE SIGNS SHALL BE CONSTRUCTED OF DURABLE

FOR MOUNTING LOCATIONS AND APPLICABLE LOCATIONS FOR SIGNAGE TO BE POSTED.

\* ALL SIGNAGE TO COMPLY WITH ADA GUIDELINES FOR ACCESSIBLE DESIGN GUIDELINES

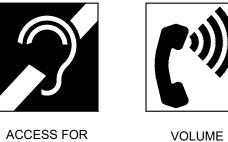
VARIES PER WIDTH OF TEXT

MAINTÉNANCE

TYPICAL ROOM ID SIGN

BRAILLE PER

MATERIAL, PERMANENTLY INSTALLED AND VISIBLE.



CONTROL



ACCESSIBLE

**ENTRY OR EXIT** 



DOUBLE SIDED

CHARACTERS

BRAILLE PER

TABLE 703.3.1

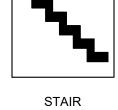
REPLACEABLE NAME

TEXT MIN HEIGHT 5/8"

SEE SIGN LOCATION DETAIL ON SHEET AC-1

BRAILLE PER

PLATE CHANNEL,



PROJECT:

**DESIGN** 

SUITE 400

43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

400 SOUTH FIFTH ST

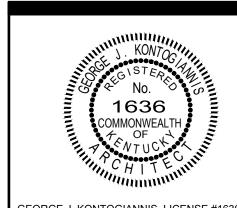
E-MAIL: architects@kontogiannis.com

COLUMBUS, OHIO

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: ACCESSIBLE SIGNAGE DETAILS

DATE: 07/31/2023 REVISED:



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SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023 CONSTRUCTION SET

AS-1

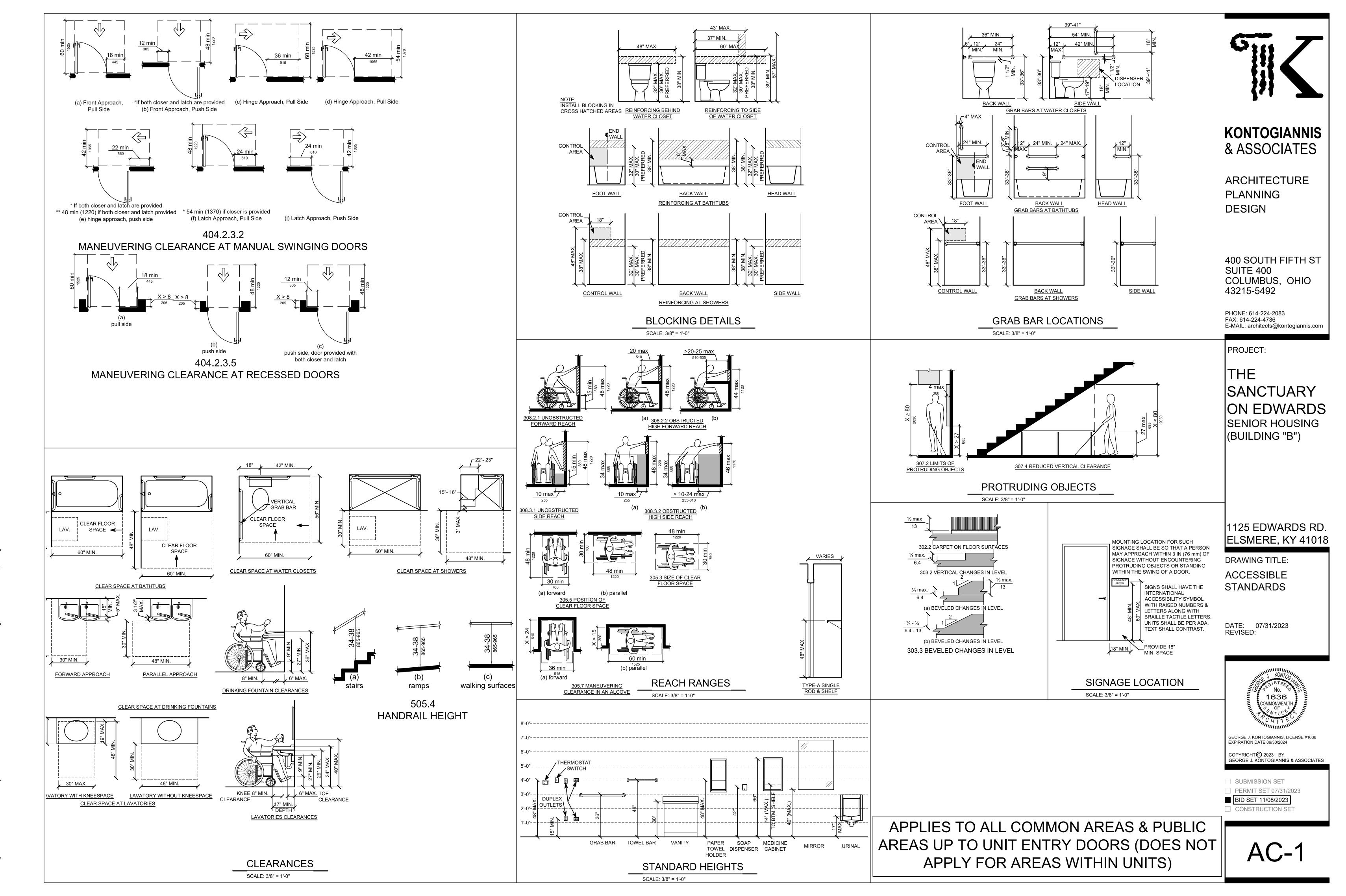


SCALE: N.T.S.



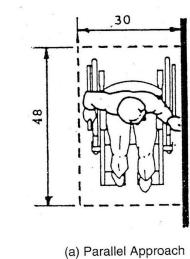
A. PROHIBIT SMOKING IN COMMON AREAS,

SEE LEED ENVIRONMENTAL TOBACCO SMOKE SECTION INDICATING TO PROVIDE SIGNAGE TO :



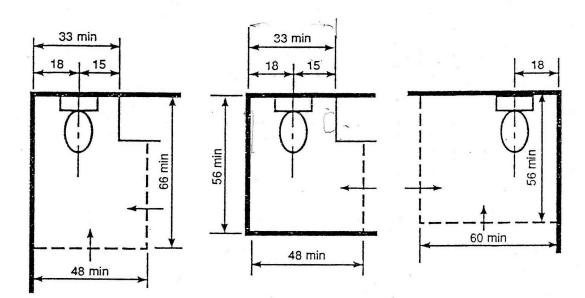
H:\Projects\Architects\Current\Sanctuary on Edwards- KY Tax Credit- HS Dev\AutoCAD BLDG B\AC-1.dwg, 11/8/2023 3:25:34 PM, crubright

# MANEUVERABILITY & CLEAR FLOOR SPACE



(b) Forward Approach

Fig. 6 Minimum Clear Floor Space for Wheelchairs



(a) Clear Floor Space for Water Closets

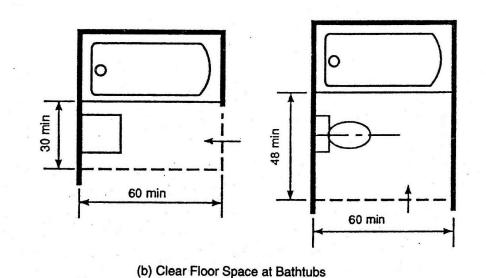
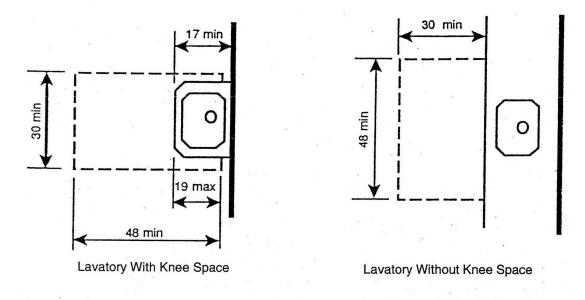


Fig. 7 Clear Floor Space for Adaptable Bathrooms



(c) Clear Floor Space at Lavatories

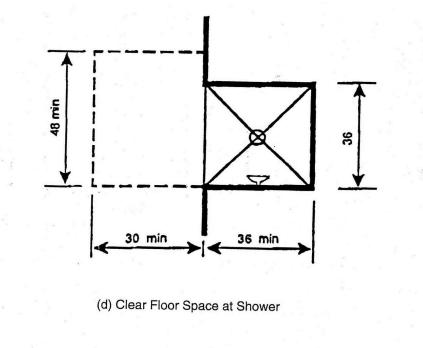


Fig. 7 Clear Floor Space for Adaptable Bathrooms

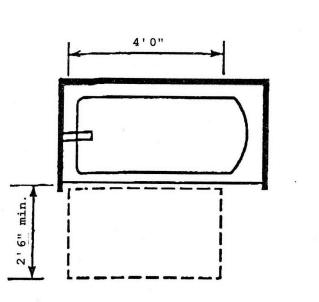


Fig. 8 Alternative Specification - Clear Floor Space at Bathtub

NOTE: Clear floor space beside tub may overlap with clear floor space beneath adjacent fixtures.

# MOUNTING HEIGHT & REACH RANGES

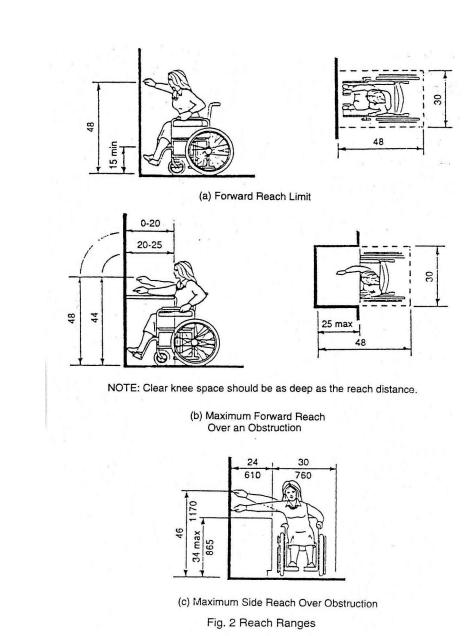
SWITCHES, OUTLETS AND CONTROLS MOUNTING HEIGHTS

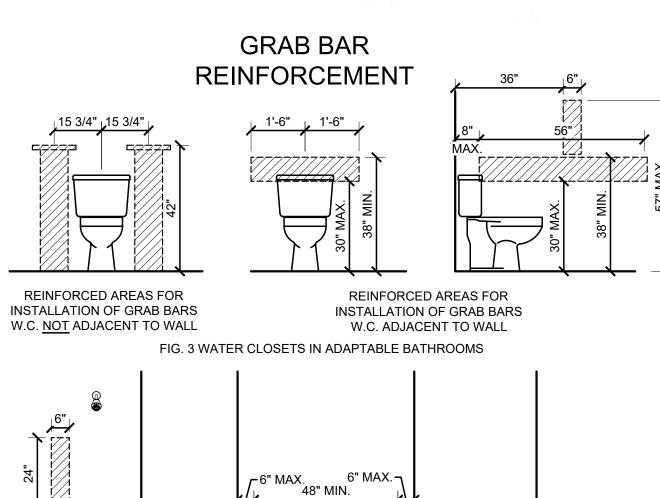
OUTLETS - MOUNT AT A MINIMUM OF 15" A.F.F.

MOUNT AT A MAXIMUM OF 48" A.F.F. IN KITCHENS
FOR SIDE REACH OVER COUNTER.

LIGHT SWITCHES - MOUNT AT A MAXIMUM OF 48" A.F.F.

THERMOSTATS - MOUNT AT A MAXIMUM OF 48" A.F.F.





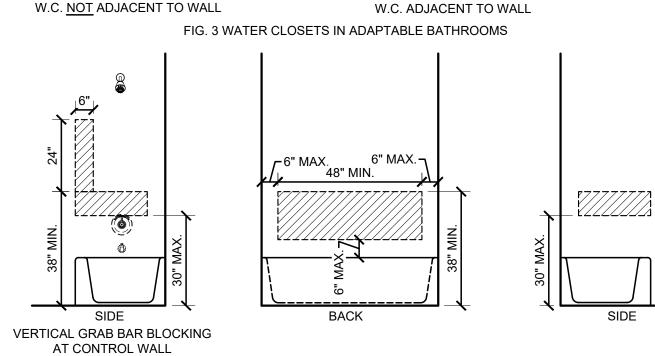


FIG. 4 LOCATION OF GRAB BAR REINFORCEMENTS FOR ADAPTABLE BATHTUBS NOTE: THE AREAS OUTLINED IN DASHED LINES REPRESENT LOCATIONS FOR FUTURE INSTALLATION OF GRAB BARS FOR TYPICAL FIXTURE CONFIGURATIONS

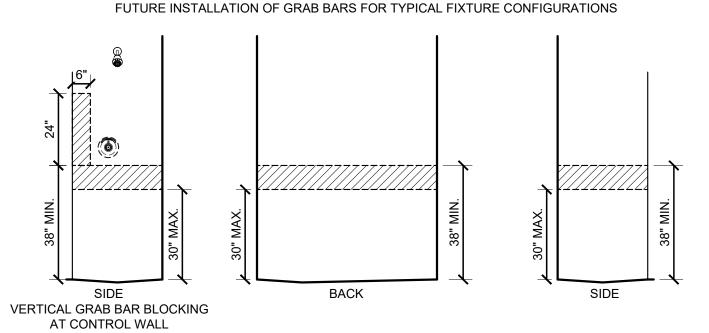
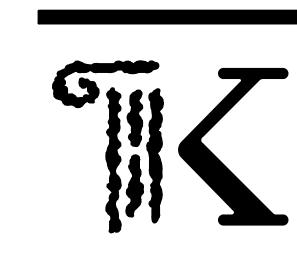


FIG. 5 LOCATION OF GRAB BAR REINFORCEMENTS FOR ADAPTABLE SHOWERS

NOTE: THE AREAS OUTLINED IN DASHED LINES REPRESENT
LOCATIONS FOR FUTURE INSTALLATION OF GRAB BARS



# **KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE PLANNING DESIGN

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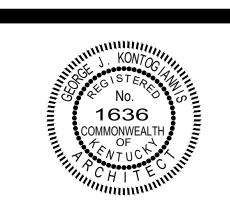
PROJECT:

THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
FAIR HOUSING &
ANSI A 117.1
DETAILS

DATE: 07/31/2023 REVISED:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

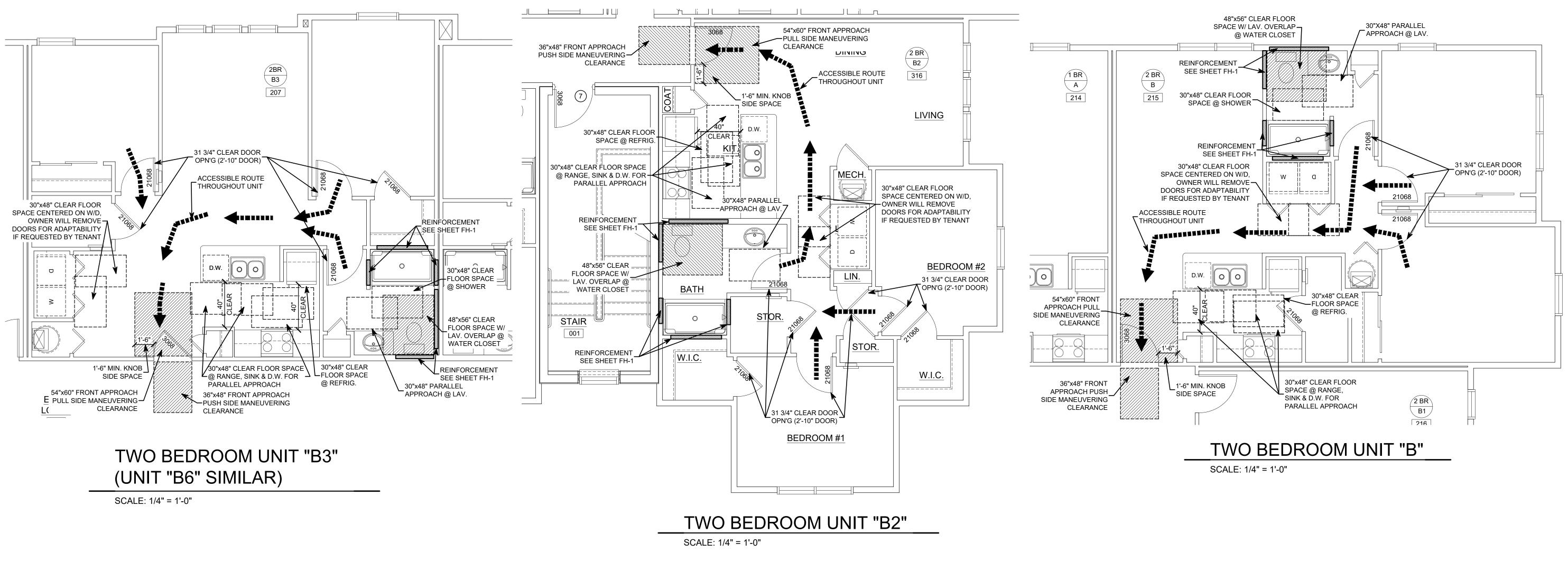
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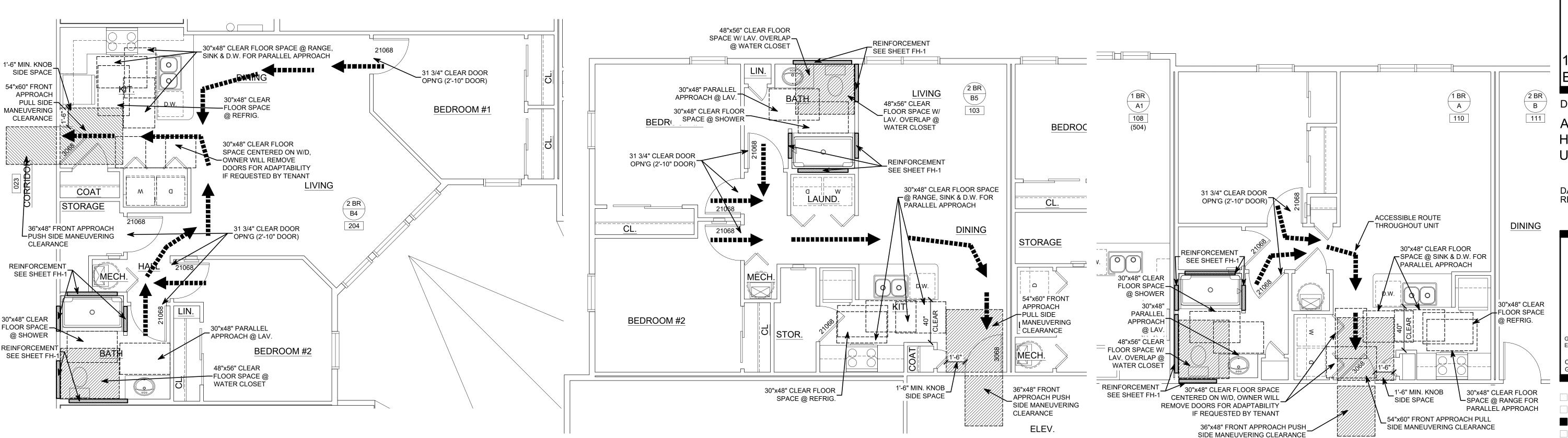
SUBMISSION SET
PERMIT SET 07/31/2023
BID SET 11/08/2023

CONSTRUCTION SET

FH-1

APPLIES TO ALL
UNITS EXCEPT 504





TWO BEDROOM UNIT "B4"

SCALE: 1/4" = 1'-0"

TWO BEDROOM UNIT "B5"

SCALE: 1/4" = 1'-0"

ONE BEDROOM UNIT "A" (UNITS "A2", "A3" SIMILAR) SCALE: 1/4" = 1'-0"

**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE **PLANNING DESIGN** 

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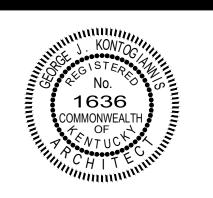
PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: ANSI / FAIR HOUSING (TYPE "B" UNITS)

DATE: 07/31/2023 **REVISED**:

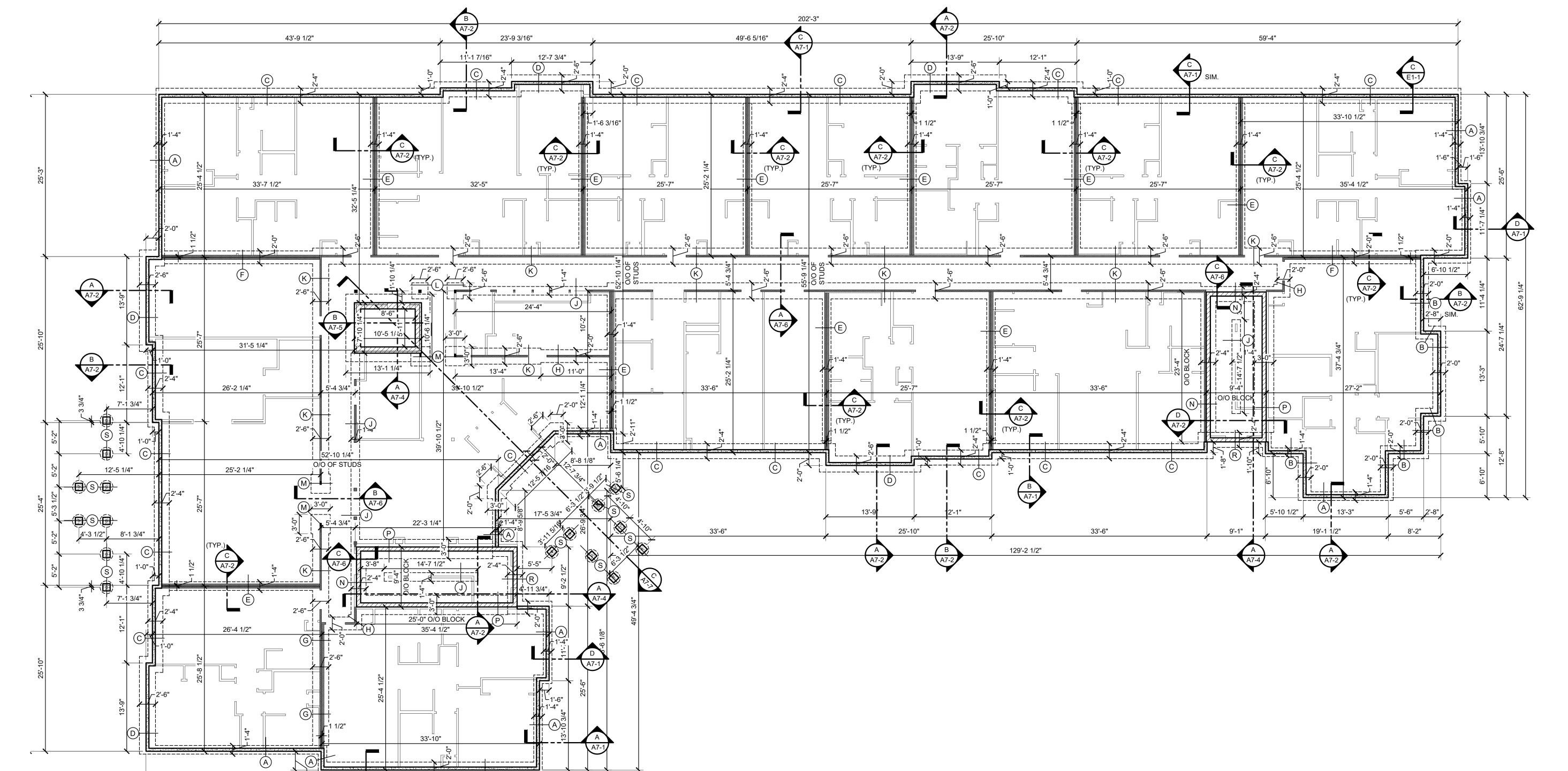


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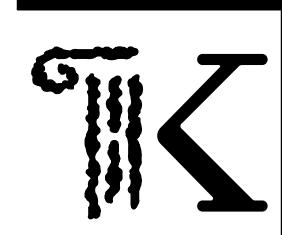
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FH-2



B



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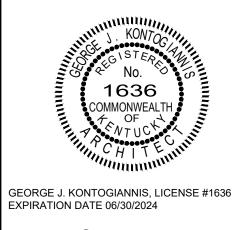
PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: BUILDING FOUNDATION PLAN

DATE: 07/31/2023 REVISED:



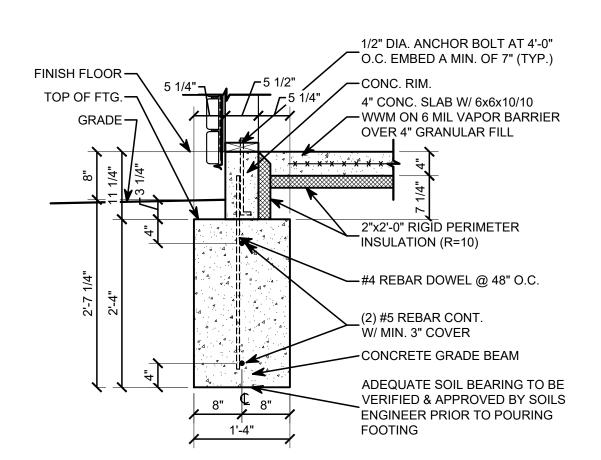
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☐ SUBMISSION SET ☐ PERMIT SET 07/31/2023 BID SET 11/08/2023 CONSTRUCTION SET

SEE SHEET AF-2 FOR

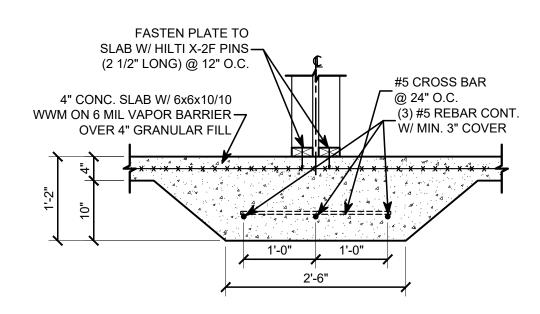
FOUNDATION DETAIL

AF-1

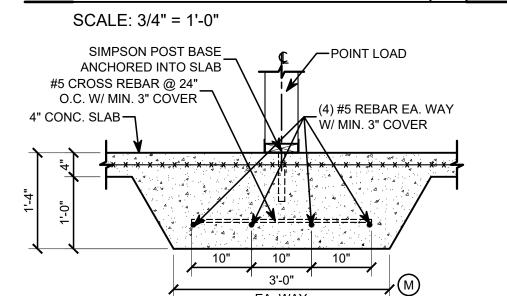


# FOUNDATION DETAIL (A)

SCALE: 3/4" = 1'-0"

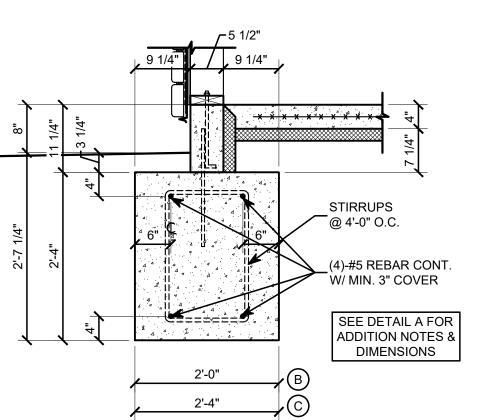


# FOUNDATION DETAIL G



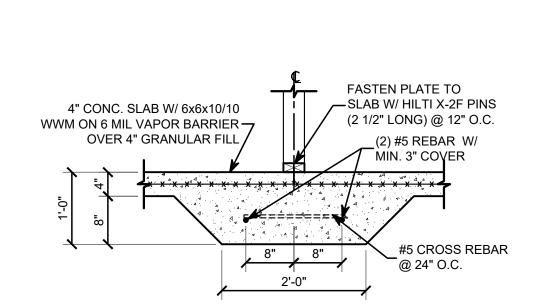
# FOUNDATION DETAIL M

SCALE: 3/4" = 1'-0"

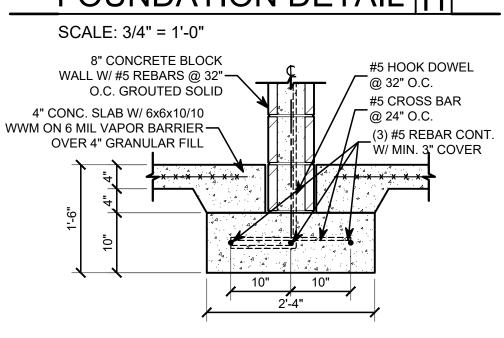


# FOUNDATION DETAIL BC

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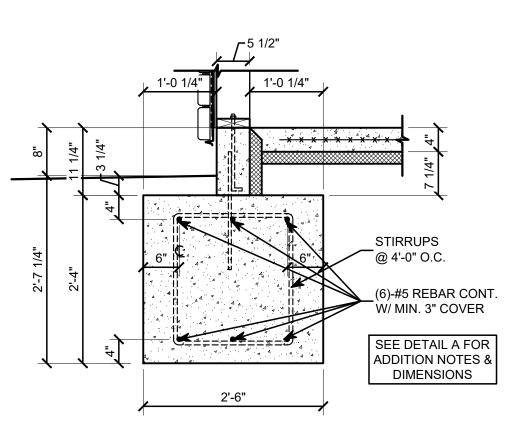


# FOUNDATION DETAIL H



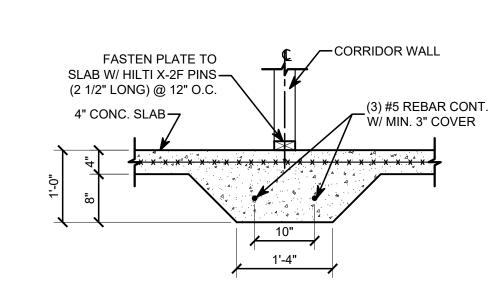
# FOUNDATION DETAIL N

SCALE: 3/4" = 1'-0"



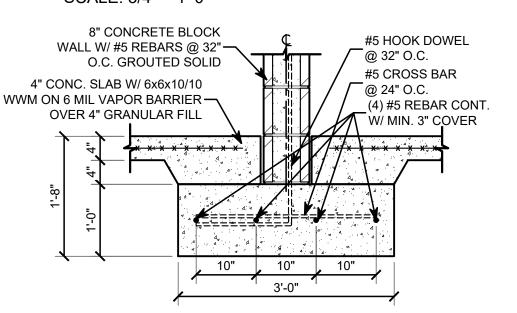
# FOUNDATION DETAIL (D)

SCALE: 3/4" = 1'-0"



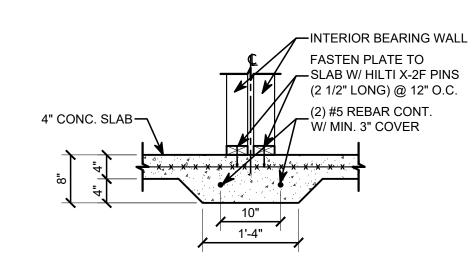
# FOUNDATION DETAIL (J)

SCALE: 3/4" = 1'-0"



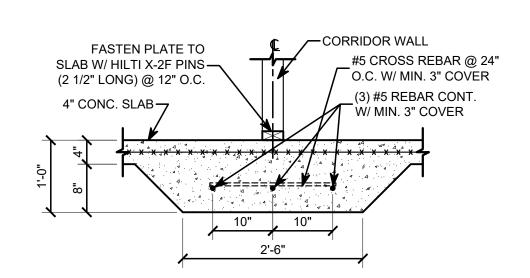
# FOUNDATION DETAIL P

SCALE: 3/4" = 1'-0"



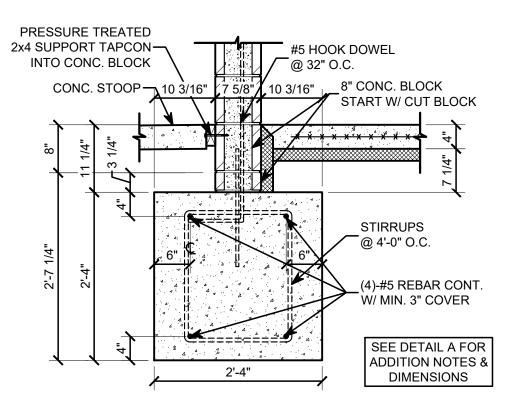
# FOUNDATION DETAIL (E)

SCALE: 3/4" = 1'-0"



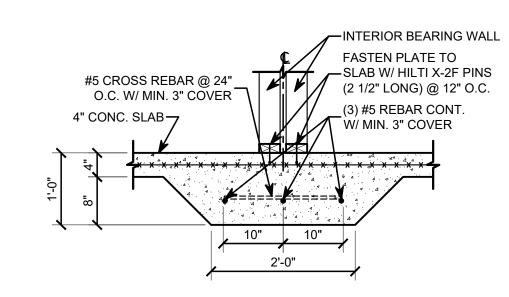
# FOUNDATION DETAIL (K)

SCALE: 3/4" = 1'-0"



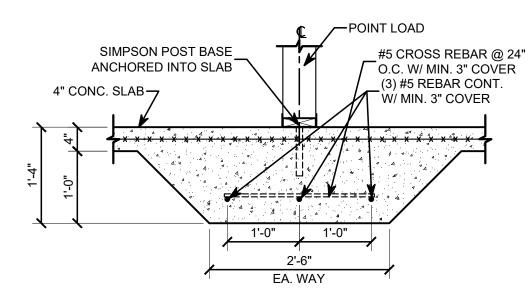
# FOUNDATION DETAIL R

SCALE: 3/4" = 1'-0"

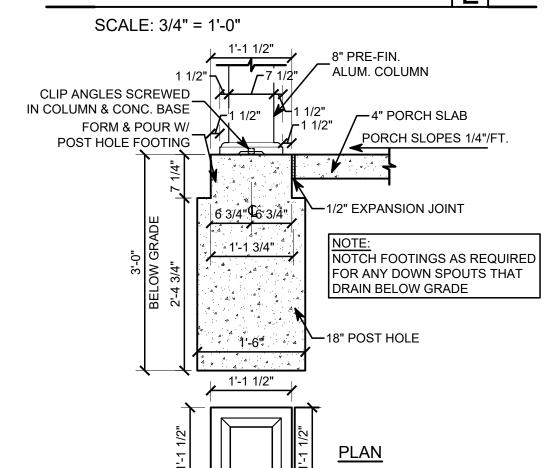


# FOUNDATION DETAIL (F)

SCALE: 3/4" = 1'-0"



# FOUNDATION DETAIL (L)



# FOUNDATION DETAIL (S)

SCALE: 3/4" = 1'-0"

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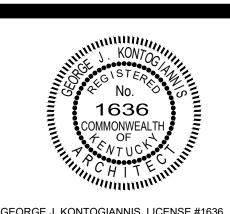
PROJECT:

THE
SANCTUARY
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SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
FOUNDATION
DETAILS

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AF-2

BUILDING FIRST FLOOR PLAN

SCALE: 1/8" = 1'-0" FIRST FLOOR GROSS AREA = 14,179 SQ.FT.

**KONTOGIANNIS** 

& ASSOCIATES

CONSTRUCTION SET

A1-1

SOUND INSUL.

SCALE: 3" = 1'-0"

TOTAL GROSS AREA
FIRST FLOOR = 14,179 SQ.FT.
SECOND FLOOR = 14,179 SQ.FT.
THIRD FLOOR = 14,179 SQ.FT.
TOTAL = 42,537 SQ.FT.

FIRE EXTINGUISHER

CABINET SECTION DETAIL (1)

SEE SHEET A5-1 FOR

WINDOW & DOOR SCHEDULE

ARCHITECTURE **PLANNING** DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

PROJECT:

SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: **BUILDING SECOND** FLOOR PLAN

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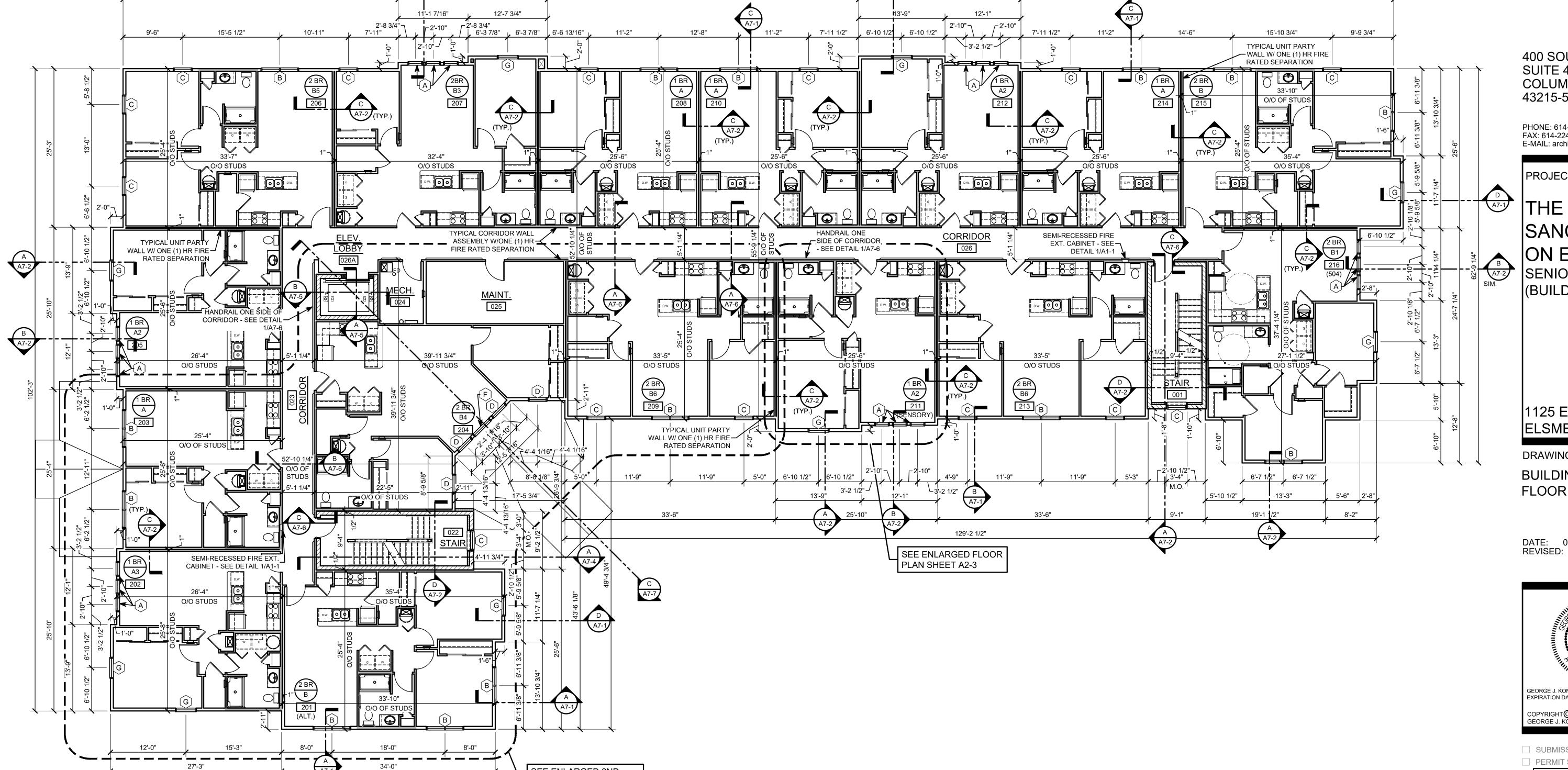
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A1-2

SUBMISSION SET

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SEE SHEET A5-1 FOR WINDOW & DOOR SCHEDULE



202'-3"

49'-6 5/16"

43'-9 1/2"

23'-9 3/16"

A SIM.

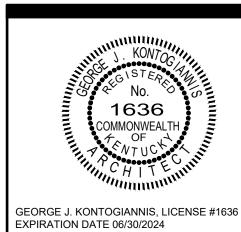
25'-10"

SEE ENLARGED 2ND

FLOOR PLAN SHEET A2-2

**BUILDING THIRD** FLOOR PLAN

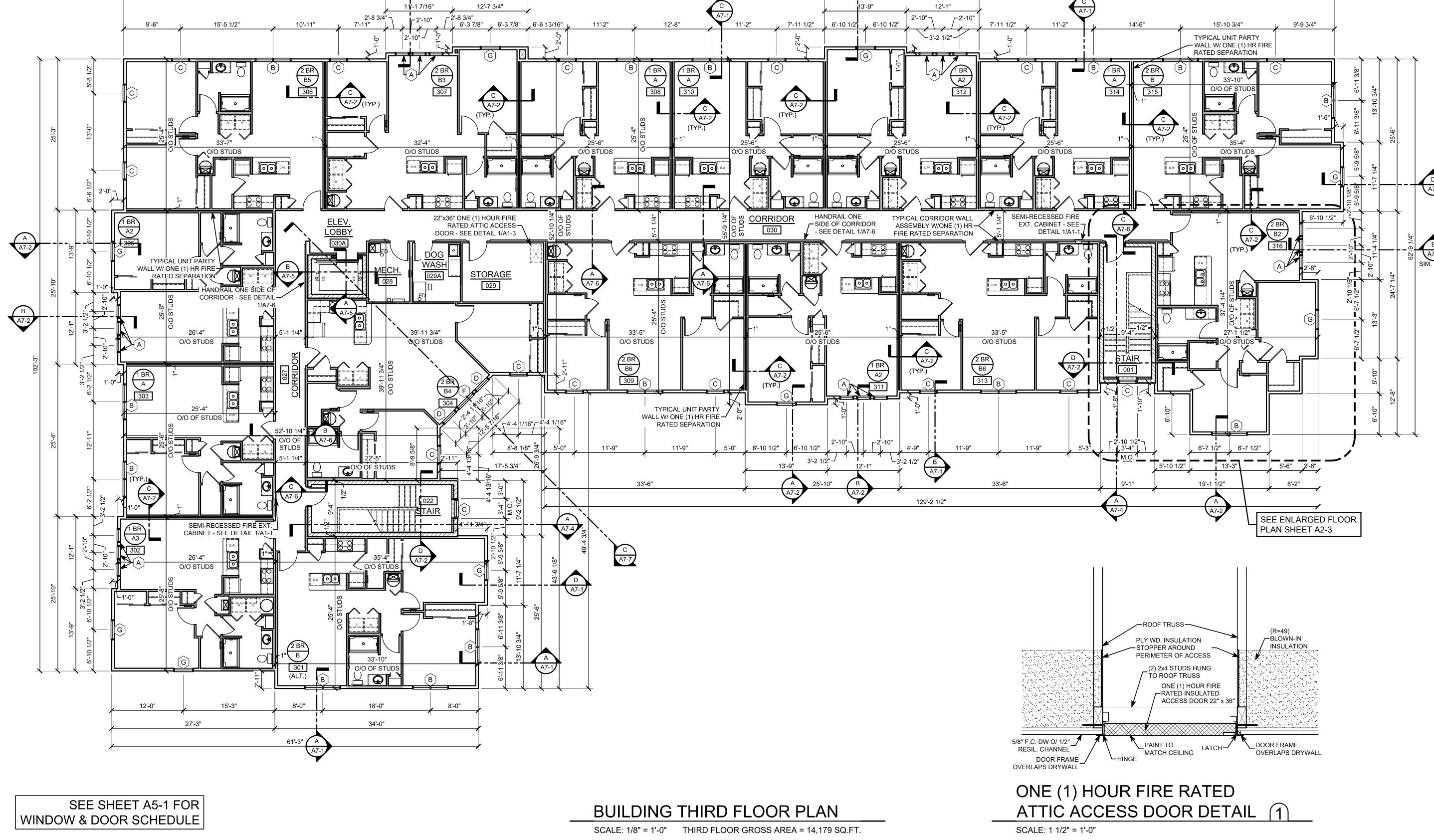
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A1-3



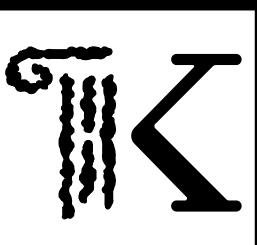
202'-3"

49'-6 5/16"

43'-9 1/2"

23'-9 3/16"

A7-2 SIM.



ARCHITECTURE PLANNING DESIGN

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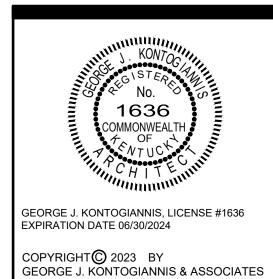
PROJECT:

THE
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ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
BUILDING
ROOF PLAN

DATE: 07/31/2023 REVISED:

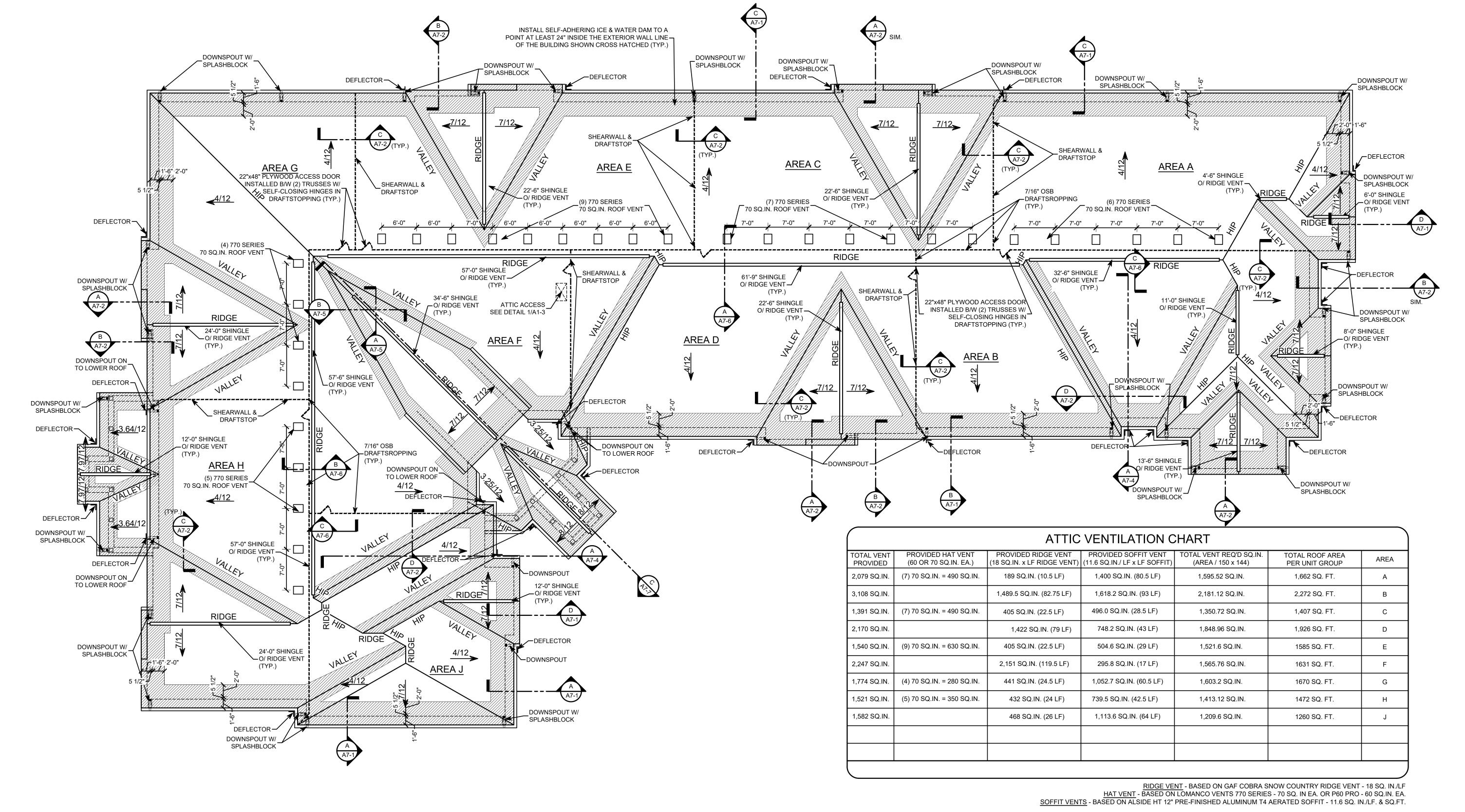


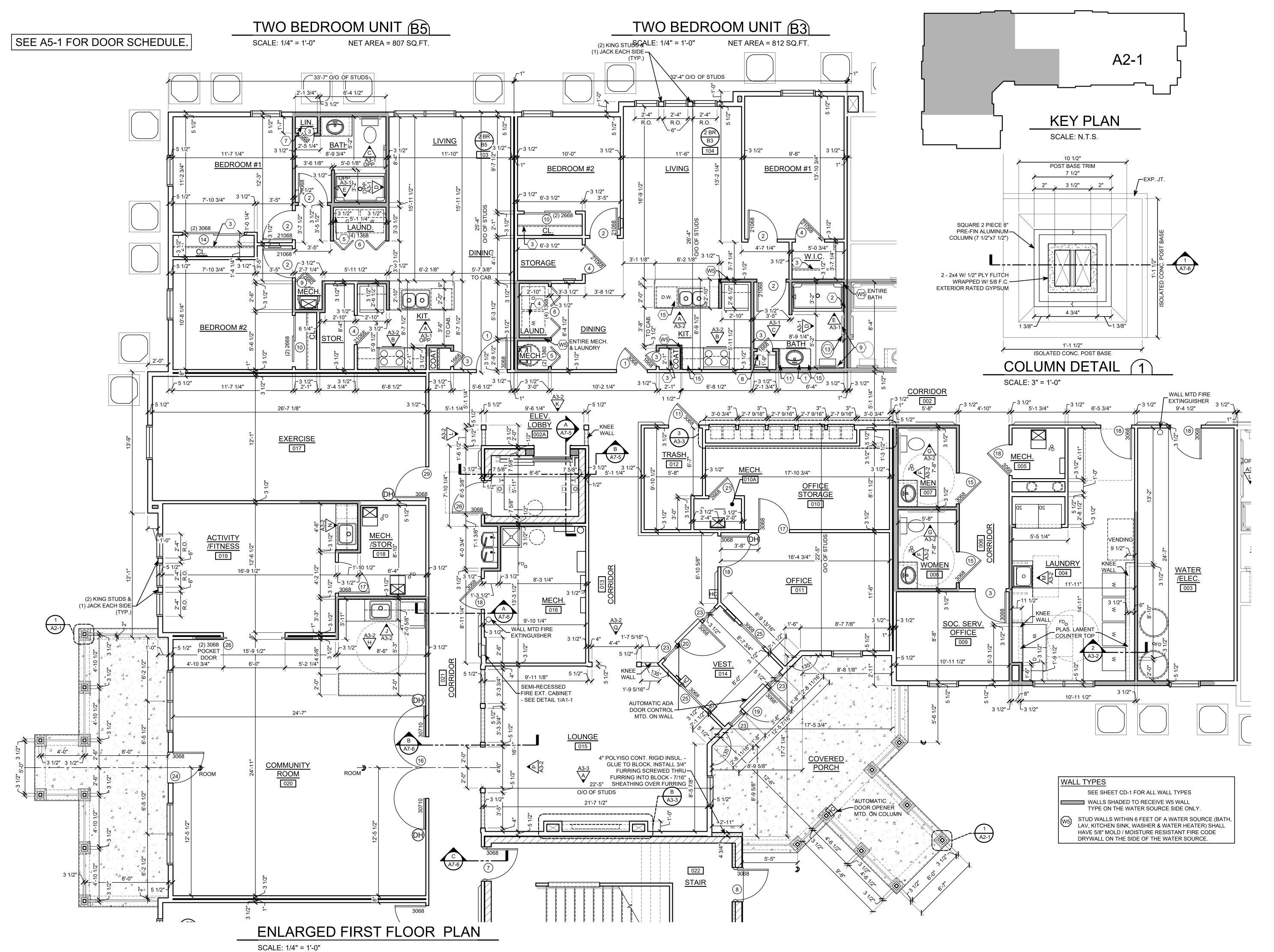
SUBMISSION SET
PERMIT SET 07/31/2023

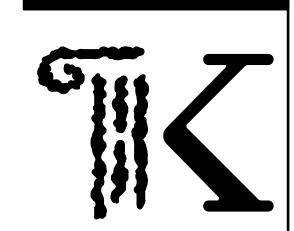
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CONSTRUCTION SET

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ARCHITECTURE PLANNING DESIGN

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PROJECT:

THE
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SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
ENLARGED FIRST
FLOOR PLAN

DATE: 07/31/2023 REVISED:



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□ CONSTRUCTION SET

A2-1

ARCHITECTURE **PLANNING DESIGN** 

W.I.C.

3 1/2" 5'-2 1/4"

BEDROOM #1

CODED NOTES  $\bigcirc$ 

ALL BATH VANITIES SHALL BE REMOVABLE. THE FLOOR & WALL MUST BE FINISHED PRIOR TO INSTALLING THE REMOVABLE BASE CABINET. INSTALL

PROTECTION FROM HOT & ABRASIVE HAZARDS PRIOR TO INSTALLING THE

ADDITIONAL WORK WILL BE NEEDED IN THE AREA UNDER THE LAVATORY.

F.C. DRYWALL SHALL BE INSTALLED ON THE RATED WALL & TAPE SEALED &

INSTALLATION, A SECOND LAYER SHALL BE INSTALLED OVER THE FLANGES

CLOSET ROD SHELF, 12" DEEP x FULL LENGTH. MOUNT AT 5'-8" OR 4'-0" (504

UNITS  $\underline{\text{ONLY}}$ ) A.F.F. TO TOP OF SHELF. PROVIDE INTERMEDIATE BRACES FOR SPANS OVER 3'-6".

12" DEEP x FULL LENGTH WIRE SHELF W/ INTEGRAL ROD. MOUNT @ 4'-0" A.F.F. PROVIDE INTERMEDIATE SUPPORT FOR SPANS OVER 3'-6" WIDE (504

(4) PANTRY SHELVES 9" DEEP x FULL LENGTH, SPACE AT 2'-0", 3'-4", 4'-8" &

(4) LINEN OR PANTRY SHELVES 12" DEEP x FULL LENGTH UNLESS NOTED OTHERWISE, SPACE @ 2'-0", 3'-4". 4'-8" & 5'-8" A.F.F.

(4) LINEN SHELVES 20" DEEP x FULL LENGTH, SPACE @ 2'-0", 3'-4". 4'-8" &

24" TOWEL BAR, MOUNT AT 5'-0" A.F.F. - TAYMOR BATHWARE - MODEL

10. 24" TOWEL BAR, MOUNT AT 4'-0" A.F.F. - TAYMOR BATHWARE - MODEL #04-SN6224 PROVIDE 2x6 WOOD BLOCKING BACKUP (504 UNIT).

1. RECESSED MEDICINE CABINET - AMERICAN PRIDE - 16" x 20" UNIT -#960M22R1 - MOUNT @ 5'-6" A.F.F. TO TOP, PROVIDE BLOCKING.

12. RECESSED MEDICINE CABINET - AMERICAN PRIDE - 16" x 20" UNIT -

SHALL HAVE BOBRICK B-2888 SURFACE MOUNTED UNIT.

15. PLASTIC LAMINATE TOP W/ 4" BACKSPLASH & SIDESPLASH.

16. 36" GRAB BAR - ASI 3801-36 - 1 1/2" x 36" S.S. GRAB BAR 42" GRAB BAR - ASI 3801-42 - 1 1/2" x 42" S.S. GRAB BAR

PROVIDE BLOCKING FOR ALL GRAB BARS.

17. GRAB BAR BLOCKING, SEE SHEET FH-1

18. MICROWAVE RANGE HOOD

19. UNDER CABINET MICROWAVE

#960M22R1 - MOUNT @ 4'-0" A.F.F. TO TOP, PROVIDE BLOCKING (504 UNIT).

13. TOILET PAPER HOLDER, MOUNT @ 1'-9" A.F.F. TO CENTER LINE. UNIT TOILET PAPER HOLDER SHALL BE MOEN P5050BN. MEN'S & WOMEN'S RESTROOM

14. 5 FT. SHOWER ROD - HARNEY MFG. #5146208 CURVED STAINLESS STEEL

18" VERTICAL GRAB BAR - ASI 3801-18 - 1 1/2" x 18" S.S. GRAB BAR

SHOWER ROD W/ FLANGES - PROVIDE 2x6 WOOD BLOCKING BACKUP.

#04-SN6224 PROVIDE 2X6 WOOD BLOCKING BACKUP.

. 12" DEEP x FULL LENGTH WIRE SHELF W/ INTEGRAL ROD. MOUNT @ 5'-0" A.F.F. PROVIDE INTERMEDIATE SUPPORT FOR SPANS OVER 3'-6" WIDE.

IN LOCATIONS WHERE THE BATHTUB OR SHOWER ABUTS A FIRE RATED CORRIDOR WALL, PARTY WALL OR CORRIDOR WALL, ONE (1) LAYER OF 5/8"

MUDDED ON ROUGH COAT PRIOR TO INSTALLING THE UNIT. AFTER

CABINET. THE INTENT IS THAT IF THE CABINET IS REMOVED, NO

NET AREA = 807 SQ.FT.

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

PROJECT:

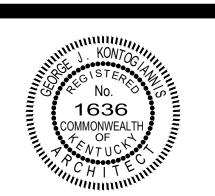
THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

### | 1125 EDWARDS RD. ELSMERE, KY 41018

**DRAWING TITLE:** ENLARGED SECOND

DATE: 07/31/2023 REVISED:

FLOOR PLAN



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023

CONSTRUCTION SET

ENLARGED SECOND FLOOR PLAN

SCALE: 1/4" = 1'-0"

IN LOCATIONS WHERE THE BATHTUB OR SHOWER ABUTS A FIRE RATED CORRIDOR WALL, PARTY WALL OR CORRIDOR WALL, ONE (1) LAYER OF 5/8" F.C. DRYWALL SHALL BE INSTALLED ON THE RATED WALL & TAPE SEALED & MUDDED ON ROUGH COAT PRIOR TO INSTALLING THE UNIT. AFTER INSTALLATION, A SECOND LAYER SHALL BE INSTALLED OVER THE FLANGES & FINISHED.

- CLOSET ROD SHELF, 12" DEEP x FULL LENGTH. MOUNT AT 5'-8" OR 4'-0" (504 UNITS ONLY) A.F.F. TO TOP OF SHELF. PROVIDE INTERMEDIATE BRACES
- 12" DEEP x FULL LENGTH WIRE SHELF W/ INTEGRAL ROD. MOUNT @ 5'-0" A.F.F. PROVIDE INTERMEDIATE SUPPORT FOR SPANS OVER 3'-6" WIDE.
- 12" DEEP x FULL LENGTH WIRE SHELF W/ INTEGRAL ROD. MOUNT @ 4'-0" A.F.F. PROVIDE INTERMEDIATE SUPPORT FOR SPANS OVER 3'-6" WIDE (504
- (4) PANTRY SHELVES 9" DEEP x FULL LENGTH, SPACE AT 2'-0", 3'-4", 4'-8" & 5'-8" A.F.F.
- (4) LINEN OR PANTRY SHELVES 12" DEEP x FULL LENGTH UNLESS NOTED OTHERWISE, SPACE @ 2'-0", 3'-4". 4'-8" & 5'-8" A.F.F.
- (4) LINEN SHELVES 20" DEEP x FULL LENGTH, SPACE @ 2'-0", 3'-4". 4'-8" & 5'-8" A.F.F.
- 24" TOWEL BAR, MOUNT AT 5'-0" A.F.F. TAYMOR BATHWARE MODEL #04-SN6224 PROVIDE 2X6 WOOD BLOCKING BACKUP.
- 10. 24" TOWEL BAR, MOUNT AT 4'-0" A.F.F. TAYMOR BATHWARE MODEL #04-SN6224 PROVIDE 2x6 WOOD BLOCKING BACKUP (504 UNIT).
- 11. RECESSED MEDICINE CABINET AMERICAN PRIDE 16" x 20" UNIT -#960M22R1 - MOUNT @ 5'-6" A.F.F. TO TOP, PROVIDE BLOCKING.
- 12. RECESSED MEDICINE CABINET AMERICAN PRIDE 16" x 20" UNIT #960M22R1 MOUNT @ 4'-0" A.F.F. TO TOP, PROVIDE BLOCKING (504 UNIT).
- 13. TOILET PAPER HOLDER, MOUNT @ 1'-9" A.F.F. TO CENTER LINE. UNIT TOILET PAPER HOLDER SHALL BE MOEN P5050BN. MEN'S & WOMEN'S RESTROOM SHALL HAVE BOBRICK B-2888 SURFACE MOUNTED UNIT.
- 5 FT. SHOWER ROD HARNEY MFG. #5146208 CURVED STAINLESS STEEL SHOWER ROD W/ FLANGES - PROVIDE 2x6 WOOD BLOCKING BACKUP.
- 15. PLASTIC LAMINATE TOP W/ 4" BACKSPLASH & SIDESPLASH.
- 16. 36" GRAB BAR ASI 3801-36 1 1/2" x 36" S.S. GRAB BAR 42" GRAB BAR - ASI 3801-42 - 1 1/2" x 42" S.S. GRAB BAR 18" VERTICAL GRAB BAR - ASI 3801-18 - 1 1/2" x 18" S.S. GRAB BAR PROVIDE BLOCKING FOR ALL GRAB BARS.
- 17. GRAB BAR BLOCKING, SEE SHEET FH-1

O/O OF CONC. BLOCK

STAIR

- 18. MICROWAVE RANGE HOOD
- 19. UNDER CABINET MICROWAVE

#### ENRICHED DESIGN QUALITIES (TOTAL OF 5)

- ALL KITCHEN AND VANITY CABINETS PROVIDED WITH LEVER-SHAPED HANDLES OR STANDARD U-SHAPED PULLS, ON ALL DRAWERS AND CABINET DOORS.
- BATHROOM MEDICINE CABINETS, ABOVE A SINK, ARE NOT INCLUDED. EITHER (A) A 30-INCH WIDE COMBINATION RANGE/OVEN APPLIANCE WITH FRONT CONTROLS. THE RANGE MUST BE FLUSH WITH THE COUNTERTOP SO ITEMS BEING PULLED OFF THE RANGE CAN SMOOTHLY TRANSITION TO THE COUNTERTOP. CLEAR SPACE FOR A WHEELCHAIR SIDE/PARALLEL APPROACH CENTERED ON THE RANGE MUST ALSO BE PROVIDED.
- BATHROOM LAVATORY WITH REMOVABLE BASE CABINET, PEDESTAL STYLE SINK, OR WALL HUNG SINK THAT ACCOMMODATES A FORWARD SEATED POSITION FROM A WHEELCHAIR. THE FLOOR AND WALL UNDER REMOVABLE CABINETRY MUST BE FINISHED PRIOR TO INSTALLATION OF CABINETRY. PROTECTION FROM HOT AND ABRASIVE HAZARDS IS REQUIRED FOR ALL LAVATORIES, SINKS, AND UNDER REMOVABLE CABINETRY.
- CENTRAL COMMON AREAS THAT CAN BE USED FOR RESIDENT ACTIVITIES TO SUPPORT SOCIAL ENGAGEMENT AND WELLNESS (E.G. FITNESS CLASSES, GROUP
- LOBBY TO SUPPORT SOCIAL CONNECTIONS WITH AGE-FRIENDLY SEATING (FIRM SEAT CUSHIONS 18" HIGH AND 18" DEEP, WITH ARMS, BACKS AND WASHABLE FABRIC).

#### **INNOVATIVE DESIGN FEATURES**

RESIDENCES AT COURTYARD CROSSING II WILL TARGET LOW INCOME SENIOR (AGE 55+) BLIND AND LOW-VISION HOUSEHOLDS. EACH RESIDENT UNIT WILL BE EQUIPPED WITH, AND/OR FULLY ADAPTABLE TO ACCOMMODATE, THE FOLLOWING UNIT FEATURES: NON-SLIP FLOORING, NATURAL LIGHT, TACTILE SIGNAGE AND STRIPS, SMART HOME SYSTEM (E.G. ALEXA SYSTEM), SMART LIGHTING, SMART LOCKS, TALKING THERMOSTAT, AND TALKING FIRE AND CARBON DIOXIDE DETECTORS. THE COMMON AREA WILL INCLUDE THE FOLLOWING FEATURES: ENLARGED PRINT AND/OR BRAILLE FOR CRITICAL DOCUMENTS AND SIGNAGE, TALKING ELEVATOR, TALKING CROSSWALK (IF APPLICABLE), AUDIO-BASED ENTRY SYSTEM, TACTILE SIGNAGE AND STRIPS, NON-SLIP FLOORING, NATURAL LIGHT, FITNESS CENTER/VOCATIONAL REHABILITATION ROOM, DOG PARK, AND ASSISTANCE DOG WASHING/TREATMENT ROOM.

### **APPLIANCE SCHEDULE**

REFRIGERATOR (ALL UNITS) - GE GTE17DTNR, 16.6 CU.FT. ADA & ENERGY STAR COMPLIANT (KITCHENETTE UNIT TO BE STAINLESS STEEL)

RANGE (REGULAR UNITS) - GE JBS460DMBB, 30" FREE-STANDING SLIDE-IN W/ FRONT CONTROLS

<u>DROP-IN RANGE</u> (504 UNITS) - GE JD630DF, 30" DROP-IN, SELF-CLEANING, CERAMIC COOKTOP, GLASS WINDOW

OVER-THE-RANGE MICROWAVE (REGULAR UNITS) - GE JVM316ODF, 1.6 CU.FT., 1,000 WATTS, DUCTED RANGE HOOD (PROVIDE FIRE STOP EXTINGUISHING UNITS UNDER

UNDER CABINET MICROWAVE (504 UNITS) - GE JEM3072DH, (10 1/8" H x 17 1/4" W x 13" D) 0.7 CU.FT. W/ HANGING KIT

RANGE HOOD (504 UNITS) - GE JVX5305DJ, 30" RANGE HOOD, DUCTED RANGE HOOD, ENERGY STAR RATED, WIRE SWITCHES TO SKIRT BOARD AT SINK. (PROVIDE FIRE STOP EXTINGUISHING UNITS UNDER HOOD)

DISHWASHER (REGULAR UNITS) - GE GSD2101V, 24" WIDE, ENERGY STAR RATED

DISHWASHER (504 UNITS) - GE GDT225SGL, 24" WIDE, ADA & ENERGY STAR COMPLIANT

2 BR B2 316

<u>LIVING</u>

6'-11" 5 1/2"

& LAUNDRY

O/O OF STUDS

5'-6"

BEDROOM #2

14'-8 1/2"

3'-0"

STOR. 8 SQ.FT.

4'-2 3/4"  $_{\odot}$ 

(2) KING STUDS &

(1) JACK EACH SIDE

#### WALL TYPES SEE A5-1 FOR DOOR SCHEDULE. SEE SHEET CD-1 FOR ALL WALL TYPES

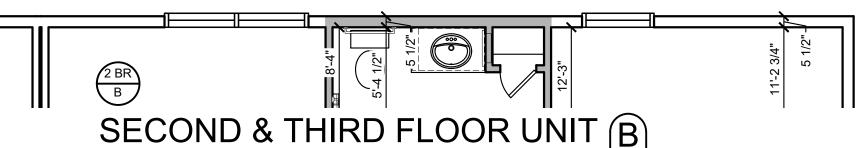
WALLS SHADED TO RECEIVE W5 WALL

TYPE ON THE WATER SOURCE SIDE ONLY.

STUD WALLS WITHIN 6 FEET OF A WATER SOURCE (BATH

HAVE 5/8" MOLD / MOISTURE RESISTANT FIRE CODE DRYWALL ON THE SIDE OF THE WATER SOURCE.

LAV, KITCHEN SINK, WASHER & WATER HEATER) SHALL



SCALE: 1/4" = 1'-0" 33'-10" O/O OF STUDS **⊢**3 1/2" 11'-6 1/2" 12'-1 3/4" ENTIRE LAUNDRY, BATH & MECH. 8'-9 3/4" A3-1 <sub>1</sub>3'-6 1/8"

BEDROOM #1 1 BR A 110 ADD WALL FOR SER CABLE **LIVING** 5 1/2"-8'-5 1/4" DINING 3 1/2"-, 2'-7 1/4" 9'-11 1/4" BEDROOM #2

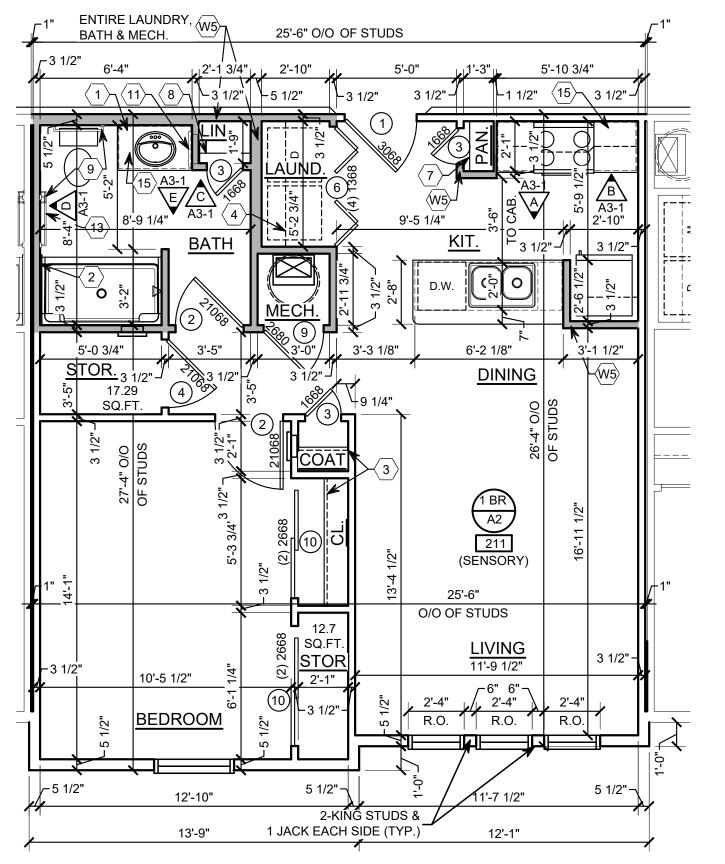
13'-7 3/4" **6**-10 1/2" 6'-10 1/2" DINING 24'-5 1/2" O/O OF STUDS 13'-10 7/8" 2 BR B1 % 9 112 -(504) **LIVING** (2) KING STUDS & (1) JACK EACH SIDE O/O OF CONC. BLOCK 3'-0" \_\_ ENTIRE MECH. /W5 & LAUNDRY 9'-3 5/8" BEDROOM #2 STAIR 001 STOR 8 SQ.FT 5'-2 1/2" 4'-2 3/4" ₺ 21068 DOOR W/

> ENLARGED FIRST & SECOND FLOOR PLAN

BEDROOM #1

UNIT B NET AREA = 829 SQ.FT.

A2-3 KEY PLAN SCALE: N.T.S.



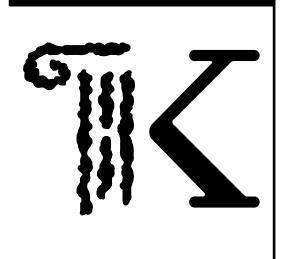


25'-6" O/O OF STUDS 11'-8 3/4" **⟨15⟩**<sub>\</sub> F KIT. 11'-8 3/4" BATH & MECH. =4'-6 1/8" 7'-2 5/8" DINING 3 1/2" **/**−3 1/2" 11'-9 1/2" 12'-10" <u>LIVING</u> **BEDROOM** (2) KING STUDS & 12'-1"

ONE BEDROOM UNIT (504) A1

NET AREA = 650 SQ.FT.

SCALE: 1/4" = 1'-0"



**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE **PLANNING DESIGN** 

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

PROJECT:

SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

**DRAWING TITLE: ENLARGED UNIT PLANS** 

DATE: 07/31/2023 **REVISED**:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023 CONSTRUCTION SET

A2-3

TWO BEDROOM UNIT (B2)

5'-8 1/2"

SCALE: 1/4" = 1'-0"

12'-4"

BEDROOM #1

NET AREA = 805 SQ.FT.

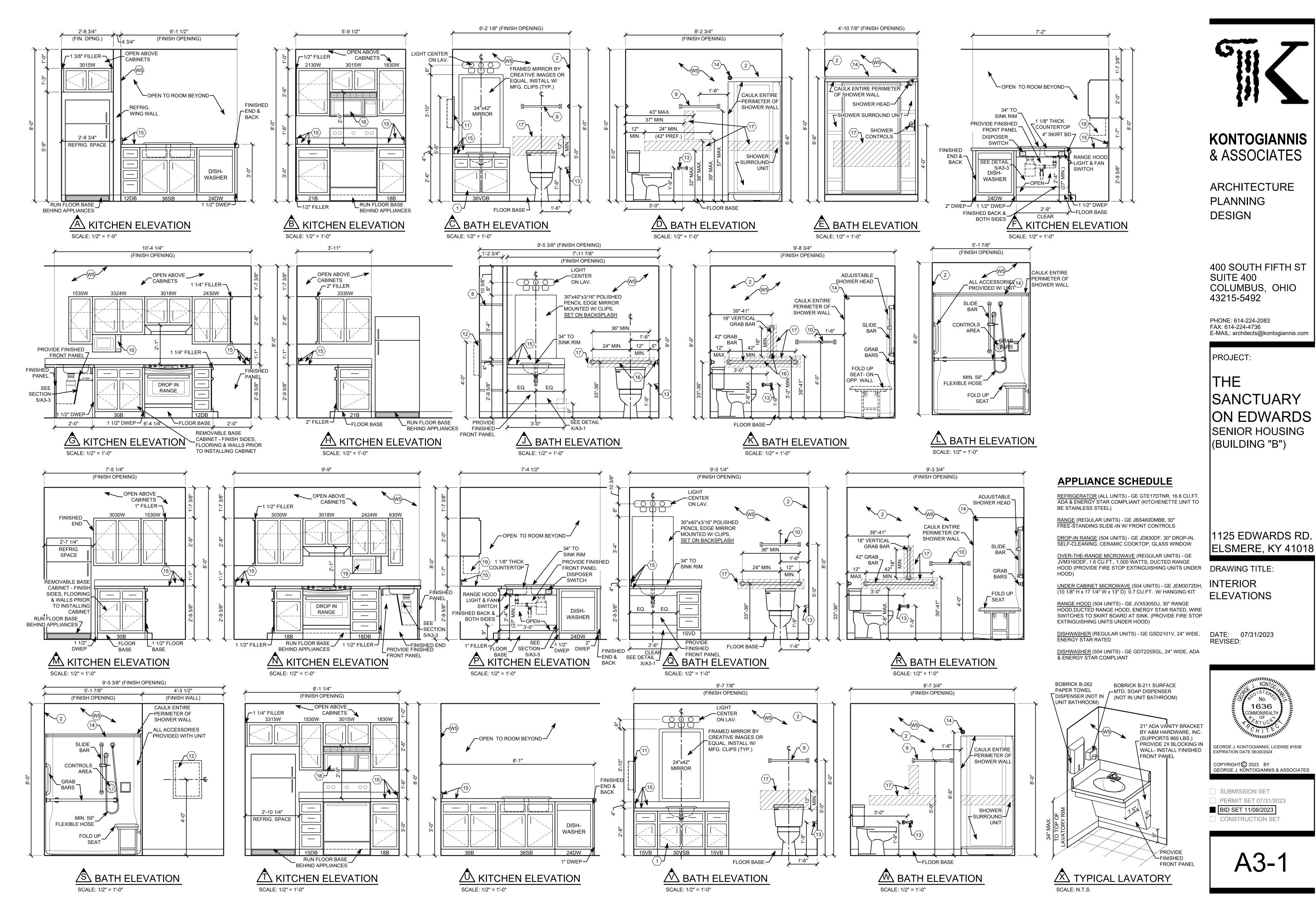
SCALE: 1/4" = 1'-0"

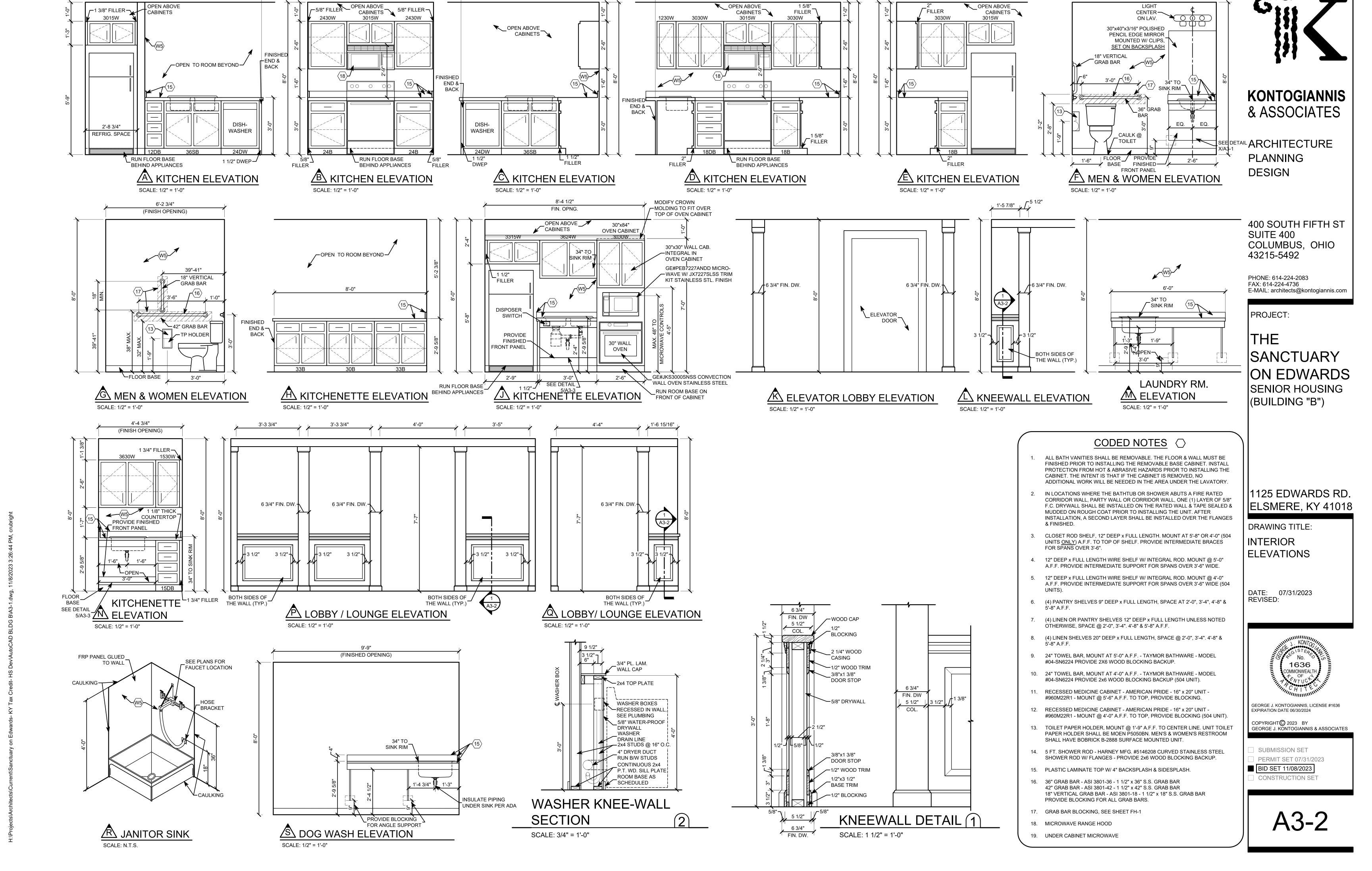
└<sub>5 1/2"</sub> 은

UNIT B1 NET AREA = 805 SQ.FT.

5'-6" □

2'-8"





(FINISH OPENING)

7'-6 3/4"

(FINISH OPENING)

(FINISH OPENING)

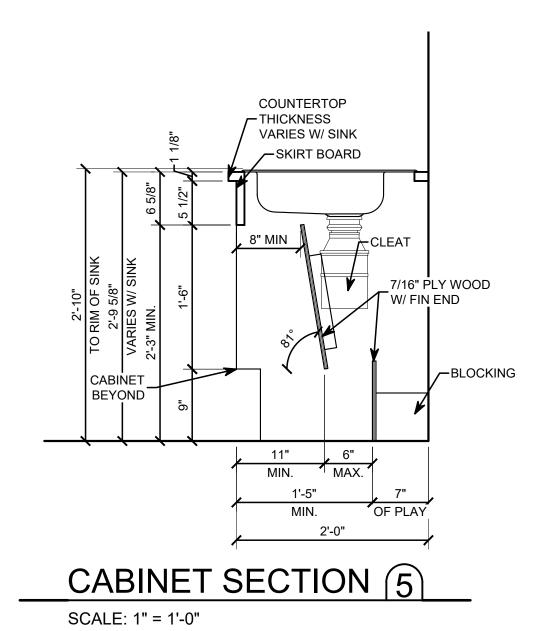
6'-7 1/4"

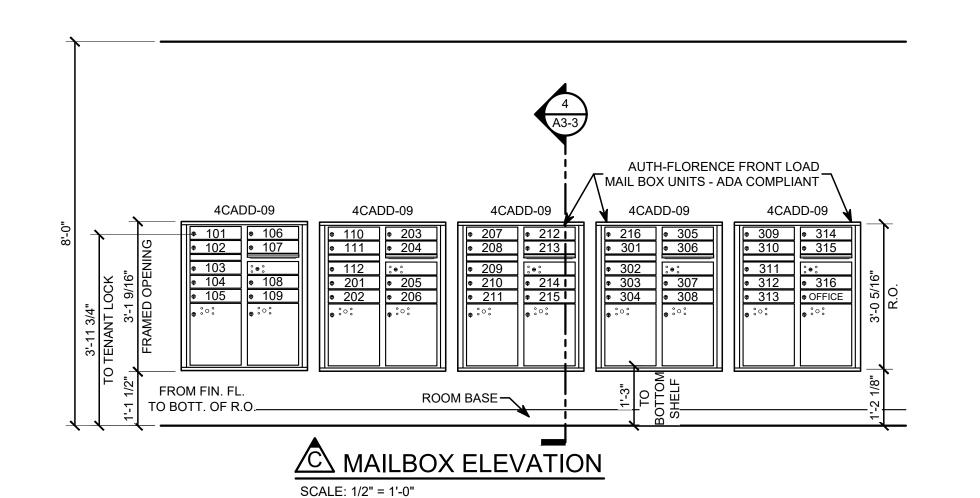
(FINISH OPENING)

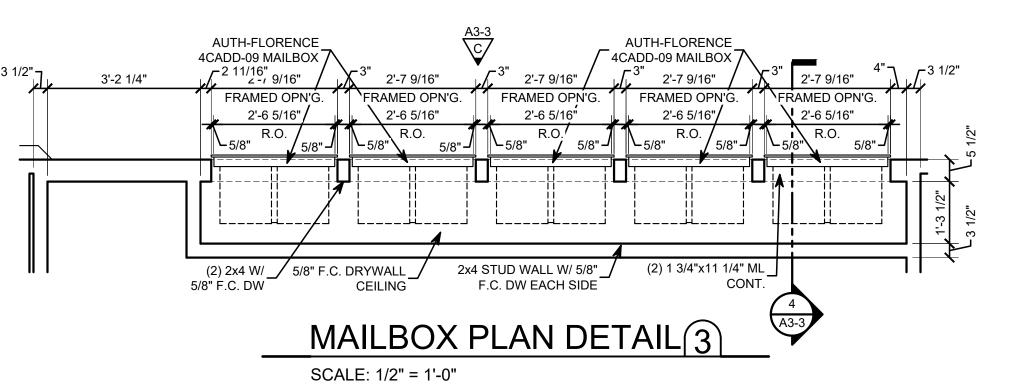
(FINISH OPENING)

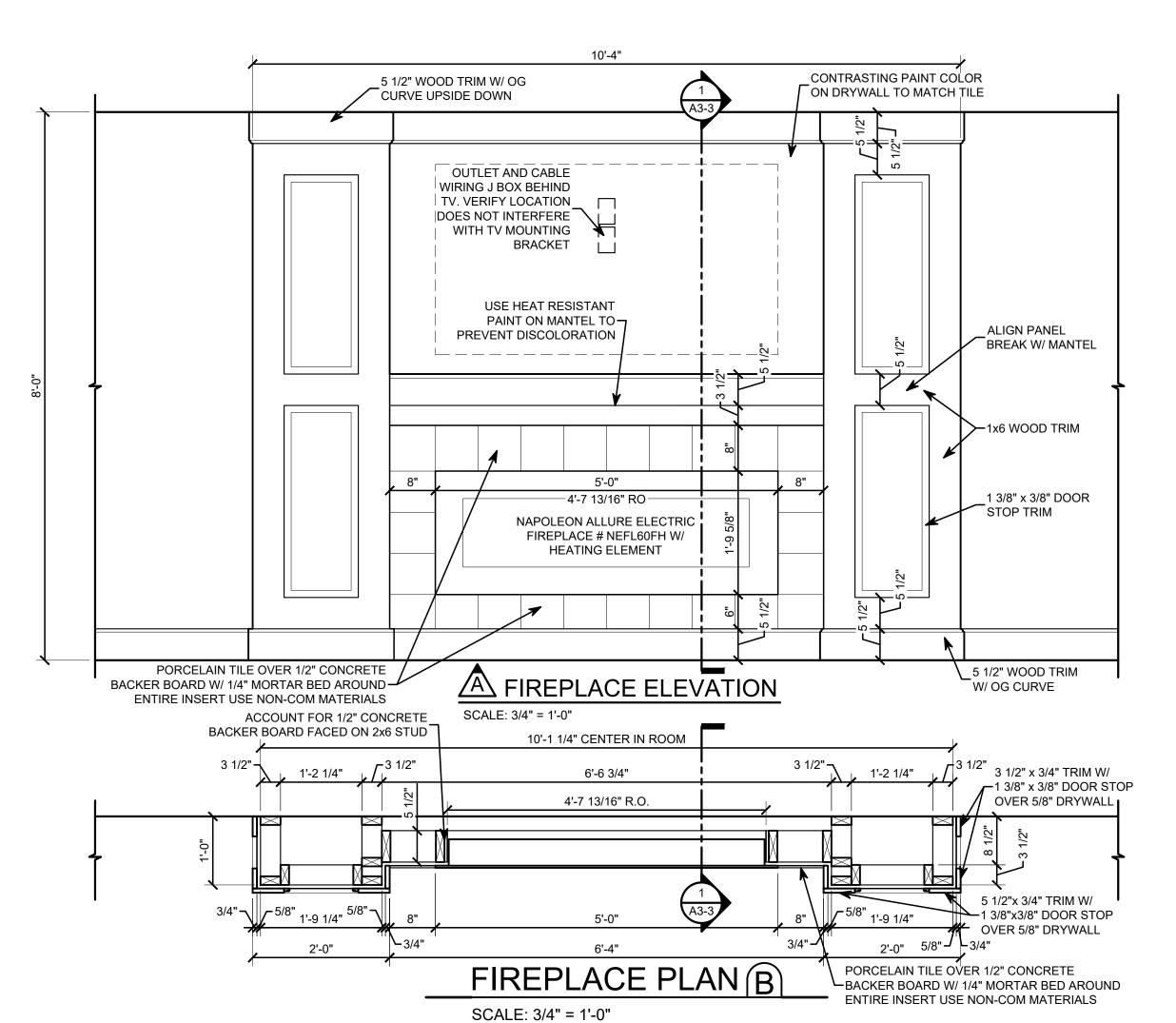
2'-8 3/4"

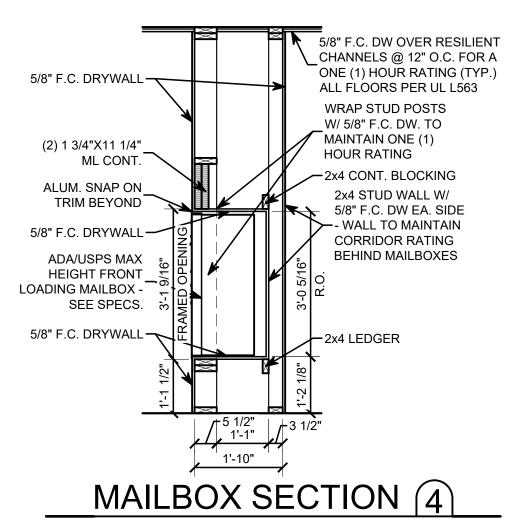
6'-1 1/2"



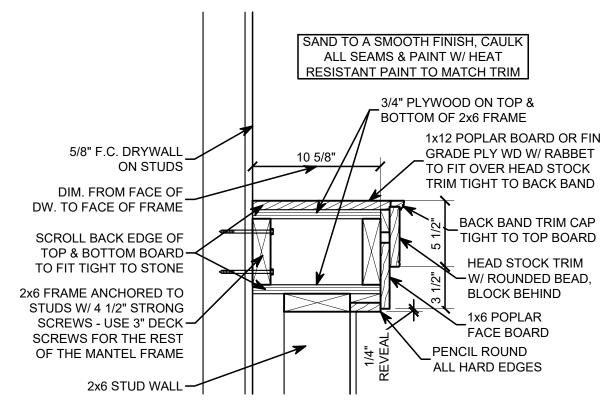




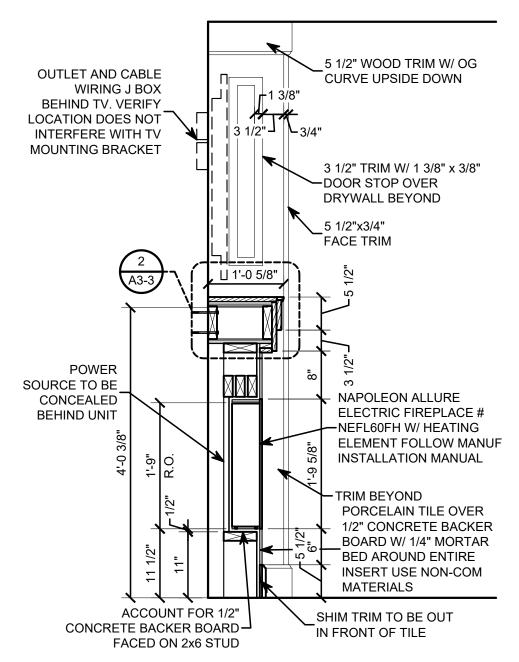




SCALE: 1/2" = 1'-0"

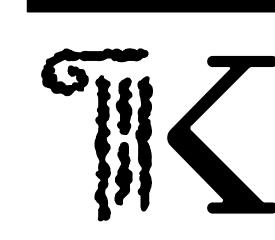


MANTEL DETAIL (2)



FIREPLACE DETAIL (1)

SCALE: 3/4" = 1'-0"



**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE PLANNING DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

PROJECT:

THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
INTERIOR
ELEVATIONS

DATE: 07/31/2023 REVISED:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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SUBMISSION SETPERMIT SET 07/31/2023■ BID SET 11/08/2023■ CONSTRUCTION SET

A3-3

ARCHITECTURE **PLANNING** DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

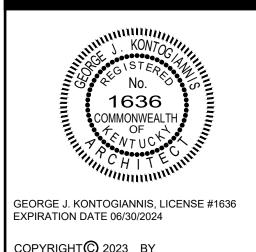
PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

### 1125 EDWARDS RD. ELSMERE, KY 41018

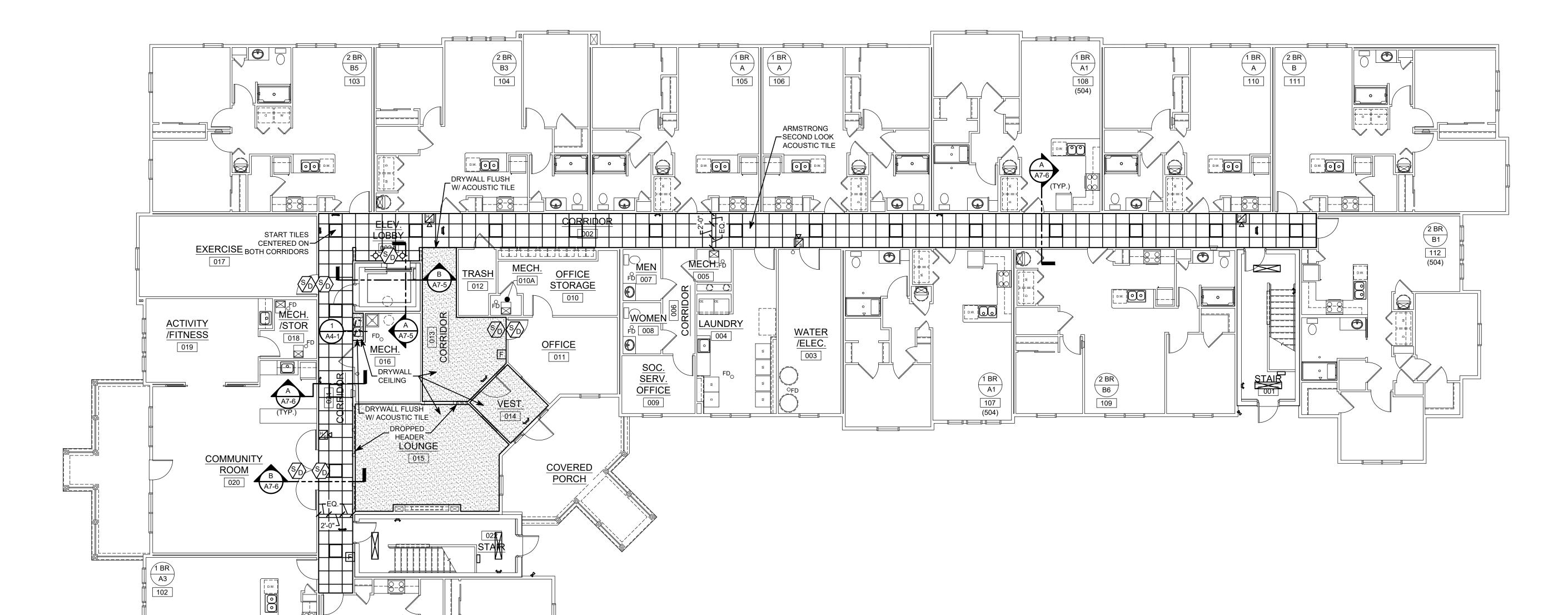
**DRAWING TITLE:** BUILDING REFLECTED **CEILING PLAN** 

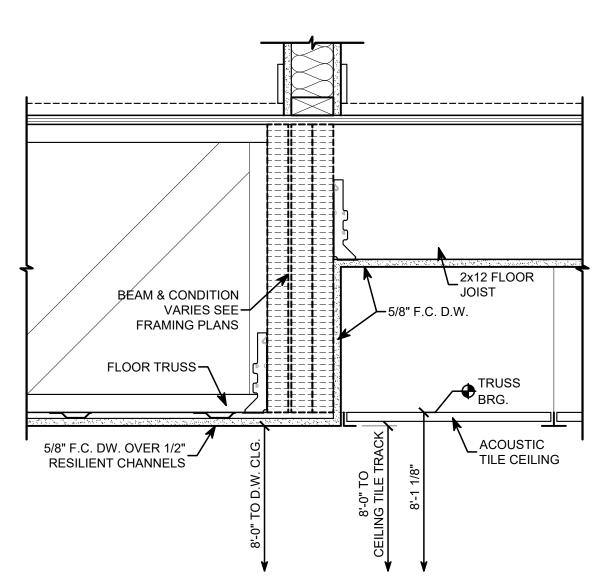
DATE: 07/31/2023 REVISED:



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SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023 CONSTRUCTION SET





CEILING DETAIL (1) SCALE: 1 1/2" = 1'-0"

				W	INDO'	W S	SCHE	DU	LE					
MARK	SIZE/ NOMINAL	ТҮРЕ	MANUF.	MODEL	(W x H)	ACTUAL DIMENSION	(W x H)	ROUGH OPENING	THICKNESS	LITES	VENT AREA (SQ. FT.)	ELEVATION	COMMENTS	
Α	2450	SINGLE HUNG	MI WINDOWS	3500	2'-3 1/2" x 4'-		2'-4" x 5'-0			6/1		1	≤ 0.30 U / ≤ 0.40 SHGC	
В	(2) - 3050	SINGLE HUNG	MI WINDOWS	3500	5'-11 5/8" x 4'-	-11 3/4"	6'-0 1/8" x 5	'-0 1/4"		6/1		2	≤ 0.30 U / ≤ 0.40 SHGC MULLED/EGI	RESS
С	3050	SINGLE HUNG	MI WINDOWS	3500	2'-11 3/4" x 4'-	-11 3/4"	3'-0 1/4" x 5	'-0 1/4"		6/1		3	≤ 0.30 U / ≤ 0.40 SHGC EGRESS	
D	3040	CASEMENT	MI WINDOWS	9770	2'-11 3/4" x	4'-0"	3'-0 1/4" x 4	18 1/2"		12		4	≤ 0.30 U / ≤ 0.40 SHGC EGRESS	
Е	3850	SINGLE HUNG	MI WINDOWS	3500	3'-7 1/2" x 4'-	11 3/4"	3'-8" x 5'-(	) 1/4"		8/1		5	≤ 0.30 U / ≤ 0.40 SHGC EGRESS	
F	3840	PICTURE	MI WINDOWS	9770	3'-7 1/2" x 3'-	11 1/2"	3'-8" x 4	18"		16		6	≤ 0.30 U / ≤ 0.40 SHGC EGRESS	
G	3450	SINGLE HUNG	MI WINDOWS	3500	3'-3 1/2" x 4'-	11 3/4"	3'-4" x 5'-0	) 1/4"		8/1		5	≤ 0.30 U / ≤ 0.40 SHGC EGRESS	

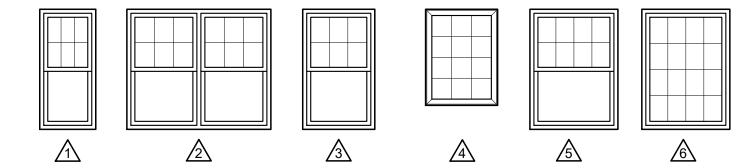
\*GENERAL NOTE:

1. ALL ENERGY STAR PRODUCTS TO CONTAIN A LABEL. THE LABEL SHALL REMAIN IN

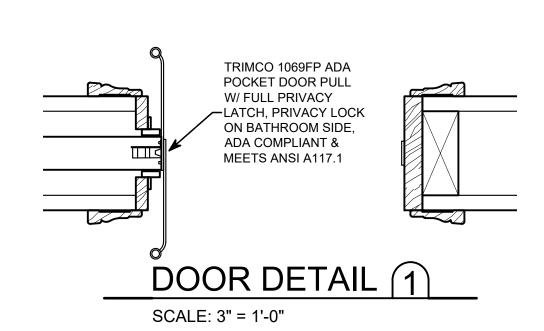
PLACE UNTIL FINIAL INSPECTION

2. PROVIDE WINDOW CONTROLS ON ALL 2ND

& 3RD FLOOR WINDOWS



FINISH SCHEDULE



		FLOOR F	FINISHES
	SYM.	MATERIAL	SPECIFICATION
	F-1	CARPET	MOHAWK PROPERTIES COLLECTION, NEUTRAL SHIFT, SMARTSTRAND NANOLOC
	F-2	SHEET VINYL	TARKETT, FIBER FLOOR CUSTSOM PRO.
	F-3	12 x 12 VCT	ARMSTRONG FLOORING, STANDARD EXCELON IMPERIAL TEXTURE
	F-4	VINYL PLANK - LVP	MOHAWK, PORTICO COLLECTION, 12 MIL.
	F-5	EXPOSED CONCRETE	
	F-6	VINYL STAIR TREADS	ROPPE, HEAVY DUTY, ROUND NOSE
	F-7	QUARRY/CERAMIC TILE	8x8 MIN. COEFFICIENT ≥ 0.6 DALTILE, QUARY TILE
,	F-8	CARPET TILE	J&J FLOORING, MINERAL MODULAR 22oz.

		BASE F	FINISHES
	SYM.	MATERIAL	SPECIFICATION
I	B-1	4" VINYL BASE	1/8" COVED
ı	B-2	PRIMED WOOD	PAINTED SEMI-GLOSS
ı	B-3	4" TILE BASE	4x8 BULL NOSE TILE BASE
ı	B-4	4" VINYL BASE	ROPPE, WALL BASE
1	(		

	WALL F	INISHES
SYM.	MATERIAL	SPECIFICATION
W-1	DRYWALL	PAINTED EGGSHELL

	CEILING	FINISHES
SYM.	MATERIAL	SPECIFICATION
C-1 C-2 C-3	DRYWALL DRYWALL 2x2 ACOUSTIC TILE	TEXTURED - KNOCK DOWN PAINTED SMOOTH SECOND - LOOK TILE

NO.	NAME	FLOOR	BASE	WALL	CLG.	HT.	REMARKS
	COMMON AREA	S F-3				(4 DIEO)	
001	STAIR	F-6	B-4	W-1	C-1	(VARIES)	
002	CORRIDOR (1ST FL)	F-8	B-2	W-1	C-3	8'-0"	
002A	ELEVATOR LOBBY WATER &	F-8	B-2	W-1	C-3	8'-0"	
003	ELECTRICAL	F-5	B-1	W-1	C-1	8'-0"	
004	LAUNDRY	F-3	B-1	W-1	C-1	8'-0"	
005	MECHANICAL	F-5	B-1	W-1	C-1	8'-0"	
006	CORRIDOR (1ST FL)	F-8	B-2	W-1	C-3	8'-0"	
007	MEN'S R.R.	F-3	B-1	W-1	C-1	8'-0"	
800	WOMEN'S R.R.	F-3	B-1	W-1	C-1	8'-0"	
009	SOCIAL SERVICE OFFICE	F-8	B-2	W-1	C-1	8'-0"	
010	OFFICE / STORAGE	F-8	B-2	W-1	C-1	8'-0"	
010A	MECH.	F-3	B-2	W-1	C-1	8'-0"	
011	OFFICE	F-8	B-2	W-1	C-1	8'-0"	
012	TRASH	F-3	B-1	W-1	C-1	8'-0"	
013	CORRIDOR (1ST FL)	F-8	B-2	W-1	C-3	8'-0"	
014	VESTIBULE	F-7	B-3	W-1	C-1	8'-0"	INLAY @ ENTRY
015	LOUNGE	F-8	B-2	W-1	C-1	8'-0"	
016	MECHANICAL	F-5	B-1	W-1	C-1	8'-0"	
017	EXERCISE ROOM	F-8	B-2	W-1	C-1	8'-0"	
018	MECH./STORAGE	F-5	B-1	W-1	C-1	8'-0"	
019	ACTIVITY/ FITNESS ROOM	F-8	B-2	W-1	C-1	8'-0"	
020	COMMUNITY ROOM	F-8	B-2	W-1	C-1	8'-0"	
021	CORRIDOR (1ST FL)	F-8	B-2	W-1	C-3	8'-0"	
022	STAIR	F-3 F-6	B-4	W-1	C-1	(VARIES)	
023	CORRIDOR (2ND FL)		B-2	W-1	C-3	8'-0"	
024	MECHANICAL	F-3	B-1	W-1	C-1	8'-0"	
025	MAINTENANCE	F-3	B-1	W-1	C-1	8'-0"	
026	CORRIDOR (2ND FL)	F-8	B-2	W-1	C-3	8'-0"	
026A	ELEVATOR LOBBY	F-8	B-2	W-1	C-3	8'-0"	
027	CORRIDOR (3RD FL)	F-8	B-2	W-1	C-3	8'-0"	
028	MECHANICAL	F-3	B-1	W-1	C-1	8'-0"	
029	STORAGE	F-3	B-1	W-1	C-1	8'-0"	
029A	DOG WASH	F-3	B-1	W-1	C-1	8'-0"	
030	CORRIDOR (3RD FL)	F-8	B-2	W-1	C-3	8'-0"	
030A	ELEVATOR LOBBY	F-8	B-2	W-1	C-3	8'-0"	
NAME		FLOOR	BASE	WALL	CLG.	CLG.	REMARKS
TYPIC	AL UNITS				ļ	HT.	
LIVING	<del></del>	F-4	B-2	W-1	C-1	8'-0"	
DINING		F-4	B-2	W-1	C-1	8'-0"	
KITCHEN		F-4	B-1	W-1	C-1	8'-0"	
LAUNDR		F-4	B-1	W-1	C-1	8'-0"	
PANTRY		F-4	B-1	W-1	C-1	8'-0"	
		F-2	B-1	W-1	C-1	8'-0"	
BATH	200	F-2 F-1	B-1	W-1	C-1	8'-0"	
BEDROC		F-1					
	S / COAT	F-4	B-2	W-1	C-1	8'-0"	
LINEN		F-2	B-1	W-1	C-1	8'-0"	
MECHAN	NICAL	F-3	B-1	W-1	C-1	8'-0"	
HALL		F-4	B-1	W-1	C-1	8'-0"	

					RIAL		9 <sub>N</sub>				SEE [	DETAI	LS ON	HE	DULE			HARI	DWARE			
MARK	DOOR TYPE	WIDTH	НЕІСНТ	THICKNESS	CORE MATER	FINISH	DOOR GLAZING	FIRE RATING	FRAME MATERIAL	FRAME SIZE	НЕАБ	SHEE	SILL	ELEVATION	REMARKS	HINGES	LOCKSET	PANIC	CLOSER	THRESHOLD		
1	4 PANEL METAL CLAD	3'-0"	6'-8"	1 3/4"	METAL CLAD	PRIME		20 MIN	PFHM					Α		1 1/2 PR 4 1/2" x 4 1/2" 1279RC	AL10S (NEPTUNE) B560P W/ 1" THROW		SPRING HINGES	ADA THRESHOLD	1 (14) (15)	
2	4 PANEL WOOD	2'-10"	6'-8"	1 3/8"	НС	PRIME			WD	4 13/16"				В	UNDERCUT 1"	1 1/2 PR 4"x4" 1279RC	F40S (SATURN)				1	
3	PANEL WOOD	1'-6"	6'-8"	1 3/8"	НС	PRIME			WD	4 13/16"				J		1 1/2 PR 4"x4" 1279RC	F10S				1	
4	4 PANEL WOOD	2'-10"	6'-8"	1 3/8"	НС	PRIME			WD	4 13/16"				В		1 1/2 PR 4"x4" 1279RC	F10S				1	
5	LOUVERED (BI-FOLD)	(2) 1'-3"	8'-0"	1 3/8"	НС	PRIME			DW					С							9	
6	WOOD PANELED (BI-FOLD)	(4) 1'-3"	6'-8"	1 3/8"	НС	PRIME			DW					D							9	
7	4 PANEL HOLLOW METAL	3'-0"	6'-8"	1 3/4"	НМ	PRIME		1 HR	KDHM					Е		1 1/2 PR 4 1/2" x 4 1/2" 1279RC	AL10Sx2 3/4"		ADA 7600	ADA THRESHOLD		
8	INSULATED METAL CLAD FRENCH DOOR	3'-0"	6'-8"	1 3/4"	INSUL MTL CLAD	PRIME	INSUL TEMP		KDHM					F		1 1/2 PR 4 1/2" x 4 1/2" 1279RC		RIM PANIC W/ LEVER	ADA 7600	ADA THRESHOLD		
9	4 PANEL WOOD	2'-6"	8'-0"	1 3/8"		PRIME			WD					Н		2 PR 4"x4"	F10S	, v (			1	
10	4 PANEL WOOD (BI-PASS)	(2) 2'-6"	6'-8"	1 3/8"	НС	PRIME			DW					G							3	
11	4 PANEL INSULATED METAL CLAD	3'-0"	6'-8"	1 3/4"	НМ	PRIME		3/4 HR	PFHM					K		1 1/2 PR 4 1/2" x 4 1/2" 1279	AL10Sx2 3/4"		ADA 7600	ADA THRESHOLD		
12	4 PANEL WOOD	3'-0"	6'-8"	1 3/8"	WD	PRIME			WD					В	UNDERCUT 1"	1 1/2 PR 4" x 4" 1279	F40S			1	1	
13	4 PANEL WOOD	3'-0"	6'-8"	1 3/8"	WD	PRIME			WD					В		1 1/2 PR 4" x 4" 1279	F10S				1	
14	4 PANEL WOOD (BI-PASS)	(2) 3'-0"	6'-8"	1 3/8"	НС	PRIME			DW					G		1219					1	
15	4 PANEL METAL CLAD	3'-0"	6'-8"	1 3/4"	METAL CLAD	PRIME		3/4 HR	PFHM					K		1 1/2 PR 4 1/2" x 4 1/2" 1279	AL40Sx2 3/4"		ADA 7600	ADA THRESHOLD	+	
16	4 PANEL METAL CLAD	(2) 3'-0"	7'-10"	1 3/4"	INSUL HM	PRIME		3/4 HR	PFHM					L		1 1/2 PR 4 1/2" x 4 1/2" 1279	AL50PDx2 3/4"		ADA 7600	ADA THRESHOLD	000	
17	4 PANEL METAL CLAD	3'-0"	6'-8"	1 3/4"	INSUL HM	PRIME			PFHM					K		1 1/2 PR 4 1/2" x	AL53PDx2 3/4"				$\bigcirc$	
18	4 PANEL METAL CLAD	3'-0"	6'-8"	1 3/4"	INSUL	PRIME		3/4 HR	PFHM							4 1/2" 1279 1 1/2 PR 4 1/2" x	AL53PDx2 3/4"		ADA 7600	ADA THRESHOLD	1	
19	INSULATED METAL CLAD	3'-0"	6'-8"	4 0/4"	HM INSUL MTL CLAD	DDIME	INSUL TEMP		PFHM					F	0.32 U / 0.40 OR LESS SHGC	4 1/2" 1279 1 1/2 PR 4 1/2" x			ADA DOOR			
20	FRENCH DOOR INSULATED METAL CLAD	3'-0"	6'-8"	4 0/4"		DDIME	INSUL		PFHM					F	0.32 U / 0.40 OR LESS SHGC	4 1/2" 1279 1 1/2 PR 4 1/2" x			OPENER ADA DOOR		71011	
21	FRENCH DOOR 4 PANEL WOOD	2'-6"	6'-8"	1 3/8"	WITE OLAD	PRIME	TEMP		WD					В		4 1/2" 1279 1 1/2 PR 4"x4"	F10S	W/ LEVER	OPENER	IIIVESHOLD		
22	4 PANEL POCKET DOOR	3'-0"	6'-8"	1 3/8"		PRIME			WD					P	SEE DETAIL 1/A5-1	1279RC	-				9	
23	INSULATED FULL GLASS	1'-6"	6'-8"	4 0/4"	INSUL		INSUL		WD					Q	FIXED SIDELIGHT 0.32 U / 0.40							
24	METAL CLAD SIDELIGHT INSULATED METAL CLAD	3'-0"	6'-8"		02, 12		TEMP INSUL		PFHM				-	N	OR LESS SHGC 0.32 U / 0.40 OR LESS SHGC	1 1/2 PR 4 1/2" x	AL50PDx2 3/4"		ADA 7600	ADA	4	
25	FRENCH DOOR INSULATED FULL GLASS	3'-0"	6'-8"	1 3/4"		PRIME	INSUL		PFHM					N	0.32 U / 0.40 OR LESS SHGC	4 1/2" 1279				THRESHOLD		
26	METAL CLAD SIDELIGHT 4 PANEL WOOD POCKET DOOR	(2) 3'-0"	6'-8"	1 3/4"		PRIME	TEMP		WD					M		1 1/2 PR 4 1/2"	AL53PDx2 3/4"		ADA 7600	ADA THRESHOLD	9	
27	4 PANEL WOOD (BI-PASS)	(2) 2'-10"	6'-8"	1 3/8"	HC	PRIME			DW				<del>                                     </del>	G		x 4 1/2" 1279RC			2.11300	THRESHOLD	3	
28	4 PANEL WOOD	(2) 2'-10"	6'-8"	1 3/8"	HC	PRIME			WD					В		1 1/2 PR 4 1/2"	F05x2 3/8"				1	
29	4 PANEL METAL CLAD	3'-0"	6'-8"	1 3/4"	INSUL	PRIME		3/4 HR						K		x 4 1/2" 1279RC 1 1/2 PR 4 1/2" x	AL10Sx2 3/4"	1	ADA 7600	ADA THRESHOLD		
	TO A STATE OF THE PARTY OF THE	U-U	V-0	1 0/4	HM	I IXIIVIL		0/-7      (	1 1 1 1101							4 1/2" 1279	7.E 100A2 0/4		NDA 1000	THRESHOLD		

### HARDWARE CODED NOTES

1 SPRING TYPE WALL STOP

2 SURFACE MOUNTED PULLS - SEE DETAIL 1/A5-1

MANUFACTURER TOP TRACK W/ ROLLER BRACKETS & 2 1/8" FINGER PULLS (US26D)

(4) MOUNT CLOSER ON ROOM SIDE OF DOOR

5 PUSH/PULL PLATES

6 TOP & BOTTOM AUTOMATIC BOLTS ON INACTIVE LEAF - HEAD MOUNTED COORDINATOR

7 COMPLETE WEATHERSTRIPPING PACKAGE

9 COMPLETE TRACK & HARDWARE PACKAGE BY MANUFACTURER PROVIDE MINIMUM 1 1/2" US2D PULLS

(10) STANLEY MAGIC ACCESS ADA DOOR OPENER/CLOSER

(11) ELECTRIC STRIKE CONTROLLED BY INTERCOM

(12) SURFACE MOUNTED TOP AND BOTTOM BOLTS

8 FIRE ALARM DOOR HOLD OPEN

13 RIGID WALL STOP

(14) AUGUST SMART LOCK PROVIDE 8" x 34" KICKPLATE ON CORRIDOR SIDE OF ENTRY DOORS

### **ABBREVIATIONS**

HC - HOLLOW CORE

SC - SOLID CORE

PFC - POLYURETHANE FOAM CORE

PF - PRE-FINISHED WOOD DOOR -COLOR BY ARCHITECT FROM MFR. SAMPLES

PL - PLASTIC LAMINATE FACED SOLID CORE WOOD DOOR -COLOR BY ARCHITECT FROM MFR. SAMPLES

PTD. - PRIME PAINTED - FINISH COAT BY PAINTER

HM - HOLLOW METAL

KDHM - KNOCK DOWN HOLLOW METAL

PFHM - PREFINISHED HOLLOW METAL FRAME (REDI-FLEX 2 PIECE (WOOD CASING)

INSUL. - INSULATED

TEMP. - TEMPERED OR LAMINATED APPROVED SAFETY GLASS AS REQUIRED BY CODE

1. ALL ENERGY STAR PRODUCTS TO CONTAIN A LABEL. THE LABEL SHALL REMAIN IN PLACE UNTIL FINIAL INSPECTION

ALL INTERIOR DOORS SHALL RECEIVE ONE COAT OF PRIMER & TWO COATS OF SATIN FINISH TO INCLUDE ALL SIX SIDES. 3. ALL HANDELS, PULLS ETC. SHALL BE LEVER HANDEL. UNITS ON ACCESSIBLE DOORS SHALL NOT REQUIRE TIGHT

GRASPING, PINICHING, OR TWISTING.

MTL. CLAD

FIXED

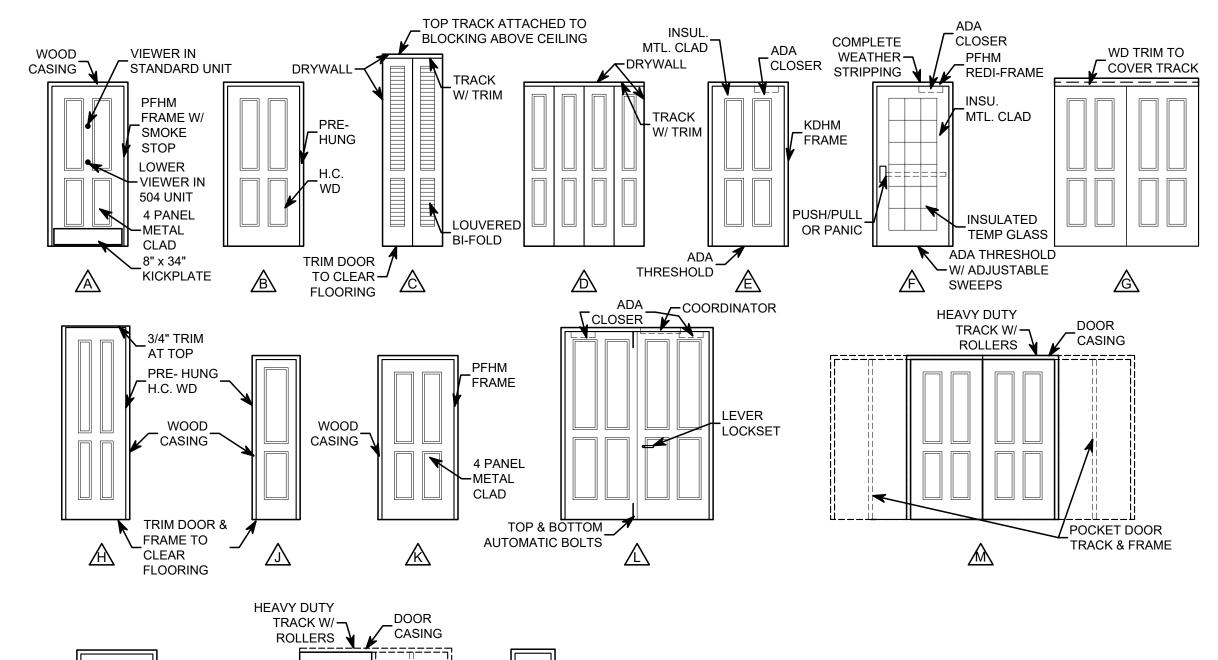
PANEL

INSULATED

TEMP GLASS

SEE DETAIL POCKET DOOR

TRACK & FRAME



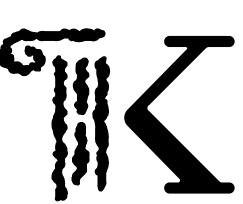
MTL. CLAD

\_FIXED

PANEL

INSULATED

TEMP GLASS



# **KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE PLANNING DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 13215-5492

PHONE: 614-224-2083 AX: 614-224-4736 -MAIL: architects@kontogiannis.com

PROJECT:

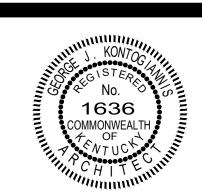
THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

**DRAWING TITLE:** DOOR, WINDOW &

FINISH SCHEDULES

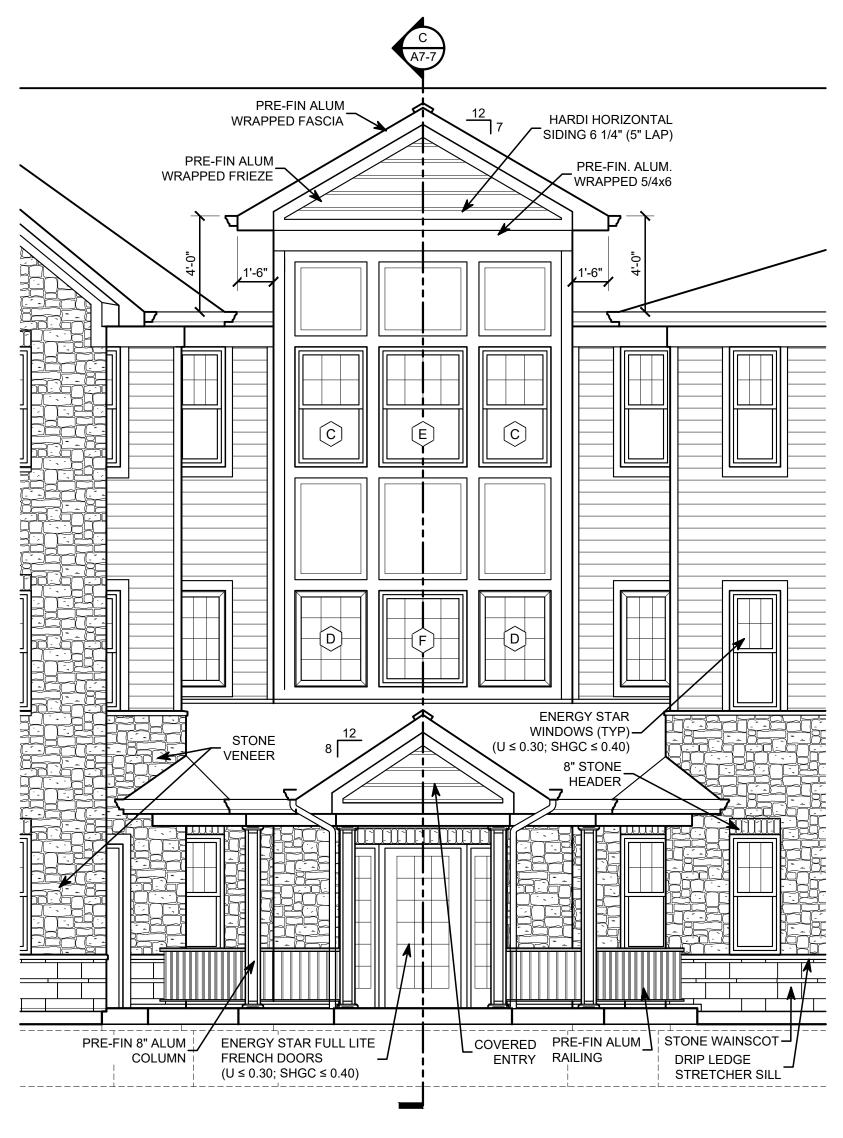
DATE: 07/31/2023 REVISED:



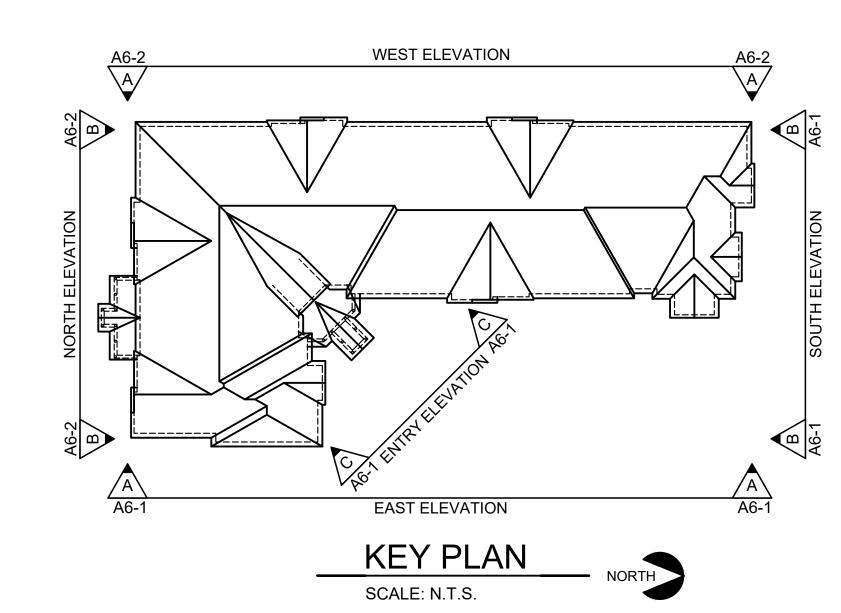
GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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SUBMISSION SET ■ PERMIT SET 07/31/2023 BID SET 11/08/2023 CONSTRUCTION SET



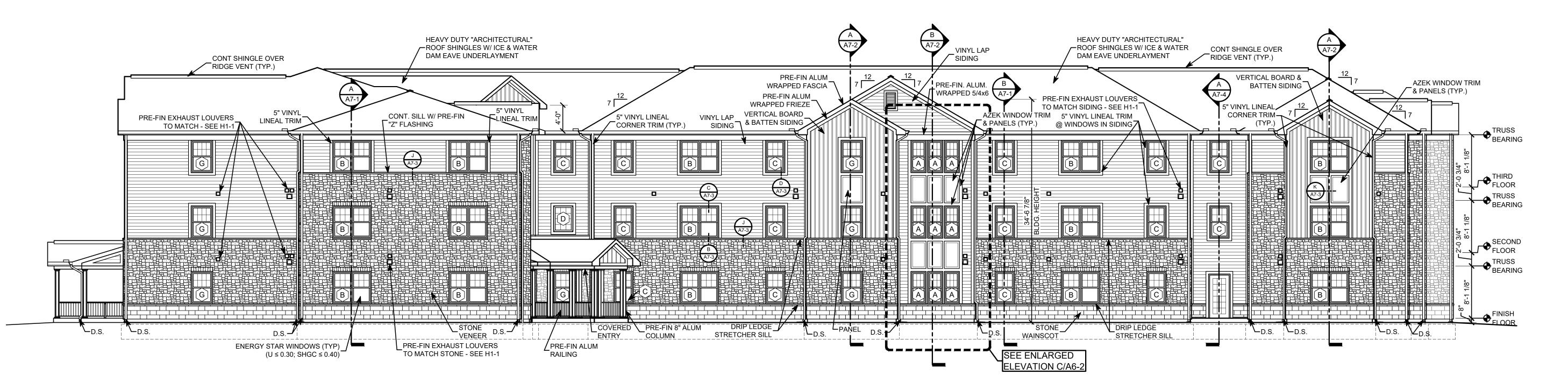
SCALE: 1/4" = 1'-0"



HEAVY DUTY "ARCHITECTURAL"
ROOF SHINGLES W/ ICE & WATER —
DAM EAVE UNDERLAYMENT CONT SHINGLE OVER D A7-1 RIDGE VENT (TYP.) PRE-FIN ALUM WRAPPED FASCIA -PRE-FIN ALUM VINYL LAP \_ SIDING TRUSS BEARING 5" VINYL LINEAL TRIM DRIP LEDGE STRETCHER SILL THIRD FLOOR PRE-FIN EXHAUST LOUVERS TO MATCH— STONE - SEE H1-1 TRUSS
BEARING B B J A7-3 STONE SECOND FLOOR VENEER ~ DRIP LEDGE STRETCHER SILL STONE WAINSCOT COVERED D.S. D.S. 8" STONE HEADER STONE WAINSCOT\_ L<sub>D.S.</sub> ►<sub>D.S.</sub> ENERGY STAR WINDOWS (TYP) (U ≤ 0.30; SHGC ≤ 0.40) SEE ENLARGED ELEVATION C/A6-2 (SIM.

SOUTH ELEVATION B

SCALE: 1/8" = 1'-0"



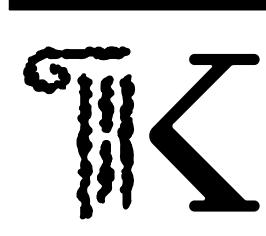
SCALE: 1/8" = 1'-0"

54.06% OF ALL BLDG. SIDING IS STONE VENEER MASONRY

TOTAL HARDIE SIDING & TRIM = 7,627 SQ.FT. (45.94%)

TOTAL STONE VENEER = 8,976 SQ.FT (54.06%)

TOTAL SIDING = 16,603 SQ.FT



**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE PLANNING DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

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PROJECT:

THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
EXTERIOR
ELEVATIONS

DATE: 07/31/2023 REVISED:



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SUBMISSION SETPERMIT SET 07/31/2023■ BID SET 11/08/2023■ CONSTRUCTION SET

A6-1

STONE VENEER

DRIP LEDGE STRETCHER SILL

ENLARGED ELEVATION C

SCALE: 1/4" = 1'-0"

STONE

ELEVATION C/A6-2 (SIM. NORTH ELEVATION B

SCALE: 1/8" = 1'-0"

SEE ENLARGED

\_\_\_\_(<u>U</u> ≤ 0.30; SHGC ≤ 0.40)

LITE FRENCH DOORS-

B A7-2 HEAVY DUTY "ARCHITECTURAL"

ROOF SHINGLES W/ ICE & WATER PRE-FIN 18X30 CONT SHINGLE OVER PRE-FIN. 18x30 LOUVER W/ LOUVER W/ 3 1/2"~ RIDGE VENT (TYP.) 3 1/2 LINEAL VINYL TRIM DAM EAVE UNDERLAYMENT LINEAL VINYL TRIM PRE-FIN ALUM\_ WRAPPED FASCIA 5" LINEAL VINYL PRE-FIN ALUM\_ TRIM @ WINDOWS PRE-FIN. ALUM. WRAPPED 5/4x6 PRE-FIN ALUM WRAPPED FRIEZE WRAPPED FASCIA PRE-FIN EXHAUST PRE-FIN ALUM\_ PRE-FIN ALUM LOUVERS TO MATCH-VERTICAL BOARD & \_ BATTEN SIDING CONT. SILL W/ PRE-FIN "Z" FLASHING VINYL LAP\_ SIDING GUTTER WRAPPED FRIEZE SIDING - SEE H1-1 TRUSS
BEARING DRIP LEDGE \_ STRETCHER SILL THIRD FLOOR TRUSS
BEARING SECOND FLOOR TRUSS BEARING DRIP LEDGE STRETCHER SILL STONE WAINSCOT D.S. 8" STONE J HEADER STONE VENEER STONE\_ VENEER E1-1 ENERGY STAR WINDOWS (TYP) (U ≤ 0.30; SHGC ≤ 0.40) PRE-FIN EXHAUST LOUVERS \_
TO MATCH STONE - SEE H1-1 SEE ENLARGED ELEVATION SEE ENLARGED
ELEVATION C/A6-2 DRIP LEDGE \_\_ STRETCHER SILL C/A6-2 (SIM. OPP. 54.06% OF ALL BLDG. SIDING IS STONE VENEER MASONRY WEST ELEVATION A

SCALE: 1/8" = 1'-0"

A6-2

WEST ELEVATION

PRE-FIN 18x30 —LOUVER W/ 3 1/2"

LINEAL VINYL TRIM

STONE STONE WAINSCOT

C/A6-2 (SIM. OPP.)

TOTAL HARDIE SIDING & TRIM = 7,627 SQ.FT. (45.94%)

TOTAL STONE VENEER = 8,976 SQ.FT (54.06%)
TOTAL SIDING = 16,603 SQ.FT

SEE ENLARGED ELEVATION

VERTICAL BOARD & BATTEN SIDING

6/4 AZEK WINDOW TRIM &

PANEL @ LOCATIONS W/

TRUSS
BEARING

THIRD FLOOR

SECOND FLOOR

TRUSS BEARING

VERTICAL BOARD &

BATTEN SIDING

**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE **PLANNING DESIGN** 

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

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PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: **EXTERIOR ELEVATIONS** 

DATE: 07/31/2023 REVISED:

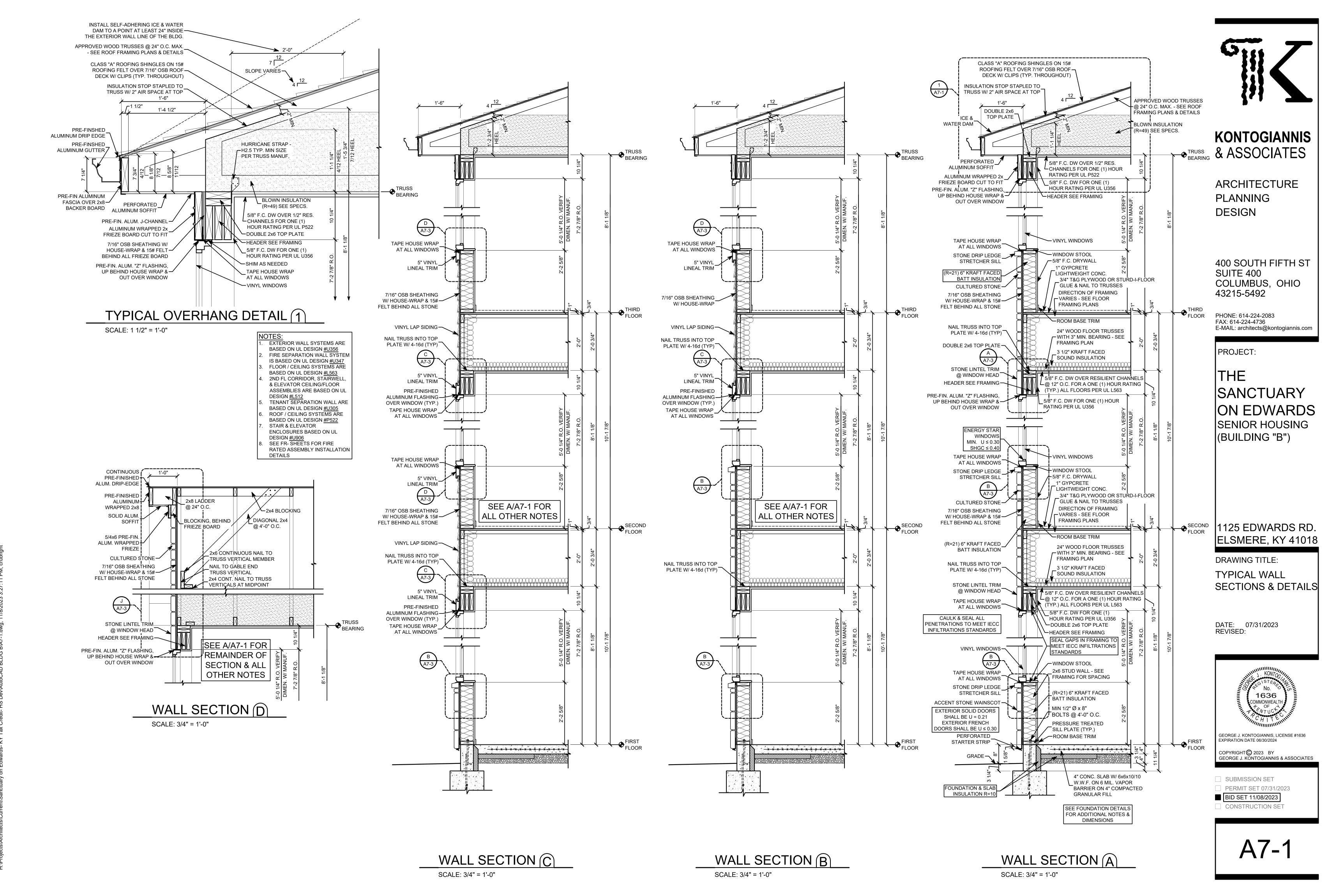


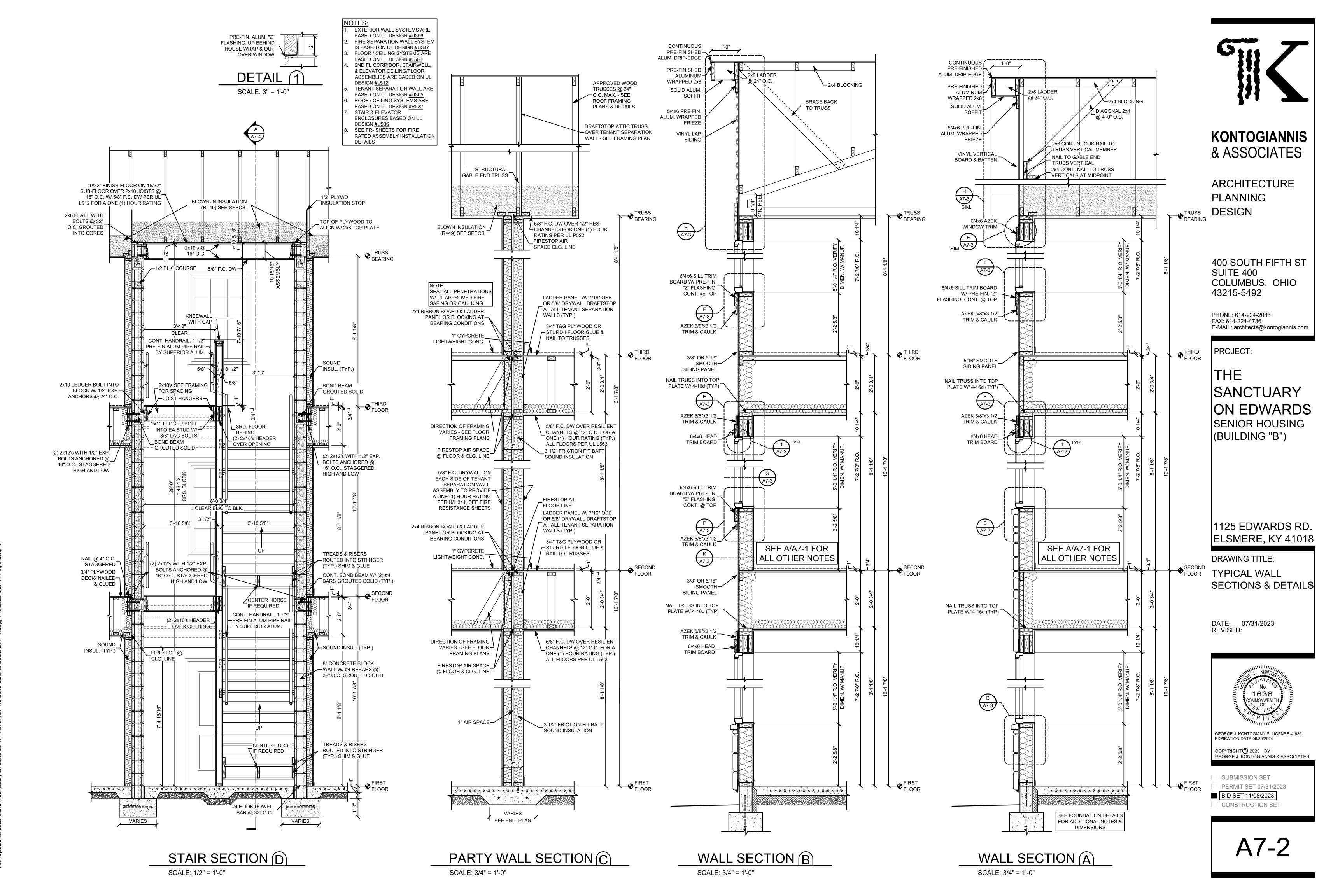
GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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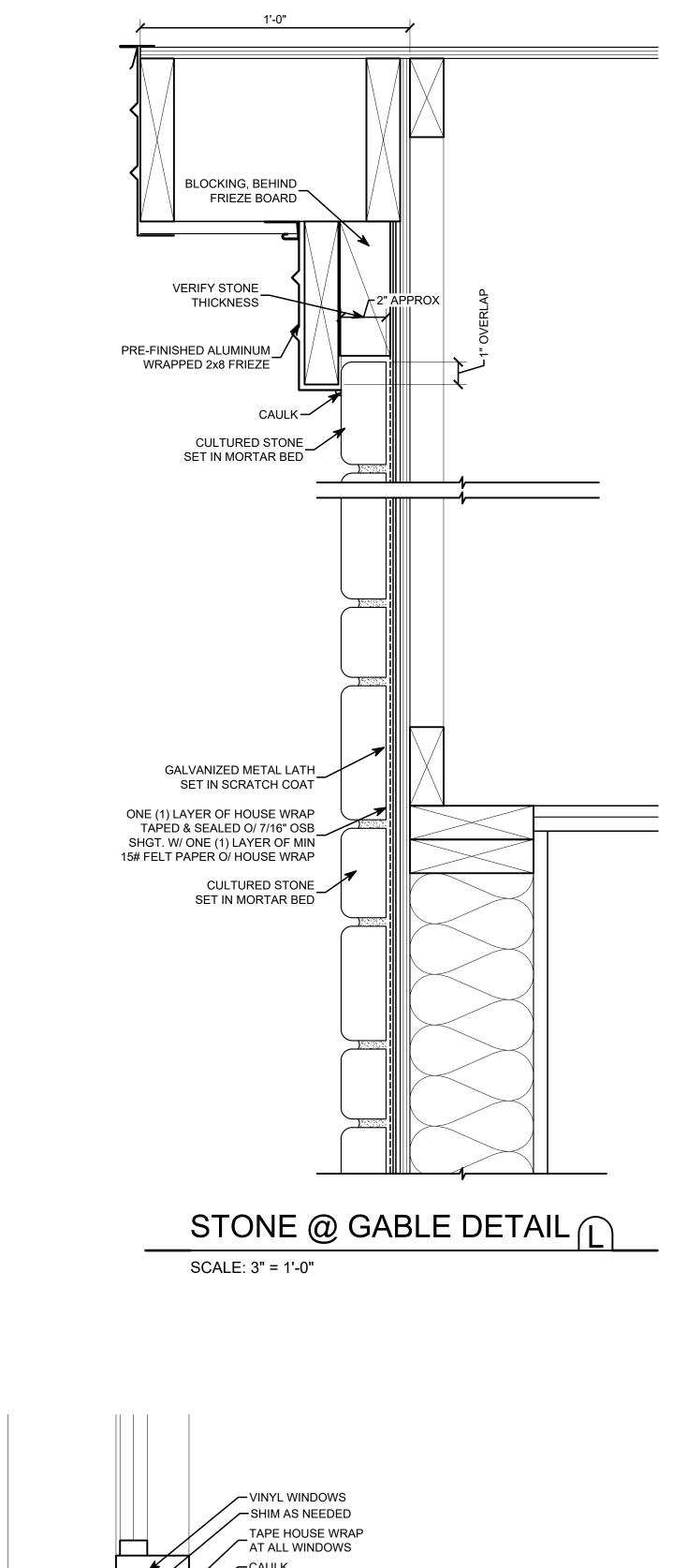
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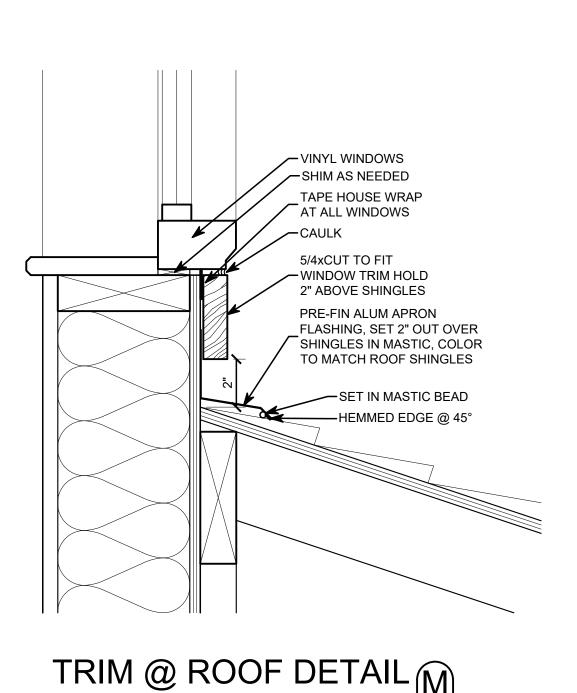
A6-2



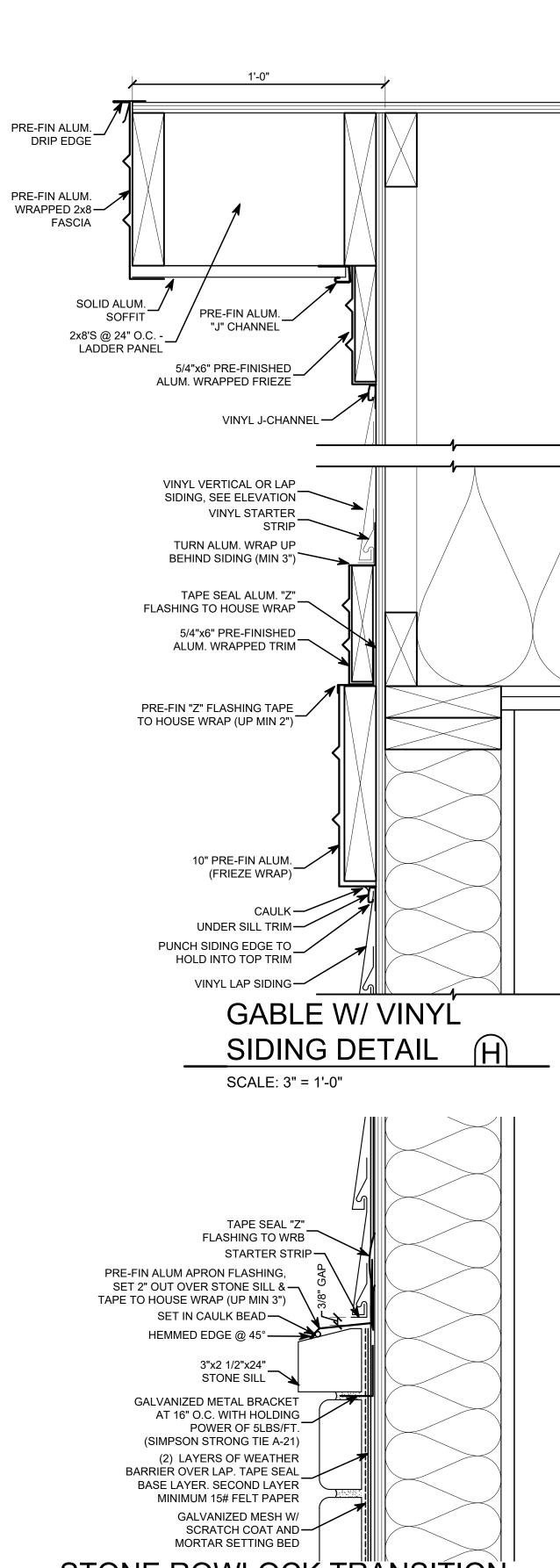


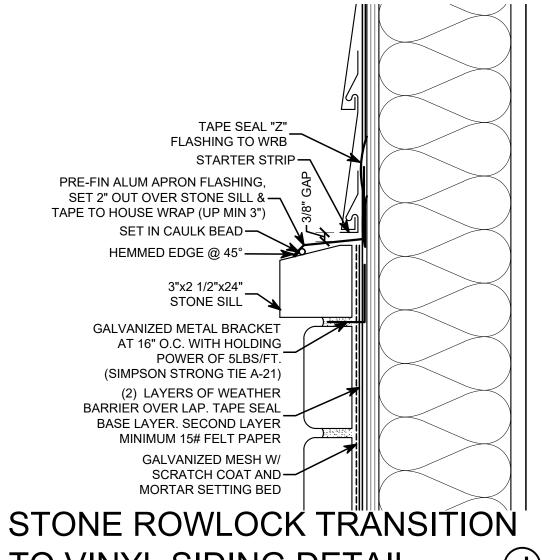
Projects\Ambitects\Current\Sanctuary on Edwards- KY Tax Credit- HS Dev\AutoCAD BLDG B\A7-1 dwg 11/8/2023 3:27:14 PM crubright



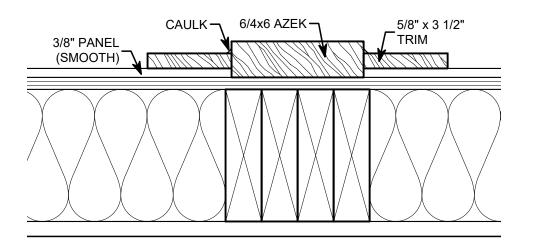


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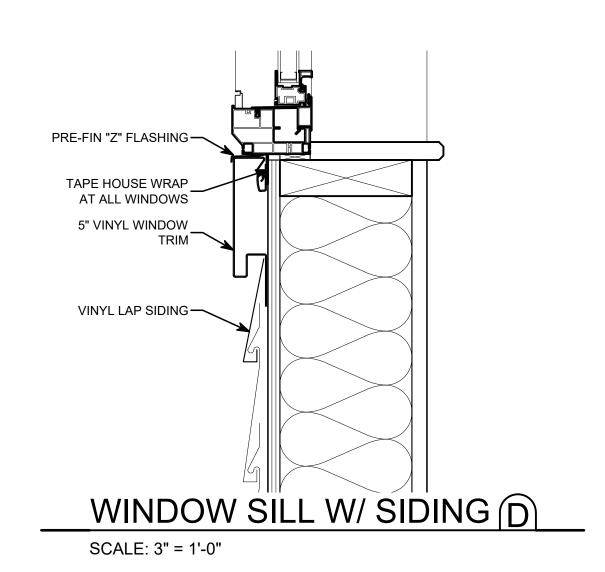




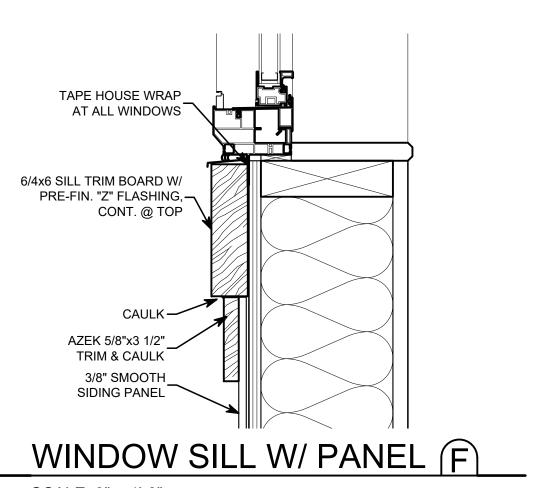
TO VINYL SIDING DETAIL SCALE: 3" = 1'-0"



TRIM DETAIL (K) SCALE: 3" = 1'-0"



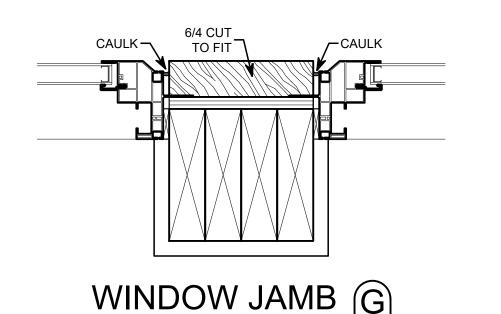
3/8" SMOOTH\_ SIDING PANEL AZEK 5/8"x3 1/2"\_ TRIM & CAULK PRE-FIN "Z" FLASHING TAPE TO HOUSE WRAP (UP MIN 2") 6/4x6 HEAD TRIM BOARD W/ PRE-FIN. "Z"-FLASHING, CONT. @ TOP PRE-FINISHED ALUMINUM FLASHING UP BEHIND HOUSEWRAP & OUT OVER WINDOW (TYP.) WINDOW HEAD W/ PANEL (E)

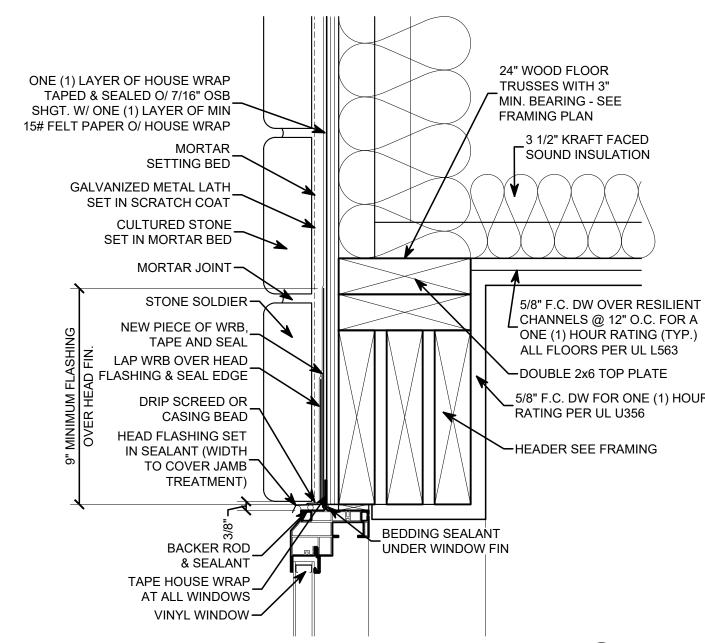


SCALE: 3" = 1'-0"

SCALE: 3" = 1'-0"

SCALE: 3" = 1'-0"



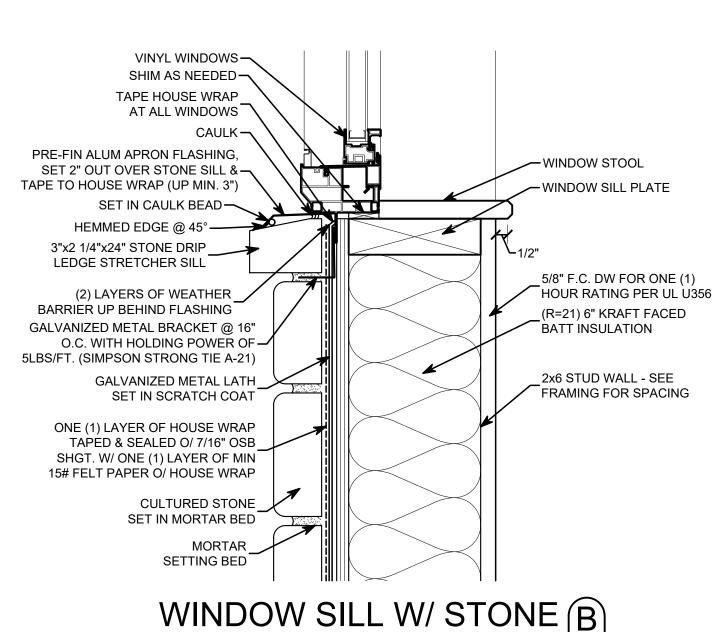


WINDOW HEAD W/ STONE A

SCALE: 3" = 1'-0"

SCALE: 3" = 1'-0"

SCALE: 3" = 1'-0"



ELSMERE, KY 41018 DRAWING TITLE:

WALL SECTIONS & **DETAILS** 

1125 EDWARDS RD.

**KONTOGIANNIS** 

& ASSOCIATES

ARCHITECTURE

400 SOUTH FIFTH ST

E-MAIL: architects@kontogiannis.com

SANCTUARY

ON EDWARDS

SENIOR HOUSING

(BUILDING "B")

COLUMBUS, OHIO

**PLANNING** 

**DESIGN** 

SUITE 400

43215-5492

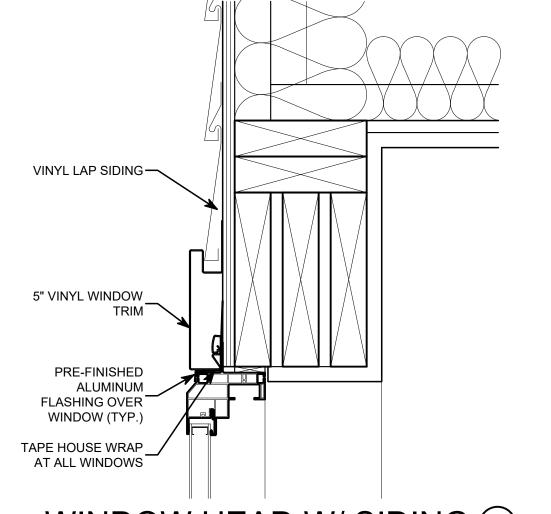
PHONE: 614-224-2083

FAX: 614-224-4736

PROJECT:

THE

DATE: 07/31/2023 REVISED:



WINDOW HEAD W/ SIDING (C)

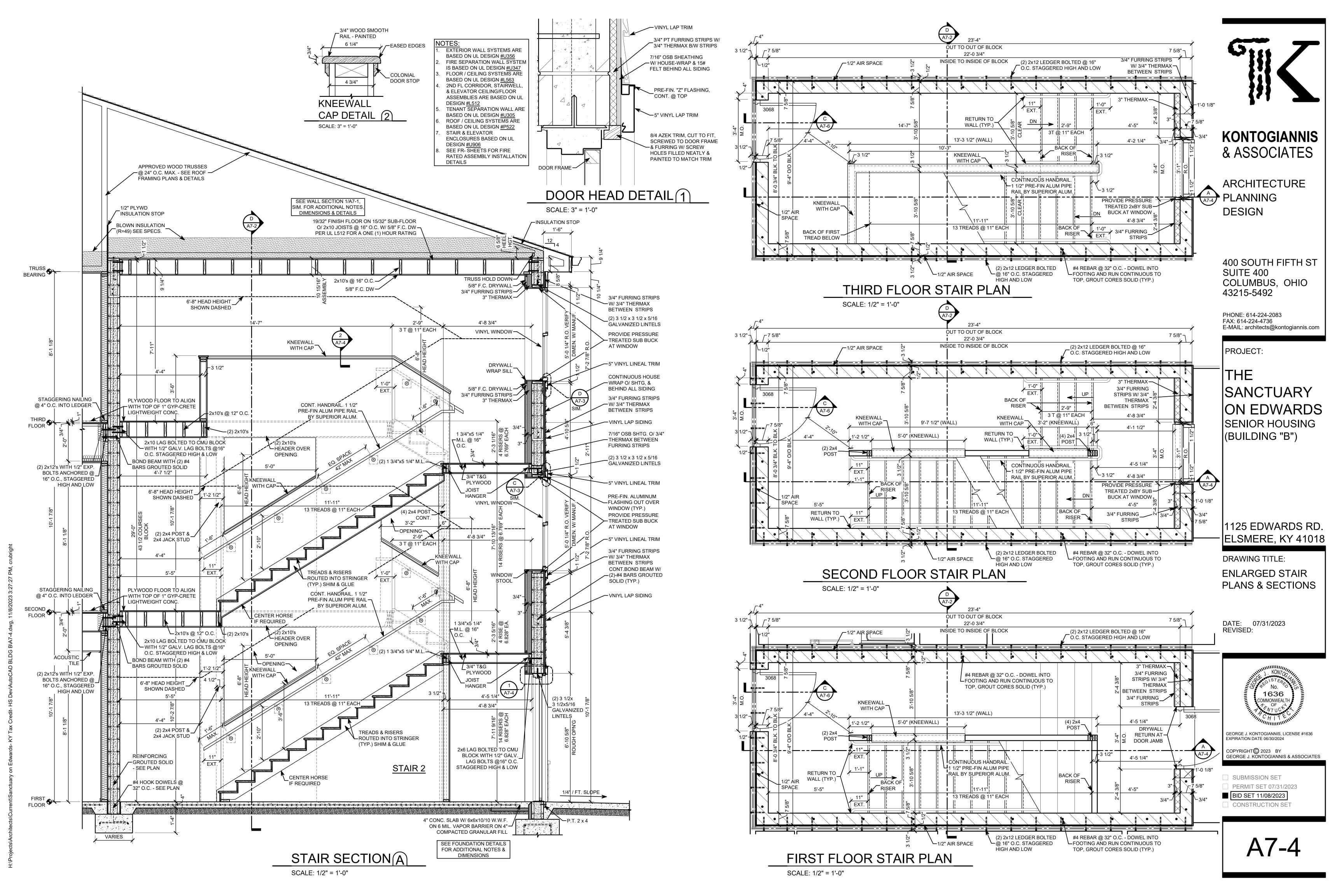
1636 COMMONWEALT

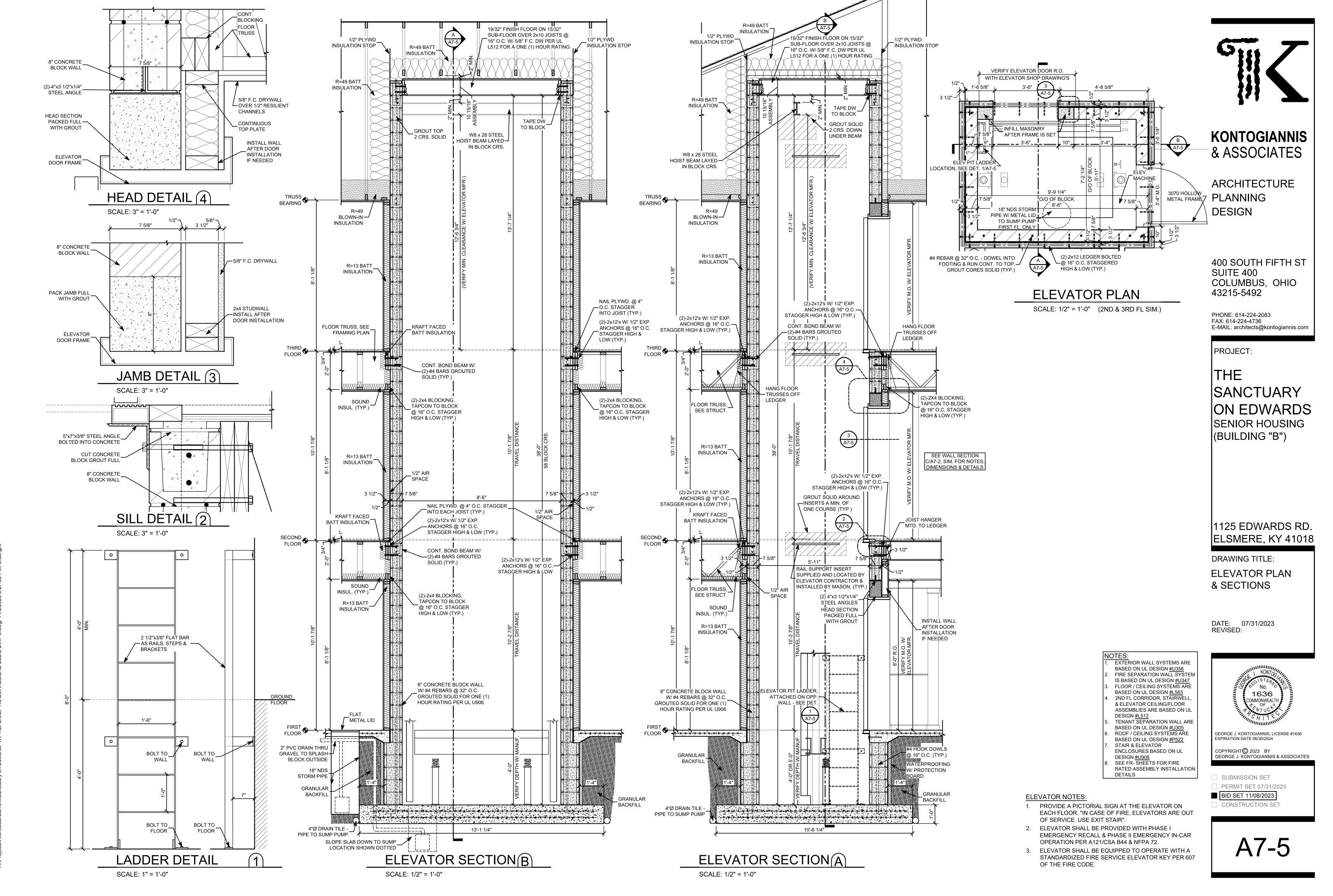
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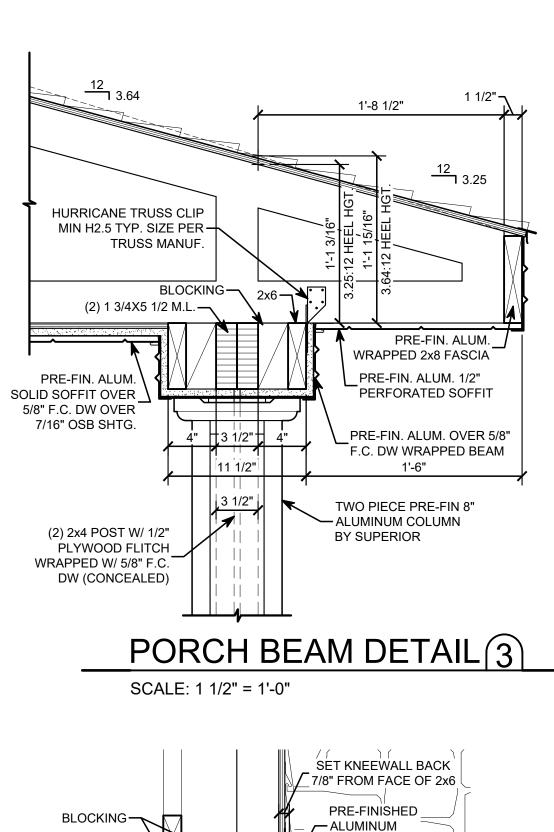
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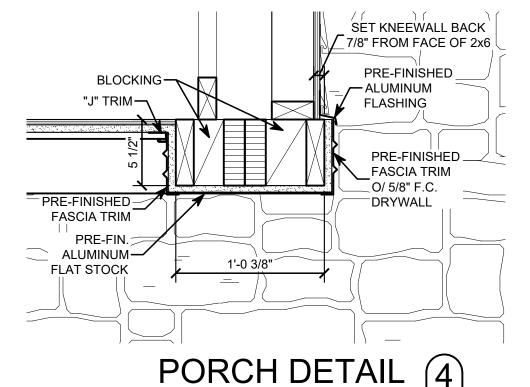
A7-3



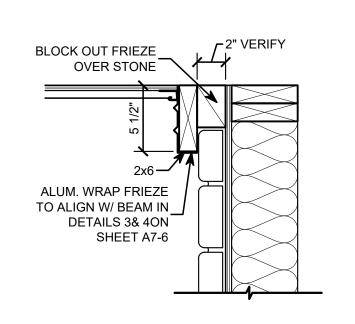


ojects\Architects\Current\Sanctuary on Edwards- KY Tax Credit- HS Dev\AutoCAD BLDG B\A7-5 dwg 11/8/2023 3:27:35 D

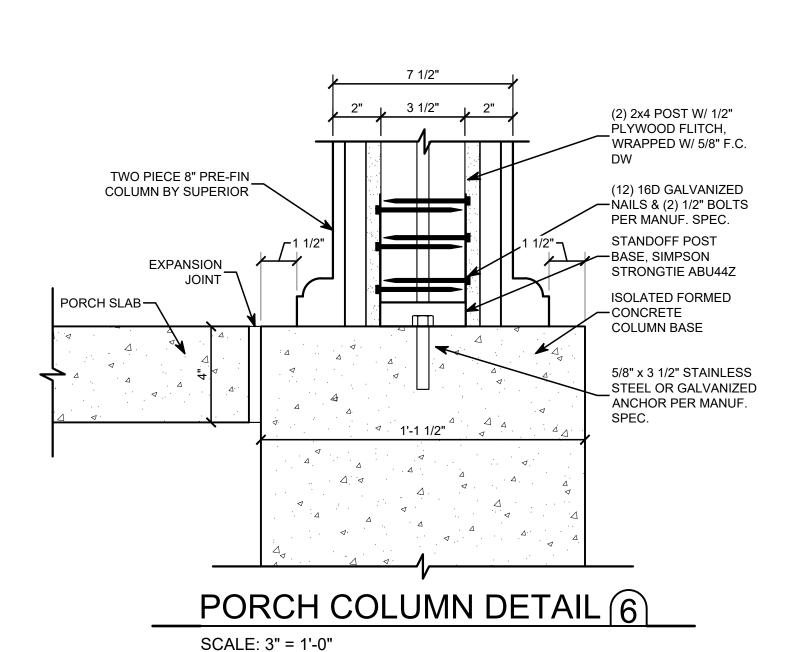


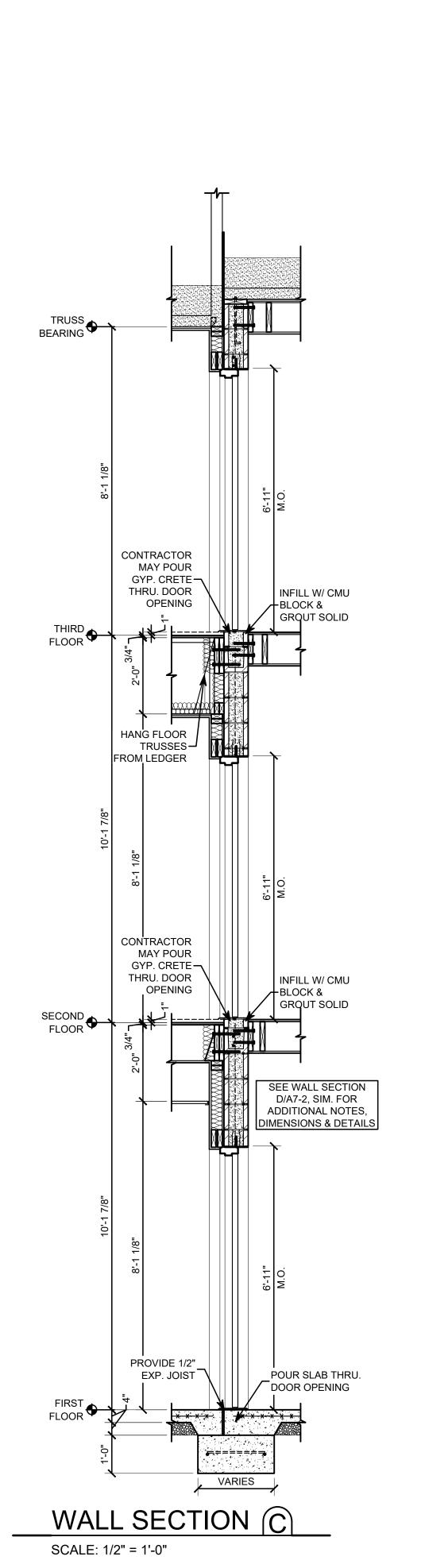


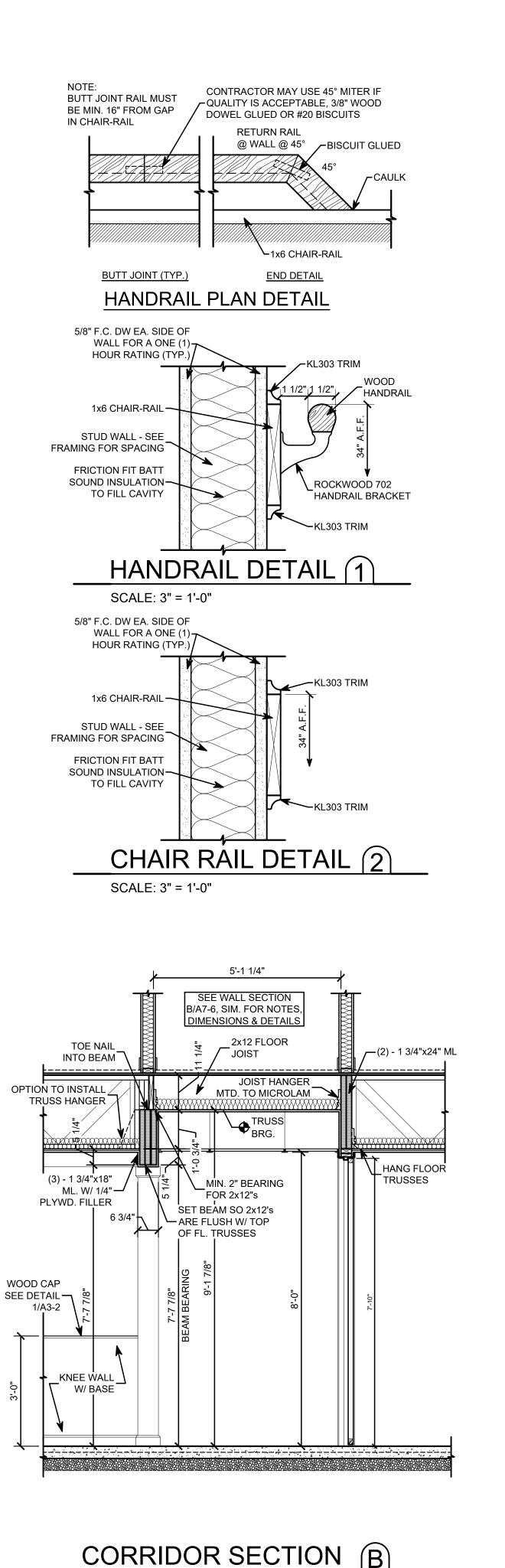
SCALE: 1 1/2" = 1'-0"



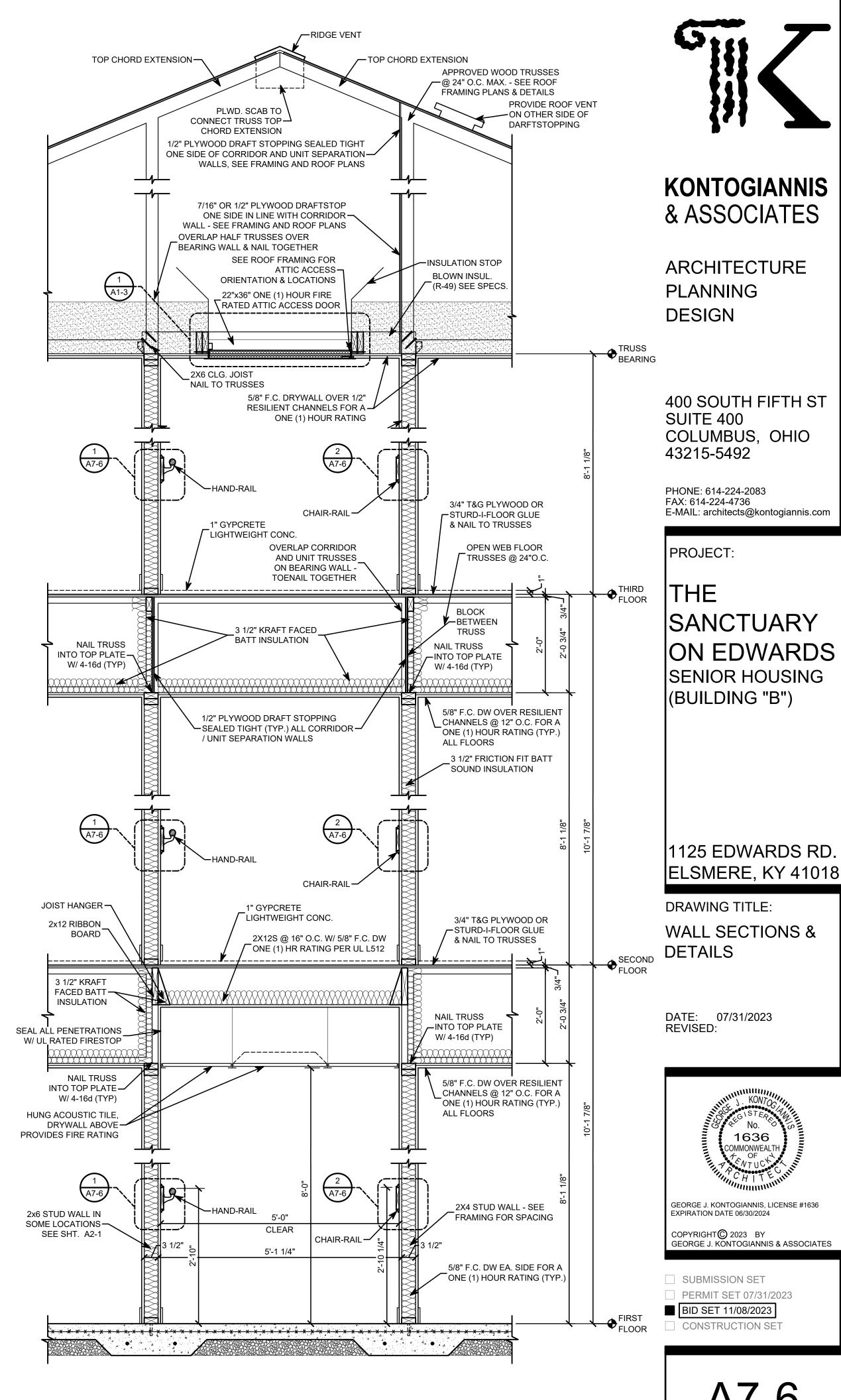
PORCH DETAIL (5) SCALE: 1 1/2" = 1'-0"





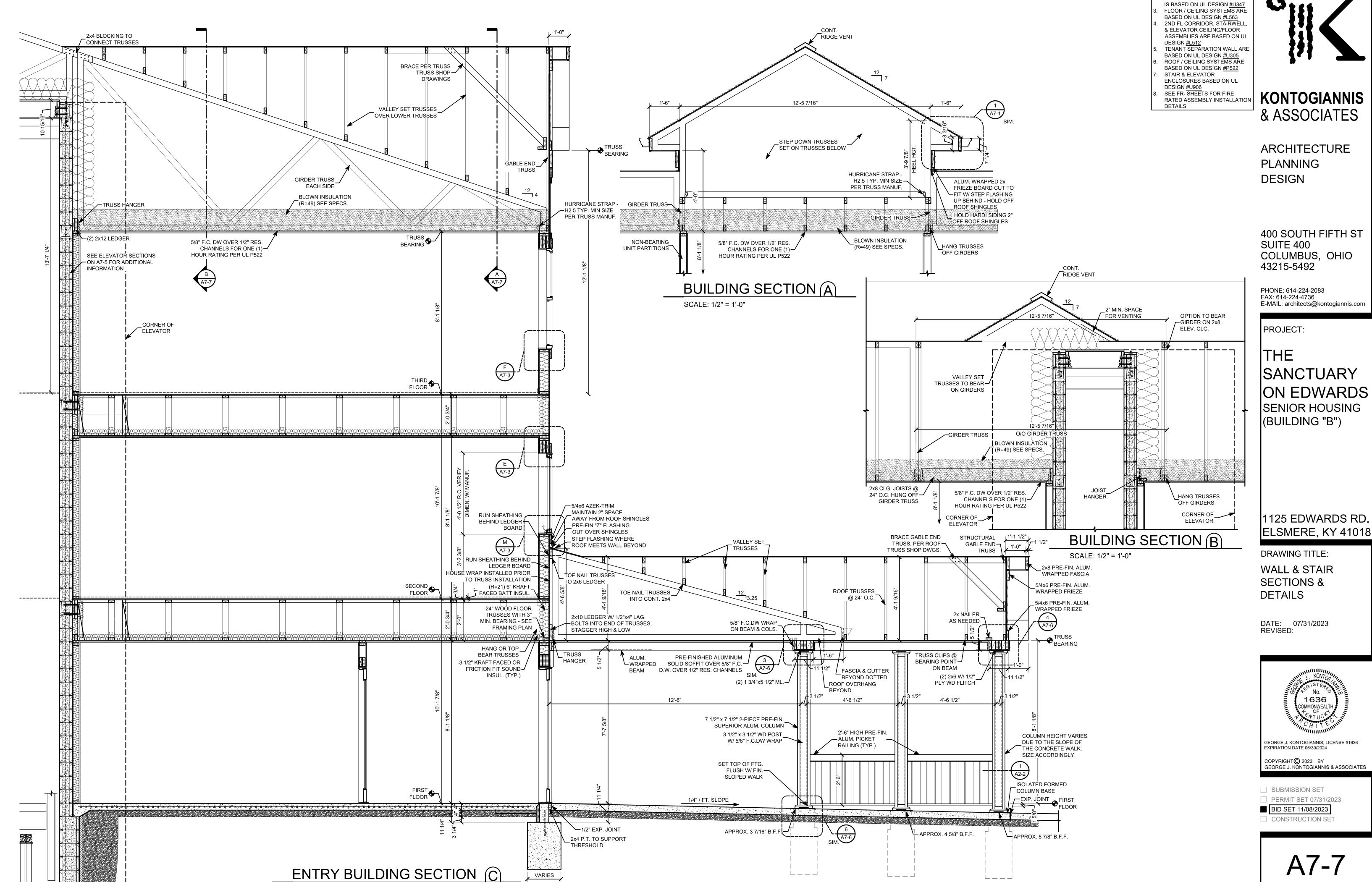


SCALE: 1/2" = 1'-0"



CORRIDOR SECTION A

SCALE: 3/4" = 1'-0"

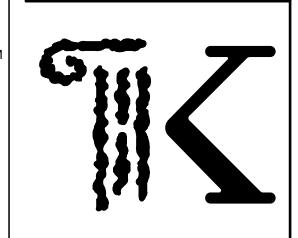


SCALE: 1/2" = 1'-0"

NOTES:
1. EXTERIOR WALL SYSTEMS ARE BASED ON UL DESIGN #U356 FIRE SEPARATION WALL SYSTE

- NOTES:

  1. EXTERIOR WALL SYSTEMS ARE BASED ON UL DESIGN <u>#U356</u> FIRE SEPARATION WALL SYSTEM IS BASED ON UL DESIGN <u>#U347</u> FLOOR / CEILING SYSTEMS ARE BASED ON UL DESIGN <u>#L563</u> 2ND FL CORRIDOR, STAIRWELL & ELEVATOR CEILING/FLOOR ASSEMBLIES ARE BASED ON UL
- DESIGN #L512 TENANT SEPARATION WALL ARE BASED ON UL DESIGN <u>#U305</u> ROOF / CEILING SYSTEMS ARE BASED ON UL DESIGN <u>#P522</u> STAIR & ELEVATOR ENCLOSURES BASED ON UL
- DESIGN <u>#U906</u>
  SEE FR- SHEETS FOR FIRE
  RATED ASSEMBLY INSTALLATIC DETAILS



ARCHITECTURE **PLANNING** DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

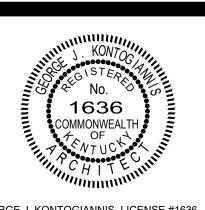
PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

**DRAWING TITLE: BUILDING SECTION** 

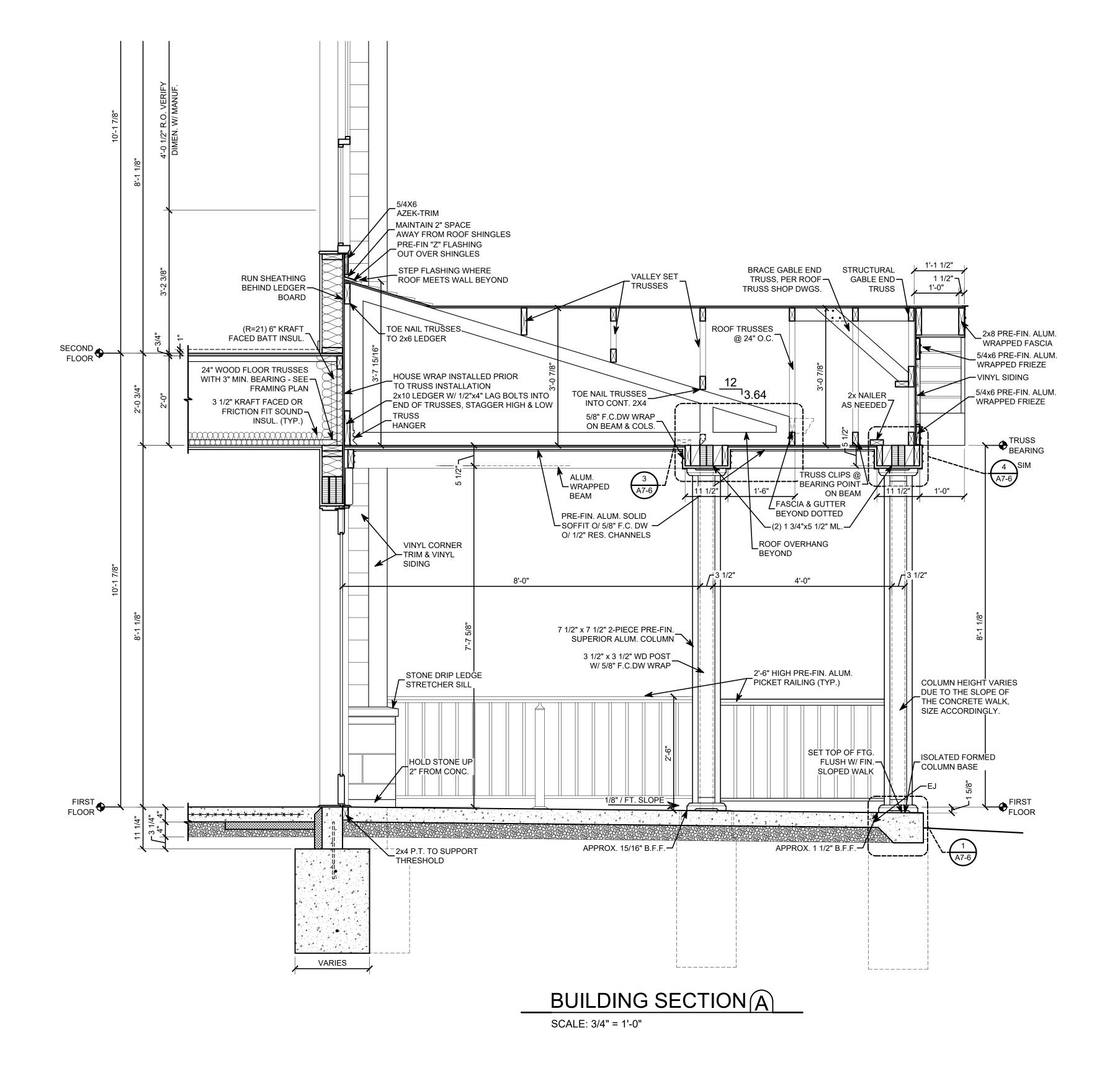
DATE: 07/31/2023 REVISED:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

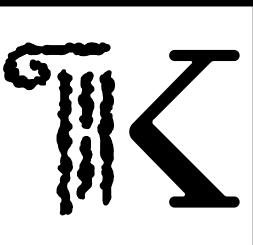
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SUBMISSION SET □ PERMIT SET 07/31/2023 BID SET 11/08/2023 CONSTRUCTION SET



SEE ENLARGED

PLAN SHEET F2-3



# **KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE PLANNING DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

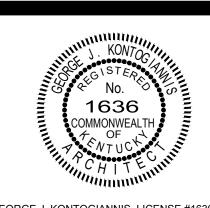
PROJECT:

THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
BUILDING SECOND
FLOOR FRAMING
PLAN

DATE: 07/31/2023 REVISED:



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SUBMISSION SET

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CONSTRUCTION SET

CONVENTIONAL FRAMING

INTERIOR BEARING WALL

HEADER

TELL TO THE METAL JOIST OR TRUSS HANGERS

DRAFTSTOPPING

3. WHERE FLOOR TRUSSES ARE REQUIRED TO FRAME INTO OTHER FLOOR TRUSSES, DESIGN OF THE

TRUSS SUPPLIER. THE TRUSS SUPPLIER IS TO MAKE

DESIGN OF ALL WEB MEMBER PERMANENT BRACING

SIZES AND CONNECTIONS, NOT PROVIDED BY THE

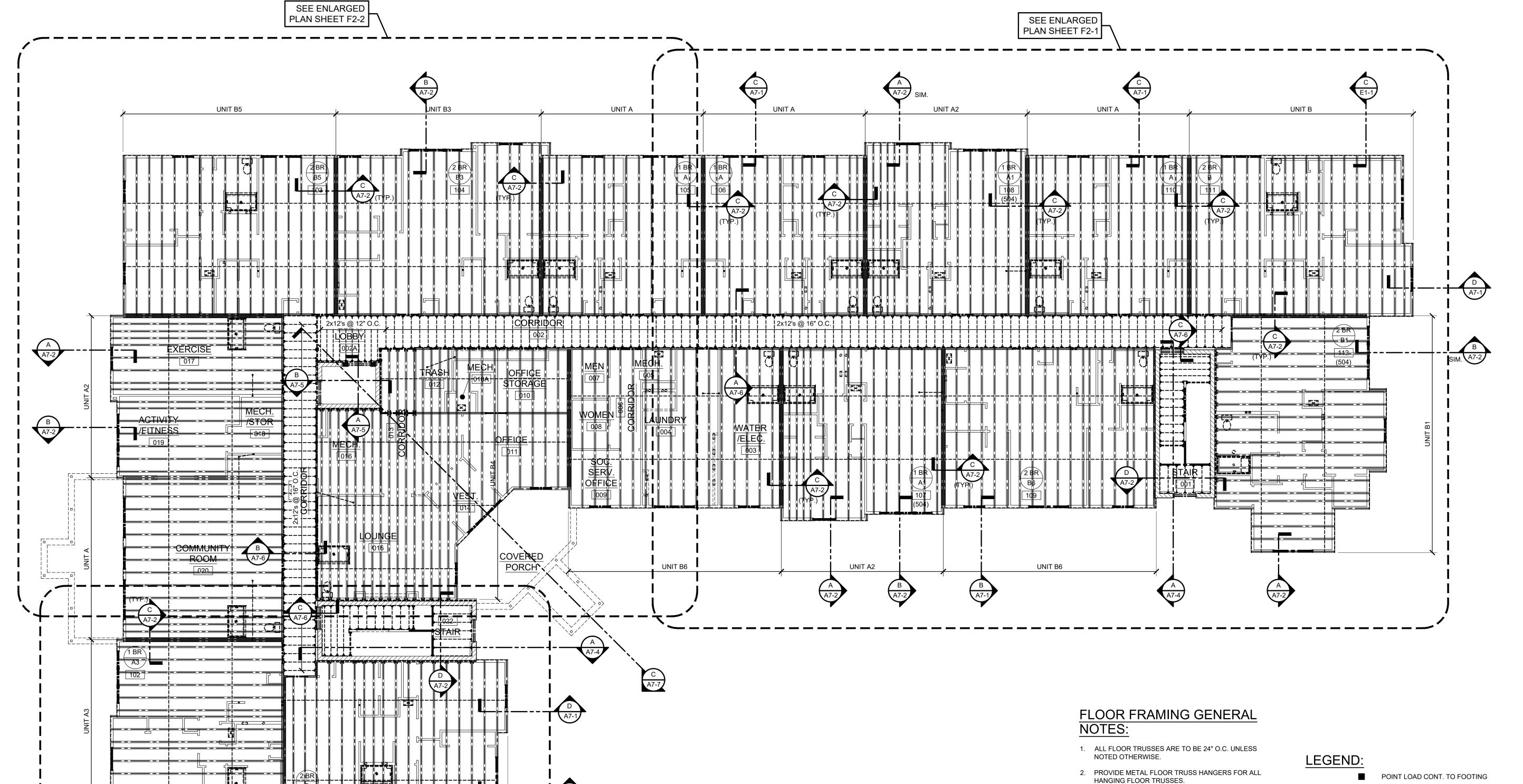
BUT IS NOT LIMITED TO, STRONG BACK BRACING. PROVIDE ANY AND ALL DETAILS WITH FLOOR TRUSS

SHEATHING SHOWN ON THE CONSTRUCTION

REQUIRED FOR THE STRUCTURAL ADEQUACY OF THE

TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE

DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. THIS BRACING CAN INCLUDE,



ARCHITECTURE PLANNING DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

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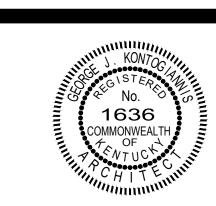
PROJECT:

THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
BUILDING THIRD
FLOOR FRAMING
PLAN

DATE: 07/31/2023 REVISED:



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3. WHERE FLOOR TRUSSES ARE REQUIRED TO FRAME

INTO OTHER FLOOR TRUSSES, DESIGN OF THE

CONNECTIONS ARE TO BE THE RESPONSIBILITY OF THE TRUSS SUPPLIER. THE TRUSS SUPPLIER IS TO MAKE

DESIGN OF ALL WEB MEMBER PERMANENT BRACING

REQUIRED FOR THE STRUCTURAL ADEQUACY OF THE

TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE

DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. THIS BRACING CAN INCLUDE, BUT IS NOT LIMITED TO, STRONG BACK BRACING. PROVIDE ANY AND ALL DETAILS WITH FLOOR TRUSS

SIZES AND CONNECTIONS, NOT PROVIDED BY THE

SHEATHING SHOWN ON THE CONSTRUCTION

SUBMITTALS.

\_\_\_\_\_

CONVENTIONAL FRAMING

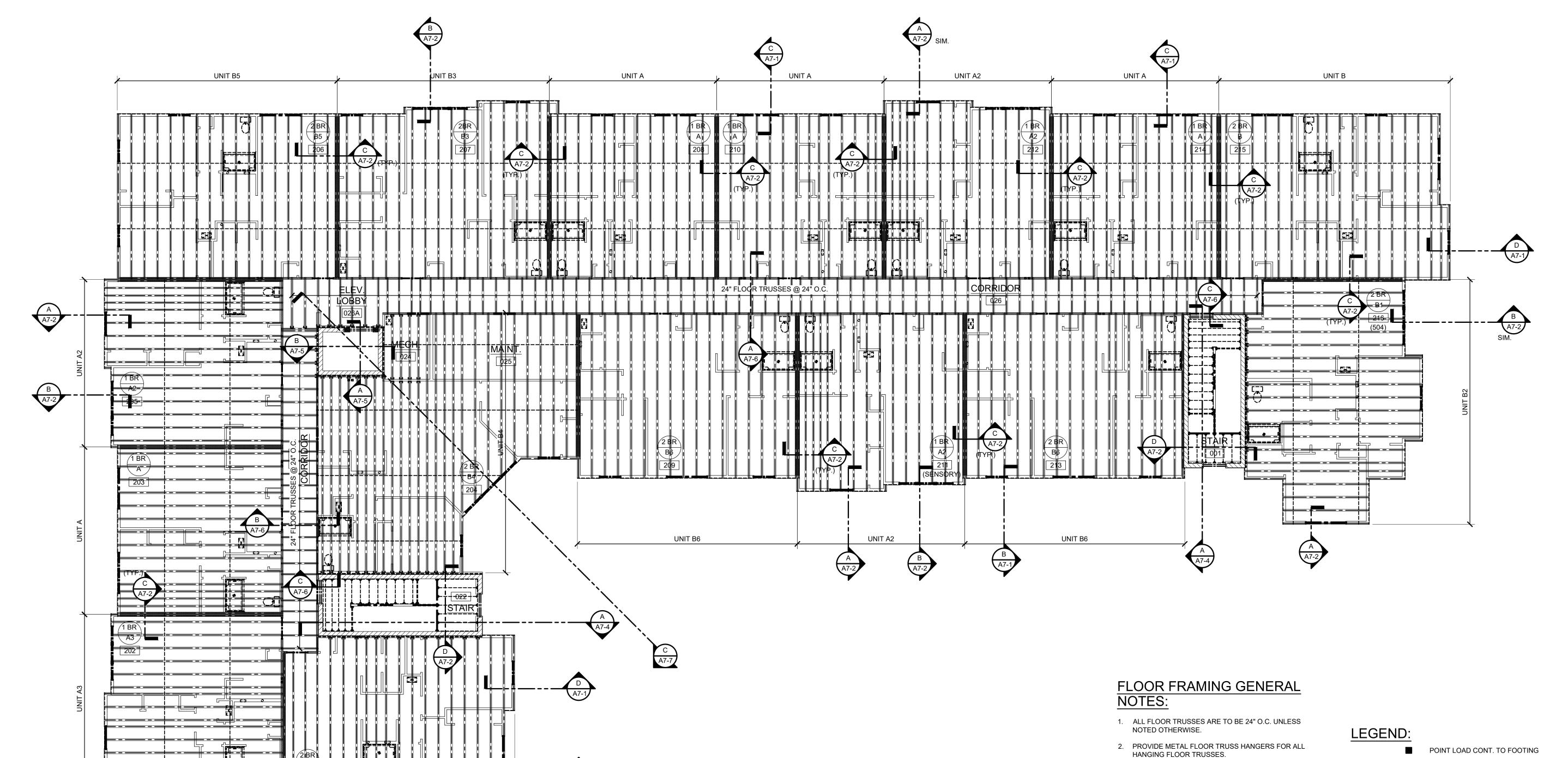
INTERIOR BEARING WALL

DRAFTSTOPPING

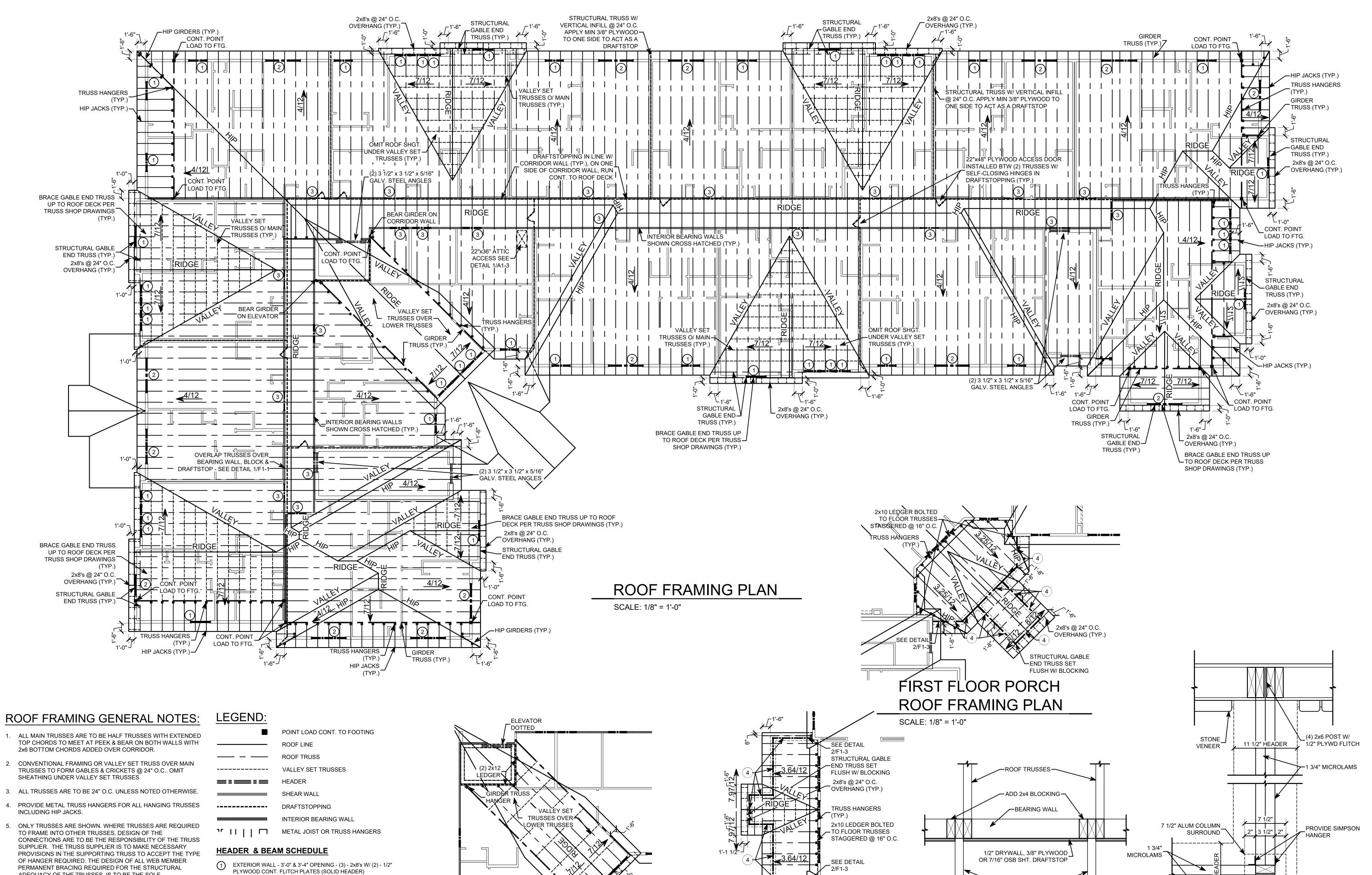
SUBMISSION SETPERMIT SET 07/31/2023■ BID SET 11/08/2023

CONSTRUCTION SET

F1-2



UNIT B



ARCHITECTURE **PLANNING DESIGN** 

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

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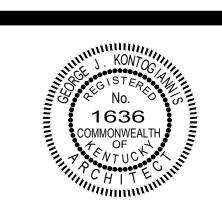
PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: **BUILDING ROOF** FRAMING PLAN

DATE: 07/31/2023 **REVISED**:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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SUBMISSION SET

BID SET 11/08/2023

\_(2) 2x4 POST W/ 1/2"

PLYWD FLITCH

CONSTRUCTION SET

PERMIT SET 07/31/2023

ONLY TRUSSES ARE SHOWN. WHERE TRUSSES ARE REQUIRED TO FRAME INTO OTHER TRUSSES, DESIGN OF THE CONNECTIONS ARE TO BE THE RESPONSIBILITY OF THE TRUSS SUPPLIER. THE TRUSS SUPPLIER IS TO MAKE NECESSARY

ADEQUACY OF THE TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. ADDITIONAL PERMANENT BRACE SIZES AND CONNECTIONS, NOT PROVIDED DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. THIS BRACING CAN INCLUDE, BUT IS NOT LIMITED TO, TOP CHORD BRACING FOR TRUSSES WITH PIGGY-BACKS. AND INTERMEDIATE BRACES FOR GABLE TRUSS

WEB MEMBERS.

EXTERIOR WALL - 6'-0" & 8'-0" OPENING - (3) - 1 3/4"x7 1/4" ML's W/ (1) - 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)

CORRIDOR & INTERIOR OPENING - 3'-2" OPENING - (2) - 2x10's W/ (1) - 1/2" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)

PORCH BEAMS - (2) - 1 3/4" x 5 1/2" ML's

EXTERIOR WALL - 6'-0" & 8'-0" OPENING - NOT CARRYING LOAD (3) - 2x8's W/ (2) - 1/2" PLYWOOD CONT. FLITCH PLATES (SOLID

TRUSSES @ 24" O.C. TOWER ROOF FRAMING PLAN

SCALE: 1/8" = 1'-0"

FIRST FLOOR PORCH ROOF FRAMING PLAN

SCALE: 1/8" = 1'-0"

DRAFTSTOPPING

SCALE: 1 1/2" = 1'-0"

PLAN DETAIL

FIRST FLOOR ROOF FRAMING PLAN

SCALE: 1 1/2" = 1'-0"

- (1) EXTERIOR WALL 3'-0" & 3'-4" OPENING (3) 2x8's W/ (2) 1/2" PLYWOOD CONT. FLITCH PLATES (SOLID HEADER)
- 2 EXTERIOR WALL 6'-0" & 8'-0" OPENING (3) 1 3/4"x7 1/4" ML's W/ (1) 1/4" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
- (3) CORRIDOR & INTERIOR OPENING 3'-2" OPENING (2) 2x10's W/ (1) - 1/2" PLYWOOD CONT. FLITCH PLATE (SOLID HEADER)
- (4) PORCH BEAMS (2) 1 3/4" x 5 1/2" ML's
- (3) 2x8's W/ (2) 1/2" PLYWOOD CONT. FLITCH PLATES (SOLID

# FLOOR FRAMING GENERAL

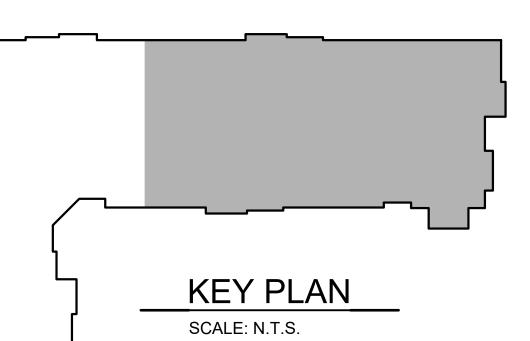
- 1. ALL FLOOR TRUSSES ARE TO BE 24" O.C. UNLESS NOTED OTHERWISE.
- PROVIDE METAL FLOOR TRUSS HANGERS FOR ALL HANGING FLOOR TRUSSES.
- 3. WHERE FLOOR TRUSSES ARE REQUIRED TO FRAME INTO OTHER FLOOR TRUSSES, DESIGN OF THE CONNECTIONS ARE TO BE THE RESPONSIBILITY OF THE TRUSS SUPPLIER. THE TRUSS SUPPLIER IS TO MAKE NECESSARY PROVISIONS IN THE SUPPORTING TRUSS TO ACCEPT THE TYPE OF HANGER REQUIRED. THE DESIGN OF ALL WEB MEMBER PERMANENT BRACING REQUIRED FOR THE STRUCTURAL ADEQUACY OF THE TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. ADDITIONAL PERMANENT BRACE SIZES AND CONNECTIONS, NOT PROVIDED BY THE SHEATHING SHOWN ON THE CONSTRUCTION DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. THIS BRACING CAN INCLUDE, BUT IS NOT LIMITED TO, STRONG BACK BRACING. PROVIDE ANY AND ALL DETAILS WITH FLOOR TRUSS

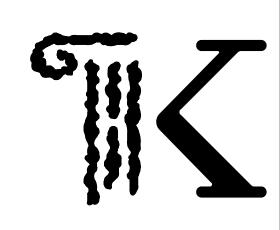
### LEGEND: POINT LOAD CONT. TO FOOTING

FLOOR TRUSS CONVENTIONAL FRAMING

SHEAR WALL

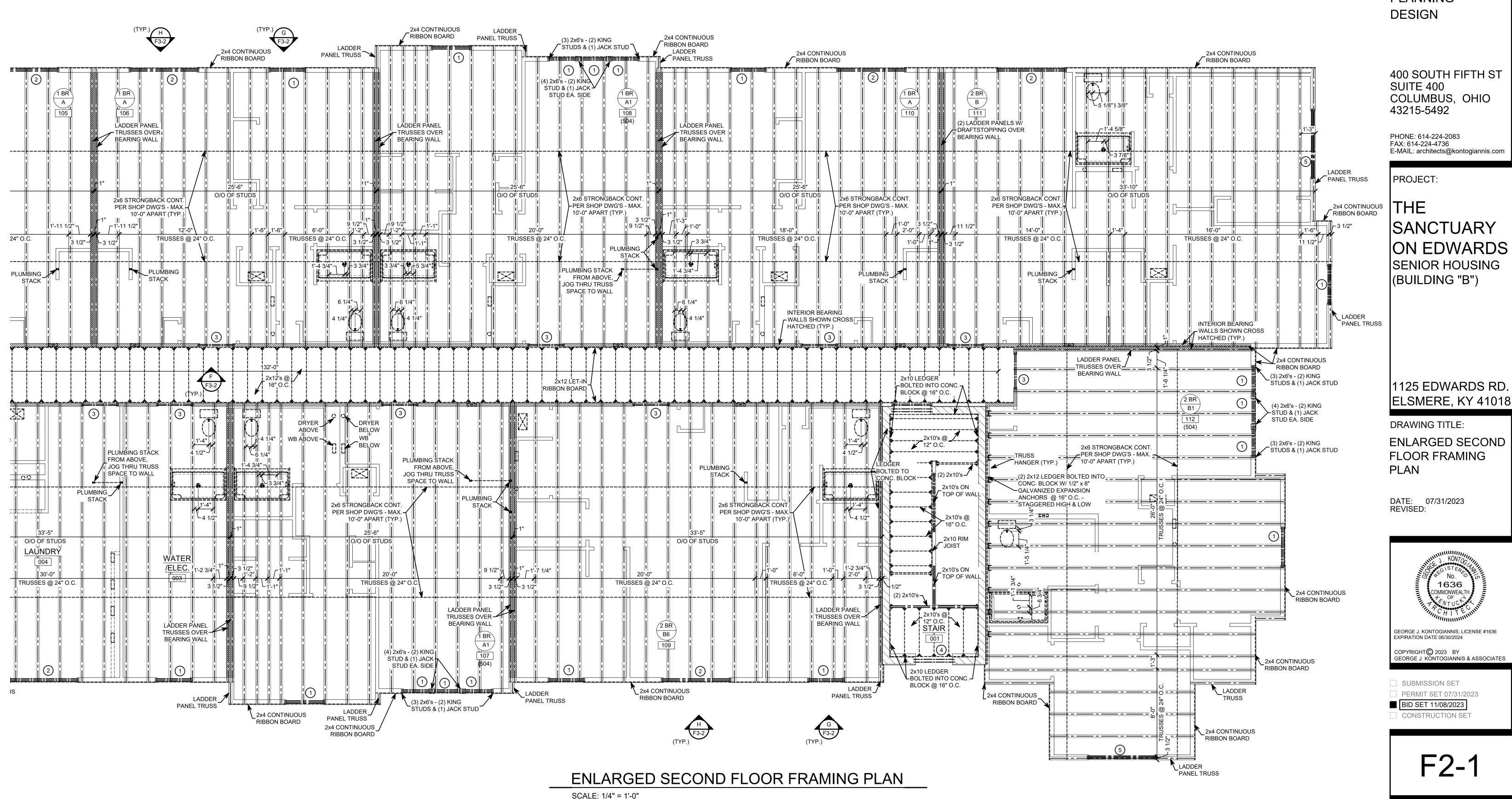
DRAFTSTOPPING ----------INTERIOR BEARING WALL

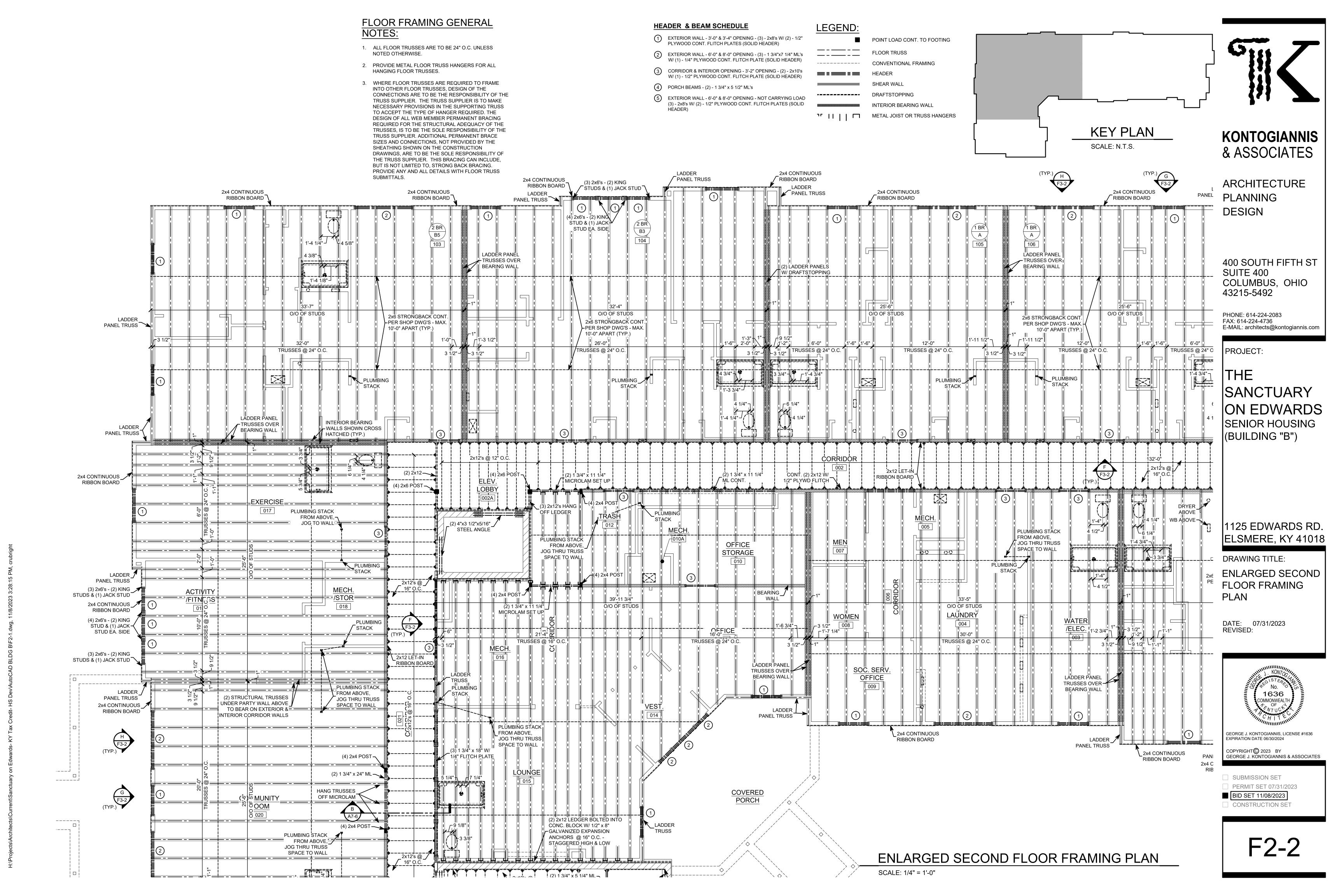




**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE **PLANNING** 





**-2-3** 

**KONTOGIANNIS** 

& ASSOCIATES

ARCHITECTURE

400 SOUTH FIFTH ST

E-MAIL: architects@kontogiannis.com

SANCTUARY

ON EDWARDS

1125 EDWARDS RD.

ELSMERE, KY 41018

ENLARGED SECOND

COMMONWEAL

GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

SUBMISSION SET

BID SET 11/08/2023

CONSTRUCTION SET

PERMIT SET 07/31/2023

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DRAWING TITLE:

& THIRD FLOOR

DATE: 07/31/2023

**REVISED**:

FRAMING PLANS

SENIOR HOUSING

(BUILDING "B")

COLUMBUS, OHIO

**PLANNING** 

**DESIGN** 

SUITE 400

43215-5492

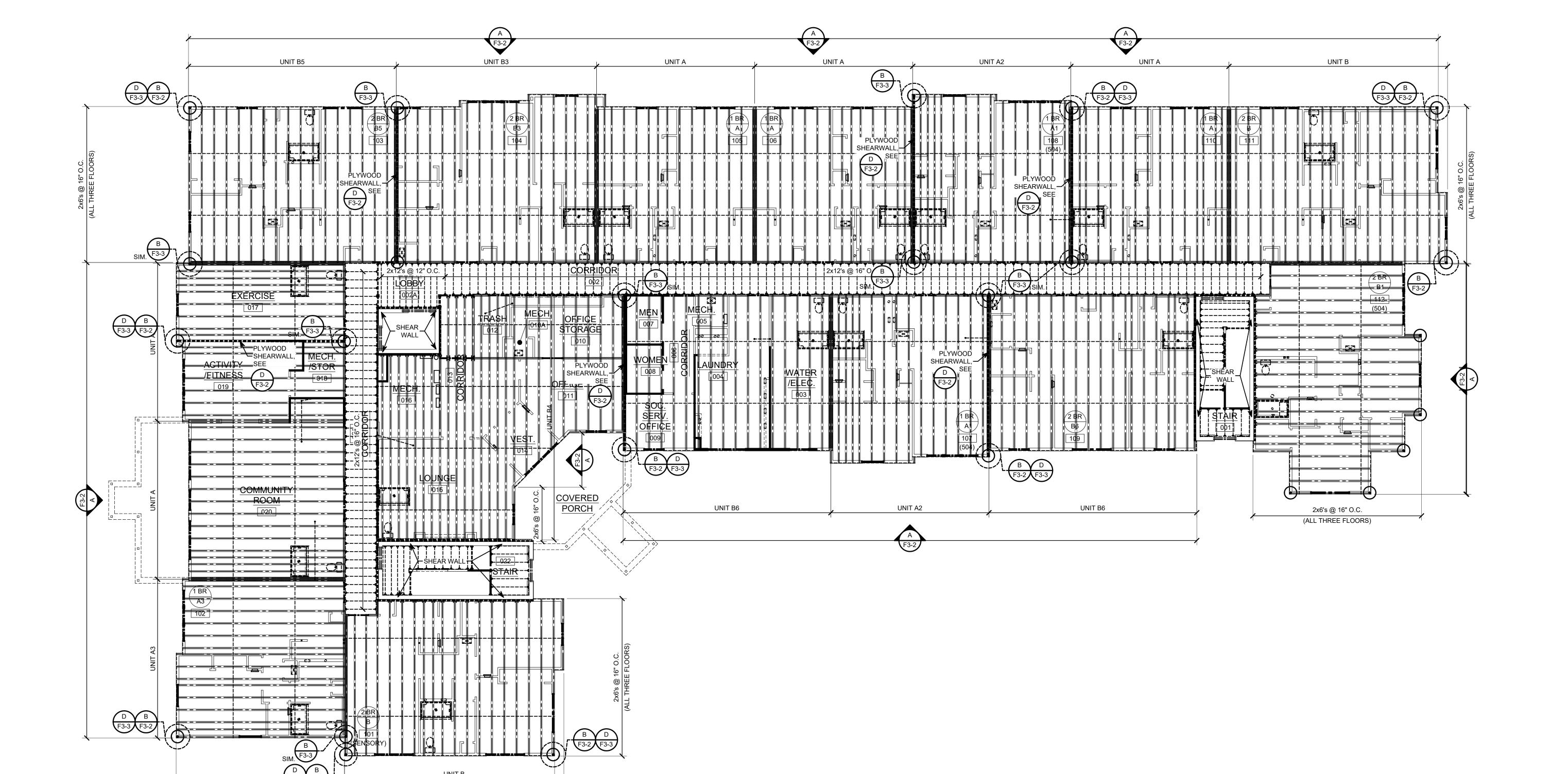
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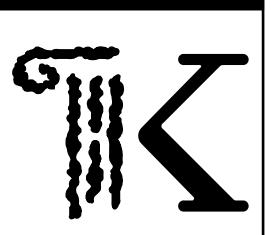
THE

PHONE: 614-224-2083 FAX: 614-224-4736

2x6's @ 16" O.C.

(ALL THREE FLOORS)





# **KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE
PLANNING
DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

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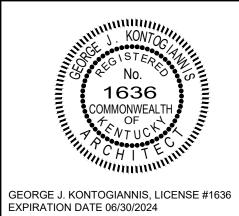
PROJECT:

THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
FLOOR PLAN (HOLD DOWNS, SHEAR WALLS & STUD SPACING)

DATE: 07/31/2023 REVISED:



GEORGE J. KONTOGIANNIS, LICENSE #1636
EXPIRATION DATE 06/30/2024

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F3-1

\_FLOOR LINE DETAIL (1)

SCALE: 1 1/2" = 1'-0"

8'-0" STRIPS OF 1/2" PLYWOOD

OR 7/16" OSB FASTEN W/ 8d

PLYWOOD SEAMS TO OCCUR

OVER PLATES OR SOLID

- 2. CONCENTRATED BEAM AND LINTEL LOADS SHALL HAVE SOLID 2X STUDS UNDER COMPLETE BEARI SURFACE AND SHALL CONTINUE DOWN THRU WALL TO FOUNDATION
- 3. ALL DOOR AND WINDOW OPENINGS UP TO 6'-0" SHALL HAVE ONE JACK AND ONE STUD. OPENINGS 6'-0" & OVER SHALL HAVE TWO (2) JACKS AND ONE STUD.
- 4. EXTERIOR & INTERIOR BEARING WALL STUD SPACING SHALL BE:
- a. EXTERIOR BEARING WALLS
- i. FIRST FLOOR: 2X6 STUDS @ 16" O.C. ALIGN UNDER FLOOR TRUSSES.
- ii. SECOND & THIRD FLOOR: 2X6 STUDS @ 16" O.C. b. INTERIOR BEARING WALLS
- i. FIRST FLOOR: 2X4 STUDS @ 12" O.C. ALIGN UNDER TRUSS. DOUBLE STUDS UNDER FLOOR
- ii. SECOND FLOOR: 2X4 STUDS @ 12" O.C. ALIGN UNDER FLOOR TRUSSES.
- iii. THIRD FLOOR: 2X4 STUDS @ 16" O.C.
- c. EXTERIOR WALL & CORRIDOR WALL WINDOW & DOOR HEADERS ARE TO BE AS NOTED ON PLANS
- PROVIDE SELF CLOSING (20"X48") 1/2" PLYWOOD DOORS IN DRAFTSTOPPING AT LOCATIONS SHOW ON FRAMING PLAN. INSTALL SPRING HINGES.
- DRAFTSTOPPING SHALL EXTEND THROUGH ALL EAVES AND OTHER HIDDEN SPACES.
- DRAFTSTOPPING MAY BE 1/2" DRYWALL, 7/16" OR 1/2" OSB OR PLYWOOD.
- STEEL ANGLE LINTELS LISTED SHALL BE PROVIDED FOR EACH 4" OF MASONRY WALL THICKNESS A SHALL HAVE A MINIMUM OF 6" OF BEARING AT EACH END.

OPENING	STEEL SIZE
1'-6" OR LESS	"3/8" x 2" FLAT BAR
1'-7" - 3'-6"	3 1/2" x 3 1/2" x 5/16" ANGLE
5'-1" - 6'-0"	5" x 3 1/2" x 5/16" ANGLE LLV
6'-1" - 7'-0"	4" x 3 1/2" x 5/16" ANGLE LLV
3'-7" - 5'-0	5" x 3 1/2" x 5/16" ANGLE LLV

### GENERAL STRUCTURAL NOTES

- GOVERNING CODE: KENTUCKY BUILDING CODE
- BUILDING RISK CATEGORY: II
- DESIGN LOADS:

	LIVE LOAD	DEAD LOAD	TOTAL LOAD
APARTMENTS	40 LBS./SQ. FT.	20 LBS./SQ. FT	60 LBS./SQ. FT
PUBLIC AREA & CORRIDORS	80 LBS./SQ. FT.	15 LBS./SQ. FT	95 LBS./SQ. FT
ROOFS	20 LBS./SQ. FT	20 LBS./SQ. FT	40 LBS./SQ. FT

### SNOW LOADS:

- GROUND SNOW LOAD (PG) 15 PSF EXPOSURE FACTOR (CE) 1.0 1.0 **IMPORTANCE FACTOR (I)** FLAT ROOF SNOW LOAD (PF) 15 PSF THERMAL FACTOR (CT) 1.0
- WIND LOADS: 115 MPH BASIC WIND SPEED (VULT) IMPORTANCE FACTORY (IW) 1.0
  - **EXPOSURE CATEGORY** INTERNAL PRESSURE COEFFICIENT (GCP1) 0.18 COMPONENTS & CLADDING DESIGN WIND PRESSURE

### COMPONENTS AND CLADDING **ULTIMATE WIND LOAD PRESSURES**

WALL ELEMENTS									
TRIBUTARY AREA	POSITIVE PRESSURE (PSF)	NEGATIVE PRESSURE (PSF)	PRESSURE WITHIN 10 FT OF CORNERS (PSF)						
10 SQ.FT.	25	27	34						
25 SQ.FT.	24	26	31						
50 SQ.FT.	23	25	29						
100 SQ.FT.	22	24	27						
200 SQ.FT.	21	23	24						
≥ 500 SQ.FT.	19	21	21						
ROOF ELEMENTS									

ROOF ELEMENTS									
TRIBUTARY AREA	UPLIFT PRESSURE (PSF)	UPLIFT WITHIN 10 FT OF EDGES (PSF)	UPLIFT WITHIN 10 FT OF CORNERS (PSF)						
10 SQ.FT.	23	40	59						
25 SQ.FT.	22	36	54						
50 SQ.FT.	22	33	50						
≥ 100 SQ.FT.	≥ 100 SQ.FT. 21		46						
	PARAPETS OR SCRE	EN WALL ELEMENTS							
PRESSURE									

TRIBUTARY AREA	EDGE PRESSURE (PSF)	WITHIN 10 FT OF CORNERS (PSF)	
10 SQ.FT.	65	84	
25 SQ.FT.	59	77	
50 SQ.FT.	55	72	
<u>&gt;</u> 100 SQ.FT.	51	68	

C. & C. PRESSURE SCHEDULE NOTES: LINEAR INTERPOLATION IS ACCEPTABLE FOR TRIBUTARY AREAS BETWEEN THOSE SHOWN.LOADS GIVEN ARE ULTIMATE LOADS OBTAINED FROM ASCE 7-10. MULTIPLY VALUES BY 0.6 TO OBTAIN SERVICE-LEVEL LOADS.

0.03

SIMPLIFIED ANALYSIS PROCEDURE (PER 1616.6.1)

## 6. SEISMIC DESIGN CRITERIA

_		
	RISK CATEGORY	II
	SEISMIC IMPORTANCE FACTOR (IE)	1.0
	SITE CLASS	С
	SS	0.198
	S1	0.104
	SDS	0.158
	SD1	0.117
		_

SEISMIC DESIGN CATEGORY SEISMIC FORCE RESISTING SYSTEM: LIGHT FRAME WALLS WITH SHEAR PANELS DESIGN BASE SHEAR 51 KIPS

ANALYSIS PROCEDURE:

7. FOUNDATION DESIGN CRITERIA GEOTECHNICAL ENGINEER REFERENCE REPORT P.N. REPORT DATE

ALLOWABLE BEARING PRESSURE

**GREENBAUM & ASSOCIATES** 21-024G FEBRUARY 19, 2021 2.500 PSF **FOUNDATION TYPE** SHALLOW SPREAD FOOTING

MATERIALS:

STRUCTURAL LUMBER

A. STRUCTURAL LUMBER: ALL DESIGN VALUES PER 2015 NFPA NATIONAL DESIGN SPECIFICATION. A SUBSTITUTIONS ARE TO MEET MINIMUM DESIGN VALUES OF ABOVE MEMBERS. UNLESS NOTED

- OTHERWISE FRAMING MATERIALS SHALL BE I) BEAMS, HEADERS, JOISTS, AND RAFTERS - SPRUCE-PINE-FIR NO.1/NO.2 AS GRADED BY NLG**A** 2) WALL STUDS 2X4 OR 2X6 - SPRUCE-PINE-FIR "STUD" GRADE AS GRADED BY NLGA
- 3) MICRO=LAM (M=L) OR LAMINATED VENEER LUMBER (LVL): FB = 2,600 PSI, FV = 285 PSI, FC (PERP.) = 750 PSI, E = 1,900 KSI.
- 4) PARALLAM OR PARALLEL STRAND LUMBER (PSL)
- a. BEAMS: FB = 2,900 PSI, FV = 290 PSI, FC (PERP.) = 750 PSI, E = 2,000 KSI. b. COLUMNS: FB = 2,400 PSI, FV = 190 PSI, FC (PERP.) = 545 PSI, E = 1,800 KSI.
- 5) LAMINATED STRAND LUMBER (LSL) BEAMS: FB = 2360 PSI, FV = 410, FC (PERP.) = 875 PSI, E =
- 1,550 KSI. 6) PREFABRICATED WOOD I-JOIST - CAPACITIES AND DESIGN PROVISIONS SHALL BE AS
- ESTABLISHED AND MONITORED IN ACCORDANCE WITH ASTM D5055. 7) ENGINEERED WOOD RIM BOARD - SHALL CONFORM TO APA PRR-410

- 8) DECKING AND SHEATHING (OSB OR PLYWOOD): FLOORS: 3/4" NOMINAL APA RATED STURD-I-FLOOR, 48/24, EXP. 1, TONGUE AND GROOVE
- ROOFS: 19/32 (5/8" NOMINAL) APA RATED SHEATHING, 32/16, EXPOSURE 1 WALL SHEATHING: 7/16" APA RATED SHEATHING, WALL-24, EXPOSURE 1
- 9) GLUE-LAMINATED BEAMS: SOUTHERN PINE, 24F-V5. 10) SOLID WOOD DECKING: 2X6 DOUGLAS FIR/LARCH, GRADE AND DESIGN VALUES AS REQUIRED
- FOR SPANS. SURFACE SMOOTH; RANDOM LENGTH; CENTER AND END MATCHED. 11) COMPOSITE INSULATED ROOF PANELS: 7/16" OSB SKINS EACH FACE WITH EXPANDED POLYSTYRENE FOAM INSULATED CORE. CORE THICKNESS AS DEFINED ON DOCUMENTS.
- B. ALL LUMBER IN CONTACT WITH CONCRETE, MASONRY, GROUND/SOIL, OR USED IN CONDITIONS WITH MOISTURE PRESENT, IS TO BE PRESSURE-TREATED TO RESIST DECAY. PRESERVATIVES USED FOR PRESSURE TREATMENT ARE TO BE ALKALINE COPPER QUAT, ACQ-C OR ACQ-D. OTHER PRESERVATIVES PROPOSED FOR USE ARE TO BE SUBMITTED FOR REVIEW PRIOR TO ERECTION OR 3. SUBMITTALS: INSTALLATION ON THE PROJECT.
- C. FIRE-RETARDANT-TREATED WOOD PRODUCTS MUST CONFORM TO ASTM D5664 FOR LUMBER AND ASTM D5516 FOR PLYWOOD.

- A. UNLESS SPECIFICALLY SHOWN OTHERWISE, DESIGN, FABRICATION AND ERECTION ARE TO BE GOVERNED BY THE LATEST REVISIONS OF:
- NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION. 2. U.S. PRODUCT STANDARD PS-1 FOR CONSTRUCTION AND INDUSTRIAL PLYWOOD.
- APA PS 2-18, PERFORMANCE STANDARD FOR WOOD STRUCTURAL PANELS. APA DESIGN/CONSTRUCTION GUIDE - RESIDENTIAL AND COMMERCIAL

- A. CONNECTIONS FOR WOOD MEMBERS SHALL BE MINIMALLY FASTENED AS PRESCRIBED IN TABLE 2304.10.1 OF THE REFERENCED BUILDING CODE UNLESS DETAILED OTHERWISE. ALL NAILS ARE TO
- BE COMMON WIRE NAILS, UNLESS SPECIFICALLY NOTED OTHERWISE B. FOUNDATION PLATES ON CONCRETE OR MASONRY WALLS SHALL BE PRESSURE TREATED LUMBER SYP #2 GRADE MINIMUM. SILLS SHALL BE ANCHORED TO CONCRETE OR MASONRY WITH ½" DIAMETER X 12" LONG ANCHOR RODS SPACED AT 48" O.C. MAXIMUM, UNLESS NOTED OTHERWISE. THERE SHALL BE A MINIMUM OF 3 BOLTS PER SILL PIECE WITH ONE BOLT LOCATED WITHIN 12" OF EACH END OF EACH PIECE. DO NOT PROVIDE A SILL PLATE SPLICE UNDER ANY POST OR STUD. SEE SHEARWALL SCHEDULE AND DETAILS FOR ADDITIONAL REQUIREMENTS
- C. JOISTS TO BEAMS OR JOISTS TO TRUSSES 16 GA. STD. JOIST HANGERS, UNLESS SHOWN OTHERWISE. BEAMS TO BEAMS - 16 GA. BEAM HANGERS, UNLESS SHOWN OTHERWISE
- D. ALL HANGERS, STRAPS, CAPS, BASES, HOLDOWNS, TIES OR OTHER CONNECTORS IN CONTACT WITH PRESSURE-TREATED LUMBER ARE TO BE BATCH/POST HOT DIPPED GALVANIZED PER ASTM A123 WITH A MINIMUM G185 COATING OR STAINLESS STEEL WITH CHEMICAL COMPOSITION CONFORMING TO AISI 303/304 OR AISI 316.
- E. ALL FASTENERS INCLUDING NAILS, ANCHOR RODS, POWDER ACTUATED FASTENERS, SCREWS BOLTS, AND THREADED RODS, IN CONTACT WITH PRESSURE TREATED LUMBER ARE TO BE HOT DIPPED GALVANIZED PER ASTM A153 WITH A MINIMUM G185 COATING OR STAINLESS STEEL WITH CHEMICAL COMPOSITION CONFORMING TO AISI 303/304 OR AISI 316. FASTENERS AND CONNECTORS ARE TO BE OF THE SAME MATERIAL, STAINLESS STEEL OR HOT DIPPED GALVANIZED, DO NOT MIX MATERIALS.
- F. ALL MECHANICAL ANCHORS INCLUDING WEDGE ANCHORS AND SLEEVE ANCHORS IN CONTACT WITH PRESSURE TREATED LUMBER ARE TO BE STAINLESS STEEL WITH CHEMICAL COMPOSITION CONFORMING TO AISI 303/304 OR AISI 316.
- G. SHEATHING TO FRAMING: 1. FLOORS - GLUED AND NAILED WITH ADHESIVES MEETING APA SPECIFICATIONS APG-01 AND APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS, USE 10D COMMON NAILS AT 6" ON CENTER AT PANEL EDGES AND 12" ON CENTER AT INTERMEDIATE SUPPORTS (UNO).
- 2. ROOFS USE 10D NAILS AT 6" ON CENTER AT PANEL EDGES AND 12" ON CENTER AT INTERMEDIATE SUPPORTS (UNO). STUD WALLS - USE 8D COMMON OR GALVANIZED BOX NAILS AT 6" ON CENTER AT PANEL EDGES AND
- 12" ON CENTER AT INTERMEDIATE SUPPORTS (UNO). SEE SHEARWALL SCHEDULES FOR ADDITIONAL **FASTENING REQUIREMENTS**
- 4. GYPSUM-SHEATHED WALLS USE 6D COOLER OR NO. 6 X 1-1/4" TYPE S OR W SCREWS AT 7" ON CENTER AT PANEL EDGES AND 7" ON CENTER AT INTERMEDIATE SUPPORTS (UNO). H. TRUSS TO WALL OR RAFTERS TO WALL - STANDARD HURRICANE ANCHORS AT EACH BEARING

### MISCELLANEOUS:

A. PROVIDE ONE LINE OF SOLID BLOCKING OR CROSS BRIDGING AT 8'-0" O/C MAX. FOR ALL FLOOR

TRUSS MANUFACTURER DURING THE SHOP DRAWING PROCESS.

- JOISTS. USE SOLID BLOCKING AT ALL JOIST AND RAFTER BEARINGS B. PROVIDE SOLID BLOCKING AT MID-HEIGHT OF WALLS FOR EACH OF THE FOLLOWING CONDITIONS: EXTERIOR STUD WALLS, INTERIOR BEARING PARTITIONS, AND ALL WALL FRAMING WHICH IS NOT SHEATHED ON EACH SIDE WITH GYPSUM OR WOOD SHEATHING.
- C. USE SINGLE JACK STUDS UNDER BEAM AND HEADER BEARINGS FOR ROUGH OPENINGS UP AND INCLUDING 4'-0". AND DOUBLE JACK STUDS UNDER BEAM AND HEADER BEARINGS FOR SPANS GREATER THAN 4'-0", UNLESS SHOWN OTHERWISE
- D. APPLY CONTINUOUS BEAD OF GLUE ON JOISTS AND GROOVE OF TONGUE-AND-GROOVE PANELS. E. PROVIDE TEMPORARY CONSTRUCTION EXPANSION JOINTS IN ALL WOOD STRUCTURAL PANEL FLOOR AND ROOF DIAPHRAGMS IN 80'-0" MAXIMUM INTERVALS IN ACCORDANCE WITH AMERICAN
- PLYWOOD ASSOCIATION'S (APA) TECHNICAL DOCUMENT U425. F. BEFORE APPLYING FINISH FLOORING, SET NAILS 1/8" BUT DO NOT FILL, AND LIGHTLY SAND ANY SURFACE ROUGHNESS, PARTICULARLY AT JOINTS AND AROUND NAILS.
- G. EACH MEMBER OF MULTIPLE MEMBER BEAMS AND COLUMNS ARE TO BE NAILED TOGETHER WITH 2 ROWS OF 10D NAILS AT 6" ON CENTER, STAGGERED, THE FULL LENGTH OF THE MEMBER. FOR MULTIPLE MEMBER LVL OR LSL PRODUCTS, FOLLOW MINIMUM FASTENING REQUIREMENTS OF THE MANUFACTURER.

### ENGINEERED WOOD TRUSSES

- MATERIALS: A. LUMBER: AS REQUIRED BY THE TRUSS MANUFACTURER. MINIMUM GRADE TO BE SYP NO. 2 KD 15 PERCENT MC, EXCEPT FOR WEBS, WHICH MAY BE MINIMUM GRADE OF SYP NO. 3, KD 15 PERCENT
- B. CONNECTIONS: ALL INTERNAL TRUSS CONNECTIONS ARE TO BE DESIGNED BY THE TRUSS MANUFACTURER. CONNECTORS ARE TO BE DEFORMED PLATE TYPE, OF MINIMUM 20 GAUGE GALVANIZED STEEL SHEET. ALL JOINTS ARE TO BE DESIGNED USING METHODS AS SET FORTH IN
- TPI STANDARDS C. ALL HANGERS, STRAPS, CAPS, BASES, HOLDOWNS, TIES OR OTHER CONNECTORS IN CONTACT WITH PRESSURE-TREATED LUMBER ARE TO BE BATCH/POST HOT DIPPED GALVANIZED PER ASTM A123 WITH A MINIMUM G185 COATING OR STAINLESS STEEL WITH CHEMICAL COMPOSITION CONFORMING TO AISI 303/304 OR AISI 316.
- D. ALL FASTENERS INCLUDING NAILS, ANCHOR RODS, POWDER ACTUATED FASTENERS, SCREWS, BOLTS, AND THREADED RODS, IN CONTACT WITH PRESSURE TREATED LUMBER ARE TO BE HOT DIPPED GALVANIZED PER ASTM A153 WITH A MINIMUM G185 COATING OR STAINLESS STEEL WITH CHEMICAL COMPOSITION CONFORMING TO AISI 303/304 OR AISI 316. FASTENERS AND CONNECTORS ARE TO BE OF THE SAME MATERIAL, STAINLESS STEEL OR HOT DIPPED GALVANIZED, DO NOT MIX MATERIALS.
- E. SPECIFICATIONS AND REFERENCE STANDARDS: UNLESS SPECIFICALLY SHOWN OTHERWISE DESIGN, FABRICATION, ERECTION, HANDLING AND BRACING REQUIREMENTS ARE TO BE GOVERNED 3. SIMPSON TITEN HD SCREW ANCHOR IN GROUT FILLED, SOLID, OR HOLLOW CONCRETE MASONRY BY THE LATEST REVISIONS OF:
- NATIONAL DESIGN SPECIFICATIONS FOR STRESS-GRADE LUMBER AND ITS FASTENINGS
- TIMBER CONSTRUCTION STANDARDS. DESIGN SPECIFICATIONS FOR LIGHT METAL PLATE CONNECTED WOOD TRUSSES. TRUSS PLATE INSTITUTE PUBLICATION-BTW BRACING WOOD TRUSSES: COMMENTARY AND

# RECOMMENDATIONS EXCEPT AS NOTED BELOW.

2. DESIGN: A. ALL TRUSSES ARE TO BE DESIGNED BY THE TRUSS MANUFACTURER FOR THE FOLLOWING LOADS:

### - TOP CHORD DEAD LOAD:15 PSF - TOP CHORD LIVE LOAD:20 PSF

- BOTTOM CHORD DEAD LOAD:10 PSF - BOTTOM CHORD LIVE LOAD: 0 PSF
- LIVE LOAD DEFLECTION LIMIT:L/360

### - TOP CHORD DEAD LOAD: 15 PSF + PARTITION LOADING - TOP CHORD LIVE LOAD:40 PSF

- BOTTOM CHORD DEAD LOAD:10 PSF
- BOTTOM CHORD LIVE LOAD: 0 PSF LIVE LOAD DEFLECTION LIMIT:L/480

### ADDITIONAL DEAD LOADS:

TRUSS DESIGNER SHALL INCLUDE ADDITIONAL WEIGHT OF DEAD LOADS APPLIED TO TRUSSES FROM OVER-FRAMED AREAS INDICATED ON PLANS. WHERE TRUSSES ARE INDICATED TO SUPPORT BRICK VENEER, LIMIT TRUSS DEFLECTION TO L/600.

### SNOW LOADS:

IN ACCORDANCE WITH ASCE 7-10 USING THE CRITERIA DEFINED IN THE "DESIGN LOADS" SECTION OF THE GENERAL STRUCTURAL NOTES. SNOW LOADS ARE TO INCLUDE THE EFFECTS OF "UNBALANCED SNOW LOADS FOR HIP AND GABLE ROOFS".

IN ACCORDANCE WITH ASCE 7-10 USING THE CRITERIA DEFINED IN THE "DESIGN LOADS" SECTION OF THE GENERAL STRUCTURAL NOTES. TRUSSES ARE TO BE DESIGNED FOR "COMPONENTS AND CLADDING" WIND LOADS UNLESS NOTED OTHERWISE.

### SPECIAL LOADS:

- SEE PLANS AND ELEVATIONS FOR ADDITIONAL LOADS TO BE CONSIDERED IN THE TRUSS DESIGN.
- B. WHERE TRUSSES ARE REQUIRED TO FRAME INTO OTHER TRUSSES, DESIGN OF THE CONNECTIONS ARE TO BE THE RESPONSIBILITY OF THE TRUSS SUPPLIER. THE TRUSS SUPPLIER IS TO MAKE NECESSARY PROVISIONS IN THE SUPPORTING TRUSS TO ACCEPT THE TYPE OF HANGER REQUIRED.
- C. THE DESIGN OF ALL WEB MEMBER PERMANENT BRACING REQUIRED FOR THE STRUCTURAL ADEQUACY OF THE TRUSSES, IS TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER
- D. ADDITIONAL PERMANENT BRACE SIZES AND CONNECTIONS, NOT PROVIDED BY THE SHEATHING SHOWN ON THE CONSTRUCTION DRAWINGS, ARE TO BE THE SOLE RESPONSIBILITY OF THE TRUSS SUPPLIER. THIS BRACING CAN INCLUDE, BUT IS NOT LIMITED TO, TOP CHORD BRACING FOR TRUSSES WITH PIGGY-BACKS, AND INTERMEDIATE BRACES FOR GABLE TRUSS WEB MEMBERS

## A. TRUSS DESIGNS ARE TO BE SUBMITTED FOR REVIEW PRIOR TO FABRICATION. TRUSS SUBMITTAL IS

- TO INCLUDE THE FOLLOWING INFORMATION: DESIGN INFORMATION FOR EACH TYPE OF TRUSS SUPPLIED.
- 2. LAYOUT DRAWING INDICATING LOCATION OF EACH SPECIFIC TRUSS TYPE AND ANY PERMANENT
- HORIZONTAL BRACING MEMBERS. PERMANENT MEMBER BRACE LOCATIONS, BRACE SIZES, AND CONNECTIONS.
- TRUSS HANGER TYPE AND LOCATION, FOR ALL TRUSSES FRAMING INTO TRUSSES. TRUSS DESIGNS AND LAYOUT DRAWING STAMPED BY A REGISTERED PROFESSIONAL ENGINEER, IN THE STATE OF PROJECT LOCATION.
- B. SUBMITTALS WHICH DO NOT INCLUDE THE ABOVE LISTED INFORMATION WILL BE RETURNED TO THE CONTRACTOR PRIOR TO REVIEW.

### 4. MISCELLANEOUS:

- A. ALL GIRDER TRUSSES ARE TO BE 2-PLY MINIMUM.
- B. UNLESS SPECIFICALLY NOTED OTHERWISE ON THE APPROVED TRUSS SHOP DRAWINGS, ALL MEMBERS OF MULTIPLE TRUSSES ARE TO BE NAILED TOGETHER WITH 10D COMMON NAILS AT 8" O.C., FOR DOUBLE TRUSSES, OR WITH 16D COMMON NAILS AT 8" O.C. FROM EACH SIDE, FOR TRIPLE

### **P**OST-INSTALLED ANCHOR SYSTEMS

- A. LISTED ANCHOR PRODUCTS PROVIDED BELOW ARE NOT TO BE USED AS INTERCHANGEABLE PRODUCTS. EACH ANCHOR HAS DEFINED CAPACITIES BASED UPON TESTED PERFORMANCE WITH APPLICABLE SAFETY FACTORS AND WILL VARY ACROSS MANUFACTURERS. TYPES OF ANCHORS INDICATED THROUGHOUT THE DESIGN DOCUMENTS ARE DETAILED FOR THEIR SPECIFIC PURPOSE AND CAPACITY. SUBSTITUTION OF ANCHORS FROM THOSE SPECIFIED ARE ONLY ALLOWED AFTER ENGINEER REVIEW AND APPROVAL OR AMENDMENT FROM WRITTEN REQUEST BY THE CONTRACTOR.
- B. PROVIDE ANCHORAGE MATCHING MANUFACTURER, TYPE, DIAMETER, EMBEDMENT, AND BASE MATERIAL AS INDICATED IN THE DOCUMENTS.
- C. ALL POST-INSTALLED ANCHORS TO BE HAMMER DRILLED. FOLLOW ALL HOLE CLEANING AND INSTALLATION INSTRUCTIONS AS STIPULATED BY THE ANCHOR MANUFACTURER. FOLLOW ALL OSHA GUIDELINES FOR CONCRETE DRILLING AS IT PERTAINS TO SILICA DUST.
- D. INSTALLATION OF ADHESIVE ANCHORS MUST BE PERFORMED BY PERSONNEL TRAINED TO INSTALL ADHESIVE ANCHORS THROUGH MANUFACTURER TRAINING PROGRAMS. E. INSTALLATION OF ADHESIVE ANCHORS IN THE HORIZONTAL OR UPWARDLY INCLINED ORIENTATION AND WHERE SUPPORTING SUSTAINED TENSION LOADS SHALL BE INSTALLED BY CERTIFIED
- PERSONNEL BY ACI/CRSI INSTALLATION PROGRAMS F. MINIMUM CONCRETE AGE FOR POST-INSTALLED ADHESIVE ANCHORS SHALL BE NOT LESS THAN 28
- G. ALL ANCHORS IN CONTACT WITH PRESSURE TREATED LUMBER ARE TO BE HOT DIPPED GALVANIZED PER ASTM A153 WITH A MINIMUM G185 COATING OR STAINLESS STEEL WITH CHEMICAL 6" O.C. INTO COMPOSITION CONFORMING TO AISI 303/304 OR AISI 316. FASTENERS AND CONNECTORS ARE TO BE OF THE SAME MATERIAL, STAINLESS STEEL OR HOT DIPPED GALVANIZED, DO NOT MIX MATERIALS.
- 2. ANCHORAGE TO CONCRETE
- A. ACCEPTABLE MECHANICAL EXPANSION ANCHORAGE SYSTEMS:
- POINT. ADDITIONAL ANCHORS MAY BE REQUIRED BASED UPON FINAL LAYOUT AND DESIGN BY THE 1. DEWALT POWER STUD +SDI WEDGE EXPANSION ANCHOR 2. HILTI KWIK BOLT 3 EXPANSION ANCHOR
  - 3. HILTI KWIK BOLT TZ EXPANSION ANCHOR 4. SIMPSON STRONG-BOLT 2 WEDGE EXPANSION ANCHOR
  - B. ACCEPTABLE MECHANICAL SLEEVE ANCHORAGE SYSTEMS: (MAY NOT BE USED TO SECURE MAIN BUILDING FRAME COMPONENTS)
  - DEWALT LOK-BOLT AS SLEEVE ANCHOR HILTI HLC SLEEVE ANCHOR
  - SIMPSON SLEEVE-ALL SLEEVE ANCHOR C. ACCEPTABLE MECHANICAL SCREW ANCHORAGE SYSTEMS:

BRICK MASONRY

AND HOLLOW CONCRETE MASONRY.

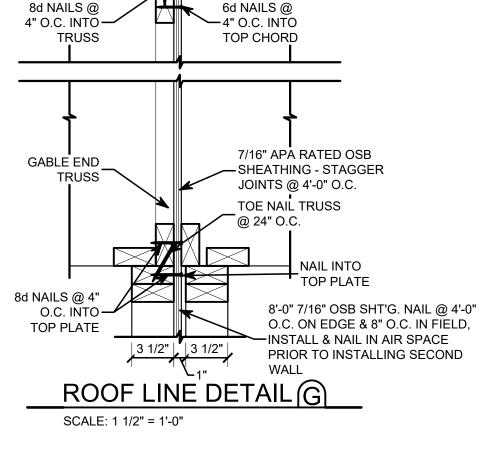
- 1. DEWALT SCREW-BOLT+ 2. HILTI KWIK HUS-EZ SCREW ANCHOR
- 3. SIMPSON TITEN HD SCREW ANCHOR D. ACCEPTABLE ADHESIVE ANCHORAGE SYSTEMS:
- DEWALT AC200+ ADHESIVE FOR REINFORCING BAR
- DEWALT PURE50+ ADHESIVE FOR THREADED ROD AND REINFORCING BAR DEWALT PURE110+ ADHESIVE FOR THREADED ROD AND REINFORCING BAR HILTI HIT-HY 200 ADHESIVE FOR THREADED ROD, REINFORCING BAR, AND HILTI SPECIFIC ROD AND
- 5. HILTI HIT-RE 500 ADHESIVE FOR THREADED ROD AND REINFORCING BAR.
- 6. HILTI HIT-RE 100 ADHESIVE FOR THREADED ROD AND REINFORCING BAR. SIMPSON AT-XP ADHESIVE FOR THREADED ROD AND REINFORCING BAR.

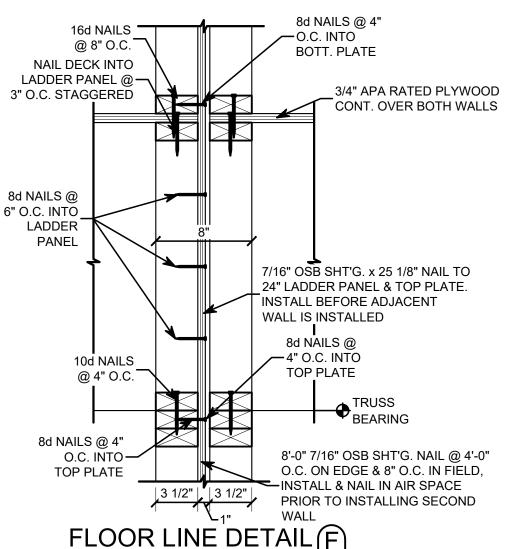
8. SIMPSON SET-3G ADHESIVE FOR THREADED ROD AND REINFORCING BAR

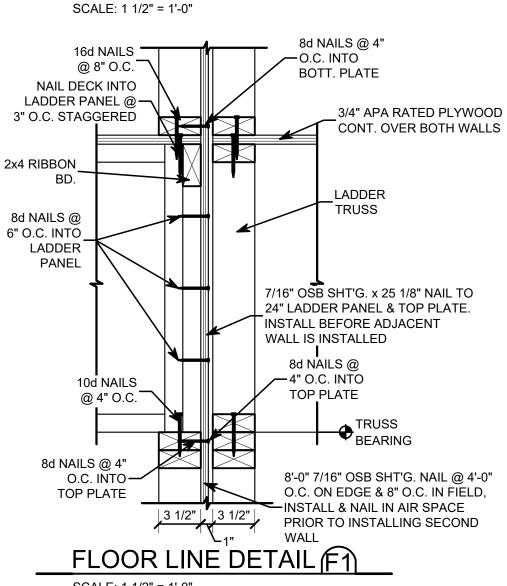
- 3. ANCHORAGE TO CONCRETE MASONRY OR BRICK MASONRY AS INDICATED: A. FOLLOW ALL MANUFACTURERS INSTALLATION INSTRUCTIONS IN REGARD TO LOCATION OF ANCHORS AWAY FROM HEAD JOINTS, MINIMUM EDGE DISTANCES, AND MINIMUM ANCHOR SPACING. B. ACCEPTABLE MECHANICAL EXPANSION ANCHORAGE SYSTEMS
- DEWALT POWER STUD +SDI WEDGE EXPANSION ANCHOR IN GROUT FILLED OR SOLID CONCRETE MASONRY 2. HILTI KWIK BOLT 3 EXPANSION ANCHOR IN GROUT FILLED OR SOLID CONCRETE MASONRY 3. SIMPSON STRONG-BOLT 2 WEDGE EXPANSION ANCHOR IN GROUT FILLED OR SOLID CONCRETE
- C. ACCEPTABLE MECHANICAL SLEEVE ANCHORAGE SYSTEMS: (MAY NOT BE USED TO SECURE MAIN BUILDING FRAME COMPONENTS) DEWALT LOK-BOLT AS SLEEVE ANCHOR IN GROUT FILLED, SOLID, OR HOLLOW CONCRETE MASONRY
- AND SOLID BRICK MASONRY 2. HILTI HLC SLEEVE ANCHOR IN GROUT FILLED, SOLID, OR HOLLOW CONCRETE MASONRY, AND SOLID BRICK MASONRY
- D. ACCEPTABLE MECHANICAL SCREW ANCHORAGE SYSTEMS: 1. HILTI KWIK HUS-EZ SCREW ANCHOR IN GROUT FILLED OR SOLID CONCRETE MASONRY 2. DEWALT SCREW-BOLT+ SCREW ANCHOR IN GROUT FILLED OR SOLID CONCRETE MASONRY AND

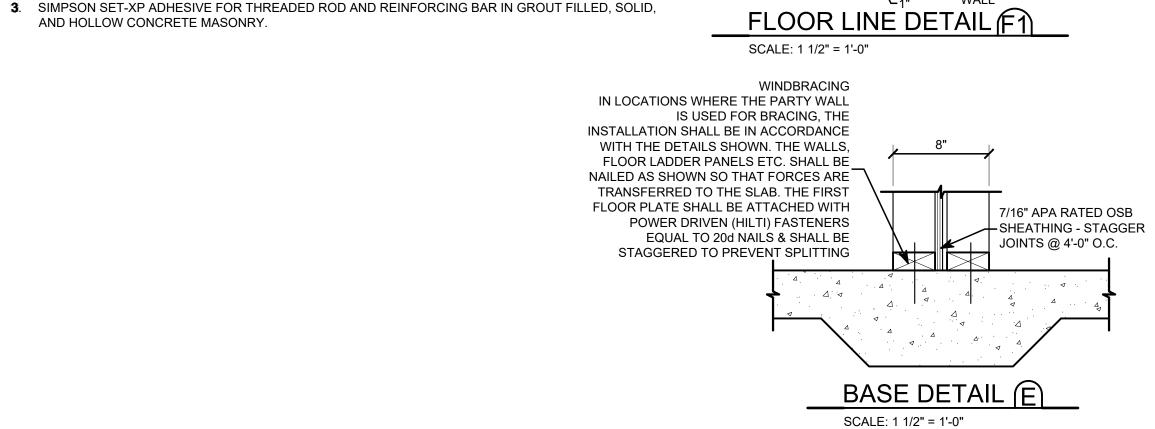
3. SIMPSON SLEEVE-ALL SLEEVE ANCHOR IN GROUT FILLED OR SOLID CONCRETE MASONRY

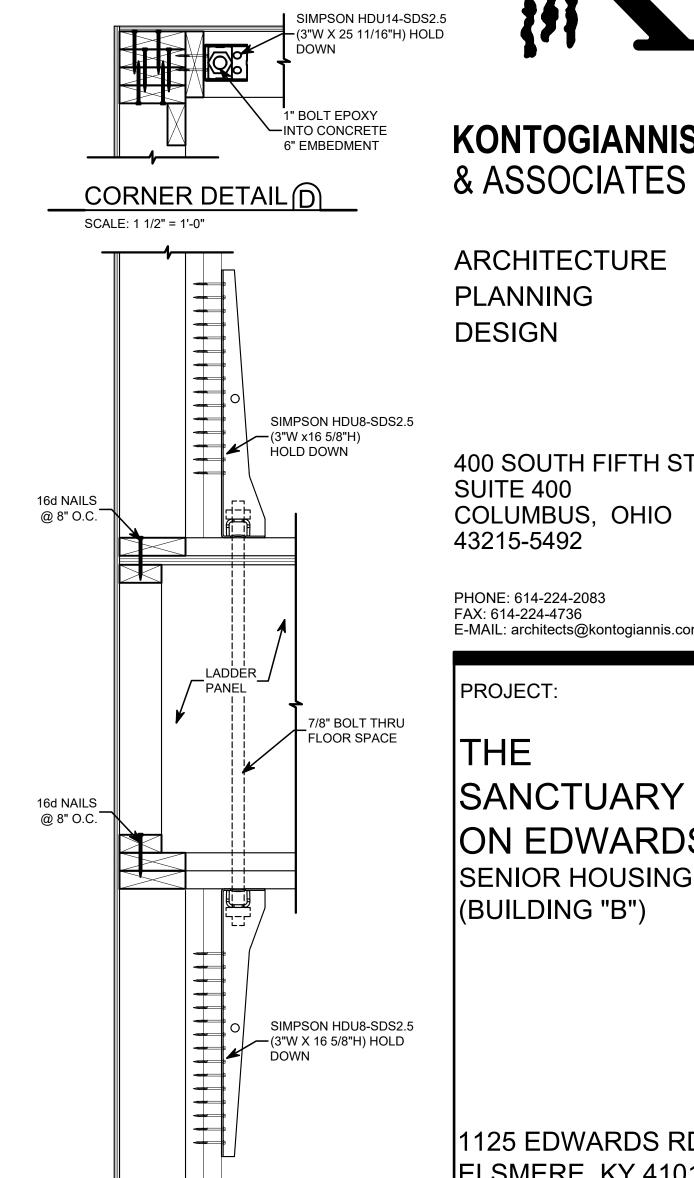
- E. ACCEPTABLE ADHESIVE ANCHORAGE SYSTEMS: 1. DEWALT AC100+ GOLD FOR THREADED ROD AND REINFORCING BAR IN GROUT FILLED MASONRY CONSTRUCTION. USE WITH SCREEN TUBES IN HOLLOW MASONRY CONSTRUCTION.
- 2. HILTI HIT-HY 270 ADHESIVE FOR THREADED ROD, REINFORCING BAR, AND HILTI SPECIFIC ROD AND INSERT SYSTEMS IN GROUT FILLED OR SOLID CONCRETE MASONRY CONSTRUCTION. USE WITH SCREEN TUBES IN HOLLOW MASONRY, MULIT-WYTHE MASONRY, OR BRICK WITH HOLES













**ARCHITECTURE PLANNING DESIGN** 

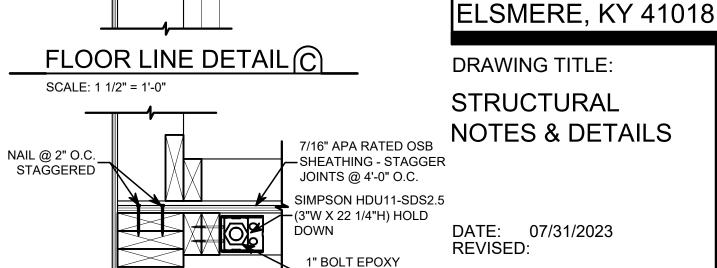
400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

PROJECT: SANCTUARY ON EDWARDS

(BUILDING "B'

1125 EDWARDS RD.



PARTY WALL DETAIL B

SCALE: 1 1/2" = 1'-0"

SCALE: 1 1/2" = 1'-0"

INTO CONCRETE

SIMPSON HDU11-SDS2.5

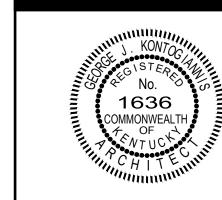
1" BOLT EPOXY

INTO CONCRETE

6" EMBEDMENT

THICKENED

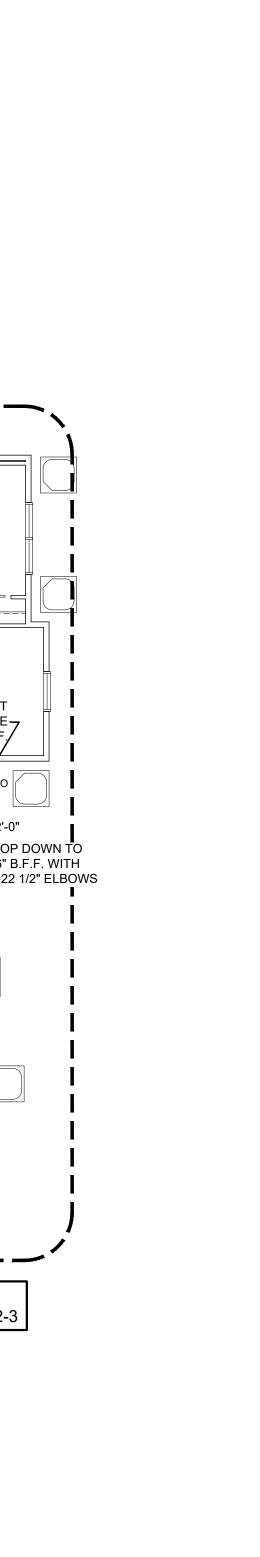
-(3"W X 22 1/4"H) HOLD



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CONSTRUCTION SET



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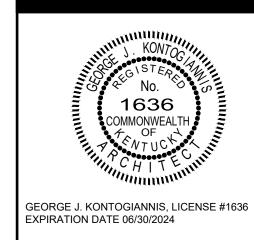
PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: **BUILDING FIRST** FLOOR PLUMBING PLAN

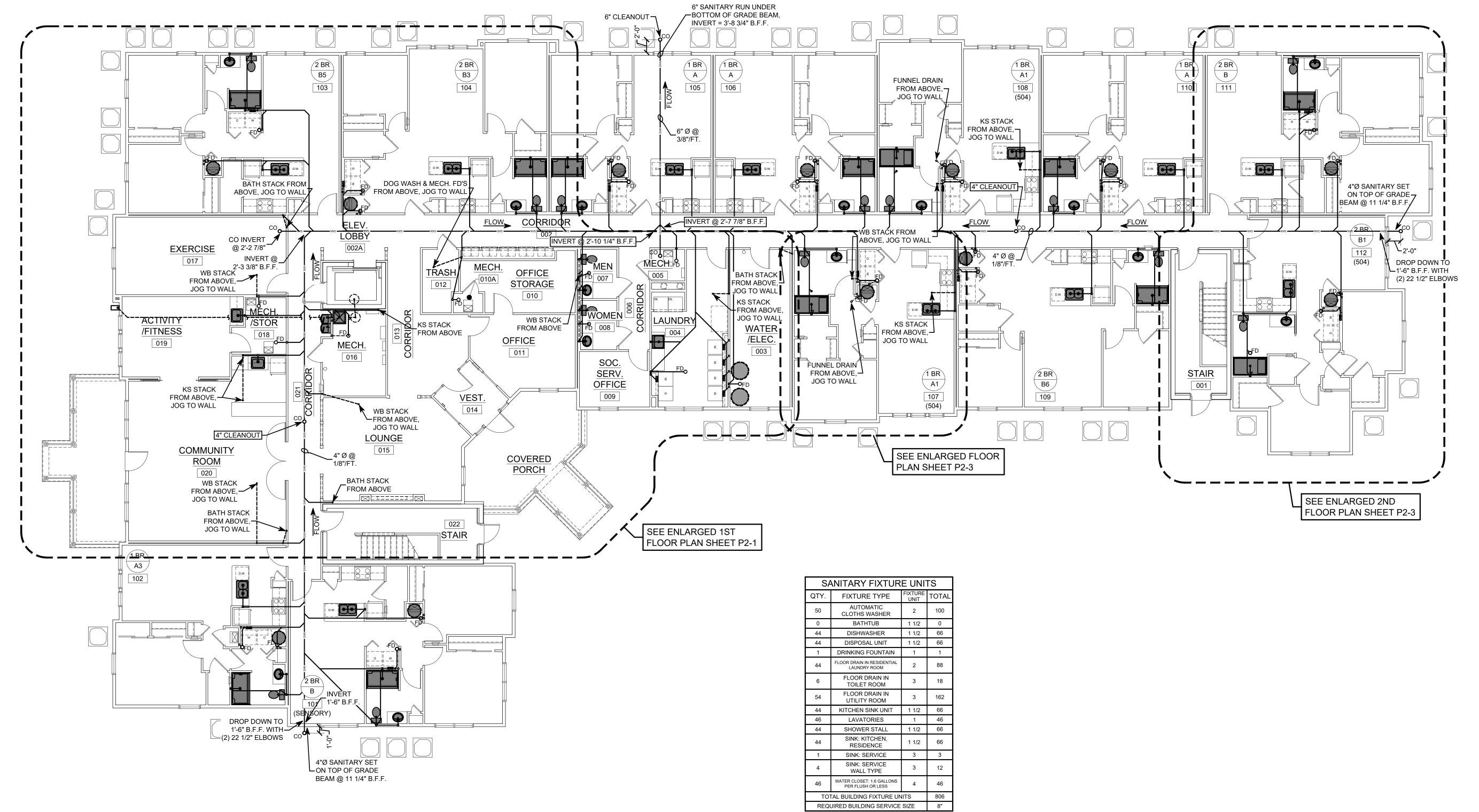
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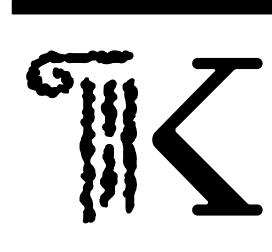
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P1-1



6" CLEANOUT -



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PROJECT:

THE
SANCTUARY
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SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
BUILDING SECOND
FLOOR PLUMBING
PLAN

DATE: 07/31/2023 REVISED:



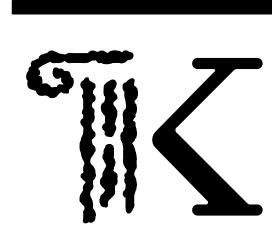
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P1-2

SEE ENLARGED 2ND FLOOR PLAN SHEET P2-2



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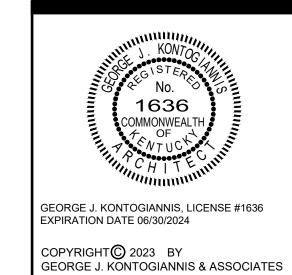
PROJECT:

THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

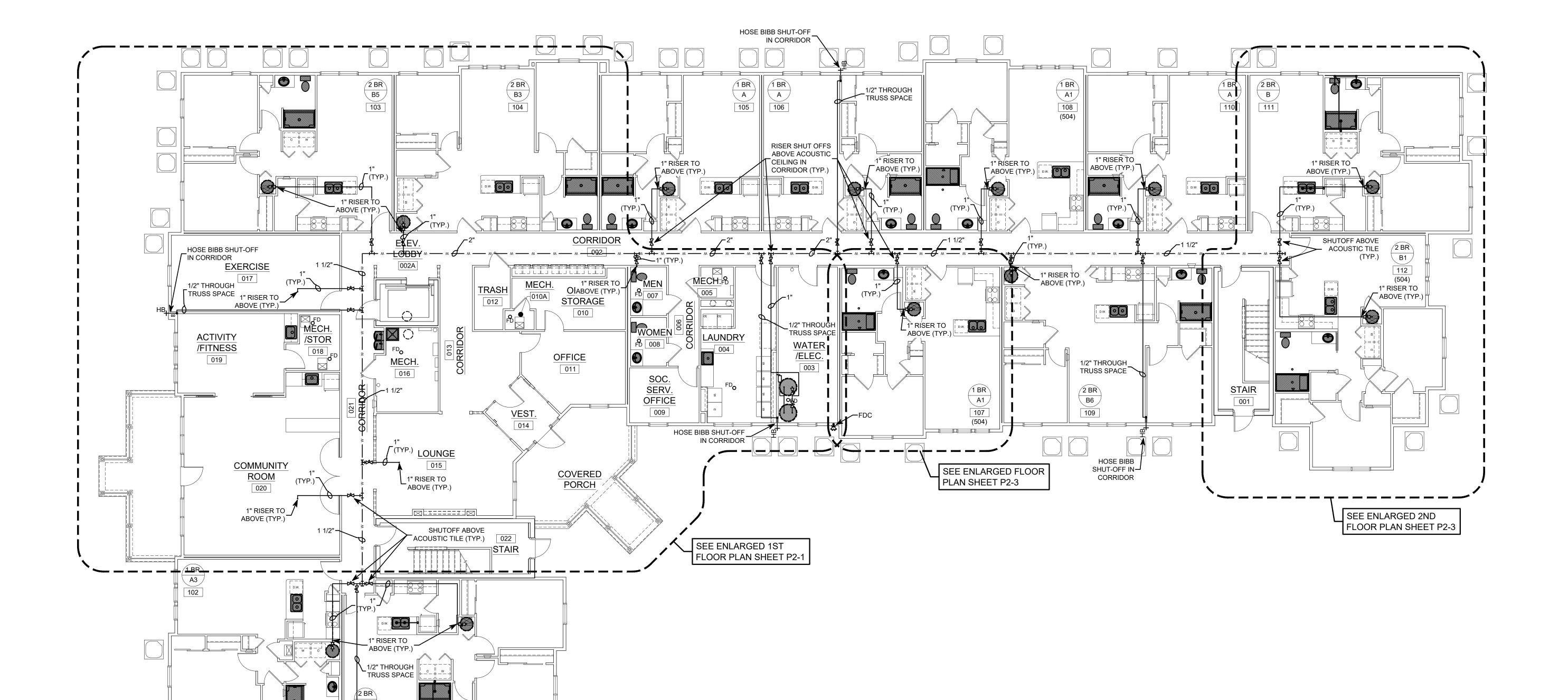
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BUILDING THIRD
FLOOR PLUMBING
PLAN

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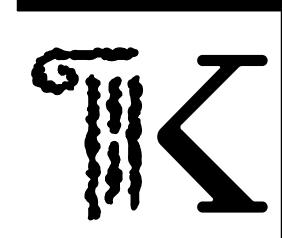


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P1-3



SEE SHEETS P2-2 & P2-3 FOR ENLARGED UNITS PLANS



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PROJECT:

THE
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ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
BUILDING WATER
SUPPLY PLAN

DATE: 07/31/2023 REVISED:



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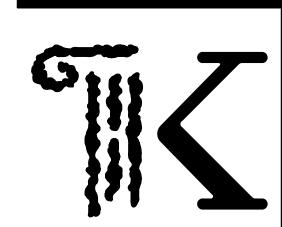
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P1-4

**BUILDING WATER PLAN** 

HOSE BIBB SHUT-OFF\_

IN CORRIDOR



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PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: **BUILDING RADON PLANS** 

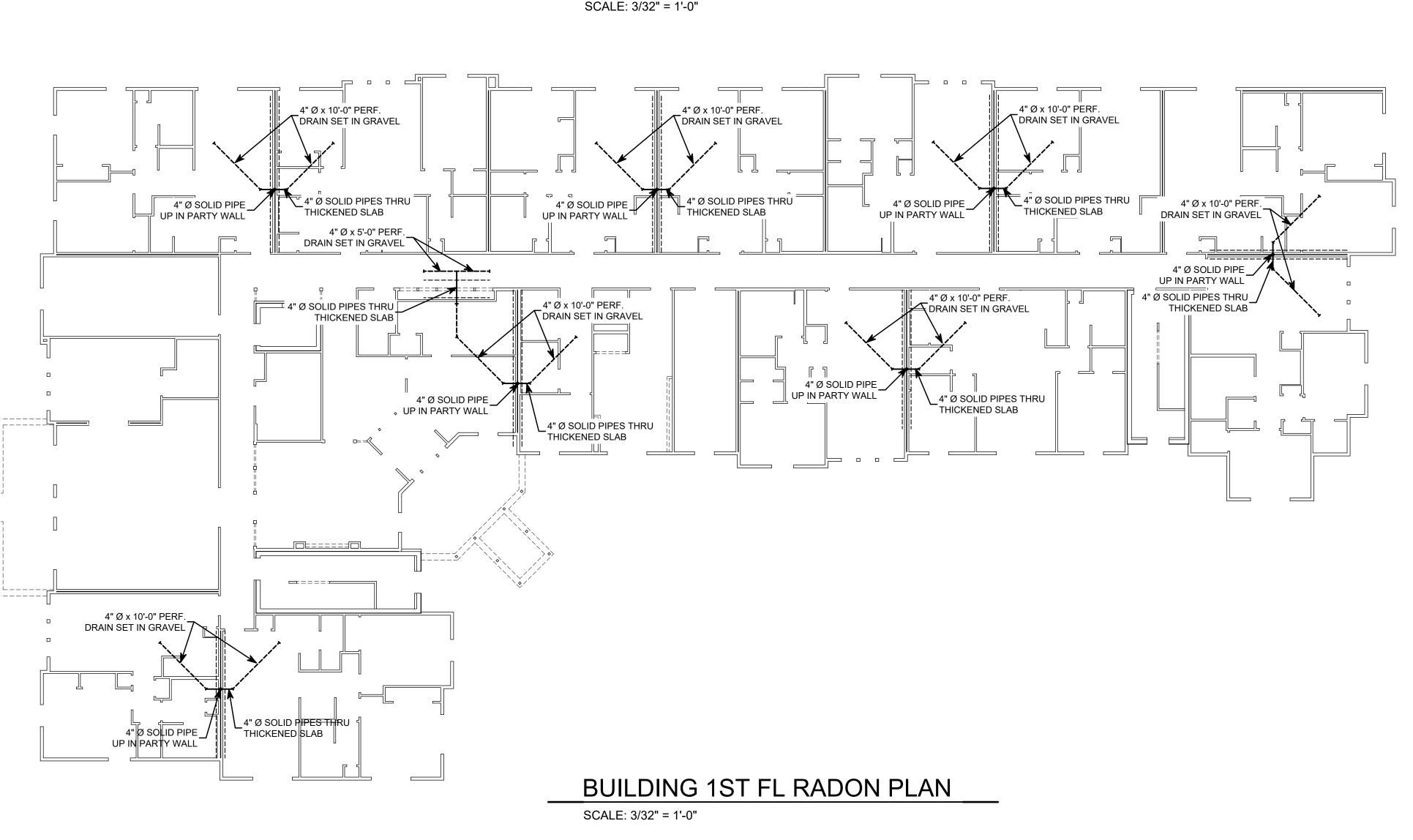
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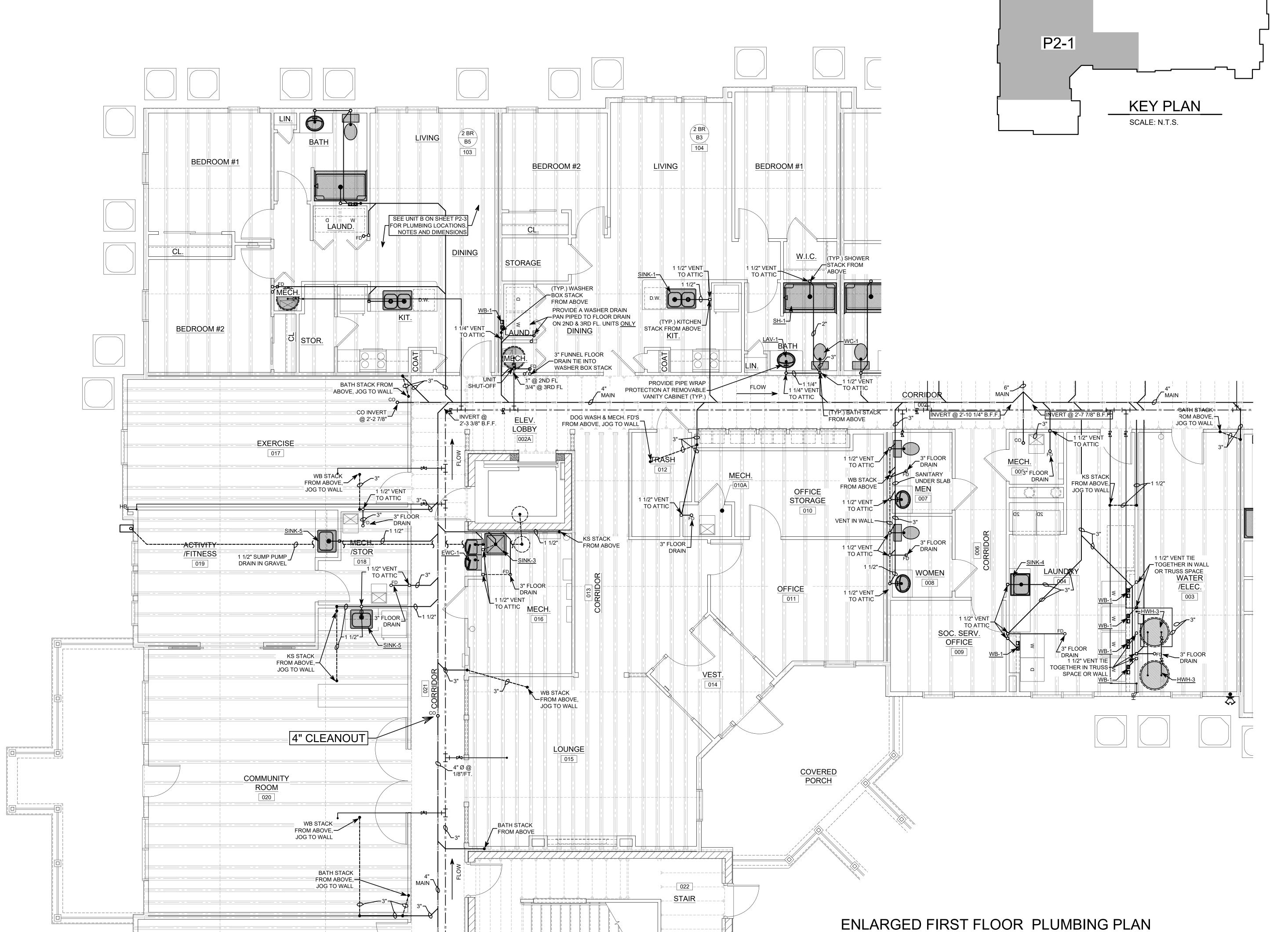


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SCALE: 1/4" = 1'-0"

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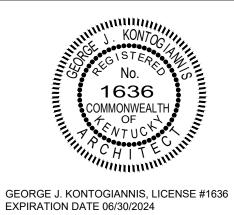
PROJECT:

THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
ENLARGED FIRST
FLOOR PLUMBING
PLAN

DATE: 07/31/2023 REVISED:



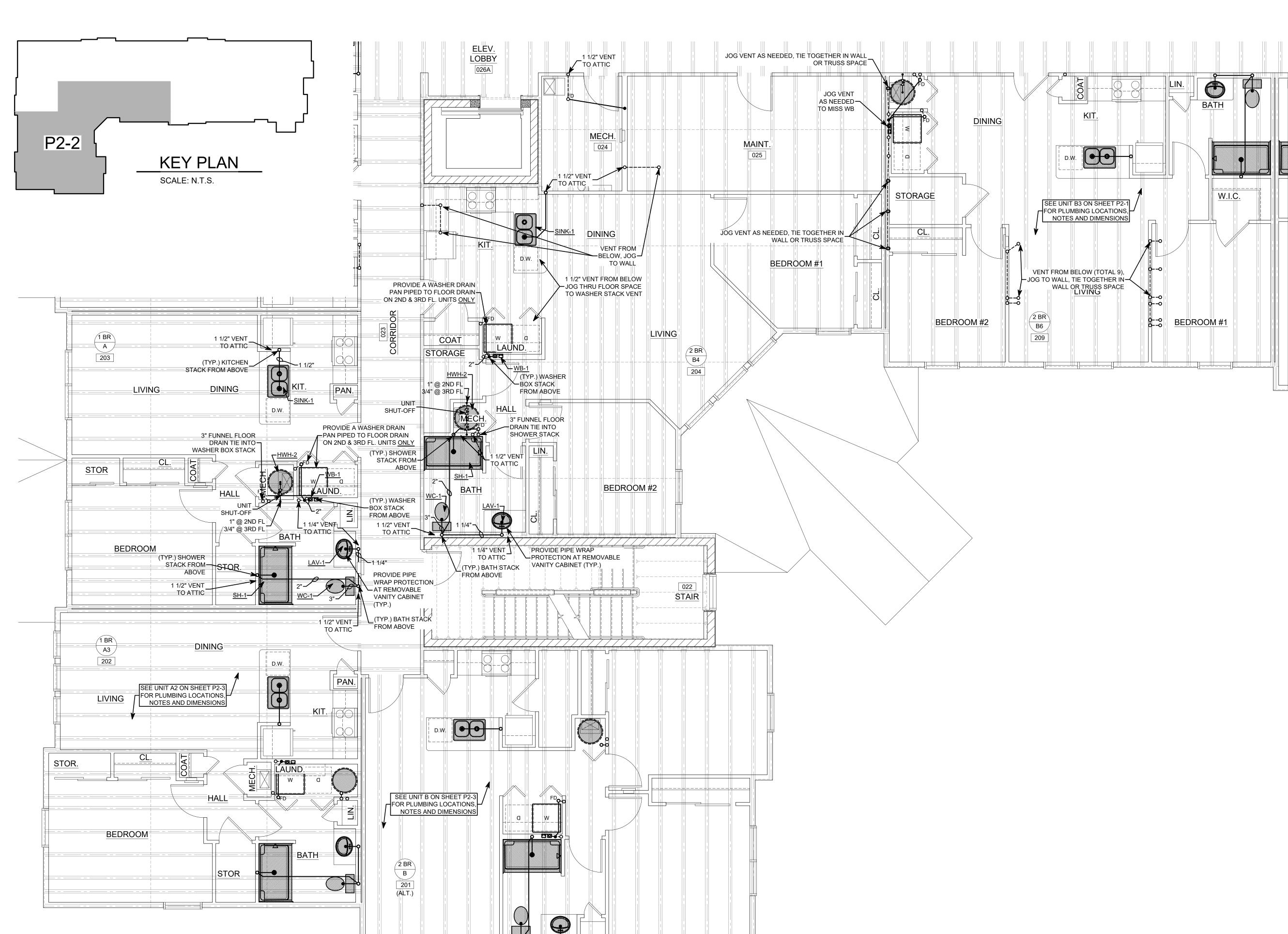
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P2-1



P2-2

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PROVIDE PIPE WRAP

1 1/4" VENT

TO ATTIC 🔨

1" @ 2ND FL 3/4" @ 3RD FL

STOR\ 1 1/2" VENT

TO ATTIC

**BEDROOM** 

SCALE: 1/4" = 1'-0"

(TYP.) BATH STACK

1 1/2" VENT 7 TO ATTIC 3"-

18TACKM — N

O WALL

I WALL
ACE
ER

LOOR

FROM ABOVE

ONE BEDROOM UNIT A2

FROM ABOVE, A

1 1/2" VENT

TOATTIC

BEDROOM

(TYP.) SHOWER STACK FROM

W.I.C.

PROVIDE PIPE WRAP

PROTECTION AT REMOVABLE

(TYP.) SHOWER

-STACK FROM

SHUT-OFF

(TYP.) BATH STACK

1 1/2" VENT TO ATTIC

<u>.I.C.</u>

FROM ABOVE

VANITY CABINET (TYP.)

(TYP.) WASHER

–BOX STACK

FROM ABOVE

-PROTECTION AT REMOVABLE

PROVIDE A WASHER DRAIN
PAN PIPED TO FLOOR DRAIN
ON 2ND & 3RD FL. UNITS ONLY

I 1/2" VENT

TO ATTIC

211 (SENSORY)

LIVING

PROVIDE A WASHER DRAIN
PAN PIPED TO FLOOR DRAIN

3" FUNNEL FLOOR DRAIN TIE INTO WASHER BOX STACK

(TYP.) KITCHEN\_ STACK FROM ABOVE

SINK-2

KS STACK FROM ABOVE,

DINING 1 1/2" VENT TO ATTIC

1 BR A1 107

JOG TO WALL

LIVING

KS VENT FROM BELOW,

JOG TO WALL

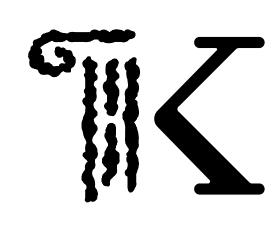
(TYP.) KITCHEN\_ STACK FROM ABOVE

KIT.

3" FUNNEL FLOOR

WASHER BOX STACK

DRAIN TIE INTO



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400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

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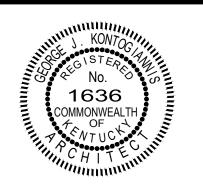
PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: **ENLARGED UNIT** PLUMBING PLANS

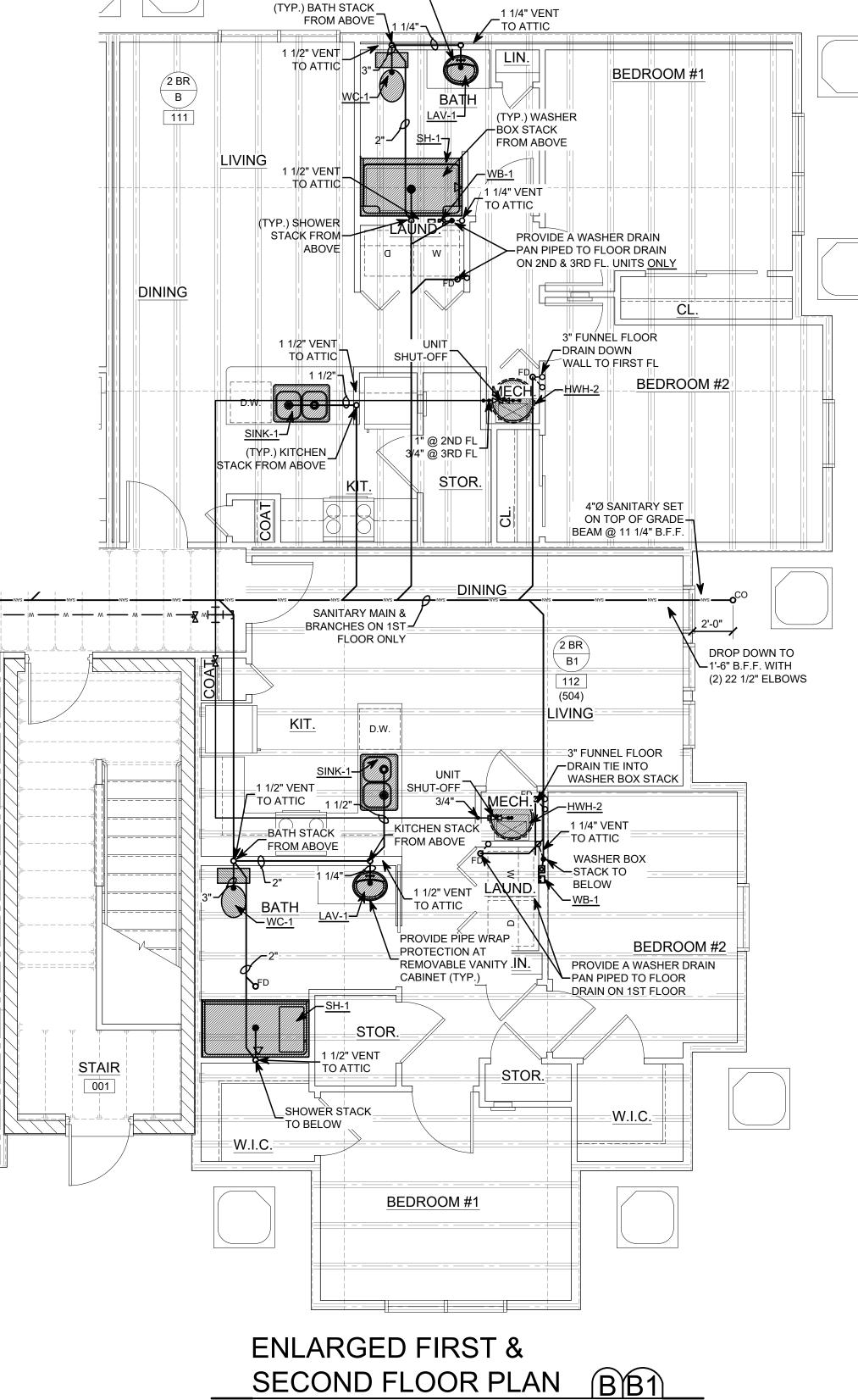
DATE: 07/31/2023 REVISED:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

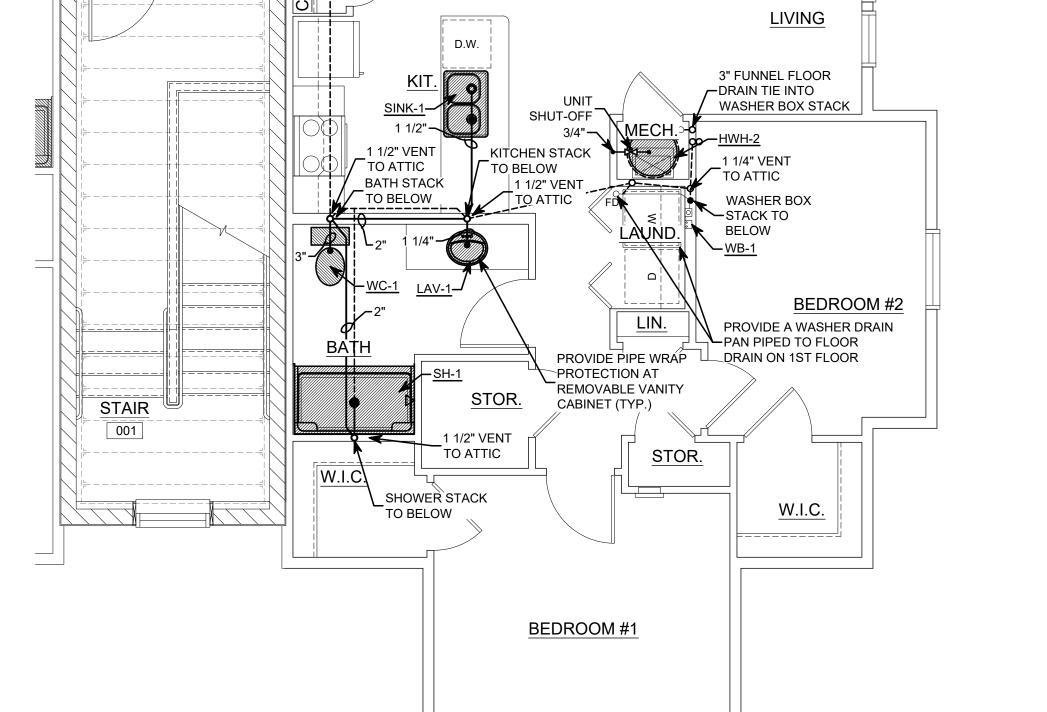
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SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023 CONSTRUCTION SET



PROVIDE PIPE WRAP

PROTECTION AT REMOVABLE VANITY CABINET (TYP.)



2 BR B2 316

<u>DINING</u>

\_\_\_\_\_

TWO BEDROOM UNIT (B2) SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'-0"

ONE BEDROOM UNIT (504) A1

SCALE: 1/4" = 1'-0"

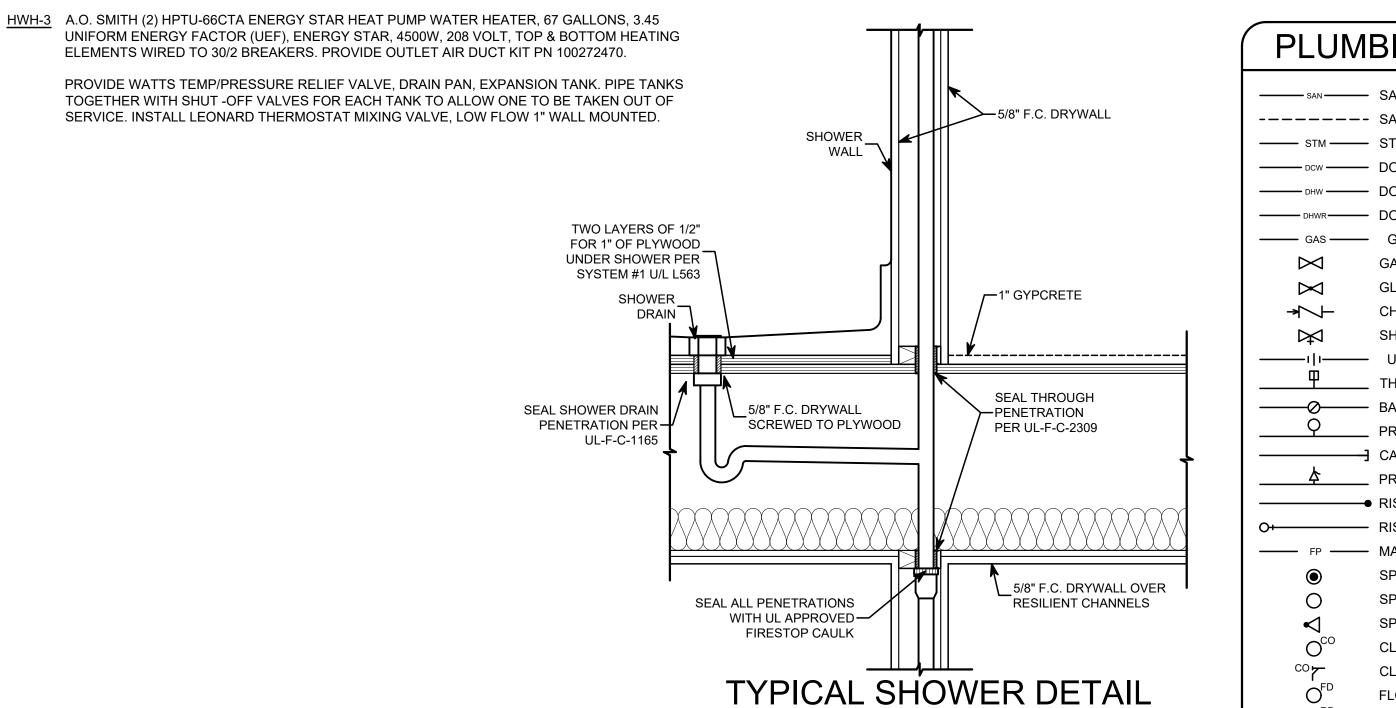
P2-3

## PLUMBING NOTES

- 1. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR INSTALLING ALL PIPING, EQUIPMENT, VALVES, ETC. IN ACCORDANCE WITH CURRENT PLUMBING CODE, CITY, COUNTY CODES, OR THE STATE BOARD OF HEALTH REGULATIONS.
- 2. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF A DOMESTIC COLD WATER SERVICE AND SANITARY BUILDING SEWER AS SHOWN ON THE DRAWINGS OR HEREIN DESCRIBED.
- 3. PLUMBING CONTRACTOR SHALL INSTALL NON-FREEZE VACUUM BREAKER SILLCOCKS WHERE SHOWN ON BUILDING PLAN. EACH BRANCH LINE SUPPLY TO SILLCOCK SHALL BE 3/4" AND SHALL HAVE AN INTERIOR SHUTOFF VALVE.
- 4. PLUMBING CONTRACTOR SHALL BE RESPONSIBLE FOR RUNNING ALL PIPING CONCEALED IN APARTMENT UNITS. IF ANY FLOOR JOIST, TRUSSES, OR BEARING WALLS ARE CUT, PRIOR APPROVAL MUST BE GIVEN BY THE ARCHITECT.
- 5. PLUMBING CONTRACTOR SHALL PROTECT UNDERGROUND WATER LINES FROM CROSS-CONTAMINATION WITH SANITARY SEWERS IN ACCORDANCE WITH ACCEPTED INSTALLATION PRACTICES FOR SEPARATION AS RECOMMENDED BY THE KENTUCKY BOARD OF HEALTH AND COUNTY AND CITY STANDARDS.
- ALL UNDERGROUND WATER LINES SHALL BE CPVC WITH NO FITTINGS BELOW SLAB. BRING LINES UP THROUGH SLAB AT HOT WATER HEATER. INSTALL UNIT TAKES-OFFS.
- 7. ALL WATER PIPING ABOVE SLAB SHALL BE CPVC.
- 8. PROVIDE MASTER SHUT-OFF FOR WATER SUPPLY TO EACH UNIT. SHUT-OFF SHALL BE LOCATED AS SHOWN AND SHALL SHUT-OFF WATER TO ALL UNIT PIPING.
- 9. DISHWASHER DISCHARGE SHALL BE PIPED THROUGH THE DISPOSAL OR THROUGH A DISHWASHER TAILPIECE "TEE".
- 10. PROVIDE DIELECTRIC UNION ON ALL HOT WATER HEATER CONNECTIONS. FINAL CONNECTIONS TO FAUCETS SHALL BE WITH A UNION OR COMPRESSION FITTING. ALL FIXTURES SHALL BE PROVIDED WITH A STOP PER CODE.
- 11. COORDINATE PIPING WITH CARPENTER. BE PARTICULARLY AWARE OF SECOND FLOOR SHOWER AND WATER CLOSET ROUGH-INS. THOSE SHALL BE COORDINATED WITH THE CARPENTER AND ERRORS IN FRAMING SHALL BE CORRECTED. WATER CLOSETS MAY NOT BE MOVED FROM LOCATIONS SHOWN.

- 12. PROVIDE LAUNDRY BOXES FOR ALL WASHER LOCATIONS. LAUNDRY BOX SHALL CONTAIN SHUT-OFF WITH THREADED HOSE CONNECTION FOR HOT AND COLD WATER (NO ELECTRICAL OUTLETS).
- 13. WATER PIPING SHALL BE SECURED TIGHTLY IN ALL LOCATIONS TO PREVENT ANY RATTLING. IF PRESSURE IS EXCESSIVE, PROVIDE DEAD END AIR CHAMBERS ABOVE SECOND FLOOR FIXTURE TO ACT AS AN AIR HAMMER.
- 14. PROVIDE TRAP PRIMERS IF REQUIRED BY CODE OR LOCAL GOVERNING AUTHORITY.
- 15. THE PLUMBING CONTRACTOR SHALL LEVEL ALL HOT WATER HEATERS.
- 16. THE PLUMBING CONTRACTOR SHALL REVIEW THE HEATING AND ELECTRICAL DRAWINGS TO VERIFY ANY AREAS OF CONFLICT WITH THESE TRADES. ALL AREAS OF CONFLICT SHALL BE WORKED OUT BEFORE INSTALLATION BEGINS. IF THIS CONTRACTOR INSTALLS HIS WORK WITHOUT COORDINATION, THE GENERAL CONTRACTOR MAY HAVE IT REMOVED IF THE G.C. FEELS THAT THE SITUATION IS UNWORKABLE FOR OTHER TRADES.
- 17. REVIEW ALL ITEMS OF EQUIPMENT SUPPLIED BY OTHERS TO DETERMINE EXACTLY WHAT IS BEING SUPPLIED AND WHAT HOOK-UPS AND ACCESSORIES ARE REQUIRED. IT SHALL BE THE RESPONSIBILITY OF THE PLUMBER TO PROVIDE ALL LABOR AND ACCESSORIES (I.E. VACUUM BREAKERS, BACKFLOW PRESENTERS, PRESSURE REDUCERS, UNIONS, STOPS, TRAPS, ETC.) NEEDED FOR A COMPLETE INSTALLATION BUT NOT SUPPLIED WITH THE EQUIPMENT. ANY AREAS IN QUESTION SHALL BE REVIEWED WITH THE GENERAL CONTRACTOR FOR CLARIFICATION.
- 18. ALL FLOOR DRAINS SHALL BE SET 3/4" BELOW SLAB LEVEL. CONCRETE SUBCONTRACTOR SHALL SLOPE FLOOR TO DRAINS.
- 19. PROVIDE DRAIN PANS UNDER ALL WATER WATER HEATERS. DRAIN LINE FROM PAN SHALL BE TIED INTO 2ND FLOOR FUNNEL DRAIN LINE IN JOIST SPACE BELOW. ALL FIRST FLOOR DRAIN PANS SHALL PIPE TO FLOOR DRAIN.
- 20. SHOWERS ON SECOND & THIRD FLOOR GARDEN UNITS SHALL BE SET ON 1" PLYWOOD. WATER CLOSET ROUGH-IN SHALL BE SET UP 1" & SECURED TO ALLOW FOR 3/4" FLOOR FILL
- 21. PROVIDE R=3 INSULATION ON ALL HOT WATER PIPING.

	PLUMBING FIXTURE SCHEDULE													
ITEM	DESCRIPTION	DRAIN	ROU(	GH IN HOT	COLD	MANUF.	MODEL	MTG.	MAT.	COLOR	FAUCET/ FLUSH VALVE	SUPPLIES & STOPS	ACCESSORIES	COMMENTS
WC-1	WATER CLOSET	3"	1 1/2"		1/2"	AMERICAN STANDARD	CADET PRO RIGHT- HEIGHT, MODEL 215AA 104.020	FLOOR	VIT. CHINA	WHITE	4" NON-ADJ PISTON ACTION ACCELERATOR	1/4 TURN STOP	1.28 GPF WC - BEMIS 170 CLOSED FRONT SEAT W/ COVER	ADA COMPLIANT
WC-2	WATER CLOSET	3"	1 1/2"		1/2"	AMERICAN STANDARD	CADET PRO RIGHT- HEIGHT, MODEL 215AA 104.020	FLOOR	VIT. CHINA	WHITE	4" NON-ADJ PISTON ACTION ACCELERATOR	1/4 TURN STOP	1.28 GPF WC - BEMIS 1955 SPLIT SEAT NO COVER	ADA COMPLIANT
LAV-1	LAVATORY	1 1/4"	1 1/4"	3/8" OD	3/8" OD	MANSFIELD	ALTO 251-4	COUNT. TOP	VIT. CHINA	WHITE	MOEN-CHATEAU L4621 WITH POP-UP	1/4 TURN STOP W/ BRAIDED S.S. SUPPLY	DEARBORN 9702 P-TRAP	
SINK-1	KITCHEN SINK DOUBLE BOWL	1 1/2"	1 1/2"	3/8" OD	3/8" OD	DAYTON	DAYTON DSE23322	SELF RIMMING	STAIN STEEL		MOEN-CHATEAU 7425 LEVER HANDLE	1/4 TURN STOP W/ BRAIDED S.S. SUPPLY	BASKET STRAINER, DECK GASKET DEARBORN 9702 & 9108, DISPOSAL - INSINKERATOR - BADGER 5	PROVIDE CORD W/ PLUG FOR DISPOSAL, (8" DEEP)
SINK-2	KITCHEN SINK DOUBLE BOWL	1 1/2"	1 1/2"	3/8" OD	3/8" OD	DAYTON	DAYTON GE23322	SELF RIMMING	STAIN STEEL		MOEN-CHATEAU 7425 LEVER HANDLE	1/4 TURN STOP W/ BRAIDED S.S. SUPPLY	BASKET STRAINER, DECK GASKET DEARBORN 9702 & 9108, DISPOSAL - INSINKERATOR - BADGER 5	PROVIDE CORD W/ PLUG FOR DISPOSAL, (5 3/8" DEEP) W/ REAR DRAINS
SINK-3	JANITOR'S SINK	3"	1 1/2"	1/2"	1/2"	FIAT	MSB 2424	FLOOR	MOLDED STONE	WHITE	FIAT 830-AA (WALL MOUNTED)	1/4 TURN STOP W/ BRAIDED S.S. SUPPLY	HOSE BRACKET & HOSE 832-AA STRAINER 1453-BB	
SINK-4	LAUNDRY SINK	2"	1 1/2"	1/2"	1/2"	DAYTON	DAYTON DPC1202010	SELF RIMMING	STAIN STEEL		MOEN-COMMERCIAL TWO-HANDLE 8938			DROP-IN STAINLESS STEEL W/ FAUCT W/ TWO-HANDLES
SINK-5	KITCHEN SINK SINGLE BOWL	1 1/2"	1 1/2"	3/8" OD	3/8" OD	DAYTON	DAYTON GE12521	SELF RIMMING	STAIN STEEL		MOEN-CHATEAU 7425 LEVER HANDLE	1/4 TURN STOP W/ BRAIDED S.S. SUPPLY	BASKET STRAINER, DECK GASKET DEARBORN 9702 & 9108, DISPOSAL - INSINKERATOR - BADGER 5	PROVIDE CORD W/ PLUG FOR DISPOSAL - CENTER REAR DRAIN LOCATION
SH-1	SHOWER 60" W/ AIP BACKERBOARDS	2"	1 1/2"	1/2"	1/2"	STERLING	STORE+ 72330106	FLOOR	FIBER GLASS	WHITE	MOEN POSI-TEMP CHATEAU L2352		POSI-TEMP VALVE W/ STOPS AND #TL-182 TRIM	PROVIDE SHOWER WITH AGE-IN-PLACE BACKERBOARDS SEE SPECS FOR SHOWER DOO
SH-2	SHOWER 63" W/ SEAT	2"	1 1/2"	1/2"	1/2"	CLARION	MP6333BF34	FLOOR	FIBER GLASS	WHITE	MOEN POSI-TEMP CHATEAU L2352		PROVIDE ACCESSORIES TO MEET ADA REQUIREMENTS	
HWH-1	HOT WATER HEATER					A. O. SMITH	EMT-6 POINT-OF-USE					SHUT-OFF W/ UNIONS		6 GAL., ELECTRIC, POINT-OF-US 98% EFF, 1,440 WATTS
HWH-2	HOT WATER HEATER					A. O. SMITH	ENJ-40 LOWBOY					SHUT-OFF W/ UNIONS	PROVIDE W/ WATTS TEMP., PRESSURE RELIEF VALVE, DRAIN PAN, EXPANISION TANK & SIDE CONNECTION	40 GAL., ELECTRIC, LOW BOY, UEF=0.93, BACK-FLOW PREVENTER
HWH-3	HOT WATER HEATER										SEE BELOW			
HWH-4	HOT WATER HEATER					A. O. SMITH	ENT-30					SHUT-OFF W/ UNIONS	PROVIDE W/ WATTS TEMP., PRESSURE RELIEF VALVE, DRAIN PAN, EXPANISION TANK & SIDE CONNECTION	30 GAL., ELECTRIC, UEF=0.89, BACK-FLOW PREVENTER
EWC-1	ELECTRIC WATER COOLER	2"	1 1/2"		1/2"	ELKAY	LZSTLG8LC	WALL						
WB-1	WASHER BOX	2"	1 1/4"	1/2" IPS	1/2" IPS	SIOUX CHIEF	696-2303CF	WALL	PLASTIC	WHITE				
НВ	HOSE BIB					WOODFORD	MODEL 19	WALL					SL-19 STEM LOCK FOR EACH HOSE BIB	



SCALE: 1 1/2" = 1'-0"

PLUMBING SYMBOLS

SANITARY WASTE PIPING ---- SANITARY VENT PIPING —— STM —— STORM WATER PIPING —— DCW — DOMESTIC COLD WATER —— DHW —— DOMESTIC HOT WATER —— DHWR—— DOMESTIC HOT WATER RETURN —— GAS —— GAS **GATE VALVE** GLOBE VALVE CHECK VALVE SHUT-OFF VALVE ——II—— UNION THERMOMETER BALANCING VALVE \_ PRESSURE GAUGE CAP ON END OF PIPE \_ PRESSURE-TEMP. RELIEF VALVE RISER DOWN O+----- RISER UP ---- FP ---- MAIN SUPPLY - FIRE PROTECTION SPRINKLER HEAD (PENDANT) SPRINKLER HEAD (UPRIGHT IN ATTIC) SPRINKLER HEAD (WALL MTD.) CLEANOUT (FLOOR) co CLEANOUT (WALL)  $O^{FL}$ FLOOR DRAIN  $O^{RD}$ **ROOF DRAIN** FROST PROOF HOSE BIBB

**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE PLANNING DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

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PROJECT:

THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

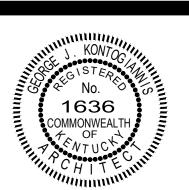
1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
PLUMBING FIXTURE

SCHEDULE, NOTES

DATE: 07/31/2023 REVISED:

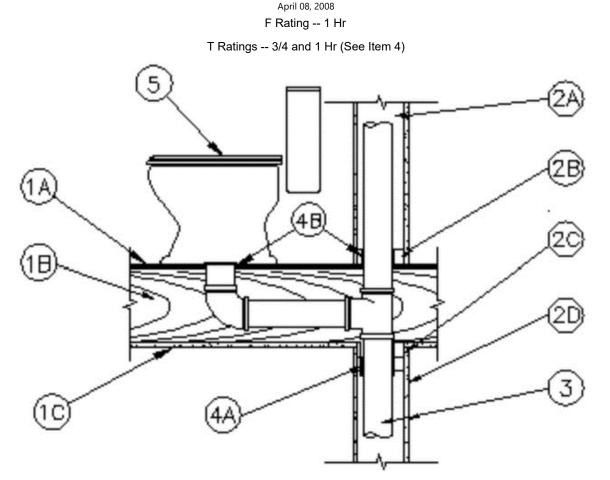
& DETAILS



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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SUBMISSION SETPERMIT SET 07/31/2023■ BID SET 11/08/2023■ CONSTRUCTION SET



System No. F-C-2095

1. Floor-Ceiling Assembly -- The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory, as summarized below:

- A. Flooring System -- Lumber or plywood subfloor with finish floor of lumber plywood or Floor Topping Mixture\* as specified in the individual Floor-Ceiling Design. Diam of opening is dependent on the pipe size. See Item 4. B. Wood Joists\* -- Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood
- **Members\*** with bridging as required and with ends firestopped. C. Gypsum Board\* -- Min 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Gypsum board nailed to wood joists. 2. Chase Wall -- The through penetrants (Item 3) are routed through a fire-rated single, double or staggered wood stud/gypsum wallboard chase wall
- include the following construction features: A. **Studs** -- Nom 2 by 6 in. (51 by 152 mm) or double 2 by 4 in. (51 by 102 mm) lumber studs.
- B. Sole Plate -- Nom 2 by 6 in. (51 by 152 mm) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of opening is dependent on the pipe size. See Item 4.

constructed of the material and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall

- C. Top Plate -- The double top plate shall consist of two 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Diam of opening is dependent on the pipe size. See Item 4.
- D. **Gypsum Board\*** -- Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design.
- 3. Nonmetallic Pipe -- One nonmetallic vent pipe provided with sanitary tee and branch drain pipe with toilet flange to be centered within the firestop system. Pipe or conduit to be rigidly supported on both sides of floor assembly. The following types and sizes of nonmetallic pipes, fittings and flanges may
- A. Polyvinyl Chloride (PVC) Pipe -- Nom 4 in. (102 mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in vented (drain, waste or vent) piping system B. Chlorinated Polyvinyl Chloride (CPVC) Pipe -- Nom 4 in. (102 mm) diam (or smaller) SDR17 CPVC pipe for use in vented (drain, waste or vent)
- piping systems. C. Acrylonitrile Butadiene Styrene (ABS) Pipe -- Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core or cellular core ABS pipe for use in
- vented (drain, waste or vent) piping systems. 4. Firestop System -- The firestop system shall consist of the following:
- A. Fill, Void or Cavity Materials Wrap Strip -- Nom 1/8 in. (3.2 mm) thick intumescent material supplied in 2 in. (51 mm) wide strips. The number of layers of wrap strips is dependent on the size of the pipe, as shown in the table below. The layers of wrap strip are individually wrapped tightly around penetrant with the ends butted and held in place with aluminum foil tape. Butted ends of successive layers may be staggered or aligned. Layers of wrap strip to be recessed into opening with the bottom surface of wrap strips extending 1-/2 to 1 in. (13 to 25 mm) below bottom of lower top plate.
- **PASSIVE FIRE PROTECTION PARTNERS** -- WS1
- B. Fill, Void or Cavity Material\*-Sealant -- Min 3/4 in. (19 mm) thickness of fill material applied within the annulus, flush with top surface of floor or sole plate. Min 5/8 in. (16 mm) thickness of fill material applied within any annular space between the wrap strip and edge of opening, flush with the bottom of lower top plate
- **PASSIVE FIRE PROTECTION PARTNERS** -- 3600EX
- C. Foil Tape -- (Not shown) Nom 4 mil by 4 in. (102 mm) wide foil tape wrapped tightly around the exposed portion of the wrap strip and overlapped onto lower top plate and pipe a min 1 in. (25 mm). Number or Wrap

PVC, CPVC, ABS 5. Water Closet -- Floor mounted vitreous china water closet.

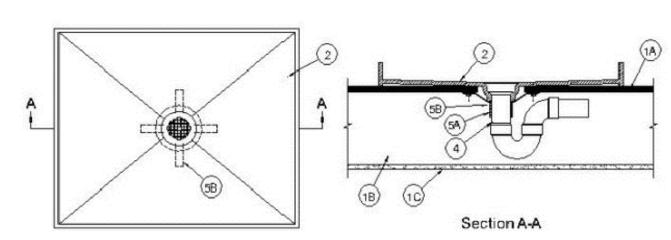
\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively

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<u>Last Updated</u> on 2008-04-08

## FLOOR PENETRATION U.L. SYSTEM NO. F-C-2095

System No. F-C-2351 F Rating -- 1 Hr T Rating -- 1 Hr



1. Floor-Ceiling Assembly -- The 1 hr fire-rated wood joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Designs in the UL Fire Resistance Directory, as summarized below:

- A. Flooring System -- Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture\* as specified in the individual Floor-Ceiling Design. Max diam of opening is 6 in. (152 mm).
- B. Wood Joists -- Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members\* with bridging as required and with ends firestopped
- C. Gypsum Board\* -- Thickness, type, number of layers and fasteners as required in the individual Floor-Ceiling Design.
- 2. Plastic Plumbing Fixtures + Shower Base Receptor -- One-piece molded nonmetallic shower base receptor with stainless steel drain plate. Shower base receptor to be installed in accordance with the manufacturer's instructions.
- TILE-REDI USA L L C -- Model 3360L, 3360R, 37NEO, 3737, 4837, 4837ADA, 4837MB or 4848 3. Tile -- (Not Shown) - Ceramic or stone tile applied to shower pan floor with epoxy adhesive in accordance with shower base receptor installation
- 4.Nonmetallic Pipe -- Nom 2 in. (51 mm) diam Schedule 40 solid or cellular core PVC pipe solvent-welded into drain in the bottom of the shower base receptor and centered in the floor opening.
- 5. Firestop System -- The details of the firestop system shall be as follows: A. Fill, Void or Cavity Materials\* - Wrap Strip -- Nom 1/8 in. (3.2 mm) thick intumescent material supplied in 2 in. (51 mm) wide strips. Single layer of
  - wrap strip tightly wrapped around nonmetallic drain pipe (Item 4) with a butted seam and with the top edge of the wrap strip abutting the hub of the shower drain. Wrap strip layer temporarily held in position using tape. 3M COMPANY 3M FIRE PROTECTION PRODUCTS -- Ultra GS

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- B. Steel Collar -- Nom 2 in. (51 mm) deep collar with 1-1/4 in. (32 mm) wide by 2 in. (51 mm) long anchor tabs and tabs to retain wrap strip layer. Coils of precut 0.016 in. (0.41 mm) thick (28 gauge) galv sheet steel available from wrap strip manufacturer. Steel collar, with anchor tabs bent outward 90 deg, wrapped tightly around wrap strip with min 1 in. (25 mm) overlap at seam. Anchor tabs to be pressed tightly against hub of shower drain and collar to be compressed around wrap strip using a min 1/2 in. (13 mm) wide stainless steel clamp at the collar midheight. Collar to be secured to underside of flooring system with steel screws with min 1-1/4 in. (32 mm) diam steel washers in conjunction with steel extension straps. Hanger tab
- extension straps to be fabricated from min 0.022 in. (0.6 mm) thick galv sheet steel. Taper straps from 1/4 in. (6 mm) wide to 1 in. (25 mm) wide with sufficient length to allow 1-1/2 to 2 in. (38 to 51 mm) lap onto floor. Straps secured to collar by inserting min 1 in. (25 mm) length of 1/4 in. (6 mm) wide end into hole on mounting tab and bending 180 degrees. Min of two anchor screws, diametrically opposed, are required.

FLOOR PENETRATION

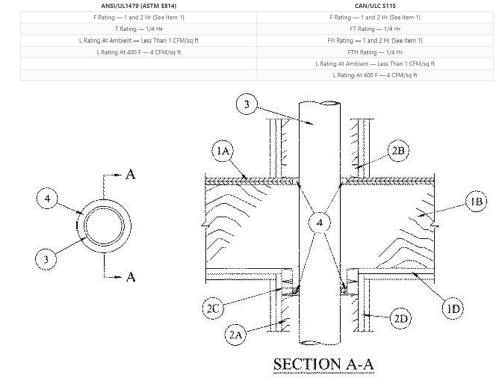
U.L. SYSTEM NO. F-C-2351

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

<u>Last Updated</u> on 2009-01-12

### MARCH 08, 2018 F Ratings -- 1 and 2 Hr (See Item 1) T Ratings -- 1/4 Hr (See Item 1)

System No. F-C-1009



1.FLOOR-CEILING ASSEMBLY -- THE 1 OR 2 HR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES FLOOR-CEILING DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY. THE F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE RATING OF THE FLOOR-CEILING ASSEMBLY. THE GENERAL CONSTRUCTION FEATURES OF THE

- A. FLOORING SYSTEM -- LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR FLOOR TOPPING MIXTURE\* AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. DIAM OF OPENING TO BE MAX 1 IN. (25 MM) LARGER THAN DIAM OF PIPE. AS AN ALTERNATE, THE OPENING MAY BE SQUARE-CUT WITH A MAX DIMENSION 1 IN. (25 MM) GREATER THAN THE DIAM OF THE PIPE.
- B. WOOD JOISTS\* -- NOM 10 IN. (254 MM) DEEP (OR DEEPER) LUMBER. STEEL OR COMBINATION LUMBER AND STEEL JOISTS. TRUSSES OR STRUCTURAL WOOD MEMBERS\* WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED.
- C. FURRING CHANNELS -- (NOT SHOWN) -- (AS REQUIRED ) RESILIENT GALVANIZED STEEL FURRING INSTALLED IN ACCORDANCE WITH THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES DESIGNS IN THE FIRE RESISTANCE DIRECTORY.
- D. GYPSUM BOARD\* -- THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. DIAM OF OPENING TO BE MAX 1 IN. (25 MM) LARGER THAN DIAM OF PIPE.
- 2.CHASE WALL -- (OPTIONAL) THE THROUGH PENETRANT (ITEM 3) MAY BE ROUTED THROUGH A FIRE RATED OR NON-RATED SINGLE, DOUBLE, OR STAGGERED WOOD STUD/GYPSUM BOARD CHASE WALL, DEPTH OF CHASE WALL TO BE MIN 1 IN, GREATER THAN THE DIAMETER OF THE THROUGH

PENETRANT THE CHASE WALL SHALL BE CONSTRUCTED TO INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

- A. STUDS -- NOM 2 BY 4 IN. (51 BY 102 MM), 2 BY 6 IN. (51 BY 152 MM) OR DOUBLE NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER STUDS. NOM 2 BY 4 IN. (51 BY 102 MM) STUDS ARE ALLOWED FOR THROUGH-PENETRANTS (ITEM 3) NOT EXCEEDING NOM 2 IN. (51 MM) DIAM.
- B. SOLE PLATE -- NOM 2 BY 4 IN. (51 BY 102 MM), 2 BY 6 IN. (51 BY 152 MM) OR PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. DIAM OF OPENING IS TO BE MAX 1 IN. (925 MM) LARGER THAN DIAM OF PIPE. AS AN ALTERNATE, THE OPENING MAY BE SQUARE-CUT WITH A MAX DIMENSION 1 IN. (25 MM) GREATER THAN THE DIAM OF THE PIPE. PLATES MAY BE DISCONTINUOUS OVER OPENING, TERMINATING AT TWO OPPOSING EDGES OF OPENING. MAX LENGTH OF DISCONTINUITY TO BE 1 IN. (25 MM) GREATER THAN DIAM OF THROUGH PENETRANT.
- C. TOP PLATE -- THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 4 IN. (51 BY 102 MM), 2 BY 6 IN. (51 BY 152 MM) OR TWO SETS OF PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. DIAM OF OPENING IS TO BE MAX 1 IN. (25 MM) LARGER THAN DIAM OF PIPE. AS AN ALTERNATE, THE OPENING MAY BE SQUARE-CUT WITH A MAX DIMENSION 1 IN. (25 MM) GREATER THAN THE DIAM OF THE PIPE. PLATES MAY BE DISCONTINUOUS OVER OPENING, TERMINATING AT TWO OPPOSING EDGES OF OPENING. MAX LENGTH OF DISCONTINUITY TO BE 1 IN. (25 MM) GREATER THAN DIAM OF THROUGH PENETRANT.
- D. GYPSUM BOARD\* -- ONE OR TWO LAYERS OF MIN 1/2 IN. (13 MM) GYPSUM BOARD.
- E. STEEL PLATE -- (NOT SHOWN) WHEN LUMBER PLATES ARE DISCONTINUOUS. NOM 1-1/2 IN. (38 MM) WIDE NO. 20 GAUGE (OR HEAVIER) GALV STEEL PLATES SHALL BE INSTALLED TO CONNECT EACH DISCONTINUOUS LUMBER PLATE AND TO PROVIDE A FORM FOR THE FILL MATERIAL. STEEL PLATES SIZED TO LAP 2 IN. (51 MM) ONTO EACH DISCONTINUOUS LUMBER PLATE AND SECURED TO LUMBER PLATES WITH STEEL SCREWS OR NAILS. THROUGH PENETRANTS -- ONE METALLIC PIPE. CONDUIT OR TUBING TO BE INSTALLED WITHIN THE FIRESTOP SYSTEM, PIPE. CONDUIT OR TUBING TO
- BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR ASSEMBLY. THE ANNULAR SPACE WITHIN THE FIRESTOP SYSTEM SHALL BE MIN 0 IN. (POINT CONTACT) TO MAX 1 IN. (25 MM). THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES OR CONDUITS MAY BE USED: A. STEEL PIPE -- NOM 4 IN. (102 MM) DIAM (OR SMALLER) SCHEDULE 10 (OR HEAVIER) STEEL PIPE
  - B. IRON PIPE -- NOM 4 IN. (102 MM) DIAM (OR SMALLER) CAST OR DUCTILE IRON PIPE
- C. CONDUIT -- NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR STEEL CONDUIT. D. COPPER TUBING -- NOM (102 MM) 4 IN. DIAM (OR SMALLER) TYPE L (OR HEAVIER) COPPER TUBING.
- E. COPPER PIPE -- NOM (102 MM) 4 IN. DIAM (OR SMALLER) REGULAR (OR HEAVIER) COPPER PIPE.
- 4.FILL, VOID OR CAVITY MATERIAL\* -- SEALANT -- MIN 3/4 IN. (19 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH THE TOP SURFACE OF THE FLOOR OR THE SOLE PLATE. MIN 5/8 IN. (16 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTTOM SURFACE OF CEILING OR LOWER TOP PLATE.
- HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- CP601S, CFS-S SIL GG, CP606, FS-ONE SEALANT OR FS-ONE MAX INTUMESCENT SEALANT (NOTE: L RATINGS APPLY ONLY WHEN FS-ONE SEALANT IS USED.

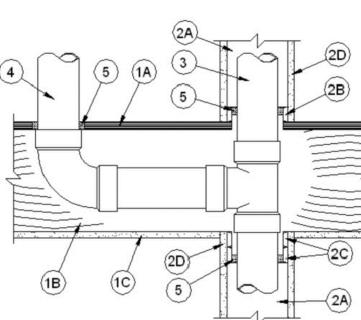
\* INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY. LAST UPDATED ON 2018-03-08

"REPRINTED FROM THE ONLINE CERTIFICATIONS DIRECTORY WITH PERMISSION FROM UL" MUST APPEAR ADJACENT TO THE EXTRACTED MATERIAL. IN ADDITION, THE REPRINTED MATERIAL MUST INCLUDE A COPYRIGHT NOTICE IN THE FOLLOWING FORMAT: "© 2020 UL LLC"

## FLOOR PENETRATION U.L. SYSTEM NO. F-C-1009

# December 08, 2008 F Rating -- 1 Hr T Rating -- 0 Hr

System No. F-C-2027



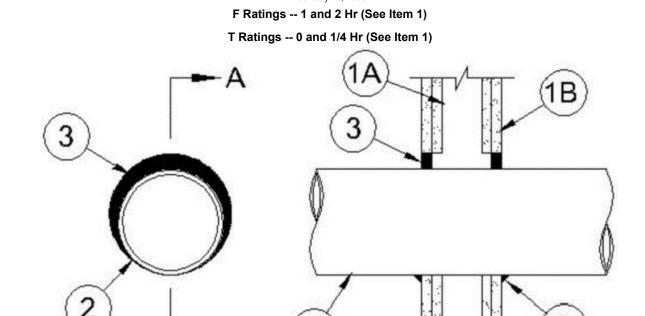
. Floor Assembly -- The 1 hr fire rated wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual L500 Series Design in the UL Fire Resistance Directory, as summarized below:

- A. Flooring System -- Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture\* as specified in the individual Floor-Ceiling Design. Diam of opening shall be 1/2 in. to 1 in. (13 to 25 mm) larger than the outside diam of nonmetallic pipe (Items 3 and 4). B. Joists -- Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood Members\* with bridging as
- . Gypsum Board\* -- Nom 4 ft (1.2 m) wide by 5/8 in. (16 mm) thick, attached as described in the individual Floor-Ceiling Design 2. Chase Wall -- The through penetrant (Item 3) shall be routed through a 1 hr fire rated single, double or staggered wood studs/gypsum board chase wall constructed of
- the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following A. **Studs** -- Nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber studs.
- B. Sole Plate -- Nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber plates. Diam of opening or length of notch-out in sole plate to be 1/2 in. to 1 in. (13 to 25 mm) larger than outside diam of pipe.
- C. Top Plate -- The double top plate shall consist of two nom 2 by 4 in. (51 by 102 mm) or 2 by 6 in. (51 by 152 mm) lumber plates. Diam of opening or length of notch-out in top plate to be 1/2 in. to 1 in. (13 to 25 mm) larger than outside diam of pipe.
- D. Gypsum Board\* -- Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design. 8. Through Penetrant -- One nonmetallic pipe to be installed within the firestop system. Pipe to be rigidly supported on both sides of floor-ceiling assembly. The annular space between pipe and periphery of opening shall be min 0 in. (point contact) to max 1/2 in. (0 to max 13 mm). The following types and sizes of nonmetallic pipes may be
- A. Polyvinyl Chloride (PVC) Pipe -- Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system.
- B. Acrylonitrile Butadiene Styrene (ABS) Pipe -- Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core or cellular core ABS pipe for use in closed (process or supply) or vented (drain, waste or vent) piping system. 4.Branch Piping -- (Optional) - One nonmetallic pipe to be connected to through penetrant (Item 3) and installed within opening in subfloor. The annular space between
- pipe and periphery of opening shall be min 0 in. (point contact) to max 1/2 in. (13 mm). The following types and sizes of nonmetallic pipes may be used: A. Polyvinyl Chloride (PVC) Pipe -- Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core or cellular core PVC pipe for use in closed (process or supply) or vented (drain, waste or vent) piping systen
- B. Acrylonitrile Butadiene Styrene (ABS) Pipe -- Nom 3 in. (76 mm) diam (or smaller) Schedule 40 solid core or cellular core ABS pipe for use in closed (process or 5.Fill, Void or Cavity Materials\* -- Caulk or Sealant -- Min 3/4 in. (19 mm) thickness of fill material applied within annular space around perimeter of through penetrant
- (Item 3), flush with top surface of floor or sole plate and flush with bottom surface of top plate. Min 3/4 in. (19 mm) thickness of fill material applied within annular space around perimeter of branch piping (Item 4) flush with top surface of floor. Min 1/2 in. (13 mm) diam bead applied at the pipe/floor interface and the pipe/plate interface. SPECIFIED TECHNOLOGIES INC -- SpecSeal Series SSS Sealant, SpecSeal LCI Sealant or Type WF300 Firestop Caulk
- \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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## FLOOR PENETRATION U.L. SYSTEM NO. F-C-2027

System No. W-L-1296



1. Wall Assembly -- The 1 or 2 hr fire rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner described in the individual U300, U400 or V400 Series Wall and Partition Design in the UL Fire Resistance Directory and shall include the following construction features:

B. Gypsum Board\* -- The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual U300, U400 or V400 Series Design in the UL Fire Resistance Directory. Max diam of opening is 10-5/8 in. (270 mm). C. Steel Sleeve -- (Optional, Not Shown) - Cylindrical sleeve fabricated from min 0.019 in, thick (0.48 mm) galv sheet steel and having a min 2 in, (51 mm) lap along

the longitudinal seam. Length of steel sleeve to be equal to thickness of wall. Sleeve installed by coiling the sheet steel to a diam smaller than the through opening,

A. Studs -- Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in.

inserting the coil through the openings and releasing the coil to let it uncoil against the circular cutouts in the gypsum wallboard layers. The hourly F Rating of the firestop system is equal to the hourly fire rating of the wall assembly in which it is installed. The hourly T Rating is 0 and 1/4 Hr for 1

2. Through-Penetrants -- One metallic pipe, conduit, tubing or flexible metal pipe installed concentrically or eccentrically within opening. Annular space between penetrant and periphery of opening to be min 0 in. (0 mm point contact) to max 2 in. (51 mm). Penetrant to be rigidly supported on both sides of wall. The following types and sizes of penetrants may be used:

- A. Steel Pipe -- Nom 8 in. (203 mm) diam (or smaller) Schedule 5 (or heavier) steel pipe. B. Iron Pipe -- Nom 8 in. (203 mm) diam (or smaller) cast or ductile iron pipe.
- C. Conduit -- Nom 4 in. (102 mm) diam (or smaller) steel electrical metallic tubing (EMT) or nom 6 in. (152 mm) rigid steel conduit.
- D. **Copper Tubing** -- Nom 4 in. (102 mm) diam (or smaller) Type L (or heavier) copper tubing. E. Copper Pipe -- Nom 4 in. (102 mm) diam (or smaller) Regular (or heavier) copper pipe.

(406 mm) OC. Steel studs to be min 3-1/2 in. (89 mm) wide spaced max 24 in. (610 mm) OC.

- F. Through Penetrating Product\*-Flexible Metal Piping -- The following types of steel flexible metal gas piping may be used:
- 1.) Nom 2 in. (51 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall **OMEGA FLEX INC**
- 2.) Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall GASTITE, DIV OF TITEFLEX
- 3.) Nom 1 in. (25 mm) diam (or smaller) steel flexible metal gas piping. Plastic covering on piping may or may not be removed on both sides of floor or wall WARD MFG L L C 3. Fill, Void or Cavity Material\* - Caulk or Sealant -- Min 5/8 in. (16 mm) thickness of caulk applied within annulus, flush with both surfaces of wall. Min 1/4 in. (6 mm)
- 3M COMPANY -- IC 15WB+, CP 25WB+ caulk or FB-3000 WT sealant \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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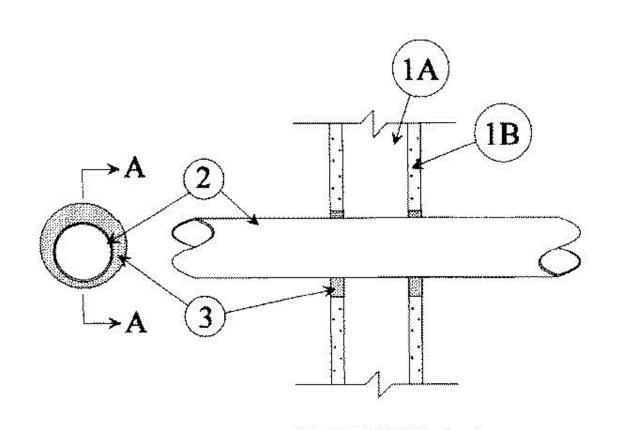
WALL PENETRATION

diam bead of caulk applied to gypsum board/penetrant interface at point contact location on both sides of wall.

U.L. SYSTEM NO. W-L-1296

System No. W-L-2126 December 07, 2002 F Ratings -- 1, 2, 3 and 4 Hr (See Item 1)

T Ratings -- 1, 2, 3 and 4 Hr (See Item 1)



## **SECTION A-A**

1. Wall Assembly -- The 1, 2, 3 or 4 hr fire-rated gypsum board/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300 or U400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features: A. Studs -- Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. lumber spaced 16 in. OC. Steel studs to be min 3-5/8 in. wide and spaced max 24 in. OC.

B. Gypsum Board\* -- The gypsum board type, thickness, number of layers, fasteners type and sheet orientation shall be as specified in the individual U300 or U400 Series Design. In the UL Fire Resistance Directory. Max diam of opening is 3-1/8 in. The hourly F and T Ratings of the firestop system is equal to the hourly fire rating of the assembly in which it is installed. 2. Through Penetrants -- One nonmetallic pipe or tubing installed either concentrically or eccentrically within the firestop system. Pipe or tubing to be rigidly

A. Chlorinated Polyvinyl Chloride (CPVC) Pipe -- Nom 2 in. diam (or smaller) SDR 11 CPVC pipe for use in closed (process or supply) piping systems The annular space between pipe and periphery of opening shall be min 1/4 in. to max 1/2 in. B. Crosslinked Polyethylene (PEX) Tubing -- Nom 1-1/2 in. diam (or smaller) SDR 9 PEX tubing for used in closed (process or supply) piping systems

supported on both sides of wall assembly. The following types and sizes of nonmetallic pipes or tubing may be used:

The annular space between tubing and periphery of opening shall be min 1/4 in. to max 3/8 in. C. Polyvinyl Chloride (PVC) Pipe -- Nom 2 in. diam (or smaller) Schedule 40 solid or cellular core PVC pipe for use in closed (process or supply) piping 3.Fill, Void or Cavity Material\* -- Sealant -- Min 5/8 in. thickness of fill material for a 1 hr rated wall assembly, min 1 in. thickness of fill material for 2, 3 and

PASSIVE FIRE PROTECTION PARTNERS -- 3600EX, 4800DW \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

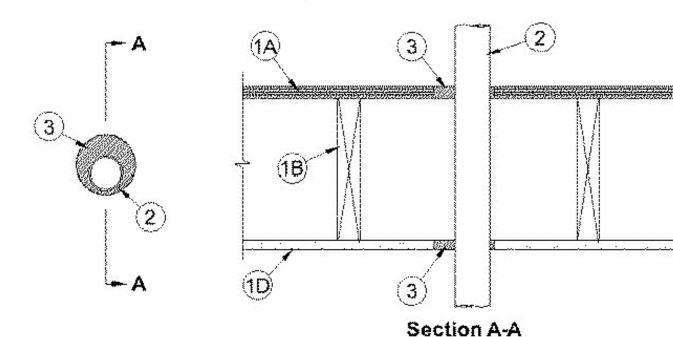
<u>Last Updated</u> on 2008-12-08

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4 hr rated wall assemblies applied within the annulus, flush with both surfaces of wall.

### WALL PENETRATION U.L. SYSTEM NO. W-L-2126

System No. F-C-2309 August 26, 2004 F Rating -- 1 Hr T Ratings -- 1/4 and 1 Hr (See Item 2)



1. Floor-Ceiling Assembly -- The 1 hr fire-rated wood joist, wood truss or combination wood and steel truss Floor-Ceiling assembly shall be constructed of the materials and in the manner described in the individual L500 Series Design in the UL Fire Resistance Directory and shall include the following construction features A. Flooring System -- Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture\* as specified in the individual Floor-Ceiling Design. Max diam of floor opening is 3-3/8 in. (92 mm).

B. Joists -- Nom 2 by 10 in. (51 by 254 mm) deep (or deeper) lumber joists spaced 16 in. (406 mm) OC with nom 1 by 3 in. (25 by 76 mm) lumber bridging and with ends firestopped or steel or combination lumber and steel joists, trusses or **Structural Wood Members\*** with bridging as required and with ends

C. Furring Channels -- (Not Shown) - Resilient galv steel furring channels installed perpendicular to wood joists (Item 1B) as required in the individual Floor-Ceiling Design. D. Gypsum Board\* -- Nom 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Max diam of opening is 3-3/8 in. (92 mm).

1.1 Chase Wall -- (Optional, Not Shown) - The through penetrant (Item 2) may be routed through a 1 hr fire-rated single, double or staggered wood stud/gypsum wallboard chase wall constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features:

A. **Studs --** Nom 2 by 6 in. (51 by 152 mm), or double nom 2 by 4 in. (51 by 102 mm) lumber studs. B. Sole Plate -- Nom 2 by 6 in. (51 by 152 mm), or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max diam of opening is 3-3/8 in. (92 mm). C. Top Plate -- The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly

butted. Max diam of opening is 3-3/8 in. (92 mm). D. Gypsum Board\* -- Thickness, type, number of layers and fasteners shall be as specified in the individual Wall and Partition Design. 2. Through Penetrant -- One nonmetallic pipe to be installed eccentrically or concentrically within the firestop system. The annular space between the nonmetallic pipe and edge of through opening shall be min 1/4 in. to max 3/4 in. (6 to 19 mm). Pipe, conduit or tubing to be rigidly supported on both sides of the floor-ceiling

assembly. The following types and sizes of metallic pipes, conduits and tubes may be used: A. Chlorinated Polyvinyl Chloride (CPVC) Pipe -- Nom 2 in. (51 mm) diam (or smaller) SDR13.5 CPVC pipe for use in closed (process or supply) piping

B. Polyvinyl Chloride (PVC) Pipe -- Nom 2 in. (51 mm) diam (or smaller) Schedule 40 solid-core PVC pipe for use in closed (process or supply) or vented

C. Rigid Nonmetallic Conduit+ -- Nom 2 in. (51 mm) diam (or smaller) Schedule 40 PVC conduit installed in accordance with Article 347 of the National Electrical Code (NFPA 70). D. Cross-Linked Polyethylene (PEX) Tubing -- Nom 1 in. (25 mm) diam (or smaller) SDR9 PEX tubing for used in closed (process or supply) piping systems

E. Polybutylene (PB) Pipe -- Nom 1 in. (25 mm) diam (or smaller) SDR11 PB pipe for use in closed (process or supply) piping systems. F. Cross-Linked Polyethylene Aluminum Cross-Linked Polyethylene (PEX-AL-PEX) Tubing -- Nom 1 in. (25 mm) diam (or smaller) SDR 5 PEX-AL-PEX tubing for use in closed (process or supply) piping systems.

When Items A, B, C, D and E are used, the chase wall is optional. When Item F is used, the chase wall is required. When nom diam of pipe exceeds 1 in. and chase wall is not used, the hourly T Rating is 1/4 hr. Otherwise, the T Rating is 1 hr. 3.Fill, Void or Cavity Material\* - Caulk -- Min 3/4 in. (19 mm) thickness of fill material applied within annulus on top surface of floor. Min 5/8 in. (16 mm) thickness of fill material applied within annulus on bottom surface of ceiling or lower top plate of chase wall assembly.

Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

FLOOR PENETRATION

U.L. SYSTEM NO. F-C-2309

<u>Last Updated</u> on 2004-08-26

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**HCC HOLDINGS INC -- Hercules Plumbers Firestop Sealant** 

**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE **PLANNING DESIGN** 

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

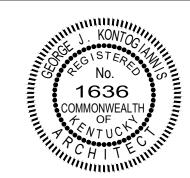
PROJECT:

SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B"

11125 EDWARDS RD. ELSMERE, KY 41018

**DRAWING TITLE:** PLUMBING FIRE STOP SYSTEMS

DATE: 07/31/2023 REVISED:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023

CONSTRUCTION SET

WALL LOUVERS IN STONE & SIDING SHALL BE HOODED PRE-FINISHED VINYL BY MID-AMERICA COMPANY (W/ BACKDRAFT DAMPER). COLOR TO MATCH STONE & SIDING.

BATH EXHAUST - 4" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & SCREEN.

<u>DRYER EXHAUST</u> - DRYER EXHAUST - 4" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & NO SCREEN.

RANGE EXHAUST - RANGE EXHAUST - 6" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & SCREEN.

FRESH AIR - FRESH AIR - 4" ROUND HOODED VENT W/ LOCKING DAMPER & SCREEN, SEE PLANS.

SOFFIT VENTS SHALL BE PRE-FINISHED VINYL (WHITE) AS MANUFACTURED BY PRIMEX MANUFACTURING LTD. AS FOLLOWS:

BATH EXHAUST - RDV-4" ROUND W/ SCREEN. USE EB4x90 ELBOW AS NEEDED.

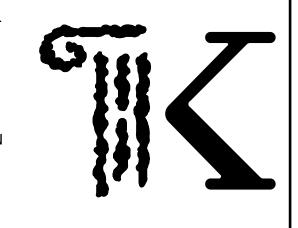
<u>DRYER EXHAUST</u> - SV28NS (NO SCREEN) & BACKDRAFT DAMPER

RANGE EXHAUST - SV28-6" W/ SCREEN & BACKDRAFT DAMPER

FRESH AIR - RDV-4" ROUND W/ SCREEN. USE EB4x90 ELBOW AS NEEDED.

### GENERAL NOTES:

- ADJUST ALL RESISTERS AS NEEDED TO MISS TRUSSES
   ADD BLOCKING AS NEEDED TO SECURE RESISTERS.
- ADD BEOOKING AG NEEDED TO GEGORE REGIOTERO.
   PLACE SUPPLY AIR PLENUMS IN TRUSS SPACE ADJUST AS NEEDED TO MISS TRUSSES.
- 4. PROVIDE PRE-FINISHED CAP TO MATCH WITH BACKDRAFT DAMPER FOR ALL EXHAUST LOUVERS.
- LINESETS THROUGH FLOOR TRUSS SPACES AND DOWN WALLS.
- 6. UNDER-CUT DOOR 1" FOR RETURN AIR (TYPICAL).
- 7. MAINTAIN 3'-0" FROM OPERABLE OPENINGS INTO BUILDINGS FOR ALL EXHAUST LOUVERS.
- 8. ALL THIRD FLOOR EXHAUST & FRESH AIR SHALL BE IN SOFFIT.



**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE PLANNING DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

PROJECT:

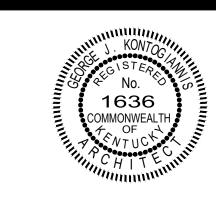
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:

BUILDING FIRST FLOOR HVAC PLAN

DATE: 07/31/2023 REVISED:



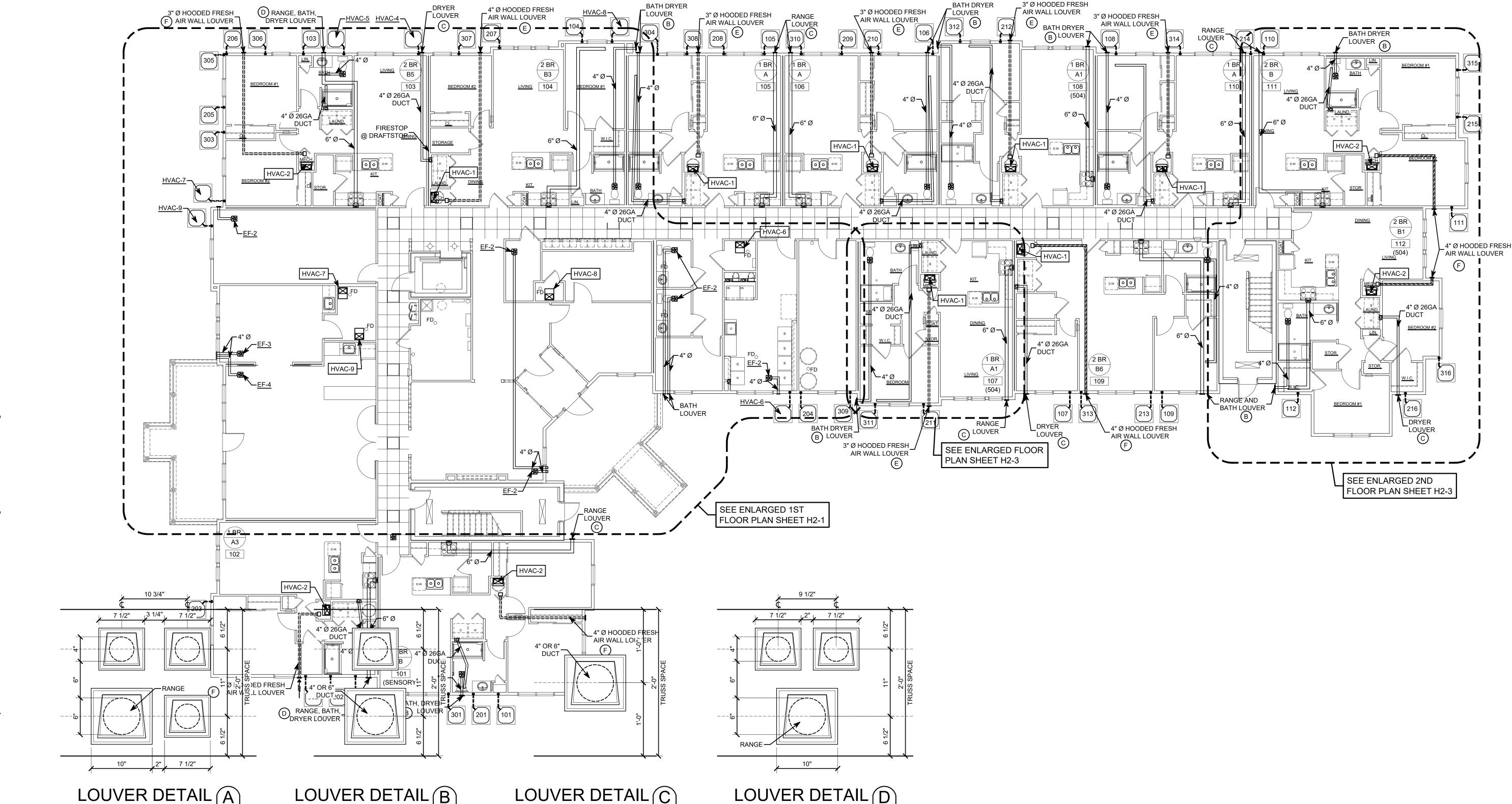
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☐ SUBMISSION SET
☐ PERMIT SET 07/31/2023

BID SET 11/08/2023

CONSTRUCTION SET

H1-1



E SIM. (3" Ø)

F SIM. (4" Ø)

SCALE: 1 1/2" = 1'-0"

WALL LOUVERS IN STONE & SIDING SHALL BE HOODED PRE-FINISHED VINYL BY MID-AMERICA COMPANY (W/ BACKDRAFT DAMPER). COLOR TO MATCH STONE & SIDING.

BATH EXHAUST - 4" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & SCREEN.

DRYER EXHAUST - DRYER EXHAUST - 4" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & NO SCREEN.

RANGE EXHAUST - RANGE EXHAUST - 6" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & SCREEN.

FRESH AIR - FRESH AIR - 4" ROUND HOODED VENT W/ LOCKING DAMPER & SCREEN, SEE PLANS.

SOFFIT VENTS SHALL BE PRE-FINISHED VINYL (WHITE) AS MANUFACTURED BY PRIMEX

BATH EXHAUST - RDV-4" ROUND W/ SCREEN. USE EB4x90 ELBOW AS NEEDED.

MANUFACTURING LTD. AS FOLLOWS:

DRYER EXHAUST - SV28NS (NO SCREEN) & BACKDRAFT DAMPER

RANGE EXHAUST - SV28-6" W/ SCREEN & BACKDRAFT DAMPER

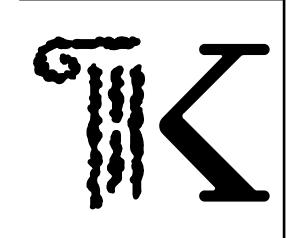
FRESH AIR - RDV-4" ROUND W/ SCREEN. USE EB4x90 ELBOW AS NEEDED.

### **GENERAL NOTES:**

WALLS.

- ADJUST ALL RESISTERS AS NEEDED TO MISS TRUSSES
   ADD BLOCKING AS NEEDED TO SECURE RESISTERS.
- PLACE SUPPLY AIR PLENUMS IN TRUSS SPACE ADJUST AS NEEDED TO MISS TRUSSES.
- 4. PROVIDE PRE-FINISHED CAP TO MATCH WITH
- BACKDRAFT DAMPER FOR ALL EXHAUST LOUVERS.

  5. LINESETS THROUGH FLOOR TRUSS SPACES AND DOWN
- 6. UNDER-CUT DOOR 1" FOR RETURN AIR (TYPICAL).
- MAINTAIN 3'-0" FROM OPERABLE OPENINGS INTO BUILDINGS FOR ALL EXHAUST LOUVERS.
- 8. ALL THIRD FLOOR EXHAUST & FRESH AIR SHALL BE IN SOFFIT



**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE PLANNING DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

PROJECT:

SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:

BUILDING SECOND FLOOR HVAC PLAN

DATE: 07/31/2023 REVISED:

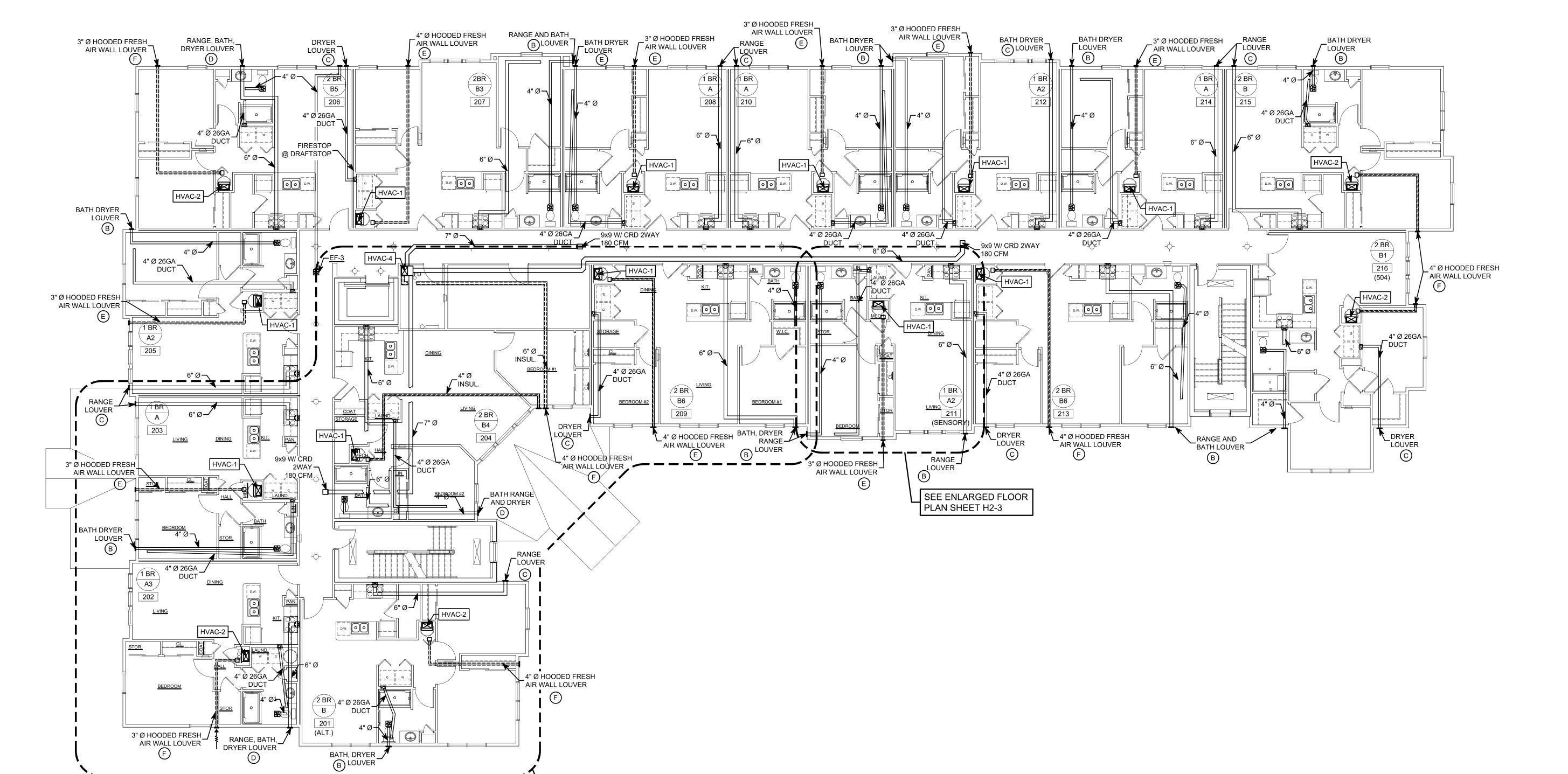


GEORGE J. KONTOGIANNIS, LICENSE #1636
EXPIRATION DATE 06/30/2024

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SUBMISSION SET
PERMIT SET 07/31/2023
BID SET 11/08/2023
CONSTRUCTION SET

H1-2



SEE ENLARGED 2ND

FLOOR PLAN SHEET H2-2

WALL LOUVERS IN STONE & SIDING SHALL BE HOODED PRE-FINISHED VINYL BY MID-AMERICA COMPANY (W/ BACKDRAFT DAMPER). COLOR TO MATCH STONE & SIDING.

BATH EXHAUST - 4" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & SCREEN.

DRYER EXHAUST - DRYER EXHAUST - 4" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & NO SCREEN.

OCKLEN.

RANGE EXHAUST - RANGE EXHAUST - 6" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & SCREEN.

FRESH AIR - FRESH AIR - 4" ROUND HOODED VENT W/ LOCKING DAMPER & SCREEN, SEE PLANS.

SOFFIT VENTS SHALL BE PRE-FINISHED VINYL (WHITE) AS MANUFACTURED BY PRIMEX MANUFACTURING LTD. AS FOLLOWS:

BATH EXHAUST - RDV-4" ROUND W/ SCREEN. USE EB4x90 ELBOW AS NEEDED.

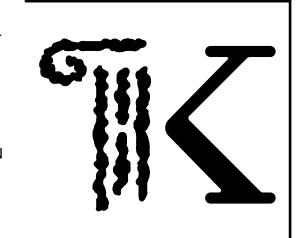
DRYER EXHAUST - SV28NS (NO SCREEN) & BACKDRAFT DAMPER

RANGE EXHAUST - SV28-6" W/ SCREEN & BACKDRAFT DAMPER

FRESH AIR - RDV-4" ROUND W/ SCREEN. USE EB4x90 ELBOW AS NEEDED.

### **GENERAL NOTES:**

- ADJUST ALL RESISTERS AS NEEDED TO MISS TRUSSES
   ADD BLOCKING AS NEEDED TO SECURE RESISTERS.
- PLACE SUPPLY AIR PLENUMS IN TRUSS SPACE ADJUST AS NEEDED TO MISS TRUSSES.
- PROVIDE PRE-FINISHED CAP TO MATCH WITH BACKDRAFT DAMPER FOR ALL EXHAUST LOUVERS.
- 5. LINESETS THROUGH FLOOR TRUSS SPACES AND DOWN WALLS.
- 6. UNDER-CUT DOOR 1" FOR RETURN AIR (TYPICAL).
- 7. MAINTAIN 3'-0" FROM OPERABLE OPENINGS INTO BUILDINGS FOR ALL EXHAUST LOUVERS.
- 8. ALL THIRD FLOOR EXHAUST & FRESH AIR SHALL BE IN SOFFIT.



**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE PLANNING DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

PROJECT:

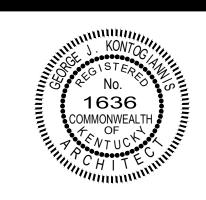
THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:

BUILDING THIRD FLOOR HVAC PLAN

DATE: 07/31/2023 REVISED:



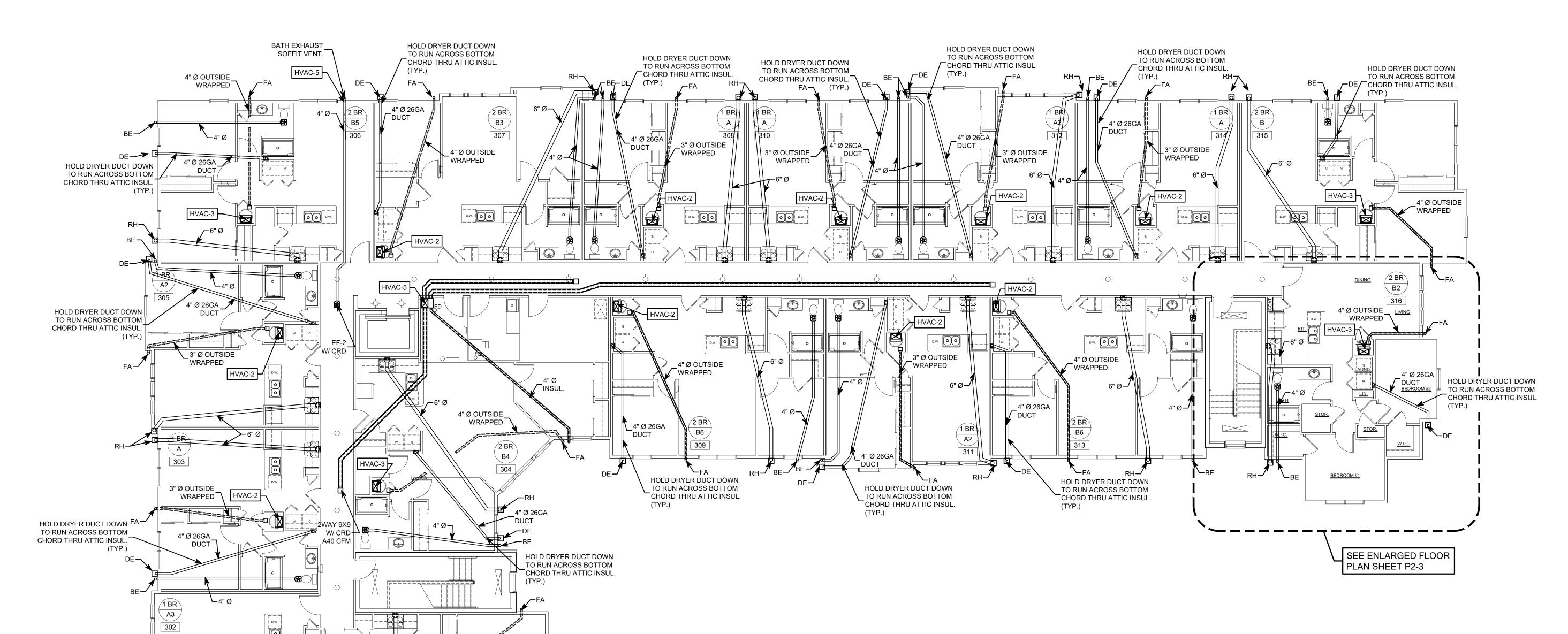
GEORGE J. KONTOGIANNIS, LICENSE #1636
EXPIRATION DATE 06/30/2024

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H1-3



4" Ø OUTSIDE

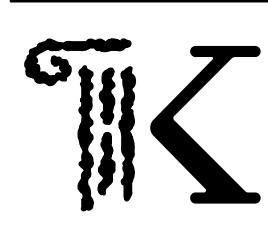
4" Ø 26GA

3" Ø OUTSIDE\_ WRAPPED

HOLD DRYER DUCT DOWN
TO RUN ACROSS BOTTOM
CHORD THRU ATTIC INSUL.

HOLD DRYER DUCT DOWN TO RUN ACROSS BOTTOM CHORD THRU ATTIC INSUL.

SCALE: 1/4" = 1'-0"



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400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

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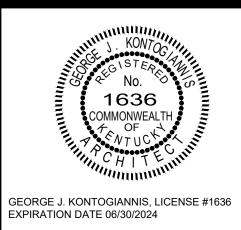
PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: **ENLARGED FIRST** FLOOR HVAC PLAN

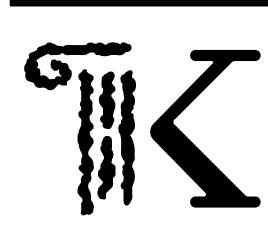
DATE: 07/31/2023 REVISED:



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H2-1



ARCHITECTURE PLANNING DESIGN

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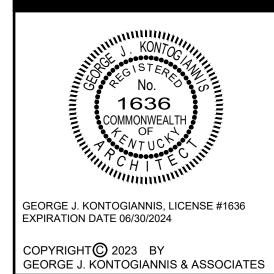
PROJECT:

THE
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ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
ENLARGED SECOND
FLOOR HVAC PLAN

DATE: 07/31/2023 REVISED:



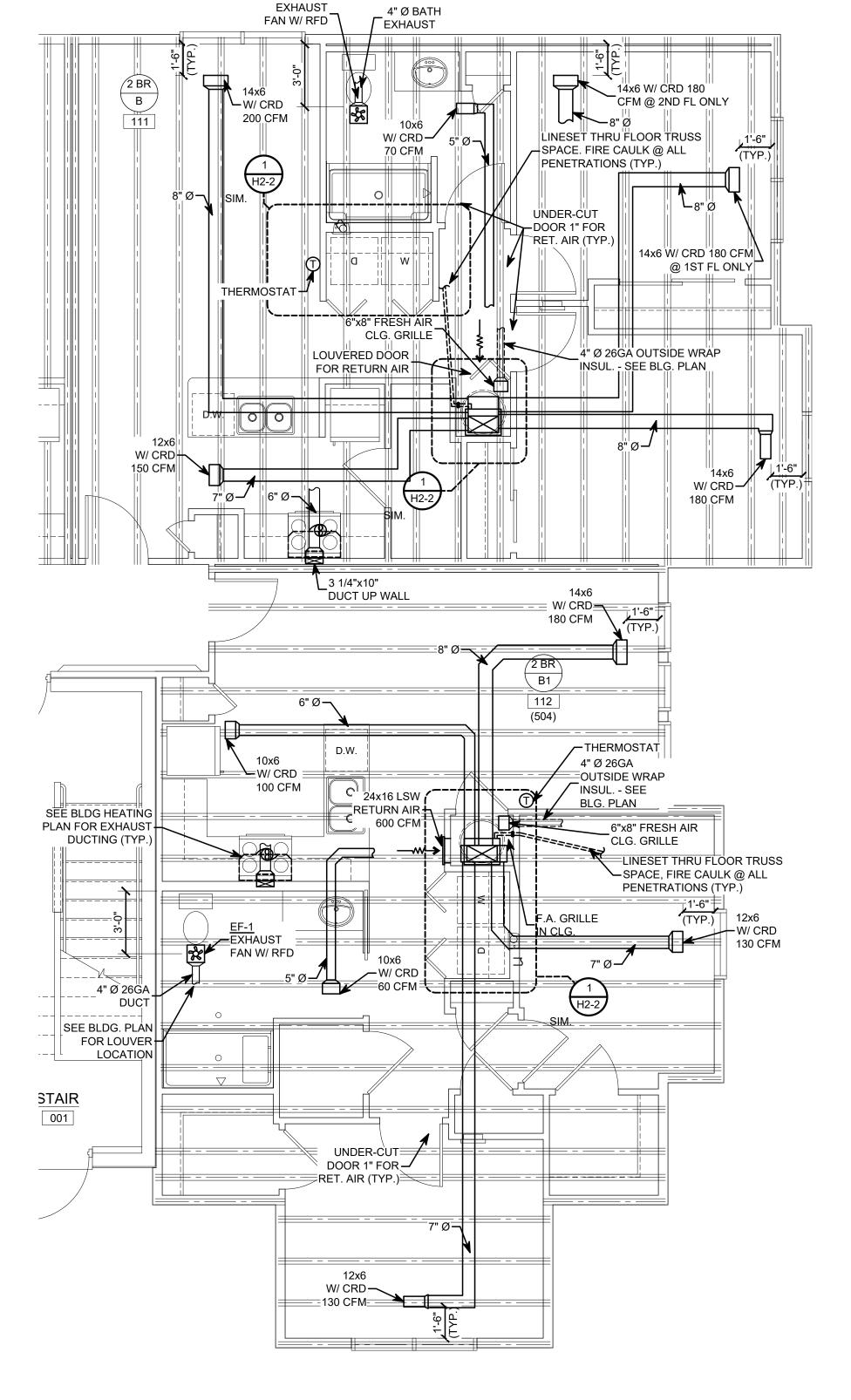
☐ SUBMISSION SET
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CONSTRUCTION SET

H2-2

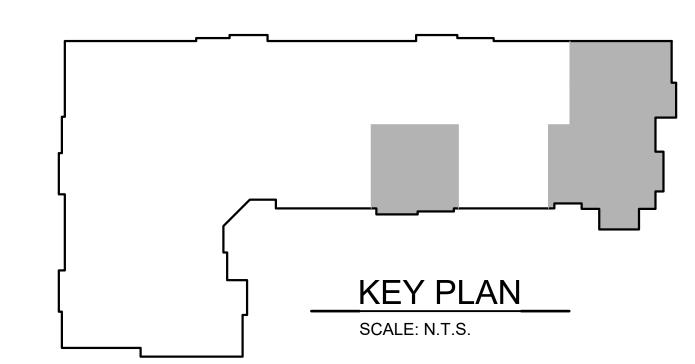
STACKED DRYER MAKE-UP AIR DETAIL (1)

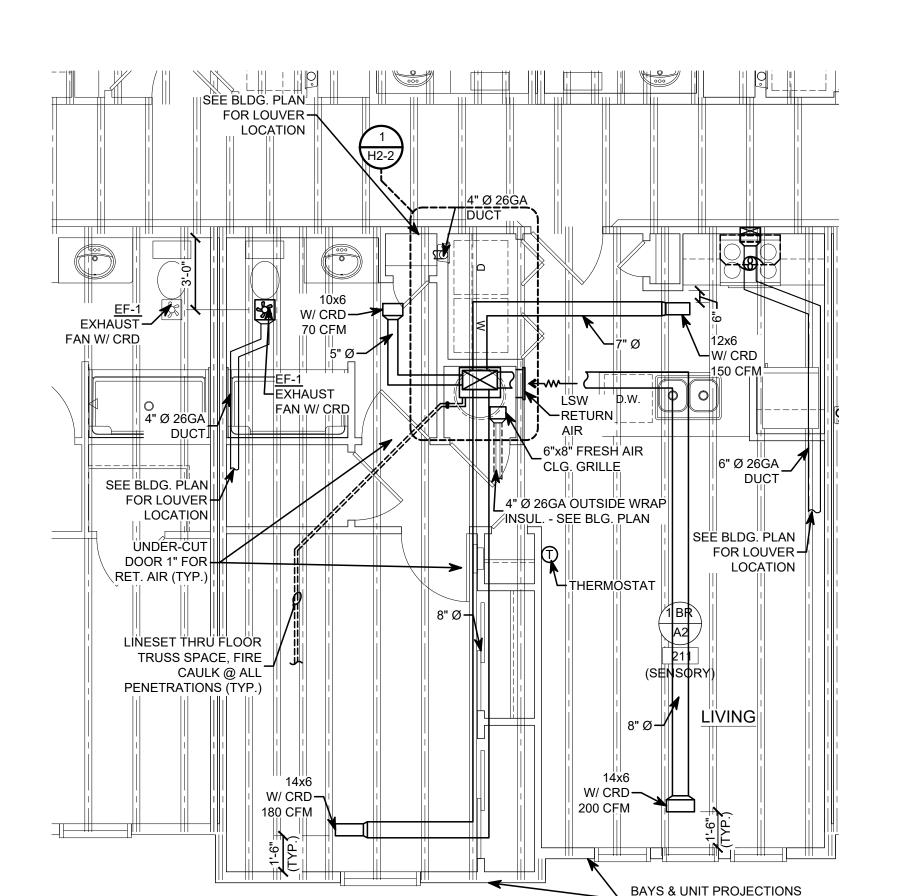
SCALE: 3/4" = 1'-0"



**ENLARGED FIRST &** SECOND FLOOR PLAN BB1

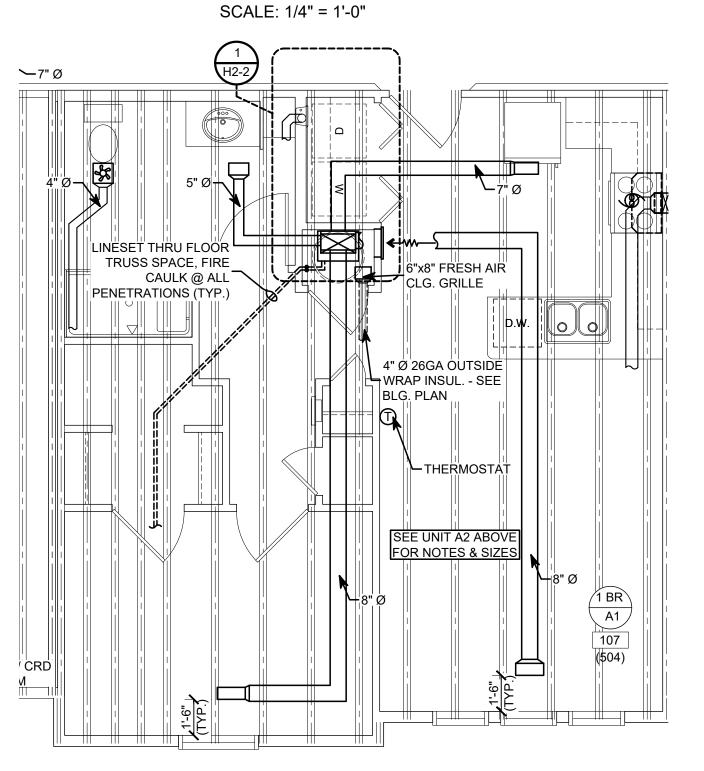
SCALE: 1/4" = 1'-0"





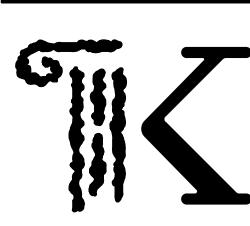
# ONE BEDROOM UNIT (A2)

VARY, SEE BLDG. PLANS



ONE BEDROOM UNIT (504) A1

SCALE: 1/4" = 1'-0"



# **KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE **PLANNING DESIGN** 

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

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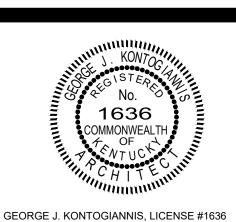
PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

**DRAWING TITLE: ENLARGED UNIT HVAC PLANS** 

DATE: 07/31/2023 REVISED:



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H2-3

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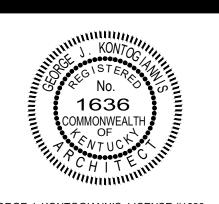
PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: **ENLARGED UNIT HVAC PLANS** 

DATE: 07/31/2023 **REVISED**:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

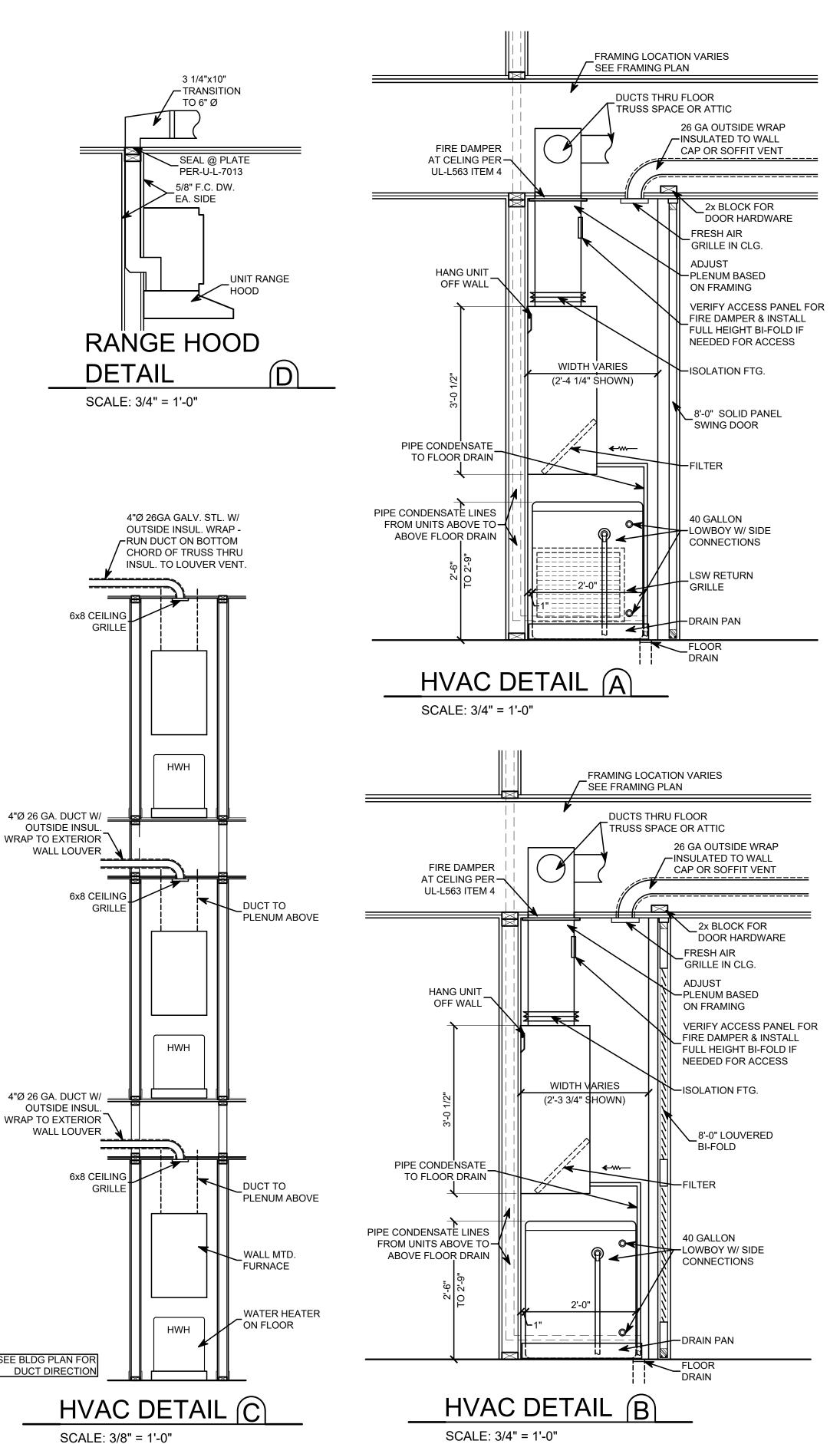
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TWO BEDROOM UNIT B3

SCALE: 1/4" = 1'-0"

SCALE: 1/4" = 1'-0"



### HEATING EQUIPMENT SCHEDULE

BRYANT OR APPROVED EQUAL, WALL HUNG FAN COIL WITH SUPPLEMENTARY ELECTRIC HEAT AND HEAT PUMP CONDENSER. EQUIPMENT PARING SHALL BE ENERGY EFFICIENT WITH A SEER=15 AND HSPF OF 9.0 AND CERTIFIED BY MANUFACTURER. PROVIDE A PROGRAMMABLE THERMOSTAT. PROVIDE MERV13

BLOWER COIL - FMA4X1800AL (18,000 BTUH) EHK205B 5.0 kW ELECTRIC HEAT (3.6 kW @ 208 VOLTS) MCA = 25, 30/2 MAX BREAKER

HEAT PUMP CONDENSER - 38MAAB18R (19,400 BTUH), (MCA = 18 AMPS, MAX BREAKER = 25/2 HACR) 15.5 SEER. HSPF = 9.0

BRYANT OR APPROVED EQUAL, WALL HUNG FAN COIL WITH SUPPLEMENTARY ELECTRIC HEAT AND HEAT PUMP CONDENSER. EQUIPMENT PARING SHALL BE ENERGY EFFICIENT WITH A SEER=15 AND HSPF OF 9.0 AND CERTIFIED BY MANUFACTURER. PROVIDE A PROGRAMMABLE THERMOSTAT. PROVIDE MERV13

<u>BLOWER COIL</u> - FMA4P1800AL (18,000 BTUH) EHK205B 8.0 KW ELECTRIC HEAT (5.6 KW @ 208 VOLTS) MCA = 36.3, 50/2 MAX BREAKER

HEAT PUMP CONDENSER - 38MAQB18R (19,460 BTUH COOLING), (MCA = 18, MAX BREAKER = 25/2 HACR) 15.5 SEER, HSPF = 9.0

BRYANT OR APPROVED EQUAL, WALL HUNG FAN COIL WITH SUPPLEMENTARY ELECTRIC HEAT AND HEAT PUMP CONDENSER. EQUIPMENT PARING SHALL BE ENERGY EFFICIENT WITH A SEER=15 AND HSPF OF 9.0 AND CERTIFIED BY MANUFACTURER, PROVIDE A PROGRAMMABLE THERMOSTAT, PROVIDE MERV13

BLOWER COIL - FMA4X2400AL (24,000 BTUH) EHK210B, 10 KW ELECTRIC HEAT (7.2 KW @ 208 VOLTS) MCA =

HEAT PUMP CONDENSER - BH16024 (24,000 BTUH COOLING) (MCA = 15.5, MAX BREAKER = 25/2 HACR) 15.0 SEER, HSPF = 9.0

BRYANT OR APPROVED EQUAL, WALL HUNG FAN COIL WITH SUPPLEMENTARY ELECTRIC HEAT AND HEAT PUMP CONDENSER. EQUIPMENT PARING SHALL BE ENERGY EFFICIENT WITH A SEER=15 AND HSPF OF 9.0 AND CERTIFIED BY MANUFACTURER. PROVIDE A PROGRAMMABLE THERMOSTAT. PROVIDE MERV13 FILTERS.

BLOWER COIL - FX4DNF019 (18,000 BTUH) KFCEH2401C05, 5 KW ELECTRIC HEAT (3.8 KW @ 208 VOLTS) MCA = 26.0 AMPS, 30/2 MAX BREAKER, 600 CFM

HEAT PUMP CONDENSER - 226CNA018 (17,600 BTUH COOLING) 208 VOLT (MCA = 13.6, MAX BREAKER = 20/2 HACR) 15.0 SEER, HSPF = 9.0

BRYANT OR APPROVED EQUAL, WALL HUNG FAN COIL WITH SUPPLEMENTARY ELECTRIC HEAT AND HEAT PUMP CONDENSER. EQUIPMENT PARING SHALL BE ENERGY EFFICIENT WITH A SEER=15 AND HSPF OF 9.0 AND CERTIFIED BY MANUFACTURER. PROVIDE A PROGRAMMABLE THERMOSTAT. PROVIDE MERV13

BLOWER COIL - FX4DNF019 (18,000 BTUH) KFCEH2501C08, 8 KW ELECTRIC HEAT (6 KW @ 208 VOLTS) MCA = 44.7 AMPS, 45/2 MAX BREAKER, 600 CFM

HEAT PUMP CONDENSER - 226CNA018 (17,600 BTUH COOLING) 208 VOLT (MCA = 13.6, MAX BREAKER = 20/2 HACR) 15.0 SEER, HSPF = 9.0

### HVAC-8 & 9

BRYANT OR APPROVED EQUAL, WALL HUNG FAN COIL WITH SUPPLEMENTARY ELECTRIC HEAT AND HEAT PUMP CONDENSER. EQUIPMENT PARING SHALL BE ENERGY EFFICIENT WITH A SEER=16 AND HSPF OF 9.0 AND CERTIFIED BY MANUFACTURER. PROVIDE A PROGRAMMABLE THERMOSTAT. PROVIDE MERV13

(BLOWER COIL) FX4DNF037L00 (30,000 BUTH ) WITH TWO STAGE SUPPLEMENTARY ELECTRIC HEATER

KFCEH3101C15 11.3 KW ELECTRIC HEAT AT 208 VOLTS

CIRCUIT #1 - 40 AMPS MCA = 58.5 - 60/2 BREAKER CIRCUIT #2 - 20 AMPS MCA = 25.0 - 25/2 BREAKER

UNIT SHALL HAVE CIRCUIT BREAKERS MOUNTED IN UNIT

(HEAT PUMP CONDENSER) 226CNA030 (28,800 BTUH COOLING) (MCA = 18.1, MAX BREAKER = 30/2 HACR) 16.0 SEER, 13.0 EER, HSPF = 9.0

### THERMOSTATS SHALL BE ECOBEE SMART THERMOSTATS

### **EXHAUST FANS**

- BATH FAN SHALL BE A PANASONIC WHISPER GREEN SELECT FAN MODEL# FV-0511VKS2 (ENERGY STAR RATED) OR APPROVED EQUAL, 50 - 80 - 110 CFM @ 0.3 SONES, WITH MULTI-SPEED MODULE. UNIT SHALL BE ADJUSTABLE FOR CONTINUOUS OPERATION REQUIRED PER ASHRAE 62.2 AND ANY BLOWER DOOR TEST. WALL SWITCH SHALL TURN FAN UP TO HIGHER EXHAUST RATE WHICH SHALL ALSO BE ADJUSTABLE. PROVIDE RADIANT FIRE DAMPER IN LOCATIONS THAT PENETRATE A RATED CEILING ASSEMBLY.
- BROAN OR APPROVED EQUAL XB80, 0.3 LOW SONES (80 CFM) EXHAUST WITH RADIANT FIRE DAMPER. 6" TO 4" REDUCER. RUN 4"Ø AS SHOWN. (ENERGY STAR RATED)
- BROAN OR APPROVED EQUAL CEILING FAN W/ RADIANT FIRE DAMPER MODEL XB50 50 CFM, 0.3 SONES. (ENERGY STAR RATED) DUCT AS SHOWN AND WIRE FOR CONTINUOUS OPERATION.
- BROAN OR APPROVED EQUAL MODEL QTXE150, 150 CFM, 1.4 SONES. (ENERGY STAR RATED)

## **INTAKE & EXHAUST LOUVERS**

WALL LOUVERS WALL LOUVERS IN STONE & SIDING SHALL BE HOODED PRE-FINISHED VINYL BY MID-AMERICA COMPANY (W/ BACKDRAFT DAMPER). COLOR TO MATCH STONE & SIDING.

BATH EXHAUST - 4" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & SCREEN.

DRYER EXHAUST - DRYER EXHAUST - 4" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & NO

RANGE EXHAUST - RANGE EXHAUST - 6" ROUND HOODED VENT W/ BACK-DRAFT DAMPER & SCREEN

FRESH AIR - FRESH AIR - 4" ROUND HOODED VENT W/ LOCKING DAMPER & SCREEN, SEE PLANS.

SOFFIT VENTS SOFFIT VENTS SHALL BE PRE-FINISHED VINYL (WHITE) AS MANUFACTURED BY PRIMEX MANUFACTURING LTD. AS FOLLOWS:

BATH EXHAUST - RDV-4" ROUND W/ SCREEN. USE EB4x90 ELBOW AS NEEDED.

DRYER EXHAUST - SV28NS (NO SCREEN) & BACKDRAFT DAMPER

RANGE EXHAUST - SV28-6" W/ SCREEN & BACKDRAFT DAMPER

FRESH AIR - RDV-4" ROUND W/ SCREEN. USE EB4x90 ELBOW AS NEEDED.

## **VENTILATION AIR SCHEDULE**

### UNIT FRESH AIR VENTILATION

THE UNITS SHALL COMPLY WITH ASHRAE 62.2 STANDARDS FOR DWELLING UNIT VENTILATION. RATES SHALL COMPLY WITH ASHRAE 4.1.1 FRESH AIR RATES SHALL BE AS FOLLOWS:

> ONE BEDROOM = 33.9 CFM TWO BEDROOM = 48.0 CFM

THE MULTI-SPEED BATH EXHAUST FANS SHALL BE SET TO PROVIDE THESE EXHAUST RATES OR AN ALTERNATE RATING BASED ON A BLOWER DOOR TEST.

UNIT	COMMON AREAS	PEOPLE OUTDOOR AIR (Rp)	BREATHING ZONE OUTDOOR AIR (Ra)	TOTAL O.A. REQUIRED	TOTAL EXHAUST AIR	TOTAL MAKEUP AIR (PROVIDED)	REMARKS
	CORRIDOR		60.6 CFM (1010 x 0.06)	60.6 CFM			
HVAC-4 (2ND FL.)	MAINT.		6.3 CFM (105 x 0.06)	6.3 CFM			
,	<u>TOTAL</u>		66.9 CFM	66.9 CFM	80.0 CFM	80.0 CFM	
			•				
	CORRIDOR		60.6 CFM (1010 x 0.06)	60.6 CFM			
HVAC-5 (3RD FL.)	DOG WASH	5 CFM (1 x 5 CFM)	4.8 CFM (79 x 0.06)	9.8 CFM			
(01.12.1.2.1)	<u>TOTAL</u>	5 CFM	65.4 CFM	70.4 CFM	80.0 CFM	80.0 CFM	
	LAUNDRY	10 CFM (2 @ 5 CFM)	14.16 CFM (236 x 0.06)	24.16 CFM	50 CFM		
	SOCIAL SERVICES	5 CFM (1 @ 5 CFM)	5.7 CFM (95 x 0.06)	10.7 CFM			
HVAC-6	WATER ROOM	NO OCCUPANCE					
LAUNDRY)	MEN'S				80 CFM INTERMITTENT		
	WOMANS				80 CFM INTERMITTENT		
	<u>TOTAL</u>	15 CFM	20 CFM	35 CFM	50.0 CFM		
	COORRIDOR		15.6 CFM (2.60 x 0.06)	15.6 CFM	16.0 CFM	(UNIT HVAC-8)	EF-2 (80 CFM)
HVAC-7	EXERCISE	60 CFM (3 @ 80 CFM)	10.8 CFM (180 x 0.06)	70.8 CFM			
	<u>TOTAL</u>	60 CFM	26.4 CFM	86.4 CFM	80.0 CFM	80.0 CFM	
	OFFICE	10 CFM (2 @ 5 CFM)	10.4 CFM (173 x 0.06)	20.4 CFM	20.4 CFM		
	COORRIDOR		45 CFM (750 x 0.06)	45 CFM			80 CFM FAN IN TRASH
HVAC-8	LOUNGE	35 CFM (7 @ 5 CFM)	13 CFM 216 x 0.06)	48 CFM	48 CFM		
	<u>TOTAL</u>	45 CFM	68.4 CFM	113.4 CFM	68 CFM	113.4 CFM	
				•			
	COMMUNITY RM.	110 CFM (22 @ 5 CFM)	24 CFM (4100 x 0.06)	134 CFM	134 CFM		EF- 4 (150 CFM)
10/400	ACTIVITY	35 CFM (7 @ 5 CFM)	12.72 CFM (212 x 0.06)	47.72CFM	50 CFM	50 CFM	EF- 3
HVAC-9	KITCHENETTE	5 CFM (1 @ 5 CFM)	4.32 CFM (7.2 x 0.06)	9.32 CFM	9.3 CFM		EF- 4 (150CFM)
	TOTAL	150 CFM	41.0 CFM	191.04 CFM	193.3 CFM	50 CFM	

- 1. PROVIDE A PROGRAMMABLE THERMOSTAT FOR EACH UNIT
- 2. HEAT PUMPS WITH SUPPLEMENT ELECTRIC HEAT SHALL HAVE CONTROLS THAT EXCEPT DURING DEFROST, PREVENT SUPPLEMENTARY HEAT OPERATION WHEN THE HEAT PUMP COMPRESSOR CAN MEAT THE HEATING LOAD.
- 3. SUPPLY DUCTS IN ATTICS SHALL BE INSULATED TO (R=8), ALL OTHERS SHALL BE INSULATED TO (R=6) UNLESS DUCTS. OR PORTIONS THEREOF, ARE LOCATED COMPLETELY INSIDE THE THERMAL ENVELOPE.
- 4. DUCTS, AIR HANDLERS AND FILTER BOXES SHALL BE SEALED. JOINTS AND SEAMS SHALL COMPLY WITH CODE. DUCT
- TIGHTNESS SHALL BE VERIFIED BY EITHER A POST CONSTRUCTION OR ROUGH-IN TEST SHOWING A LEAKAGE OR LESS THAN OR EQUAL TO 4 CFM PER 100 SQ.FT.

PROCEEDING WITH LIKE UNITS.

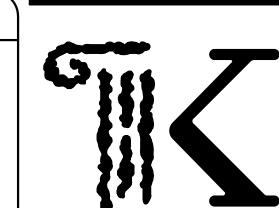
### **HEATING NOTES**

- PROVIDE CANVAS OR FIBERGLASS ISOLATION SLEEVES ON ALL PLENUM CONNECTIONS TO TRUNK DUCT.
- ALL RECTANGULAR DUCTWORK SHALL BE GALVANIZED SHEET METAL WITH OUTSIDE WRAP INSULATION TO MEET CURRENT CODE. ALL DUCT SIZES ARE AIR SIZE. EXHAUST DUCTWORK IN ATTIC NEED NOT BE INSULATED, EXCEPT OUTSIDE WRAP FIRST 5 FEET OF EXHAUST DUCTWORK.
- ALL ROUND DUCTS IN HEATED AREAS SHALL BE GALVANIZED SHEET METAL. ROUND DUCTS IN ATTIC AREAS SHALL BE SHEET METAL WITH EXTERIOR INSULATION WRAP, RIGID INSULATED DUCTS, OR FLEXIBLE INSULATED DUCT. IF FLEXIBLE DUCT IS ALLOWED, IT SHALL BE INSTALLED STRAIGHT AND TRUE WITH A MINIMUM NUMBER OF BENDS SO AS NOT TO INCREASE FRICTION. ANY DUCT RUNS INSTALLED LIKE "SPAGHETTI" SHALL BE REJECTED BY ARCHITECT AND SHALL BE REPLACED WITH RIGID DUCT.
- PROVIDE BALANCING DAMPERS ON ALL BRANCH DUCTS. DAMPERS SHALL BE INSTALLED IN THE DUCT AT TAKE-OFF FROM THE MAIN DUCT. DAMPERS IN REGISTERS ARE NOT CONSIDERED BALANCING DAMPERS. BALANCING DAMPERS ARE NOT REQUIRED IF DUCTWORK IS NOT ACCESSIBLE.
- FLEXIBLE DUCTS SHALL BE CUT TO PROPER LENGTHS TO ELIMINATE DUCT COMPRESSION AND/OR EXTRA BENDS. PROPERLY SUPPORT DUCT TO PREVENT SAGGING. FURNACE WIRE SHALL NOT BE USED TO SUPPORT FLEXIBLE DUCT. FLEXIBLE DUCT CONNECTIONS SHALL BE TAPED AND CLAMPED TO ACHIEVE AN AIRTIGHT CONNECTION.
- CEILING AND WALL REGISTERS SHALL BE SUPPORTED FROM FRAMING STRUCTURE PROVIDE SOLID 2x2 BLOCKING ON ALL SIDES.
- ALL WORK SHALL BE IN ACCORDANCE WITH CURRENT STATE MECHANICAL AND BUILDING CODES AND ALL APPLICABLE CITY, COUNTY AND LOCAL
- PROVIDE CEILING RADIANT DAMPER (CRD) AND FIRE RATED WALL PENETRATIONS AS REQUIRED BY CODE. FIRE DAMPER WORK SHALL BE REVIEWED WITH BUILDING INSPECTOR DURING ROUGH-IN WORK TO CLARIFY ALL AREAS WHERE DAMPERS ARE REQUIRED.
- RETURN AIR DUCTS SHALL BE OUTSIDE WRAPPED INSULATED AS LISTED IN NOTES 2 &3 ABOVE. RETURN AIR PLENUMS IN HEATED AREAS SHALL BE INSIDE
- INSULATED WITH 1" SOUND INSULATION LINER.
- 0. EXHAUST FANS SHALL BE SUPPORTED FROM THE ROOF TRUSS CONSTRUCTION WITH VIBRATION ISOLATION HANGERS TO PREVENT SOUND AND VIBRATION

1. PIPE CONDENSATE TO ABOVE FLOOR DRAIN OR WATER HEATER DRAIN PAN. CONDENSATE DRAINS SHALL BE ADEQUATELY SECURED TO CEILING AND WALLS

AND SHALL BE SLOPED AS REQUIRED. CARE SHALL BE TAKEN THAT DRAIN PANS SLOPE TO DRAIN. ALL CONDENSATE PIPING SHALL BE LEAK TESTED PRIOR

- TO INSTALLATION OF DRYWALL. PROVIDE TRAP. 2. HEATING CONTRACTOR SHALL DO ONE (1) COMPLETE ROUGH-IN OF EACH TYPE UNIT FOR REVIEW AND APPROVAL. INSTALLATION SHALL BE REVIEWED BY THE ARCHITECT AND COORDINATED WITH OTHER TRADES. ALL CONFLICTS SHALL BE RESOLVED AND FINAL INSTALLATION SHALL BE APPROVED PRIOR TO
- 13. THE ENTIRE DUCTWORK SYSTEM SHALL BE INSTALLED PER S.M.A.C.N.A.-HVAC DUCT CONSTRUCTION STANDARDS.
- 4. WHERE THE EXHAUST DUCT EQUIVALENT LENGTH EXCEEDS 35FT, AND THE DUCT IS CONCEALED WITHIN THE BUILDING CONSTRUCTION, THE EQUIVALENT LENGTH SHALL BE IDENTIFIED ON A LABEL LOCATED WITHIN 6FT OF THE CONNECTION.



CONTOGIANNIS ASSOCIATES

RCHITECTURE LANNING **ESIGN** 

00 SOUTH FIFTH ST UITE 400 OLUMBUS, OHIO 3215-5492

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**ROJECT:** 

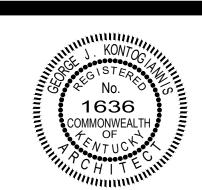
HE SANCTUARY ON EDWARDS SENIOR HOUSING BUILDING "B"

125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: HVAC EQUIPMENT,

**NOTES & DETAILS** 

DATE: 07/31/2023 REVISED:

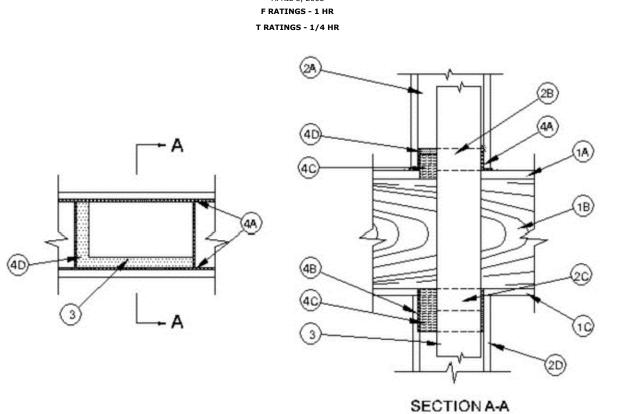


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SYSTEM NO. F-C-7012

1.FLOOR-CEILING ASSEMBLY -- THE 1 HR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL L500 SERIES DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. THE GENERAL CONSTRUCTION FEATURES OF THE FLOOR-CEILING ASSEMBLY ARE SUMMARIZED BELOW:

A. FLOORING SYSTEM -- LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR FLOOR TOPPING MIXTURE\* AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX SIZE OF OPENING IS 5-1/2 BY 14 IN. (140 BY 356 MM).

. WOOD JOISTS\* -- NOM 10 IN. (254 MM) DEEP (OR DEEPER) LUMBER, STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSE OR **STRUCTURAL WOOD MEMBERS\*** WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED.

C GYPSUM BOARD\* -- THICKNESS TYPE NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN INDIVIDUAL FLOOR-CEILING DESIGN 2. CHASE WALL -- THE THROUGH PENETRANT (ITEM NO. 3) SHALL BE ROUTED THROUGH A FIRE-RATED SINGLE, DOUBLE OR STAGGERED WOOD STUD/GYPSUM WALLBOARD CHASE WALL HAVING A FIRE RATING CONSISTENT WITH THAT OF THE FLOOR-CEILING ASSEMBLY. THE CHASE WALL SHAL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES:

A. STUDS -- NOM 2 BY 6 IN. (51 BY 152 MM) OR DOUBLE NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER STUDS.

B. SOLE PLATE -- NOM 2 BY 6 IN. (51 BY 152 MM) OR PARALLEL 2 BY 4 IN. LUMBER PLATES, TIGHTLY BUTTED. MAX SIZE OF OPENING IS 5-1/2 BY 14 C. TOP PLATE -- THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 6 IN. (51 BY 152 MM) OR TWO SETS OF PARALLEL 2 BY 4 IN. (51 BY 102

MM) LUMBER PLATES, TIGHTLY BUTTED. MAX SIZE OF OPENING IS 5-1/2 BY 14 IN. (140 BY 356 MM). D. GYPSUM BOARD\* -- THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN INDIVIDUAL WALL AND PARTITION

OPENING SHALL BE MIN 0 IN. (POINT CONTACT) TO MAX 2 IN. (51 MM). DUCT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR-CEILING ASSEMBLY. 4.FIRESTOP SYSTEM -- THE FIRESTOP SYSTEM SHALL CONSIST OF THE FOLLOWING

INSTALLED ECCENTRICALLY OR CONCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN THE DUCT AND THE PERIPHERY OF

3.STEEL DUCT -- NOM 12 BY 4 IN. (305 BY 102 MM) (OR SMALLER) NO. 30 GAUGE (OR HEAVIER) RECTANGULAR GALVANIZED STEEL DUCT TO BE

A. RETAINING ANGLES -- MIN 1 BY 1-1/2 IN. (25 BY 38 MM) 16 GAUGE (OR HEAVIER) STEEL ANGLES USED TO BRIDGE OPENING ON BOTH SIDES OF WALL AT SOLE PLATE IN SINGLE STUD WALLS WHEN SOLE PLATE IS REMOVED AT OPENING IN PLYWOOD FLOOR, ANGLES TO BE CUT TO OVERLAP A MIN OF 2 IN. (51 MM) ONTO SOLE PLATE ON EACH SIDE OF OPENING WITH THE 1-1/2 IN. (38 MM) LEG OF ANGLE SECURED TO SOLE PLATE WITH A MIN OF TWO NAILS OR SCREWS ON EACH SIDE OF OPENING AND ON BOTH SIDES OF WALL.

B. STEEL PLATES -- MIN 3 IN. (76 MM) WIDE 16 GAUGE (OR HEAVIER) STEEL PLATES USED TO BRIDGE OPENING ON BOTH SIDES OF WALL AT DOUBLE TOP PLATE IN SINGLE STUD WALLS WHEN TOP PLATES ARE REMOVED AT OPENING. PLATES TO BE CUT TO OVERLAP A MIN OF 2 IN. (51 MM) ONTO TOP PLATES ON EACH SIDE OF OPENING AND SECURED TO TOP PLATES WITH A MIN OF TWO NAILS OR SCREWS ON EACH SIDE OF OPENING

C. PACKING MATERIAL -- MIN 1-3/4 IN. (44 MM) THICKNESS OF 4 PCF (64 KG/M<sup>3</sup>) MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO THE OPENING WITHIN THE SOLE PLATE/PLYWOOD SUBFLOOR AND A MIN 3 IN. (76 MM) THICKNESS OF 4 PCF (64 KG/M<sup>3</sup>) MINERAL WOOL BATT INSULATION FIRMLY PACKED INTO THE OPENING WITHIN THE TOP PLATE. THE PACKING MATERIAL TO BE RECESSED FROM TOP SURFACE OF SOLE PLATE TO ACCOMMODATE THE REQUIRED THICKNESS OF FILL MATERIAL (ITEM 4D).

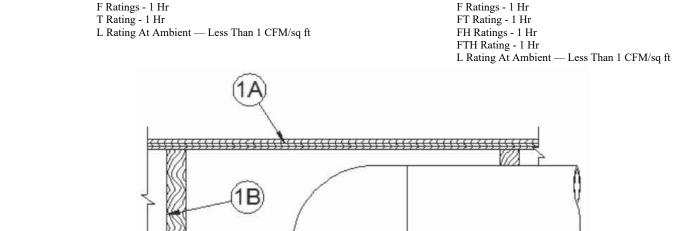
D. FILL. VOID OR CAVITY MATERIALS\* -- SEALANT -- MIN 1/2 IN. (13 MM) THICKNESS OF SEALANT APPLIED WITHIN THE ANNULUS. FLUSH WITH TOP SURFACE OF SOLE PLATE. AT THE POINT CONTACT LOCATION BETWEEN DUCT AND SOLE PLATE. A MIN 1/2 IN. (13 MM) DIAM BEAD OF SEALANT. SHALL BE APPLIED AT THE DUCT/SOLE PLATE INTERFACE ON TOP SURFACE OF PLATE. AT THE POINT CONTACT LOCATION BETWEEN DUCT AND RETAINING ANGLE, A MIN 1/8 IN. (3.2 MM) DIAM BEAD OF SEALANT SHALL BE APPLIED AT THE DUCT/RETAINING ANGLE INTERFACE ON TOP

PASSIVE FIRE PROTECTION PARTNERS -- 3600EX, 4800DW

\* INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.

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## FLOOR PENETRATION U.L. SYSTEM NO. F-C-7012



SYSTEM NO. F-C-7060

JANUARY 06, 2015

CAN/ULC S115

F Ratings - 1 Hr

1.**floor -- Ceiling Assembly --** the 1 hr fire-rated wood Joist Floor-Ceiling Assembly Shall be constructed of the Materials and In THE MANNER SPECIFIED IN THE INDIVIDUAL L500 DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY, AS SUMMARIZED BELOW: A. FLOORING SYSTEM -- LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR FLOOR TOPPING MIXTURE\* AS

R WOOD JOISTS -- NOM 10 IN. (254 MM) DEEP (OR DEEPER) LUMBER. STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSES OR STRUCTURAL WOOD MEMBERS\* WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED. C GYPSUM BOARD\* -- THICKNESS TYPE NUMBER OF LAYERS AND EASTENERS AS REQUIRED IN THE INDIVIDUAL FLOOR-CEILING DESIGN DIAN OF OPENING IS TO BE MAX 1-1/2 IN. (38 MM) LARGER THAN DIAM OF STEEL DUCT.

I.A. CHASE WALL -- (OPTIONAL, NOT SHOWN) -- THE THROUGH PENETRANT (ITEM 2) MAY BE ROUTED THROUGH A 1 HR FIRE RATED SINGLE, DOUBLE OR STAGGERED WOOD STUD/GYPSUM BOARD CHASE WALL. DEPTH OF CHASE WALL STUD CAVITY TO BE MIN 1/2 IN. (13 MM) GREATER THAN DIAMETER OF OPENING CUT IN TOP PLATES TO ACCOMMODATE THE THROUGH PENETRANT (ITEM 2). THE CHASE WALL SHALL BE CONSTRUCTED OF THE MATERIALS and in the manner specified in the individual u300 series wall and partition designs in the UL fire resistance directory and shall INCLUDE THE FOLLOWING CONSTRUCTION FEATURES: A. STUDS -- NOM 2 BY 4 IN. (51 BY 102 MM), 2 BY 6 IN. (51 BY 152 MM) OR DOUBLE NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER STUDS.

B. SOLE PLATE -- NOM 2 BY 4 IN. (51 BY 102 MM), 2 BY 6 IN. (51 BY 152 MM)OR PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY

SETS OF PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. DIAM OF OPENING IS TO BE MAX 1-1/2 IN. (38 MM) LARGER THAN DIAM OF STEEL DUCT. AS AN ALTERNATE, THE OPENING MAY BE SQUARE-CUT WITH A MAX DIMENSION 1-1/2 IN. (38 MM) GREATER THAN THE DIAM OF THE PIPE. PLATES MAY BE DISCONTINUOUS OVER OPENING, TERMINATING AT TWO OPPOSING EDGES OF OPENING. MAX LENGTH OF DISCONTINUITY IS 7-1/2 IN. (191 MM).

D. STEEL PLATE -- WHEN LUMBER PLATES ARE DISCONTINUOUS, NOM 1-1/2 IN. (38 MM) WIDE NO. 20 GAUGE (OR HEAVIER) GALV STEEL PLATES SHALL BE INSTALLED TO CONNECT DISCONTINUOUS LUMBER PLATES AND TO PROVIDE A FORM FOR THE FILL MATERIAL. STEEL PLATES SIZED TO LAP 2 IN. (51 MM) ONTO EACH DISCONTINUOUS LUMBER PLATE AND SECURED TO LUMBER PLATES WITH STEEL SCREWS OR NAILS. E. GYPSUM BOARD\* -- THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN THE INDIVIDUAL WALL AND PARTITION

2.STEEL DUCT -- ONE NOM 6 IN. (152 MM) DIAM (OR SMALLER) NO. 30 GA (OR HEAVIER) GALVANIZED STEEL DUCT TO BE INSTALLED EITHER CONCENTRICALLY OR ECCENTRICALLY WITHIN THE OPENING. ANNULAR SPACE TO BE MIN 0 IN. (POINT CONTACT) TO MAX 1-1/2 IN. (38 MM). STEEL

3.**FILL, VOID OR CAVITY MATERIAL\* -- SEALANT --** MIN 5/8 IN. (16 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTTOM SURFACE OF CEILING OR TOP PLATE. MIN 1/4 IN. (6 MM) DIAM BEAD OF FILL MATERIAL APPLIED AT POINT CONTACT LOCATION AT THE PENETRANT/CEILING OR CHASE WALL TOP PLATE INTERFACE. SPECIFIED TECHNOLOGIES INC -- SPECSEAL LCI SEALANT, SPECSEAL LC150 SEALANT OR TYPE WF300 CAULK

\* INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.

LAST UPDATED ON 2015-01-06

ANSI/UL1479 (ASTM E814)

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SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN.

### FLOOR PENETRATION U.L. SYSTEM NO. F-C-7060

SEE FIRE RESISTANCE RATINGS SHEETS FOR FIRE DAMPER RATING FOR 1 HOUR FLOOR/CEILING ASSEMBLY U.L. DESIGN NO. L563

SEE FIRE RESISTANCE RATINGS SHEETS FOR FIRE DAMPER RATING FOR 1 HOUR ROOF/CEILING ASSEMBLY U.L. DESIGN NO. P522



### **INSTALLATION INSTRUCTION**

CRD 50-FGPB-4.2 & CRD 50-EA-FGPB-4.2 for register & grille installations CRD 50-FGPB-4.2 & CRD 50-EA-FGPB-4.2 for drop thru duct installations CRD 50-FGPB-4.2-CP & CRD 50-EA-FGPB-4.2-CP for register & grille installations CRD 50-FGPB-4.2-CP & CRD 50-EA-FGPB-4.2-CP for drop thru duct installations CRD 50-FGPB-6.0-NI & CRD 50-EA-FGPB-6.0-NI for register & grille installations CRD 50-FGPB-6.0-NI & CRD 50-EA-FGPB-6.0-NI for drop thru duct installations

(1) Lloyd Industries UL 555-C listed ceiling radiation damper These Damper Assemblies Have Been Tested And Approved (2) Easy access or std fusible link (165°F std)(212°F optional) For Installation In 1 Hour Roof/ceiling, Floor/ceiling Design (3) Fiberglass ductboard plenum box (UL rated 181 class 1)(see Numbers: UL-L563, P544, L563, L521, L546, P522, L528 (4) Damper sleeve: flanged for plenum insulation support (22 ga.

(5) Register/grille sleeve 22 ga. galv. steel. (for 5/8" thick gyp-(6) Support angles (2) per unit: factory installed or supplied sepa-

A. std. (16 ga. galvanized steel 3/4" x 3/4" x 26" lg) B. optional (22 ga. galvanized 1-1/2" x 1-1/2" x 26" lg) (7) Support angle fasteners (fastens support angles to damper) #8 x 3/4" lg steel sheet metal screws, 3/16 diameter steel rivets, or spot welds. (2) places on each support angle minimum. when the (4) adjustable angle brackets are used, use fasteners above and secure support angles to adjustable brackets with a

minimum of (1) fastener for each bracket (8) Support angle fasteners (angles to truss cords) #8 or #10 x 1-/2" lg steel sheet metal or drywall screws or #6 common nails (8) plcs.

(9) Drop duct sleeve 22 ga. galv. steel (10) Drop duct mounting angles (4) 22 ga. x 1" x 1" galv. steel (11) Drop duct angle fasteners (angles to sleeve) #8 or #10 x 3/4" lg steel sheet metal screws or 3/16" steel pop rivets (8) plcs. (12) Ref: design 1-563 wood truss ASM: A. deck/roof materials B. truss wood cords

C. RC channel

Email: lloydind@firedamper.com

D. gypsum board 5/8" thick minimum (13) Register/grille (26 ga steel min)(.55 mm) (provided by other) (14) Register/grille steel mounting screws (2) #8 x 2" lg minimum. (provided by other) (15) Flexible duct and duct connectors: UL Classified class 0 or

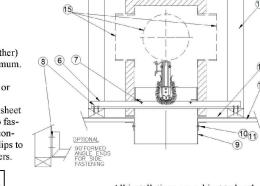
class 1 (provided and installed by other) (16) Boot clip installation permitted using (2) #8 or #10 steel sheet metal screws. use a min of (2) #8 "s" type steel screws to fasten to truss cords at each mounting point. use (2) crimp connections or hardware above to fasten non-locking boot clips to the flange. locking boot clip do not require flange fasteners.

\*ALL STATED SPECIFICATIONS ARE SUBJECT TO UPDATE WITHOUT NOTICE OR OBLIGATION.

THE PRODUCTS SPECIFIED, AR

CONFORMANCE TO ALL OF

DERWRITERS LABORATORIES



All installations are subject to local authority approval prior to ordering and installing dampers

Email: lloydind1@bellsouth.net To Kwa Wan, Kowloon, H. K. Tel: 852-2760-4188 Fax: 852-2760-4177 Email: tatanlexyim@lloydasia.com Lloyd Industries Inc. 2013



### INSTALLATION INSTRUCTION

CRD 50-FGPB-4.2 & CRD 50-EA-FGPB-4.2 for register & grille installation CRD 50-FGPB-4.2 & CRD 50-EA-FGPB-4.2 for drop thru duct installations CRD 50-FGPB-4.2-CP & CRD 50-EA-FGPB-4.2-CP for register & grille installations CRD 50-FGPB-4.2-CP & CRD 50-EA-FGPB-4.2-CP for drop thru duct installations CRD 50-FGPB-6.0-NI & CRD 50-EA-FGPB-6.0-NI for register & grille installations CRD 50-FGPB-6.0-NI & CRD 50-EA-FGPB-6.0-NI for drop thru duct installations

1. Before installing the damper assembly, open the ceiling radiation damper blades and secure the blades open with the easy access wire catch and the temperature rated fusible link. c. Ceiling penetrations should be located between adjacent trusses and RC Channels using a s a minimum of 1-3/4" from the truss to the outside of the plenum box as shown. If required (1) RC Channel may be cut to allow installation. The clearance between the damper/sleeve and the gypsum ceiling material must not exceed 1/16" per side and 1/8"

. Installation: A. If support angles have been provided pre-assembled to the units by the factory, center dampers between trusses and locate support angle rails on top of the lower truss cords. Fasten using a minimum of (2) #8, or #10 wood or drywall steel screws X 1-1/2" Ig or #6 common nails at each mounting point. B. Support angles may be cut and formed 90° for truss side mounting inside truss cords as shown. C. If support angles have been provided separate from the unit, establish the dimension for the gypsum flange

location to the top of the lower truss cord and fasten (2) support angles to units using (2) #8 x 3/4" lg steel sheet metal screws or (2) 3/16" diameter steel rivets for each angle. NOTE: Insure that fasteners do not interfere with the ceiling radiation damper operation. The Fiberglass insulation plenum box permits cutting and installing a maximum of (3) collars for class 1 or class 0 flexible ducting. Use UL 181 Class 1 reinforced 2" wide aluminum Tape where required for assembly and box/duct

sealing. NOTE: Duct and collar installation must not interfere with damper operation inside the fiberglass ductboard plenum box. 6. Registers/grilles of steel construction with 26 ga. (.55 mm) minimum are to be attached to the ceiling radiation damper gypsum flange using (2) #8 x 2" lg steel sheet metal screws minimum. (1) at each end of the grille/register

Drop duct installations require 22 ga. 1" x 1" retaining angles on all (4) sides fastened to the steel drop duct sleeve using (2) #8 x 3/4" lg steel sheet metal or 3/16" diameter steel rivets on each side as shown

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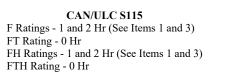
and installing dampers 4/F., Luen Ming Hing Factory Build 36 Mok Cheong St., To Kwa Wan, Kowloon, H. K. ALI Tel: 852-2760-4188 Fax: 852-2760-4177 9518 Email: tatanlexyim@lloydasia.com Llowd Industries Inc. 20

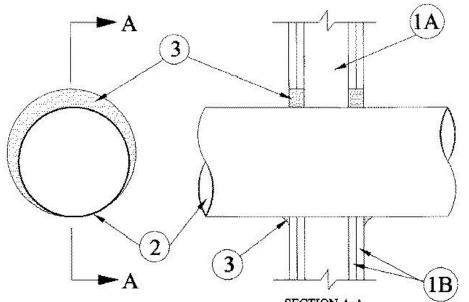
All installations are subject to local

authority approval prior to ordering

System No. W-L-7042 October 12, 2017

ANSI/UL1479 (ASTM E814) F Ratings - 1 and 2 Hr (See Items 1 and 3) T Rating - 0 Hr





1. Wall Assembly -- The 1 or 2 hr fire rated wallboard/stud wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400 or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features. A. Studs -- Wall framing may consist of either wood studs or steel channel studs. Wood studs to consist of nom 2 by 4 in. (51 by 102 mm) lumber spaced 16 in. (406 mm) OC. Steel studs to be min 2-1/2 in. (64 mm) wide and spaced 24 in. (610 mm) OC. Additional framing members shall be used to

completely frame the opening for all ducts greater than 20 in. (502 mm) diam. B. Gypsum Board\* -- For 1 hr assembly, one layer of min 5/8 in. (16 mm) thick wallboard as required in the individual Wall and Partition Design. For 2 hr assembly, two layers of min 5/8 in. (16 mm) thick wallboard as required in the individual Wall and Partition Design. Max diam of opening is 14-1/2 in. (368 mm) for wood stud walls and 25-1/2 in. (648 mm) for steel stud walls.

The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed. 2. Through Penetrant -- Galv steel duct to be installed concentrically or eccentrically within the firestop system. The annular space between the duct and periphery of opening shall be 0 in. (0 mm, point contact) and max 1-1/2 in. (64 mm) Duct to be rigidly supported on both sides of wall assembly. A. Spiral Wound HVAC Duct -- Nom 24 in. (610 mm) diam (or smaller) No. 28 MSG (or heavier) galy steel spriral wound duct.

B. Sheet Metal Duct -- Nom 12 in. (305 mm) diam (or smaller) No. 28 MSG (or heavier) galy sheet steel duct. 3. Fill. Void or Cavity Material\*--Sealant -- Min 5/8 in. (16 mm) and 1-1/4 in. (32 mm) thickness of fill material applied within annulus. flush with both surfaces of wall assembly for 1 and 2 hr F Ratings, respectively. When FS-ONE Max is used, min 5/8 in. (16mm) thickness for both 1 and 2 hr F Ratings, At the point contact location between duct and wallboard, a min 1/2 in. (13 mm) diam bead of sealant shall be applied at the wallboard/duct interface on both surfaces of wall assembly

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- CP601S Elastomeric Firestop Sealant, FS-ONE Sealant, FS-ONE MAX Intumescent Sealant or CP606 Flexible Firestop Sealant \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL

Certification (such as Canada), respectively. Last Updated on 2017-10-12"Reprinted from the Online Certifications Directory with permission from UL" "© 2021 UL LLC"

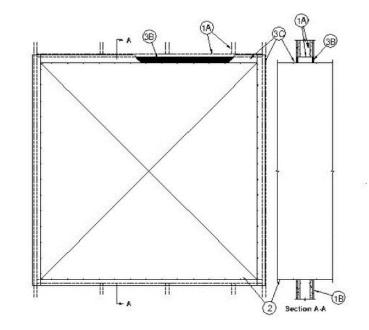
### WALL PENETRATION U.L. SYSTEM NO. W-L-7042

### System No. W-L-7155 December 26, 2017

ANSI/UL1479 (ASTM E814) F Ratings -- 1 and 2 Hr (See Item 1) T Ratings -- 0 Hr L Rating at Ambient -- Less Than 1 CFM/sq ft L Rating at 400 F -- Less Than 1 CFM/sq ft

Refer to Ventilation Duct Assemblies in Vol. 2 of the Fire Resistance Directory.

F Ratings -- 1 and 2 Hr (See Item 1) FT Ratings -- 0 Hr FH Ratings -- 1 and 2 Hr (See Item 1) FTH Ratings -- 0 Hr L Rating at Ambient -- Less Than 1 CFM/sq ft L Rating at 400 F -- Less Than 1 CFM/sq ft



1. Wall Assembly -- The 1 or 2 hr fire-rated gypsum wallboard/stud wall assembly shall be constructed of the materials and in the manner described in the individual U400, V400 or W400 Series Wall or Partition Design in the UL Fire Resistance Directory and shall include the following construction features: A. Studs -- Wall framing shall consist of min 3-1/2 in. (89 mm) wide steel channel studs spaced max 24 in. (610 mm) OC. Additional steel studs shall be used to completely frame the opening

B. Gvpsum Board\* -- 5/8 in. (16 mm) thick, 4 ft (1.22 m) wide with square or tapered edges. The gypsum board type, thickness, number of layers, fastener type and sheet orientation shall be as specified in the individual Wall and Partition Design in the UL Fire Resistance Directory. Max area of opening is 73.7 sq ft (6.85 m<sup>2</sup>) with a max dimension of 104 in. (2.64 m).

The hourly F and FH Ratings of the firestop system are equal to the hourly fire rating of the wall assembly in which it is installed.

2. Steel Duct -- Max 100 in. by 100 in. (2.5 by 2.5 m) galv steel duct to be installed either concentrically or eccentrically within the firestop system. The duct shall be constructed and reinforced in accordance with SMACNA construction standards. The space between the steel duct and periphery of opening shall be min 0 in. (point contact) to max 2 in. (51 mm). Steel duct to be rigidly supported on both sides of the wall assembly. 2A1. Through-Pentrating Product\* -- As an alterate to Item 2. Fiber cement with galvanized steel facing, 3/8 in.(10 mm) thick composite metallic duct, with a max cross-sectional area of 43.0 sq ft, (4 m<sup>2</sup>) and a max individual dimension of 78 3/4 in. (2 m). Duct to be installed either concentrically or eccentrically within

the firestop system such that the annular space is min 0 in. (point contact) to max 2 in. (51 mm). Duct to be rigidly supported on both sides of wall assembly.

**DURASYSTEMS BARRIERS INC** -- Type DuraDuct HP. 2A3. Through-Pentrating Product\* -- As an alternate to Item 2. Galvanized steel faced duct panel, with a max cross-sectional area of 2450 sq in. (1.58 m²), and a max individual dimension of 49-1/2 in. (1258 mm) Duct to be installed either concentrically or eccentrically within the firestop system such that the annular space is min 0 in. (point contact) to max 2 in. (51 mm). Duct to be rigidly supported on both sides wall assembly. Refer to Ventilation Duct Assemblies in Vol. 2 of the

**DURASYSTEMS BARRIERS INC** -- Type DuraDuct GNX 2A4. Through-Penetrants -- Coated Ducts\* -- As an alternate to Item 2, rectangular steel air duct supplied coated with BW11 coating material. Max 40 by 40 in. (1.02 by 1.02 m) duct size. One duct to be installed within the firestop system with an annular space of min 0 in. (point contact) to max 2 in. (51 mm). Reinforcement stiffener or transverse joint with bolted flanges shall be located approximately at the mid depth of the annular space. Duct to be rigidly supported on both sides of the wall assembly. Duct sections shall be assembled using bolted flanges or SMACNA approved Transverse Joint Reinforcements.

FIRESPRAY INTERNATIONAL LTD -- FLAMEBAR BW11 FIRE RATED DUCTWORK 3 **Firestop System --** The firestop system shall consist of the following:

A. Packing Material -- (Optional, Not Shown) -- Polyethylene backer rod, mineral wool batt insulation or fiberglass batt insulation friction fitted into annular space. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material

A1. Packing Material -- Required as specified in Table below. Min 3-3/4 in. (95 mm) or 5 in. (127 mm) thickness of min 4 pcf (64 kg/m³) mineral wool batt insulation firmly packed into opening as a permanent form for 1 and 2 hr rated assemblies, respectively. Packing material to be recessed from both surfaces of wall to accommodate the required thickness of fill material. B. Fill, Void or Cavity Material\* -- Sealant -- Min 5/8 in. (16 mm) thickness of fill material applied within the annulus, flush with both surfaces of wall. Min

1/4 in. (6 mm) diam bead of fill material shall be applied at the point contact location between the steel duct or coated duct and the gypsum board. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- CFS-S SIL GG Sealant, FS-ONE Sealant, FS-ONE MAX Intumescent Sealant or CP606 Flexible

C. Steel Retaining Angles -- Min No. 16 gauge galv steel angles sized to lap steel duct a min of 2 in. (51 mm) and to lap wall surfaces a min of 1 in. (25 mm). When max duct dimension does not exceed 48 in. (122 cm) and duct area does not exceed 1300 in<sup>2</sup> (8387 cm<sup>2</sup>), angles may be min No. 18 gauge galv steel. Angles attached to steel duct or coated duct on both sides of wall with min No. 10 by 1/2 in. (13 mm) long steel sheet metal screws located a max of 1 in. (25 mm) from each end of steel duct and spaced a max of 6 in. (152 mm) OC. Steel angles are optional for those sides of duct that do not exceed the dimension specified in Table below, dependent on packing material, sealant and annular space as specified.

Packing Material Angle (Item 3C) Required

(13 to 25 mm) CP606 Flexible Firestop Sealant \* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL

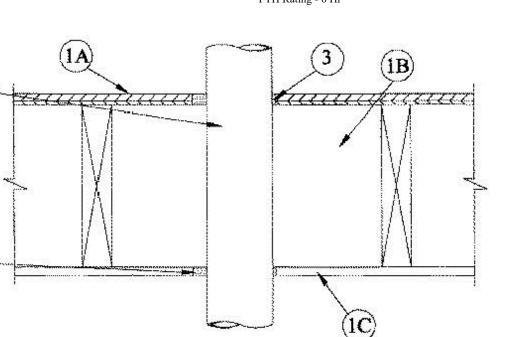
24 ga or heavier 1/2 in. min to 1 in. max FS-ONE Sealant or Item 3A1

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Certification (such as Canada), respectively.

**ANSI/UL1479 (ASTM E814)** F Rating - 1 Hr T Rating - 0 Hr

SYSTEM NO. F-C-7013 F Rating - 1 Hr FT Rating - 0 Hr FH Ratings - 1 Hr FTH Rating - 0 Hr



SECTION A-A

1. FLOOR-CEILING ASSEMBLY -- THE 1 HR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF TH MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES FLOOR-CEILING DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY. THE GENERAL CONSTRUCTION FEATURES OF THE FLOOR-CEILING ASSEMBLY ARE SUMMARIZED BELOW:

A. FLOORING SYSTEM -- LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR FLOOR TOPPING MIXTURE\* AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING SHALL BE 5-1/4 IN. (133 MM)

3. WOOD JOIST\* -- NOM 10 IN. (254 MM) DEEP (OR DEEPER) LUMBER, STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSES OR STRUCTURAL WOOD MEMBERS\* WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED.

C. GYPSUM BOARD\* -- NOM 4 FT (1.2 M) WIDE BY 5/8 IN. (16 MM) THICK AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF

1.1 **Chase Wall** -- (not shown, optional) the through penetrants (item 2) may be routed through a 1 hr fire-rated single, double or STAGGERED WOOD STUD/GYPSUM WALLBOARD CHASE WALL HAVING A FIRE RATING CONSISTENT WITH THAT OF THE FLOOR-CEILING ASSEMBLY. THE CHASE WALL SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES: A. STUDS -- NOM 2 BY 6 IN. (51 BY 152 MM) LUMBER OR DOUBLE NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER STUDS.

B. SOLE PLATE -- NOM 2 BY 6 IN. (51 BY 152 MM) LUMBER OR PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. MAX DIAM C. TOP PLATE -- THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 6 IN. (51 BY 152 MM) LUMBER PLATES OR TWO SETS OF NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES TIGHTLY BUTTED. MAX DIAM OF OPENING IS 5-1/4 IN. (133 MM).

D. GYPSUM BOARD\* -- THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN INDIVIDUAL WALL AND PARTITION 2.STEEL DUCT -- NOM 4 IN. (102 MM) DIAM (OR SMALLER) NO. 28 GAUGE (OR HEAVIER) STEEL DUCT TO BE INSTALLED EITHER CONCENTRICALLY OR

ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. THE ANNULAR SPACE BETWEEN DUCT AND PERIPHERY OF OPENING SHALL BE MIN OF 1/4 IN. (6 MM) TO MAX 3/4 IN. (19 MM). STEEL DUCT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR-CEILING ASSEMBLY. 3.FILL, VOID OR CAVITY MATERIALS\*-SEALANT -- MIN 3/4 IN. (19 MM) THICKNESS OF SEALANT APPLIED WITHIN THE ANNULAR SPACE, FLUSH WITH TOP SURFACE OF FLOOR OR SOLE PLATE. MIN 5/8 IN. (16 MM) THICKNESS OF SEALANT APPLIED WITHIN ANNULAR SPACE, FLUSH WITH BOTTOM SURFACE

HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- FS-ONE SEALANT OR FS-ONE MAX INTUMESCENT SEALANT \*INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS

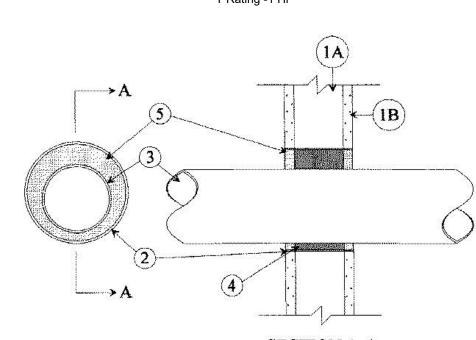
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## FLOOR PENETRATION U.L. SYSTEM NO. F-C-7013

System No. F-C-7017 F Rating - 1 Hr



1. Floor-Ceiling Assembly -- The 1 hr fire-rated solid or trussed lumber joist floor-ceiling assembly shall be constructed of the materials and in the manner specified in the individual L500 Series Floor-Ceiling Designs in the UL Fire Resistance Directory. The general construction details of the floor-ceiling assembly

A. Flooring System -- Lumber or plywood subfloor with finish floor of lumber, plywood or Floor Topping Mixture\* as specified in the individual B. Wood Joists -- Nom 10 in. (254 mm) deep (or deeper) lumber, steel or combination lumber and steel joists, trusses or Structural Wood

**Members\*** with bridging as required and with ends firestopped. C. Gypsum Board\* -- Nom 4 ft (122 cm) wide by 5/8 in. (16 mm) thick as specified in the individual Floor-Ceiling Design. Gypsum board secured to wood joists or furring channels as specified in the individual Floor-Ceiling Design. Max of opening is 6 by 5-1/2 in. (152 mm by 140 mm). 1.1 Chase Wall -- (Optional, not shown) - The duct (Item 2) may be routed through a fire-rated single, double or staggered wood stud/gypsum board chase

wall having a fire rating consistent with that of the floor-ceiling assembly. The chase wall shall be constructed of the materials and in the manner specified in the individual U300 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction features: A. **Studs** -- Nom 2 by 6 in. (51 by 152 mm) or double nom 2 by 4 in. (51 by 102 mm) lumber studs.

B. Sole Plate -- Nom 2 by 6 in. (51 by 152 mm) or parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. C. Top Plate -- The double top plate shall consist of two nom 2 by 6 in. (51 by 152 mm) or two sets of parallel 2 by 4 in. (51 by 102 mm) lumber plates, tightly butted. Max of opening is 6 by 5-1/2 in. (152 by 140 mm).

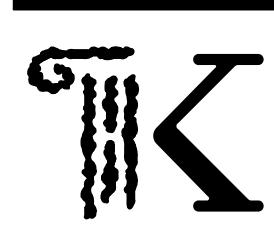
D. Gypsum Board\* -- Thickness, type, number of layers and fasteners shall be as specified in individual Wall and Partition Design. 2. Steel Duct -- Nom 4 in. (102 mm) diam (or Smaller) No. 30 gauge (or heavier) galv steel duct to be installed eccentrically or concentrically within the firestop system. The annular space between the duct and the periphery of opening shall be min 0 in. (0 mm, point contact) to max 2 in. (51 mm). Duct to be rigidly supported on both sides of the Floor-Ceiling assembly.

3. Fill. Void or Cavity Materials\* - Caulk or Sealant -- Min 3/4 in. (19 mm) thickness of caulk applied within the annulus, flush with top surface of floor or sole plate. Min 5/8 in. (16 mm) thickness of caulk applied within the annulus, flush with bottom surface of ceiling or top plate. Min 1/2 in. (13 mm) diam bead of caulk applied at the duct/floor or sole plate interface at point contact location on the top side of assembly and at the duct/ceiling or top plate interface at point contact location on bottom side of assembly. **3M COMPANY** -- FireDam-150+, CP 25WB+, IC 15WB+ caulk or FB-3000 WT sealant

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

<u>Last Updated</u> on 2005-05-19

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# **KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE **PLANNING** DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

PROJECT:

SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B"

11125 EDWARDS RD. ELSMERE, KY 41018

**DRAWING TITLE: HVAC FIRE STOP** SYSTEMS

DATE: 07/31/2023 REVISED:



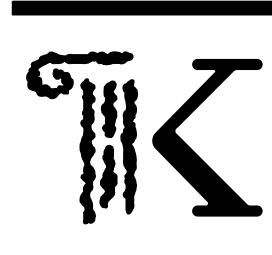
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SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023 CONSTRUCTION SET

WALL PENETRATION U.L. SYSTEM NO. W-L-7155

WALL PENETRATION U.L. SYSTEM NO. W-L-7017



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PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: **BUILDING FIRST** FLOOR ELECTRICAL PLAN

DATE: 07/31/2023 **REVISED**:

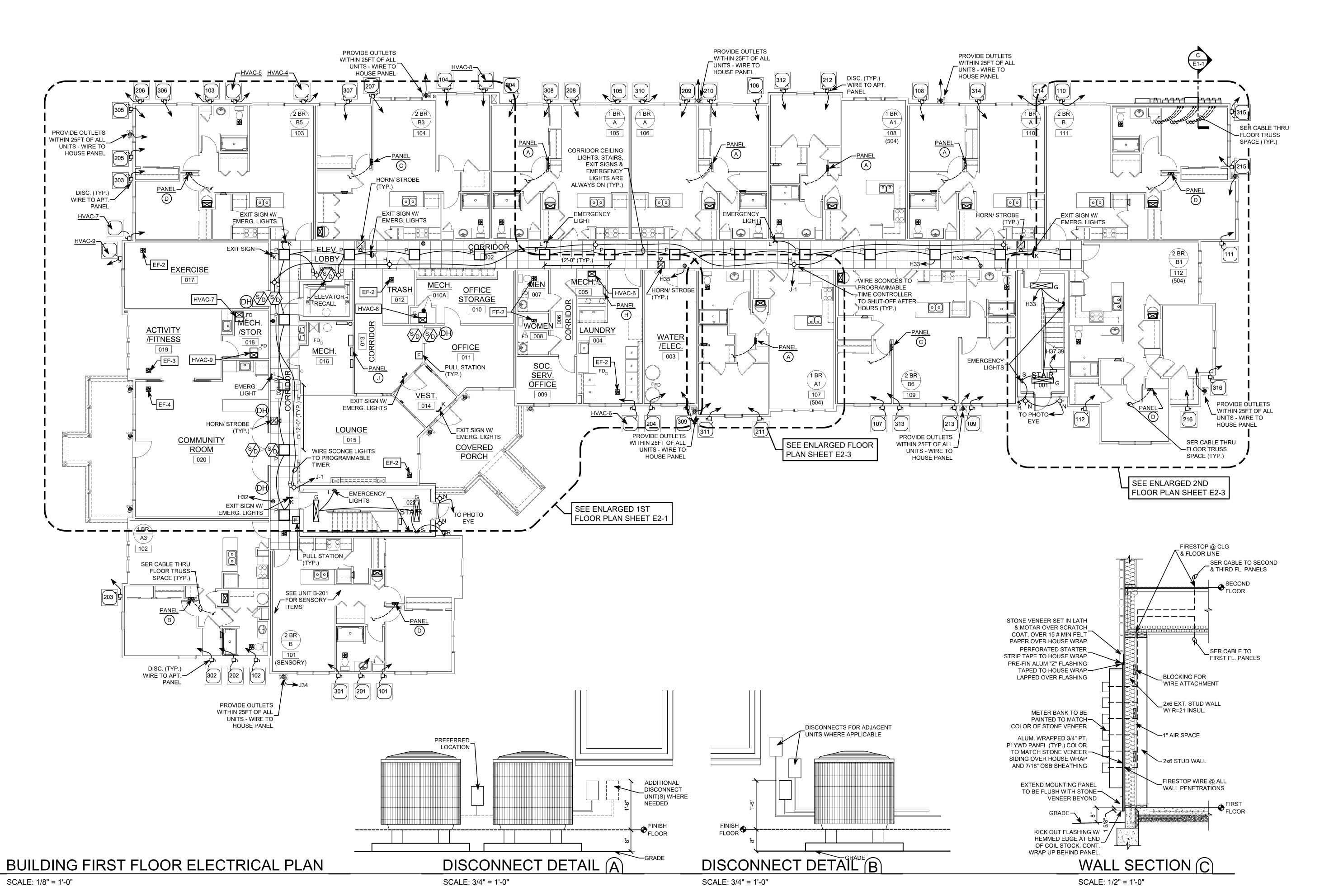


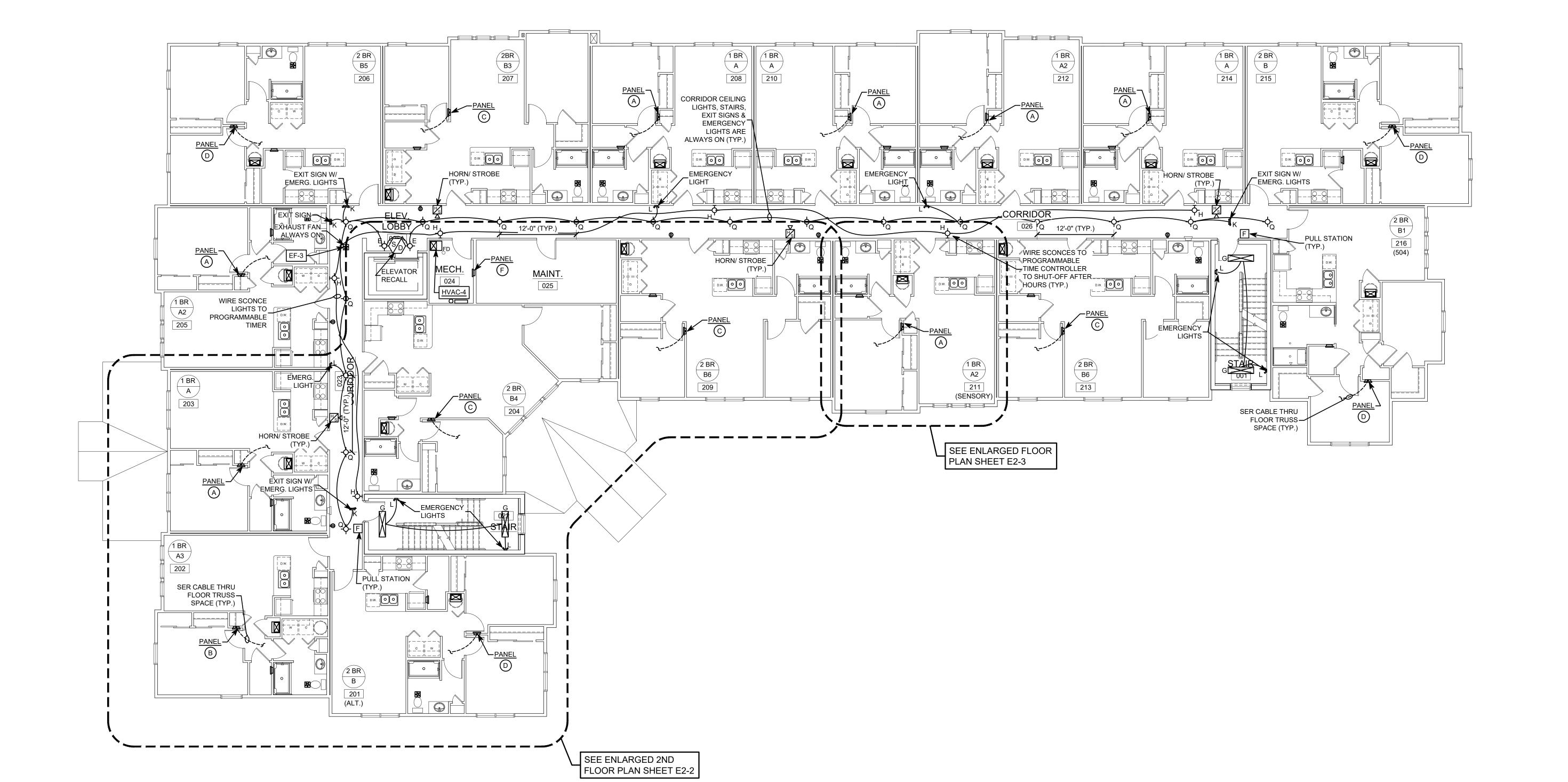
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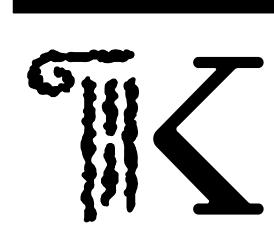
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E1-1







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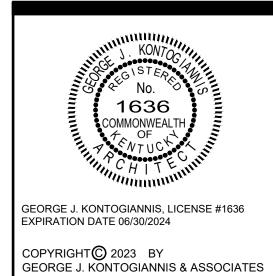
PROJECT:

THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
BUILDING SECOND
FLOOR ELECTRICAL
PLAN

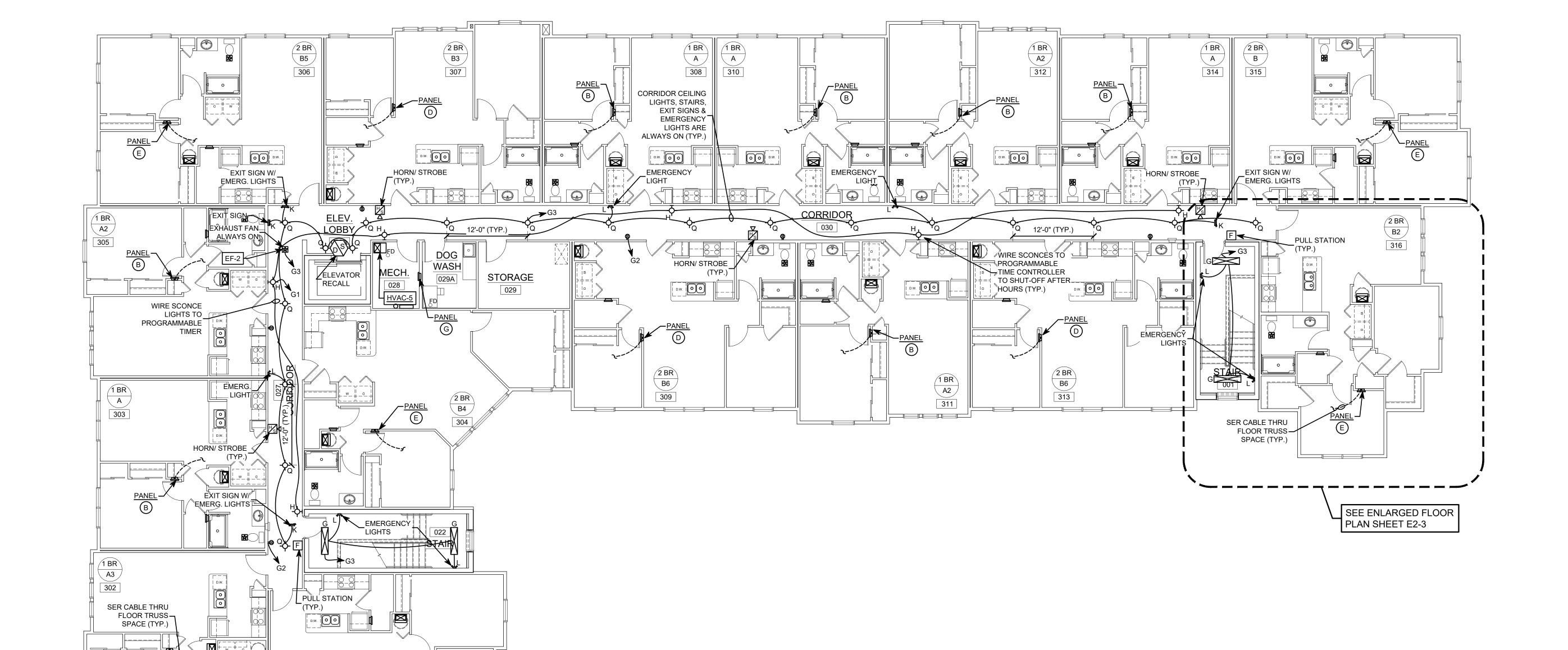
DATE: 07/31/2023 REVISED:

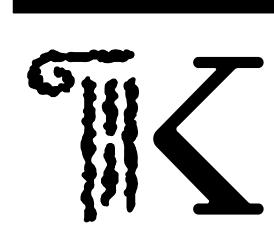


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CONSTRUCTION SET

E1-2





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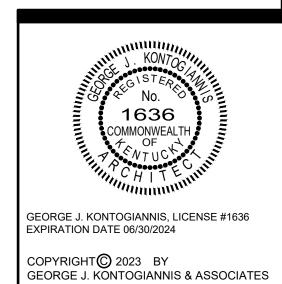
PROJECT:

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1125 EDWARDS RD. ELSMERE, KY 41018

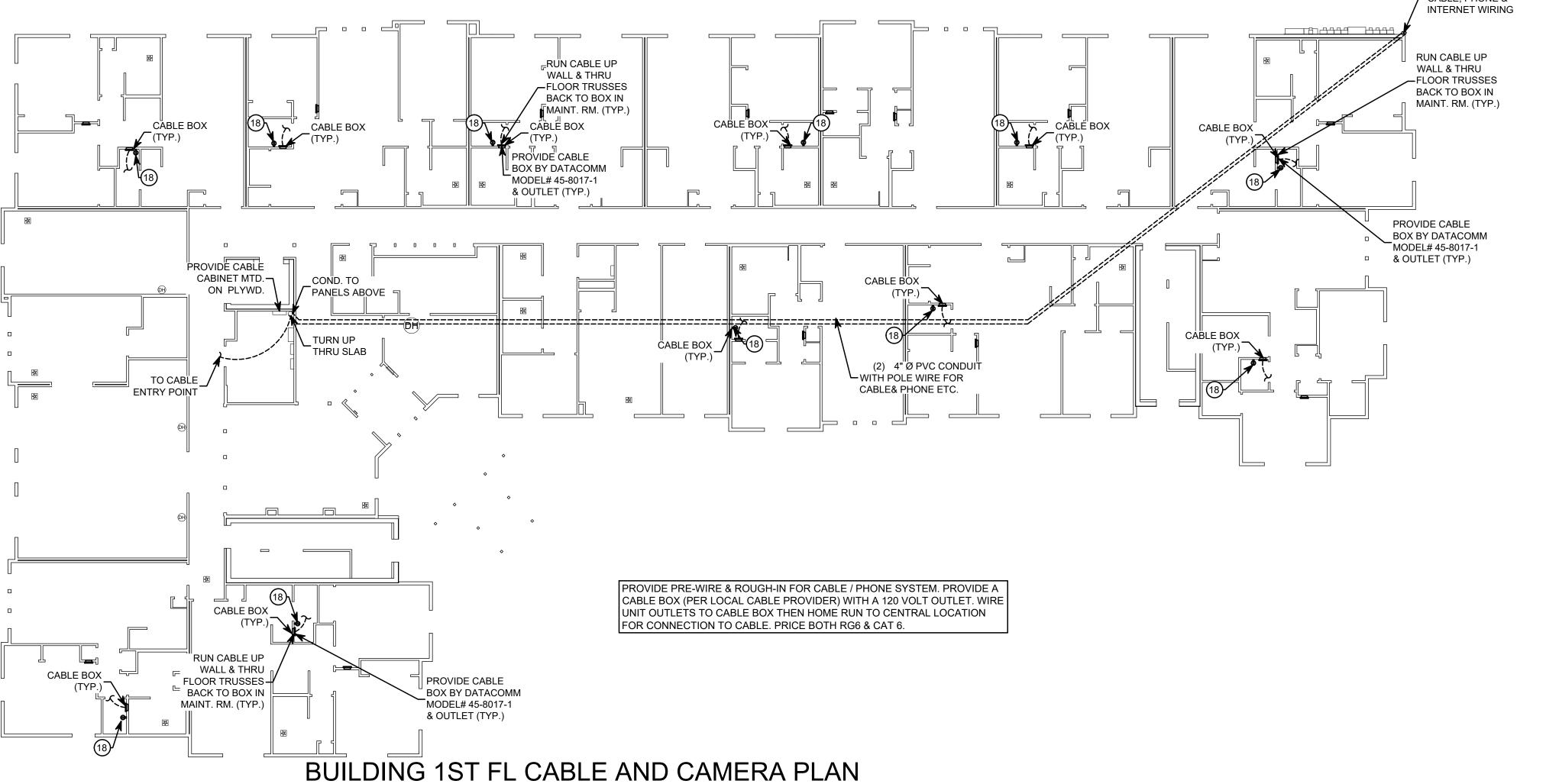
DRAWING TITLE:
BUILDING THIRD
FLOOR ELECTRICAL
PLAN

DATE: 07/31/2023 REVISED:

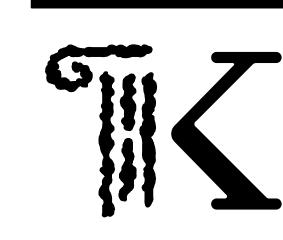


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PERMIT SET 07/31/2023
BID SET 11/08/2023
CONSTRUCTION SET

E1-3



SCALE: 3/32" = 1'-0"



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PROJECT:

THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
BUILDING CABLE
& CAMERA PLAN

DATE: 07/31/2023 REVISED:



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□ CONSTRUCTION SET

1-4

SCALE: 1/4" = 1'-0"

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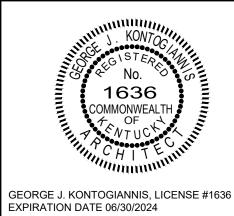
PROJECT:

THE SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

## 1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: **ENLARGED FIRST** FLOOR ELECTRICAL PLAN

DATE: 07/31/2023 REVISED:



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E2-1

# ENLARGED SECOND FLOOR ELECTRICAL PLAN

INSTALLED IN ACCORDANCE WITH NFPA #74 MANUAL, WIRE INTO BEDROOM LIGHTING CIRCUIT. INTERCONNECT DETECTOR SO THAT IF ONE DETECTOR ALARMS ALL DETECTORS ALARM (PROVIDE BATTERY BACKUP). PROVIDE STROBE UNIT IN HANDICAPPED AND SENSORY UNIT. THE UNIT IN THE HALLWAY SHALL BE WITHIN 3 FT. OF THE BEDROOM DOOR & SHALL BE A COMBINATION FIRE DETECTION UNIT & CO2 DETECTION . THE UNIT INSIDE

#12 WIRE AND MAKE ALL CONNECTIONS. (VERIFY IF WASHER BOX HAS AN

DRYER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED OUTLET AT

42" A.F.F. WIRE BACK TO 30/2 CIRCUIT BREAKER, USE #10 WIRE AND MAKE

HOUSEHOLD FIRE DETECTION CEILING MOUNTED AS SHOWN, SHALL BE

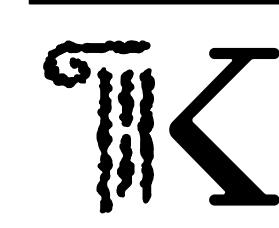
THE BEDROOM SHALL BE A STANDARD FIRE DETECTION UNIT.

ALL CONNECTIONS.

GROUND FAULT BATH RECEPTACLE (G.F.I.) ABOVE COUNTER AT 42" A.F.F. AS SHOWN. OUTLET IN SECOND BATH IS FED DOWNSTREAM THROUGH THIS DEVICE AS APPLICABLE. WIRE TO SEPARATE 20/1 CIRCUIT BREAKER

W.I.C.

- GROUND FAULT RECEPTACLE (G.F.I.) IN BACKSPLASH OR ON WALL. WIRE IN WITH APPLIANCE CIRCUITRY.
- WALL MOUNTED ELECTRIC BLOWER COIL UNIT WITH ELECTRIC HEAT STRIP. UNIT SHALL HAVE A DISCONNECT PROVIDED ON THE UNIT. WIRE TO
- WEATHERPROOF OUTLET PROVIDE GFI OUTLET AND WIRE IN WITH ADJACENT OUTLETS, OR WIRE DOWNSTREAM OF BATH GFI OUTLET.
- 13. <u>PAD MOUNTED HEAT PUMP CONDENSER.</u> PROVIDE WALL MOUNTED DISCONNECT AND WIRE TO PANEL. PROVIDE WEATHERPROOF OUTLETS
- 14. <u>ELECTRIC WATER HEATER</u>. UNIT HAS 4,500 WATT ELEMENT. PROVIDE WALL MTD. DISCONNECT PER CODE. WIRE TO 30/2 CIRCUIT BREAKER. USE #10
- 15. PROVIDE U/L LISTED FAN JUNCTION BOX SECURELY MOUNTED FOR ALL
- PROVIDE <u>SENSORY UNITS</u> WITH AUDIO/VISUAL DOOR BELL, TELEPHONE & SINGLE STATION SMOKE DETECTOR AS SHOWN ON UNIT PLAN IN ORDER FOR TENANTS WITH HEARING OR VISUAL IMPAIRMENTS TO BE NOTIFIED IF SOMEONE IS AT THE ENTRY DOOR, CALLING ON THE PHONE OR IF SMOKE IS BUILDING UP IN THEIR UNIT.
- 17. PROVIDE LOW SOUNDER UNIT WITH STROBE AT PILLOW LOCATION CONNECTED TO THE FIRE ALARM SYSTEM PER NFPA 72.
- PROVIDE PRE-WIRE & ROUGH-IN FOR CABLE / PHONE SYSTEM. PROVIDE A CABLE BOX (PER LOCAL CABLE PROVIDER) WITH A 120 VOLT OUTLET. WIRE UNIT OUTLETS TO CABLE BOX THEN HOME RUN TO CENTRAL LOCATION FOR CONNECTION TO CABLE. PRICE BOTH RG6 & CAT 6.



**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE **PLANNING DESIGN** 

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

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PROJECT:

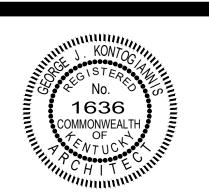
SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B")

11125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:

ENLARGED SECOND FLOOR ELECTRICAL PLAN

DATE: 07/31/2023 REVISED:



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CONSTRUCTION SET

SCALE: 1/4" = 1'-0"

## SPECIAL OUTLETS

- RANGE HOOD SHALL BE SUPPLIED BY THE GENERAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR. PROVIDE ALL ELECTRICAL CONNECTIONS AND WIRE TO LIGHTING CIRCUIT.
- ELECTRIC RANGE BY GENERAL CONTRACTOR. PROVIDE 40 AMP OUTLET, WIRE BACK TO 40/2 CIRCUIT BREAKER, USE #8 WIRE AND MAKE ALL CONNECTIONS. LOCATE OUTLET PER APPLIANCE MANUFACTURER'S
- EXHAUST FANS SHALL BE PROVIDED AND INSTALLED BY THE HEATING CONTRACTOR. WIRE IN WITH LIGHTING CIRCUIT AS SHOWN AND MAKE ALL CONNECTIONS.
- DISPOSAL SHALL BE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR. UNIT HAS CORD W/ PLUG - INSTALL OUTLET UNDER SINK, WIRE SWITCH TO 15/1 CIRCUIT BREAKER, USE #14 WIRE AND MAKE ALL CONNECTIONS.
- DISHWASHER BY GENERAL CONTRACTOR. WIRE DIRECT WITH ADDITIONAL WIRE TO ALLOW REMOVAL FOR SERVICE. (PROVIDE DISCONNECT ONLY IF REQUIRED BY LOCAL AUTHORITIES). WIRE TO 20/1 CIRCUIT BREAKER, USE #12 WIRE AND MAKE ALL CONNECTIONS. PROVIDE GFI PROTECTION.
- WASHER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED SINGLE OUTLET MOUNTED AT 48" A.F.F. WIRE BACK TO 20/1 CIRCUIT BREAKER, USE #12 WIRE AND MAKE ALL CONNECTIONS. (VERIFY IF WASHER BOX HAS AN OUTLET.
- DRYER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED OUTLET AT 42" A.F.F. WIRE BACK TO 30/2 CIRCUIT BREAKER, USE #10 WIRE AND MAKE ALL CONNECTIONS.
- HOUSEHOLD FIRE DETECTION CEILING MOUNTED AS SHOWN, SHALL BE INSTALLED IN ACCORDANCE WITH NFPA #74 MANUAL. WIRE INTO BEDROOM LIGHTING CIRCUIT. INTERCONNECT DETECTOR SO THAT IF ONE DETECTOR ALARMS ALL DETECTORS ALARM (PROVIDE BATTERY BACKUP). PROVIDE STROBE UNIT IN HANDICAPPED AND SENSORY UNIT. THE UNIT IN THE HALLWAY SHALL BE WITHIN 3 FT. OF THE BEDROOM DOOR & SHALL BE A COMBINATION FIRE DETECTION UNIT & CO2 DETECTION . THE UNIT INSIDE THE BEDROOM SHALL BE A STANDARD FIRE DETECTION UNIT.
- GROUND FAULT BATH RECEPTACLE (G.F.I.) ABOVE COUNTER AT 42" A.F.F. AS SHOWN. OUTLET IN SECOND BATH IS FED DOWNSTREAM THROUGH THIS DEVICE AS APPLICABLE. WIRE TO SEPARATE 20/1 CIRCUIT BREAKER USE #12 WIRE.
- . GROUND FAULT RECEPTACLE (G.F.I.) IN BACKSPLASH OR ON WALL. WIRE IN WITH APPLIANCE CIRCUITRY.
- WALL MOUNTED ELECTRIC BLOWER COIL UNIT WITH ELECTRIC HEAT STRIP. UNIT SHALL HAVE A DISCONNECT PROVIDED ON THE UNIT. WIRE TO A CIRCUIT BREAKER AS SHOWN.
- 12. <u>WEATHERPROOF OUTLET</u> PROVIDE GFI OUTLET AND WIRE IN WITH ADJACENT OUTLETS, OR WIRE DOWNSTREAM OF BATH GFI OUTLET.

1)HOOD

EMERGENCY

STAIR

PULL CORD

CENTER

HOLD LIGHT 12"

MIN. FROM FACE— OF SHELF

0

- PAD MOUNTED HEAT PUMP CONDENSER. PROVIDE WALL MOUNTED DISCONNECT AND WIRE TO PANEL. PROVIDE WEATHERPROOF OUTLETS WITHIN 25 FEET OF CONDENSERS
- ELECTRIC WATER HEATER. UNIT HAS 4,500 WATT ELEMENT. PROVIDE WALL MTD. DISCONNECT PER CODE. WIRE TO 30/2 CIRCUIT BREAKER. USE #10 WIRE & MAKE ALL CONNECTIONS.
- 15. PROVIDE U/L LISTED FAN JUNCTION BOX SECURELY MOUNTED FOR ALL CEILING FANS. JUNCTION BOX SHALL BE U/L LISTED CEILING FAN BOX.
- PROVIDE SENSORY UNITS WITH AUDIO/VISUAL DOOR BELL, TELEPHONE & SINGLE STATION SMOKE DETECTOR AS SHOWN ON UNIT PLAN IN ORDER FOR TENANTS WITH HEARING OR VISUAL IMPAIRMENTS TO BE NOTIFIED IF SOMEONE IS AT THE ENTRY DOOR, CALLING ON THE PHONE OR IF SMOKE IS BUILDING UP IN THEIR UNIT.
- PROVIDE LOW SOUNDER UNIT WITH STROBE AT PILLOW LOCATION CONNECTED TO THE FIRE ALARM SYSTEM PER NFPA 72.
- PROVIDE PRE-WIRE & ROUGH-IN FOR CABLE / PHONE SYSTEM. PROVIDE A CABLE BOX (PER LOCAL CABLE PROVIDER) WITH A 120 VOLT OUTLET. WIRE UNIT OUTLETS TO CABLE BOX THEN HOME RUN TO CENTRAL LOCATION FOR CONNECTION TO CABLE. PRICE BOTH RG6 & CAT 6.

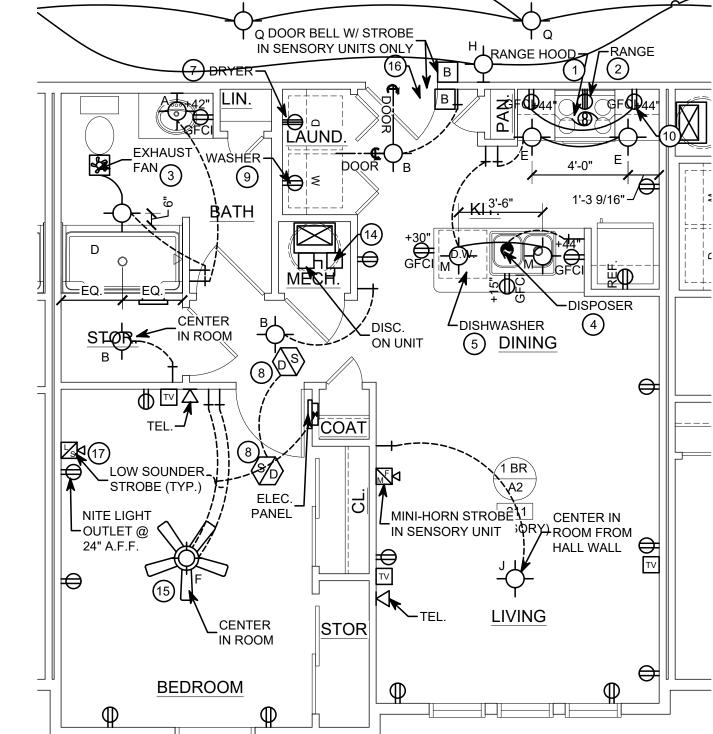
E2-3 E2-3 KEY PLAN **KONTOGIANNIS** SCALE: N.T.S. & ASSOCIATES

> LOW SOUNDER STROBE (TYP.)

> > IN ROOM

**EMERGENCY** 

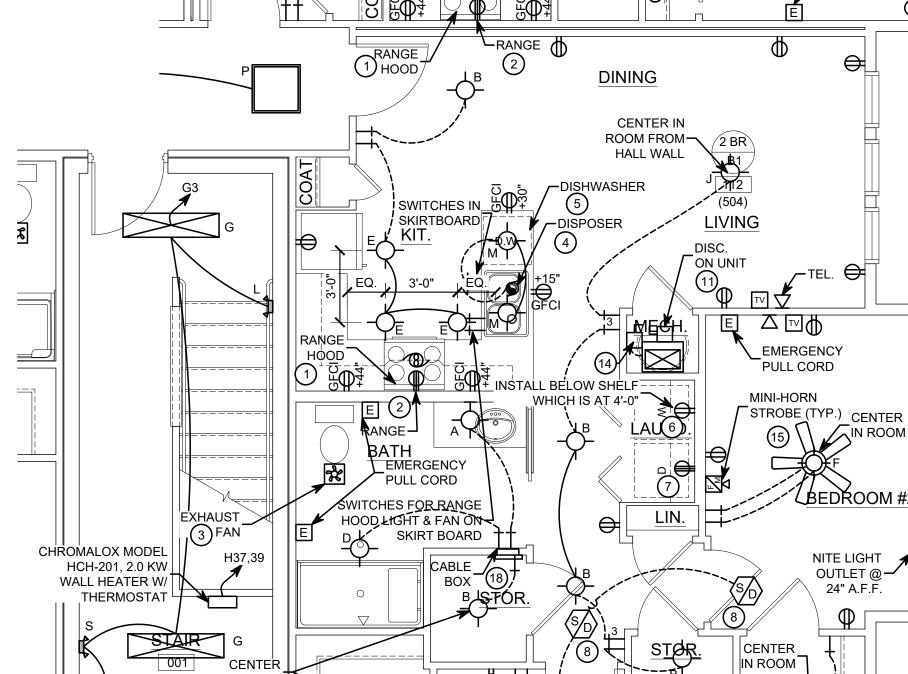
PULL CORD



EMERGENCY RULL CORD DOOR BETTLE B LAUN
W/ STROBE
INSTALL BELOW SHELF
WHICH IS AT 4'-0" SWITCHES ON KIT. ON UNIT STOR B STROBE EQ. DINING SWITCHES FOR -CABLE BOX RANGE HOOD LIGHT & FAN \_DOOR BELL` W/ STROBE CENTER IN ←ROOM FROM ← HALL WALL DOOR BELL W/ STROBE LIVING A1 107 (504) CENTER LOW SOUNDER IN ROOM STROBE (TYP.)

ONE BEDROOM UNIT (504) A1

SCALE: 1/4" = 1'-0"



NITE LIGHT

HOLD LIGHT 12"
MIN. FROM FACE

OF SHELF

LOW SOUNDER STROBE (TYP.)

CENTER
OUTLET
BELOW
LIGHT

OUTLET @ 4

24" A.F.F.

3 FAN

BATH

EMERGENCY

PULL CORD

2 BR

В

111

TWO BEDROOM UNIT B2

CABLE BOX

NITE LIGHT

OUTLET @ 2 \ 24" A.F.F.

**DINING** 

CENTER IN ROOM FROM

HALL WALL

LIN.

B2

EZV

MINI-HORN

CENTER\_ IN ROOM

HOLD LIGHT 12" MIN. FROM FACE

**EMERGENCY** 

LIVING

EMERGENCY PULL CORD

STROBE (TYP.) CENTER

BEDROOM #2

NITE LIGHT OUTLET @

ENLARGED FIRST & SECONDIFLOOR PLAN

**HOLD LIGHT 12** 

MIN. FROM FACE-

OF SHELF

**EMERGENCY** 

SCALE: 1/4" = 1'-0"

ARCHITECTURE

400 SOUTH FIFTH ST

COLUMBUS, OHIO

**PLANNING** 

**DESIGN** 

SUITE 400

43215-5492

PHONE: 614-224-2083

GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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E2-3

SCALE: 1/4" = 1'-0"

LOW SOUNDER STROBE (TYP.)

The second

CENTER IN FAX: 614-224-4736 ROOM FROM E-MAIL: architects@kontogiannis.com HALL WALL DINING PROJECT: PANEL TEL. TOW SOUNDER STROBE (TYP.) BEDROOM #2 SANCTUARY ON EDWARDS SWITCHES ON\_ CENTER SENIOR HOUSING SKIRTBOARD IN ROOM (BUILDING "B") **EMERGENCY** PULL CORD ONE BEDROOM UNIT (A2) SCALE: 1/4" = 1'-0" 1125 EDWARDS RD.

> ELSMERE, KY 41018 DRAWING TITLE: **ENLARGED UNIT ELECTRICAL PLANS** DATE: 07/31/2023 REVISED:

PERMIT SET 07/31/2023

### **ELECTRIC LOADS**

ONE BEDROOM (PANEL A)		
LIGHTS & OUTLETS @ 3 W / S 660 SQ, FT, X 3 W / SQ.FT. 2 APPL. CIRC @ 1500 WATTS ELECTRIC RANGE DISPOSER WASHER DISHWASHER DRYER REFRIGERATOR WATER HEATER	=	9.90 KW 0.70 KW 1.50 KW 1.20 KW
SUBTOTAL	=	27.88 KW
HEAT PUMP = 3.74 ELECTRIC RESISTANCE HEAT = 3.6	= =	3.47 KW 5.60 KW
TOTAL CONNECTED LOAD	=	35.22 KW
DEMAND PER 220.82 FIRST 10 KW @ 100% REST 17.78 KW @ 40% HEAT PUMP (3.74) +65%(3.6KW)	= =	10.00 KW 7.15 KW <u>6.08 KW</u>
TOTAL LOAD	=	23.23 KW

USE 125/2 CIRCUIT BREAKER WITH

#1/0 SER ALUMINUM CABLE (XHHW)

USE 125/2 CIRCUIT BREAKER WITH

#1/0 SER ALUMINUM CABLE (XHHW)

NE BEDROOM (PANEL B)			TWO BEDROOM (PANEL D)
GHTS & OUTLETS @ 3 W / S	SQ.FT.		LIGHTS & OUTLETS @ 3 W
60 SQ, FT, X 3 W / SQ.FT.			840 SQ, FT, X 3 W / SQ.FT.
APPL. CIRC @ 1500 WATTS	; =	3.00 KW	2 APPL. CIRC @ 1500 WATT
			ELECTRIC RANGE
LECTRIC RANGE SPOSER	=	0.70 KW	DISPOSER
ASHER	=	1.50 KW	WASHER
ASHER SHWASHER	=	1.20 KW	DISHWASHER
		4.40 KW	
			REFRIGERATOR
ATER HEATER	=	4.5 KW	WATER HEATER
SUBTOTAL	=	27.88 KW	SUBTOTAL
EAT PUMP = 3.74 FLECTRIC	:=	3.74 KW	HEAT PUMP = 3.74 ELECTR
ESISTANCE HEAT = 5.6	=	5.6 KW	RESISTANCE HEAT = 5.6
OTAL CONNECTED LOAD	=	37.22 KW	TOTAL CONNECTED LOAD
EMAND PER 220.82			DEMAND PER 220.82
EMAND PER 220.82 FIRST 10 KW @ 100% REST 17.88 KW @ 40%	_	10 00 KW	FIRST 10 KW @ 100%
REST 17 88 KW @ 40%	=	7 15 K\M	REST 18.4 KW @ 40%
HEAT DIMP (3.74)		7.10 KW	HEAT PUMP (3.74)
HEAT PUMP (3.74) +65%(5.6KW)	_	7 38 K\M	+65%(5.6KW)
10070(0.01(0))	_	1.30 KW	10370(3.01(**)
TOTAL LOAD	=	24.53 KW	TOTAL LOAD
- 11 12 2 2 1			211.2.201.2
24.53 KW / .208	=	117.9 AMPS	24.74 KW / .208

ROOM (PANEL A)			TWO BEDROOM (PANEL C)					
OUTLETS @ 3 W / S	Q.FT.		LIGHTS & OUTLETS @ 3 W / S	SQ.FT.				
Γ, X 3 W / SQ.FT.	=	1.98 KW	840 SQ, FT, X 3 W / SQ.FT.	=	2.50 KW			
RC @ 1500 WATTS	=	3.00 KW	2 APPL. CIRC @ 1500 WATTS	=	3.00 KW			
RANGE	=	9.90 KW	ELECTRIC RANGE	=	9.90 KW			
₹	=	0.70 KW	DISPOSER	=	0.70 KW			
	=	1.50 KW	WASHER	=	1.50 KW			
HER	=	1.20 KW	DISHWASHER	=	1.20 KW			
	=	4.40 KW	DRYER	=	4.40 KW			
RATOR	=	.70 KW	REFRIGERATOR	=	.70 KW			
EATER	=	4.5 KW	WATER HEATER	=	4.5 KW			
SUBTOTAL	=	27.88 KW	SUBTOTAL	=	28.40 KW			
IP = 3.74 ELECTRIC	: =	3.47 KW	HEAT PUMP = 3.74 ELECTRIC	; =	3.74 KW			
CE HEAT = 3.6	=	5.60 KW	RESISTANCE HEAT = 3.6	=	3.60 KW			
NNECTED LOAD	=	35.22 KW	TOTAL CONNECTED LOAD	=	35.74 KW			
PER 220.82			DEMAND PER 220.82					
ST 10 KW @ 100%	=	10.00 KW	FIRST 10 KW @ 100%	=	10.00 KW			
T 17.78 KW @ 40%	=	7.15 KW	REST 18.4 KW @ 40%	=	7.36 KW			
T PUMP (3.74)			HEAT PUMP (3.74)					
%(3.6KW)	=	6.08 KW	+65%(3.6KW)	=	6.08 KW			
TOTAL LOAD	=	23.23 KW	TOTAL LOAD	=	23.44 KW			
23.23 KW / .208	=	111.68 AMPS	23.44 KW / .208	=	112.7 AMPS			
125/2 CIRCUIT BRE SER ALUMINUM CA			USE 125/2 CIRCUIT BRE #1/0 SER ALUMINUM CA					

NURSE CALL

WO BEDROOM (PANEL D)			TWO BEDROOM (PANEL E)		
	O ET		LICUTE & OUTLETS @ 2 W / S	O ET	
IGHTS & OUTLETS @ 3 W / \$ 40 SQ, FT, X 3 W / SQ.FT.		2.50 KW	LIGHTS & OUTLETS @ 3 W / S 840 SQ, FT, X 3 W / SQ.FT.	SQ.F1.	2.50 KV
APPL. CIRC @ 1500 WATTS LECTRIC RANGE			2 APPL. CIRC @ 1500 WATTS ELECTRIC RANGE		
	=	9.90 KW		=	
ISPOSER	=		BATH OUTLET		
VASHER ISHWASHER	=	1.50 KW	WASHER DISHWASHER	=	1.50 KV
ISHWASHER	=	1.20 KW			
RYER			DRYER		
EFRIGERATOR /ATER HEATER	=		REFRIGERATOR	=	.70 KV
/ATER HEATER	=	<u>4.5 KW</u>	WATER HEATER	=	4.5 KV
OLIDTOTAL		00.40.1014	OUDTOTAL		00 40 10
SUBTOTAL	=	28.40 KW	SUBTOTAL	=	28.40 KV
EAT PUMP = 3.74 ELECTRIC	:=	3 74 KW	HEAT PUMP = 3.2 ELECTRIC	=	3.20 KV
ESISTANCE HEAT = 5.6		5.60 KW	RESISTANCE HEAT = 7.2	=	7.2 KV
2010 17 11 402 1 127 11 0.0		0.001111	TREGIOTATION T.E		7.210
OTAL CONNECTED LOAD	=	37.74 KW	TOTAL CONNECTED LOAD	=	38.80 KV
EMAND PER 220.82			DEMAND PER 220.82		
FIRST 10 KW @ 100%	=	10.00 KW	FIRST 10 KW @ 100%	=	10.00 KV
REST 18.4 KW @ 40%	=	7.36 KW	REST 18.4 KW @ 40%	=	7.36 KV
HEAT PUMP (3.74)			HEAT PUMP (3.2)		
	=	7.38 KW	+65%(7.2KW) ´	=	7.88 KV
,			,		
TOTAL LOAD	=	24.74 KW	TOTAL LOAD	=	25.24 KV
24.74 KW / .208	=	118.9 AMPS	25.24 KW / .208	=	121.3 AN
USE 125/2 CIRCUIT BRI			USE 125/2 CIRCUIT BRI		
#1/0 SER ALUMINUM C	ABLE	(XHHW)	#1/0 SER ALUMINUM CA	ABLE	(XHHW)

## SPECIAL OUTLETS

- RANGE HOOD SHALL BE SUPPLIED BY THE GENERAL CONTRACTOR AND INSTALLED BY THE ELECTRICAL CONTRACTOR, PROVIDE ALL ELECTRICAL CONNECTIONS AND WIRE TO LIGHTING CIRCUIT.
- ELECTRIC RANGE BY GENERAL CONTRACTOR. PROVIDE 40 AMP OUTLET, WIRE BACK TO 40/2 CIRCUIT BREAKER, USE #8 WIRE AND MAKE ALL CONNECTIONS. LOCATE OUTLET PER APPLIANCE MANUFACTURER'S RECOMMENDATIONS.
- EXHAUST FANS SHALL BE PROVIDED AND INSTALLED BY THE HEATING CONTRACTOR. WIRE IN WITH LIGHTING CIRCUIT AS SHOWN AND MAKE ALL CONNECTIONS.
- DISPOSAL SHALL BE PROVIDED AND INSTALLED BY PLUMBING CONTRACTOR. UNIT HAS CORD W/ PLUG - INSTALL OUTLET UNDER SINK, WIRE SWITCH TO 15/1 CIRCUIT BREAKER, USE #14 WIRE AND MAKE ALL CONNECTIONS.
- DISHWASHER BY GENERAL CONTRACTOR. WIRE DIRECT WITH ADDITIONAL WIRE TO ALLOW REMOVAL FOR SERVICE. (PROVIDE DISCONNECT ONLY IF REQUIRED BY LOCAL AUTHORITIES). WIRE TO 20/1 CIRCUIT BREAKER, USE #12 WIRE AND MAKE ALL CONNECTIONS. PROVIDE GFI PROTECTION.
- WASHER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED SINGLE OUTLET MOUNTED AT 48" A.F.F. WIRE BACK TO 20/1 CIRCUIT BREAKER, USE #12 WIRE AND MAKE ALL CONNECTIONS. (VERIFY IF WASHER BOX HAS AN OUTLET.
- DRYER BY GENERAL CONTRACTOR. PROVIDE WALL MOUNTED OUTLET AT 42" A.F.F. WIRE BACK TO 30/2 CIRCUIT BREAKER, USE #10 WIRE AND MAKE ALL CONNECTIONS.
- HOUSEHOLD FIRE DETECTION CEILING MOUNTED AS SHOWN, SHALL BE INSTALLED IN ACCORDANCE WITH NFPA #74 MANUAL. WIRE INTO BEDROOM LIGHTING CIRCUIT. INTERCONNECT DETECTOR SO THAT IF ONE DETECTOR ALARMS ALL DETECTORS ALARM (PROVIDE BATTERY BACKUP). PROVIDE STROBE UNIT IN HANDICAPPED AND SENSORY UNIT. THE UNIT IN THE HALLWAY SHALL BE WITHIN 3 FT. OF THE BEDROOM DOOR & SHALL BE A COMBINATION FIRE DETECTION UNIT & CO2 DETECTION. THE UNIT INSIDE THE BEDROOM SHALL BE A STANDARD FIRE DETECTION UNIT.
- GROUND FAULT BATH RECEPTACLE (G.F.I.) ABOVE COUNTER AT 42" A.F.F. AS SHOWN. OUTLET IN SECOND BATH IS FED DOWNSTREAM THROUGH THIS DEVICE AS APPLICABLE. WIRE TO SEPARATE 20/1 CIRCUIT BREAKER USE #12 WIRE.
- GROUND FAULT RECEPTACLE (G.F.I.) IN BACKSPLASH OR ON WALL. WIRE IN WITH APPLIANCE CIRCUITRY.
- 11. <u>WALL MOUNTED ELECTRIC BLOWER COIL UNIT</u> WITH ELECTRIC HEAT STRIP. UNIT SHALL HAVE A DISCONNECT PROVIDED ON THE UNIT. WIRE TO A CIRCUIT BREAKER AS SHOWN.
- 12. WEATHERPROOF OUTLET PROVIDE GFI OUTLET AND WIRE IN WITH ADJACENT OUTLETS, OR WIRE DOWNSTREAM OF BATH GFI OUTLET.
- 13. PAD MOUNTED HEAT PUMP CONDENSER. PROVIDE WALL MOUNTED DISCONNECT AND WIRE TO PANEL. PROVIDE WEATHERPROOF OUTLETS WITHIN 25 FEET OF CONDENSERS.
- 4. ELECTRIC WATER HEATER. UNIT HAS 4,500 WATT ELEMENT. PROVIDE WALL MTD. DISCONNECT PER CODE. WIRE TO 30/2 CIRCUIT BREAKER. USE #10 WIRE & MAKE ALL CONNECTIONS.
- 15. PROVIDE U/L LISTED FAN JUNCTION BOX SECURELY MOUNTED FOR ALL CEILING FANS. JUNCTION BOX SHALL BE U/L LISTED CEILING FAN BOX.
- 16. PROVIDE SENSORY UNITS WITH AUDIO/VISUAL DOOR BELL, TELEPHONE & SINGLE STATION SMOKE DETECTOR AS SHOWN ON UNIT PLAN IN ORDER FOR TENANTS WITH HEARING OR VISUAL IMPAIRMENTS TO BE NOTIFIED IF SOMEONE IS AT THE ENTRY DOOR. CALLING ON THE PHONE OR IF SMOKE IS BUILDING UP IN THEIR UNIT.
- PROVIDE LOW SOUNDER UNIT WITH STROBE AT PILLOW LOCATION CONNECTED TO THE FIRE ALARM SYSTEM PER NFPA 72.
- 18. PROVIDE PRE-WIRE & ROUGH-IN FOR CABLE / PHONE SYSTEM. PROVIDE A CABLE BOX (PER LOCAL CABLE PROVIDER) WITH A 120 VOLT OUTLET. WIRE UNIT OUTLETS TO CABLE BOX THEN HOME RUN TO CENTRAL LOCATION FOR CONNECTION TO CABLE. PRICE BOTH RG6 & CAT 6.

### **HOUSE PANEL F**

HVAC-4 SUPPL. HEAT (HEAT PUMP IN PANE		=	2.47 KW
OUTLETS	,	=	1.8 KW
LIGHTS		=	1.25 KW
OTHER		=	.55 KW
PANEL G		=	9.74 KW
TOT	ΓAL	Ξ	15.76 KV

15.46 KW / .208 / 1.732 = 43.75 AMPS

USE 60/3 CIRCUIT BREAKER W/ #6 CU WIRE & GROUND IN 1 1/2" CONDUIT

HOUSE PANEL G	
HVAC-5 SUPPL. HEAT 65% x 6 KW (HEAT PUMP IN PANEL J)	= 3.90 KW
OUTLETS	= 2.94 KW
LIGHTS	= 1.9 KW
OTHER	= 1.0 KW
TOTAL	= 9.74 KW
9.74 KW / .208 / 1.732 = 27.04	AMPS

#8 CU WIRE & GROUND IN 1	1/2"	CONDUIT
HOUSE PANEL H		
LIGHTS	=	1.2 KW
OUTLETS	=	9.98 KW
5 DRYERS @ 4.4 KW X 85%	=	18.7 KW

USE 40/3 CIRCUIT BREAKER W/

5 WASHERS @ 1.2 KW = 6.0 KW **HEAT PUMPS** HEAT PUMP 6.58 + 20.46 SUPPL. HEAT x 65% = 19.9 KW = 9.9 KW = 15.76 KW PANEL F = 81.44 KW

81.44 KW / .208 / 1.732 = 226 AMPS

USE 400 AMP DISC. W/ 250 AMP FUSES

## **ELECTRICAL NOTES**

- ALL BRANCH CIRCUIT WIRING SHALL BE COPPER. ALUMINUM MAY BE USED ONLY FOR SERVICE ENTRANCE
- ELECTRIC CODE & ALL APPLICABLE STATE, CITY, & LOCAL CODES.
- COORDINATE ALL WORK WITH ASSOCIATED TRADES. VERIFY ELECTRICAL REQUIREMENTS W/SUBTRADES PROVIDING ITEMS REQUIRING HOOK-UPS (I.E.
- COORDINATE WIRING OF TELEPHONE SERVICE & CABLE TV. PROVIDE ALL LABOR & MATERIALS REQUIRED FOR A COMPLETE INSTALLATION BUT NOT SUPPLIED BY TELEPHONE OR TV CABLE COMPANY.
- POSSIBLE. REVIEW LOCATIONS OF ALL ITEMS W/THE INSPECTOR, ARCHITECT, SUPERINTENDENT, & ASSOCIATED TRADES. CORRECT ANY ERRORS AND THEN PROCEED WITH LIKE UNITS. ANY MISTAKES REPEATED FROM UNIT TO UNIT BECAUSE OF FAILURE CONTRACTORS EXPENSE.
- ALL WIRING MUST BE RUN WITHIN WALLS. IN AREAS WHERE WIRING MUST BE RUN EXPOSED, ALL WIRING MUST BE IN RIGID CONDUIT.
- **INSTALLED ON PANEL**
- UNIT SMOKE DETECTORS MAY NOT BE INSTALLED UNTIL AFTER FINAL CLEANUP OF UNITS TO PREVENT DUST FROM ACCUMULATING IN THE CHAMBER. IF ELECTRICIAN WISHES TO INSTALL UNITS PRIOR TO FINAL CLEANUP THEY SHALL BE COVERED TIGHTLY WITH A SMALL PIECE
- COORDINATE ELECTRIC SERVICE W/ POWER CO. VERIFY AVAILABLE FAULT CURRENT PRIOR TO ORDERING METER UNITS - NOTIFY ARCHITECT OF ANY LOCATIONS ALL LABOR & MATERIALS STARTING AT THE TRANSFORMER FOR ALL WORK NOT BEING DONE BY POWER CO. BUT NECESSARY FOR COMPLETE INSTALLATION.

<u># UNITS</u>

37.22 KW

35.74 KW

37.74 KW

38.80 KW

APARTMENT UNIT LOAD SUMMARY

1,618.42 KW x .27 = 436.97 KW

USE 1600/3 AMP SWITCH WITH 1400 AMP FUSES

436.97 KW / .208 / 1.732 = 1,212.94 AMPS

ONE BR.

TWO BR.

TWO BR.

TWO BR.

DEMAND PER NEC 220.84

**HOUSE PANEL J** 

- FEEDS TO UNIT PANELS.
- OUTLETS & SWITCHES IN KITCHENS SHALL BE AT 44" AFF. OUTLETS & SWITCHES IN BATHROOMS SHALL BE AT 42" AFF. ALL OTHER OUTLETS SHALL BE AT 15" MIN. AFF. & ALL OTHER LIGHT SWITCHES SHALL BE AT 48" AFF. TO
- FURNACES, FANS, APPLIANCES, ETC. )
- WIRE ONE OF EACH TYPICAL UNIT AS COMPLETELY AS TO REVIEW TYPICAL UNIT SHALL BE CORRECTED @ THIS
- MECHANICAL ROOMS) SHALL HAVE THE COVER AND DOOR SANDED AND PAINTED TO MATCH THE WALL WITH SEMI-GLOSS OR EGGSHELL ENAMEL BEFORE COVER IS

- ALL WORK SHALL BE IN ACCORDANCE W/THE NATIONAL

- ELECTRIC PANELS EXPOSED TO VIEW (OTHER THAN IN
- OF PLASTIC BAG WITH RUBBER BAND.
- WHERE FAULT CURRENT IS ABOVE 10,000 A.I.C. PROVIDE

		LIGH	HT FIXTURE	SCHEDU	JLE
MARK	MANUFACTURER	CATALOG NUMBER	LAMP	MT'G. TYPE	REMARKS
А	GENERATION LIGHTING	44852EN3-965	(3) 9.5W LED A19	WALL	
В	GENERATION LIGHTING	75434EN3-962	(1) 9.3W LED A19	CEILING	3000K BRUSHED NICKEL
С	GENERATION LIGHTING	75952EN3-962	(2) 10W LED A19	CEILING	
D	HALO	SLD606930WH	(1) 13W LED	CEILING	
E	HALO	SLD612930WH	(1) 14.8W LED	CEILING	
F	PROGRESS	P250016-030W / P2659-09	(2) 10W LED	CEILING	CEILING FAN WITH LIGHT KIT & CLOSE TO CEILING ACCESSO
G	LITHONIA	FMLWL 48 827	(1) 40W LED	CEILING	
Н	WAC LIGHTING	WS-180414-30-BN	(1) 12W LED	WALL	MOUNT 6'-2" A.F.F.
J	GENERATION LIGHTING	75435EN3-962	(2) 9.3W LED A19	CEILING	3000K BRUSHED NICKEL
К	SURE-LITES	LPXC25	LED	CEILING/WALL	SEE PLANS FOR MOUNTING LOCATIONS
L	SURE-LITES	SEL50	LED	CEILING/WALL	SEE PLANS FOR MOUNTING LOCATIONS
М	GENERATION LIGHTING	6130701EN3-112	(1) 9.3W LED A19	CEILING	
N	GENERATION LIGHTING	88241EN3-780	(1) 9.3W LED A19	WALL	
Р	LITHONIA	CPANL	2400/3300/4400 LUMENS	CEILING	2x2 LAY- IN LED 2400/3300/4400 LUMENS 3500 K, 22/31/41 WATT
Q	GENERATION LIGHTING	75436EN3-962	(3) 9.3W LED A19	CEILING	3000K BRUSHED NICKEL
R	SURE-LITES	SEL SERIES REMOTE (SRP)	LED	CEILING	
S	LITHONIA	CPANL AL01 SWW7 M4 W/ DCMK14		CEILING	DIRECT TO CELING MOUNTING LED 2400/3300/4400 LUMENS 3500 K. 22/31/41 WATTS
Т	LITHONIA	CPANL AL06 SWW7 M2 W/ DCMK22	4	CEILING	DIRECT TO CELING MOUNTING LED 4000/5000/6000 LUMENS 3500 K. 36/45/55 WATTS
U	WAC	H-8010-30 WH (4)	11W LED 3000K - 850 ML		8FT TRACK W/ 4 HEADS

### NOTE: ALL LIGHTS TO MEET ENERGY STAR RATINGS

### PUBLIC SAFETY BI-DIRECTIONAL AMPLIFIER (BDA) FOR FIRST RESPONDERS

A BI-DIRECTIONAL AMPLIFIER WILL BE INSTALLED IN THE THIRD FLOOR BY A QUALIFIED INSTALLER TO PROVIDE AMPLIFIED EMERGENCY RESPONDER RADIO COVERAGE WITH INTERIOR AND EXTERIOR ANTENNA. THE SYSTEM SHALL COMPLY WITH SECTION 510 OF THE 2018 INTERNATIONAL FIRE CODE (IFC), & SECTIONS 916.1 OF THE 2018 KENTUCKY BUILDING CODE (KBC). THERE WILL BE MULTIPLE INTERIOR ANTENNA, A MIN OF ONE PER FLOOR, AND AN EXTERIOR ANTENNA ALLOWING UNINTERRUPTED COVERAGE OF THE PUBLIC SAFETY 700 MHz BAND FREQUENCY. LOCATIONS OF THE INTERIOR AND ANTENNA ARE TO BE APPROVED BY THE ARCHITECT IN COORDINATION WITH THE INDEPENDENCE KENTUCKY FIRE DEPARTMENTS FIRE CHIEF AND RADIO SYSTEMS MANAGER.

### TWO-WAY COMMUNICATION SYSTEM

A TWO-WAY COMMUNICATIONS SYSTEM WILL BE PROVIDED AT AN ACCESSIBLE LOCATION AT THE LANDING OF THE ELEVATOR ON EACH FLOOR TO COMPLY WITH SECTIONS 1009.8, 1009.8.1 OF THE 2018 KENTUCKY BUILDING CODE (KBC). THE TWO-WAY COMMUNICATION SYSTEM SHALL HAVE A TIMED AUTOMATIC TELEPHONE DIAL-OUT CAPABILITY TO A MONITORING LOCATION OR 9-1-1. THE TWO-WAY COMMUNICATION SYSTEM SHALL INCLUDE BOTH AUDIBLE AND VISIBLE SIGNALS.

### RESIDENT BEDROOM SAFETY DEVICES

OWNER TO PROVIDE THE FOLLOWING HOMEAWARE PRODUCTS FOR EACH RESIDENTIAL UNIT:

	EQUIPMENT SPECIFICATIONS	QTY.	POWER SOURCE
	HOMEAWARE - MAIN UNIT W/ BED VIBRATOR AND BUILT IN SMOKE/CO (HA360MVSB)	1	PLUG, PHONE LINE
	HOMEAWARE - SMOKE/CO TRANSMITTER (HA360SSSCK)	1	BATTERIES
	HOMEAWARE - DOORBELL (HA360DB)	1	BATTERIES
	HOMEAWARE - BASIC RECEIVER (HA360BRK)	1	BATTERIES
	HOMEAWARE - SOUND SIGNALER (HA360US)	2	BATTERIES
- 1	,		

### **HOUSE PANEL LOADS**

422.64 KW

372.2 KW

214.44 KW

415.14 KW

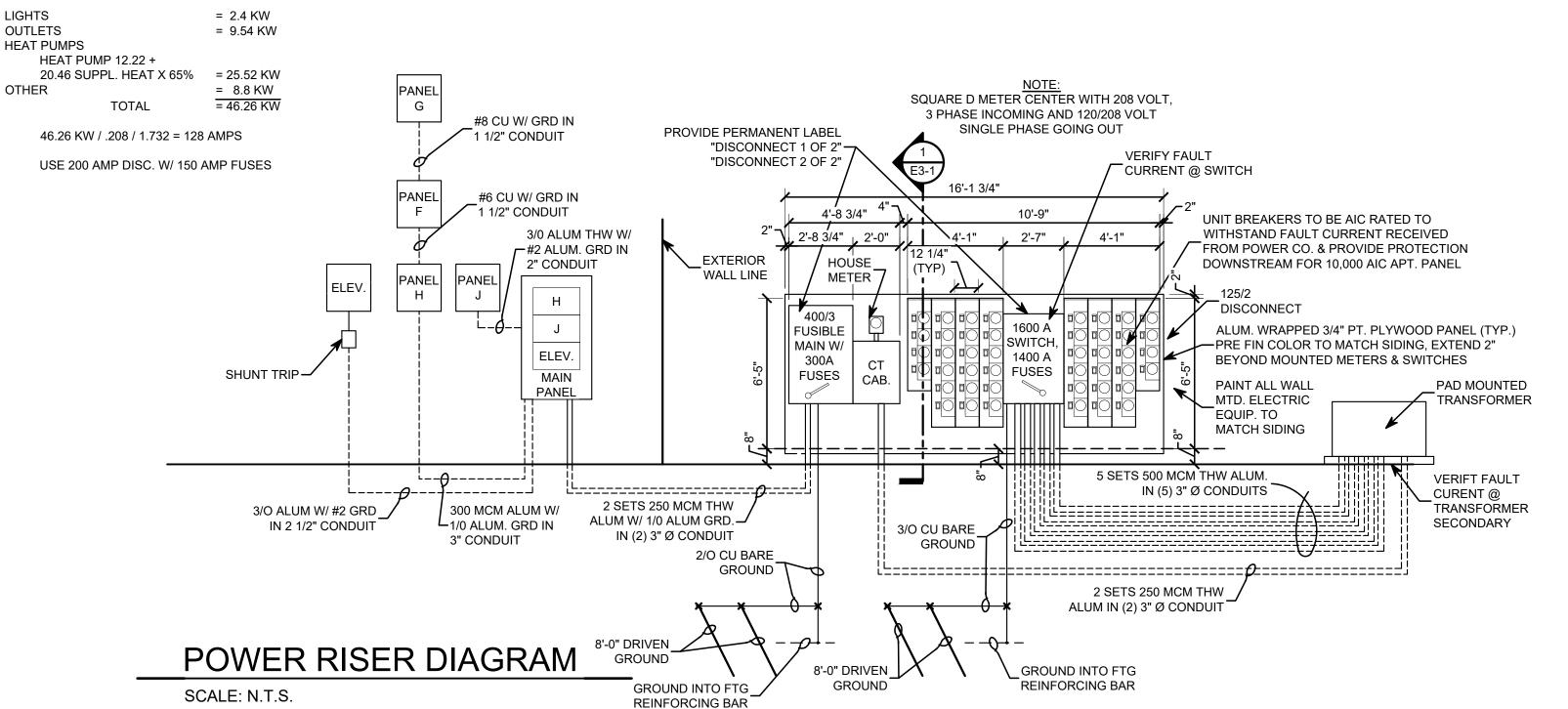
194.00 KW

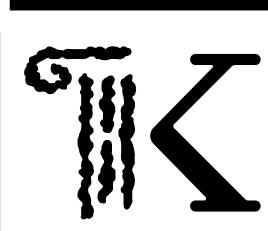
1,618.42 KW

		LIGHTS	OUTLETS	HEAT PUMPS	SUPPL. ELEC. HEAT	WASHER/ DRYER	OTHER	TOTAL
	PANEL F PANEL G PANEL H PANEL J ELEVATOR	1.25 1.9 1.2 2.4	1.8 2.94 9.98 9.54	6.58 12.22	3.8 6.0 20.46 20.46	24.7	0.5 1.0 9.9 8.8	7.35 KW 11.84 KW 72.82 KW 53.42 KW 18.65 KW
Ī	SUBTOTAL	6.75	24.26	18.8	50.72	24.7	20.2	164.08 KW
		DEM	AND PER NE	EC 220.44	x 65%			
	TOTAL	6.75	17.13	18.8	32.97	24.7	20.2 ELEVATOR TOTAL	120.55 KW 18.65 KW 139.20 KW

139.20 KW / .208 / 1.732 = 386.4 AMPS

USE 400/3 AMP FUSIBLE SWITCH W/ 300 AMP FUSES





**KONTOGIANNIS** & ASSOCIATES

**ARCHITECTURE PLANNING DESIGN** 

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

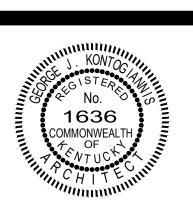
**PROJECT:** 

SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B'

11125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE: **ELECTRICAL LIGHT** FIXTURE SCHEDULE **NOTES & DETAILS** 

DATE: 07/31/2023 REVISED:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023 CONSTRUCTION SET

			120/20								MOUNTING SURFA	ACE
MAIN	BREAKER MAI	N LUG	S 400 A	AMP_	М	ΑI	N FE	EDEF	RS GRO	DUNE	IN 3" CONDUIT	
CIRC. NO.	LOAD	KW	CB/P	WIRE SIZE	,	٩B	С	WIRE SIZE	CB/P	KW	LOAD	CIR( NO
1	DRYER	2.2	30/2	#10			hline	#12	20/1 GFCI	1.5	WASHER	2
3	DICTER	2.2	30/2	#10			$\vdash$	#12	20/1 GFCI	1.5	WASHER	4
5	DRYER	2.2	30/2	#10		Н	$\overline{}$	#12	20/1 GFCI	1.5	WASHER	6
7	DICTER	2.2	30/2	#10			$\vdash \frown$	#12	20/1 GFCI	1.5	WASHER	8
9	DRYER	2.2	30/2	#10			$\vdash \frown$	#12	20/1 GFCI	1.5	WASHER	10
11	DIVILIX	2.2	30/2	#10			$\overline{}$	#12	20/1 GFCI	1.5	OUTLETS 004	12
13	DRYER	2.2	30/2	#10			$\vdash \frown$	#10	30/2	2.25	HWH-3	14
15	DICTER	2.2	30/2	#10			$\vdash \frown$	#10	30/2	2.25	TIWIFO	16
17	DRYER	2.2	30/2	#10		Н	$\overline{}$	#10	30/2	2.25	HWH-3	18
19	DIVILIX	2.2	30/2	#10			$\vdash$	#10	30/2	2.25	TIWIFS	20
21	HVAC-6 CONDENSER	1.41	20/2	#12			$\vdash$	#6	45/2	3.0	HVAC-6 BLOWER COIL	22
23		1.41	HACR	#12			$\overline{}$	#0	43/2	3.0	TIVAG-0 BEGWEN COIL	24
25	LIGHTS 003, 004,005 ,006, 007, 008 & 009	.65	15/1	#14	_		$\overline{}$	#12	20/1	.72	OUTLETS 003, 005 & 006	26
27	OUTLETS 007 & 008	1.5	20/1 GFCI	#12			$\vdash$	#12	20/1	.72	OUTLETS 009	28
29	OUTLETS 010	.72	20/1	#12			$\overline{}$	#14	15/1	.40	LIGHTS 010, 011, 012 ,013 & 014	30
31	OUTLETS 011	1.08	20/1	#12			$\vdash$	#12	20/1	.72	CORRIDOR OUTLETS	32
33	CORRIDOR, STAIR & EMERG. LIGHTS	.8	15/1	#14			$\vdash$	#6	60/2	4.15	HVAC-8 CIRC. #1	34
35	CORRIDOR, STAIR & EMERG. OUTLETS	.72	20/1	#12			$\overline{}$	#0	00/2	4.15	TIVAC-0 CII.C. #1	36
37	STAIR 001 HEATER	1.0	20/2	#12			$\vdash$	#10	25/2	2.08	HVAC-8 CIRC. #2	38
39	STAIR OUTTILATER	1.0	20/2	#12	$\sim$		$\uparrow \sim$	#10	23/2	2.08	TIVAC-0 CINC. #2	40
41	A/C UNIT OUTLETS	1.5	20/1 GFCI	#12			$\overline{}$	#10	30/2	1.88	HVAC-8 CONDENSER	42
43	AUTOMATIC DOOR OPENER	.3	15/1	#14				#10	HACR	1.88	TIVAO-0 CONDENSER	44
45	INTERCOM	.6	15/1	#14				#12	20/1 GFCI	1.5	PORCH WP OUTLETS	46
47		5.25				$\coprod$	$\overline{}$	#14	15/1	.15	PORCH LIGHTS	48
49	PANEL F FEEDER	5.25	50/3	#6	_		$\overline{}$					50
51		5.25			lacksquare		$\overline{}$					52
53					$\vdash \smallfrown$		$\overline{}$					54
55					-		$\overline{}$					56
57						+						58
59						H	<b>├</b>					60

	EL J VOLT  BREAKER MAIN								3/0 A	ALUM	MOUNTING SURF I. W/ #2 ALUM. IN 2" CONDUIT	ACE
CIRC. NO.	LOAD	KW	CB/P	WIRE SIZE	/	AB(		WIRE SIZE	CB/P	KW	LOAD	CIRC NO.
1	SCONCE LIGHTS	.3	15/1	#14	<u></u>	$oldsymbol{H}$	$\overline{}$	//40	00/0	1.0	OTAID 000 HEATED	2
3	OUTLETS 015	1.26	20/1	#12	_	H	$\overline{}$	#12	20/2	1.0	STAIR 022 HEATER	4
5	ELECTRIC FIRE PLACE 015	.2	15/1	#14		H	~	#14	15/1	.3	LIGHTS 015 & 016	6
7	SUMP PUMP	1.0	20/1 GFCI	#12	<u></u>	H	$\overline{}$	#14	15/1 GFCI	1.0	ELECTRIC WATER COOLER	8
9	SUMP PUMP	1.0	20/1 GFCI	#12		+	$\overline{}$	#12	20/1 GFCI	.18	ELEVATOR PIT OUTLETS	10
11	CORRIDOR & STAIR LIGHTS, EXIT SIGNS & EMERGENCY LIGHTS	.3	15/1	#14		H	~	#14	15/1	.4	ELEVATOR PIT LIGHTS	12
13	FIRE ALARM	.5	20/1	#12	<u>-</u>			#12	20/1	.72	EXERCISE OUTLETS	14
15	LIVAC 7 DI CIAIED COII	3.0	AEIO	πν.			$\overline{}$	#12	20/1	.54	EXERCISE OUTLETS	16
17	HVAC-7 BLOWER COIL	3.0	45/2	#6	$\overline{L}$	H	~	#12	20/1	1.08	ACTIVITY OUTLETS	18
19	LIVA O Z GONDENOED	1.41	20/2	"40		H	$\overline{}$	#12	20/1 GFCI	1.5	ACTIVITY OUTLETS	20
21	HVAC-7 CONDENSER	1.41	HACR	#12			$\overline{}$	"10		1.6	0.4271.000	22
23	LD 44 G G G G G 44	4.15	00/0	,,,	$\overline{}$	H	~	#12	30/2	1.6	OVEN 020	24
25	HVAC-9 CIRC. #1	4.15	60/2	#6	$\overline{L}$	H	$\overline{}$	#14	15/1	1.2	MICROWAVE 020	26
27	LIV (A.O. O. O.IDO. #0	2.08	05/0	"40	$\overline{}$		$\overline{}$	#14	15/1	.7	REFRIGERATOR 020	28
29	HVAC-9 CIRC. #2	2.08	25/2	#10	abla	H	^-	#12	20/1 GFCI	1.5	APPL. CIRC. 020	30
31	LIVA O O CONDENIOED	1.88	30/2	"40		H	$\overline{}$	#12	20/1	1.26	OUTLETS 020	32
33	HVAC-8 CONDENSER	1.88	HACR	#10	abla	+	$\overline{}$	#12	20/1 GFCI	1.5	PORCH & A/C OUTLETS	34
35	LIVAG C CONDENGED	1.41	20/2	<i>1140</i>		H	^-	#14	15/1	.4	LIGHTS 017, 018, 019 & 020	36
37	HVAC-6 CONDENSER	1.41	HACR	#12	$\overline{L}$	H	$\overline{}$	"40	20/2	1.41	LIVA O E CONDENICED	38
39	SITE LIGHTS	.7	20/1	#10	$\overline{}$		$\overline{}$	#12	HACR	1.41	HVAC-5 CONDENSER	40
41					<u></u>	H	~					42
43					<u></u>	H	_					44
45					<u>-</u>	+	_					46
47					<u> </u>	H	~					48
49					<u></u>	H	$\overline{}$					50
51					$\overline{}$		$\overline{}$					52
53					<u></u>	Ħ	~					54
55					<u></u>	H	$\overline{}$					56
57					<u> </u>		_					58
59					$\overline{}$	Ħ,	$\overline{}$					60

	DREAKER IVIAII	N LU	55 <u>-120</u>	- Alvii			MA	IN FE	EDERS	1/0 /	ALUMINUM SER CABLE	- (7(111100)
CIRC. NO.	LOAD	KW	CB/P	WIRE SIZE	S PHAS	INGLI SE PA	E ANEL	WIRE SIZE	CB/P	KW	LOAD	CIRC NO.
1	ELECTRIC RANGE	4.95	40/2	#6	Σ		$\sum$	#6	60/2	3.6	HVAC-3	2
3	ELECTRIC RANGE	4.95	40/2	#0	$\sum_{i}$		$\sum_{i}$	#0	00/2	3.6	NVAC-3	4
5	APPLIANCE CIRCUIT	1.5	20/1 AFCI/GFCI	#12	$\sum$		$\sum$	#10	25/2	1.6	HVAC-3 CONDENSER	6
7	APPLIANCE CIRCUIT	1.5	20/1 AFCI/GFCI	#12	$\sum$		$\searrow$	#10	HACR	1.6	NVAC-3 CONDENSER	8
9	BATH OUTLET	1.5	20/1 GFCI	#12	$\sum_{i}$		$\geq$	#14	15/1 AFCI	.7	REFRIGERATOR	10
11	DISHWASHER	1.2	20/1 AFCI/GFCI	#12	$\sum$		$\sum_{i}$	#14	15/1 AFCI/GFCI	.7	DISPOSER	12
13	WASHER	1.5	20/1 AFCI/GFCI	#12	7		$\overline{A}$	#10	20/2	2.2	ELECTRIC DRVER	14
15	LIGHTS & FANS	.5	15/1 AFCI	#14	7	_	$\overline{\mathbf{x}}$	#10	30/2	2.2	ELECTRIC DRYER	16
17	OUTLETS LIVING ROOM	1.44	15/1 AFCI	#14	7		$\overline{A}$	#12	20/1 AFCI	1.5	DINING OUTLETS	18
19	OUTLETS BEDROOM	1.26	15/1 AFCI	#14	7		$\overline{\mathbf{A}}$	#40	20/0	2.25	WATER HEATER	20
21	OUTLETS BEDROOM (TWO BR.)	.90	15/1 AFCI	#14	7		$\overline{A}$	#10	30/2	2.25	WATER HEATER	22
23	MICROWAVE RANGE HOOD	1.2	15/1 AFCI	#14	7		$\overline{\mathbf{A}}$					24
25					7		$\overline{A}$					26
27					$\overline{\mathbf{A}}$		$\sim$					28
29					$\sim$		$\overline{A}$					30

PANE	EL F (2nd FL) VOLT	AGE	120/20	08		3	_ Pŀ	IASE	4 	WIRE U WI	MOUNTING RECEST	SED
MAIN	BREAKER MAIN	LUG	S 100 A	MP_	MA	λIN	N FE	EDEF		_		
CIRC. NO.	LOAD	KW	CB/P	WIRE SIZE	Α	В	С	WIRE SIZE	CB/P	KW	LOAD	CIRC NO.
1	SCONE LIGHTS	.3	15/1	#14		+	7	#10	20/2	1.9	LIVAC A DI OMED COII	2
3	CORRIDOR & STAIR LIGHTS, EXIT SIGNS & EMERGENCY LIGHTS	1.0	15/1	#14	<u> </u>	1	_	#10	30/2	1.9	HVAC-4 BLOWER COIL	4
5	LIGHTS & FAN 023, 024 & 025	.25	15/1	#14		$\pm$	<b>\</b>	#12	20/1	1.08	CORRIDOR OUTLETS	6
7	OUTLETS 024 & 025	.72	20/1	#12	<u> </u>	$\frac{1}{1}$	7	#12	20/1	.5	CABLE EQUIPMENT OUTLET	8
9					$\overline{\ }$	+	>			3.24		10
11					$\overline{\ }$	ł	<b>-</b>	#8	40/3	3.24	PANEL G FEEDER	12
13					-^-	$oxed{\top}$	_			3.24		14
15			-			Ŧ	$\overline{}$		-			16

PANE	EL G (3RD FL) VOLT	AGE	120/20	08	_	3	_PF	HASE	4 	WIRE U WI	MOUNTING <u>RECES</u> RE W/ GROUND	SED
MAIN	BREAKER MAIN	LUG	S 100 A	MP_	MA	AIN	FE	EDEF	RS <u>IN 1</u>	1/2" (	CONDUIT	
CIRC. NO.	LOAD	KW	CB/P	WIRE SIZE		BC	)	WIRE SIZE	CB/P	KW	LOAD	CIR
1	SCONE LIGHTS	.3	15/1	#14		+	λ	#12	20/1	1.08	CORRIDOR OUTLETS	2
3	CORRIDOR & STAIR LIGHTS, EXIT SIGNS & EMERGENCY LIGHTS	1.0	15/1	#14	$\sim$			#14	15/1	.6	LIGHTS & FAN 027,028,029,029A	4
5	OUTLETS 028 & 029	.36	20/1	#12	$\vdash \cap \vdash$	+	Σ	#14	15/1	.1	RADON EXHAUST FAN	6
7	HVAC-5 BLOWER COIL	3.0	45/2	#6	$\sim$	$\blacksquare$		#12	20/1 GFCI	1.5	OUTLETS 029A	8
9	HVAC-3 BLOWER COIL	3.0	45/2	#0		+	λ	#12	20/1	.5	CABLE EQUIPMENT OUTLET	10
11	ELEVATOR CONTROLS	.5	20/1	#12		$\overline{+}$	7	#12	20/1	.035	PUBLIC SAFETY BDA	1:
13						$\mathbb{H}$	7					14
15						$\overline{+}$	7					16

### MAIN PANEL

SQUARE "D" 400 AMP MAIN LUGS FUSIBLE SERVICE ENTRANCE PANEL WITH QMB FUSIBLE BRANCH SWITCHES AS FOLLOWS (MIN. 100,000 AIC RATING) VERIFY AVAILABLE FAULT CURRENT WITH POWER COMPANY) AIC CAN BE REDUCED BASED ON AVAILABLE FAULT CURRENT.

		i
	1	
	2	
	3	

1 PANEL H -

400/3 SWITCH W/ 250 AMP CURRENT LIMITING FUSES. 250 MCM ALUM. THW W/ 1/0 GROUND IN 2" CONDUIT

2 PANEL J -

200/3 SWITCH W/ 150 AMP CURRENT LIMITING FUSES. 3/0 ALUM THW W/ #2 ALUM. GROUND IN 2 1/2" COND.

③ <u>ELEVATOR</u> -

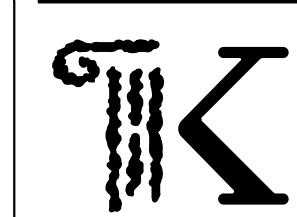
200/3 W/ 150 AMP CURRENT LIMITING FUSES. 3/0 ALUM. THW W/ #2 GROUND IN 2 1/2" CONDUIT

MAIN	BREAKER MA	AIN LU	GS <u>125</u>	AME	<u></u>	M	AIN	FE	EDERS	1/0	ALUMINUM SER CABLE	: (XHF
CIRC. NO.	LOAD	KW	CB/P	WIRE SIZE	SII PHAS	NGLE E PANI	W S	IRE ZE	CB/P	KW	LOAD	C
1	ELECTRIC DANCE	4.95	40/2	#6		-	$T_{\scriptscriptstyle{L}}$	10	30/2	1.8	HVAC-1	
3	ELECTRIC RANGE	4.95	40/2	#6	abla	4	$\exists$	10	30/2	1.8	HVAC-1	
5	APPLIANCE CIRCUIT	1.5	20/1 AFCI/GFCI	#12		7	$T_{\scriptscriptstyle{L}}$	10	25/2	1.87	HVAC-1 CONDENSER	
7	APPLIANCE CIRCUIT	1.5	20/1 AFCI/GFCI	#12	$\Box$	7	$\exists$ "	10	HACR	1.87	HVAC-1 CONDENSER	
9	BATH OUTLET	1.5	20/1 GFCI	#12		7	4	14	15/1 AFCI	.7	REFRIGERATOR	
11	DISHWASHER	1.2	20/1 AFCI/GFCI	#12	$\Box$	7	4	14	15/1 AFCI/GFCI	.7	DISPOSER	
13	WASHER	1.5	20/1 AFCI/GFCI	#12	$\overline{}$		$\overline{T}_{_{L}}$	10	20/2	2.2	ELECTRIC DRVER	
15	LIGHTS & FANS	.5	15/1 AFCI	#14	$\Box$	7	$\exists$ "	10	30/2	2.2	ELECTRIC DRYER	
17	OUTLETS LIVING ROOM	1.44	15/1 AFCI	#14	$\overline{}$		4	12	20/1 AFCI	1.5	DINING OUTLETS	
19	OUTLETS BEDROOM	1.26	15/1 AFCI	#14		4	$\overline{T}_{_{L}}$	10	20/2	2.25		
21	MICROWAVE RANGE HOOD	1.2	15/1 AFCI	#14	$\overline{}$		$\exists$	10	30/2	2.25	WATER HEATER	
23						4	丁					
25						4	丁					
27							$\Box$					

PANE	EL_BVOLTAGE_	120/	208		_	1	_PF	HASE	3	_WIF	RE MOUNTING RECESSI	ED
MAIN	BREAKER MAIN	l LU	GS <u>125</u>	5 AMF	PS	_	MA	IN FE	EDERS	1/0	ALUMINUM SER CABLE (X	HHW)
CIRC. NO.	LOAD	KW	CB/P	WIRE SIZE	S PHA	SINGL SE P	E ANEL	WIRE SIZE	CB/P	KW	LOAD	CIRC. NO.
1	ELECTRIC DANCE	4.95	40/0	"0	$\overline{}$		7	"0	50/2	2.8	HVAC-2	2
3	ELECTRIC RANGE	4.95	40/2	#6	abla			#6				4
5	APPLIANCE CIRCUIT	1.5	20/1 AFCI/GFCI	#12	$\vdash \frown$			#10	25/2	1.87	LIVAC 2 CONDENSED	6
7	APPLIANCE CIRCUIT	1.5	20/1 AFCI/GFCI	#12	$\overline{\Gamma}$		Σ	#10	HACR	1.87	HVAC-2 CONDENSER	8
9	BATH OUTLET	1.5	20/1 GFCI	#12	$\vdash \frown$			#14	15/1 AFCI	.7	REFRIGERATOR	10
11	DISHWASHER	1.2	20/1 AFCI/GFCI	#12	$\overline{\Gamma}$		Σ	#14	15/1 AFCI/GFCI	.7	DISPOSER	12
13	WASHER	1.5	20/1 AFCI/GFCI	#12	$\overline{}$		7	410	20/2	2.2	ELECTRIC DRVER	14
15	LIGHTS & FANS	.5	15/1 AFCI	#14	$\overline{\Gamma}$		Σ	#10	30/2	2.2	ELECTRIC DRYER	16
17	OUTLETS LIVING ROOM	1.44	15/1 AFCI	#14	$\overline{}$		7	#12	20/1 AFCI	1.5	DINING OUTLETS	18
19	OUTLETS BEDROOM	1.26	15/1 AFCI	#14	$\overline{\Gamma}$		Σ	410	20/2	2.25	WATER HEATER	20
21	MICROWAVE RANGE HOOD	1.2	15/1 AFCI	#14	$\overline{}$	$\vdash$		#10	30/2	2.25	WATER HEATER	22
23					$\vdash \frown$							24
25						$\vdash$	$ \langle$					26
27					$\vdash$		$\left  \cdot \right $					28
29						lacksquare	$ \langle$					30

PANE	EL C VOLTAGE_	120/:	208		_	1	 _Pŀ	IASE	3	_WIF	RE MOUNTING RECESS	ED
MAIN	BREAKER MAIN	N LU	GS <u>125</u>	5 AMF	S	-	MA	IN FE	EDERS	1/0	ALUMINUM SER CABLE ()	(HHW)
CIRC. NO.	LOAD	KW	CB/P	WIRE SIZE	S PHA	INGL SE P	.E ANEL	WIRE SIZE	CB/P	KW	LOAD	CIRC. NO.
3	ELECTRIC RANGE	4.95 4.95	40/2	#6	3   }		<b>}</b>   }	#10	30/2	1.8 1.8	HVAC-1	2
5	APPLIANCE CIRCUIT	1.5	20/1 AFCI/GFCI	#12	7		$\sim$	#10	25/2 HACR	1.87	HVAC-1 CONDENSER	6
9	APPLIANCE CIRCUIT BATH OUTLET	1.5 1.5	20/1 AFCI/GFCI 20/1 GFCI	#12 #12				#14	15/1 AFCI	1.87 .7	REFRIGERATOR	10
11	DISHWASHER	1.2	20/1 AFCI/GFCI	#12	\		$\overline{\sim}$	#14	15/1 AFCI/GFCI	.7	DISPOSER	12
13	WASHER	1.5	20/1 AFCI/GFCI	#12	ζ		$\overline{\ }$	#10	30/2	2.2	ELECTRIC DRYER	14
15	LIGHTS & FANS	.5	15/1 AFCI	#14	$\langle \  $		$\sim$	#10	30/2	2.2	ELECTRIC DRYER	16
17	OUTLETS LIVING ROOM	1.44	15/1 AFCI	#14	~		$\sim$	#12	20/1 AFCI	1.5	DINING OUTLETS	18
19	OUTLETS BEDROOM	1.26	15/1 AFCI	#14	$\leq$		$\sim$	#10	30/2	2.25	WATER HEATER	20
21	OUTLETS BEDROOM (TWO BR.)	.90	15/1 AFCI	#14	ζ		$\sim$	#10	30/2	2.25	WATERTIER	22
23	MICROWAVE RANGE HOOD	1.2	15/1 AFCI	#14	$\leq$		$\sim$					24
25					~							26
27					_		$\sim$					28
29					7		<b>∼</b>					30

ΛΑΙΝ	BREAKER MAI	N LU	GS <u>125</u>	5 AMF	PS_	-	MA	IN FE	EDERS	1/0	ALUMINUM SER CABLE	(XHHW
CIRC. NO.	LOAD	KW	CB/P	WIRE SIZE	S PHAS	INGLI SE PA	E ANEL	WIRE SIZE	CB/P	KW	LOAD	CIRC NO.
1	51 50 50 D A A A A A A A A A A A A A A A A A A	4.95	40/0	""	<u>-</u>	4-1		#6	E0/2	2.8	HVAC-2	2
3	ELECTRIC RANGE	4.95	40/2	#6	hline		ļ	#6	50/2	2.8	nvac-2	4
5	APPLIANCE CIRCUIT	1.5	20/1 AFCI/GFCI	#12	7		ζ	#10	25/2	1.87	HVAC-2 CONDENSER	6
7	APPLIANCE CIRCUIT	1.5	20/1 AFCI/GFCI	#12	$\overline{\ }$		Ź	#10	HACR	1.87	HVAC-2 CONDENSER	8
9	BATH OUTLET	1.5	20/1 GFCI	#12	7		ζ	#14	15/1 AFCI	.7	REFRIGERATOR	10
11	DISHWASHER	1.2	20/1 AFCI/GFCI	#12	$\overline{\ }$		Ź	#14	15/1 AFCI/GFCI	.7	DISPOSER	12
13	WASHER	1.5	20/1 AFCI/GFCI	#12	7		Z	#10	30/2	2.2	ELECTRIC DRYER	14
15	LIGHTS & FANS	.5	15/1 AFCI	#14	$\overline{\ }$		Ź	#10	30/2	2.2	ELECTRIC DRIER	16
17	OUTLETS LIVING ROOM	1.44	15/1 AFCI	#14	7		Z	#12	20/1 AFCI	1.5	DINING OUTLETS	18
19	OUTLETS BEDROOM	1.26	15/1 AFCI	#14	$\overline{\ }$		Ź	#10	30/2	2.25	WATER HEATER	20
21	OUTLETS BEDROOM (TWO BR.)	.90	15/1 AFCI	#14	7		Z	#10	30/2	2.25	WATER HEATER	22
23	MICROWAVE RANGE HOOD	1.2	15/1 AFCI	#14	$\vdash$		ļ					24
25					<u> </u>							26
27					$\vdash$		ļ					28
29					$\overline{\mathbf{A}}$		$ \zeta $					30



**KONTOGIANNIS** & ASSOCIATES

ARCHITECTURE PLANNING DESIGN

400 SOUTH FIFTH ST SUITE 400 COLUMBUS, OHIO 43215-5492

PHONE: 614-224-2083 FAX: 614-224-4736 E-MAIL: architects@kontogiannis.com

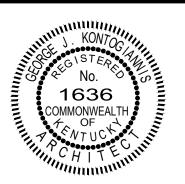
PROJECT:

THE
SANCTUARY
ON EDWARDS
SENIOR HOUSING
(BUILDING "B")

1125 EDWARDS RD. ELSMERE, KY 41018

DRAWING TITLE:
ELECTRIC PANELS

DATE: 07/31/2023 REVISED:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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☐ SUBMISSION SET☐ PERMIT SET 07/31/2023☐ BID SET 11/08/2023☐ CONSTRUCTION SET

**Product Data Sheet** 

3M™ Fire Barrier Sealant IC 15WB+



available in tube, pail or sausage.

Product Color: Yellow.

Product Features

Firestop tested up to 3 hours in accordance with ASTM E 814 (UL Halogen-free 1479), ASTM E 1966 (UL 2079) & CAN/ULC-S115 • Expanded fire protection systems Helps minimize sound transfer\*

FBC<sup>™</sup> System Compatible

 Sag-resistant Excellent adhesion Re-enterable/repairable Excellent caulk rate Paintable Meets the standards and is deemed Water clean up

Complies with the intent of LEED® NC-EQ Credit 4.1 for Low-Emitting Materials: Adhesives and Sealants, contains <250 g/L VOC contents (less  $H_2O$  and exempt solvents per SCAQMD Rule 1168).

2. Applications 3M™ Fire Barrier Sealant IC 15WB+ is a general-purpose intumescent firestop ideal for sealing single or multiple through penetrations in fire-rated construction. 3M™ Fire Barrier Sealant IC 15WB+ is typically used in mechanical, electrical and plumbing applications to firestop openings created by the following penetrations in fire-rated floors, floor/ceilings or walls: metallic pipe, plastic pipe, conduit, power and communication cable, cable trays, busways, combos, insulated pipe and HVAC duct penetrations, 3M<sup>™</sup> Fire Barrier Sealant IC 15WB+ is also used to firestop blank openings and static construction joints.

3. Specifications 3M™ Fire Barrier Sealant IC 15WB+ shall be a one component, ready-to-use, gun-grade, latex-based, intumescent firestop sealant capable of expanding a minimum of 3 times at 1000°F. The material shall be thixotropic and be applicable to overhead, vertical and horizontal firestops. The sealant shall be listed by independent test agencies such as UL, ULC, Intertek or FM. 3M™ Fire Barrier Sealant IC 15WB+ shall be tested to and pass the criteria of ASTM E 814 (UL 1479) Standard Test Method for Fire Tests of Penetration Firestop Systems, ASTM E 1966 (UL 2079) Standard Test Method for Fire Resistive Joint Systems and CAN/ ULC-S115 Standard Method of Fire Tests of Firestop Systems. 3M™ Fire Section 26 00 00 – Electrical Barrier Sealant IC 15WB+ meets the requirements of the IBC, IRC, NBCC, IFC, IPC, IMC, NFPA 5000, NEC (NFPA 70) and NFPA 101.

For technical support relating to 3M Fire Protection Products and Systems, call: 1-800-328-1687 For more information on 3M Fire Protection Products, visit: www.3m.com/firestop



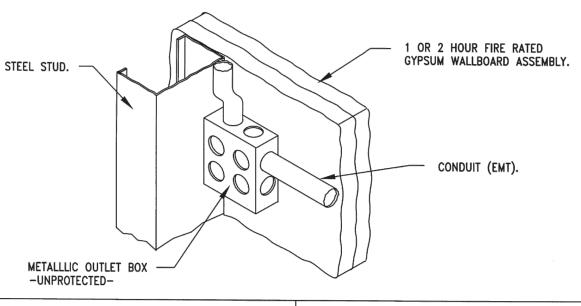
FILL, VOID, OR CAVITY FOR USE IN JOINT SYSTEMS

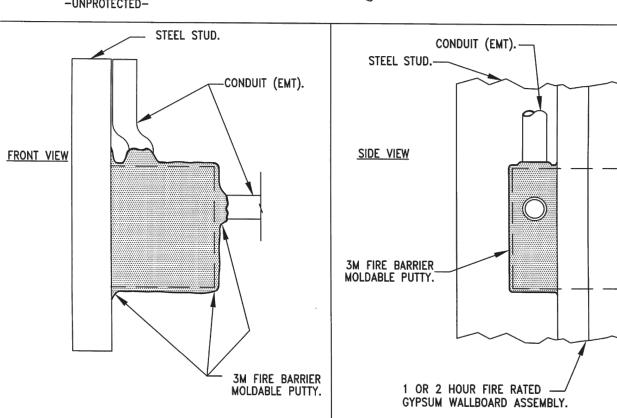
AND PERIMETER CONTAINMENT SYSTEM SEE UL FIRE RESISTANCE DIRECTORY 90G9

\*Minimizes noise transfer—STC-Rating of 54 when tested in STC 54-rated wall assembly.

Typically Specified MasterFormat (2004) Section 07 84 00 – Firestopping Section 07 86 00 – Smoke Seals Section 07 92 13 - Elastomeric Joint Sealants ection 07 92 19 - Acoustical Joint Sealants Section 21 00 00 – Fire Suppression Section 22 00 00 – Plumbing Section 23 00 00 – Heating, Ventilating, and Air Conditioning (HVAC)

# **Suggested Installation for 3M<sup>TM</sup> Fire Barrier Moldable Putty+** on Electrical Outlet Boxes





This material was extracted and drawn by 3M Fire Protection Products from the 2007 edition of the UL Fire Resistance Directory. **3M** Fire Protection Products Product Support Line: 1-800-328-1687 Choose option 4 for FAX ON DEMAND www.3m.com/firestop

4. Performance & Typical Physical Properties

**Hardness** (ASTM D 2240 Shore A): **Application Temperature Range:** 40° to 122°F (4° to 50°C) Tensile Strength: (ASTM C 1299) Volume Shrinkage (ASTM C 1241): **Service Temperature Range:** -20° to 180°F (-28° to 82°C) **VOC Less H<sub>2</sub>O and Exempt Solvents:** STC Acoustic Barrier: 54 when tested in STC 54 rated Dry: Under typical conditions of 75°F (23°C) and 50% R.H., sealant (ASTM E 90 and ASTM E 413) wall assembly becomes tack-free in about ten minutes and dry-to-touch in 30 to 60 Surface Burning (ASTM E 84): Flame Spread 5, Smoke Development 50 minutes. Full dry depends upon ambient conditions and volume of sealant.

Typical dry rate is approximately 1/8 inch (3 mm) per day. Unit Volume: 10.1 fl. oz tube (298.7 ml, 18.2 in.3), 20 fl. oz. sausage (591.5 ml, 36.1 in.3), 27 fl. oz tube (798.5 ml, 48.7 in.3), 4.5 gal. pail (17.03 L, 1039.5 in.3)

5. Packaging, Storage, Shelf Life

Industrial Adhesives and

3M Center, Building 223-2N-21

St. Paul, MN 55144-1000 USA

**Tapes Division** 

-800-328-1687

www.3M.com/firestop

Product packaged in cartridge or pail is enclosed in HDPE plastic containers, sausage is packaged in aluminum foil wrap. **Packaging** 3M™ Fire Barrier Sealant IC 15WB+ should be stored indoors in dry conditions between 40°F and 90°F (4°C and 32°C) in the original unopened package. Avoid repeated freeze / thaw exposures of the 3M™ Fire Barrier Sealant Shelf Life 3M™ Fire Barrier Sealant IC 15WB+ shelf life is 12 months in original unopened containers from date of packaging

when stored above 68°F (2°C). Lot numbering (e.g. 8183AS): First digit = Last digit of year manufactured, Second to fourth digit = Julian Date, Letters = Random to

**6. Installation Techniques**Consult a 3M Authorized Fire Protection Products Distributor / Dealer or Sales Representative for applicable UL, cUL, ULC, Intertek, FM or other third-party drawings and system details.

Preparatory Work The surface of the opening and any penetrating items should be cleaned to allow for the proper adhesion of the 3M<sup>™</sup> Fire Barrier Sealant IC 15WB+. Ensure that the surface of the substrates are not wet and are frost free. Sealant can be installed with a standard caulking gun, pneumatic pumping equipment or it can be easily applied with a putty knife or trowel. Install the applicable depth of backing material, if required, as detailed within the applicable UL, cUL, ULC, Intertek, FM or other third-party listed system. Cut the end of the 3M™ Fire Barrier Sealant IC 15WB+ tube spout to achieve the desired **Installation Details** bead width when applying. Install the applicable depth of 3M™ Fire Barrier Sealant IC 15WB+ into the opening flush with

the surface of the substrate, or as detailed within the applicable listed system, at the depth for the assembly and rating that is required. Tool within 5 minutes. Clean all tools immediately after use with water. Do not apply 3M™ Fire Barrier Sealant IC 15WB+ when surrounding temperature is than less 40°F (4°C) and in conditions where seals may be exposed to rain or water spray within 18 hours of application. Do not apply 3M™ Fire Barrier Sealant IC 15WB+ to building materials that bleed oil, plasticizers or solvent (e.g. impregnated wood, oil-based sealants, or green or partially vulcanized rubber). Do not apply 3M™ Fire Barrier Sealant IC 15WB+ to wet or frost-coated surfaces or to areas that are continuously damp or immersed in water.

7. **Maintenance** No maintenance is expected to be required when installed in accordance with the applicable UL, cUL, ULC, Intertek, FM or other third-party listed system. Once installed, if any section of the 3M<sup>™</sup> Fire Barrier Sealant IC 15WB+ is damaged, the following procedure will apply: remove and reinstall the damaged section in accordance with the applicable listed system, with a minimum 1/2 in. (12.7 mm) overlap onto the

8. Availability 3M™ Fire Barrier Sealant IC 15WB+ is available from 3M Authorized Fire Protection Products Distributors and Dealers. 3M<sup>™</sup> Fire Barrier Sealant IC 15WB+ is available in 10.1 fl. oz. cartridges (3M ID 98-0400-5509-1, 12/case), 20.0 fl. oz. sausages (3M ID 98-0400-5512-5, 10/case), and 4.5 gallon pails (3M ID 98-0400-5510-9, 1/case). For additional technical and purchasing information regarding this and other 3M Fire Protection Products, please call: 1-800-328-1687 or visit www.3m.com/firestop.

**9. Safe Handling Information**Consult country-of-use Safety Data Sheet (SDS) prior to handling and disposal.

Technical Information: The technical information, recommendations and other statements contained in this document are based upon tests or experience that 3M believes are reliable, but the accuracy or completeness of such information is not guaranteed.

Product Use: Many factors beyond 3M's control and uniquely within user's knowledge and control can affect the use and performance of a 3M product in a particular application. Given the variety of factors that can affect the use and performance of a 3M product, user is solely esponsible for evaluating the 3M product and determining whether it is fit for a particular purpose and suitable for user's method of applicat Narranty and Limited Remedy: 3M warrants that each 3M Fire Protection Product will be free from defects in material and manufacture for 90 days from the date of purchase from 3M's authorized distributor. 3M MAKES NO OTHER EXPRESS OR IMPLIED WARRANTIES, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If a 3M product does not conform to this warranty, the sole and exclusive remedy is, at 3M's option, replacement of the 3M product or refund of the purchase price. imitation of Liability: Except where prohibited by law, 3M will not be liable for any loss or damage arising from the 3M product, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted.

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R9700

85 psi (0.59 MPa)

<2 g/L

### WALL OPENING PROTECTIVE MATERIALS (CLIV)

This category covers proprietary compositions which are used to maintain the hourly ratings of fire resistive walls and partitions containing flush mounted devices such as outlet boxes, electrical cabinets and mechanical cabinets. The individual Classifications indicate the specific applications and the method of installation for which the materials have been evaluated. The basic standard used to investigate products in this category is ANSI/UL 263, "Fire Tests of Building Construction and Materials"

LOOK FOR CLASSIFICATION MARKING ON PRODUCT The Classification Marking of Underwriters Laboratories Inc. (shown below) on the product or container is the only method provided by Underwriters Laboratories Inc. to identify Wall Opening Protective Materials produced under its Classification and Follow-

> UNDERWRITERS LABORATORIES INC.® CLASSIFIED

WALL OPENING PROTECTIVE MATERIAL FIRE RESISTANCE CLASSIFICATION SEE PRODUCT CATEGORY IN UL FIRE RESISTANCE DIRECTORY

**3M COMPANY 3M FIRE PROTECTION PRODUCTS** 3M CENTER, ST PAUL MN 55144 USA

Type MPP+ moldable putty pads for use with max 4-11/16 by 4-11/16 by 2-1/8 in. deep flush device UL Listed Metallic Outlet Boxes nstalled with steel cover plates for use in 1 or 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. wide wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Type MPP+ moldable putty pads for use with max 4-11/16 by 4-11/16 by 2 1/8 in. deep flush device UL Listed Metallic Outlet Boxes nstalled with steel or plastic cover plates for use in 1 hr or 2 hr fire rated gypsum board wall assemblies framed with min 5-1/2 in, wide wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Metallic outlet boxes to be provided with steel attachment brackets which offset box min 1/4 in. from stud. Putty pad to be affixed to the back and all four sides of the box. Boxes may be installed back-to-back within the stud cavity. When back-to-back boxes are interconnected a ball of putty is to be installed to plug the open end of each electrical metallic tube or conduit within the outlet boxes.

Type MPP+ moldable putty pads for use with max 4 by 4 by 2-1/8 in. deep flush device UL Listed Metallic Outlet Boxes installed with plastic cover plates for use in 1 or 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in wide wood or steel study and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Type MPP+ moldable putty pads for use with max 14 by 4 by 2-1/2 in. deep flush device UL Listed Metallic Outlet Boxes installed with steel cover plates for use in 1 or 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in, wide steel studs and constructed as specified in the individual U400 or V400 Series Wall and Partition Designs in the fire Resistance Directory Type MPP+ moldable putty pads for use with max 14 by 4-1/2 by 2-1/2 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by

Carlon Electrical Products, made of PVC and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classified for Fire Resistance" category in the Fire Resistance Directory. Boxes installed with steel cover plates, for use in 1 or 2 hr rated gypsum board wall assemblies framed with min 3-1/2 in. wide wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Type MPP+ moldable putty pads for use with max 4 by 3-1/4 by 3-3/4 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Thomas & Betts Corp., made of polycarbonate, Type 234 or made of phenolic, Type 1052 and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classified for Fire Resistance" category in the Fire Resistance Directory. Boxes installed with steel cover plates. For use in 1 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. wide wood studs and constructed as specified in the individual U300 series Wall and Partition Designs in the Fire Resistance Directory Type MPP+ moldable putty pads for use with max 4 by 3-3/4 by 3 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Carlon

Electrical Products, made of PVC and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classified for Fire Resistance category in the Fire Resistance Directory. Boxes installed with plastic cover plates, for use in 1 hr rated gypsum board wall assemblies framed with min 3-1/2 in. wide wood studs and constructed as specified in the individual U300 Series Wall and Partition Designs in the Fire Resistance Directory. Type MPP+ moldable putty pads for use with max 4 by 3-1/4 by 3-3/4 in. deep UL Listed Nonmetallic Outlet Boxes manufactured by Thomas & Betts Corp., made of phenolic, Type 2002-738-C and bearing a 2 hr rating under the "Outlet Boxes and Fittings Classified for Fire Resistance" category in the Fire Resistance Directory. Boxes installed with steel cover plates. For use in 2 hr fire rated gypsum board wall assemblies framed with min 3-1/2 in. wide steel studs and constructed as specified in the individual U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Type MPP+ moldable putty pads for use with max 4 by 4 by 1-1/2 in. deep flush device UL Listed Metallic Outlet Boxes installed with

plastic cover plates for use in 1 hr fire rated gypsum board wall assemblies framed with min 3-5/8 in. wide steel studs and constructed as specified in the individual U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory, Boxes may be installed back-to-back within the stud cavity.

Type MPP+ moldable putty pads for use with max 5 by 5 by 2 7/8 in, deep flush device UL Listed Metallic Outlet Boxes or UL Listed Communications-Circuit Accessories manufactured by Randl Industries Inc for use in 1 hr or 2 hr fire rated gypsum board wall assemblies framed with min 3-5/8 in. wide wood or steel studs and constructed as specified in the individual U300, U400 or V400 Series Wall and Partition Designs in the Fire Resistance Directory. Metallic outlet boxes to be provided with UL Listed Signal Appliance with steel cover plate manufactured by Cooper Wheelock Inc.

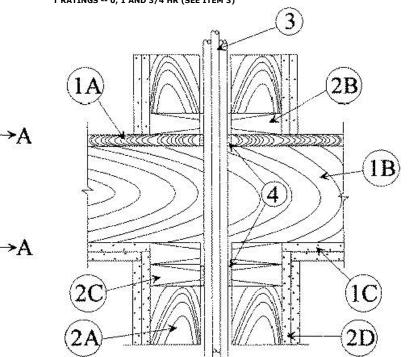
Moldable putty pads are to be installed to completely cover the exterior surfaces of the outlet box (except for the side of the outlet box against the stud unless otherwise noted) including nailing tabs and to completely seal against the stud within the stud cavity. Multiple moldable putty pads may be installed on an outlet box to attain the required minimum thickness of putty material. Additional putty material used to seal around each conduit and/or cable fitting on the exterior of each box. A min 1/10 in. thickness of putty material is required on the exterior surfaces of flush device boxes in 1 and 2 hr fire rated Wall and Partition Designs. When the moldable putty pad outlet box protective material is used on boxes on both sides of wall as directed, the horizontal separation between outlet boxes on opposite sides of the wall may be less than 24 in. provided that the outlet boxes are not installed back to back, except as noted.

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**3M** Fire Protection Products **Product Support Line CLIV** • 2 of 2 1-800-328-1687 www.3m.com/firestop

SYSTEM NO. F-C-3012 F RATINGS -- 1 AND 2 HR (SEE ITEM 1)

T RATINGS -- 0, 1 AND 3/4 HR (SEE ITEM 3)



**SECTION A-A** 

1.FLOOR-CEILING ASSEMBLY -- THE 1 OR 2 HR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES FLOOR-CEILING DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY. THE GENERAL CONSTRUCTION FEATURES OF THE FLOOR-CEILING ASSEMBLY ARE SUMMARIZED BELOW

A. FLOORING SYSTEM -- LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR FLOOR TOPPING MIXTURE\* AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING FOR 1 OR 2 HR ASSEMBLY IS 2-1/2 IN. (64 MM) OR 2 IN. (51 MM),

B. WOOD JOISTS\* -- NOM 10 IN. (254 MM) DEEP (OR DEEPER) LUMBER, STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSES OR STRUCTURAL WOOD MEMBERS\* WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED. C. FURRING CHANNELS -- (NOT SHOWN) -- (AS REQUIRED) - RESILIENT GALVANIZED STEEL FURRING INSTALLED IN ACCORDANCE WITH THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES DESIGNS IN THE FIRE RESISTANCE DIRECTORY.

D. GYPSUM BOARD\* -- THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN, MAX DIAM OF OPENING FOR 1 OR 2 HR ASSEMBLY IS 2-1/2 IN. (64 MM) OR 2 IN. (51 MM), RESPECTIVELY. THE F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE RATING OF THE FLOOR-CEILING ASSEMBLY.

2.CHASE WALL -- (OPTIONAL) - THE THROUGH PENETRANT (ITEM 3) MAY BE ROUTED THROUGH A FIRE-RATED OR NON-RATED SINGLE, DOUBLE OR STAGGERED WOOD STUD/GYPSUM WALLBOARD CHASE WALL. THE CHASE WALL SHALL BE CONSTRUCTED TO INCLUDE THE FOLLOWING CONSTRUCTION

A. STUDS -- NOM 2 BY 6 IN. (51 BY 152 MM) OR DOUBLE NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER STUDS.

B, SOLE PLATE -- NOM 2 BY 6 IN. (51 BY 152 MM) OR PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. MAX DIAM OF OPENING FOR 1 OR 2 HR RATED ASSEMBLY IS 2-1/2 IN. (64 MM) OR 2 IN. (51 MM), RESPECTIVELY C. TOP PLATE -- THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 6 IN. (51 BY 152 MM) OR TWO SETS OF PARALLEL 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES, TIGHTLY BUTTED. MAX DIAM OF OPENING FOR 1 OR 2 HR RATED ASSEMBLY IS 2-1/2 IN. (64 MM) OR 2 IN. (51 MM),

D. GYPSUM BOARD\* -- ONE OR TWO LAYERS OF MIN 1/2 IN. (13 MM) GYPSUM BOARD. 3.CABLES -- IN 1 HR FIRE-RATED ASSEMBLIES, AGGREGATE CROSS-SECTIONAL AREA OF CABLES IN OPENING TO BE MAX 45 PERCENT OF THE CROSS-SECTIONAL AREA OF THE OPENING (MAX 2 IN. (51 MM) DIAM BUNDLE). CABLES TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR ASSEMBLY ANY COMBINATION OF THE FOLLOWING TYPES AND SIZES OF COPPER CONDUCTORS MAY BE USED:

A. RG 59 COAXIAL CABLE WITH SINGLE COPPER CONDUCTOR, CELLULAR POLYETHYLENE CELLULAR FOAM INSULATION AND POLYVINYL CHLORIDE

B. MAX 8/C NO. 22 AWG TELEPHONE CABLE WITH POLYVINYL CHLORIDE (PVC) JACKETING. C. MAX 2/C NO. 12 AWG CABLE WITH POLYVINYL CHLORIDE (PVC) INSULATION AND JACKETING.

D. MAX 3/C WITH GROUND NO. 2/0 AWG ALUMINUM OR COPPER TYPE SER CABLE WITH POLYVINYL CHLORIDE (PVC) INSULATION.

E. MAX 3/C WITH GROUND NO. 2/0 AWG TYPE NM CABLE WITH POLYVINYL CHLORIDE (PVC) INSULATION. F. MAX 3/C NO. 12 AWG MC (BX) CABLE WITH POLYVINYL CHLORIDE (PVC) INSULATION.

G. MAX 1 IN. DIAM METAL CLAD TEK CABLE WITH PVC JACKET.

H. MAX 4/C WITH GROUND NO. 300 KCMIL (OR SMALLER) ALUMINUM SER CABLE WITH PVC INSULATION AND JACKET. THROUGH PENETRATING PRODUCT\* - ANY CABLES, METAL-CLAD CABLE+ OR ARMORED CABLE+ CURRENTLY CLASSIFIED UNDER THE THROUGH PENETRATING PRODUCTS CATEGORY

SEE THROUGH PENETRATING PRODUCT (XHLY) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS. THE T RATING IS 1 AND 1-3/4 HR FOR 1 AND 2 HR RATED ASSEMBLIES, RESPECTIVELY, FOR CABLES 3A THROUGH 3G. THE T RATING IS 0 HR FOR

4.FILL, VOID OR CAVITY MATERIAL\* -- SEALANT -- MIN 3/4 IN. (19 MM) THICKNESS OF FILL MATERIAL APPLIED WITHIN THE ANNULUS. FLUSH WITH TOP SURFACE OF FLOOR OR SOLE PLATE. MIN 5/8 IN. (16 MM) THICKNESS OF FILL MATERIAL ALSO APPLIED WITHIN THE ANNULUS, FLUSH WITH BOTTOM

HILTI CONSTRUCTION CHEMICALS. DIV OF HILTI INC -- FS611A SEALANT OR FS-ONE SEALANT OR FS-ONE MAX INTUMESCENT SEALANT \*INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.

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## FLOOR PENETRATION U.L. SYSTEM NO. F-C-3012

SYSTEM NO. F-C-3044

JANUARY 20, 2015 F RATINGS -- 1 HR T RATINGS -- 1 HR

1.FLOOR-CEILING ASSEMBLY -- THE 1 HR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES FLOOR-CEILING DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY. THE GENERAL CONSTRUCTION FEATURES OF THE FLOOR-CEILING ASSEMBLY ARE SUMMARIZED BELOV

A. FLOORING SYSTEM -- LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR FLOOR TOPPING MIXTURE\* AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING SHALL BE 3 IN. (76 MM)

B. WOOD JOISTS\* -- NOM 10 IN. (254 MM) DEEP (OR DEEPER) LUMBER, STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSES OR **Structural wood members\*** with Bridging as required and with ends firestopped. C. GYPSUM BOARD\* -- NOM 4 FT (1.2 M) WIDE BY 5/8 IN. (16 MM) THICK AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING SHALL BE 3 IN. (76 MM)

1.1 CHASE WALL -- (NOT SHOWN, OPTIONAL)--THE THROUGH PENETRANTS (ITEM 2) MAY BE ROUTED THROUGH A 1 HR FIRE-RATED SINGLE, DOUBLE OR STAGGERED WOOD STUD/GYPSUM WALLBOARD CHASE WALL HAVING A FIRE RATING CONSISTENT WITH THAT OF THE FLOOR-CEILING ASSEMBLY. THE CHASE WALL SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES: A. STUDS -- NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER STUDS.

B. SOLE PLATE -- NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES. MAX DIAM OF OPENING SHALL BE 3 IN. (76 MM).

C. TOP PLATE -- THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 4 IN. (51 BY 102 MM) LUMBER PLATES. MAX DIAM OF OPENING SHALL D. GYPSUM BOARD\* -- THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN INDIVIDUAL WALL AND PARTITION

2.CABLES -- AGGREGATE CROSS-SECTIONAL AREA OF CABLES IN OPENING TO BE MAX 25 PERCENT OF THE CROSS-SECTIONAL AREA OF THE OPENING

THE ANNULAR SPACE WITHIN THE FIRESTOP SYSTEM SHALL BE 3/4 IN. CABLES TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR ASSEMBLY. ANY

COMBINATION OF THE FOLLOWING TYPES AND SIZES OF CABLES MAY BE USED: A. RG 59 COAXIAL CABLE WITH SINGLE COPPER CONDUCTOR, CELLULAR POLYETHYLENE CELLULAR FOAM INSULATION AND POLYVINYL CHLORIDE

B. MAX 25 PAIR NO. 24 AWG TELEPHONE CABLE WITH POLYVINYL CHLORIDE (PVC) JACKETING. C. MAX 3/C NO. 10 AWG CABLE (TYPE NM)

D. MAX 3/C WITH GROUND NO. 2/0 AWG ALUMINUM OR COPPER TYPE SER CABLE WITH POLYVINYL CHLORIDE (PVC) INSULATION. E. MAX 24 FIBER OPTIC CABLE

F. THROUGH PENETRATING PRODUCTS\* -- THREE CONDUCTOR NO. 10 AWG METAL-CLAD CABLE. AFC CABLE SYSTEMS INC

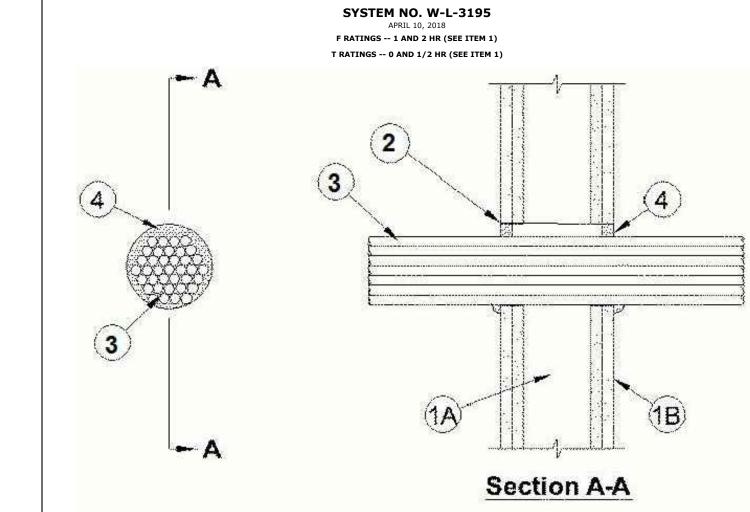
3.FILL, VOID OR CAVITY MATERIALS\*-SEALANT -- MIN 3/4 IN. (19 MM) THICKNESS OF SEALANT APPLIED WITHIN THE ANNULAR SPACE, FLUSH WITH TOP SURFACE OF FLOOR OR SOLE PLATE, MIN 5/8 IN. (16 MM) THICKNESS OF SEALANT APPLIED WITHIN ANNULAR SPACE, FLUSH WITH BOTTOM SURFACE OF THE GYPSUM WALLBOARD OR LOWER TOP PLATE. SEALANT FORCED INTO THE INTERSTICES OF THE CABLES ON BOTH SIDES OF THE WALL. HILTI CONSTRUCTION CHEMICALS, DIV OF HILTI INC -- FS-ONE SEALANT OR FS-ONE MAX INTUMESCENT SEALANT

\* INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY. + BEARING THE UL LISTING MARK LAST UPDATED ON 2015-01-20

FLOOR PENETRATION

U.L. SYSTEM NO. F-C-3044

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I. WALL ASSEMBLY -- THE 1 OR 2 HR FIRE RATED GYPSUM BOARD/STUD WALL ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER DESCRIBED IN THE INDIVIDUAL U300, U400 OR V400 SERIES WALL AND PARTITION DESIGN IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE TH FOLLOWING CONSTRUCTION FEATURES:

A. STUDS -- WALL FRAMING MAY CONSIST OF EITHER WOOD STUDS OR STEEL CHANNEL STUDS. WOOD STUDS TO CONSIST OF NOM 2 BY 4 IN. (51 B' 102 MM) LUMBER SPACED 16 IN. (406 MM) OC. STEEL STUDS TO BE MIN 3-1/2 IN. (89 MM) WIDE SPACED MAX 24 IN. (610 MM) OC. B. GYPSUM BOARD\* -- THE GYPSUM BOARD TYPE, THICKNESS, NUMBER OF LAYERS, FASTENER TYPE AND SHEET ORIENTATION SHALL BE AS SPECIFIED IN THE INDIVIDUAL DESIGN IN THE UL FIRE RESISTANCE DIRECTORY. MAX DIAM OF OPENING IS 5 IN. (127 MM

THE HOURLY F RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE HOURLY FIRE RATING OF THE WALL ASSEMBLY IN WHICH IT IS INSTALLED. THE HOURLY T RATING IS 0 AND 1/2 HR FOR 1 AND 2 HR FIRE RATED ASSEMBLIES, RESPECTIVEL 2. STEEL SLEEVE -- (OPTIONAL) - CYLINDRICAL SLEEVE FABRICATED FROM MIN 0.018 IN. (0.46 MM) THICK (NO. 28 GAUGE) GALV SHEET STEEL AND HAVING A MIN 1 IN. (25 MM) LAP ALONG THE LONGITUDINAL SEAM. LENGTH OF SLEEVE TO BE EQUAL TO OR MAX 2 IN. (51 MM) GREATER THAN THE THICKNESS OF WALL. ENDS OF SLEEVE TO BE FLUSH WITH OR EXTEND A MAX 1 IN. (25 MM) BEYOND EACH SURFACE OF WALL.

3. CABLE -- MAX 4 IN. (102 MM) DIAM CABLE BUNDLE INSTALLED ECCENTRICALLY OR CONCENTRICALLY WITHIN OPENING. ANNULAR SPACE BETWEEN CABLE BUNDLE AND PERIPHERY OF OPENING OR SLEEVE TO BE MIN 0 IN. (0 MM, POINT CONTACT) TO MAX 1 IN. (25 MM). CABLE BUNDLE TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF WALL. THE FOLLOWING TYPES AND SIZES OF CABLES MAY BE USED: A. MAX 200 PAIR NO. 22 AWG (OR SMALLER) COPPER CONDUCTOR WITH POLYVINYL CHLORIDE (PVC) INSULATION AND JACKETING MATERIAL.

C. MAX 7/C NO. 12 AWG (OR SMALLER) COPPER CONDUCTOR POWER AND CONTROL CABLES WITH XLPE OR PVC INSULATION WITH XLPE OR PVC JACKET D. MAX 3/C NO. 4/0 AWG (OR SMALLER) COPPER OR ALUMINUM CONDUCTOR SER CABLES WITH XLPE OR PVC INSULATION AND JACKET. E. MAX 4/C NO. 2/0 AWG (OR SMALLER) COPPER CONDUCTOR, ALUMINUM CLAD OR STEEL CLAD TECK 90 CABLE WITH OR WITHOUT PVC JACKETED. F. MAX 110/125 FIBER OPTIC (F.O.) CABLE WITH PVC INSULATION AND JACKET.

B. MAX 1/C NO. 350 KCMIL (OR SMALLER) COPPER CONDUCTOR CABLE WITH CROSS-LINKED POLYETHYLENE (XLPE) OR PVC JACKET

G. MAX 3/C WITH GROUND NO. 8 AWG (OR SMALLER) COPPER CONDUCTOR NM CABLE WITH PVC INSULATION AND JACKET. H. MAX RG/U COAXIAL CABLE WITH FLUORINATED ETHYLENE INSULATION AND JACKET.

I. MAX 4 PAIR NO. 24 AWG (OR SMALLER) COPPER CONDUCTOR DATA CABLE WITH HYLAR JACKET AND INSULATION. J. THROUGH PENETRATING PRODUCT\*-ANY CABLES, ARMORED CABLE+ OR METAL CLAD CABLE+CURRENTLY CLASSIFIED UNDER THE THROUGH PENETRATING PRODUCT CATEGORY

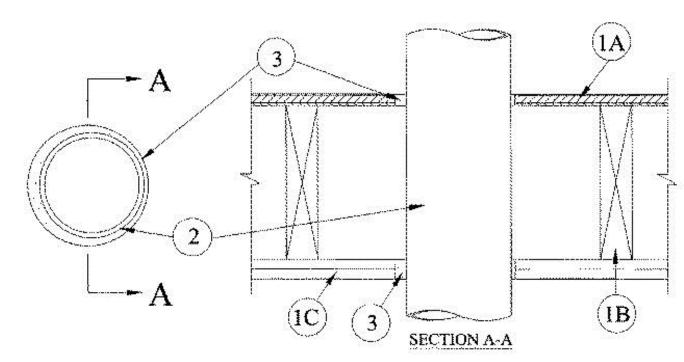
SEE THROUGH PENETRATING PRODUCT (XHLY) CATEGORY IN THE FIRE RESISTANCE DIRECTORY FOR NAMES OF MANUFACTURERS. 4. FILL, VOID OR CAVITY MATERIAL\* - CAULK OR SEALANT -- MIN 5/8 IN. (16 MM) THICKNESS OF CAULK APPLIED WITHIN ANNULUS, FLUSH WITH BOTH SURFACES OF WALL. MIN 1/4 IN. (6 MM) DIAM BEAD OF CAULK APPLIED TO GYPSUM BOARD/CABLE BUNDLE INTERFACE AT POINT CONTACT LOCATION ON BOTH

3M COMPANY -- IC 15WB+, CP 25WB+ CAULK OR FB-3000 WT SEALANT \* INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH

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## WALL PENETRATION U.L. SYSTEM NO. W-L-3195

SYSTEM NO. F-C-1059 DECEMBER 06,2018 F RATINGS -- 1 AND 2 HR (SEE ITEM 1) T RATINGS -- 0 AND 1/2 HR (SEE ITEM 1)



1. FLOOR-CEILING ASSEMBLY -- THE 1 OR 2 HR FIRE-RATED SOLID OR TRUSSED LUMBER JOIST FLOOR-CEILING ASSEMBLY SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES FLOOR-CEILING DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY. THE F FH RATING OF THE FIRESTOP SYSTEM IS EQUAL TO THE RATING OF THE FLOOR-CEILING AND WALL ASSEMBLIES. THE T. FT AND FTH RATING OF THE FIRESTOP SYSTEM IS 0 HR FOR 1 HR RATED FLOOR CEILING ASSEMBLY AND 1/2 HR FOR 2 HR RATED FLOOR CEILING ASSEMBLY. THE GENERAL CONSTRUCTION FEATURES OF THE FLOOR-CEILING ASSEMBLY ARE SUMMARIZED BELOW

A. FLOORING SYSTEM -- LUMBER OR PLYWOOD SUBFLOOR WITH FINISH FLOOR OF LUMBER, PLYWOOD OR FLOOR TOPPING MIXTURE\* AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING SHALL BE 7-5/8 IN. (194 MM)

B. WOOD JOISTS\* -- NOM 10 IN (254 MM) DEEP (OR DEEPER) LUMBER, STEEL OR COMBINATION LUMBER AND STEEL JOISTS, TRUSSES OR STRUCTURAL WOOD MEMBERS\* WITH BRIDGING AS REQUIRED AND WITH ENDS FIRESTOPPED. C. GYPSUM BOARD\* -- THICKNESS, TYPE, NUMBER OF LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN THE INDIVIDUAL FLOOR-CEILING DESIGN. MAX DIAM OF OPENING SHALL BE 7-5/8 IN. (194 MM).

D. FURRING CHANNELS -- (NOT SHOWN) (AS REQUIRED) RESILIENT GALVANIZED STEEL FURRING INSTALLED IN ACCORDANCE WITH THE MANNER SPECIFIED IN THE INDIVIDUAL L500 SERIES DESIGNS IN THE FIRE RESISTANCE DIRECTORY. 1.1 **Chase Wall --** (not shown, optional)--the through penetrants (item 2) may be routed through a 1 or 2 hr fire-rated single DOUBLE OR STAGGERED WOOD STUD/GYPSUM WALLBOARD CHASE WALL HAVING A FIRE RATING CONSISTENT WITH THAT OF THE FLOOR-CEILING

ASSEMBLY. THE CHASE WALL SHALL BE CONSTRUCTED OF THE MATERIALS AND IN THE MANNER SPECIFIED IN THE INDIVIDUAL U300 SERIES WALL AND PARTITION DESIGNS IN THE UL FIRE RESISTANCE DIRECTORY AND SHALL INCLUDE THE FOLLOWING CONSTRUCTION FEATURES: A. STUDS -- NOM 2 BY 8 IN. (51 BY 203 MM) LUMBER OR DOUBLE NOM 2 BY 6 IN. (51 BY 152 MM) LUMBER STUDS.

B. SOLE PLATE -- NOM 2 BY 8 IN. (51 BY 203 MM) LUMBER OR PARALLEL 2 BY 6 IN. (51 BY 152 MM) LUMBER PLATES, TIGHTLY BUTTED. MAX DIAM TOP PLATE -- THE DOUBLE TOP PLATE SHALL CONSIST OF TWO NOM 2 BY 8 IN. (51 BY 203 MM) LUMBER PLATES OR TWO SETS OF NOM 2 BY 6

IN. (51 BY 152 MM) LUMBER PLATES TIGHTLY BUTTED, MAX DIAM OF OPENING IS 7-5/8 IN. (194 MM). D. GYPSUM BOARD\* -- THICKNESS, TYPE, NUMBER OR LAYERS AND FASTENERS SHALL BE AS SPECIFIED IN INDIVIDUAL WALL AND PARTITION

2.THROUGH PENETRANTS -- ONE METALLIC TUBING, PIPE OR CONDUIT TO BE INSTALLED CONCENTRICALLY OR ECCENTRICALLY WITHIN THE FIRESTOP SYSTEM. ANNULAR SPACE BETWEEN PIPE OR CONDUIT AND EDGE OF OPENING TO BE MIN 1/4 IN. (6 MM) AND MAX 3/4 IN. (19 MM). PIPE, TUBING OR CONDUIT TO BE RIGIDLY SUPPORTED ON BOTH SIDES OF FLOOR-CEILING ASSEMBLY. THE FOLLOWING TYPES AND SIZES OF METALLIC PIPES, TUBING OR

A. STEEL PIPE -- NOM 6 IN. (152 MM) DIAM (OR SMALLER) SCHEDULE 40 (OR HEAVIER) STEEL PIPE.

B. IRON PIPE -- NOM 6 IN. (152 MM) DIAM (OR SMALLER) CAST OR DUCTILE PIPE.

C. CONDUIT -- NOM 4 IN. (102 MM) DIAM (OR SMALLER) STEEL ELECTRICAL METALLIC TUBING OR NOM 6 IN. DIAM (OR SMALLER) STEEL CONDUIT. D. STEEL FLEXIBLE METAL CONDUIT + -- NOM 2 IN. (51 MM) DIAM (OR SMALLER) STEEL FLEXIBLE METAL CONDUIT

SEE FLEXIBLE METAL CONDUIT (DXUZ) CATEGORY IN THE ELECTRICAL CONSTRUCTION MATERIALS DIRECTORY FOR NAMES OF MANUFACTURERS. 3.FILL, VOID OR CAVITY MATERIAL\*--SEALANT -- MIN 5/8 IN. (16 MM) OR 1-1/4 IN. (32 MM) THICKNESS OF SEALANT APPLIED WITHIN ANNULAR SPACE, FLUSH WITH THE BOTTOM SURFACE OF GYPSUM WALLBOARD OR LOWER TOP PLATE FOR 1 AND 2 HR FLOORS RESPECTIVELY. MIN. 3/4 IN. (19 MM) THICKNESS OF SEALANT APPLIED WITHIN ANNULAR SPACE, FLUSH WITH TOP SURFACE OF FLOOR OR SOLE PLATE.

HILTI INC -- FS-ONE SEALANT OR FS-ONE MAX INTUMESCENT SEALANT +BEARING THE UL LISTING MARK

\* INDICATES SUCH PRODUCTS SHALL BEAR THE UL OR CUL CERTIFICATION MARK FOR JURISDICTIONS EMPLOYING THE UL OR CUL CERTIFICATION (SUCH AS CANADA), RESPECTIVELY.

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FLOOR PENETRATION

U.L. SYSTEM NO. F-C-1059

**KONTOGIANNIS** & ASSOCIATES

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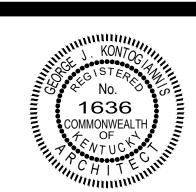
PROJECT:

SANCTUARY ON EDWARDS SENIOR HOUSING (BUILDING "B"

11125 EDWARDS RD. ELSMERE, KY 41018

**DRAWING TITLE:** ELECTRICAL FIRE STOP SYSTEMS

DATE: 07/31/2023 REVISED:



GEORGE J. KONTOGIANNIS, LICENSE #1636 EXPIRATION DATE 06/30/2024

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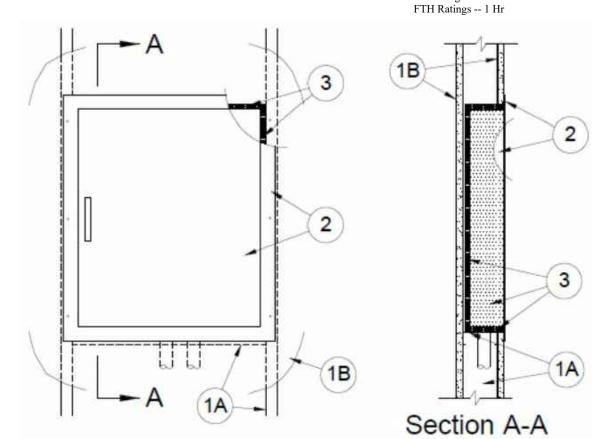
SUBMISSION SET PERMIT SET 07/31/2023 BID SET 11/08/2023

CONSTRUCTION SET



System No. W-L-7248 December 05, 2016

CAN/ULC S115 F Ratings -- 1 Hr FT Ratings -- 1 Hr ANSI/UL1479 (ASTM E814) F Ratings -- 1 Hr T Ratings -- 1 Hr FH Ratings -- 1 Hr



1. Wall Assembly -- The 1 hr fire rated framed gypsum board wall assembly shall be constructed of the materials and in the manner specified in the individual U300, U400, V400, or W400 Series Wall and Partition Designs in the UL Fire Resistance Directory and shall include the following construction

A. Studs -- Wall framing shall consist of steel channel studs or wood studs. Steel studs to be min 3-5/8 in. (92 mm) wide and spaced max 24 in. (610 mm) OC. Wood studs to be min 2 by 4 in. (51 by 102 mm) or larger and spaced max 16 in. (406 mm) OC. An additional framing member shall be used to form a shelf within the wall cavity to support the steel box (Item 2) and mat fill material (Item 3). The framed opening is to be 1 in. (25 mm) wider than the width of the steel box. Studs sized to allow min 3/4 in. between back of the bare box and the back of the gypsum on the opposite side of wall to accommodate the thickness of the Membrane Penetration Fire Shield (item 3).

B. Gypsum Board\* -- The gypsum board type, thickness, number of layers and orientation shall be, as specified in the individual Wall and Partition Design. Size of cutout made to accommodate steel box (Item 2) is to be 1 in. (25 mm) wider and 1 in. (25 mm) higher than the width and height of the

2. Steel Box -- Max 20 in. (508 mm) wide by max 33 in. (838 mm) high by max 3 1/2 in. (89 mm) deep for steel stud walls. Max 14-3/8 in. (365 mm) wide by max 32 in. (813 mm) high by max 3 1/2 in. (89 mm) deep for wood stud walls. Electrical panel box, utility box, valve box, fire extinguisher cabinet fabricated from 18 ga or lighter steel. fabricated from 18 ga or lighter steel. Box to be recessed box with hinged steel door and mounting flange. Steel box secured to steel studs with steel screws after application of mat material (Item 3) on exterior surfaces of steel box. Bottom and/or top of steel box may be penetrated by up to six max 1-1/2 in. (38 mm) diam copper, steel or iron pipes or tubes metal clad cable and up to ten 1 in. max diam steel or iron pipes or tubes metal clad cable installed from the top and five max1 in. diam steel or iron pipes or tubes metal clad cable installed from the bottom of the box. Total number of box penetrations shall not exceed six for configurations with copper penetrations and ten for all others. Open pipes or tubes and clad cables which terminate within the box shall be sealed with caulk (Item 4) or plugged with a ball of putty (Item 5).

3. Fill, Void or Cavity Materials\* - Cavity material -- Prefabricated insulation assembly sized to accommodate the Steel box (item 2).. Circular cutouts made in the top, bottom and vertical sides mat to accommodate the pipes or tubes to be 1/4 in. to 1/2 in. (6 to 13 mm) larger than outside diam of pipe or tube. All corners and butted seams in the mat are to be sealed with min 1/8 in. bead of caulk (Item 4).

4.Fill, Void or Cavity Materials\* - Caulk or Sealant -- (Not Shown) - Nom 1/4 in. (6 mm) diam bead of caulk applied between the gypsum (item 1B) and mat (Item 3) around the entire perimeter of the opening in the wall. Additional caulk fill material shall be used to completely fill each circular cutout made in the mat material to accommodate a pipe or tube. The end of each open pipe or tube which terminates within the box shall be sealed with a min 1/2 in. (13

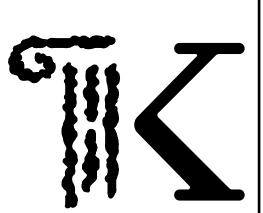
3M COMPANY 3M FIRE PROTECTION PRODUCTS -- Type CP 25WB+ Caulk, FB-3000WT Sealant

5. Fill, Void or Cavity Materials\* - Putty -- (Not Shown) - As an alternate to the caulk (Item 4), the end of each open pipe or tube which terminates within the box may be sealed with a min 1/2 in. (13 mm) depth of putty fill material. 3M COMPANY 3M FIRE PROTECTION PRODUCTS -- Type MP+ Moldable Putty

\* Indicates such products shall bear the UL or cUL Certification Mark for jurisdictions employing the UL or cUL Certification (such as Canada), respectively.

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WALL PENETRATION U.L. SYSTEM NO. W-L-7248



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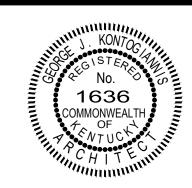
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DRAWING TITLE: ELECTRICAL FIRE STOP SYSTEMS

DATE: 07/31/2023 REVISED:



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CONSTRUCTION SET