

GENERAL STRUCTURAL NOTES

1. GENERAL

A. ALL CONSTRUCTION SHALL CONFORM WITH THE PROVISIONS OF THE 2018 INTERNATIONAL RESIDENTIAL CODE FOR ONE AND TWO FAMILY DWELLINGS.

B.DESIGN LIVE LOADS:
ROOF.....40 PSF
FLOORS.....40 PSF
SLEEPING AREA.....30 PSF

2. FOUNDATIONS

A. FOOTINGS ARE DESIGNED FOR AN ALLOWABLE SOIL BEARING CAPACITY OF 2000 PSF. FOOTINGS SHALL BEAR ON NATURAL UNDISTURBED SOIL. 1'-0" BELOW ORIGINAL GRADE. THE BOTTOM OF EXTERIOR FOOTINGS SHALL BE A MINIMUM OF 2'-6" BELOW FINISHED GRADE. CONTRACTOR TO VERIFY THE ALLOWABLE SOIL PRESSURE IN THE FIELD. IF FOUND TO BE LESS THAN 2000 PSF, THE FOOTINGS WILL HAVE TO BE REDESIGNED.

3. CAST IN PLACE CONCRETE

A. ALL CONCRETE WORK SHALL CONFORM TO THE LATEST APPROVED (BY LOCAL GOVERNMENT) EDITIONS OF THE FOLLOWING A.C.I. AND A.S.T.M. DOCUMENTS:

ACI-301 SPECIFICATIONS FOR STRUCTURAL CONCRETE FOR BUILDINGS
ACI-318 BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE

B. ALL CONCRETE EXCEPT AS NOTED SHALL BE (FC=3,000 PSI) STONE AGGREGATE CONCRETE AT 28 DAYS. ALL CONCRETE EXPOSED TO THE WEATHER SHALL BE AIR ENTRAINED.

C. SLABS ON GROUND SHALL BE 4" THICK CONCRETE REINFORCED WITH 6"x6" W1.4XN1.4 WWF OVER 6 MIL POLYETHYLENE VAPOR BARRIER AND 4" WASHED GRAVEL UNLESS OTHERWISE NOTED.

4. MASONRY

A. ALL MASONRY CONSTRUCTION AND MATERIALS USED THEREIN (CONCRETE MASONRY, CLAY MASONRY, MORTAR, GROUT, AND STEEL REINFORCEMENT) SHALL CONFORM TO "BUILDING CODE REQUIREMENTS FOR MASONRY STRUCTURES" (ACI 530-02/ASCE 5-02/TMS 402-02) AND "SPECIFICATIONS FOR MASONRY STRUCTURES" (ACI 530.1-02/ASCE 6-02/ TMS 602-02) IN ALL RESPECTS.

B. MASONRY BEARING WALLS SHALL CONSIST OF STANDARD HOLLOW UNITS CONFORMING TO ASTM C 90 UNLESS OTHERWISE NOTED. WHERE SOLID UNITS ARE REQUIRED, PROVIDE UNITS CONFORMING TO ASTM C 145.

C. ALL MORTAR SHALL CONFORM TO THE REQUIREMENTS FOR PROPORTIONS, MIXING, STRENGTH AND APPLICATION FOR PORTLAND CEMENT/ LIME TYPE "S" MORTAR AS DESCRIBED IN ACI 530-02.

D. ALL GROUT FILL IN MASONRY WALLS SHALL CONFORM TO ASTM C 476. SLUMP RANGE 8-11". PLACE GROUT IN 5'-0" MAXIMUM FOUR HEIGHTS AND CONSOLIDATE BY MECHANICAL VIBRATION.

E. PROVIDE 8" DEPTH OF 100% SOLID MASONRY BELOW ALL JOIST OR SLAB BEARING LINES. PROVIDE 16" HIGH X16" LONG 100% SOLID MASONRY BELOW ALL LINTELS AND BEAMS UNLESS NOTED OTHERWISE.

F. ALL MASONRY WALLS SHALL BE REINFORCED WITH NO. 9 GAGE TRUSS TYPE GALVANIZED DUR-O-WALL SPACED VERTICALLY AT 16" O.C. UNO. LAP ALL DUR-O-WALL 6" MINIMUM. PROVIDE CORNER AND TEE PIECES AT ALL INTERSECTIONS.

G. LOOSE LINTELS FOR MASONRY WALLS SHALL BE FOR EACH 4" WIDTH OF MASONRY ONE STEEL ANGLE AS FOLLOWS:

0'-0" TO 3'-0" 3-1/2"X 3-1/2"X 5/16"
3'-1" TO 3'-0" 4"X 3-1/2"X 5/16"
3'-1" TO 6'-6" 5"X 3-1/2"X 3/8"
6'-1" TO 8'-0" 6"X 3-1/2"X 3/8"

ALL ANGLES SHALL HAVE THEIR SHORT LEG OUTSTANDING AND 6" MINIMUM BEARING.

5. STRUCTURAL STEEL

A. ALL STRUCTURAL STEEL SHALL CONFORM TO ASTM SPECIFICATION A-36 (LATEST LOCAL APPROVED). ALL STEEL SHALL BE DETAILED, FABRICATED, AND ERECTED IN ACCORDANCE WITH THE AISC MANUAL, AISC SPECIFICATION AND AISC CODE OF STANDARD PRACTICE.

B. ALL WELDED CONNECTIONS SHALL BE DONE WITH E70XX ELECTRODES. SHOP AND FIELD WELDS SHALL BE MADE BY APPROVED CERTIFIED WELDERS AND SHALL CONFORM TO THE AMERICAN WELDING SOCIETY CODE FOR BUILDING AWS D1.1. SHALL DEVELOP THE FULL STRENGTH OF MATERIALS BEING WELDED UNLESS OTHERWISE NOTED.

6. WOOD

A. STRUCTURAL WOOD RAFTERS, JOISTS, BEAMS, AND STUDS SHALL BE HEM FIR #2 OR SPRUCE PINE FIR #2 SURFACED DRY AT A MAXIMUM OF 19% MOISTURE CONTENT. ALL LUMBER EXPOSED TO WEATHER SHALL BE PRESSURE TREATED SOUTHERN PINE #2. ALL FABRICATION, ERECTION, OTHER PROCEDURES, AND MINIMUM UNIT STRESSES SHALL CONFORM TO THE CURRENT "NATIONAL DESIGN SPECIFICATION FOR WOOD" CONSTRUCTION.

B. WOOD TRUSSES SHALL BE DESIGNED, FABRICATED AND ERECTED IN ACCORDANCE WITH THE NATIONAL DESIGN SPECIFICATION FOR METAL PLATE CONNECTED WOOD TRUSS CONSTRUCTION (ANSI/TPI 1) AND COMMENTARY AND RECOMMENDATIONS FOR HANDLING, INSTALLING AND BRACING METAL PLATE CONNECTED WOOD TRUSSES (HIB-91) AS PUBLISHED BY THE TRUSS PLATE INSTITUTE AND IN ACCORDANCE WITH THE 1991 EDITION OF THE NATIONAL DESIGN SPECIFICATION FOR WOOD CONSTRUCTION.

C. WOOD TRUSSES AND ENGINEERED FLOOR JOISTS ARE TO BE DESIGNED BY THE SUPPLIER. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER/ ARCHITECT FOR REVIEW. ALL TRUSSES AND JOISTS SHALL BE DESIGNED TO LIMIT THE BEARING STRESS TO 425 PSI WHEN MEMBERS BEAR ON STUD WALLS. PROVIDE MEMBERS OF ADEQUATE WIDTH OR METAL CONNECTIONS TO LIMIT STRESSES TO THE SPECIFIED VALUE.

D. ALL LAMINATED VENEER LUMBER (LVL) OR PARALLEL STRAND LUMBER (PSL) SHALL HAVE THE FOLLOWING MINIMUM PROPERTIES: Fb=2600 psi, Fv=225 psi, E=1,900,000 psi, Fc= 2510 psi (PARALLEL), Fc=750 psi (PERPENDICULAR).

E. ALL DOUBLE MEMBERS SHALL BE NAILED TOGETHER WITH 2 ROWS OF 16d NAILS SPACED AT 12" O.C. ALL TRIPLE MEMBERS SHALL BE NAILED TOGETHER WITH 3 ROWS OF 16d NAILS SPACED AT 12" O.C. NAILED FROM EACH SIDE.

F. PROVIDE DOUBLE JOISTS AT PARALLEL PARTITIONS WHERE PARTITION LENGTH EXCEEDS 1/3 JOIST SPAN.

G. ALL NAILS ARE TO BE COMMON WIRE NAILS. NAILING OF ALL FRAMING SHALL BE AS SPECIFIED IN THE CONTRACT DOCUMENTS BUT IN NO CASE SHALL BE LESS THAN THE RECOMMENDED NAILING SCHEDULE CONTAINED IN THE 2018 INTERNATIONAL RESIDENTIAL CODE. ALL W/16 NAIL STUD POSTS ARE TO BE NAILED TOGETHER WITH 12d NAILS @ 6" O.C. STAGGERED.

H. PROVIDE BRIDGING SPACED AT 48" O.C. IN FIRST TWO JOIST, RAFTER, OR TRUSS SPACES WHEN FRAMING. PROVIDE PARALLEL NAIL SHEATHING (FLOOR, CEILING OR ROOF) TO BRIDGING AND NAIL BRIDGING EXTERIOR WALL. PLATE. PROVIDE ONE ROW OF BRIDGING BETWEEN ALL FLOOR AND ROOF JOISTS FOR EACH 8'-0" OF SPAN. PROVIDE SOLID BLOCKING OR A CONTINUOUS RIM JOIST AT THE BEARING OF JOISTS, RAFTERS OR TRUSSES ON WOOD PLATES

I. PROVIDE THE FOLLOWING JAMB STUDS AT ALL BEARING WALL OPENINGS UNLESS NOTED OTHERWISE:
0-3" OPENING 1 JACK STUD, 1 KING STUD
3'-1" - 6'-0" OPENINGS 2 JACK STUDS, 1 KING STUD
6'-1" - 40" OPENING 2 JACK STUDS, 2 KING STUDS

PROVIDE DOUBLE STUDS AT ALL CORNERS AND BENEATH ALL GIRDER TRUSSES AND WOOD BEAMS UNLESS NOTED OTHERWISE ON PLANS. WOOD BEAMS, GIRDERS TRUSSES AND HEADERS SHALL BEAR THE FULL DEPTH OF POSTS AND JACK STUDS.

J. ALL POSTS (MULTIPLE STUDS OR SOLID POST) SUPPORTING BEAMS, WALL HEADERS OR GIRDER TRUSSES, SHALL BE BLOCKED SOLID FOR THE FULL LENGTH AND WIDTH OF POSTS AT ALL INTERSECTIONS WITH FLOORS AS REQUIRED TO PROVIDE CONTINUOUS SUPPORT TO TOP OF FOUNDATION WALLS OR BEAMS. POSTS SHOWN ON UPPER LEVELS FLOORS SHALL ALSO BE INSTALLED ON THE LOWER LEVELS IN LINE WITH THE POST ABOVE DOWN TO FOUNDATION WALLS OR BEAMS.

K. ALL FLUSH JOIST TO BEAM OR BEAM TO BEAM CONNECTIONS SHALL BE MADE WITH JOIST OR BEAM HANGERS TO SUPPORT THE LOAD CAPACITY INDICATED ON THE PLANS OR THE FULL CAPACITY OF THE JOIST OR BEAM. HANGERS SHALL BE PROVIDED BY SIMPSON STRONG TIE OR USF LUMBER CONNECTORS. THE SUPPLIER SHALL DESIGN ALL HANGERS FOR THE CAPACITY STATED. INSTALL ALL HANGERS IN STRICT CONFORMANCE TO THE MANUFACTURERS INSTRUCTIONS. FILL ALL NAIL OR BOLT HOLES USING THE SPECIFIED NAILS AND BOLTS ONLY.

2018 IECC CODE COMPLIANCE

R301.1 CLIMATE ZONE 4

R401.2 COMPLIANCE METHOD: MANDATORY AND PRESCRIPTIVE PROVISIONS

R402.1.1 VAPOR RETARDER:
WALL ASSEMBLIES IN THE THERMAL BUILDING ENVELOPE SHALL COMPLY WITH THE VAPOR RETARDER REQUIREMENTS OF SECTION R702.7 OF THE IRC CODE, 2018 EDITION

R402.1.2 ATTIC INSULATION: RAISED HEEL TRUSS:
R-44 R-38

R402.1.2 WOOD FRAME WALL:
R-20 OR R13+R5 CONTINUOUS INSULATION

R402.1.2 BASEMENT WALL INSULATION:
R-19/R-10 FOIL FACED CONTINUOUS, UNINTERRUPTED BATTS FULL HEIGHT

R402.1.2 CRACK SPACE WALL INSULATION:
R-19/R-10 FOIL FACED CONTINUOUS BATTS FULL HEIGHT EXTENDING FROM FLOOR ABOVE TO FINISH GRADE LEVEL AND THEN VERTICALLY OR HORIZONTALLY AN ADDITIONAL 2'-0"

R402.1.2 FLOOR INSULATION OVER UNCONDITIONED SPACE:
R-19 BATT INSULATION

R402.1.2 WINDOW U-VALUE / SHGC
.35 (U-VALUE)
.40 (SHGC)

R402.2.10 SLAB ON GRADE FLOORS LESS THAN 12" BELOW GRADE:
R-10 RIGID FOAM BOARD UNDER SLAB EXTENDING EITHER 2'-0" HORIZONTALLY OR 2'-0" VERTICALLY

R402.2.4 ATTIC ACCESS:
ATTIC ACCESS SCUTTLE WILL BE WEATHERSTRIPPED AND INSULATED R-49.

R402.4 BUILDING THERMAL ENVELOPE (AIR LEAKAGE):
EXTERIOR WALLS AND PENETRATIONS WILL BE SEALED PER THIS SECTION OF THE 2018 IECC WITH CAULK, GASKETS, WEATHERSTRIPPING OR AN AIR BARRIER OF SUITABLE MATERIAL.

R402.4.12 BUILDING THERMAL ENVELOPE TIGHTNESS TEST:
BUILDING ENVELOPE SHALL BE TESTED AND VERIFIED AS HAVING AN AIR LEAKAGE RATE OF NOT EXCEEDING 3 AIR CHANGES PER HOUR. TESTING SHALL BE CONDUCTED IN ACCORDANCE WITH ASTM E 779 OR ASTM E 1827 (WITH BLOWER DOOR) AS A PRESSURE OF 0.2 INCHES W.G. (50 PASCALS). TESTING SHALL BE SIGNED BY THE PARTY CONDUCTING THE TEST AND PROVIDED TO THE BUILDING INSPECTOR.

R402.4.2 FIREPLACES:
NEW WOOD BURNING MASONRY FIREPLACES WILL HAVE TIGHT-FITTING FLUE DAMPERS AND OUTDOOR COMBUSTION AIR. FIREPLACE DOORS SHALL BE LISTED AND LABELED IN ACCORDANCE WITH UL 127 (FACTORY BUILT FIREPLACE) AND UL 907 (MASONRY FIREPLACE)

R402.4.4 ROOMS CONTAINING FUEL BURNING APPLIANCES WHERE OPEN COMBUSTION AIR DUCTS PROVIDE COMBUSTION AIR TO OPEN COMBUSTION FUEL BURNING APPLIANCES, THE APPLIANCES AND COMBUSTION AIR SHALL BE LOCATED OUTSIDE THE BUILDING THERMAL ENVELOPE TO ENCLOSED IN A ROOM ISOLATED FROM THE THERMAL ENVELOPE.
EXCEPTION: DIRECT VENT APPLIANCES WITH BOTH INTAKE AND EXHAUST PIPES INSTALLED CONTINUOUS TO THE OUTSIDE. FIREPLACES AND STOVES COMPLYING WITH SECTION R402.4.2 AND SECTION R1006 OF THE IRC.

R402.4.5 RECESSED LIGHTING:
RECESSED LUMINAIRES INSTALLED IN THE BUILDING THERMAL ENVELOPE SHALL BE SEALED TO LIMIT AIR LEAKAGE.

R403.1.1 THERMOSTAT:
ALL DWELLING UNITS WILL HAVE AT LEAST (1) PROGRAMMABLE THERMOSTAT FOR EACH SEPARATE HEATING AND COOLING SYSTEM PER IRC IECC SECTION R403.1.1.

R403.1.2 WHERE A HEAT PUMP SYSTEM HAVING SUPPLEMENTARY ELECTRIC RESISTANCE HEAT IS USED, THE THERMOSTAT SHALL PREVENT THE SUPPLEMENTARY HEAT FROM COMING ON WHEN HEAT PUMP CAN MEET HEATING LOAD.

R403.3.1 MECHANICAL DUCT INSULATION:
SUPPLY AND RETURN DUCTS IN ATTIC R-8 MINIMUM. R-6 WHEN LESS THAN 5". SUPPLY AND RETURN DUCTS OUTSIDE OF CONDITIONED SPACE R-8 MINIMUM. ALL OTHER DUCTS EXCEPT THOSE LOCATED COMPLETELY INSIDE THE BUILDING THERMAL ENVELOPE R-6 MINIMUM. DUCTS LOCATED UNDER CONCRETE SLABS MUST BE R-6 MINIMUM.

R403.3.2 DUCT SEALING:
ALL DUCTS, AIR HANDLERS, FILTER BOXES WILL BE SEALED. JOINTS AND SEAMS WILL COMPLY WITH SECTION M1601.4.1 OF THE IRC.

R403.6 A DUCT TIGHTNESS TEST ("DUCT BLASTER" DUCT TOTAL LEAKAGE TEST) WILL BE PERFORMED ON ALL HOMES AND SHALL BE VERIFIED BY EITHER A POST CONSTRUCTION TEST OR A ROUGH-IN TEST. DUCT TIGHTNESS IS NOT REQUIRED IF THE AIR HANDLER AND ALL DUCTS ARE LOCATED WITHIN THE CONDITIONED SPACE.

R403.6 MECHANICAL VENTILATION:
OUTDOOR (MAKE UP AND EXHAUSTS) AIR DUCTS TO BE PROVIDED WITH AUTOMATIC OR GRAVITY DAMPER THAT CLOSE WHEN THE VENTILATION SYSTEM IS NOT OPERATING.

R403.6.1 WHOLE HOUSE MECHANICAL VENTILATION SYSTEM FAN EFFICIENCY TO COMPLY WITH TABLE R403.6.1.

R403.7 EQUIPMENT SIZING SHALL COMPLY WITH R403.7.

R404.1 LIGHTING EQUIPMENT:
A MINIMUM OF 75% OF ALL LAMPS (LIGHTS) MUST BE HIGH-EFFICACY LAMPS.

*THE CONTRACTOR IS ALSO RESPONSIBLE FOR GENERATING CERTIFICATE OF COMPLIANCE AND AFFIXING TO ELECTRICAL PANEL OR WITHIN 6 FEET OF THE PANEL AND BE READILY VISIBLE.

DESCRIPTION OF WORK:

CONSTRUCT THREE (3) 3 STORY TOWNHOMES.

DRAWING INDEX

SHEET #	SHEET DESCRIPTION
COVER	COVER SHEET / NOTES
2	PROPOSED ELEVATIONS
3	FOUNDATON PLAN
4	GROUND FLOOR PLAN
5	SECOND FLOOR PLAN
6	THIRD FLOOR PLAN
7	SECTION AND DETAILS
8	ADA DETAILS

GENERAL NOTES

ALL PROPOSED INTERIOR NON-BEARING PARTITIONS TO BE 2x4 @ 16" O/C W/ SINGLE TOP PLATE U.N.O.

ALL PROPOSED WINDOW ROUGH OPENING HEIGHTS TO BE SET PER THE ELEVATION DRAWINGS

REFER TO FRAMING SUPPLIER'S LAYOUT FOR BRACING DETAILS & FRAMING INSTALLATION REQUIREMENTS (FOR NEW CONSTRUCTION)

FRAMING SUPPLIER'S SHOP DRAWINGS SUPERSEDE PROPOSED FRAMING LAYOUT HEREIN SUGGESTED.

PROVIDE ADEQUATE CLEARANCE AT PROPOSED PLUMBING STACKS AS REQ'D.

DOORS AND WINDOWS ARE NOTED IN FEET AND INCHES IE: "28-68" DOOR IS 2'-8"x6'-8" - A WINDOW NOTED AS "3650" IS 3'-6"x5'-0"- TYPICAL

WALL BRACING DESIGN INFO:

LOCATION: BALTIMORE CITY, MARYLAND

SEISMIC CATEGORY: B

WIND SPEED: 90 MPH

METHOD 3 (WOOD SHEATHING)/ CONTINUOUS SHEATHING

METHOD 5 (GYPSUM BOARD)

*THESE DRAWINGS ARE LIMITED TO IRC WALL BRACING REQUIREMENTS ONLY.

R602.10.4 CONTINUOUS SHEATHING: BRACED WALL LINES WITH CONTINUOUS SHEATHING SHALL BE CONSTRUCTED IN ACCORDANCE WITH THIS SECTION. ALL BRACED WALL LINES ALONG EXTERIOR WALLS ON THE SAME STORY SHALL BE CONTINUOUSLY SHEATHED.

SECTION R310 EMERGENCY ESCAPE AND RESCUE OPENINGS

R310.1 EMERGENCY ESCAPE AND RESCUE OPENING REQUIRED

BASEMENTS, HABITABLE ATTICS AND EVERY SLEEPING ROOM SHALL HAVE NOT LESS THAN ONE OPERABLE EMERGENCY ESCAPE AND RESCUE OPENING. WHERE BASEMENTS CONTAIN ONE OR MORE SLEEPING ROOMS, AN EMERGENCY ESCAPE AND RESCUE OPENING SHALL BE REQUIRED IN EACH SLEEPING ROOM. EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL OPEN DIRECTLY INTO A PUBLIC WAY, OR TO A YARD OR COURT THAT OPENS TO A PUBLIC WAY.

EXCEPTION: STORM SHELTERS AND BASEMENTS USED ONLY TO HOUSE MECHANICAL EQUIPMENT NOT EXCEEDING A TOTAL FLOOR AREA OF 200 SQUARE FEET (18.58 M2).

R310.1.1 OPERATIONAL CONSTRAINTS AND OPENING CONTROL DEVICES

EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL BE OPERATIONAL FROM THE INSIDE OF THE ROOM WITHOUT THE USE OF KEYS, TOOLS OR SPECIAL KNOWLEDGE. WINDOW OPENING CONTROL DEVICES COMPLYING WITH ASTM F2090 SHALL BE PERMITTED FOR USE ON WINDOWS SERVING AS A REQUIRED EMERGENCY ESCAPE AND RESCUE OPENING.

R310.2 EMERGENCY ESCAPE AND RESCUE OPENINGS

EMERGENCY ESCAPE AND RESCUE OPENINGS SHALL HAVE MINIMUM DIMENSIONS AS SPECIFIED IN THIS SECTION.

R310.2.1 MINIMUM OPENING AREA

EMERGENCY AND ESCAPE RESCUE OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5.7 SQUARE FEET (0.530 M2). THE NET CLEAR OPENING DIMENSIONS REQUIRED BY THIS SECTION SHALL BE OBTAINED BY THE NORMAL OPERATION OF THE EMERGENCY ESCAPE AND RESCUE OPENINGS FROM THE INSIDE. THE NET CLEAR HEIGHT OPENING SHALL BE NOT LESS THAN 24 INCHES (610 MM) AND THE NET CLEAR WIDTH SHALL BE NOT LESS THAN 20 INCHES (508 MM).

EXCEPTION: GRADE FLOOR OR BELOW GRADE OPENINGS SHALL HAVE A NET CLEAR OPENING OF NOT LESS THAN 5 SQUARE FEET (0.465 M2).

R310.2.2 WINDOW SILL HEIGHT

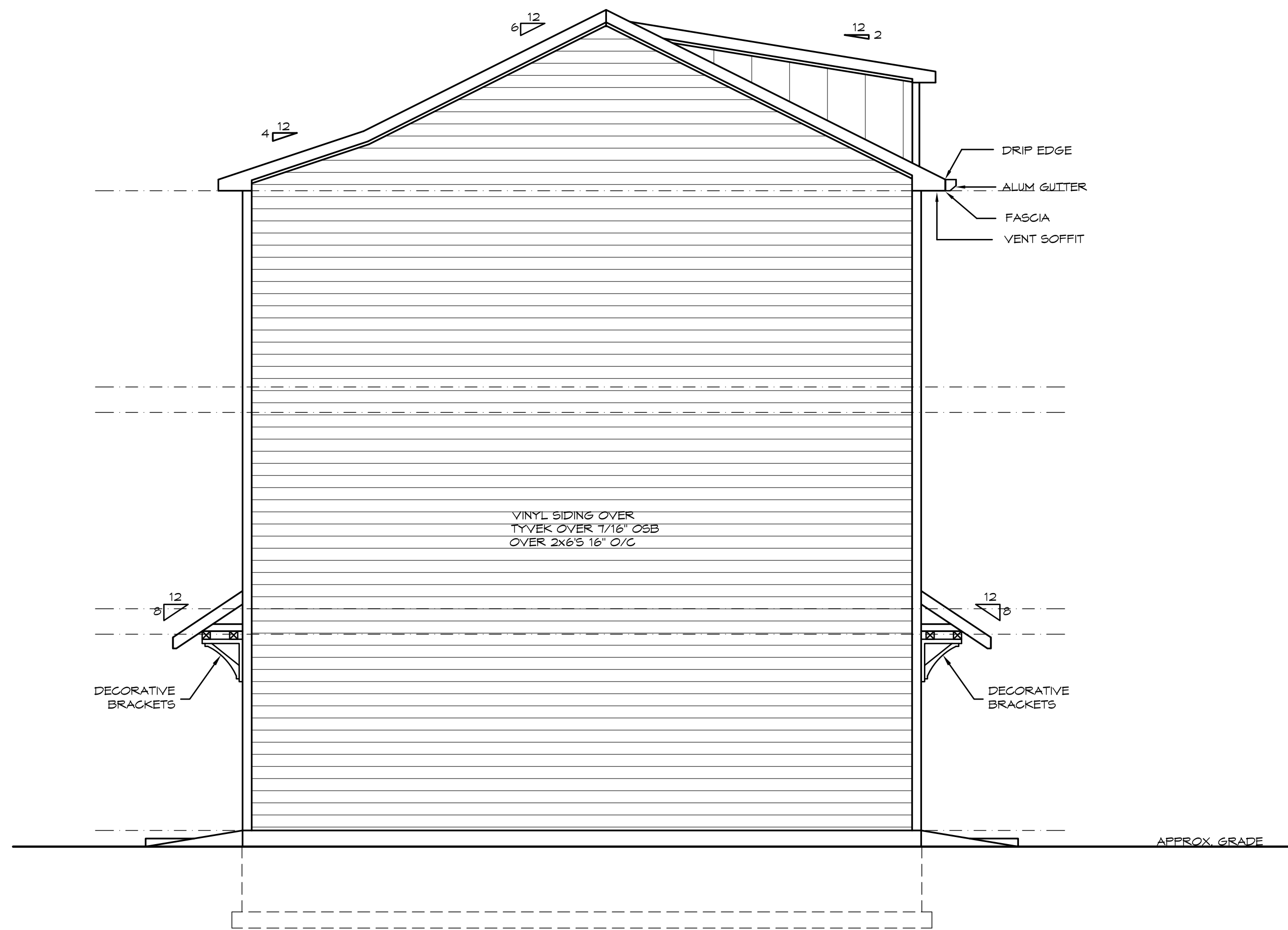
WHERE A WINDOW IS PROVIDED AS THE EMERGENCY ESCAPE AND RESCUE OPENING, IT SHALL HAVE A SILL HEIGHT OF NOT MORE THAN 44 INCHES (1118 MM) ABOVE THE FLOOR; WHERE THE SILL HEIGHT IS BELOW GRADE, IT SHALL BE PROVIDED WITH A WINDOW WELL IN ACCORDANCE WITH SECTION R310.2.3.

SCALE: NONE

DATE: 12/2024

SHEET NO.: COVER

GBL CUSTOM HOME DESIGN INC.
PO BOX 237 FINKSBURG, MD 21048
PHONE 410-833-8320



LEFT SIDE ELEVATION

SCALE: 1/4"=1'-0"



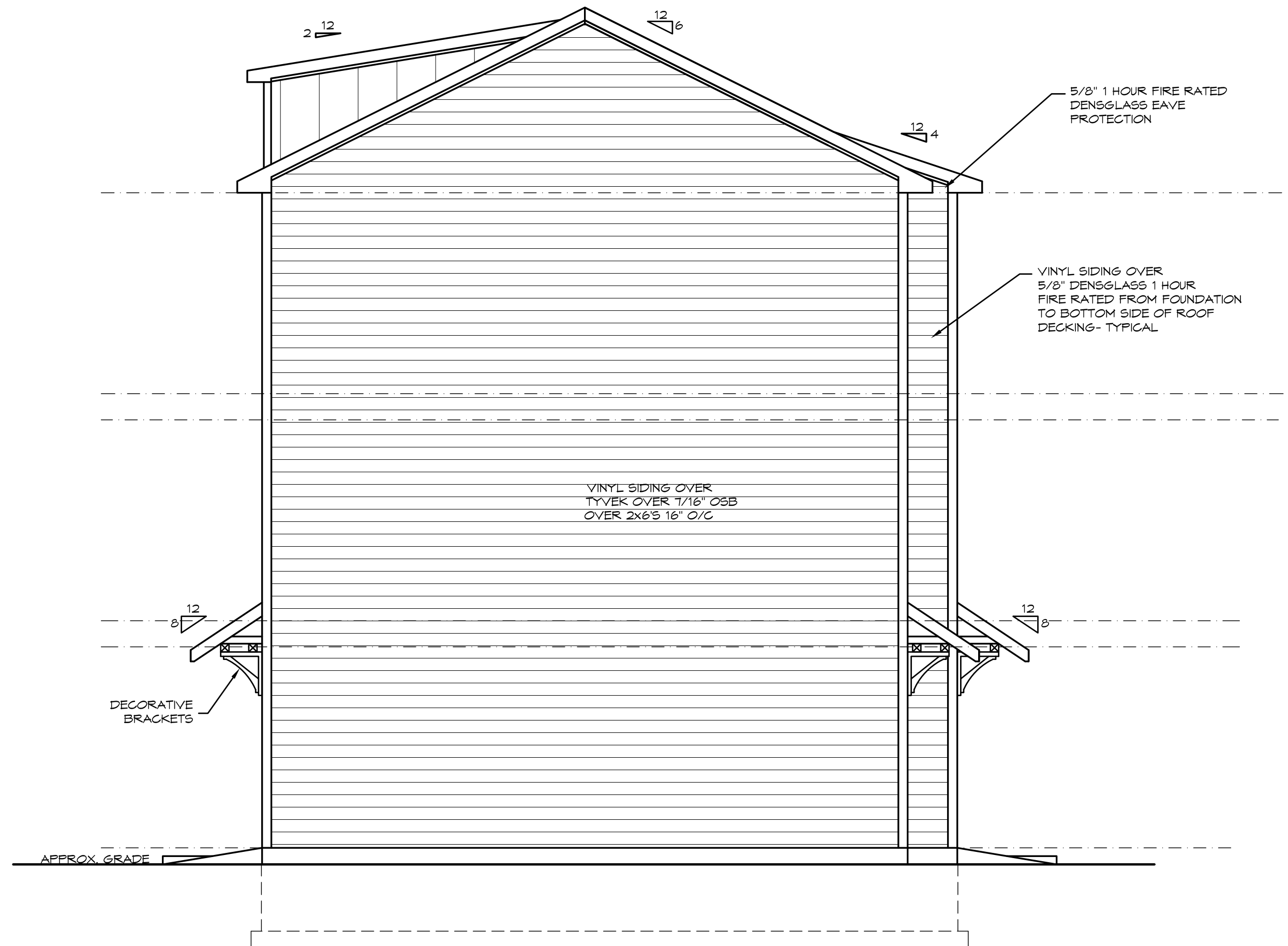
FRONT ELEVATION

SCALE: 1/4"=1'-0"



REAR ELEVATION

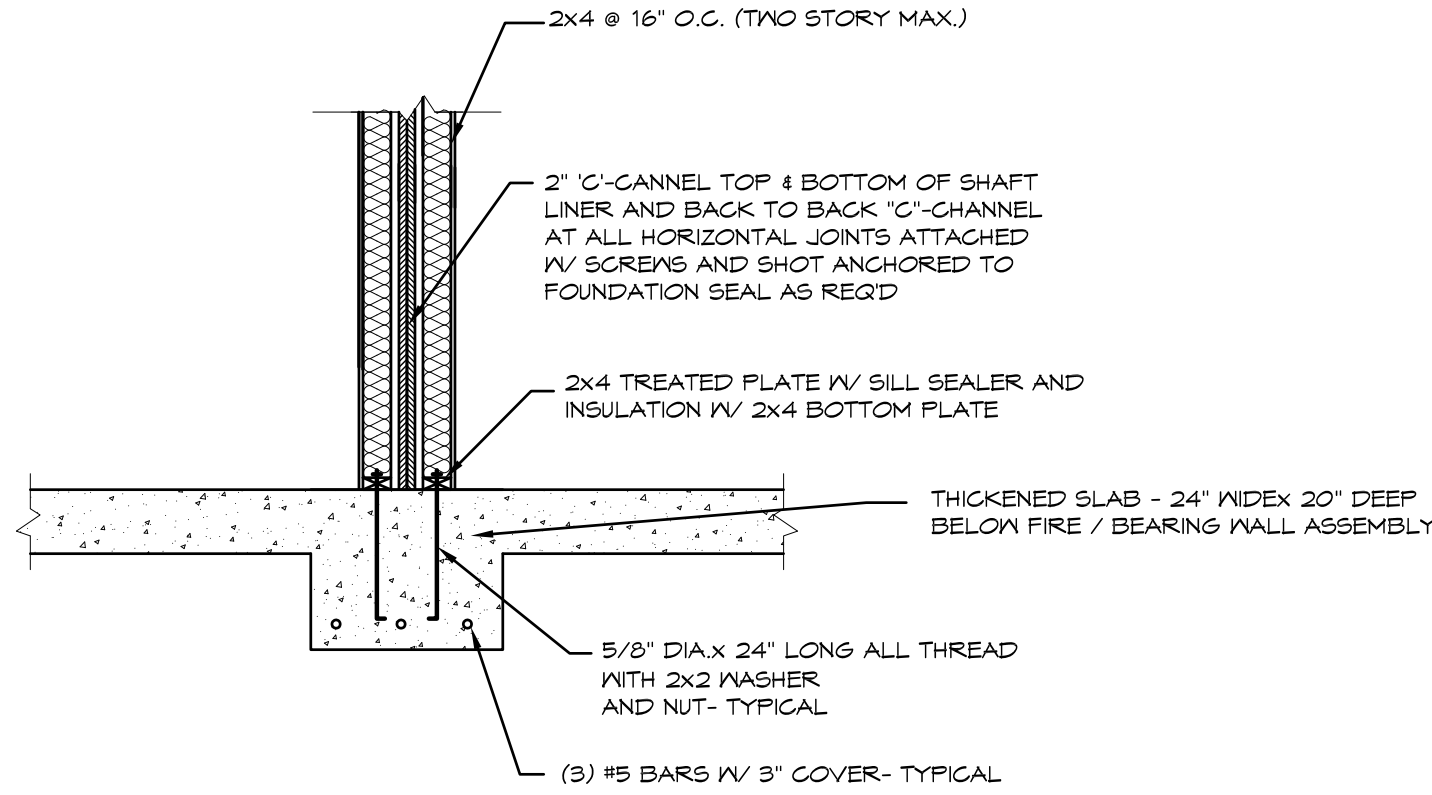
SCALE: 1/4"=1'-0"



RIGHT SIDE ELEVATION

SCALE: 1/4"=1'-0"

3 UNIT TOWNHOMES
BALTIMORE ENTITIES, LLC

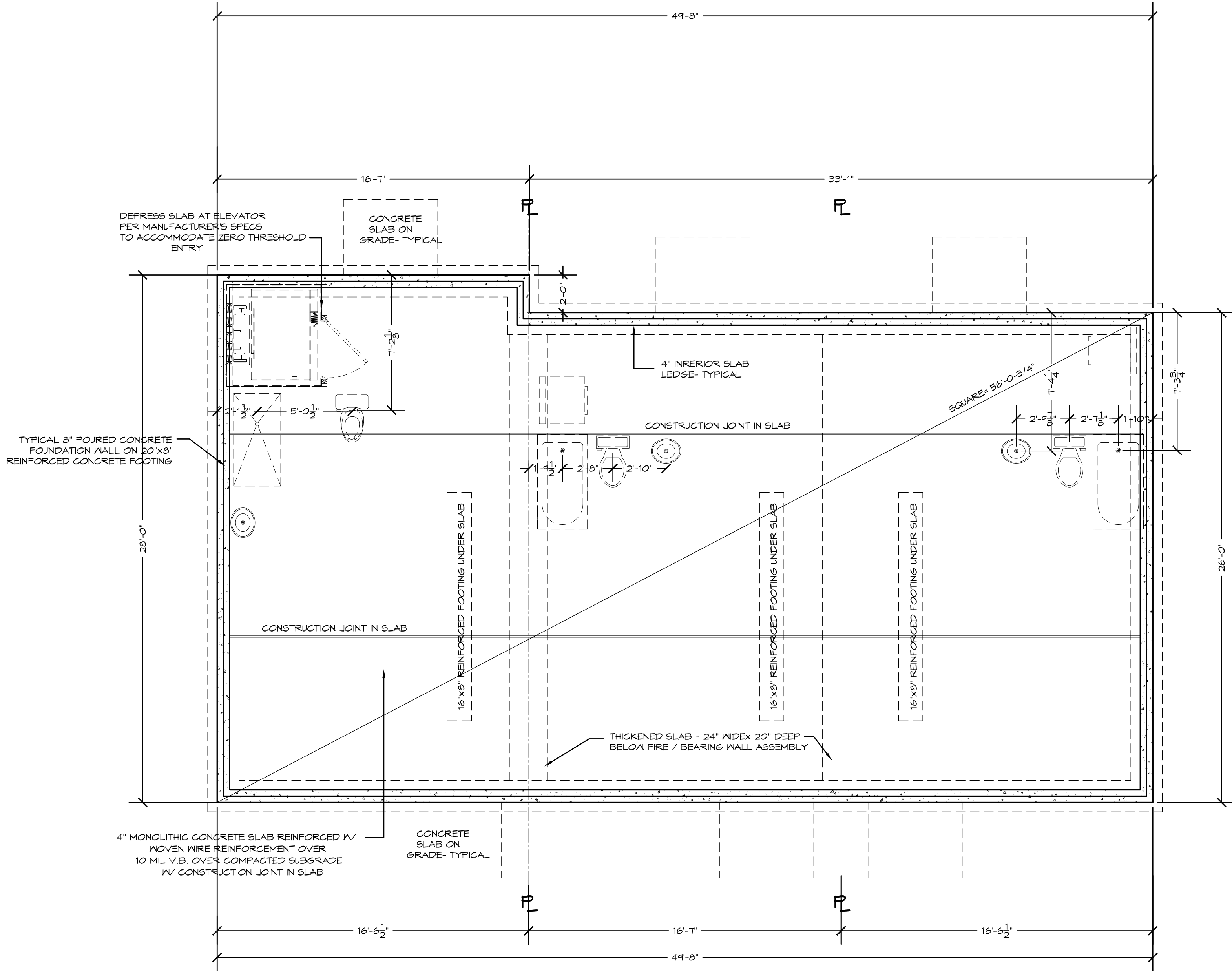


SECTION AT FIRE WALL FOUNDATION

SCALE: 1/2"=1'-0"

NOTES:

1. THE PLACEMENT OF HORIZONTAL AND VERTICAL REINFORCING STEEL SHALL BE MADE IN ACCORDANCE WITH THE GOVERNING PROVISIONS OF THE INTERNATIONAL RESIDENTIAL CODE (IRC) AND AS NOTED ON THE DRAWINGS. THE PLACEMENT OF REINFORCING STEEL UNDER THE IRC SHALL CONFORM TO THE PROVISIONS AS ESTABLISHED BY THE INTERNATIONAL BUILDING CODE (IBC) IN ACCORDANCE WITH THE AMERICAN CONCRETE INSTITUTE (ACI) 318 BUILDING CODE FOR STRUCTURAL CONCRETE, LATEST EDITION.
2. REINFORCING STEEL SHALL CONFORM TO ASTM DESIGNATION A-615, GRADE 60.
3. REINFORCING BARS SHALL BE LAPPED A MINIMUM OF 40 BAR DIAMETERS WHEN SPLICED, EXCEPT AS NOTED ON THE DRAWINGS OR SUPERCEDED BY OTHER CODE REQUIREMENTS.
4. HORIZONTAL AND VERTICAL REINFORCEMENT AT ALL WALL CORNERS, DOORWAY AND WINDOW OPENINGS AND OTHER OPENINGS WITHIN THE FOUNDATION WALLS ARE TO BE CONSTRUCTED WITH MINIMUM 12-INCH HOOKED ENDS. THE HOOKED ENDS SHALL BE LAPPED TO THE REINFORCEMENT WITHIN THE ADJOINING WALL SECTIONS OR SURROUNDING THE OPENINGS WITHIN THE FOUNDATION WALL.
5. HORIZONTAL AND VERTICAL REINFORCEMENT AT DOORWAY, WINDOW AND OTHER OPENINGS WITHIN FOUNDATION WALLS SHALL BE CONFIGURED AS REQUIRED TO FORM LINTELS TO SUPPORT OVERLYING APPLIED LOADS.



SLAB ON GRADE FLOORS LESS THAN 12\"/>

FOUNDATION PLAN-
SCALE: 1/4\"/>

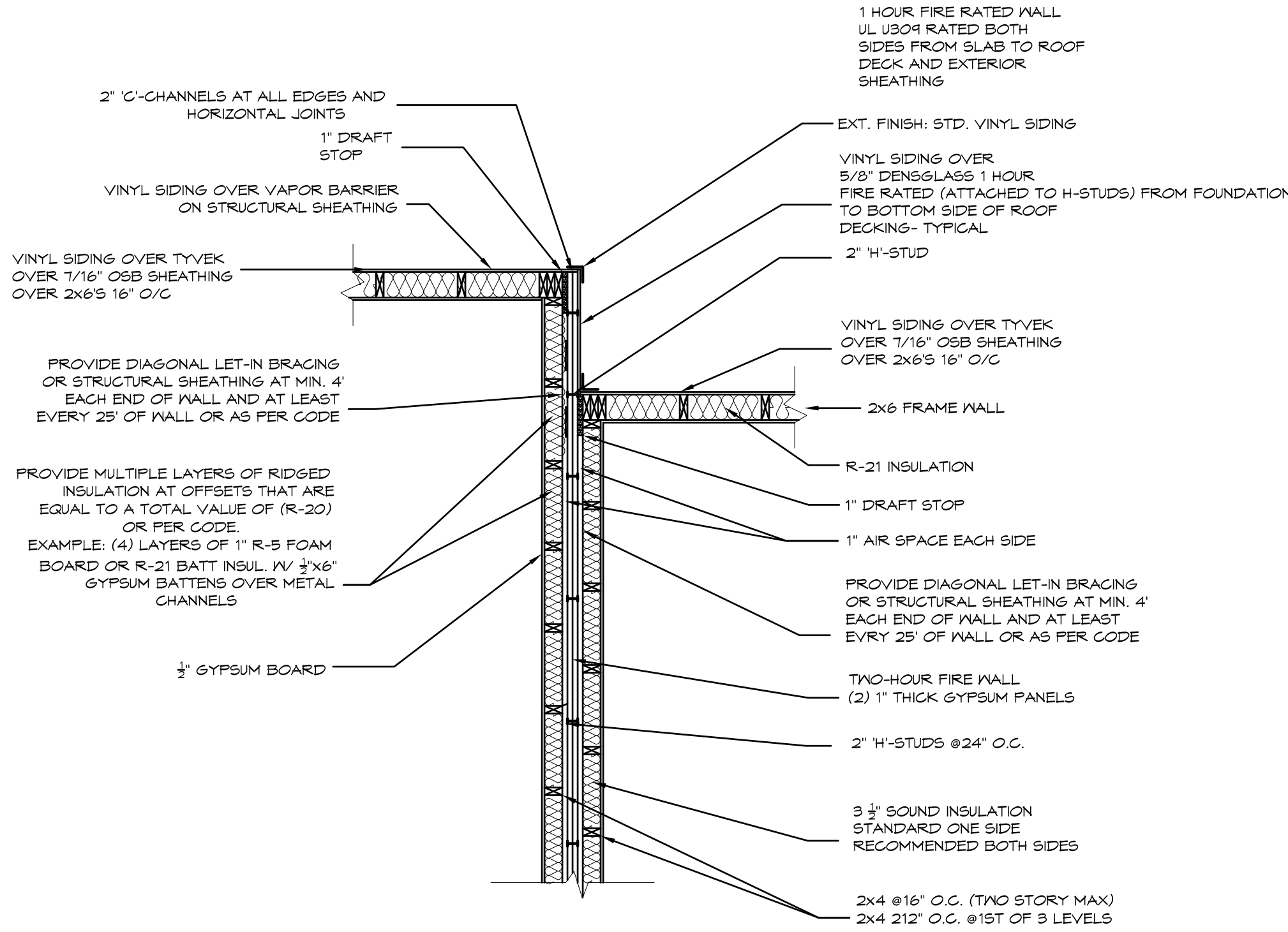
3 UNIT TOWNHOMES
BALTIMORE ENTITIES, LLC

SCALE: NONE

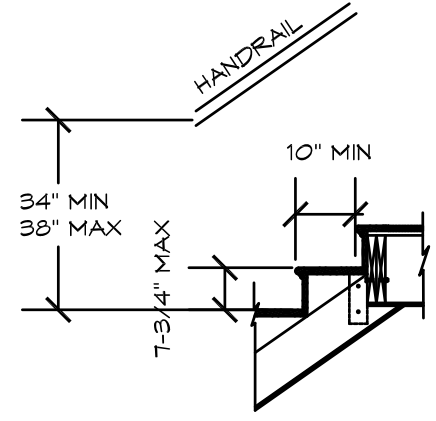
DATE: 12/2024

SHEET NO.: <

GBL CUSTOM HOME
DESIGN INC.
PO BOX 237 FINKSBURG, MD 21048
PHONE 410-833-8320

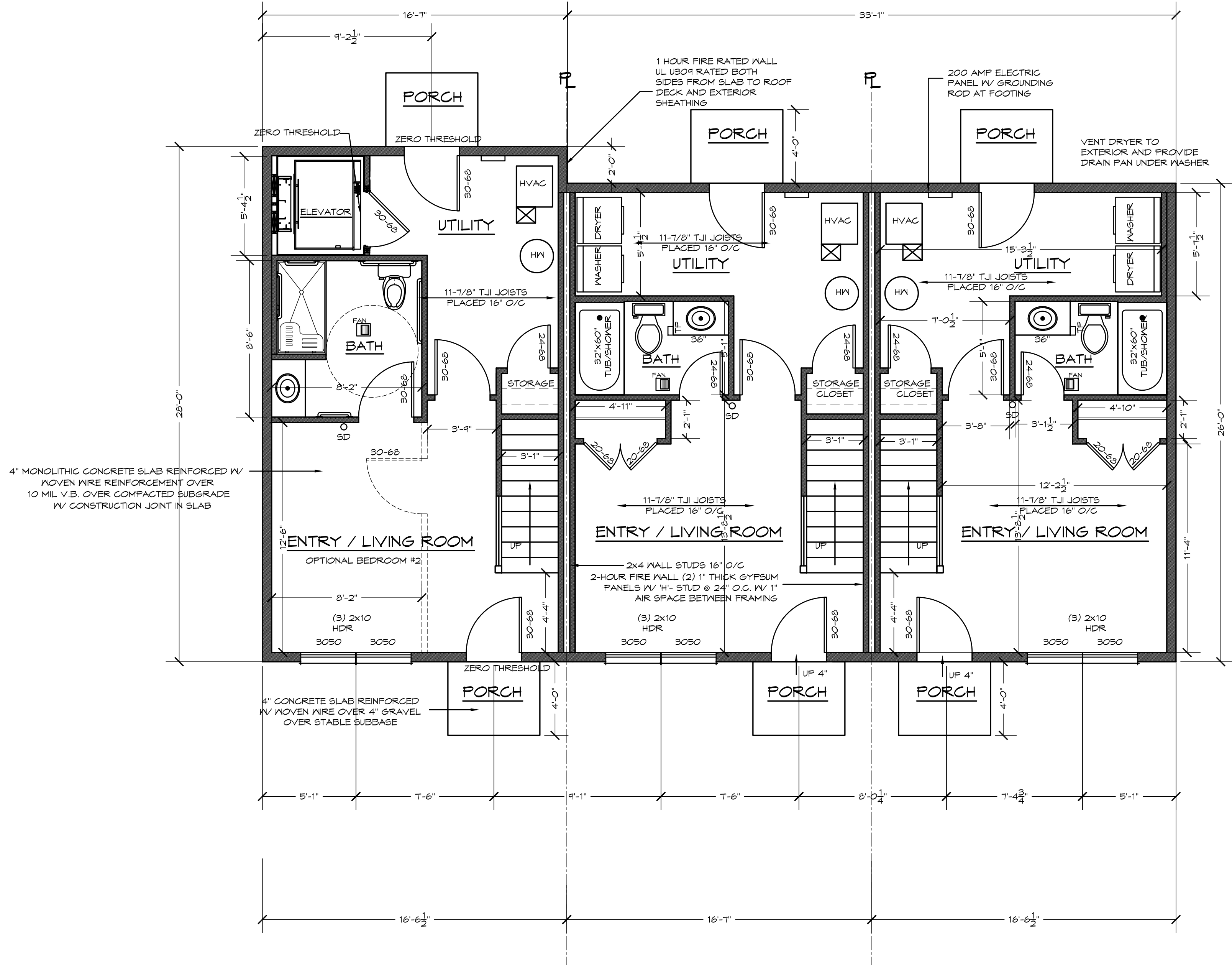


PLAN VIEW AT UNIT OFFSET
SCALE: 1/2"=1'-0"



TYPICAL STAIR SECTION
NOT TO SCALE

NOTE: ALL STAIRS SHALL BE
CONSTRUCTED IN ACCORDANCE WITH
IRC 2021 SECTION R314





ELEVATOR DETAIL AND SPECIFICATIONS

NOT TO SCALE

- 1 IF PLATFORM SIZE IS REDUCED, THEN THE BLOCKING IS TO BE POSITIONED SUCH THAT IT IS CENTERED ON THE PLATFORM.
(PLATFORM DEPTH / 2) + 2" = CENTERLINE OF RAIL BLOCKING
OFF OF INSIDE FRONT WALL. (MIN. 28" DIMENSION)
- 2 CAR TO WALL (CTW) DIMENSION IS 3" MIN.
- 3 HOISTWAY DOORS & FRAMES MUST BE INSTALLED TO COMPLY
WITH THE AUTHORITY HAVING JURISDICTION REQUIREMENTS.
THESE DIMENSIONS VARY. CONSULT YOUR
RESIDENTIAL ELEVATORS SALES REPRESENTATIVE
FOR DETAILS. RETURN TO CONSTRUCTION.
- 4 HOISTWAY DOORS TO BE SOLID CORE (BY OTHERS.)
- 5 CLEAR CAB DIMENSIONS BASED ON A 34" FLAT WALL
CAB DESIGN.
- 6 MINIMUM HINGE SIDE RETURN TO BE 8" TO
ACCOMMODATE GATE STACK.
- 7 MINIMUM HOISTWAY DIMENSION BASED ON 36" HOISTWAY
LANDING DOOR



FLOOR JOIST- DATA: LP BRAND OR EQUAL- W1 80 SERIES L/480

- WINDOWS SHOWN ARE STANDARD VINYL SIZES. VERIFY WITH MANUFACTURE THAT SHOWN SIZES MEET OR EXCEED EXCESS CLEAR OPENING AREA OF 5.7 SQ.FT., CLEAR OPENING WIDTH OF 30" & CLEAR OPENING HEIGHT OF 24"
- FINAL SHOWN HORIZONTAL SIZES ARE STATED. APPROXIMATE CONTRACTOR TO FIELD VERIFY.
- PROVIDE SMOKE DETECTORS TO BE HARD WIRE W/ BATTERY BACKUP.
 - 1 PER BEDROOM & 1 IN CENTRAL LOCATION PER LEVEL
- PROVIDE CARBON MONOXIDE DETECTORS TO BE HARD WIRE W/ BATTERY BACKUP.
 - 1 IN CENTRAL LOCATION PER LEVEL
- THIS HOME IS TO BE FULLY SPRINKLERED PER BAL.T. CITY CODE
 - PROVIDE SOLID BLOCKING AT STAIR WALLS FOR HANDRAIL.

EXCEPTIONS:

1. WINDOWS WHOSE OPENINGS WILL NOT ALLOW A 4" DIA. SPHERE TO PASS THROUGH THE OPENING WHEN THE OPENING IS IN ITS LARGEST OPENED POSITION
2. OPENINGS THAT ARE PROVIDED WITH WINDOW GUARDS THAT COMPLY WITH ASTM F 2009 OF F 2090

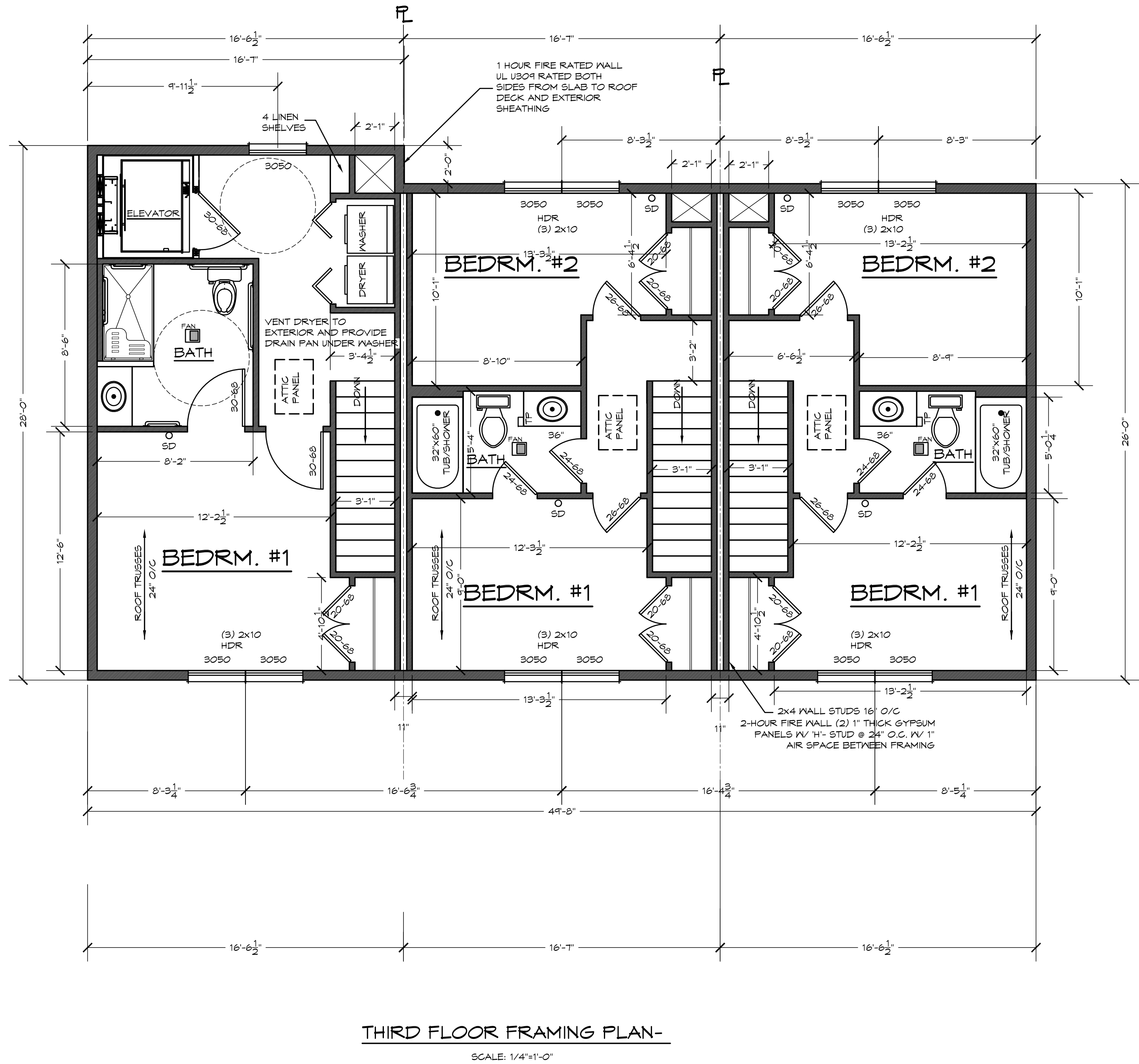
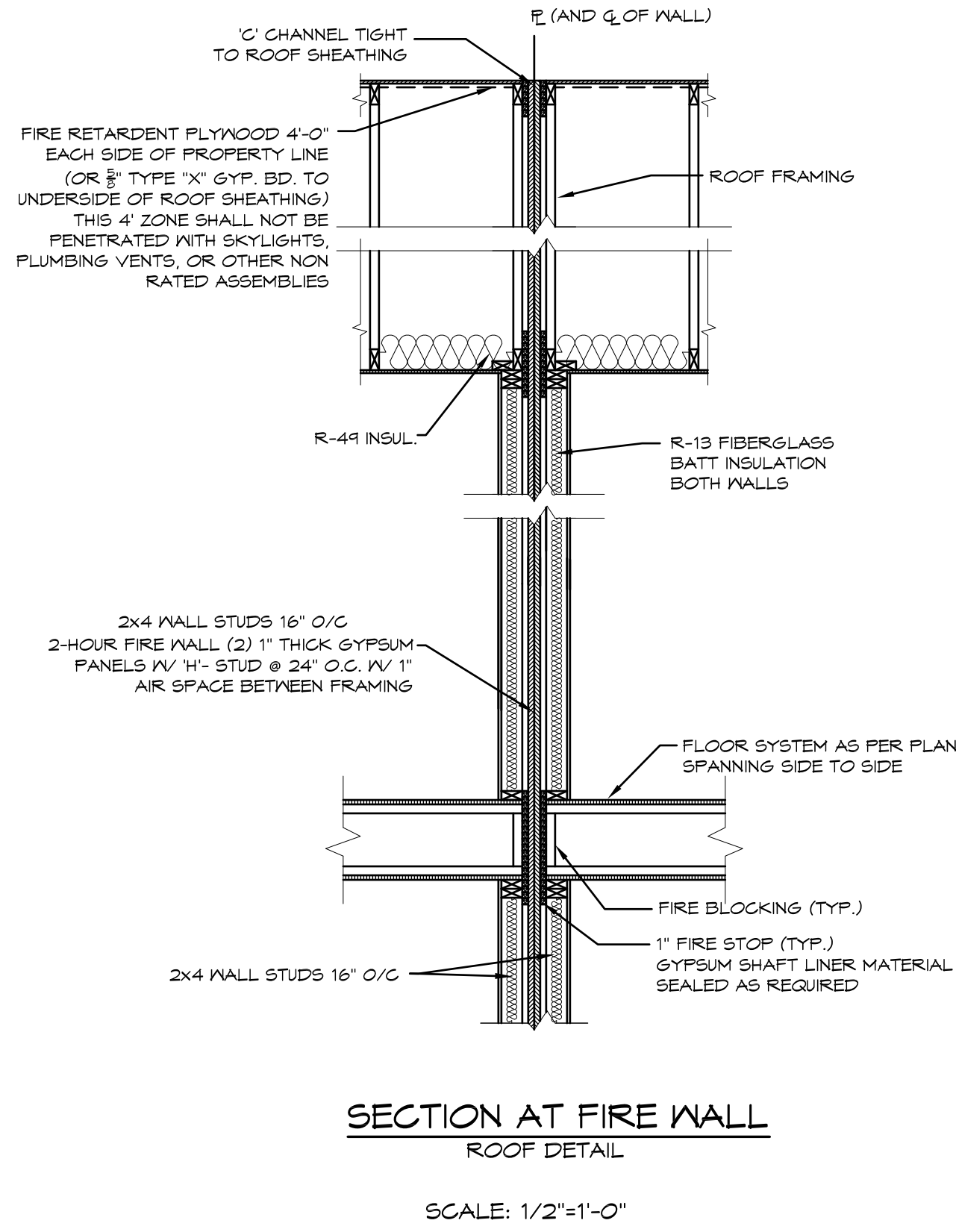
3 UNIT TOWNHOMES
BALTIMORE ENTITIES, LLC

NONE		
12/2024		
LO.: <		

**GBL CUSTOM HOME
DESIGN INC.**

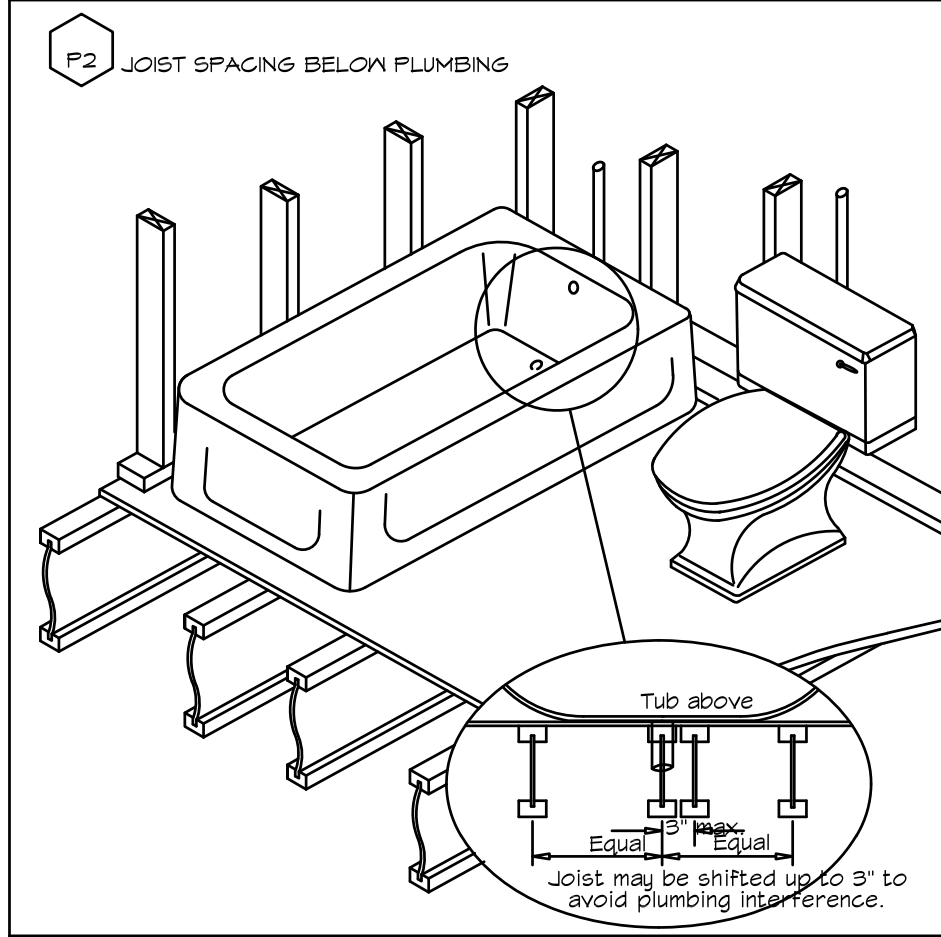
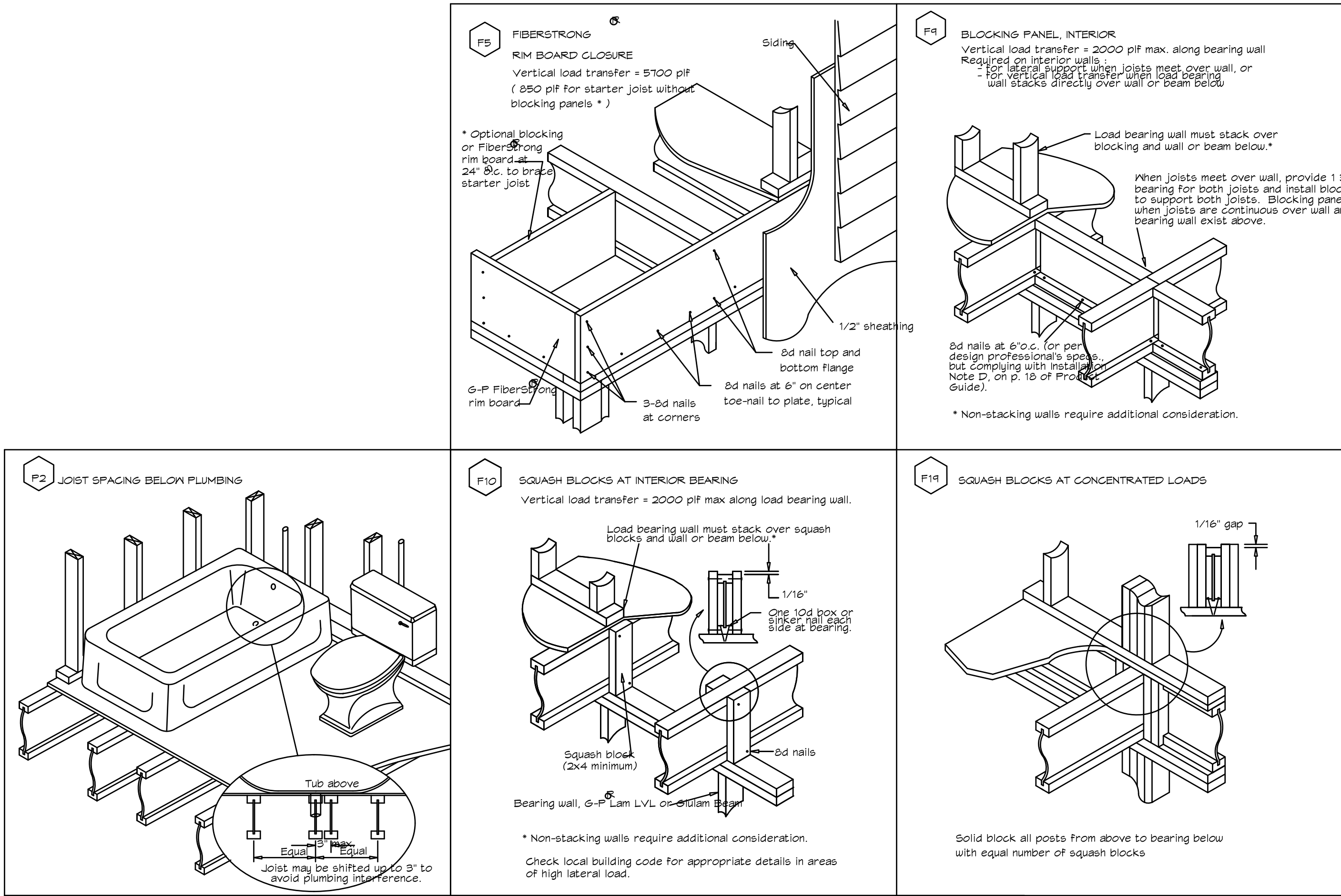
PO BOX 237 FINKSBURG, MD 21048

PHONE 410-833-8320



3 UNIT TOWNHOMES BALTIMORE ENTITIES, LLC

SCALE: NONE	GBL CUSTOM HOME DESIGN INC. PO BOX 237 FINKSBURG, MD 21048 PHONE 410-833-8320
DATE: 12/2024	
SHEET NO.: <	



LVL FASTENING SCHEDULE

Maximum Uniform Load Applied to Either or Both Outside Pieces (Pounds per lineal foot)						
Pieces in Member	16d NAILS		1/2" BOLTS		SCREWS (Note 4)	
	A	B	C	D	E	F
	2 ROWS 12" o.c.	3 ROWS 12" o.c.	2 ROWS 12" o.c. 24" o.c. stagger	2 ROWS 12" o.c.	2 ROWS 12" o.c.	2 ROWS 12" o.c.
2	505	760	505	1015	500	995
3	380	570	380	760	375	745
4	Not Permitted		340	675	330	665

NOTES:

1. Confirm adequacy of the beam (depth and number of pieces) for carrying the designated load.
2. Stress level for nail and bolt values is 100%. Increases of 15% for snow loaded or 25% for non-snow loaded roof conditions are permitted.
3. Top and bottom row of connectors should be 2" from edge.
4. Bolt holes are to be the same diameter as the bolt. Every bolt must extend through the full thickness of the member. Use washers under head and nut.
5. For three-piece member, specified nailing is from the each side.
6. To minimize rotation, four-piece members should only be used when loads are applied to both sides, or completely across the top of the member.
7. Four-piece members must be bolted or attached with 6" screws from both sides.
8. Floor joists must be attached with approved metal hangers.
9. Screws are USP 16S series or Simpson Strong-Tie SDS installed per manufacturer instructions.
10. Screws for 3-ply and 4-ply members must be from both sides of beam.

1 3/4" Multiple Piles

2 FLY 2A Connection/3B Connection (4C Connection) (4E Connection)

3 FLY 3A Connection (3C Connection)

4 FLY 4A Connection (4E Connection)

1 3/4" + 3 1/2"

2 FLY (2A Connection) (3C Connection)

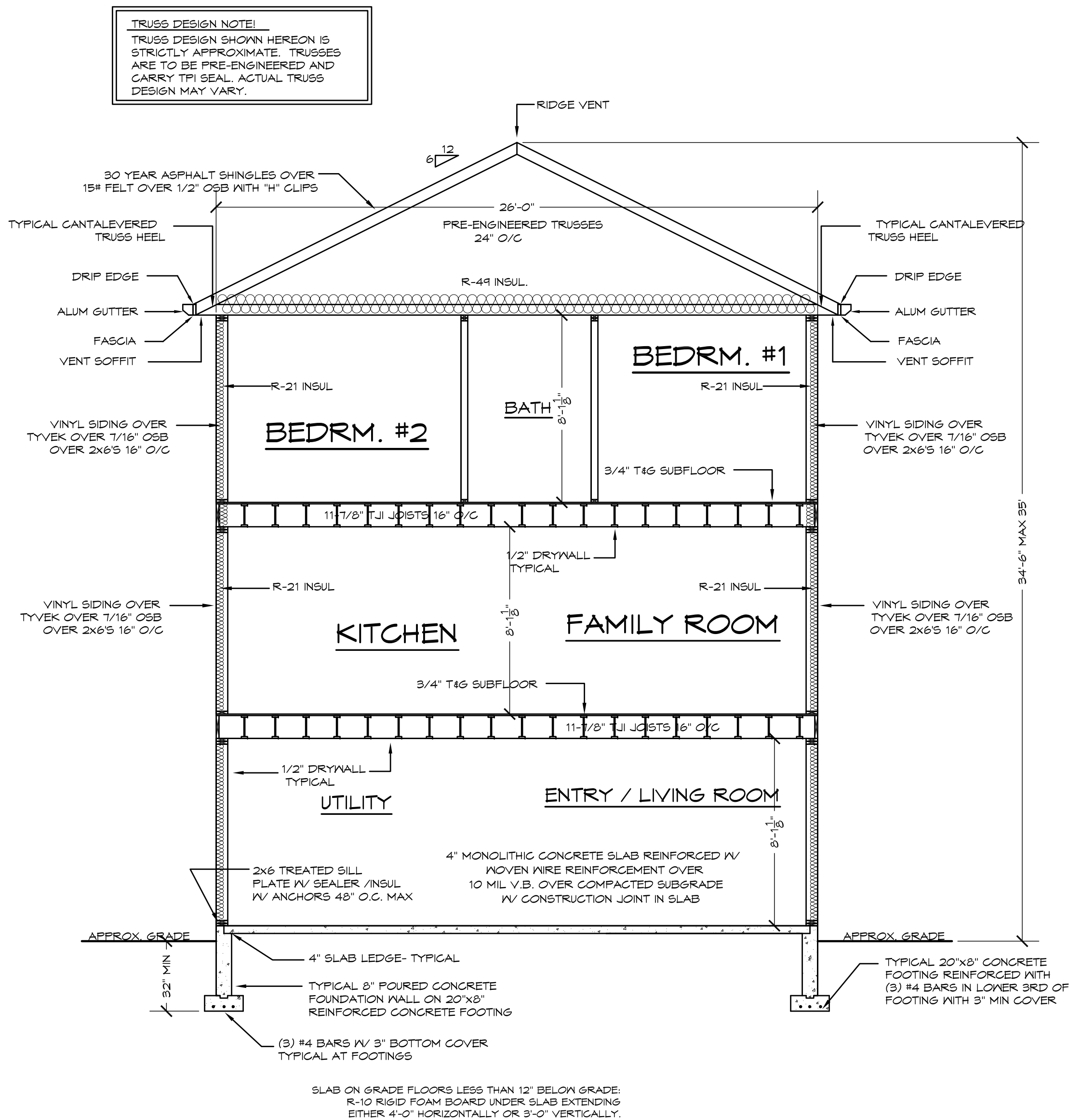
3 FLY (4E Connection)

D (Bolts) 4 F (Screws)
TWO ROWS 12" O.C.

A (Nails) 4 F (Screws)
TWO ROWS 12" O.C.

B (Nails)
THREE ROWS 12" O.C.

C (Bolts) 4 E (Screws)
TWO ROWS 24 IN. O.C. STAGGERED



SECTION

SCALE: 1/4"=1'-0"

A
4

1/2" ROOF SHEATHING: (ROOF SHEATHING TO BE FIRE-RETARDANT-TREATED WOOD FOR A DISTANCE OF 4'-0" MIN. FROM ONE HOUR WALL ASSEMBLY OR THE ROOF IS TO BE PROTECTED WITH .625-INCH TYPE-X GYPSUM BOARD DIRECTLY BENEATH THE UNDERSIDE OF THE ROOF SHEATHING OR DECK, SUPPORTED BY A MINIMUM OF NORMAL 2-INCH (51 MM) LEDGERS ATTACHED TO THE SIDES OF THE ROOF FRAMING MEMBERS, FOR A MINIMUM DISTANCE OF 4 FEET (1220 MM))

3 UNIT TOWNHOMES
BALTIMORE ENTITIES, LLC

SCALE: NONE

DATE: 12/2024

SHEET NO.: <

GBL CUSTOM HOME
DESIGN INC.

PO BOX 237 FINKSBURG, MD 21048

PHONE 410-833-8320