



STAFF REPORT  
October 1, 2024  
Site Plan Review of Parcel Id # 05-917-00-07-005.00

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Application for a Site Plan Approval

Code Sections:  
400.390 – 400.440      Site Plan Approval

Property Information:

Address:                      14601 N. Fairview Dr. (est.)  
Owner:                        KPI3 LLC  
Current Zoning:              R-3 (Conceptual Plan)

Application Date:              September 12, 2024

GENERAL DESCRIPTION:

Application to approve a site plan for the Fairview Townhomes project located within the Fairview Crossing development's Conceptual Overlay Plan. The application includes 16 4-unit townhomes (64 total units) on Lot 1 of the subdivision.

Section 400.410 Standard of Review

1. The extent to which the proposal conforms to these regulations. *See attached standards:*

**400.415.B.18** - In developments proposed in a "R-3" District where the platting process is not implicated or required, the proposal must also show how the project meets the requirements for dedication or reservation of public open space as is described in Sections 425.200 — 425.230 of the City Code, which shall include payment in lieu of dedication requirements if no dedication or reservation is included or accepted. *The requirements of 425.200 –*

*425.230 are applicable to this development once the exact number of dwelling units is determined (by this approval) in order to calculate the park dedication requirements. In this case, there are no lands or greenspace not associated with stormwater drainage available in the entire development suitable for dedication, so the only compliance method is payment of fees in lieu of dedication. Those fees are \$625.00 per dwelling unit on 64 units (\$625 x 64) for a total fee of \$40,000.00. Payment of this amount shall be a condition of approval of the site plan and no building permit shall issue until such fee is paid.*

#### **400.419 Development Standards In "R-3" Districts.**

A. Intent. All residential building and sites shall be constructed with materials that are durable, economically maintained and of a quality that will retain their appearance over time.

1. Building Materials. The materials used shall meet the intent of this Section by being of such quality, design and type that they will maintain their installed appearance overtime. These materials must be organized in a cohesive development pattern for each of the proposed buildings in the development area. *Exterior facades include LP Siding, Cultured Stone and/or Thin Brick on the front facades, with vinyl siding on sides and rear of buildings. Each building will have a similar design motif with varying complementary colors throughout.*

2. Building Color. Color schemes shall tie building elements together, relate separate (freestanding) buildings within the same development to each other and shall be used to enhance the architectural form of a building. The principal color of all structures shall be generally earth tones, grays and blue-grays or combinations thereof. Intense, bright, black or fluorescent colors must be specifically requested and can only be approved by the Board of Aldermen and in no event shall they be the predominate color on any wall or roof. *Each building will have distinct earth toned color variations that separate and designate each dwelling unit along the rear vinyl sided areas to break up the units. The front façade has multiple materials and colors that enhance the architectural form.*

3. Building Massing And Facade Treatment.

a. Variation In Massing. A single, large dominant building mass shall be avoided. *The single large massing of the building is eliminated by a combination*

*of different colors of materials for each dwelling unit in the buildings, with gable end treatments added to two of the four units to further distinguish the individual units. The front facades are also broken up with varying colors and materials.*

b. All building walls shall have horizontal and vertical architectural interest and variety to avoid the effect of a single, blank, long or massive wall with no relation to human scale. *The front facades have multiple vertical and horizontal breaks using different materials and the rear is treated with separate color for each unit.*

4. Site Layout Principles. Access to the development should take into account the service level of the adjacent roadways and shield or buffer the residential buildings from traffic noise and conflicts associated with higher level roadways, building orientation. *Access to the development will be by one larger collector street along the west edge, with multiple stub streets of a residential character, with all buildings oriented towards the residential streets.*

a. All primary and pad site buildings shall be arranged and grouped so that their primary orientation complements adjacent and existing developments and either:

(1) Frames the corner of an adjacent street intersection; or **Yes**.

(2) Frames and encloses a "main street" pedestrian and/or vehicle access corridor within the development site; or **Yes**.

(3) Frames and encloses on at least three (3) sides parking areas, public spaces or other site amenities. **No**.

(4) Alternatives. An applicant may submit an alternative development pattern, provided such pattern achieves the intent of the above standards and this Section.

b. Parking Lot Layout.

(1) In order to reduce the scale of paved surfaces and to shorten the walking distance between the parked car and the building, off-street parking for all developments shall be located according to one (1) of the following: *The development is designed to work like a standard single-family development, with driveways leading to garages. There is no additional, separate parking areas for this development.*

(a) A minimum of forty percent (40%) of the off-street parking spaces provided shall be located other than between a facade facing a public right-of-way and the public right-of-way (e.g., to the rear or side of the building); or

(b) More than sixty percent (60%) of the off-street parking spaces provided may be located between the front facade of the primary building(s) and the abutting street, provided the amount of interior and perimeter parking lot landscaping required is increased by fifty percent (50%) and the overall green space is increased by twenty-five percent (25%).

5. Lighting Standards. Since the development is primarily residential in nature, lighting shall be designed for safety as its' primary goal. To the extent the development is adjacent to residential uses other than "R-3," a photometric plan showing the development meets the off-site standards required of commercial developments in Section 400.430 is required. Parking lot lighting shall be limited to illuminating the parking areas without spilling over into other areas of the site or off-site. The height of light poles should be consistent with the overall development design, but in no event shall the lights be more than twenty (20) feet above adjacent grade. Building attached lighting shall be directed downward, and in no event should it be directed such that its glare is off-site. Pedestrian walkway lighting shall be such that it primarily illuminates the path(s) involved with generally low stature lights. If necessary or an integral part of the design of the development, taller lights may be installed, but in no event shall they exceed ten (10) feet from adjacent grade. ***The street lighting will be to current city standards for all streets – intersections and ends of roads will have lighting. The building lighting will be standard residential lighting as well to illuminate the porches and patios.***

6. Landscaping Standards. To maintain the general residential feel of the development, landscaping should be designed in accordance with its location. In all developments, existing mature trees that are not required to be removed for construction should remain in place. The development should be buffered from adjacent roadways with either a combination of berms and medium stature trees, or without berms a combination of both higher stature trees and low standing non-deciduous trees or shrubs. Grouping or clustering such trees in a natural looking state is desired. In the event a building or parking area is adjacent to a public street, the landscape buffering requirements in Section 400.435(C)(3) shall be met. ***The submitted landscaping plan meets the standards.***



7. Pedestrian And Recreation Considerations. In addition to the considerations identified in Section 400.415(B)(18), above, all residential developments shall account for the recreational needs of the project residents as well as providing access to the public recreational offerings. In order to meet the public offering requirements, the standards in the Comprehensive Plan and Parks Master Plans of the City of Smithville shall be the prime consideration. ***These factors were considered in the initial plan review of the conceptual plans, and these townhomes are compliant with the approved conceptual plan.***

2. The extent to which the development would be compatible with the surrounding area. *The development would constitute a buffering development between the residential developments of Hills of Shannon and Estates of Wilkerson Creek to the east and northeast from the future commercial development to the west along 169 Highway. The building's façade treatments are such that they mimic single family detached residential in the coloration and materials use. Much of the developed area will be buffered by a large stand of trees surrounding a creek and drainage areas from the detached housing to the east and northeast.*

3. The extent to which the proposal conforms to the provisions of the City's subdivision regulations concerning the design and layout of the development, as well as water system, sewer system, stormwater protection and street improvements. *The approved development was separately subject to the subdivision regulations and zoning regulations in the approval of the original Conceptual Plan Overlay approval in 2023, as well as the subdivision review of the city's Public Works Department and the City's Engineers.*

4. The extent to which the proposal conforms to the policies and provisions of the City's Comprehensive Plan. *The development was designed with the Comprehensive Plan in mind and was separately and previously approved as compliant with the plan.*

5. The extent to which the proposal conforms to the adopted engineering standards of the City. *The development's plans for infrastructure design and layout were individually reviewed and approved by the City's engineers and staff prior to construction.*

6. The extent to which the locations of streets, paths, walkways and driveways are located so as to enhance safety and minimize any adverse traffic impact on the surrounding area. *The entire development (including Lot 1 herein) was subject to multiple traffic studies and reviews from both the city and MODOT engineers and was designed and laid out to meet both MODOT and City standards.*

7. The extent to which the buildings, structures, walkways, roads, driveways, open space and parking areas have been located to achieve the following objectives:

a. Preserve existing off-site views and create desirable on-site views; The *original state of the property was untended growth of brush. Once removed, and as many of the mature trees that were salvageable were saved, the views were improved.*

b. Conserve natural resources and amenities available on the site; The *existing mature trees, especially those adjacent to the drainage areas and property lines to the east, were saved to satisfy this item.*

c. Minimize any adverse flood impact; The *development was subject to engineering review of all stormwater drainage and includes drainage structures that will reduce the overall impact of the development from pre-development standards.*

d. Ensure that proposed structures are located on suitable soils; Limited *fills were needed in the development for habitable structures, and walls and compaction testing for the backfill behind them were all approved as suitable for the intended usage – particularly part of one road.*

e. Minimize any adverse environmental impact; and The *design included saving valuable mature trees where possible, and stormwater detention structures built for the entire development drainage area, not just this portion of the overall design.*

f. Minimize any present or future cost to the municipality and private providers of utilities in order to adequately provide public utility services to the site. *The project is designed to lessen the areas needed for utility services throughout the site, saving costs to all.*

STAFF RECOMMENDATION:

Staff recommends APPROVAL of the proposed Site Plan with the condition that no permit shall be issued until the parks fees are paid.

Respectfully Submitted,

/s/

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Director of Development





Group 3



Group 4







Group 1



Group 2







UNIT SF  
MAIN FLOOR 634 SF  
SECOND FLOOR 974 SF  
GARAGE 387 SF  
PATIO 80 SF

UNIT SF  
MAIN FLOOR 530 SF  
SECOND FLOOR 778 SF  
GARAGE 272 SF  
PATIO 80 SF

FRONT  
ELEVATION

UNIT SF  
MAIN FLOOR 634 SF  
SECOND FLOOR 974 SF  
GARAGE 387 SF  
PATIO 80 SF

UNIT SF  
MAIN FLOOR 530 SF  
SECOND FLOOR 778 SF  
GARAGE 272 SF  
PATIO 80 SF

BUILDING SF  
MAIN FLOOR 2328 SF  
SECOND FLOOR 3504 SF  
GARAGE 1318 SF  
PATIO 320 SF

TABLE OF CONTENT

- CS COVER SHEET
- A1 FRONT AND REAR ELEVATIONS
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BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL RESIDENTIAL CODE , LOCAL CODES, AND 2021 INTERNATIONAL ENERGY CONSERVATION CODE, USING ENERGY RATING INDEX OPTION ( ERI/HERS )	
FAIRVIEW CROSSING TOWNHOMES SMITHVILLE MO.	
SCALE 1/4" = 1-0	
DATE 9-12-24	
PLAN NO.	
4299	
SHEET NO.	
CS	

SOFFIT SHALL BE RATED AND SAPARTED AT THE CNETER WALL



FRONT EL.  
SIDING CULTURED STONE,  
THIN BRICK, LP SIDING

GUTTERS AND DOWN SPOUTS REQUIRED



REAR EL.  
VINYL SIDING

SOFFIT SHALL BE RATED AND SAPARTED AT THE CNETER WALL

BUILD IN ACCORDANCE WITH 2018  
INTERNATIONAL RESIDENTIAL CODE , LOCAL  
INTERNATIONAL ENERGY  
CONSERVATION CODE, USING ENERGY RATING  
INDEX OPTION ( ERI/HERS )

FAIRVIEW CROSSING TOWNHOMES  
SMITHVILLE MO.

SCALE  
1/4" = 1'-0

DATE  
9-12-24

PLAN NO.

4299

SHEET NO.

A1

ATTIC VENTS MUST BE 4'-0" AWAY FROM THE FIRE WALL ( DEMISING WALL )

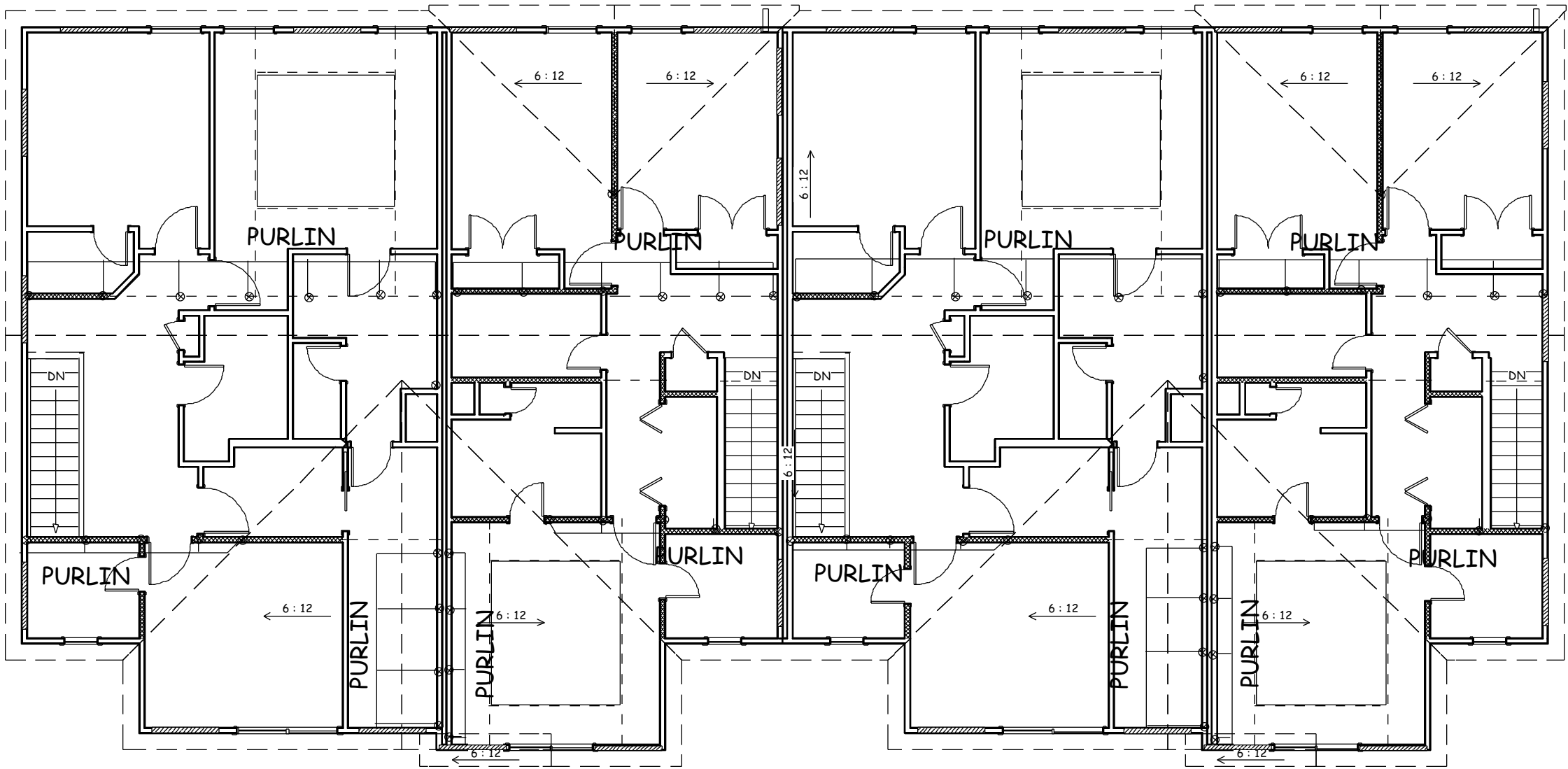
NOTE HIP AND VALLEYS CANNOT PENETRATE THE 2 HOUR RATED WALL.  
2 X 8 LEDGE EACH SIDE OF FIREWALL TYP. ATTACHED WITH SIMPSON 2-SDS25312 @ 16" O.C.

GUTTERS AND DOWN SPOUTS REQUIRED

FIREWALL NO HIP RIDGE OR RAFTERS TO GO THRU FIREWALLS TYP.

NOTE 4'-0" SETBACK REQUIREMENTS FROM 2 HOUR FIRE RESISTANT WALLS FOR VENTS AND PENETRATIONS ON THE PLANS

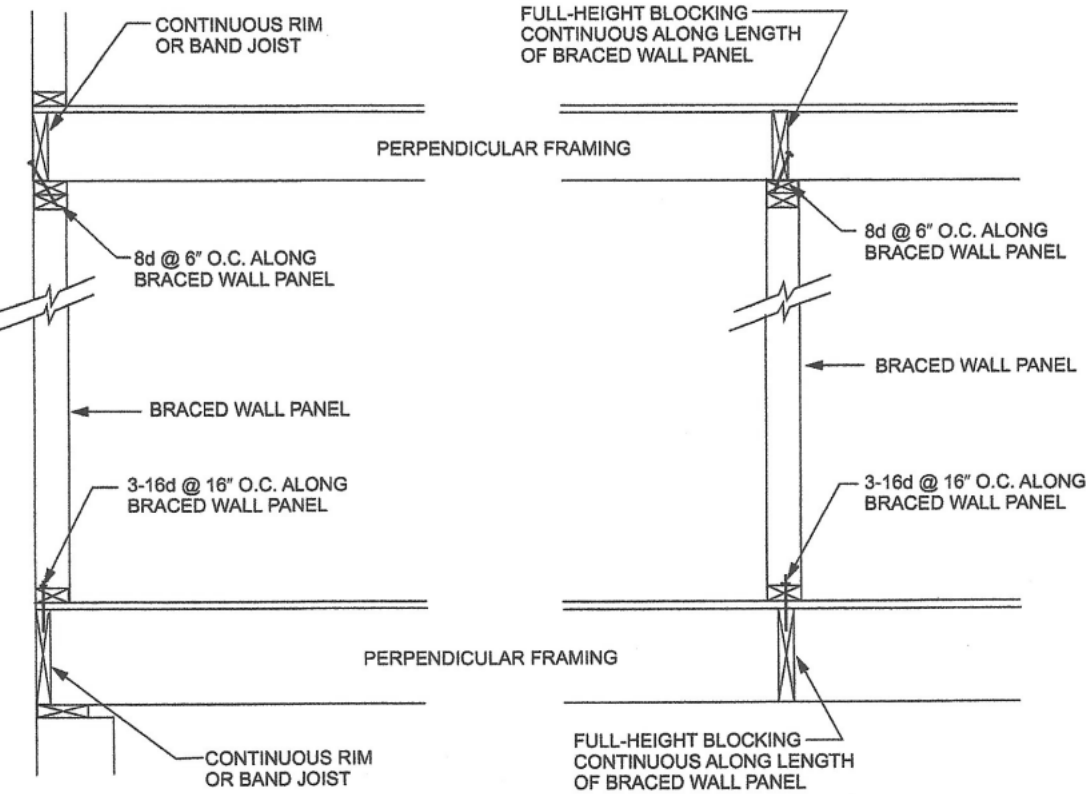
RAFTERS MAX. SPAN BETWEEN SUPPORTS 14'-4"



RAFTER DIRECTION TYP.

NO PURLINS ON MAIN FLOOR

PURLIN PLAN 1/8" = 1'-0"  
FRONT TO BACK 6/12  
SIDE TO SIDE 6/12  
12" SOFFITS TYP.

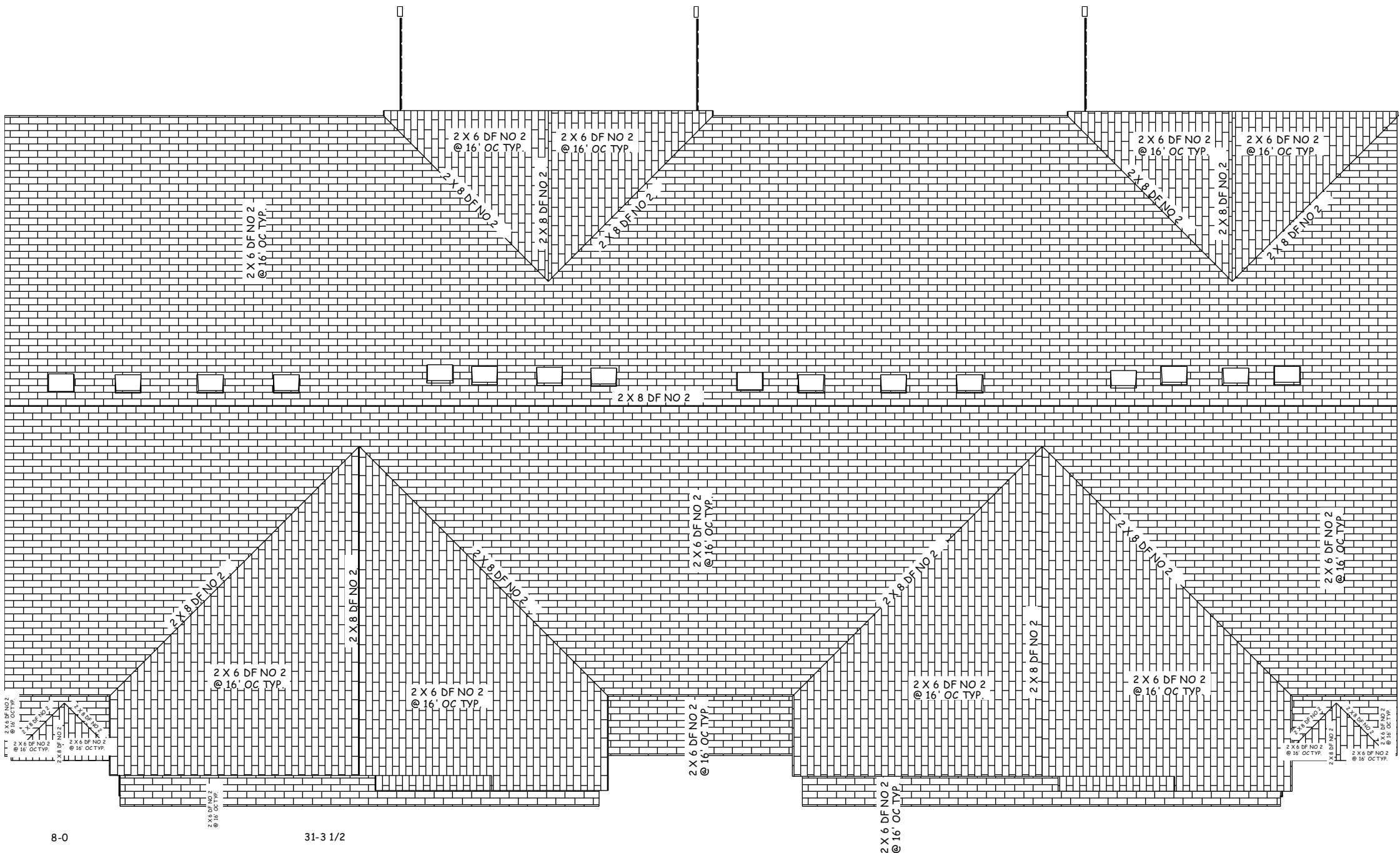


For Sfr: 1 inch = 25.4 mm.

FIGURE R802.10.8(1)  
BRACED WALL PANEL CONNECTION WHEN PERPENDICULAR TO FLOOR/CEILING FRAMING

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2018 INTERNATIONAL RESIDENTIAL CODE®



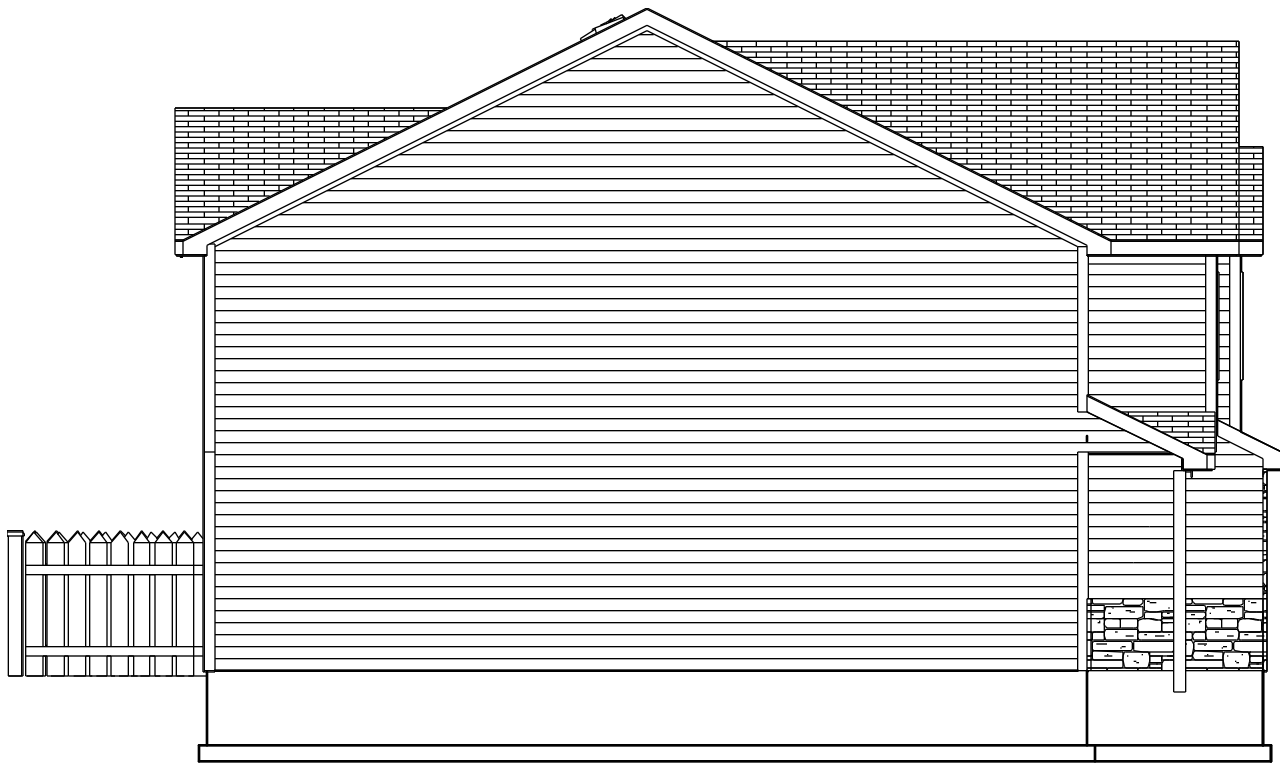
ROOF PLAN 1/8" = 1'-0"  
FRONT TO BACK 6/12  
SIDE TO SIDE 6/12  
12" SOFFITS TYP.

RAFTERS 2 X 6 DF NO 2 @ 16" OC TYP. U.N.O.  
HIPS AND RIDGES 2 X 8 DF NO 2 U.N.O

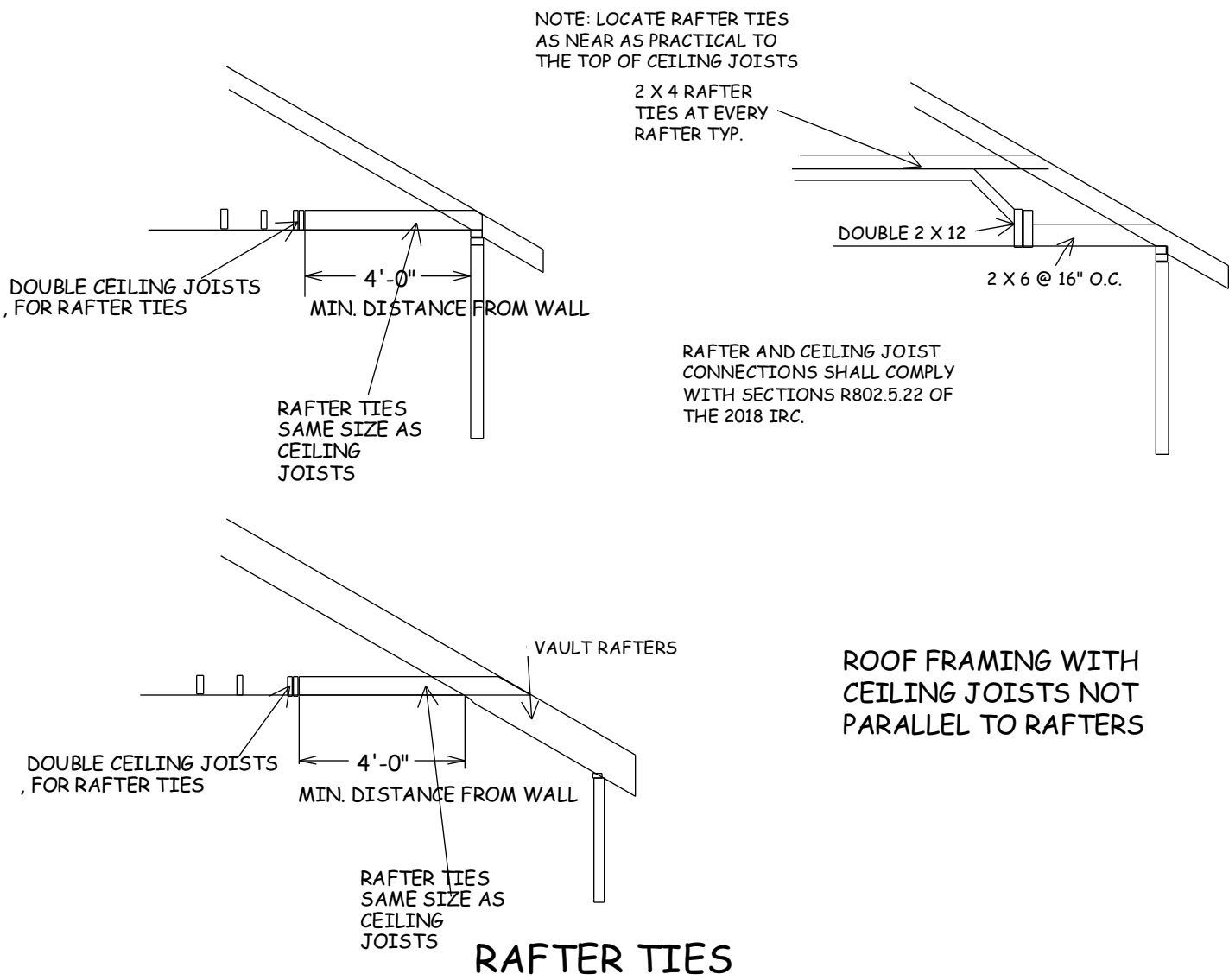
PURLIN

PURLIN LEG O.C. SUPPORT  
2 X 6 DF NO 2 4'-0"  
2 X 8 DF NO 2 5'-4"  
2 X 10 DF NO 2 8'-0"  
2 X 12 DF NO 2 9'-6"

SUPPORT LEG FOR PURLINS  
2 X 4 8'-0"  
2 X 4 W 2 X 4 T - BRACE 9'-7"  
2 X 6 W 2 X 6 T - BRACE 17'-2"  
2 X 8 W 2 X 6 T - BRACE 17'-4"

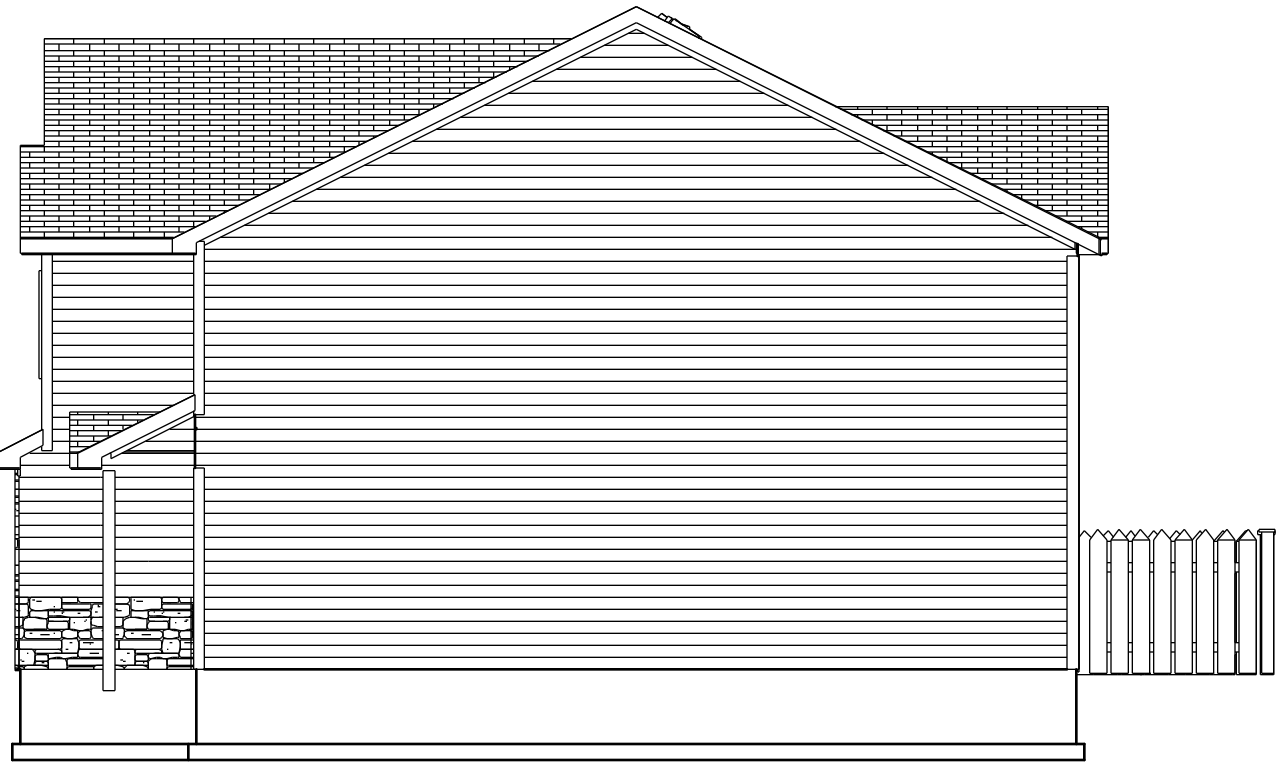


LEFT EL.  
1/8" = 1'-0"  
VINYL SIDING



RAFTERS

ROOF FRAMING WITH  
CEILING JOISTS NOT  
PARALLEL TO RAFTERS



RIGHT EL.  
1/8" = 1'-0"  
VINYL SIDING

BUILD IN ACCORDANCE WITH 2018  
INTERNATIONAL RESIDENTIAL CODE , LOCAL  
CODES, AND 2021 INTERNATIONAL ENERGY  
CONSERVATION CODE, USING ENERGY RATING  
INDEX OPTION ( ERI/HERS )

FAIRVIEW CROSSING TOWNHOMES  
SMITHVILLE MO.

SCALE  
1/4" = 1'-0"

DATE  
9-12-24

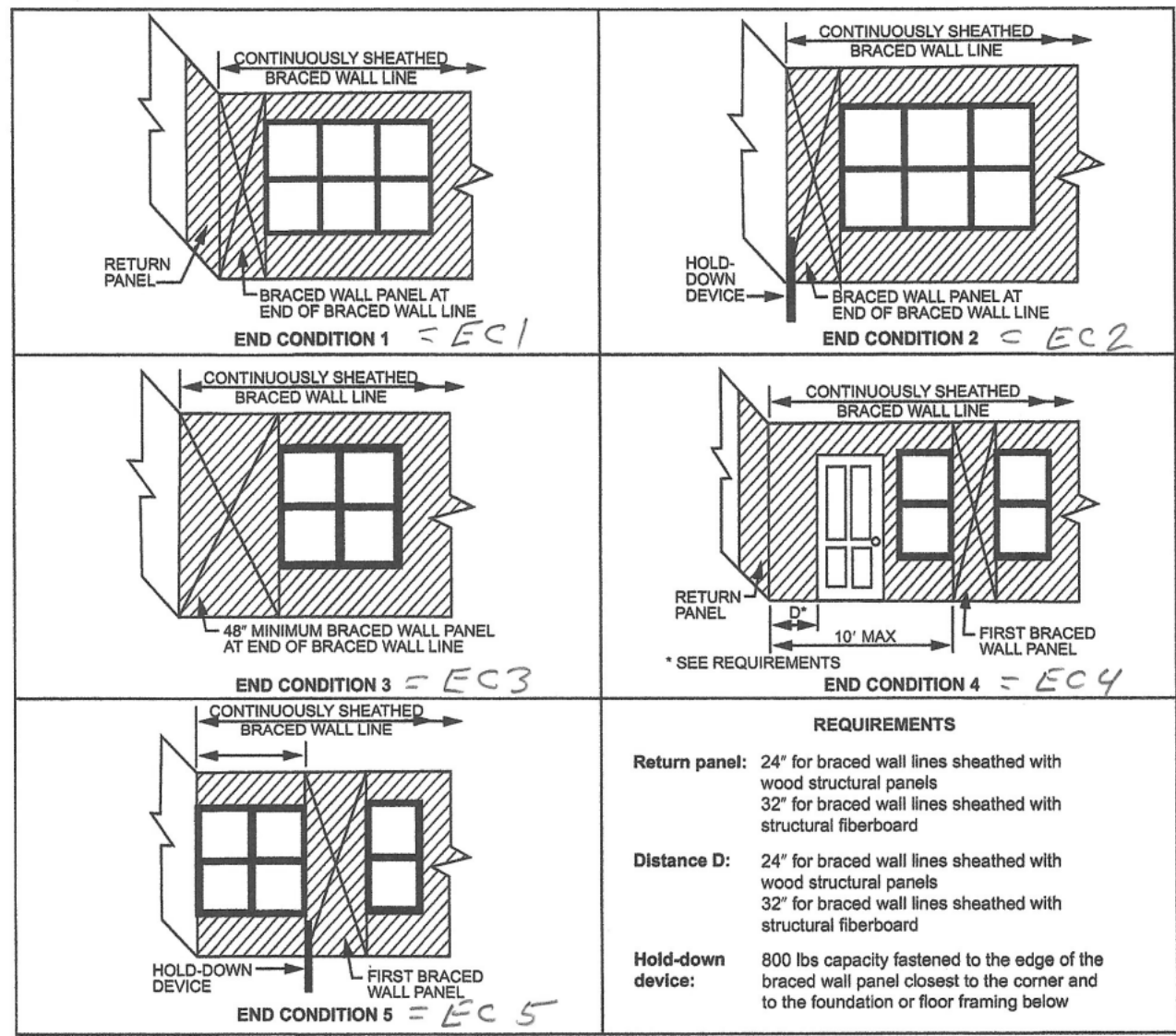
PLAN NO.

4299

SHEET NO.

A2

STRUCTURAL SLAB ON FILL REBAR 12" O.C. E.W.

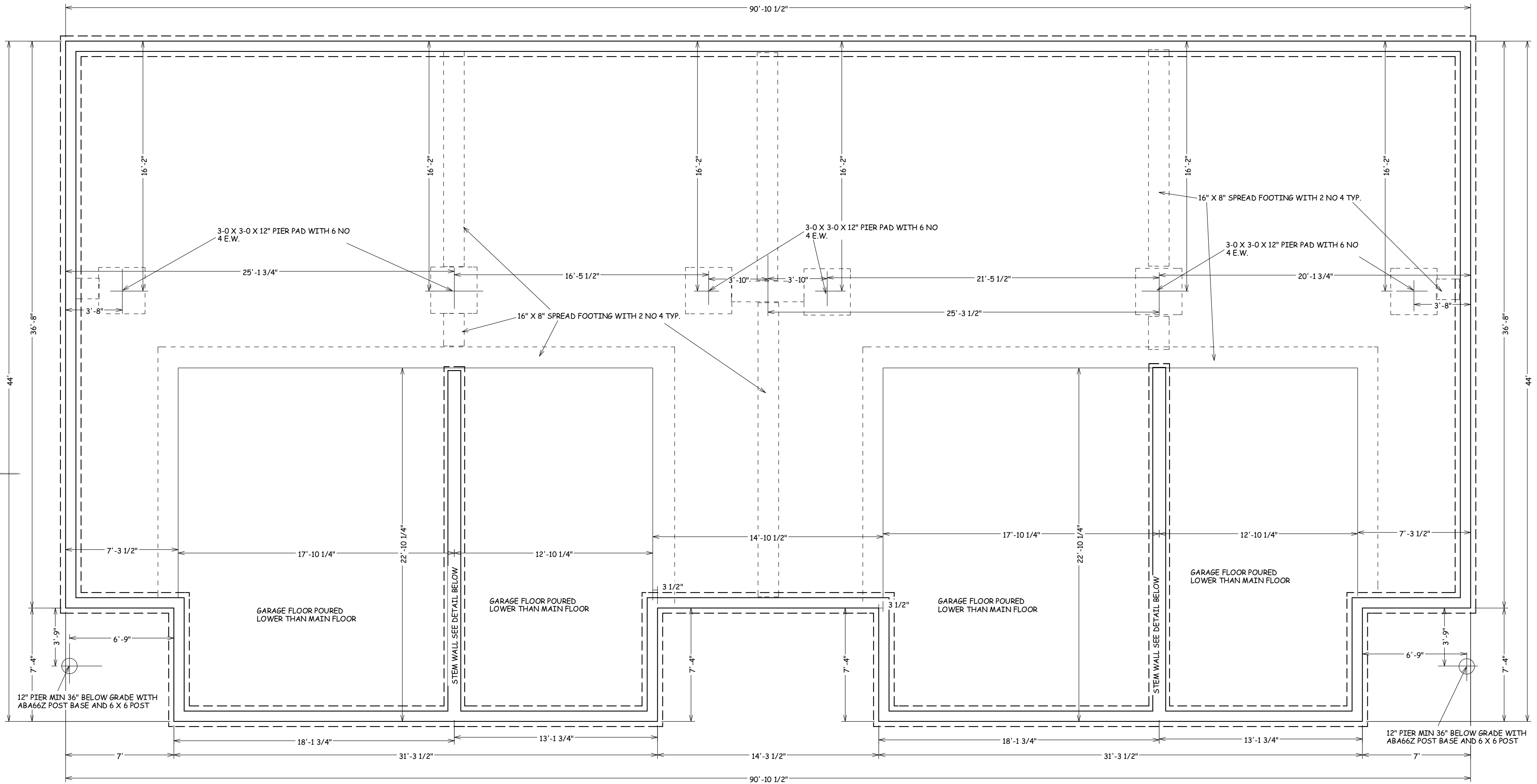


For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound = 4.45 N

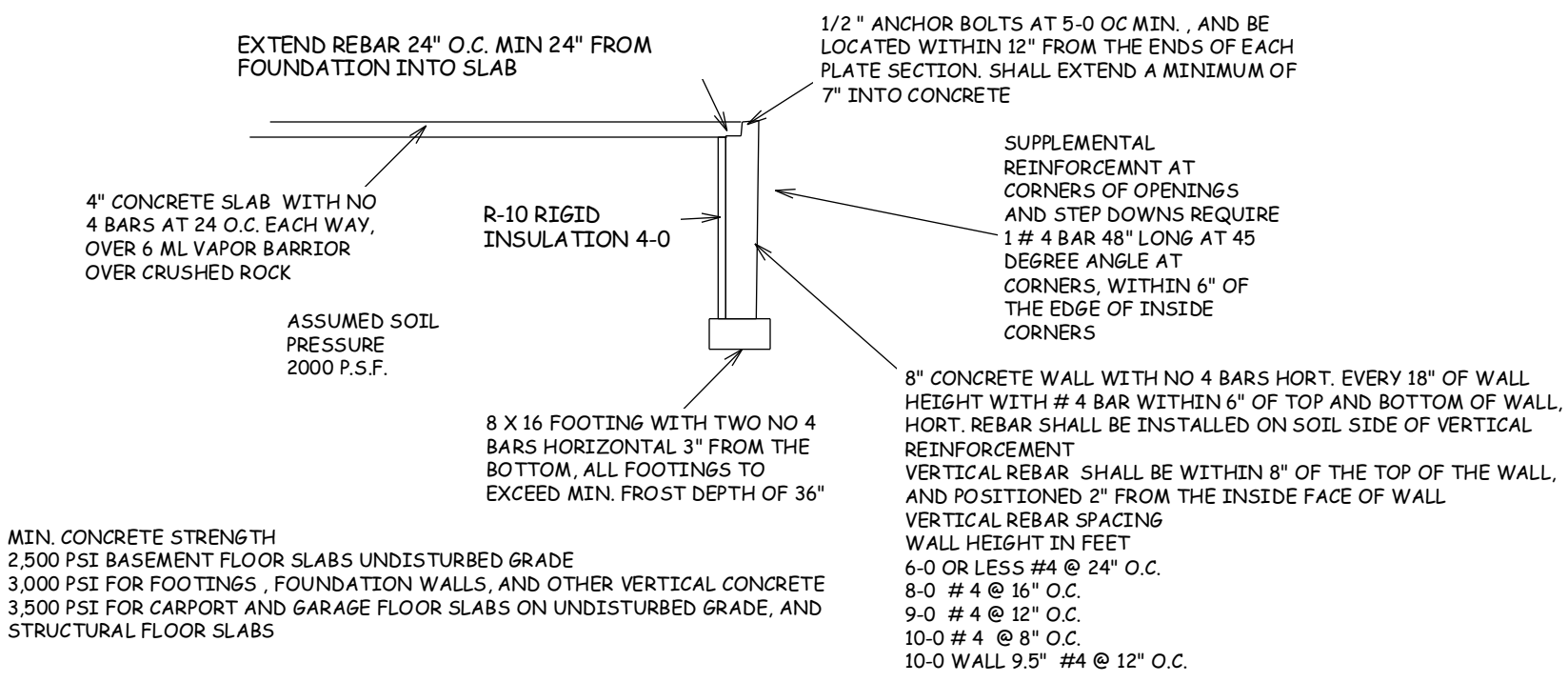
**FIGURE R602.10.7**  
**END CONDITIONS FOR BRACED WALL LINES WITH CONTINUOUS SHEATHING**

2018 INTERNATIONAL RESIDENTIAL CODE®

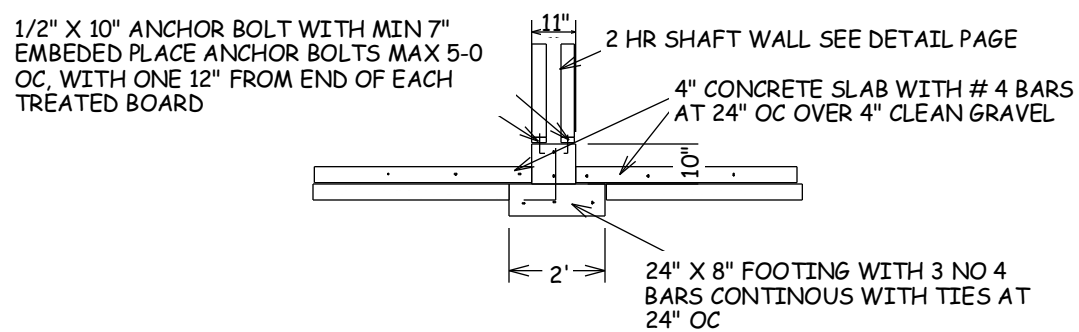
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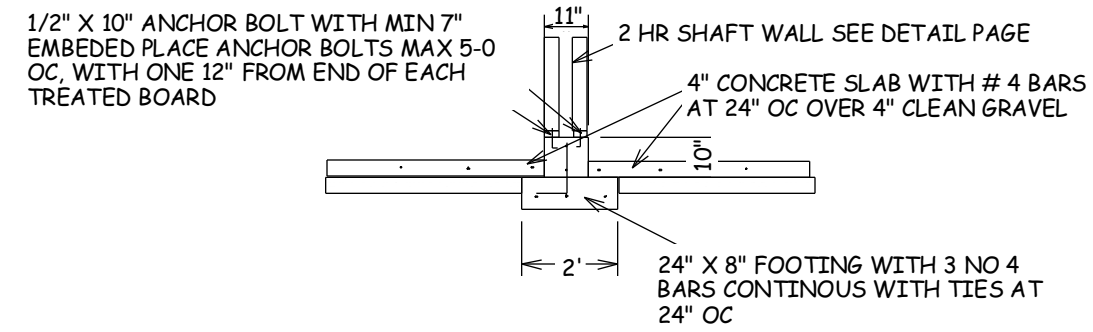
## FOUNDATION PLAN



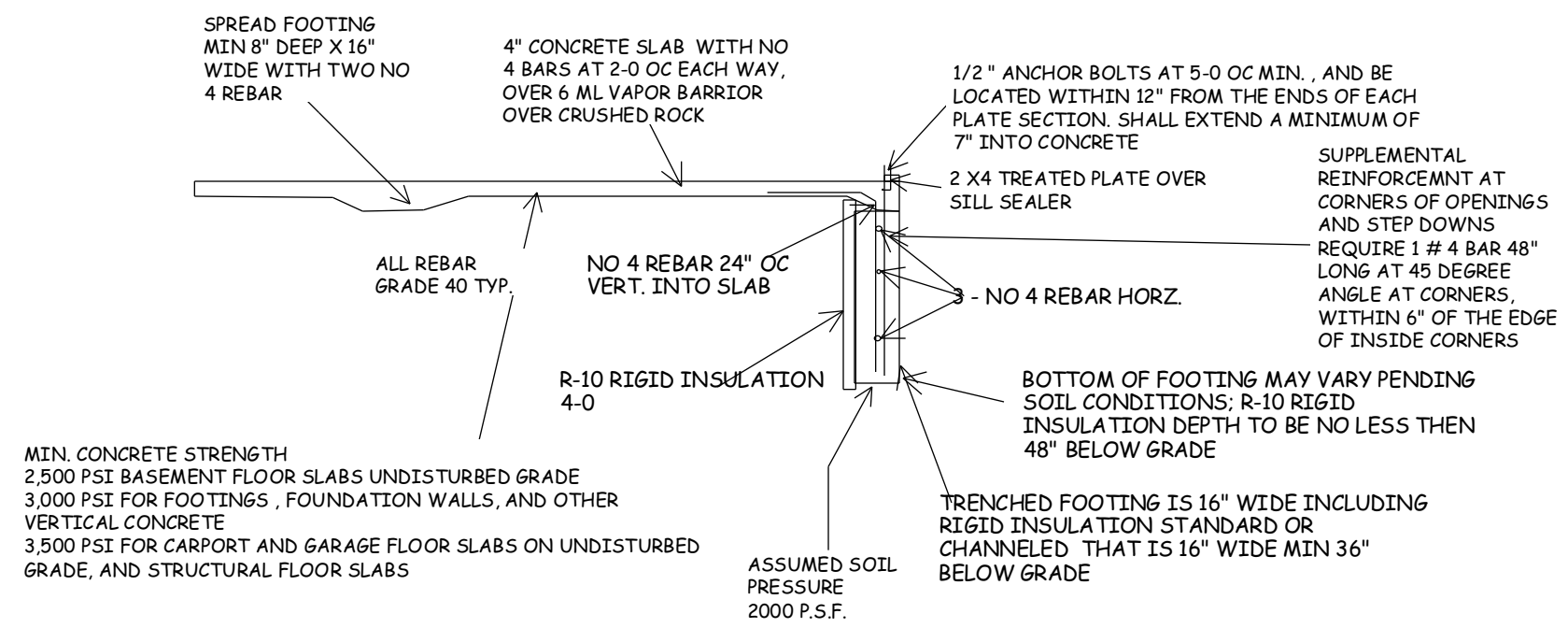
## SPREAD FOOTING WITH STEM WALL FOUNDATION



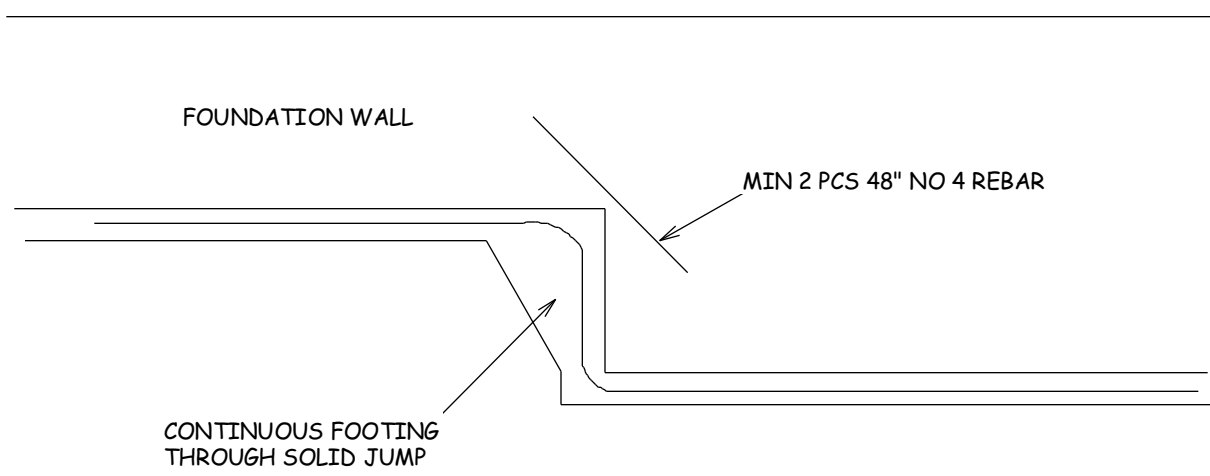
WALL BETWEEN GARAGES



WALL BETWEEN GARAGES



### OPTIONAL TRENCHED FOOTING



FOOTING JUMP TYP.

BUILD IN ACCORDANCE WITH 2018  
INTERNATIONAL RESIDENTIAL CODE, LOCAL  
CODES, AND 2021 INTERNATIONAL ENERGY  
CONSERVATION CODE, USING ENERGY RATING  
INDEX OPTION ( ERI/HERS )

FAIRVIEW CROSSING TOWNHOMES  
SMITHVILLE MO.

SCALE  
1/4" = 1'-0"

DATE  
9-12-24

PLAN NO.

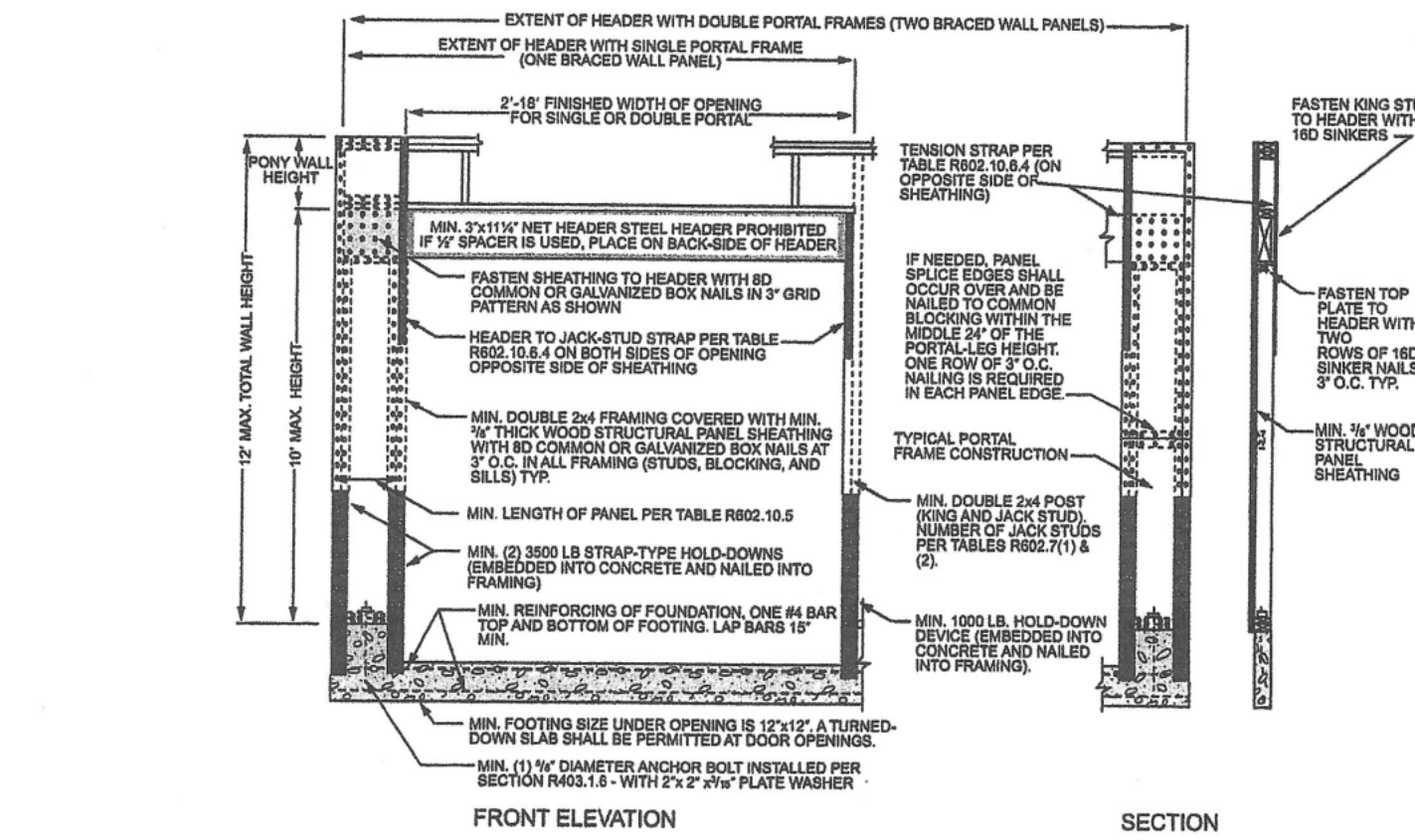
4299

SHEET NO.

A3



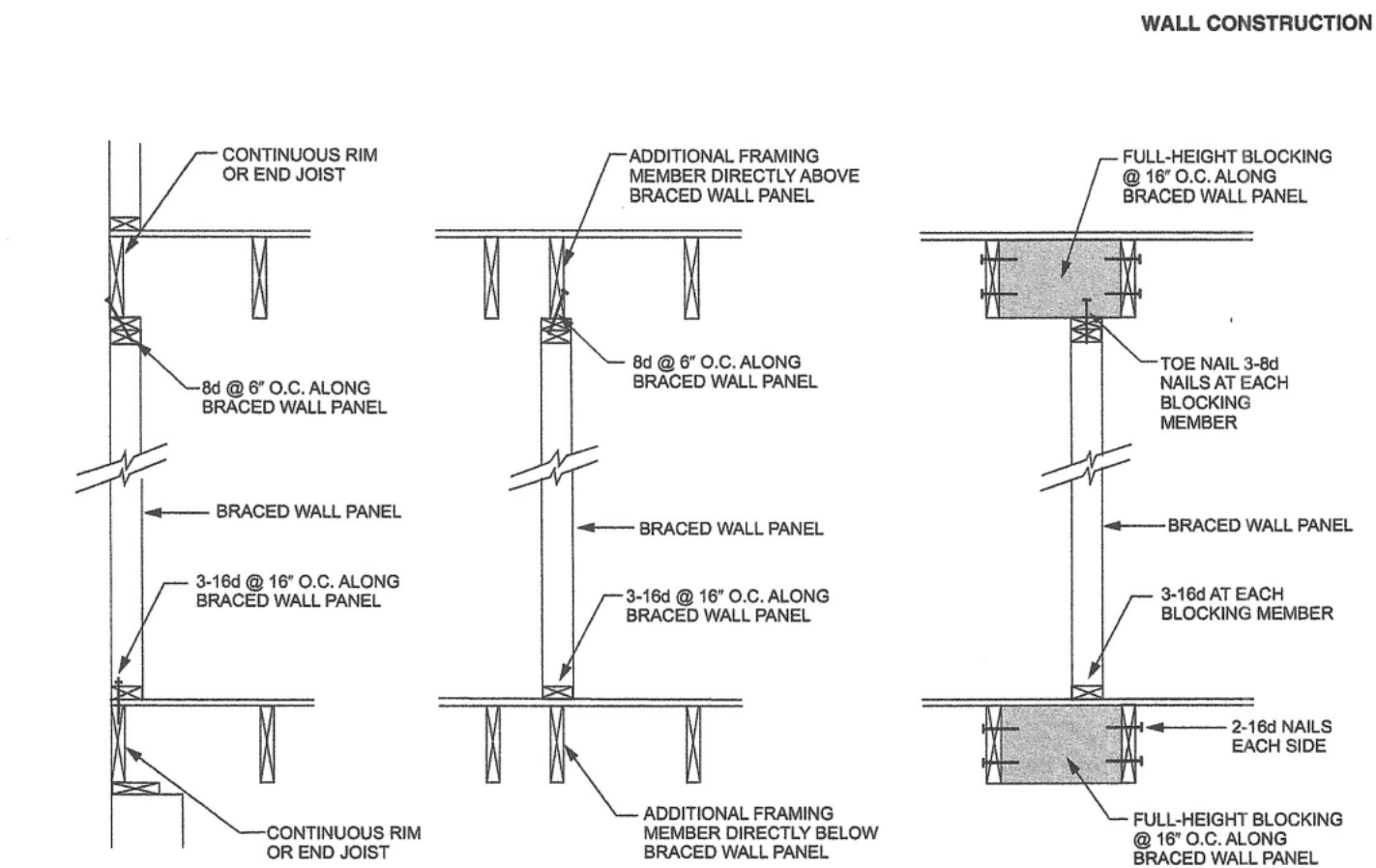
INTERIOR LOAD BEARING WALLS ARE 2 X 4 DF NO 2 @ 16" O.C.



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

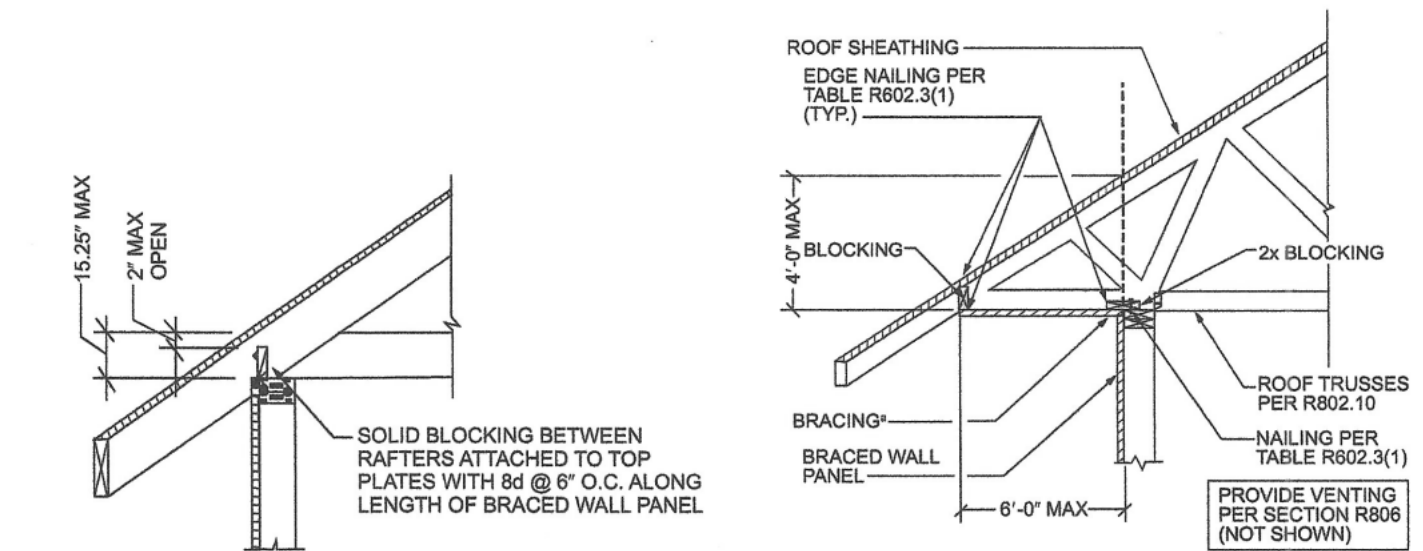
FIGURE R602.10.8.2  
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

2018 INTERNATIONAL RESIDENTIAL CODE®



For SI: 1 inch = 25.4 mm.

FIGURE R602.10.8.2(1)  
BRACED WALL PANEL CONNECTION TO PERPENDICULAR RAFTERS



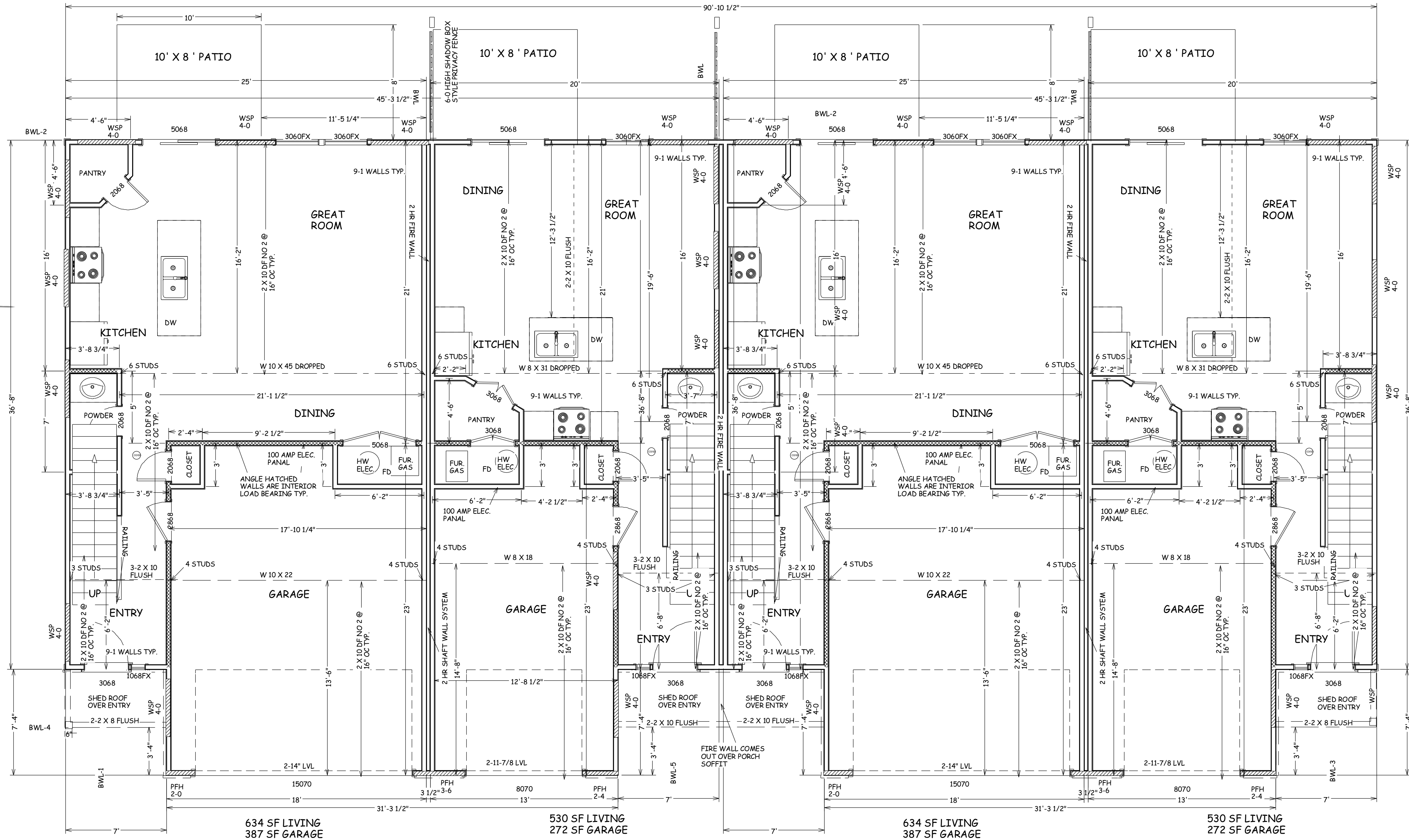
For SI: 1 inch = 25.4 mm.

a. Methods of bracing shall be as described in Section R602.10.4.

FIGURE R602.10.8.2(2)  
BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES

2018 INTERNATIONAL RESIDENTIAL CODE®

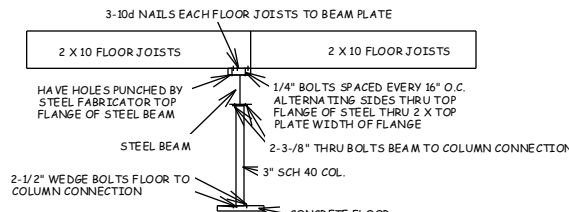
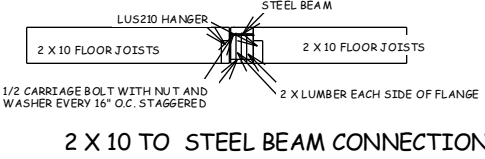
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MAIN FLOOR PLAN

MAIN FLOOR PLAN

GARAGE DOORS WILL ALWAYS HAVE 7/16" OSB SHEATHING



SHIP LAP SIDING EDGES MUST BE DOUBLE NAILED: ONE NAIL MUST BE PLACED IN THE UNDERLAP AND A SECOND NAIL MUST BE PLACED IN THE OVERLAP AT 6\"/>

WALL PANEL LEGEND

WSP = WOOD STRUCTURAL PANEL, MIN THICKNESS 3/8", NAILED 6" EDGES, 12" FIELD WITH 8 D ( 2.5" X 0.131") NAIL

CS-WSP = CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL, MIN THICKNESS 3/8", NAILED 6" EDGES, 12" FIELD WITH 8 D ( 2.5" X 0.131") NAIL

EC = END CONDITION CONTINUOUSLY SHEATHED WOOD STRUCTURAL PANEL, MIN THICKNESS 3/8", NAILED 6" EDGES, 12" FIELD WITH 8 D ( 2.5" X 0.131") NAIL

PFH= PORTAL FRAME WITH HOLD DOWN, MIN SHEATHING THICKNESS 7/16" NAILING 3" OC ALL FRAMING MEMBERS WITH 8 D (2.5" X 0.131" )

GB= GYPSUM BOARD MIN 1/2" THICK NAILING 7" EDGES & FIELD WITH GYPSUM BOARD NAIL 0.0915 DIAMETER, 1-5/8" LONG 19/64" HEAD

CS-PF= CONTINUOUSLY SHEATHED 7/16" WOOD SHEATHING MIN., PORTAL FRAME NAILING 3" OC ALL FRAMING MEMBERS WITH 8 D (2.5" X 0.131" )

BUILD IN ACCORDANCE WITH 2018 INTERNATIONAL RESIDENTIAL CODE , LOCAL CODES, AND 2021 INTERNATIONAL ENERGY CONSERVATION CODE, USING ENERGY RATING INDEX OPTION ( ERI/HERS )

FAIRVIEW CROSSING TOWNHOMES  
SMITHVILLE MO.

SCALE  
1/4" = 1-0

DATE  
9-12-24

PLAN NO.

4299

SHEET NO.

A4

TABLE R902.5.2  
RAFTER/CEILING JOIST HEEL JOINT CONNECTIONS<sup>a,b,c,d,e,f,g</sup>

RAFTER SLOPE	RAFTER SPACING (inches)	GROUND SNOW LOAD (psf)				
		Roof span (feet)				
		12	20	28	36	
3:12	12	4	6	8	10	
	16	5	8	10	13	
	24	7	11	15	19	
4:12	12	3	5	6	8	
	16	4	6	8	10	
	24	5	8	12	15	
5:12	12	3	4	5	6	
	16	3	5	6	8	
	24	4	7	9	12	
7:12	12	3	4	4	5	
	16	3	4	5	6	
	24	3	5	7	9	
9:12	12	3	3	4	4	
	16	3	4	4	5	
	24	3	4	6	7	
12:12	12	3	3	3	3	
	16	3	3	4	4	
	24	3	4	4	5	

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 pound per square foot = 0.0479 kPa.

a. 40d box nails shall be permitted to be substituted for 16d common nails.

b. Nailing requirements shall be permitted to be reduced 25 percent if nails are clinched.

c. Heel joint connections are not required where the ridge is supported by a load-bearing wall, header or ridge beam.

d. Where intermediate support of the rafter is provided by vertical struts or purlins to a load-bearing wall, the tabulated heel joint connection requirements shall be permitted to be reduced proportionally to the reduction in span.

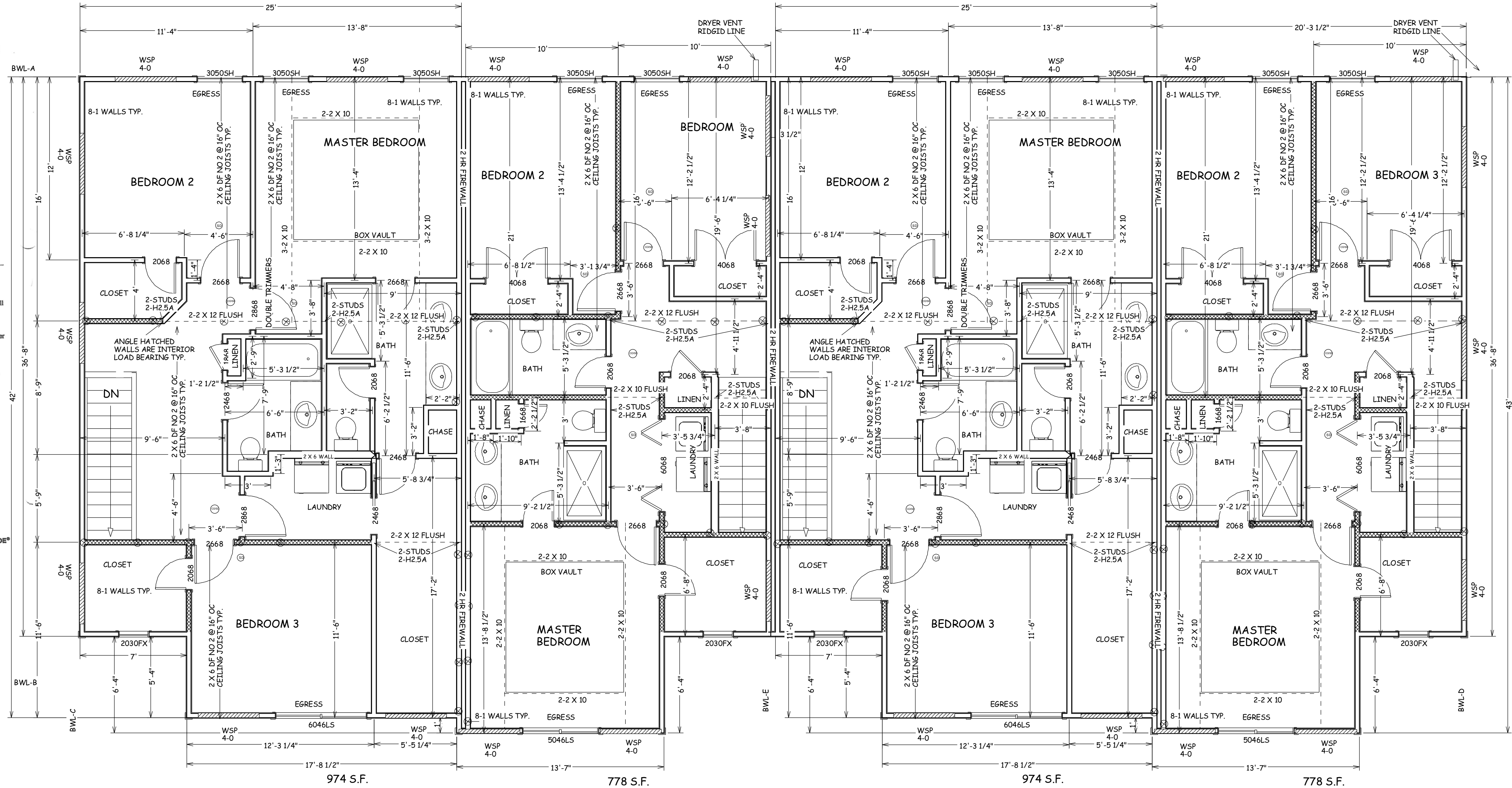
e. Equivalent nailing patterns are required for ceiling joist to ceiling joist lap splices.

f. Applies to roof live load of 20 psf or less.

g. Tabulated heel joint connection requirements assume that ceiling joists or rafter ties are located at the bottom of the attic space. Where ceiling joists or rafter ties are located higher in the attic, heel joint connection requirements shall be increased by the following factors:

H <sub>c</sub> /H <sub>r</sub>	Heel Joint Connection Adjustment Factor
1/3	1.5
1/4	1.33
1/5	1.25
1/6	1.2
1/10 or less	1.11

where:  
H<sub>c</sub> = Height of ceiling joists or rafter ties measured vertically above the top of the rafter support walls.  
H<sub>r</sub> = Height of roof ridge measured vertically above the top of the rafter support walls.



SHIP LAP SIDING EDGES MUST BE DOUBLE NAILED: ONE NAIL MUST BE PLACED IN THE UNDERLAP AND A SECOND NAIL MUST BE PLACED IN THE OVERLAP AT 6" O.C. UNDER AND OVER

WALL PANEL ATTACHMENT SCHEDULE  
WSP OR CS-WSP AND EC PANELS= 6" EDGES, 12" FIELD WITH 8 D ( 2.5" X 0.131") NAIL  
PFH= 3" OC ALL FRAMING MEMBERS WITH 8 D (2.5" X 0.131" )  
GB= 7" EDGES & FIELD WITH GYPSUM BOARD NAIL 0.0915 DIAMETER, 1-5/8" LONG 19/64" HEAD  
CS-PF= 3" OC ALL FRAMING MEMBERS WITH 8 D (2.5" X 0.131" )

WALL PANEL LEGEND  
WSP = WOOD STRUCTURAL PANEL, MIN THICKNESS 3/8', NAILED 6" EDGES, 12" FIELD WITH 8 D ( 2.5" X 0.131") NAIL  
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PFH= PORTAL FRAME WITH HOLD DOWN, MIN SHEATHING THICKNESS 7/16" NAILING 3" OC ALL FRAMING MEMBERS WITH 8 D (2.5" X 0.131" )  
GB= GYPSUM BOARD MIN 1/2" THICK NAILING 7" EDGES & FIELD WITH GYPSUM BOARD NAIL 0.0915 DIAMETER, 1-5/8" LONG 19/64" HEAD  
CS-PF= CONTINUOUSLY SHEATHED 7/16" WOOD SHEATHING MIN., PORTAL FRAME NAILING 3" OC ALL FRAMING MEMBERS WITH 8 D (2.5" X 0.131" )

BUILD IN ACCORDANCE WITH 2018  
INTERNATIONAL RESIDENTIAL CODE , LOCAL  
INTERNATIONAL RESIDENTIAL CODE , AND 2021 INTERNATIONAL ENERGY  
CONSERVATION CODE, USING ENERGY RATING  
INDEX OPTION ( ERI/HERS )

FAIRVIEW CROSSING TOWNHOMES  
SMITHVILLE MO.

SCALE  
1/4" = 1-0

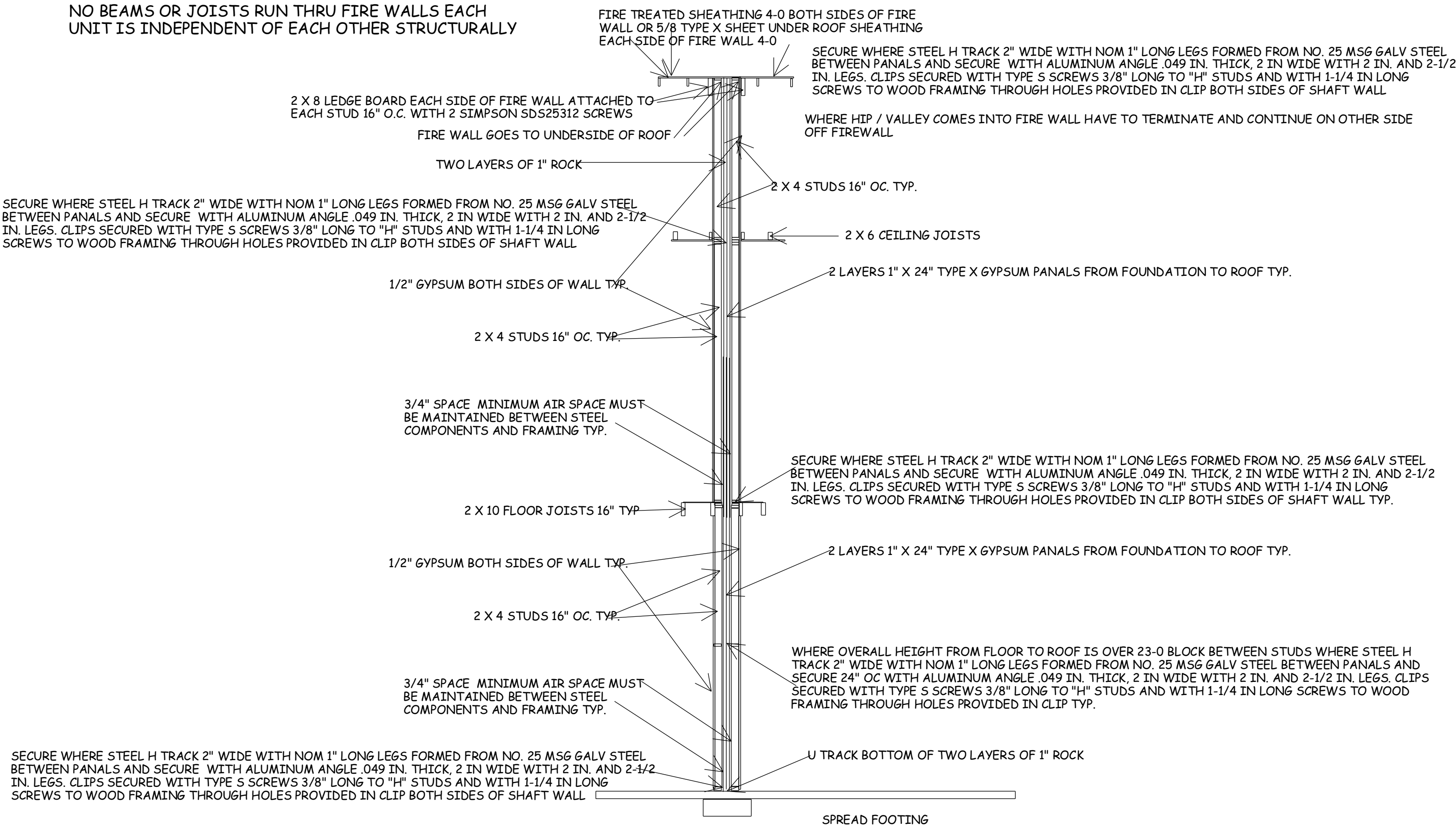
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9-12-24

PLAN NO.

4299

SHEET NO.



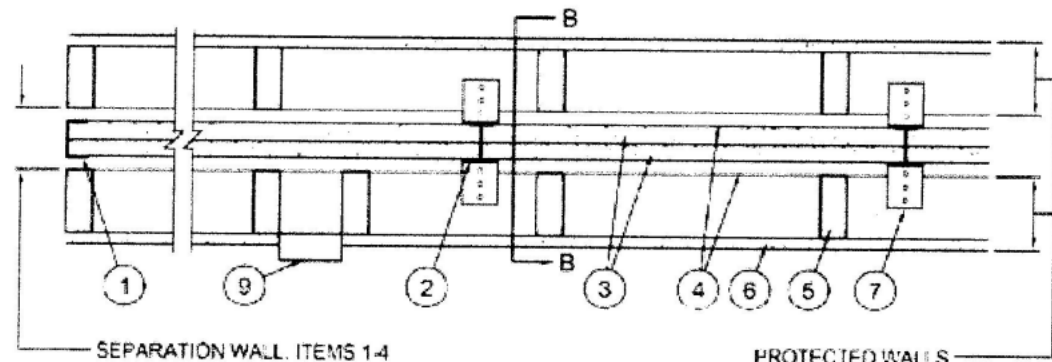


PARTY WALLS BETWEEN UNITS  
UL FIRE WALL U 347

UL Product iQ™



BXUV.U347



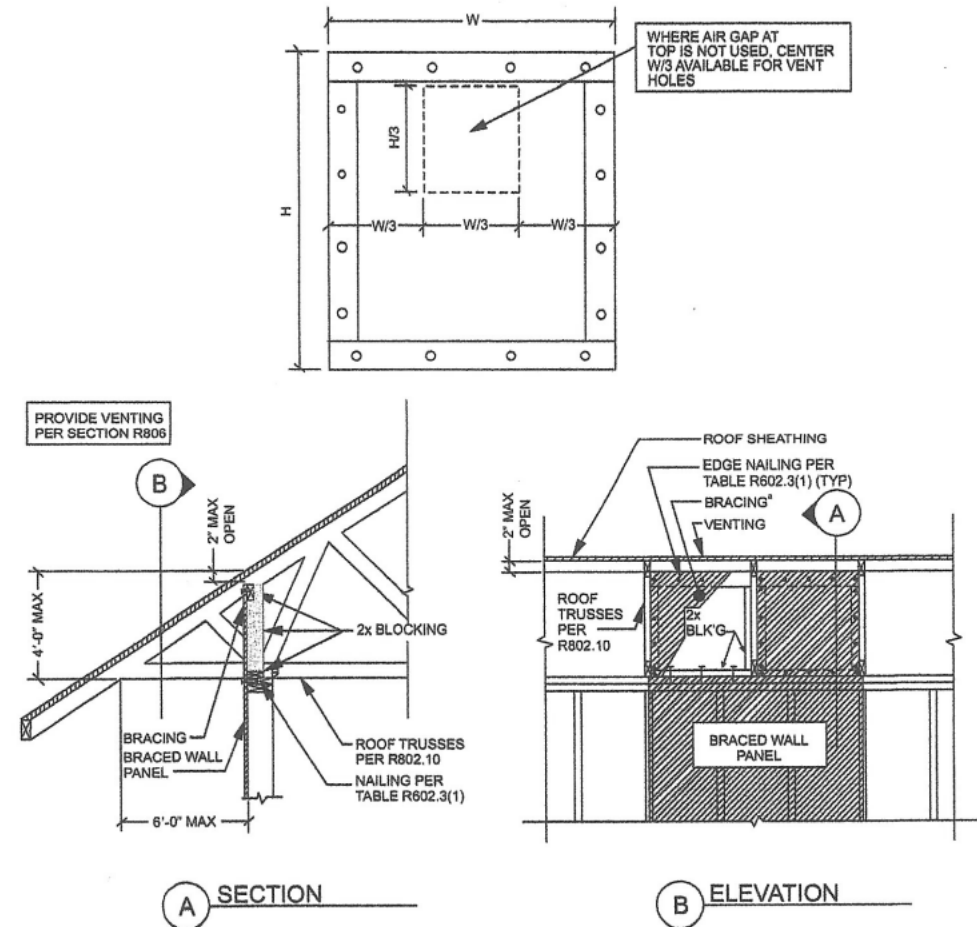
SEPARATION WALL: (Non-bearing, Max Height - 66 ft - see Item 6)

- Steel Track** — Floor, sidewall or top wall track. Nom 2 in. wide channel shaped with nom 1 in. long legs, formed from No. 25 MSG galv steel, secured with suitable fasteners spaced 24 in. OC.
- Steel Studs** — "H" shaped studs formed from No. 25 MSG galv steel having an overall depth of approximately 2 in. and flange width 1-3/8 in.
- Gypsum Board\*** — Two layers of 1 in. thick gypsum wallboard liner panels, supplied in nom 24 in. widths. Vertical edges of panels friction fit into "H" shaped studs.  
**NATIONAL GYPSUM CO** — Types FSW, FSW-B, FSW-7, FSW-9
- Air Space** — Minimum 3/4-in. air space.
- Wood Studs** — For Bearing or Nonbearing Wall Rating — Nom 2 by 4 in. max spacing 24 in. OC. Studs cross braced at mid-height where necessary for clip attachment. Min 3/4 in. separation between wood framing and fire separation wall. Finish rating evaluated for wood studs only.
- Gypsum Board\*** — As an alternate to Item 6 - Min 5/8 in. thick, min. 6 in. wide batten strips, applied on both sides of Steel Studs (Item 2) and horizontal back to back Steel Track (Item 1). Min. 5/8 in. thick, min. 3 in. wide batten strips applied on both sides of single Steel Track (Item 1) at perimeter of assembly. Batten strips secured to studs with 1-1/4 in. long Type 5 steel screws spaced 12 in. OC. Batten joints shall be butted tight to form a closed joint. As an option, entire sheet of gypsum board may be used in lieu of the battens. Clip placement as in item 7, 7A, 7B, or 7C.  
**NATIONAL GYPSUM CO** — Type FSW-3, FSW, FSW-6

9. **Non-Bearing Wall Partition Intersection** — (Optional) Wall system consisting of nominal 2 by 4 in. stud or nominal 2 by 6 in. stud. Maximum one non-bearing wall partition intersection per stud cavity.

11. **Caulking and Sealants\*** — (Optional - Intended for use as an air barrier - Not evaluated as fireblocking) - A bead of sealant applied around the partition perimeter in the 3/4 in. air space between wood framing (Item 5) and shaftliner panels (Item 3) to create an air barrier.  
**DUPONT DE NEMOURS, INC.** — Great Stuff Gaps & Cracks, Great Stuff Pro Gaps & Cracks, Great Stuff Pro Window & Door

**ICP ADHESIVES & SEALANTS INC** — Handi-Foam Fireblock, Handi-Foam Fireblock West, and Fast Foam Fireblock



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm  
a. Methods of bracing shall be as described in Section R602.10.4.

FIGURE R602.10.8.2(3)  
BRACED WALL PANEL CONNECTION OPTION TO PERPENDICULAR RAFTERS OR ROOF TRUSSES

EACH TOWNHOUSE SHALL BE CONSIDERED A SEPARATE BUILDING AND SHALL BE SEPERATED BY FIRE - RESISTANCE- RATED WALL ASSEMBLIES MEETING THE REQUIREMENTS FO SECTION R302-1 FOR EXTERIOR WALLS.

THE FIRE- RESISTANCE - RATED WALL OR ASSEMBLY SEPARATING TOWNHOUSES SHALL BE CONTINUOUS FROM THE FOUNDATION TO THE UNDERSIDE OF THE ROOF SHEATHING, DECK OR SLAB. THE FIRE RESISTANCE RATING SHALL EXTEND THE FULL LENGTH OF THE WALL OR ASSEMBLY, INCLUDING WALL EXTENSIONS THROUHG AND SEPERATING ATTACHED ENCLOSED ACCESSORY STRUCTURES

THERE ARE NO PLUMBING OR MECHANICAL ITEMS ALLOWED IN THE FIREWALL'S. IN ADDITION, BEAMS CANNOT BE CONTINUES THRU FIRE WALL

SOFFITS TO HAVE A 1 HR FIRE RESISTANCE RATING ON THE UNDERSIDE WHEN LOCATED BETWEEN 2 AND 5 FEET FROM A REAL OR IMAGINARY PROPERTY LINE WHERE NEEDED 5/8" TYPE X SHEET ROCK ON THE UNDER SIDE OF 2 X 4 @ 16" O.C. SOFFIT SUPPORT

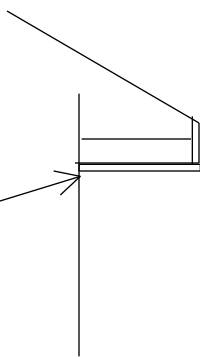




TABLE R602.3(1) FASTENING SCHEDULE			
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER <sup>a,1</sup>	SPACING AND LOCATION
Roof			
1	Blocking between ceiling joists or rafters to top plate	4-8d box (2½" × 0.113") or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Toe nail
2	Ceiling joists to top plate	4-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Per joist, toe nail
3	Ceiling joist not attached to parallel rafter, laps over partitions (see Section R802.5.2 and Table R802.5.2)	4-10d box (3" × 0.128"); or 3-16d common (3½" × 0.162"); or 4-3" × 0.131" nails	Face nail
4	Ceiling joist attached to parallel rafter (heel joint) (see Section R802.5.2 and Table R802.5.2)	Table R802.5.2	Face nail
5	Collar tie to rafter, face nail or 1½" × 20 ga. ridge strap to rafter	4-10d box (3" × 0.128"); or 3-10d common (3" × 0.148"); or 4-3" × 0.131" nails	Face nail each rafter
6	Rafter or roof truss to plate	3-16d box nails (3½" × 0.135"); or 3-10d common nails (3" × 0.148"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	2 toe nails on one side and 1 toe nail on opposite side of each rafter or truss <sup>2</sup>
7	Roof rafters to ridge, valley or hip rafters or roof rafter to minimum 2" ridge beam	4-16d (3½" × 0.135"); or 3-10d common (3" × 0.148"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	Toe nail
		3-16d box 3½" × 0.135"; or 3-16d common (3½" × 0.162"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	End nail
Wall			
8	Stud to stud (not at braced wall panels)	16d common (3½" × 0.162") 10d box (3" × 0.128"); or 3" × 0.131" nails	24" o.c. face nail 16" o.c. face nail
9	Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d box (3½" × 0.135"); or 3" × 0.131" nails	12" o.c. face nail
10	Built-up header (2" to 2" header with ½" spacer)	16d common (3½" × 0.162")	16" o.c. face nail
		16d common (3½" × 0.162") 16d box (3½" × 0.135")	16" o.c. each edge face nail 12" o.c. each edge face nail
11	Continuous header to stud	5-8d box (2½" × 0.113"); or 4-8d common (2½" × 0.131"); or 4-10d box (3" × 0.128")	Toe nail
12	Top plate to top plate	16d common (3½" × 0.162") 10d box (3" × 0.128"); or 3" × 0.131" nails	16" o.c. face nail 12" o.c. face nail
13	Double top plate splice	8-16d common (3½" × 0.162"); or 12-16d box (3½" × 0.135"); or 12-10d box (3" × 0.128"); or 12-3" × 0.131" nails	Face nail on each side of end joint (minimum 24" lap splice length each side of end joint)

(continued)

TABLE R602.3(1)—continued FASTENING SCHEDULE			
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER <sup>a,1</sup>	SPACING AND LOCATION
14	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common (3½" × 0.162") 16d box (3½" × 0.135"); or 3" × 0.131" nails	16" o.c. face nail 12" o.c. face nail
15	Bottom plate to joist, rim joist, band joist or blocking (at braced wall panel)	3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162"); or 4-3" × 0.131" nails	3 each 16" o.c. face nail 2 each 16" o.c. face nail 4 each 16" o.c. face nail
16	Top or bottom plate to stud	4-8d box (2½" × 0.113"); or 3-16d box (3½" × 0.135"); or 4-8d common (2½" × 0.131"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	Toe nail End nail
17	Top plates, laps at corners and intersections	3-10d box (3" × 0.128"); or 3-16d common (3½" × 0.162"); or 3-3" × 0.131" nails	Face nail
18	1" brace to each stud and plate	3-8d box (2½" × 0.113"); or 2-8d common (2½" × 0.131"); or 2-10d box (3" × 0.128"); or 2 staples 1½"	Face nail
19	1" × 6" sheathing to each bearing	3-8d box (2½" × 0.113"); or 2-8d common (2½" × 0.131"); or 2-10d box (3" × 0.128"); or 2 staples, 1" crown, 16 ga., 1½" long	Face nail
20	1" × 8" and wider sheathing to each bearing	3-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 4 staples, 1" crown, 16 ga., 1½" long Wider than 1" × 8"	Face nail
Floor			
21	Joist to sill, top plate or girder	4-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	Toe nail
22	Rim joist, band joist or blocking to sill or top plate (roof applications also)	8d box (2½" × 0.113") 8d common (2½" × 0.131"); or 10d box (3" × 0.128"); or 3" × 0.131" nails	4" o.c. toe nail 6" o.c. toe nail
23	1" × 6" subfloor or less to each joist	3-8d box (2½" × 0.113"); or 3-8d common (2½" × 0.131"); or 3-10d box (3" × 0.128"); or 2 staples, 1" crown, 16 ga., 1½" long	Face nail

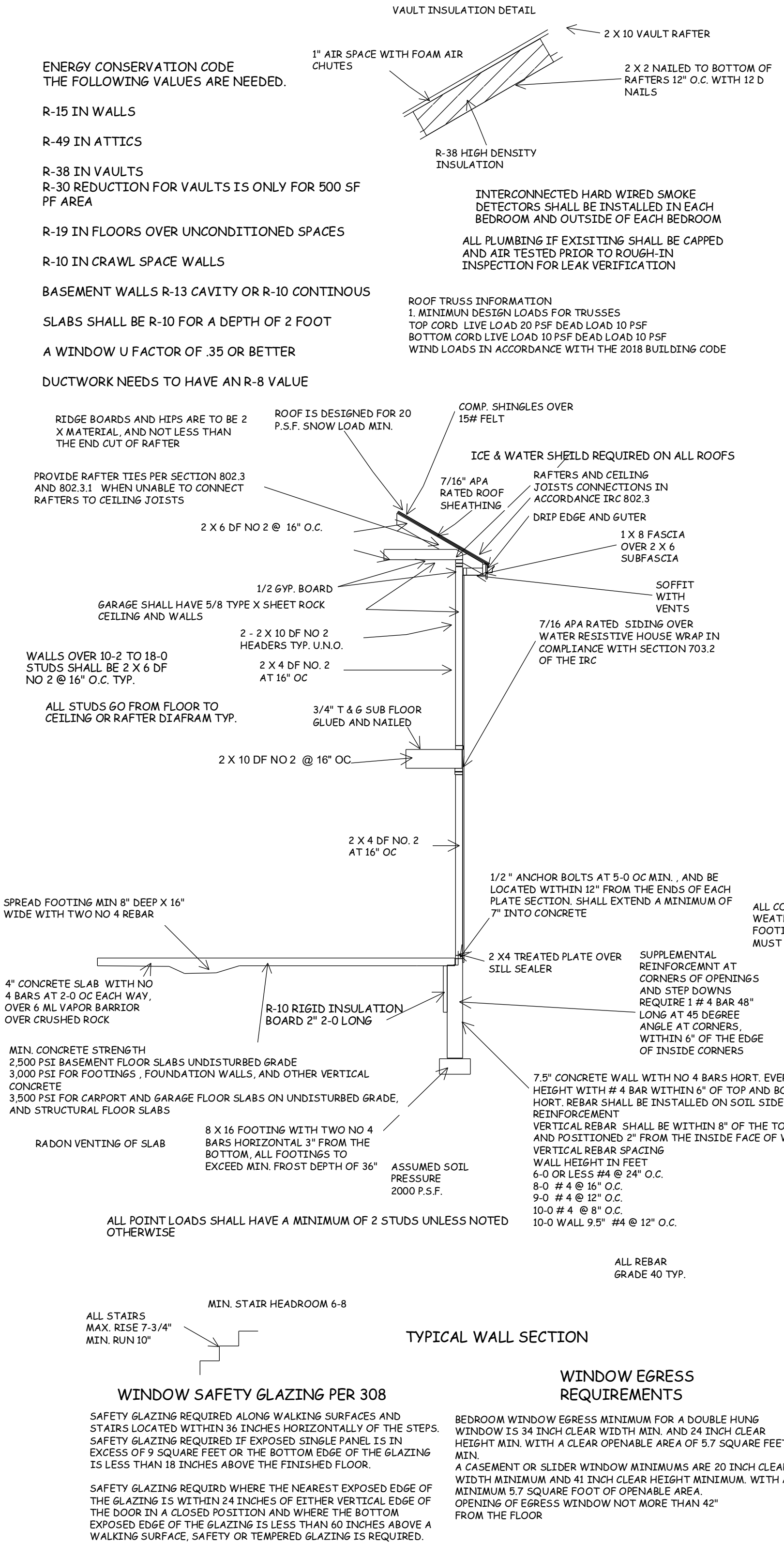
(continued)

WALL CONSTRUCTION

TABLE 602.3(1) FASTENING SCHEDULE—continued				
ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER <sup>a,1</sup>	SPACING AND LOCATION	
Floor				
24	2" subfloor to joist or girder	3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162")	Blind and face nail	
25	2" planks (plank & beam—floor & roof)	3-16d box (3½" × 0.135"); or 2-16d common (3½" × 0.162")	At each bearing, face nail	
26	Band or rim joist to joist	3-16d common (3½" × 0.162") 4-10 box (3" × 0.128"); or 4-3" × 0.131" nails; or 4-3" × 14 ga. staples, ½" crown	End nail	
27	Built-up girders and beams, 2-inch lumber layers	20d common (4" × 0.192"); or	Nail each layer as follows: 32" o.c. at top and bottom and staggered.	
		10d box (3" × 0.128"); or 3" × 0.131" nails And: 2-20d common (4" × 0.192"); or 3-10d box (3" × 0.128"); or 3-3" × 0.131" nails	24" o.c. face nail at top and bottom staggered on opposite sides	
			Face nail at ends and at each splice	
28	Ledger strip supporting joists or rafters	4-16d box (3½" × 0.135"); or 3-16d common (3½" × 0.162"); or 4-10d box (3" × 0.128"); or 4-3" × 0.131" nails	At each joist or rafter, face nail	
29	Bridging or blocking to joist	2-10d box (3" × 0.128"), or 2-8d common (2½" × 0.131"); or 2-3" × 0.131" nails	Each end, toe nail	
ITEM			SPACING OF FASTENERS	
DESCRIPTION OF BUILDING ELEMENTS			Edges (inches) <sup>2</sup>	Intermediate supports <sup>a,1</sup> (inches)
Wood structural panels, subfloor, roof and interior wall sheathing to framing and particleboard wall sheathing to framing (see Table R602.3(3) for wood structural panel exterior wall sheathing to wall framing)				
30	½" — ½"	6d common (2" × 0.113") nail (subfloor, wall) 8d common (2½" × 0.131") nail (roof); or RSRS-01 (2½" × 0.113") nail (roof)	6	12"
31	¾" — 1"	8d common nail (2½" × 0.131"); or RSRS-01; (2½" × 0.113") nail (roof)	6	12"
32	1½" — 1½"	10d common (3" × 0.148") nail; or 8d (2½" × 0.131") deformed nail	6	12
Other wall sheathing <sup>3</sup>				
33	½" structural cellulosic fiberboard sheathing	1½" galvanized roofing nail, ½" head diameter, or 1½" long 16 ga. staple with ½" or 1" crown	3	6
34	¾" structural cellulosic fiberboard sheathing	1½" galvanized roofing nail, ½" head diameter, or 1½" long 16 ga. staple with ½" or 1" crown	3	6
35	½" gypsum sheathing <sup>4</sup>	1½" galvanized roofing nail; staple galvanized, ½" long; 1½" screws, Type W or S	7	7
36	¾" gypsum sheathing <sup>4</sup>	1½" galvanized roofing nail; staple galvanized, ½" long; 1½" screws, Type W or S	7	7
Wood structural panels, combination subfloor underlayment to framing				
37	½" and less	6d deformed (2" × 0.120") nail; or 8d common (2½" × 0.131") nail	6	12
38	¾" — 1"	8d common (2½" × 0.131") nail; or 8d deformed (2½" × 0.120") nail	6	12
39	1½" — 1½"	10d common (3" × 0.148") nail; or 8d deformed (2½" × 0.120") nail	6	12

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s; 1 ksi = 6.895 MPa.

(continued)



ENERGY CONSERVATION CODE  
THE FOLLOWING VALUES ARE NEEDED.

R-15 IN WALLS

R-49 IN ATTICS

R-38 IN VAULTS  
R-30 REDUCTION FOR VAULTS IS ONLY FOR 500 SF  
PF AREA

R-19 IN FLOORS OVER UNCONDITIONED SPACES

R-10 IN CRAWL SPACE WALLS

BASEMENT WALLS R-13 CAVITY OR R-10 CONTINUOUS

SLABS SHALL BE R-10 FOR A DEPTH OF 2 FOOT

A WINDOW U FACTOR OF .35 OR BETTER

DUCTWORK NEEDS TO HAVE AN R-8 VALUE

1. DWELLING / GARAGE OPENINGS BETWEEN GARAGE AND SLEEPING PURPOSES SHALL NOT BE PERMITTED. OTHER OPENINGS SHALL BE EQUIPPED WITH SOLID WOOD OR STEEL DOORS NOT LESS THAN 1-3/8" THICK OR 20 MINUTE RATED DOORS, WITH SELF CLOSING DEVICES REQUIRED FOR GARAGE / DWELLING SEPERATION DOORS R302.5.1

2. WHOLE HOUSE MECHANICAL VENTILATION SYSTEM IS REQUIRED FOR ANY DWELLING IN COMPLIANCE WITH IRC M 1505

3. CARBON MONOXIDE DETECTORS REQUIRED IRC R 315

4. STEEL COLUMNS SHALL BE MINIMUM SCHEDULE 40 R407.3

5. DECK SHALL BE BUILT PER TABLES 507.2, 507.2.1, 507.3, 507.6, 507.5.1(1)(2), 507.5, AND 507.6

6. STUDS SHALL BE CONTINUOUS BETWEEN FLOOR, CEILING AND OR ROOF DIAPHRAGMS R602.3

7. ADDED REQUIREMENTS FOR WINDOW FALL PROTECTION R312.2

8. NEW PROVISIONS FOR ATTACHMENT OF RAFTERS, TRUSSES AND ROOF BEAMS R802.3.1, R802.11

9. INSULATION REQUIRED FOR ALL BASEMENT WALLS ( INCLUDING UNFINISHED BASEMENTS) N102.1

10. EXTERIOR WINDOWS/DOORS SHALL HAVE U-FACTOR 0.35 AND GLAZING SHALL HAVE SOLAR HEIGHT GAIN FACTOR OF 0.40 N102.1

11. HOUSE LEAKAGE AND DUCT LEAKAGE PERFORMANCE STANDARDS EFFECTIVE JANUARY 1, 2014. A SAMPLE TESTING PROGRAM WILL BE IMPLEMENTED OCTOBER 1, 2012. KBCRC N102.4.1.2 N103.2.2

12. LIGHTING FIXTURES PENETRATING THE THERMAL ENVELOPE ( E.G. CAN LIGHTS IN ATTIC ) SHALL BE IC RATED, LEAKAGE-RATED AND SEALED TO THE 6VPSUM WALLBOARD N102.4.4

13. PROGRAMMABLE THERMOSTAT REQUIRED N103.1.1

14. AIR HANDLERS SHALL BE RATED FOR MAXIMUM 2 % AIR LEAKAGE RATE N103.2.2.1

15. BUILDING CAVITIES USED AS RETURN AIR PLENUMS SHALL BE SEALED TO PREVENT LEAKAGE ACROSS THE THERMAL ENVELOPE KBCRC N103.2.2

16. CERTAIN HOT WATER PIPES SHALL BE INSULATED N103.0.4

17. ALL EXHAUST FANS SHALL TERMINATE TO THE BUILDING EXTERIOR M1507.2

18. MAKEUP AIR SYSTEM REQUIRED FOR KITCHEN EXHAUST HOODS THAT EXCEED 400 CFM M1503.4

19. BUILDING CAVITIES IN A THERMAL ENVELOPE WALL ( INCLUDING THE WALL BETWEEN THE HOUSE AND GARAGE ) SHALL NOT BE USED AS RETURN AIR PLENUMS

20. AN AIR HANDLING SYSTEM SHALL NOT SERVE BOTH THE LIVING SPACE AND THE GARAGE M1601.6

21. A CONCRETE- ENCASED GROUNDING ELECTRODE ( 'UFER' GROUND ) CONNECTION SHALL BE PROVIDED TO THE ELECTRICAL SERVICE E3608.1

22. COMPLIANCE WITH THE REQUIREMENT AND SHOW CONNECTION AS NEEDED FOR ROOF BEAM, TRUS, RAFTER, AND GIRDER CONNECTION FOR UPLIFT PER IRC 902.11. ALL RAFTERS BE IN COMPLIANCE WITH IRC 902.11 AMENDED RAYMORE CODE

BUILD IN ACCORDANCE WITH 2018  
INTERNATIONAL RESIDENTIAL CODE , LOCAL  
CODES, AND 2021 INTERNATIONAL ENERGY  
CONSERVATION CODE, USING ENERGY RATING  
INDEX OPTION ( ERI/HERS )

FAIRVIEW CROSSING TOWNHOMES  
SMITHVILLE MO.

SCALE  
1/4" = 1'-0

DATE  
9-12-24

PLAN NO.

4299

SHEET NO.

A-7



EXPOSURE CATEGORY B 10-FOOT MEAN ROOF HEIGHT 10-FOOT WALL HEIGHT 2 BRACED WALL LINES			MINIMUM TOTAL LENGTH (FEET) OF BRACED WALL PANELS REQUIRED ALONG EACH BRACED WALL LINE <sup>a</sup>				
Ultimate Design Wind Speed (mph)	Story Location	Braced Wall Line Spacing <sup>b</sup> (feet)	Method LIP <sup>c</sup>	Method GB	Methods DWB, WSP, FFB, PBS, PCP, HPS, BV-WSP, ABW, PFH, PFG, CS-SFB	Methods CS-WEP, CS-G, CS-PF	
≤ 115		10	3.5	3.5	2.0	2.0	
		20	6.5	6.5	3.5	3.5	
		30	9.5	9.5	5.5	4.5	
		40	12.5	12.5	7.0	6.0	
		50	15.0	15.0	9.0	7.5	
		60	18.0	18.0	10.5	9.0	
		10	7.0	7.0	4.0	3.5	
		20	12.5	12.5	7.5	6.5	
		30	18.0	18.0	10.5	9.0	
		40	23.5	23.5	13.5	11.5	
		50	29.0	29.0	16.5	14.0	
		60	34.5	34.5	20.0	17.0	
		10	NP	10.0	6.0	5.0	
		20	NP	18.5	11.0	9.0	
		30	NP	27.0	15.5	13.0	
		40	NP	35.0	20.0	17.0	
		50	NP	43.0	24.5	21.0	
		60	NP	51.0	29.0	25.0	

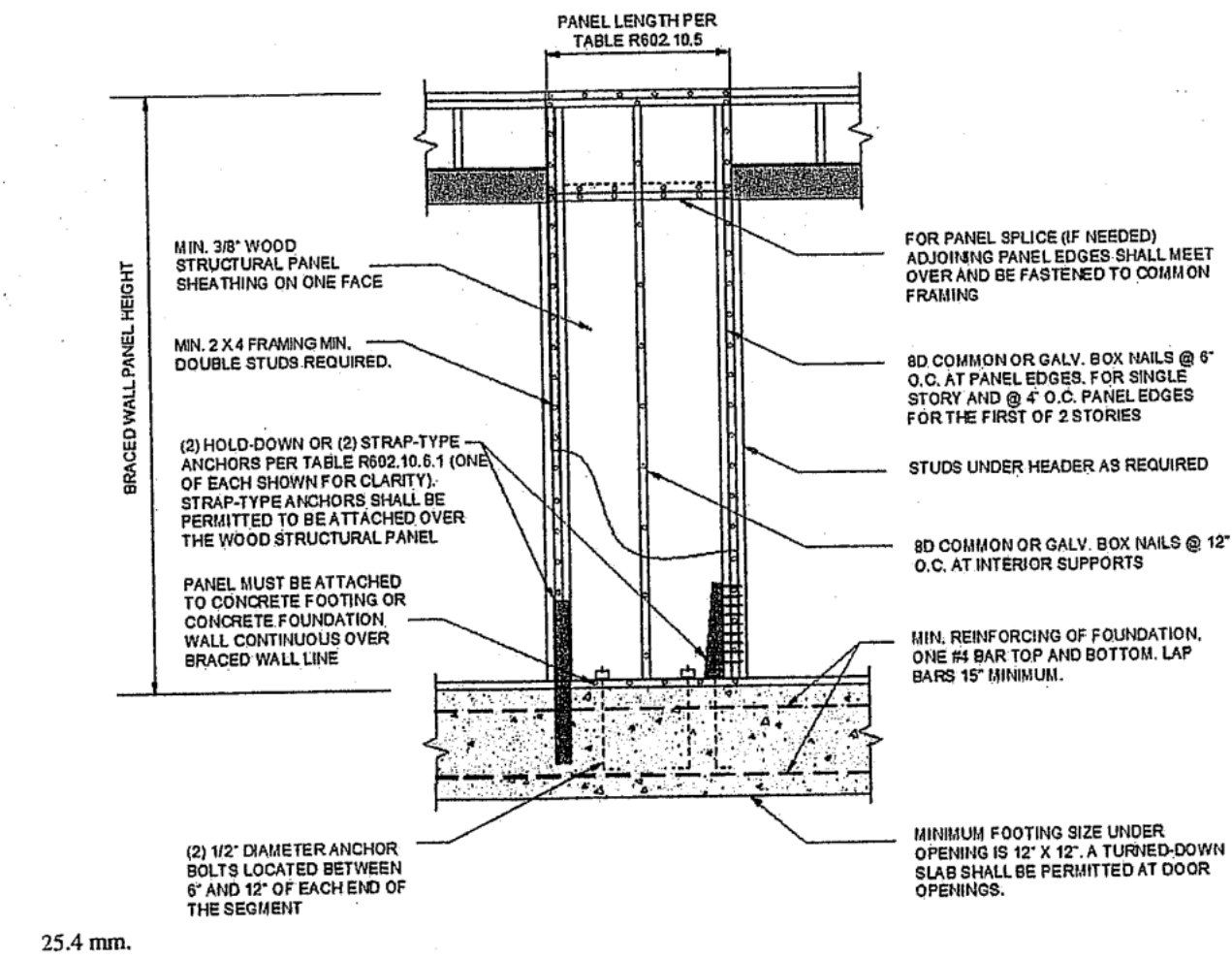
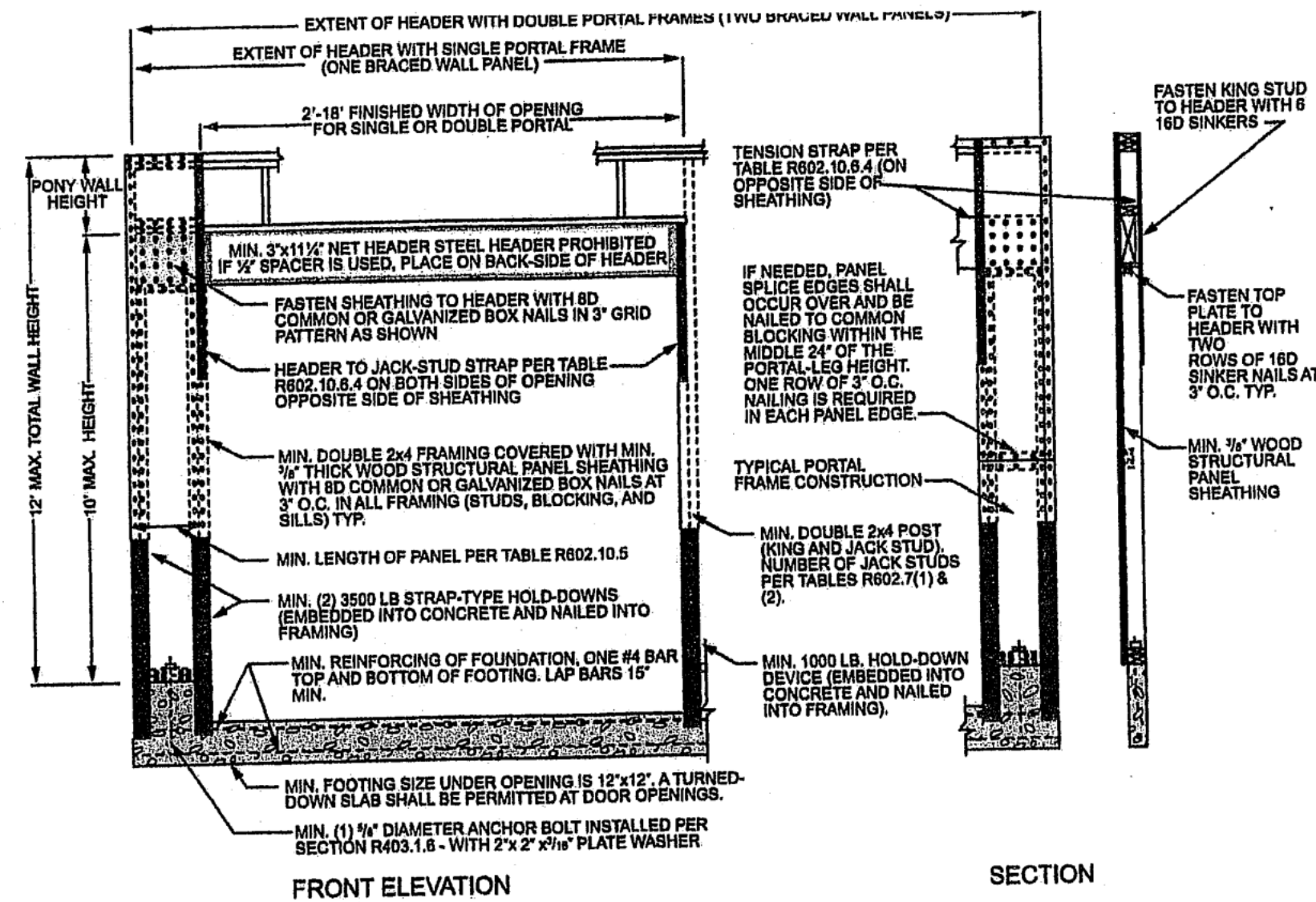


FIGURE R602.10.6.1  
METHOD ABW—ALTERNATE BRACED WALL PANEL



4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.2  
METHOD PFH—PORTAL FRAME WITH HOLD-DOWNS

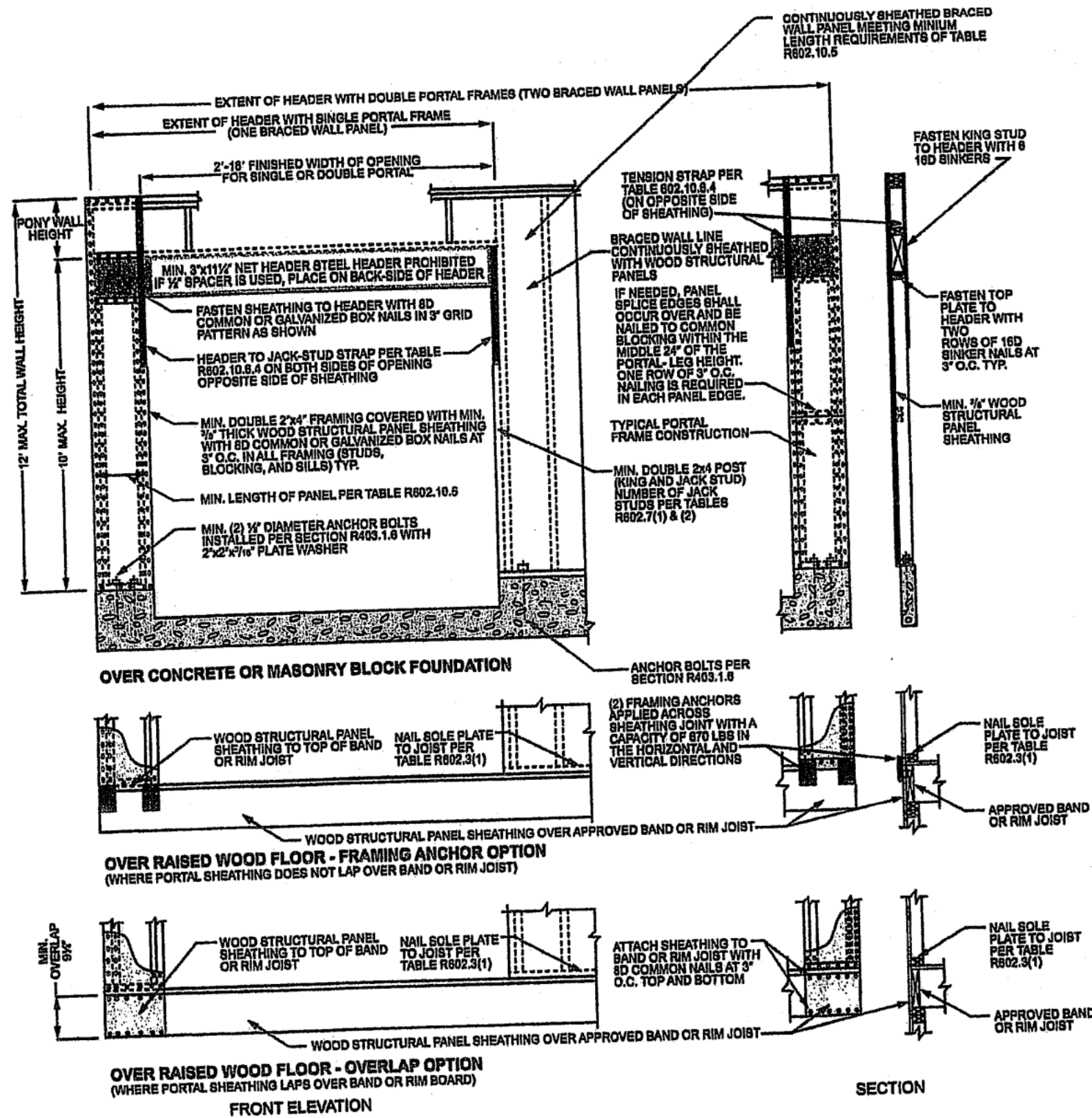
METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA <sup>a</sup>	
			Fasteners	Spacing
LIP Let-in-bracing	1 x 4 wood or approved metal straps at 45° to 60° angles for maximum 16\"/>		Wood: 2-8d common nails or 3-8d (2 1/2\"/>	Wood: per stud and top and bottom plates Metal: per manufacturer
DWB Diagonal wood boards	1/2\"/>		2-8d (2 1/2\"/>	Per stud
WSP Wood structural panel (See Section R604)	1/2\"/>		Exterior sheathing per Table R602.3(3) Interior sheathing per Table R602.3(1) or R602.3(2)	6\"/>
BV-WSP <sup>b</sup> Wood structural panels with stone or masonry veneer (See Section R602.10.6.5)	1/8\"/>	See Figure R602.10.6.5	8d common (2 1/2\"/>	4\"/>
SFB <sup>c</sup> Structural fiberboard sheathing	1/2\"/>		1 1/2\"/>	3\"/>
GB Gypsum board	1/2\"/>		Nails or screws per Table R702.3.5 for exterior locations Nails or screws per Table R702.3.5 for interior locations	For all braced wall panel locations: 7\"/>
PBS <sup>d</sup> Particleboard sheathing (See Section R605)	1/2\"/>		For 1/2\"/>	3\"/>
PCP <sup>e</sup> Portland cement plaster	See Section R703.7 for maximum 16\"/>		1 1/2\"/>	6\"/>
HPS <sup>f</sup> Hardboard panel siding	1/8\"/>		0.092\"/>	4\"/>
ABW <sup>g</sup> Alternate braced wall	1/2\"/>		See Section R602.10.6.1	See Section R602.10.6.1

METHOD (See Table R602.10.4)	MINIMUM LENGTH <sup>a</sup> (inches)					CONTRIBUTING LENGTH (inches)
	8 feet	9 feet	10 feet	11 feet	12 feet	
DWB, WSP, SFB, PBS, PCP, HPS, BV-WSP	48	48	48	53	58	Actual <sup>b</sup>
GB	48	48	48	53	58	Double sided = Actual Single sided = 0.5 x Actual
LIP	55	62	69	NP	NP	Actual <sup>b</sup>
ABW	SDC A, B and C, ultimate design wind speed < 140 mph	28	32	34	38	42
	SDC D <sub>1</sub> , D <sub>2</sub> and D <sub>3</sub> , ultimate design wind speed < 140 mph	32	32	34	NP	NP
CS-G	Adjacent clear opening height (inches)	24	27	30	33	36
CS-WSP, CS-SFB	≤ 64	24	27	30	33	36
	68	26	27	30	33	36
	72	27	27	30	33	36
	76	30	29	30	33	36
	80	32	30	30	33	36
	84	35	32	32	33	36
	88	38	35	33	33	36
	92	43	37	35	35	36
	96	48	41	38	36	36
	100	—	44	40	38	38
	104	—	49	43	40	39
	108	—	54	46	43	41
	112	—	—	50	45	43
	116	—	—	55	48	45
	120	—	—	60	52	48
	124	—	—	—	56	51
	128	—	—	—	61	54
	132	—	—	—	66	58
	136	—	—	—	—	62
	140	—	—	—	—	66
	144	—	—	—	—	72
METHOD (See Table R602.10.4)	Portal header height					48
	8 feet	9 feet	10 feet	11 feet	12 feet	
PFH	Supporting roof only	16	16	16	Note c	Note c
PFG	Supporting one story and roof	24	24	24	Note c	Note c
	Supporting one story and roof	24	24	27	30	Note d
CS-PF	SDC A, B and C	16	18	20	Note e	Note e
	SDC D <sub>1</sub> , D <sub>2</sub> and D <sub>3</sub>	16	18	20	Note e	Note e

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 mile per hour = 0.447 m/s.  
NP = Not Permitted.  
a. Linear interpolation shall be permitted.  
b. Use the actual length where it is greater than or equal to the minimum length.  
c. Maximum header height for PFH is 10 feet in accordance with Figure R602.10.6.2, but wall height shall be permitted to be increased to 12 feet with pony wall.  
d. Maximum header height for PFG is 10 feet in accordance with Figure R602.10.6.3, but wall height shall be permitted to be increased to 12 feet with pony wall.  
e. Maximum header height for CS-PF is 10 feet in accordance with Figure R602.10.6.4, but wall height shall be permitted to be increased to 12 feet with pony wall.

METHODS, MATERIAL	MINIMUM THICKNESS	FIGURE	CONNECTION CRITERIA <sup>a</sup>	
			Fasteners	Spacing
PFH Portal frame with hold-downs	1/2\"/>		See Section R602.10.6.2	See Section R602.10.6.2
PFG Portal frame at garage	1/4\"/>		See Section R602.10.6.3	See Section R602.10.6.3
Continuous Sheathing Methods	CS-WSP Continuously sheathed wood structural panel		Exterior sheathing per Table R602.3(3) Interior sheathing per Table R602.3(1) or R602.3(2)	6\"/>
	CS-G <sup>b</sup> Continuously sheathed wood structural panel adjacent to garage openings		See Method CS-WSP	See Method CS-WSP
	CS-PF <sup>c</sup> Continuously sheathed portal frame		See Section R602.10.6.4	See Section R602.10.6.4
	CS-SFB <sup>d</sup> Continuously sheathed structural fiberboard		1 1/2\"/>	3\"/>

For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm, 1 degree = 0.0175 rad, 1 pound per square foot = 0.048 N/m<sup>2</sup>, 1 mile per hour = 0.447 m/s.  
a. Adhesive attachment of wall sheathing, including Method GB, shall not be permitted in Seismic Design Categories C, D<sub>1</sub>, D<sub>2</sub>, and D<sub>3</sub>.  
b. Applies to panels next to garage door opening where supporting gable end wall or roof load only. Shall only be used on one wall of the garage. In Seismic Design Categories D<sub>1</sub>, D<sub>2</sub> and D<sub>3</sub>, roof covering dead load shall not exceed 3 psf.  
c. Garage openings adjacent to a Method CS-G panel shall be provided with a header in accordance with Table R602.7(1). A full-height clear opening shall not be permitted adjacent to a Method CS-G panel.  
d. Method CS-SFB does not apply in Seismic Design Categories D<sub>1</sub>, D<sub>2</sub>, and D<sub>3</sub>.  
e. Method applies to detached one- and two-family dwellings in Seismic Design Categories D<sub>1</sub> through D<sub>3</sub> only.



For SI: 1 inch = 25.4 mm, 1 foot = 304.8 mm.

FIGURE R602.10.6.4  
METHOD CS-PF—CONTINUOUSLY SHEATHED PORTAL FRAME PANEL CONSTRUCTION

BUILD IN ACCORDANCE WITH 2018  
INTERNATIONAL RESIDENTIAL CODE, LOCAL  
INTERNATIONAL ENERGY  
CONSERVATION CODE, USING ENERGY RATING  
INDEX OPTION (ERI/HERS)

FAIRVIEW CROSSING TOWNHOMES  
SMITHVILLE MO.

SCALE  
1/4" = 1-0

DATE  
9-12-24

PLAN NO.

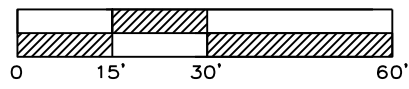
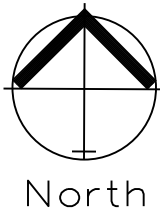
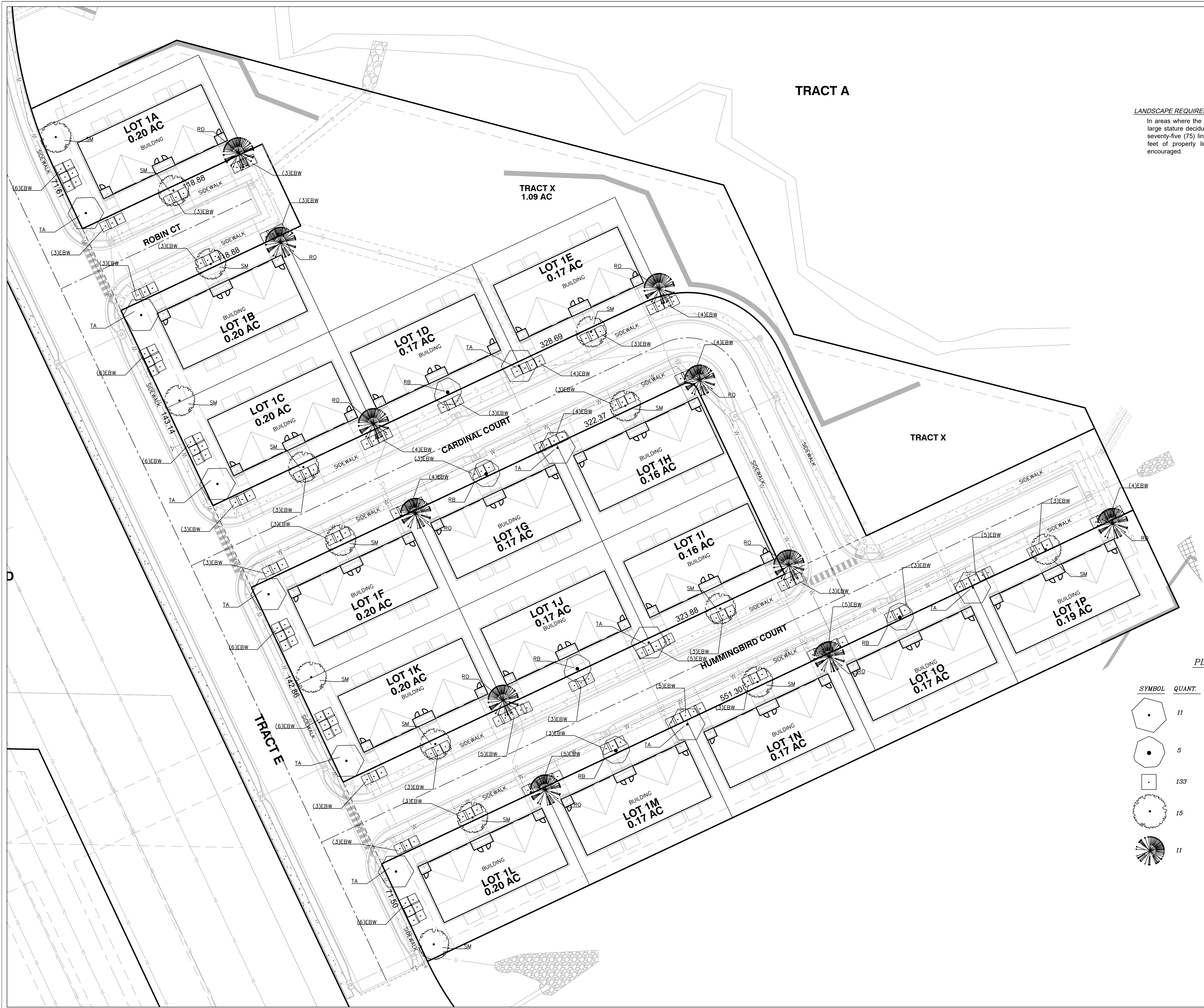
4299

SHEET NO.









LANDSCAPE PLAN  
SCALE: 1" = 30'

TRACT A

TRACT X  
1.09 AC

TRACT X

TRACT E

LANDSCAPE REQUIREMENT SSection 400.435(C)(3)

In areas where the building is adjacent to the street, there shall be one (1) large stature deciduous tree or two (2) ornamental flowering trees for every seventy-five (75) linear feet and three (3) shrubs for every forty (40) linear feet of property line. Attractive clustering of the required plantings is encouraged.

PLANTING GUIDE

SYMBOL	QUANT.	KEY	NAME	SIZE
	11	TA	AMERICAN BASSWOOD LINDEN TILIA AMERICANA	3" CAL
	5	RB	OKLAHOMA REDBUD CERCIS RENIFORMIS "OKLAHOMA"	3" CAL
	133	EBW	DWARF ENGLISH BOXWOOD BUXUS SEMPERVIRENS "SUFFRUTICOSA"	#3 POT
	15	SM	CADDO SUGAR MAPLE ACER SACCHARUM 'AUTUMN SPLENDOR'	3" CAL
	11	RO	RED OAK QUERCUS RUBRA	3" CAL

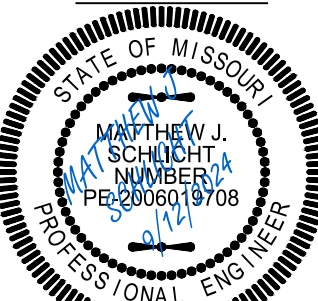


Professional Registration  
Missouri  
Engineering 2005002186-D  
Surveying 2005008319-D  
Kansas  
Engineering E-1695  
Surveying LS-218  
Oklahoma  
Engineering 6254  
Nebraska  
Engineering CA2821

FAIRVIEW CROSSINGS  
Smithville, Clay County, Missouri

Project:  
FAIRVIEW CROSSINGS  
SMITHVILLE  
Issue Date:  
September 25, 2024

Landscape Plan  
Construction Plans for:  
FAIRVIEW CROSSINGS  
Smithville, Clay County, Missouri



Matthew J. Schlicht  
MO PE 2006019708  
KS PE 19071  
OK PE 25226  
NE PE E-14335

REVISIONS