

rock fill.

- than the studding above.
- Beam pockets in concrete walls to have a min.  $\frac{1}{2}$ " air space on sides, and min. 3" of bearing for all beams and girders.
- post.
- be used on both sides of attachment to post.
- Excavate a min. of 18" below bottom of all beams.
- Install 15" x 7" closable FND vents in FND walls. Min 1 sq ft vented area for every 150 sq ft of crawl space.

Interior Braced Wall (above)

F1

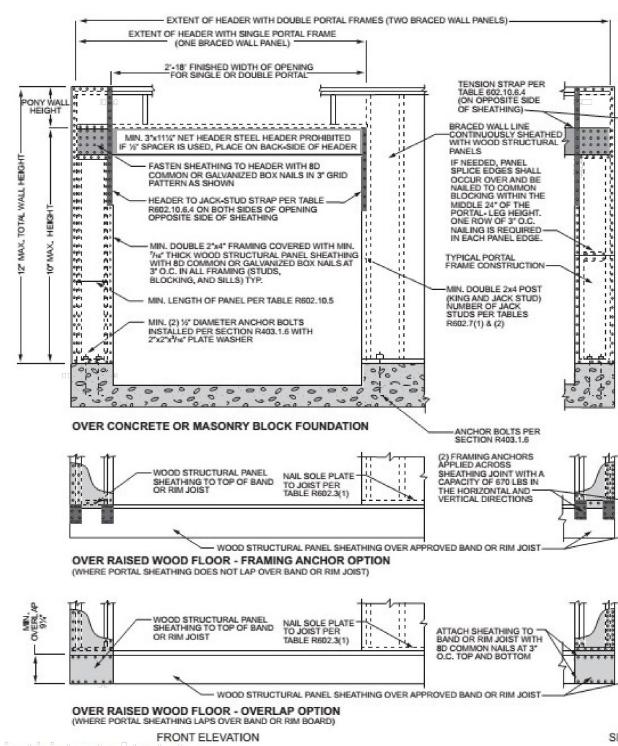
# Design Standards

Code: 2015 IRC Wind Speed: 135 mph Wind Exposure : B Snow Load: 25 PSF Seismic Design Category : D-1 Soil Bearing Pressure : 1500 PSF Soil Passive Bearing Pressure: 200 PSF

Bracing Method		Minimum	Details	Connection Criteria			
		Thickness	Dotailo	Fasteners	Spacing		
	CS-WSP Continuously Sheathed Wood Structural Panel	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	See APA Wall Bracing Calculations for individual wall details.	Exterior sheathing per Table R602.3(3)	6" Edges, 12" Field		
	CS-PF Continuously Sheathed Portal Frame	7/1" 16	See APA Wall Bracing Calculations, as well as details below.	See Section R602.10.6.4	See Section R602.10.6.4		
	GB ∑ Gypsum Board 1⁄2" Double-Sided		See APA Wall Bracing Calculations for individual wall details.	Nails of screws per Table R702.3.5 for interior locations.	For all braced wall panel locations: 7" edges, 7" field.		

### R602.10.6.4 Method CS-PF: Continuously sheathed portal frame.

Continuously sheathed portal frame braced wall panels shall be constructed in accordance with Figure R602.10.6.4 and Table R602.10.6.4 The number of continuously sheathed portal frame panels in a single braced wall line shall not exceed four.



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

	MAXIMUM PONY WALL HEIGHT (feet)	MAXIMUM TOTAL WALL HEIGHT (feet)	MAXIMUM OPENING WIDTH (feet)	TENSION STRAP CAPACITY REQUIRED (pounds) <sup>a, t</sup> Ultimate Design Wind Speed V <sub>ult</sub> (mph)					
MINIMUM WALL STUD FRAMING NOMINAL SIZE AND GRADE									
				110	115	130	110	115	130
	(1001)			Exposure B			Exposure C		
	0	• <b>10</b> . <sup>t</sup> °	18	1,000	1,000	1,,000	1,000	1,000	1,050
	Б	ີ <b>10</b>	9	1,000	1,000	1,000	1,000	1,000	1,750
	1″		<b>16</b> <sup>L</sup>	1,000	1,025	2,050	2,075	2,500	3,950
			18	1,000	1,275	2,375	2,400	2,850	DR
		<b>.10</b> °,	9	1,000	1,000	1,475	1,500	1,875	3,125
	2		16	1,775:	2,175	3,525	3, <mark>550</mark>	4,125	DR
2 × 4 No. 2 Grade			18 <sup>°</sup>	2,075	2,500	3,950	3,975	DR	DR
	2	v 12 ⊭°	9	1,150	1,500	2,650	2,675	3,175	DR
			.16	2,875	3,375	DR	DR	DR	DR
			18	3,425	3,975	DR	DR.	DR	DR
		<b>12</b> °	9	2,275	2,750	DR	DR	DR	DR
			12	3,225	3,775	DR	DR	DR	DR
	2	.1 <b>2</b> .	9	1,000	1,000	1,700	1,700	2,025	3,050
			16	1,825	2,150	3,225	3,225	3,675	DR
2 × 6 Stud Grade			18	2,200	2,550	3,725	3,750	DR	DR
	4 °	• <b>12</b> ເື	. 9	1,450	1,750	2,700	2,725	3,125	DR
			.16	2,050	2,400	DR	DR	DR	DR
			18	3,350	3,800	DR	DR	DR	DR

### TABLE R602.10.6.4 TENSION STRAP CAPACITY FOR RESISTING WIND PRESSURES PERPENDICULAR TO METHODS PFH, PFG AND CS-PF BRACED

### REQUIREMENTS FOR WOOD STRUCTURAL PANEL WALL SHEATHING USED TO RESIST WIND PRESSURES<sup>4, b, c</sup>

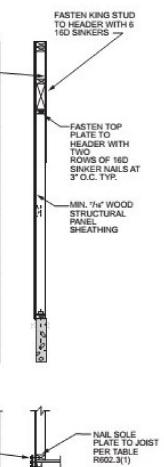
				MAXIMUM WALL	PANEL NA	ULTIMATE DESIGN WIND SPEED V <sub>ult</sub> (mph)			
, Size , c	Penetration (inches)		THICKNESS (inches)	(inches)	Edges (inches o.c.)	Field (inches o.c.)	Wind e	xposure c C	ategory D
6d Common (2.0" × 0,113")	ն <b>1.5</b>	.24/0	3/8	16 <sub>ల</sub> ి	6	f12	140	115	<b>110</b>
8d Common (2.5" × 0.131")	" <b>1.75</b> "	24/16	- 77 - 77 16,	16 <sup>°</sup> ∿ 241	6 ⊶6	ໍ12 ຳ12	170 140	140 115	135 110

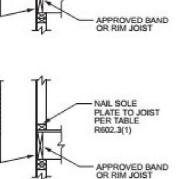
For SI: 1 inch = 25.4 mm, 1 mile per hour = 0.447 m/s.

Ta: Panel strength axis parallel or perpendicular to supports. Three-ply plywood sheathing with study spaced more than 16 inches on center shall be applied with panel strength axis perpendicular to supports b. Table is based on wind pressures acting toward and away from building surfaces in accordance with Section R301.2. Lateral bracing requirements shall be in accordance with Section R602.10 c. Wood structural panels with span ratings of Wall-16 or Wall-24 shall be permitted as an alternate to panels with a 24/0 span rating. Plywood siding rated 16 o.c. or 24 o.c. shall be permitted as an alternate to panels with a 24/16 span rating. Wall-16 and Plywood siding 16 o.c. shall be used with studs spaced not more than 16 inches on center.

For SI: 1 inch = 25.4 mm, 1 mile per hour = 0.447 m/s.

a. DR = Design Required. b. Straps shall be installed in accordance with manufacturer's recommendations.





SECTION

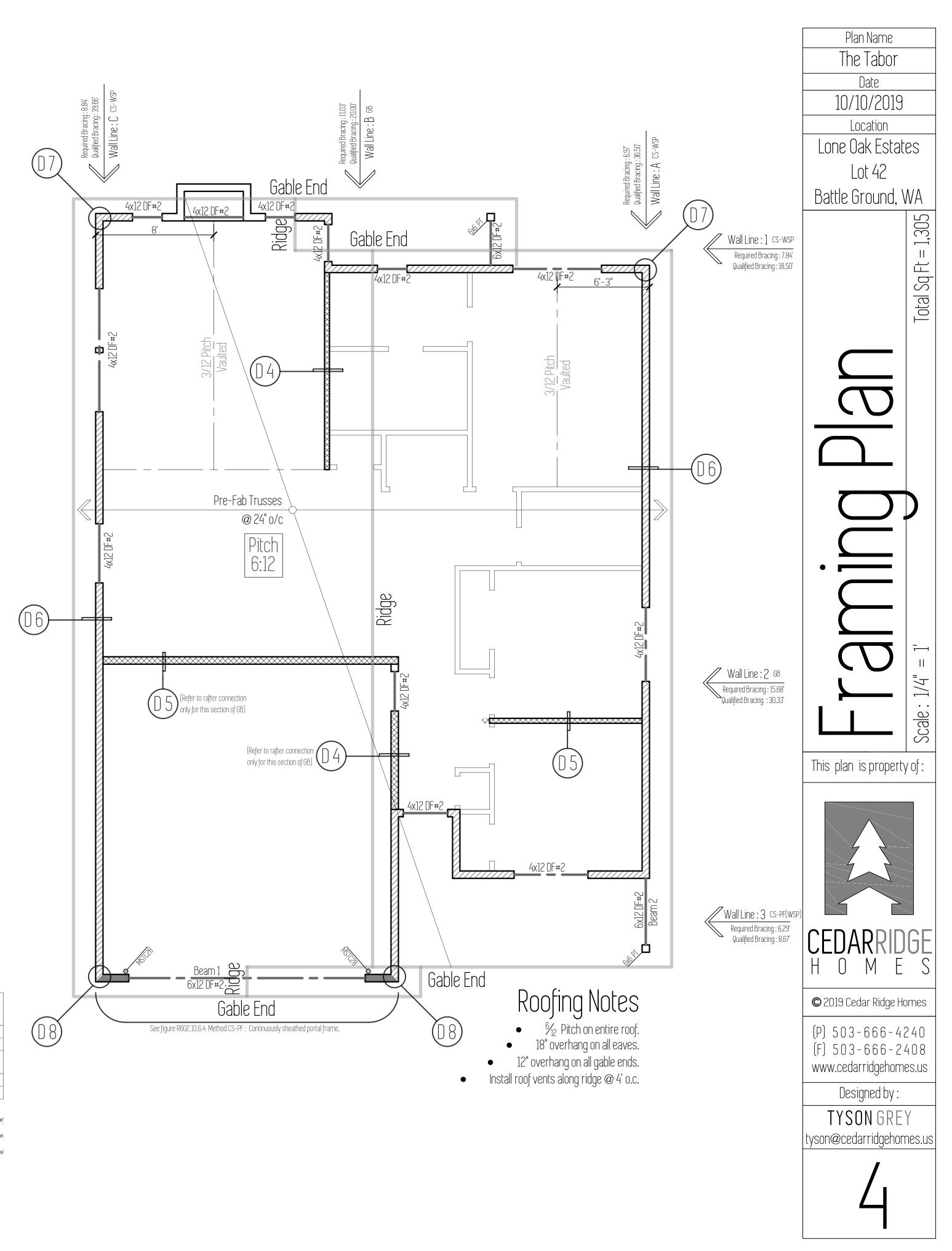
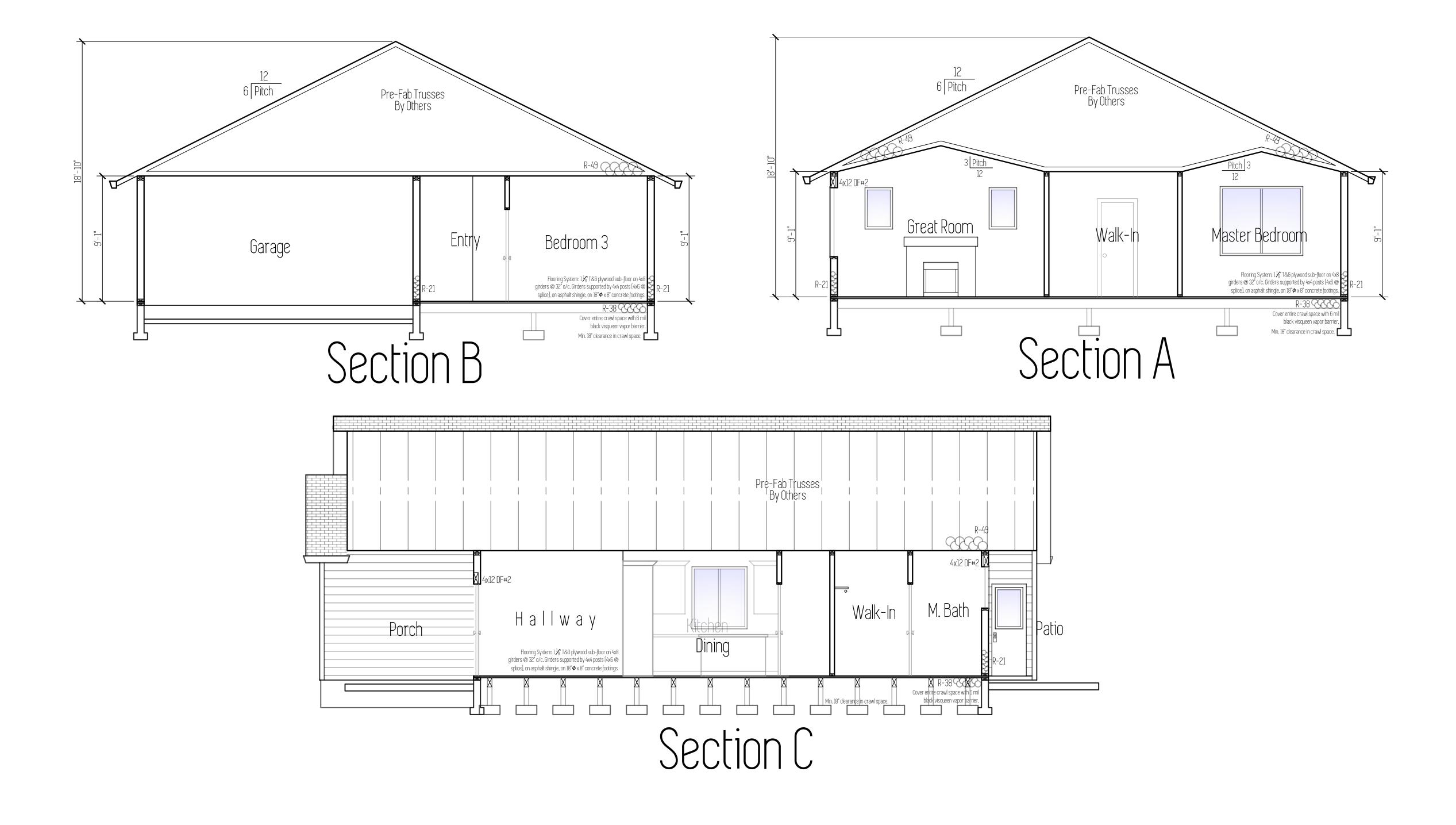
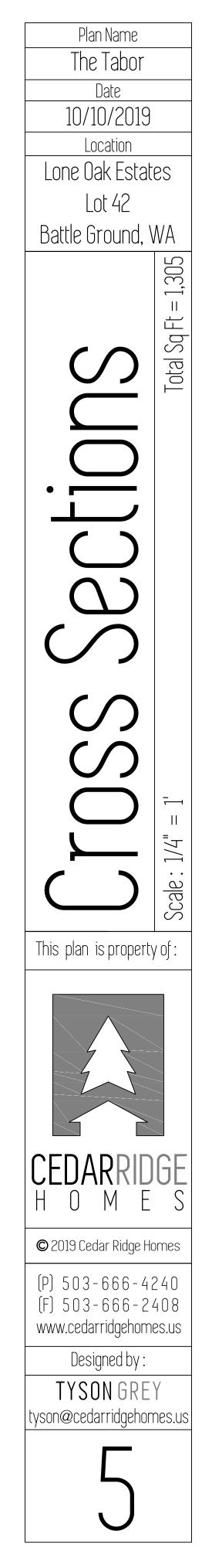


TABLE R602.3(3)





## General Notes

- All work is to comply with the 2015 International Residential Code (IRC). • The contractor is responsible to check the plans omissions prior to the start of construction.
- Structural specifications and drawings for this work have been prepared in accordance with generally accepted engineering practices to meet minimum requirements of the 2015
- Any written dimensions have precedence over scaled dimensions.

## Foundation Notes

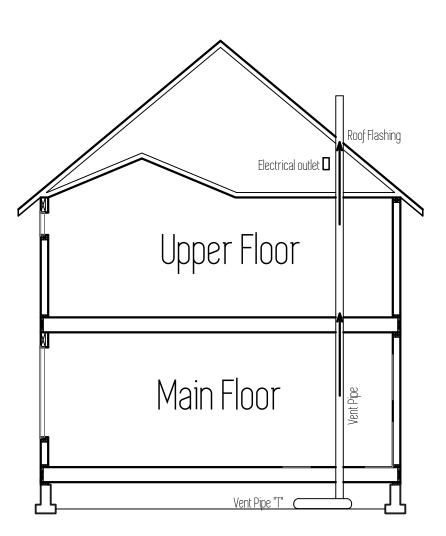
- Footings are to be placed on undisturbed, native soil with an assumed 1500 PSF.
- All slabs to be supported with a minimum of 4" compacted, crushed rock fill. • Beam pockets in concrete walls to a minimum  $\frac{1}{2}$ " air space on sides, and minimum 3" of bearing for all beams and girders.
- Cover entire crawl space with 6 mil black visqueen vapor barrier.
- Excavate minimum of 18" below bottom of all beams.
- Install 15"x 7" closable foundation vents in foundation walls. Minimum of 1 SqFt vented area for every 150 SqFt of crawl space.
- Foundation stem walls shall be provided with a minimum of one #4 bar within 12" of the top of the wall, and one #4 bar a minimum of 3" clearance from the bottom of the footing.
- A grounding electrode system shall be installed in foundations: One #4 horizontal bar not less than 3" from bottom of footing and not less than 20' long, one #4 vertical bar stubbed up at least 12" above the floor plate with a minimum 12" splice to the horizontal bar.
- Foundation anchor bolts shall be not less than  $\frac{1}{2}$ " diameter bolts embedded at least 7" into concrete, or masonry, spaced 48" o/c, with at least two bolts per plate and within 12" of ends and corners.
- Foundations wall shall extend at least 6" above grade.
- Drains shall be provided around all foundations enclosing habitable or usable space below grade.
- Waterproofing is required on the outside surface of below-grade foundation walls enclosing interior space.
- An 18"x 24" (minimum) access opening is required to all under-floor spaces.

## Radon Passive System

AF103.5.3 Vent Pipe

A plumbing tee or other approved connection shall be inserted horizontally beneath the sheeting and connected to a 3- or 4-inch-dia. fitting with a vertical vent pipe installed through the sheeting. The vent pipe shall be extended up through the building floors, terminate at least 12" above roof in a location at least 10' away from any window or other opening into the conditioned spaces of the building that is less than 2' below the exhaust point, and 10' from any window or other opening adjoining or adjacent buildings.

\*Install electrical outlet in attic at vent pipe for future fan.



# Framing Notes All stud spacing to be 16" o/c.

- Exterior wall : 2x6 DF#2.
- Interior wall : 2x4 DF#2.

- applies for roof sheathing.)
- bottom of stair runs.

- equivalent.
- member's span.
- the ends.
- top or bottom, or to any other hole or notch.
- professional.

- Trusses shall be braced per manufacturer.

• Walls shall be capped with a double top plate to provide overlapping at corners and intersections with bearing partitions.

• Anchor bolts embedded in foundation wall and fastened to sill plate 48" o/c.

• Sheathing: Wall sheathing to be  $\frac{15}{32}$ " APA rated CDX or OSB. All panel edges shall be backed by wall stud. Nail panels with 8d nails at 6" o/c along edges and 12" o/c in field. (Same

• Fireblocking shall be installed in concealed spaces of wood construction; in walls at ceiling and floor levels, and not more than 10' horizontally; and intersections between vertical and horizontal spaces such as dropped ceilings and soffits; between stair stringers at top and

• Fireblocking shall consist of 2" nominal lumber,  $\frac{1}{2}$ " gypsum board, mineral wool or glass fiber insulation securely retained, or other approved material. • Draftstopping shall be in concealed floor-ceiling construction parallel to the framing

members so that the area does not exceed 1,000 SqFt. • Fasteners and connectors in contact with P.T. wood shall be hot dipped galvanized steel or

• Notches in sawn lumber joists, rafters, and beams shall not exceed  $\frac{1}{6}$  of the member's depth, not longer than  $\frac{1}{3}$  of the member's depth, and not located in the middle  $\frac{1}{3}$  of the

• Notches at ends shall not exceed  $\frac{1}{4}$  of the member's depth. • Tension side of members greater than 4" nominal thickness shall not be notched except at

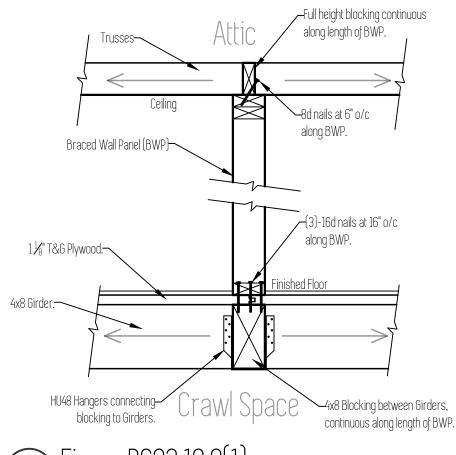
• Hole diameters shall not exceed  $\frac{1}{3}$  of the member's depth, and not be closer than 2" to the

• Cuts, notches or holes are not permitted in engineered wood products, except where permitted by the product manufacturer or where designed by a registered design

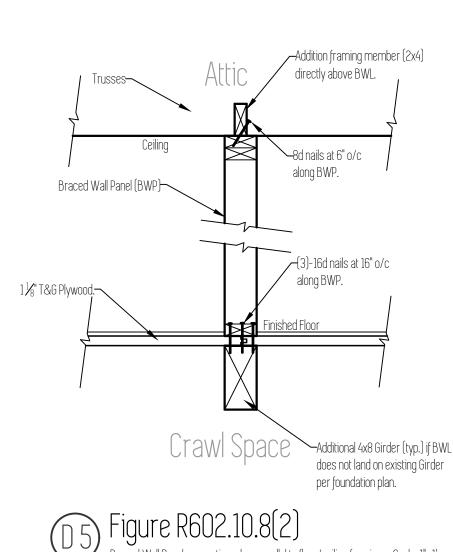
• Top plates of bearing walls notched or drilled more than 50% of their width shall have a minimum 16 gauge,  $1\frac{1}{2}$ " wide galvanized strap installed at the opening.

• Straps shall extend 6" minimum past the opening with (8)-10d nails on each side. • Engineered truss drawings shall be submitted for review and approval prior to erection.

• Tie-downs shall be installed to provide a continuous load path from trusses to foundation.







Braced Wall Panel connection when parallel to floor/ceiling framing. Scale: 1"=1'

