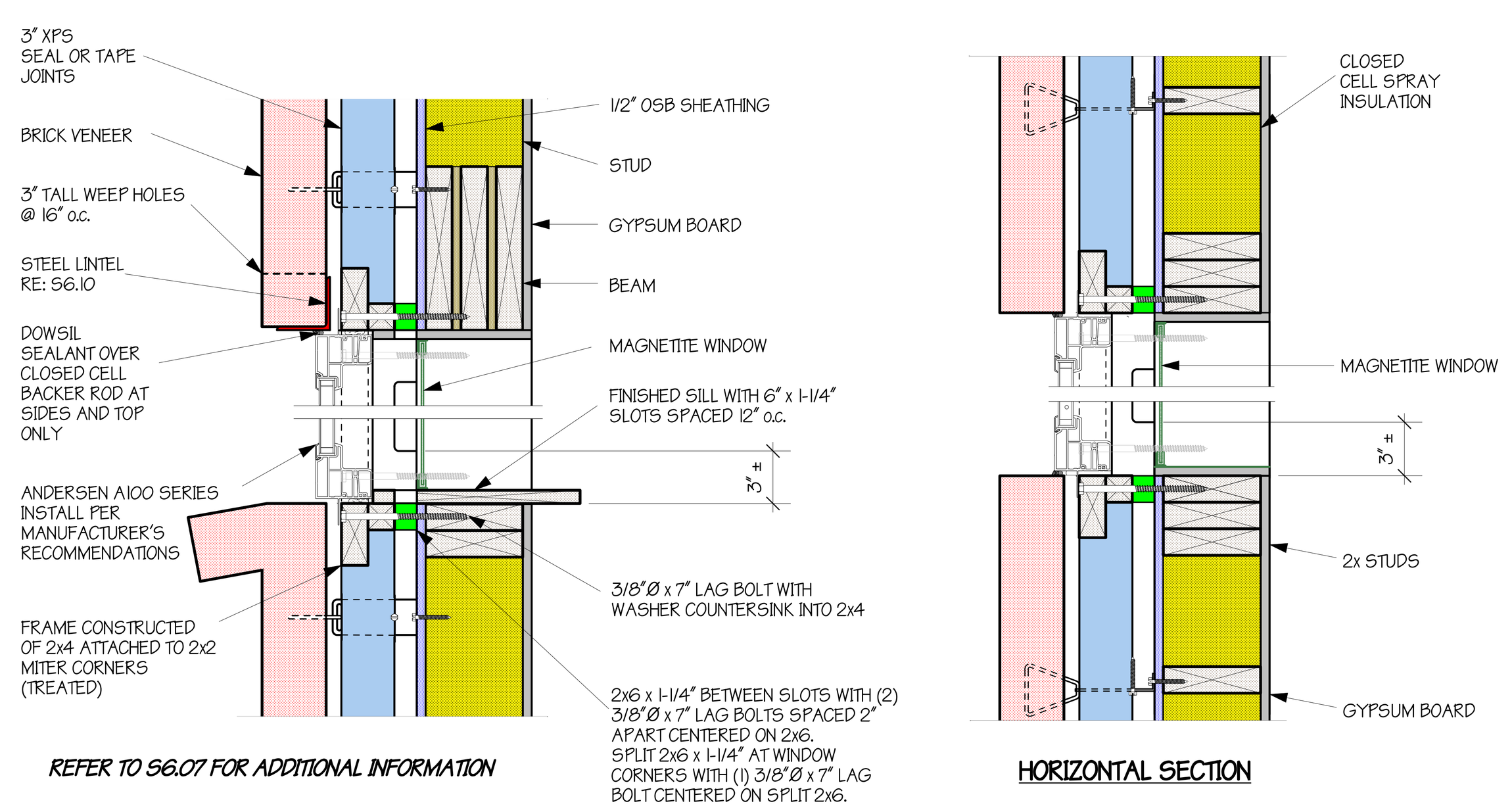
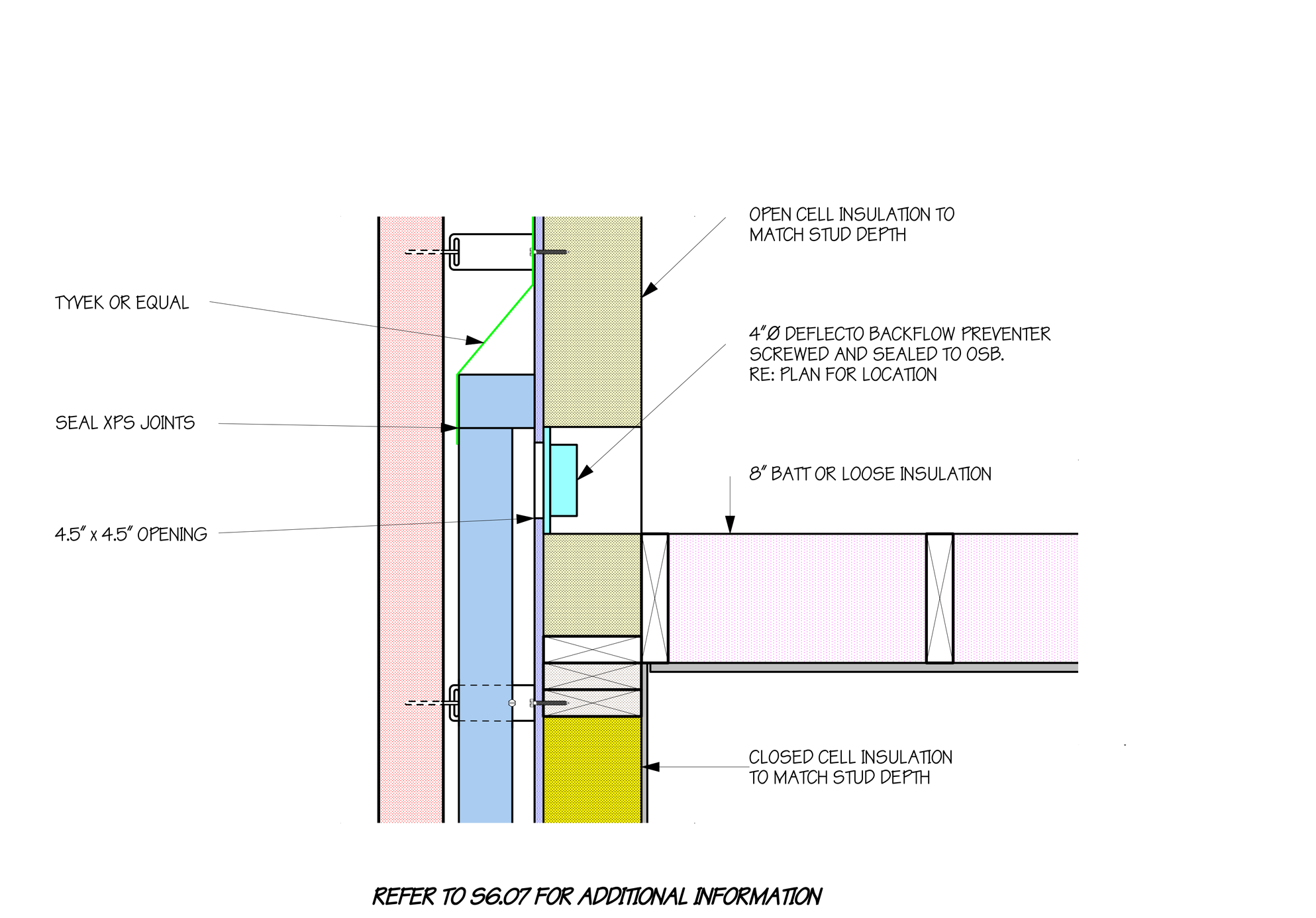
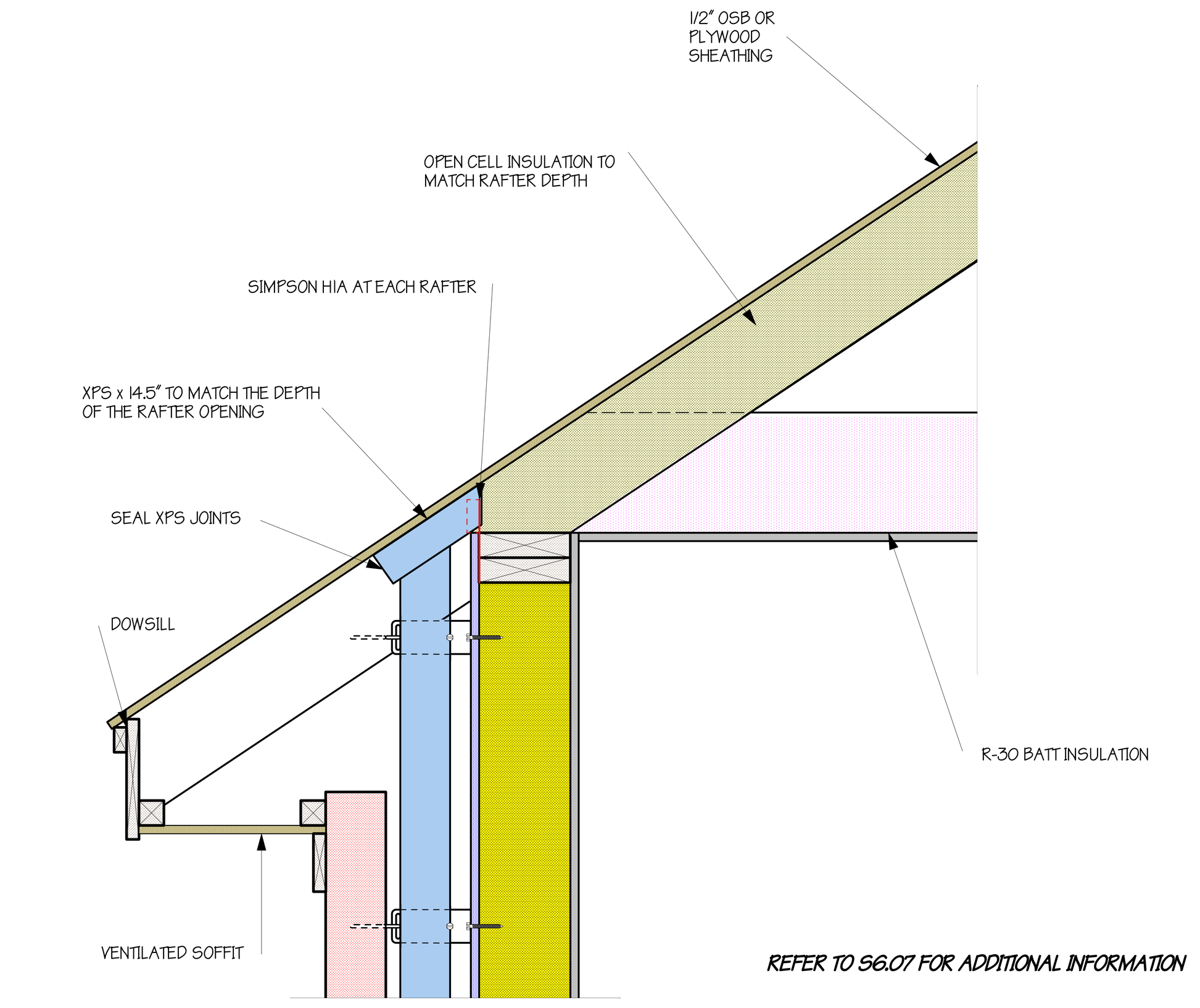


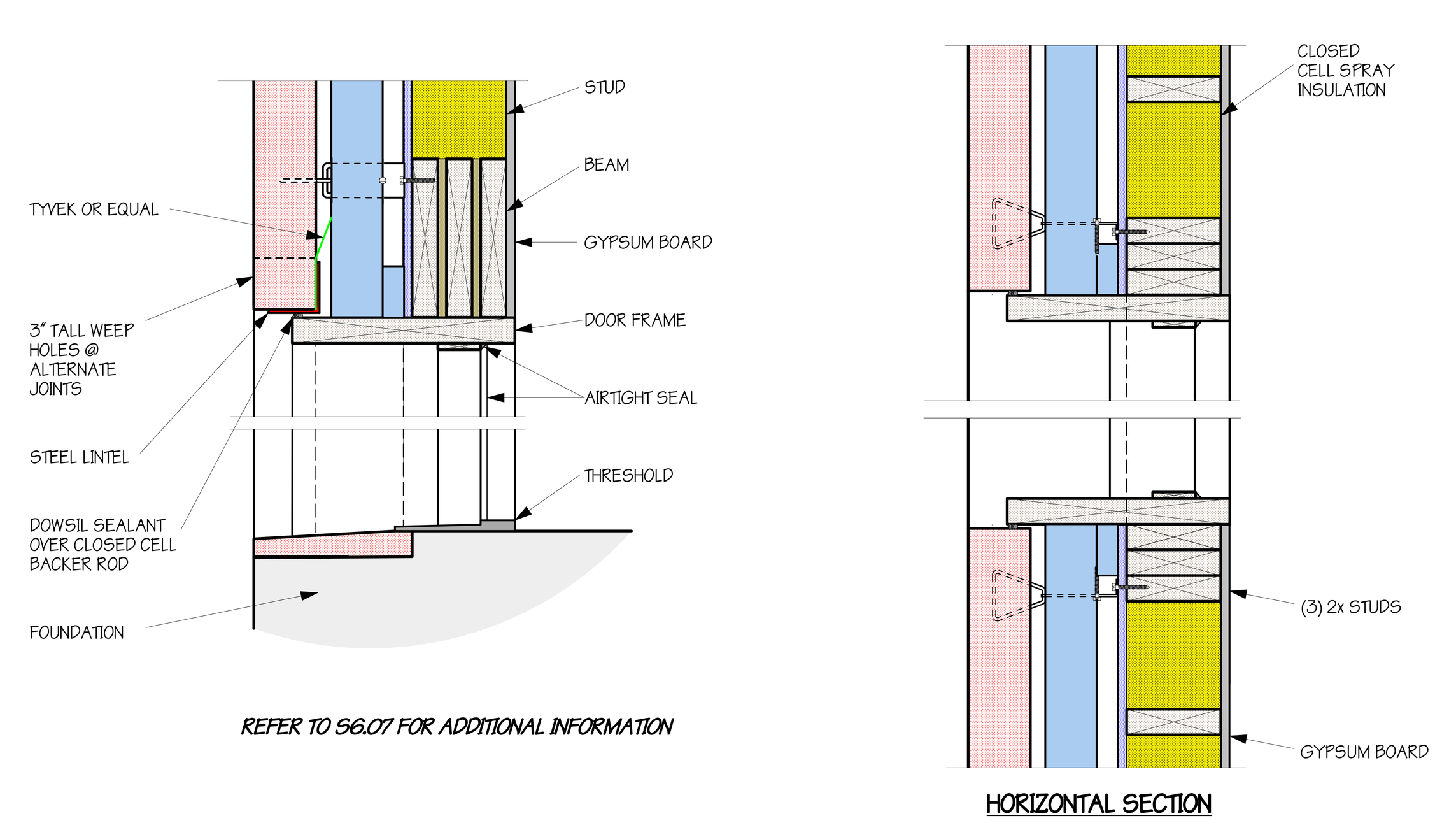
WINDOW AT WALL S6.01
SCALE 1-1/2" = 1'-0"



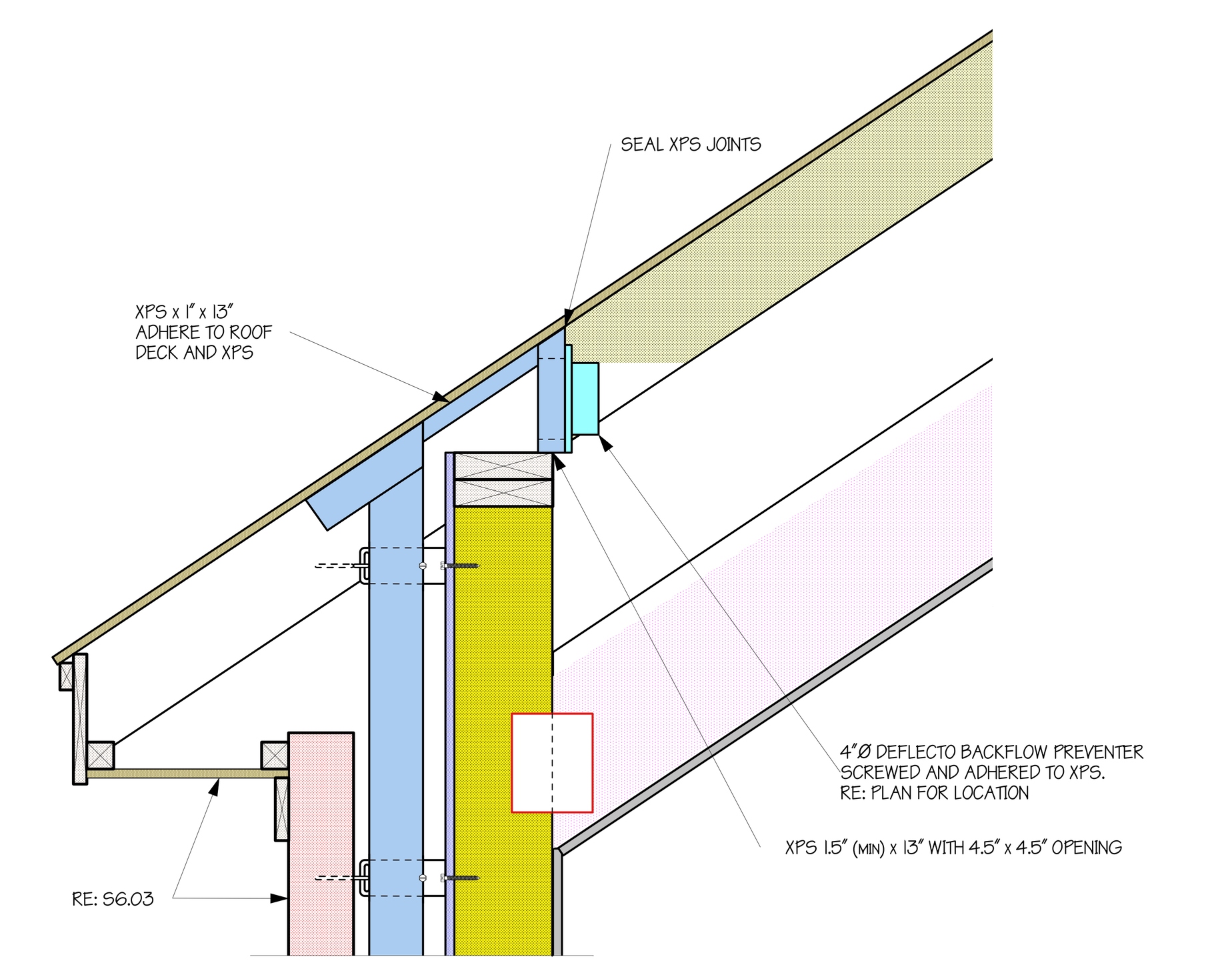
GABLE ROOF AT WALL S6.02
SCALE 1-1/2" = 1'-0"



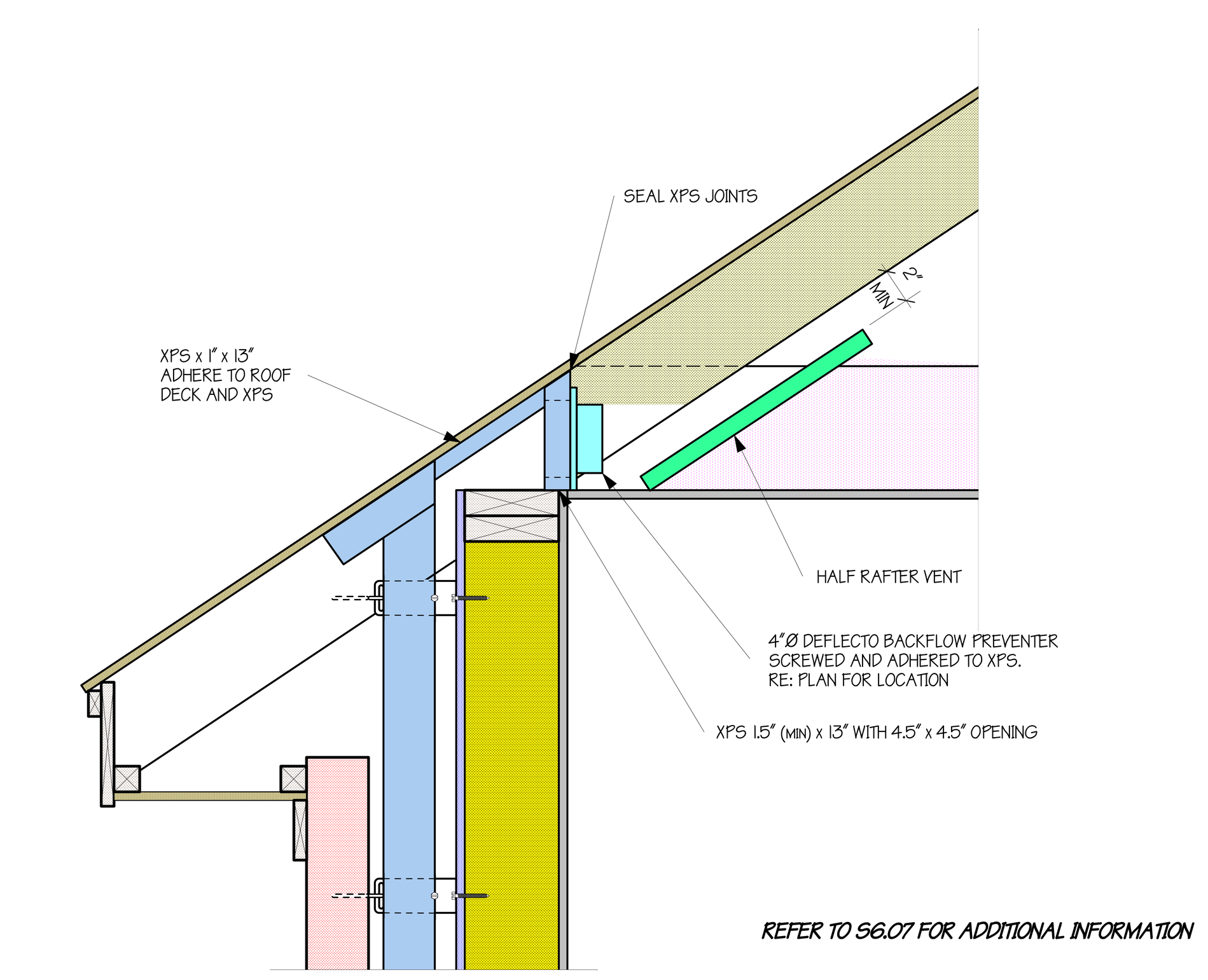
HIP ROOF AT WALL S6.03
SCALE 1-1/2" = 1'-0"



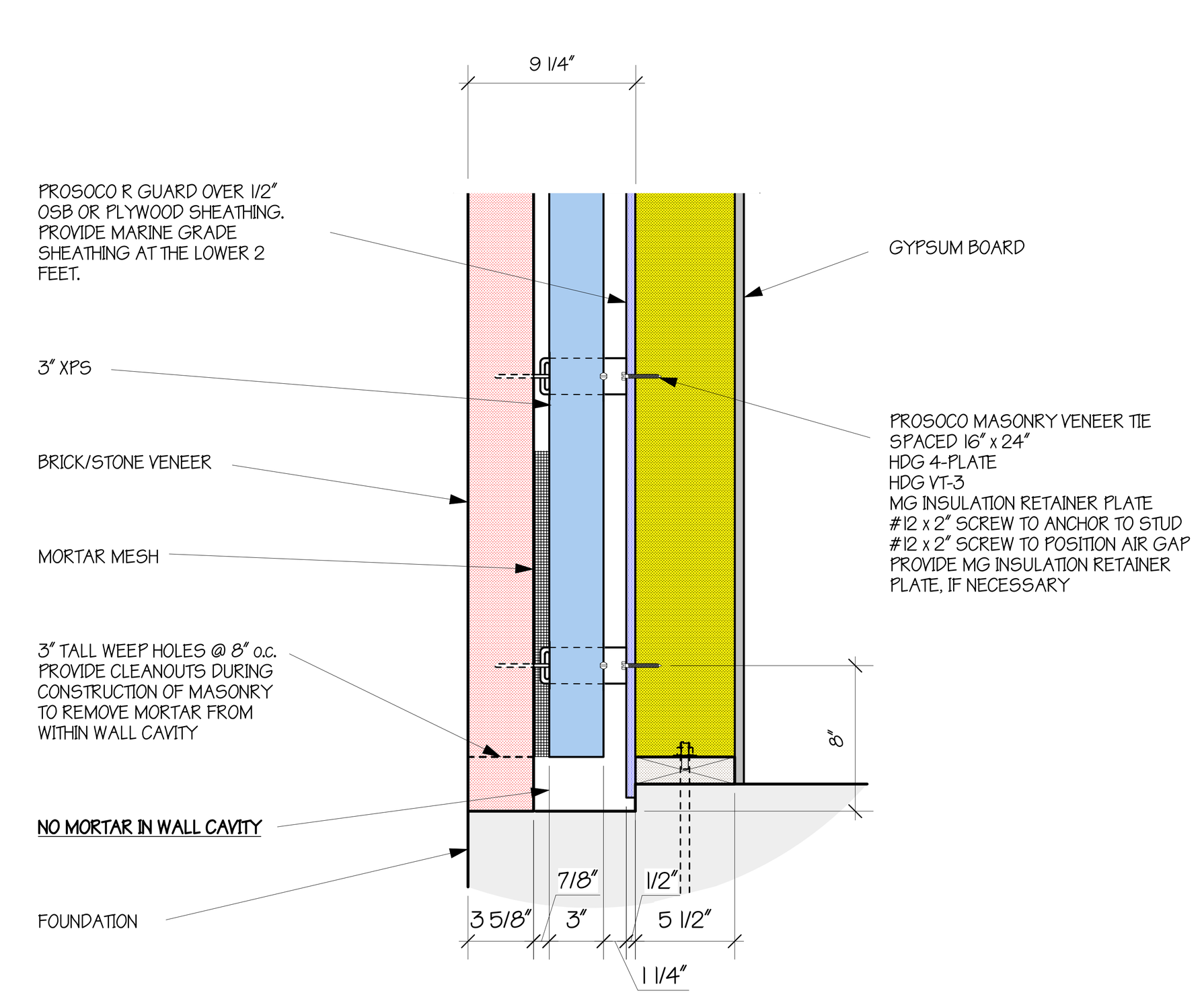
DOOR AT WALL S6.04
SCALE 1-1/2" = 1'-0"



GREAT ROOM AND TALL GARAGE ROOF AT WALL - VENTILATION PLENUM S6.05
SCALE 1-1/2" = 1'-0"



HIP ROOF AT WALL - VENTILATION PLENUM S6.06
SCALE 1-1/2" = 1'-0"



WALL AT FOUNDATION S6.07
SCALE 1-1/2" = 1'-0"

NAILING SCHEDULE
(UNLESS NOTED OTHERWISE)

TABLE R602.3(1)
FASTENING SCHEDULE

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER[a, b, c]	SPACING AND LOCATION
Roof			
1	Blocking between ceiling joists or rafters to top plate	4-8d box ($2\frac{1}{2}$″ × 0.113″) or 3-8d common ($2\frac{1}{2}$″ × 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 ($2\frac{1}{2}$″ × 0.113″); or 3-8d common ($2\frac{1}{2}$″ × 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 ($3\frac{1}{2}$″ × 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 $1\frac{1}{4}$″ × 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 ($3\frac{1}{2}$″ × 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[i]
7	Roof rafters to ridge, valley or hip rafters or roof rafter to minimum 2″ ridge beam	4-16d ($3\frac{1}{2}$″ × 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 $3\frac{1}{2}$″ × 0.135″); or 2-16d common ($3\frac{1}{2}$″ × 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 ($3\frac{1}{2}$″ × 0.162″)	24″ o.c. face nail
		10d box (3″ × 0.128″); or 3″ × 0.131″ nails	16″ o.c. face nail
9	Stud to stud and abutting studs at intersecting wall corners (at braced wall panels)	16d box ($3\frac{1}{2}$″ × 0.135″); or 3″ × 0.131″ nails	12″ o.c. face nail
		16d common ($3\frac{1}{2}$″ × 0.162″)	16″ o.c. face nail
10	Built-up header (2″ to 2″ header with $\frac{1}{2}$″ spacer)	16d common ($3\frac{1}{2}$″ × 0.162″)	16″ o.c. each edge face nail
		16d box ($3\frac{1}{2}$″ × 0.135″)	12″ o.c. each edge face nail
11	Continuous header to stud	5-8d box ($2\frac{1}{2}$″ × 0.113″); or 4-8d common ($2\frac{1}{2}$″ × 0.131″); or 4-10d box (3″ × 0.128″)	Toe nail
12	Top plate to top plate	16d common ($3\frac{1}{2}$″ × 0.162″)	16″ o.c. face nail
		10d box (3″ × 0.128″); or 3″ × 0.131″ nails	12″ o.c. face nail
13	Double top plate splice	8-16d common ($3\frac{1}{2}$″ × 0.162″); or 12-16d box ($3\frac{1}{2}$″ × 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)

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER[a, b, c]	SPACING AND LOCATION
14	Bottom plate to joist, rim joist, band joist or blocking (not at braced wall panels)	16d common ($3\frac{1}{2}$″ × 0.162″)	16″ o.c. face nail
		16d box ($3\frac{1}{2}$″ × 0.135″); or 3″ × 0.131″ nails	12″ o.c. face nail
15	Bottom plate to joist, rim joist, band joist or blocking (at braced wall panel)	3-16d box ($3\frac{1}{2}$″ × 0.135″); or 2-16d common ($3\frac{1}{2}$″ × 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 ($2\frac{1}{2}$″ × 0.113″); or 3-16d box ($3\frac{1}{2}$″ × 0.135″); or 4-8d common ($2\frac{1}{2}$″ × 0.131″); or 4-10d box (3″ × 0.128″); or 4-3″ × 0.131″ nails	Toe nail
		3-16d box ($3\frac{1}{2}$″ × 0.135″); or 2-16d common ($3\frac{1}{2}$″ × 0.162″); or 3-10d box (3″ × 0.128″); or 3-3″ × 0.131″ nails	End nail
17	Top plates, laps at corners and intersections	3-10d box (3″ × 0.128″); or 2-16d common ($3\frac{1}{2}$″ × 0.162″); or 3-3″ × 0.131″ nails	Face nail
18	1″ brace to each stud and plate	3-8d box ($2\frac{1}{2}$″ × 0.113″); or 2-8d common ($2\frac{1}{2}$″ × 0.131″); or 2-10d box (3″ × 0.128″); or 2 staples $1\frac{3}{4}$″	Face nail
19	1″ × 6″ sheathing to each bearing	3-8d box ($2\frac{1}{2}$″ × 0.113″); or 2-8d common ($2\frac{1}{2}$″ × 0.131″); or 2-10d box (3″ × 0.128″); or 2 staples, 1″ crown, 16 ga., $1\frac{3}{4}$″ long	Face nail
20	1″ × 8″ and wider sheathing to each bearing	3-8d box ($2\frac{1}{2}$″ × 0.113″); or 3-8d common ($2\frac{1}{2}$″ × 0.131″); or 3-10d box (3″ × 0.128″); or 3 staples, 1″ crown, 16 ga., $1\frac{3}{4}$″ long	Face nail
		Wider than 1″ × 8″ 4-8d box ($2\frac{1}{2}$″ × 0.113″); or 3-8d common ($2\frac{1}{2}$″ × 0.131″); or 3-10d box (3″ × 0.128″); or 4 staples, 1″ crown, 16 ga., $1\frac{3}{4}$″ long	
Floor			
21	Joist to sill, top plate or girder	4-8d box ($2\frac{1}{2}$″ × 0.113″); or 3-8d common ($2\frac{1}{2}$″ × 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 ($2\frac{1}{2}$″ × 0.113″)	4″ o.c. toe nail
		8d common ($2\frac{1}{2}$″ × 0.131″); or 10d box (3″ × 0.128″); or 3″ × 0.131″ nails	6″ o.c. toe nail
23	1″ × 6″ subfloor or less to each joist	3-8d box ($2\frac{1}{2}$″ × 0.113″); or 2-8d common ($2\frac{1}{2}$″ × 0.131″); or 3-10d box (3″ × 0.128″); or 2 staples, 1″ crown, 16 ga., $1\frac{3}{4}$″ long	Face nail

a. Nails are smooth-common, box or deformed shanks except where otherwise stated. Nails used for framing and sheathing connections shall have minimum average bending yield strengths as shown: 80 ksi for shank diameter of 0.192 inch (20d common nail), 90 ksi for shank diameters larger than 0.142 inch but not larger than 0.177 inch, and 100 ksi for shank diameters of 0.142 inch or less.
b. Staples are 16 gage wire and have a minimum $\frac{7}{16}$-inch on diameter crown width.
c. Nails shall be spaced at not more than 6 inches on center at all supports where spans are 48 inches or greater.
d. Four-foot by 8-foot or 4-foot by 9-foot panels shall be applied vertically.
e. Spacing of fasteners not included in this table shall be based on Table R602.3(2).
f. For wood structural panel roof sheathing attached to gable end roof framing and to intermediate supports within 48 inches of roof edges and ridges, nails shall be spaced at 6 inches on center where the ultimate design wind speed is less than 130 mph and shall be spaced 4 inches on center where the ultimate design wind speed is 130 mph or greater but less than 140 mph.
g. Gypsum sheathing shall conform to ASTM C1396 and shall be installed in accordance with GA 253. Fiberboard sheathing shall conform to ASTM C208.
h. Spacing of fasteners on floor sheathing panel edges applies to panel edges supported by framing members and required blocking and at floor perimeters only. Spacing of fasteners on roof sheathing panel edges applies to panel edges supported by framing members and required blocking. Blocking of roof or floor sheathing panel edges perpendicular to the framing members need not be provided except as required by other provisions of this code. Floor perimeter shall be supported by framing members or solid blocking.
i. Where a rafter is fastened to an adjacent parallel ceiling joist in accordance with this schedule, provide two toe nails on one side of the rafter and toe nails from the ceiling joist to top plate in accordance with this schedule. The toe nail on the opposite side of the rafter shall not be required.
j. RSRS-01 is a Roof Sheathing Ring Shank nail meeting the specifications in ASTM F1667.

ITEM	DESCRIPTION OF BUILDING ELEMENTS	NUMBER AND TYPE OF FASTENER[a, b, c]	SPACING AND LOCATION	
Floor				
24	2″ subfloor to joist or girder	3-16d box ($3\frac{1}{2}$″ × 0.135″); or 2-16d common ($3\frac{1}{2}$″ × 0.162″)	Blind and face nail	
25	2″ planks (plank & beam—floor & roof)	3-16d box ($3\frac{1}{2}$″ × 0.135″); or 2-16d common ($3\frac{1}{2}$″ × 0.162″)	At each bearing, face nail	
26	Band or rim joist to joist	3-16d common ($3\frac{1}{2}$″ × 0.162″) 4-10 box (3″ × 0.128″), or 4-3″ × 0.131″ nails; or 4-3″ × 14 ga. staples, $\frac{7}{16}$″ 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	24″ o.c. face nail at top and bottom staggered on opposite sides	
		And: 2-20d common (4″ × 0.192″); or 3-10d box (3″ × 0.128″); or 3-3″ × 0.131″ nails	Face nail at ends and at each splice	
28	Ledger strip supporting joists or rafters	4-16d box ($3\frac{1}{2}$″ × 0.135″); or 3-16d common ($3\frac{1}{2}$″ × 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 ($2\frac{1}{2}$″ × 0.131″; or 2-3″ × 0.131″) nails	Each end, toe nail	
ITEM	**DESCRIPTION OF BUILDING ELEMENTS**	**NUMBER AND TYPE OF FASTENER[a, b, c]**	**SPACING OF FASTENERS**	
			Edges (inches)[h]	**Intermediate supports[c, e] (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	$\frac{3}{8}$″ – $\frac{1}{2}$″	6d common (2″ × 0.113″) nail (subfloor, wall)[i] 8d common ($2\frac{1}{2}$″ × 0.131″) nail (roof); or RSRS-01 ($2\frac{3}{8}$″ × 0.113") nail (roof)[j]	6	12[f]
31	$\frac{19}{32}$″ – 1″	8d common nail ($2\frac{1}{2}$″ × 0.131″); or RSRS-01; ($2\frac{3}{8}$″ × 0.113") nail (roof)[j]	6	12[f]
32	$1\frac{1}{8}$″ – $1\frac{1}{4}$″	10d common (3″ × 0.148″) nail; or 8d ($2\frac{1}{2}$″ × 0.131″) deformed nail	6	12
Other wall sheathing[g]				
33	$\frac{1}{2}$″ structural cellulosic fiberboard sheathing	$1\frac{1}{2}$″ galvanized roofing nail, $\frac{7}{16}$″ head diameter, or $1\frac{1}{4}$″ long 16 ga. staple with $\frac{7}{16}$″ or 1″ crown	3	6
34	$\frac{25}{32}$″ structural cellulosic fiberboard sheathing	$1\frac{3}{4}$″ galvanized roofing nail, $\frac{7}{16}$″ head diameter, or $1\frac{1}{2}$″ long 16 ga. staple with $\frac{7}{16}$″ or 1″ crown	3	6
35	$\frac{1}{2}$″ gypsum sheathing[d]	$1\frac{1}{2}$″ galvanized roofing nail; staple galvanized, $1\frac{1}{2}$″ long; $1\frac{1}{4}$″ screws, Type W or S	7	7
36	$\frac{5}{8}$″ gypsum sheathing[d]	$1\frac{3}{4}$″ galvanized roofing nail; staple galvanized, $1\frac{5}{8}$″ long; $1\frac{5}{8}$″ screws, Type W or S	7	7
Wood structural panels, combination subfloor underlayment to framing				
37	$\frac{3}{4}$″ and less	6d deformed (2″ × 0.120″) nail; or 8d common ($2\frac{1}{2}$″ × 0.131″) nail	6	12
38	$\frac{7}{8}$″ – 1″	8d common ($2\frac{1}{2}$″ × 0.131″) nail; or 8d deformed ($2\frac{1}{2}$″ × 0.120″) nail	6	12
39	$1\frac{1}{8}$″ – $1\frac{1}{4}$″	10d common (3″ × 0.148″) nail; or 8d deformed ($2\frac{1}{2}$″ × 0.120″) nail	6	12

NAILING SCHEDULE S6.09

LINTEL SCHEDULE

CLEAR SPAN	LINTEL
5'-0" OR LESS	L 3-1/2 x 3-1/2 x 5/16
5'-0" TO 7'-0"	L 4 x 3-1/2 x 5/16
7'-0" TO 8'-0"	L 5 x 3-1/2 x 5/16

1. PROVIDE 8" MINIMUM BEARING EACH END OF LINTEL
2. PROVIDE AN END DAM EACH END OF LINTEL TO PROHIBIT MOISTURE FLOW INTO THE WALL CAVITY

STEEL LINTEL SCHEDULE S6.10

FRAMING AND STRUCTURAL VENTILATION DETAILS

Vacek LLC
Structural & Architectural Engineering

VACEK RESIDENCE
25048 CHISOS BENDE
MAGNOLIA, TEXAS

S6.0