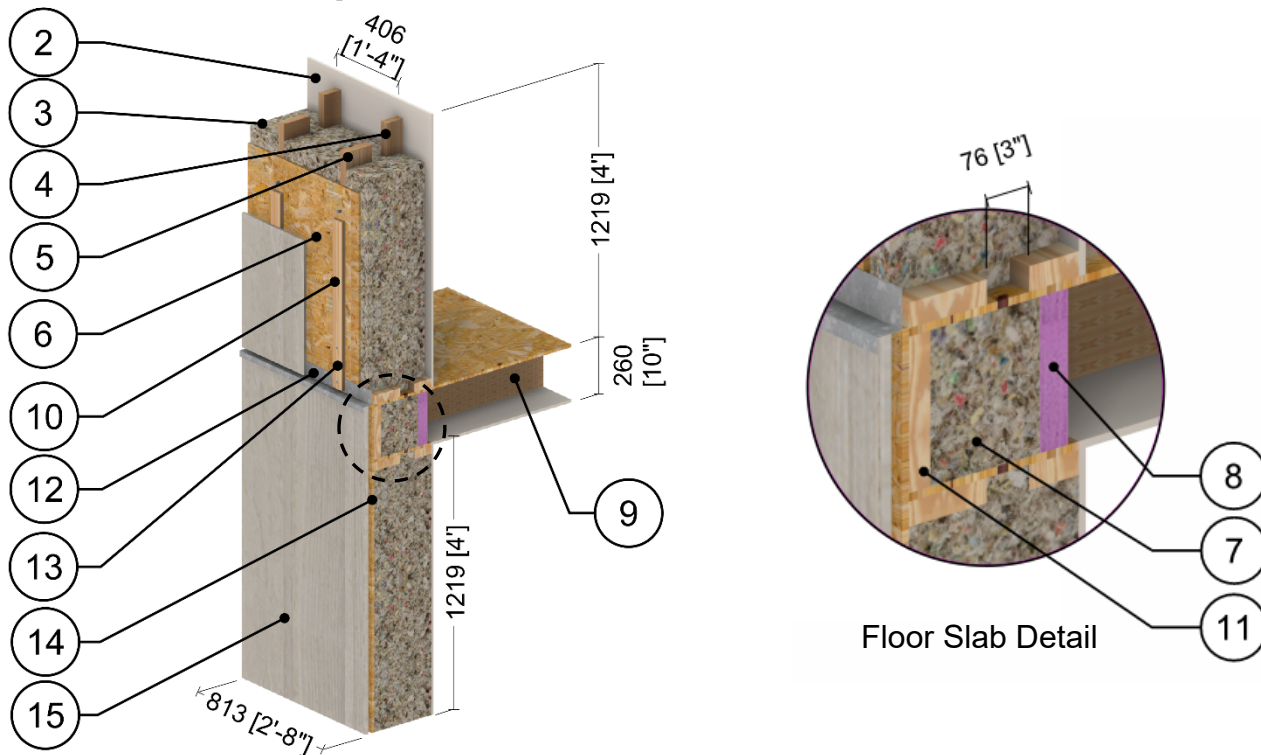


Detail 8.2.7

Interior Insulated Double Framed Wall 2x6 and 2x4 Wood Stud (16" o.c.) Wall Assembly with 3" Gap – Rim Joist and Floor Intersection



ID	Component	Thickness Inches (mm)	Conductivity Btu-in / ft ² -hr-°F (W/m K)	Nominal Resistance hr-ft ² -°F/Btu (m ² K/W)	Density lb/ft ³ (kg/m ³)	Specific Heat Btu/lb-°F (J/kg K)
1	Interior Film ¹	-	-	R-0.6 to R-0.9 (0.11 RSI to 0.16 RSI)	-	-
2	Gypsum Board	1/2" (13)	1.1 (0.16)	R-0.5 (0.08 RSI)	50 (800)	0.26 (1090)
3	Fill Insulation	12" (305)	Varies	-	-	-
4	2x4 Wood Stud (16" o.c.)	3 1/2" (89)	0.69 (0.10)	-	31 (500)	0.45 (1880)
5	2x6 Wood Stud (16" o.c.)	5 1/2" (140)	0.69 (0.10)	-	31 (500)	0.45 (1880)
6	Exterior Plywood Sheathing	1/2" (13)	0.69 (0.10)	R-0.7 (0.13 RSI)	31 (500)	0.45 (1880)
7	Fill Insulation at Joist	6 3/4" (171)	Varies	-	-	-
8	XPS Insulation	2" (51)	0.20 (0.029)	R-10 (1.76 RSI)	1.8 (28)	0.29 (1220)
9	2x10 Wood Joists (16" o.c.)	9 1/4" (235)	0.69 (0.10)	-	31 (500)	0.45 (1880)
10	Steel Fasteners (12" o.c.)	0.43" (11) Ø	347 (50)	-	489 (7830)	0.12 (500)
11	2x10 Rim Joist	1 1/2" (38)	0.69 (0.10)	-	31 (510)	0.45 (1880)
12	Steel Flashing	18 Gauge	430 (62)	-	489 (7830)	0.12 (500)
13	Wood Strapping (1" x 3")	3/4" (19)	0.69 (0.10)	-	31 (500)	0.45 (1880)
14	Rainscreen Cavity	3/4" (19)	-	R-0.4 (0.07 RSI)	0.075 (1.2)	0.24 (1000)
15	Fiber Cement Board	1/2" (13)	4.86 (0.7)	-	-	-
16	Exterior Film ¹	-	-	R-0.2 (0.03 RSI)	-	-

¹ Value selected from table 1, p. 26.1 of 2009 ASHRAE Handbook – Fundamentals depending on surface orientation