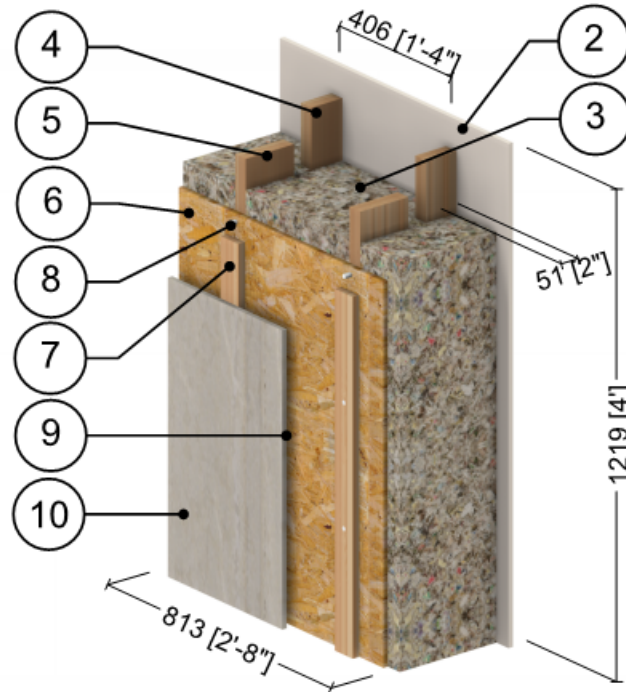


Detail 8.1.10

Interior Insulated Double Framed Wall 2x6 and 2x4 Wood Stud (16" o.c.) Wall Assembly with 2" Gap – Clear Wall



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-0.7 (0.12 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	11" (279)	0.17 (0.024) to 0.29 (0.041)	R-38.5 to R-66.0 (6.78 RSI to 11.62 RSI)	-	-
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	Wood Strapping (1" x 3")	3/4" (19)	0.69 (0.10)	-	31 (500)	0.45 (1880)
8	Steel Fasteners (12" o.c.)	0.43" (11) Ø	347 (50)	-	489 (7830)	0.12 (500)
9	Rainscreen Cavity	3/4" (19)	-	R-0.4 (0.07 RSI)	0.075 (1.2)	0.24 (1000)
10	Fiber Cement Board	1/2" (13)	4.86 (0.7)	R-0.1 (0.02 RSI)	-	-
11	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