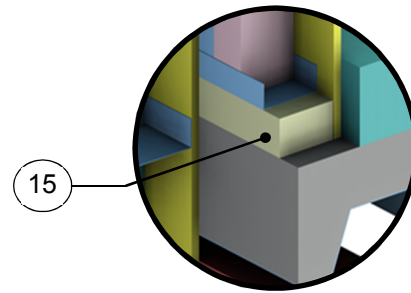
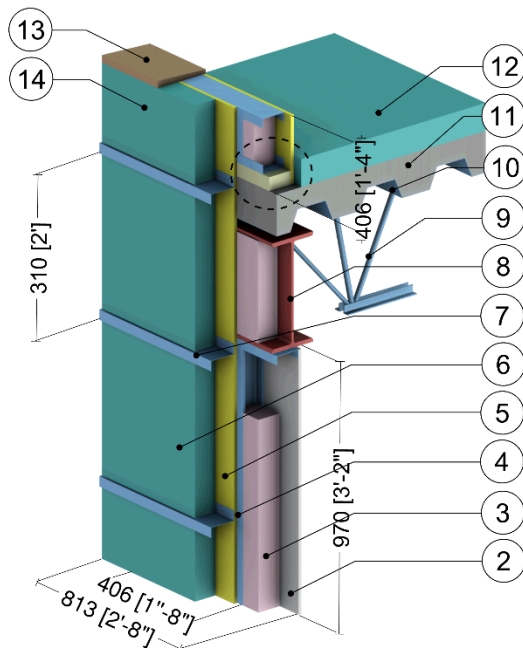


Detail 7

Exterior and Interior Insulated 3 5/8" x 1 5/8" Steel Stud (16" o.c.) Wall Assembly with Horizontal Z-Girts (24" o.c.) Supporting Metal Cladding – Steel Roof Deck with Open Web Steel Joist & Parapet Intersection with Thermal Break under Parapet Stud Cavity



Parapet Thermal Break

ID	Component	Thickness Inches (mm)	Conductivity Btu·in / ft²·hr·°F (W/m K)	Nominal Resistance hr·ft²·°F/Btu (m²K/W)	Density lb/ft³ (kg/m³)	Specific Heat Btu/lb·°F (J/kg K)
1	Interior Film ¹	-	-	R-0.6 (0.11 RSI) to 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	Fiberglass Batt Insulation in Stud Cavity	3 5/8" (92)	0.29 (0.042)	R-12 (2.1 RSI)	0.9 (14)	0.17 (710)
4	3 5/8" x 1 5/8" Steel Studs with Top and Bottom Tracks	18 gauge	430 (62)	-	489 (7830)	0.12 (500)
5	Exterior Sheathing	1/2" (13)	1.1 (0.16)	R-0.5 (0.08 RSI)	50 (800)	0.26 (1090)
6	Exterior Insulation	varies	-	R15 (2.64 RSI)	1.8 (28)	0.29 (1220)
7	Horizontal Z-girts w/ 1 1/2" Flange	18 gauge	430 (62)	-	489 (7830)	0.12 (500)
8	Steel Beam (W410)	-	347 (50)	-	489 (7830)	0.12 (500)
9	Open Web Steel Joist	-	347 (50)	-	489 (7830)	0.12 (500)
10	Steel Deck	1/16" (1.6)	347 (50)	-	489 (7830)	0.12 (500)
11	Concrete Topping	6" (152)	6.3 (0.9)	-	120 (1920)	0.20 (850)
12	Exterior Insulation, Roof	4" (102)	-	R-20 (3.5 RSI)	1.8 (28)	0.29 (1220)
13	Wood Blocking	5/8" (16)	0.63 (0.09)	R-1 (0.18 RSI)	27.8 (445)	0.45 (1880)
14	Metal cladding with vented air space/ cap flashing/ finish roof materials is incorporated into exterior heat transfer coefficient					
15	Armatherm 500	2" (50)	0.32 (0.05)	R-6.2 (1.09 RSI)	-	-
16	Exterior Film ¹	-	-	R-0.2 (0.03 RSI) to R-0.7 (0.12 RSI)	-	-

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