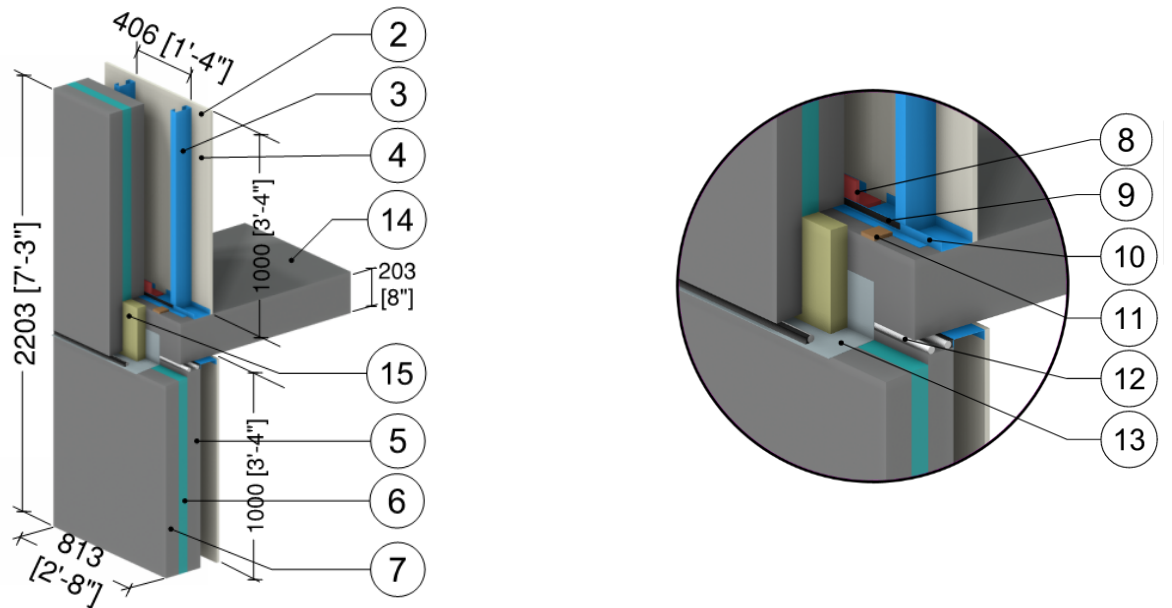


Detail 7.2.25

Highly Insulated Precast Concrete Sandwich Panel Wall Assembly – Intermediate Floor Intersection with Inner Wythe Supported by Concrete Floor



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	5/8" (15)	1.1 (0.16)	R-0.5 (0.09 RSI)	50 (800)	0.26 (1090)
3	3 5/8" x 1 5/8" Steel Studs with Top and Bottom Tracks	18 Gauge	430 (62)	-	489 (7830)	0.12 (500)
4	Air in Stud Cavity	3 5/8" (92)	-	R-0.9 (0.16 RSI)	0.075 (1.2)	0.24 (1000)
5	Precast Sandwich Panel, Interior Concrete Panel	4" (102)	12.5 (1.8)	-	140 (2250)	0.20 (850)
6	Precast Sandwich Panel Insulation	Varies	-	R-10 to R-20 (1.76 RSI to 3.52 RSI)	1.8 (28)	0.29 (1220)
7	Precast Sandwich Panel, Exterior Concrete Panel	4" (102)	12.5 (1.8)	-	140 (2250)	0.20 (850)
8	Anchor	-	347 (50)	-	489 (7830)	0.12 (500)
9	Sealant	-	1.73 (0.25)	-	-	-
10	Angle	-	430 (62)	-	489 (7830)	0.12 (500)
11	Shims	-	0.69 (0.1)	-	-	-
12	Backer Rod	-	0.25 (0.036)	-	-	-
13	Flashing	18 Gauge	1110 (160)	-	171 (2739)	0.22 (900)
14	Concrete Floor Slab	8" (203)	12.5 (1.8)	-	140 (2250)	0.20 (850)
15	Mineral Wool Slab Insulation	Varies	0.238 (0.034)	R-8.4 to R-16.8 (1.48 RSI to 2.96 RSI)	4 (64)	0.20 (850)
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

