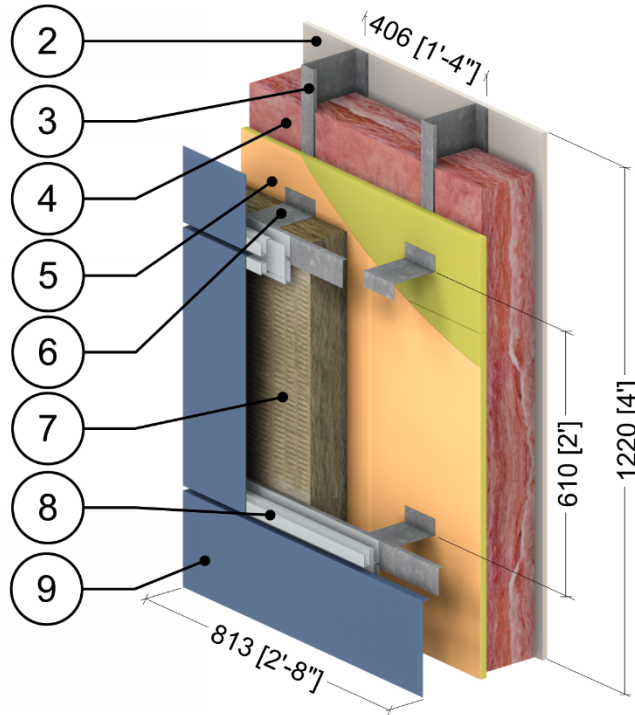


Detail 5.1.97

Exterior and Interior Insulated 6" x 1 5/8" Steel Stud (16" o.c.) Wall Assembly with Galvanized Horizontal Intermittent Clips (24" o.c.) Supporting Metal Cladding and Owens Corning R-22.5 Batt Insulation in Stud Cavity – 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 | 6" x 1 5/8" Steel Studs | 18 Gauge | 430 (62) | - | 489 (7830) | 0.12 (500) |
| 4 | Ecotouch Pink Fiberglass Batt | 6" (152) | 0.26 (0.038) | R-22.5 (4.0 RSI) | 0.99 (15.9) | 0.17 (710) |
| 5 | Exterior Sheathing | 5/8" (16) | 1.1 (0.16) | R-0.6 (0.10 RSI) | 50 (800) | 0.26 (1090) |
| 6 | Horizontal Clips w/ 1 1/2" horizontal rail | 18 Gauge | 430 (62) | - | 489 (7830) | 0.12 (500) |
| 7 | Thermafiber RainBarrier 45 Mineral Wool Semi Rigid Insulation | Varies | 0.24 (0.034) | R-6.3 to R-21.0 (1.11 to 3.70 RSI) | 4.5 (72) | 0.20 (850) |
| 8 | Panel Clip | 14 Gauge | 430 (62) | - | 489 (7830) | 0.12 (500) |
| 9 | Metal Cladding with 1/2" vented airspace incorporated into exterior heat transfer coefficient | | | | | |
| 10 | Exterior Film ¹ | - | - | R-0.7 (0.12 RSI) | - | - |

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