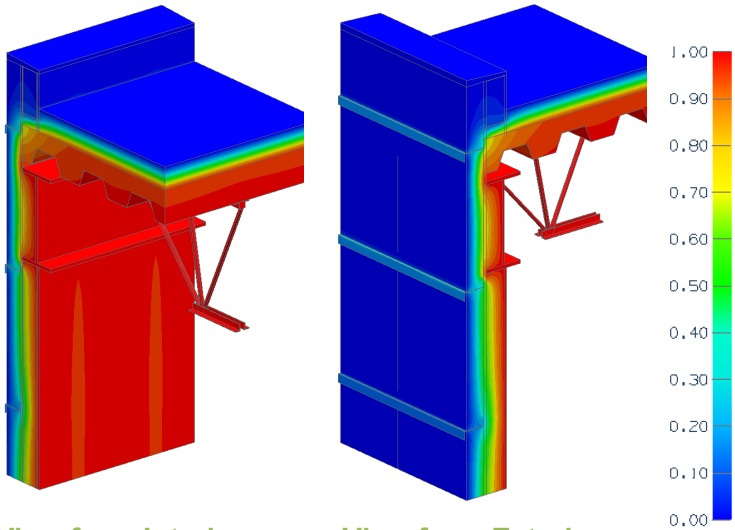
Detail 7

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



View from Interior View from Exterior

Thermal Performance Indicators

Assembly 1D (Nominal) R-Value	R_{1Dw}	R-14.2 (2.50 RSI) + exterior insulation
Transmittance / Resistance without Anomaly	U_r, R_r, U_w, R_w	“clear field” U- and R-values for: r = insulated roof w = steel stud wall assembly with horizontal z girts
Transmittance / Resistance [1]	U, R	U and R-values for the overall assembly
Surface Temperature Index	T_i	0 = exterior temperature 1 = interior temperature
Linear Transmittance	ψ	Incremental increase in transmittance per linear length of parapet

[1]Note, assembly U- and R-values are based on model dimensions (see accompanying data sheet). Overall assembly U- and R-Values for other assembly dimensions can be calculated using the linear transmittance

Nominal (1D) vs. Assembly Performance Indicators

Base Assembly – Wall

Wall Exterior Insulation 1D R-Value (RSI)	R_{1D} ft²·hr·°F / Btu (m² K / W)	R_w ft²·hr·°F / Btu (m² K / W)	U_w Btu/ft² ·hr ·°F (W/m² K)
R-15 (2.64)	R-29.2 (5.14)	R-18.5 (3.25)	0.054 (0.31)

Base Assembly - Roof

Roof Exterior Insulation 1D R-Value (RSI)	R_r ft²·hr·°F / Btu (m² K / W)	U_r Btu/ft² ·hr ·°F (W/m² K)
R-20 (3.52)	R-21.9 (3.86)	0.046 (0.26)

Parapet Linear Transmittance

Wall Exterior Insulation 1D R-Value (RSI)	R ft²·hr·°F / Btu (m² K / W)	U Btu/ft² ·hr ·°F (W/m² K)	ψ Btu/ft hr °F (W/m K)
R-15 (2.64)	R-14.0 (2.47)	0.071 (0.39)	0.151 (0.260)