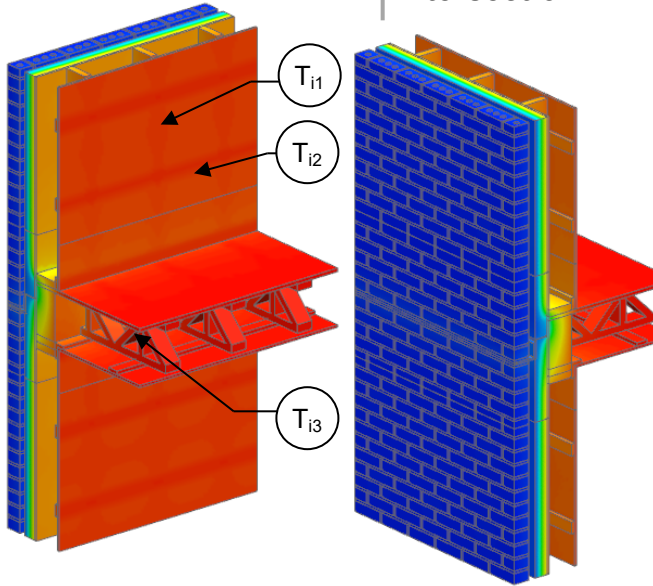


Detail 8.2.16

Exterior Insulated 2x6 Wood Stud (16" o.c.) Wall with Interior Wood Furring Assembly with Stand-off (Knife Plate) Shelf Angle & Brick Ties Supporting Brick Veneer – CLT and Wood Truss Floor Intersection



Thermal Performance Indicators

Assembly 1D (Nominal) R-Value	R_{1D}	R-4.0 (0.70 RSI) + exterior insulation
Transmittance / Resistance without Anomaly	U_o, R_o	"clear wall" U- and R-value, without floor
Transmittance / Resistance	U, R	U and R-values for the overall assembly
Surface Temperature Index ¹	T_i	0 = exterior temperature 1 = interior temperature
Linear Transmittance	ψ	Incremental increase in transmittance per linear length of wood framed floor

¹Assumptions and limitations for surface temperatures identified in ASHRAE 1365-RP

View from Interior

View from Exterior

Nominal (1D) vs. Assembly Performance Indicators

Exterior Insulation 1D R-Value (RSI)	R_{1D} ft ² ·hr·°F / Btu (m ² K / W)	R_o ft ² ·hr·°F / Btu (m ² K / W)	U_o Btu/ft ² ·hr ·°F (W/m ² K)	R ft ² ·hr·°F / Btu (m ² K / W)	U Btu/ft ² ·hr ·°F (W/m ² K)	ψ Btu/ft ·hr·°F (W/m K)
R-10 (1.76)	R-14.0 (2.46)	R-13.0 (2.29)	0.077 (0.44)	R-12.8 (2.25)	0.078 (0.44)	0.012 (0.021)
R-15 (2.64)	R-19.0 (3.35)	R-16.6 (2.92)	0.060 (0.34)	R-15.7 (2.77)	0.064 (0.36)	0.026 (0.046)
R-20 (3.52)	R-24.0 (4.23)	R-19.8 (3.49)	0.050 (0.29)	R-18.2 (3.21)	0.055 (0.31)	0.034 (0.059)
R-25 (4.40)	R-29.0 (5.11)	R-22.8 (4.02)	0.044 (0.25)	R-20.5 (3.61)	0.049 (0.28)	0.039 (0.068)
R-30 (5.28)	R-34.0 (5.99)	R-25.6 (4.50)	0.039 (0.22)	R-22.5 (3.96)	0.044 (0.25)	0.042 (0.073)

Temperature Indices

	R10	R15	R20	R25	R30	
T_{i1}	0.69	0.72	0.74	0.76	0.78	Min T on sheathing, at studs near brick ties
T_{i2}	0.84	0.87	0.90	0.91	0.92	Max T on sheathing, between studs and brick ties
T_{i3}	0.90	0.90	0.91	0.91	0.92	Min T on CLT, near wood joists, behind shelf angle fasteners