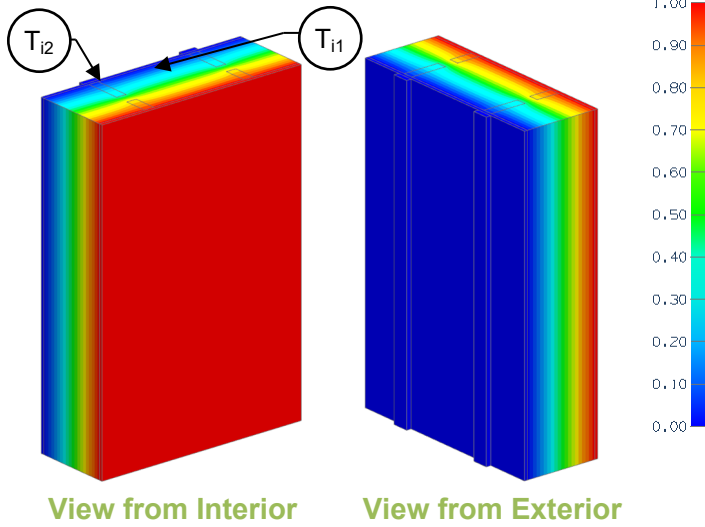


# Detail 8.1.10

## Interior Insulated Double Framed Wall 2x6 and 2x4 Wood Stud (16" o.c.) Wall Assembly with 2" Gap – Clear Wall



### Thermal Performance Indicators

Assembly 1D (Nominal) R-Value	$R_{1D}$	R-2.5 (0.44 RSI) + exterior insulation
Transmittance / Resistance without Anomaly	$U_o, R_o$	"clear field" U- and R-value, without connectors or joint
Surface Temperature Index <sup>1</sup>	$T_i$	0 = exterior temperature 1 = interior temperature

### Nominal (1D) vs. Assembly Performance Indicators

Insulation R/in	Fill Insulation 1D R-Value (RSI)	$R_{1D}$ ft <sup>2</sup> ·hr·°F / Btu (m <sup>2</sup> K / W)	$R_o$ ft <sup>2</sup> ·hr·°F / Btu (m <sup>2</sup> K / W)	$U_o$ Btu/ft <sup>2</sup> ·hr·°F (W/m <sup>2</sup> K)
3.5	R-38.5 (6.78)	R-41.0 (7.23)	R-38.0 (6.70)	0.026 (0.15)
4	R-44.0 (7.75)	R-46.5 (8.19)	R-42.4 (7.47)	0.024 (0.13)
5	R-55.0 (9.69)	R-57.5 (10.13)	R-50.8 (8.94)	0.020 (0.11)
6	R-66.0 (11.62)	R-68.5 (12.07)	R-58.9 (10.37)	0.017 (0.10)

### Temperature Indices

	R38.5	R44	R55	R66	
$T_{i1}$	0.029	0.028	0.024	0.020	Min T on sheathing, between studs
$T_{i2}$	0.070	0.068	0.064	0.061	Max T on sheathing, at studs