

## STRONGHOLD ICF THERMAL RESISTANCE QUICK REFERENCE

### Base Assemblies

Assembly	Total Assembly Resistance <i>R-Value</i> (h·ft <sup>2</sup> ·°F/Btu)	Total Assembly Transmittance <i>U-Value</i> (Btu/ h·ft <sup>2</sup> ·°F)*
4" Concrete Core, 2.75" EPS inside and outside	23.1	0.0433
6" Concrete Core, 2.75" EPS inside and outside	23.2	0.0431
8" Concrete Core, 2.75" EPS inside and outside	23.4	0.0427
10" Concrete Core, 2.75" EPS inside and outside	23.5	0.0426
12" Concrete Core, 2.75" EPS inside and outside	23.6	0.0424

### Finished and Clad Assemblies

Assembly	Total Assembly Resistance <i>R-Value</i> (h·ft <sup>2</sup> ·°F/Btu)	Total Assembly Transmittance <i>U-Value</i> (Btu/ h·ft <sup>2</sup> ·°F)*
8" Concrete, 2.75" EPS inside and outside, 1/2" Interior Drywall, 3/8" Exterior Fiber-Cement Board	24.3	0.0412
8" Concrete, 2.75" EPS inside and outside, 1/2" Interior Drywall, 1/2" Exterior Cedar Board	24.5	0.0408
8" Concrete, 2.75" EPS inside and outside, 1/2" Interior Drywall, R2.0 Exterior Insulated Lap Siding	26.1	0.0383
8" Concrete, 2.75" EPS inside and outside, 1/2" Interior Drywall, 1/8" Exterior Stucco	24.1	0.0415
8" Concrete, 2.75" EPS inside and outside, 1/2" Interior Drywall, 1/8" EIFS	24.1	0.0415

Performance values are theoretical based on best practices and ASHRAE Handbook Fundamentals. Actual performance may vary with concrete mix and installation.

For additional information on these calculated values, please refer to full report:  
*"Stronghold ICF Thermal Resistance Calculations" 12/18/2020 rev 0*

**\*Rev1:** This one page document has been revised (Feb 20, 2024 Rev 1) to report the U-values for the above tables, where  $U = 1/R$ . No changes to the values themselves or associated report (Dec 18, 2020 Rev 0) have been made.

Seal is for revisions only.

