

STRONGHOLD ICF THERMAL RESISTANCE QUICK REFERENCE

Base Assemblies

Assembly	Total Assembly Resistance R (h·ft ² ·°F/Btu)
4" Concrete Core, 2.75" EPS inside and outside	23.1
6" Concrete Core, 2.75" EPS inside and outside	23.2
8" Concrete Core, 2.75" EPS inside and outside	23.4
10" Concrete Core, 2.75" EPS inside and outside	23.5
12" Concrete Core, 2.75" EPS inside and outside	23.6

Finished and Clad Assemblies

Assembly	Total Assembly Resistance R (h·ft ² ·°F/Btu)
8" Concrete, 2.75" EPS inside and outside, 1/2" Interior Drywall, 3/8" Exterior Fiber-Cement Board	24.3
8" Concrete, 2.75" EPS inside and outside, 1/2" Interior Drywall, 1/2" Exterior Cedar Board	24.5
8" Concrete, 2.75" EPS inside and outside, 1/2" Interior Drywall, R2.0 Exterior Insulated Lap Siding	26.1
8" Concrete, 2.75" EPS inside and outside, 1/2" Interior Drywall, 1/8" Exterior Stucco	24.1
8" Concrete, 2.75" EPS inside and outside, 1/2" Interior Drywall, 1/8" EIFS	24.1

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