



SUPERINSULATED BUILDING SYSTEM

- Residential
- Commercial
- Agricultural

Wall and Structural Roof R-Values

4-1/2" Standard Thermal Wall Panel			
Through Insulated Area		Through Unbroken Studs	
Outside Air Film	.17	Outside Air Film	.17
Lap Siding	.81	Lap Siding	.81
7/16" OSB	.70	7/16" OSB	.70
3&5/8" EPS	14.16	2x4 stud	4.59
7/16" OSB	.70	7/16" OSB	.70
6 mil Poly Barrier	.00	6 mil Poly Barrier	.00
Gypsum Board	.45	Gypsum Board	.45
Inside Air Film	.68	Inside Air Film	.68
Total R-values	17.67		8.10

6-1/2" Standard Thermal Wall Panel			
Through Insulated Area		Through Insulated Studs	
Outside Air Film	.17	Outside Air Film	.17
Lap Siding	.81	Lap Siding	.81
7/16" OSB	.70	7/16" OSB	.70
		2x4 stud	1.96
5&5/8" EPS	21.96	2&3/5" EPS Core	10.26
		2x4 stud	1.96
7/16" OSB	.70	7/16" OSB	.70
6 mil Poly Barrier	.00	6 mil Poly Barrier	.00
Gypsum Board	.45	Gypsum Board	.45
Inside Air Film	.68	Inside Air Film	.68
Total R-values	25.47		17.69

8-1/4" Standard Thermal Wall Panel			
Through Insulated Area		Through Insulated Studs	
Outside Air Film	.17	Outside Air Film	.17
Lap Siding	.81	Lap Siding	.81
7/16" OSB	.70	7/16" OSB	.70
		2x4 stud	1.96
7&3/8" EPS	28.78	4&2/5" EPS Core	17.80
		2x4 stud	1.96
7/16" OSB	.70	7/16" OSB	.70
6 mil Poly Barrier	.00	6 mil Poly Barrier	.00
Gypsum Board	.45	Gypsum Board	.45
Inside Air Film	.68	Inside Air Film	.68
Total R-values	32.29		25.23

8-1/4" Standard Structural Roof Panel			
Through Insulated Area		Through Unbroken Studs	
Outside Air Film	.17	Outside Air Film	.17
Shingles	.44	Shingles	.44
Asphalt Rolled Roofing	.15	Asphalt Rolled Roofing	.15
7/16" OSB	.70	7/16" OSB	.70
7&3/8" EPS	28.78	2x8 stud	9.50
7/16" OSB	.70	7/16" OSB	.70
6 mil Poly Barrier	.00	6 mil Poly Barrier	.00
Gypsum Board	.45	Gypsum Board	.45
Inside Air Film	.68	Inside Air Film	.68
Total R-values	32.07		12.79

10-1/4" Standard Structural Roof Panel			
Through Insulated Area		Through Unbroken Studs	
Outside Air Film	.17	Outside Air Film	.17
Shingles	.44	Shingles	.44
Asphalt Rolled Roofing	.15	Asphalt Rolled Roofing	.15
7/16" OSB	.70	7/16" OSB	.70
9&3/8" EPS	36.58	2x10 stud	12.12
7/16" OSB	.70	7/16" OSB	.70
6 mil Poly Barrier	.00	6 mil Poly Barrier	.00
Gypsum Board	.45	Gypsum Board	.45
Inside Air Film	.68	Inside Air Film	.68
Total R-values	39.87		15.41

12-1/4" Standard Structural Roof Panel			
Through Insulated Area		Through Unbroken Studs	
Outside Air Film	.17	Outside Air Film	.17
Shingles	.44	Shingles	.44
Asphalt Rolled Roofing	.15	Asphalt Rolled Roofing	.15
7/16" OSB	.70	7/16" OSB	.70
11&3/8" EPS	44.38	2x12 stud	14.74
7/16" OSB	.70	7/16" OSB	.70
6 mil Poly Barrier	.00	6 mil Poly Barrier	.00
Gypsum Board	.45	Gypsum Board	.45
Inside Air Film	.68	Inside Air Film	.68
Total R-values	47.67		18.03

* Federal Trade Commission ruling: Use the 75 F R-value when calculating R-values for residential construction (fact sheets available upon request).
The R-value of EPS increases as temperature decreases.

3100 9th Ave. SE • Watertown, SD 57201-9102
(605) 882-2222 FAX (605) 882-2753 1-800-658-3303
E-MAIL: enercept@enercept.com • WEBSITE: www.enercept.com