R-VALUE:

Insulation is rated in terms of thermal resistance (R-value), which indicates the resistance to heat flow. The higher the R-value, the greater the insulating effectiveness. Closed cell spray foam has one of the highest R-values, 6 per inch, of all readily available, cost-effective insulations on the market today.

Insulation R-Value Comparison Chart

	R-Value Per Inch	*Advantages*
Loose-fill Cellulose	**3.1-3.7**	**Easy to use for irregularly shaped areas and around obstructions.**
Loose-fill Fiberglass	**2.2-2.9**	
Loose-fill Rock Wool	**2.2-2.9**	
Fiberglass Batts	**2.9-3.8**	**Do it yourself.** **Suited for stud and joist spacing, if there are few obstructions.**
Cotton Batts	**3.0-3.7**	
Closed Cell Spray Foam	**5.6-6.2**	**Can provide air sealing as well as insulation.** **Can provide complete coverage around obstructions.**
Open Cell Spray Foam	**3.6-4.3**	
EPS	**3.9-4.2**	**High insulating value for relatively little thickness.**
XPS	**5.0**	

Chart provided courtesy of Sources: DOE Insulation Fact Sheet, 1993 ASHRAE Handbook of Fundamentals, Loose-Fill Insulations.