



**Calculated R-Values for Nominal 2x4 and 2x6 Wall Cavities Insulated with
VR Plus Shield and Spray-Applied Cellular Plastic Foam¹**

The thermal resistances (R-values) for combinations of Fi-Foil VR-Plus Shield Reflective Insulation and spray-applied cellular foam plastic insulation have been calculated using a procedure published in ASTM STP 1116.²

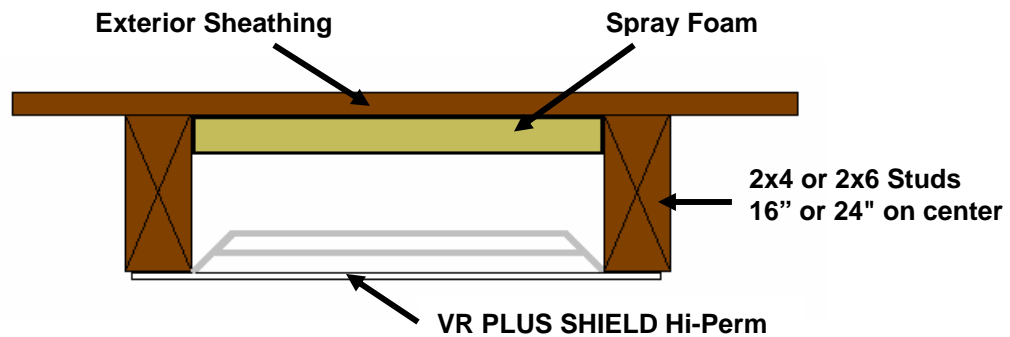


Figure 1. Top View of Wall Cavity with Foam and Reflective Insulation Assembly

Table 1. R-Values for Combinations of Foam and VR-Plus Shield in Frame Walls

System	Inches of Spray Foam	Foam R	2x4 Frame Walls		2x6 Frame Walls	
			Reflective System R	Total R *	Reflective System R	Total R *
Foam R*=6.0	2"	12	7.42	19	7.66	20
	1.5"	9	8.09	17	7.41	16
	1.0"	6	7.64	14	7.16	13
Foam R*=5.0	2"	10	7.39	17	7.56	18
	1.5"	7.5	8.02	16	7.31	15
	1.0"	5	7.57	13	7.10	12
Foam R*=3.5	2"	7	7.33	14	7.40	14
	1.5"	5.25	7.87	13	7.19	12
	1.0"	3.5	7.44	11	7.00	11

R* - thermal resistance per inch of thickness: ft²·h·°F/Btu·in

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* - Rounded in accordance with FTC Rule 460 (R-Value Rule)

The above table contains the calculated R-values. The entries for “Total R *” are for the insulation materials and reflective air spaces in the 3.5 and 5.5-inch cavities of the 2”x4” and 2”x6” Frame Walls. All cavity R-values are reported in customary U.S. units at mean temperature 75 °F.

¹ David W. Yarbough, PhD, PE, R&D Services, Inc., January 6, 2008

² ASTM STP 1116, American Society for Testing and Materials (1991) pp. 24-43.