SNS® Thermal Block "The Performer"

R and U Value with 10" deep Zee Purlins

U Value	0.043			
R Value	23.290			
Test Report: T10-58 Sample 8, dated June 18, 2010, John Manville Technical Center				
Unfaced insulation layer thickness (in) over SNS block				
Faced insulation layer thickness (in) in Cavity				
Zee purlin depth (in)	10			
MBI blanket rated R value	35			
Equivalent blanket thickness (in) (23.29/3.25)	7.166			

MBI Blanket	Insulation Layer Thickness (in)		R Value	U Value	
Rated R Value	Upper	Cavity	Suspended		
R-35	3	8	0	23.29	0.0430
R-45	3	8	3	33.04	0.0303
R-48	3	8	4	36.29	0.0276
R-52	3	8	5	39.54	0.0253
R-54	3	8	6	42.79	0.0234
R-60	3	8	8	49.29	0.0203

Sample Calculation

R value with 3" thick suspended insulation

 $23.29 + 3 \times 3.25 = 33.04$

U value with 3" thick suspended insulation

1/33.04 = 0.0303

R value for 1" blanket insulation was assumed as 3.25.

