SNS® Thermal Block "The Performer"

R and U Value with 8" deep Zee Purlins

U Value	0.048			
R Value	20.833			
Test Report: T10-29 Sample 7, dated April 8, 2010, John Manville Technical Center				
The above test was conducted with 0.75" thick EPS thermal block installed under the				
interior side of purlin. U value obtained from test was 0.047. U value was increased				
to 0.048 for use without EPS thermal block.				
Unfaced insulation layer thickness (in) over SNS block				
Faced insulation layer thickness (in) in Cavity	6			
Zee purlin depth (in)	8			
MBI blanket rated R value	29			
Equivalent blanket thickness (in) (20.83/3.25)	6.410			

MBI Blanket	Insulation Layer Thickness (in)		R Value	U Value	
Rated R Value	Upper	Cavity	Suspended		
R-29	3	6	0	20.83	0.0480
R-39	3	6	3	30.58	0.0327
R-42	3	6	4	33.83	0.0296
R-45	3	6	5	37.08	0.0270
R-48	3	6	6	40.33	0.0248
R-54	3	6	8	46.83	0.0214

Sample Calculation

R value with 3" thick suspended insulation

 $20.83 + 3 \times 3.25 = 30.58$

U value with 3" thick suspended insulation

1/30.58 = 0.0327

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

