



TESTED MBI U-VALUES FOR INSULATION ASSEMBLIES

WALLS

	Rated R-Values	Insulation Thickness (inches)		Thru-Fastened Wall Assemblies		Calculated Energy Saving	SNS Rated R-Values with Thermal Blocks
		Outer Layer	Inner Layer Cavity	Without Thermal Blocks *ASHRAE U-Value	With Continuous SNS Thermal Blocks ** JM U-Value		
	R-10	3"		0.186	0.147	27%	R-12.65
	R-13	4"		0.162	0.120	35%	R-17.55
	R-19	6"		0.147	0.076	90%	R-36.75
	R-20	3"	3"	0.147	0.055	250%	R-53.45
	R-29	3"	6"	No Data	0.046	Deep Savings	High R-Value

Due to our extensive testing, SNS found that wall U-Values performed better than roof U-Values by 1 to 3 thousandths of a percent. SNS has dedicated much of our resources to the roof applications, therefore, all comparative wall U-Values will be more conservative by 1 to 3 thousandths of a percent.

ROOF

Purlin Size	Rated R-Values	Insulation Thickness (inches)		Thru-Fastened Roof Assemblies		Calculated Energy Saving	SNS Rated R-Values with Thermal Blocks
		Upper Layer Roof	Lower Layer Cavity	Without Thermal Blocks *ASHRAE U-Value	With Continuous SNS Thermal Blocks ** JM U-Value		
8"	R-10	3"		0.184	0.147	25%	R-12.52
8"	R-13	4"		0.174	0.120	45%	R-18.85
8"	R-20	3" + 3"		0.151	0.076	98%	R-39.74
8"	R-20	3"	3"	0.151	0.055	275%	R-54.91
8"	R-23	3"	4"	No Data	0.050	Deep Savings	High R-Value
8"	R-26	4"	4"	No Data	0.047	Deep Savings	High R-Value
8"	R-29	3"	6"	No Data	0.046	Deep Savings	High R-Value
8"	R-32	4"	6"	No Data	0.041***	Deep Savings	High R-Value
10"	R-35	3"	8"	No Data	0.039	Deep Savings	High R-Value
10"	R-38	4"	8"	No Data	0.037	Deep Savings	High R-Value
10"	R-40	3"	10"	No Data	0.036	Deep Savings	High R-Value
10"	R-43	4"	10"	No Data	0.035	Deep Savings	High R-Value

* U-Values published by ASHRAE

** U-Values by JM (MBI Computer Modeling for Screw-Down Roof Assemblies)

*** U-Values by JM (Hot Box Testing ASTM C 1363)

In each case, saving the end-user thousands if not tens of thousands of dollars in energy and building costs. Any combination can greatly enhance insulation values by using the SNS® Continuous Insulation System.