#### **Metal Buildings Code Alert**

## **WEST VIRGINIA ENERGY CODE**

Effective: 5/30/2019

The State of West Virginia has updated the West Virginia Building Code and went into effect statewide May 30, 2019. The new energy code is mandatory for all jurisdictions and is based upon ASHRAE Standard 90.1-2010. For more information about the new code visit www.thermaldesign.com

# = Climate Zone 5 (cz5)

#### **COMPRESSED INSULATION DOES NOT MEET ENERGY CODE INTENT!**

There will be more insulation required for each building and there will be different installation methods and techniques in order to reach the intended thermal performance. Conditioned buildings will require more than a single layer or double layer of fiberglass compressed over purlins and behind girts. Here is a summary of the new metal building roof and wall intended performance levels and how Thermal Design's Simple Saver System® complies.

#### MINIMUM REQUIREMENTS

Roof			
Double Layer 'Sag & Bag' does NOT meet intended thermal performance			
U-factor* (installed R-value)			
Wall			
U-factor* (installed R-value)	CZ 4:U-0.084 (R-11.9) CZ 5:U-0.069 (R-14.5)		

<sup>\*</sup>Based upon 90.1-2010, Tables 5.5-1 through 5.5-8.

### SIMPLE SAVER SYSTEM® PERFORMANCE

Roof: Simple Saver System® R-30 (R19+R11)			
Roof Type Thermal Block	Thru-Fastened None	Standing Seam None	Standing Seam R-3
U-factor (installed R-value) U-0.044 (R-22.7)		U-0.040 (R-25)	U-0.035 (R-28.6)
Wall: Simple Saver System® (single layer)			
R-value	R-25	R-30	Note:
U-factor (installed R-value)	U-0.060 (R-16.6)	U-0.047 (R-21.3)	No continuous insulation or rigid board

Spacing: Purlins 5'oc, Girts 7'oc. Additional high R-value Simple Saver assemblies available upon request.



The installed performance of the Simple Saver System® surpasses the minimum requirements set for in the ASHRAE Standard 90.1-2010 and for the State of West Virginia. Thermal Design has conducted hot box testing in accordance to ASTM C1363 on a variety of Simple Saver roof and wall assemblies that validates installed performance to demonstrate energy code compliance and envelope assembly modeling. Additional high R-value Simple Saver assemblies available upon request.

For more detailed information on which metal building insulation assemblies that meet code intent and to learn more about the changes with metal building U-factors, visit

- www.thermaldesign.com
- Code Questions

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