

IECC 2009 / ASHRAE 2007 Fiberglass Solutions

IECC 2009 Building Envelope Requirements, Table C502.1.2 Metal Building Walls			
Climate Zone	Prescriptive Maximum U-Factor	Compliance Options	
		U - Factor	Assembly Description
1	0.093	0.059*	Single Layer, Filled Cavity Fiberglass System - R -25 with 1/8" Foam Tape
2			
3			
4	0.084	0.059*	Single Layer, Filled Cavity Fiberglass System - R -25 with 1/8" Foam Tape
5			
6	0.069	0.059*	Single Layer, Filled Cavity Fiberglass System - R -25 with 1/8" Foam Tape
7			
8	0.057	0.052*	Single Layer, Filled Cavity Fiberglass System - R -30 with 1/8" Foam Tape

* Use with COMcheck - Other Metal Building Wall

IECC 2009 Building Envelope Requirements, Table C502.1.2 Metal Building Roof			
Climate Zone	Prescriptive Maximum U-Factor	Compliance Options	
		U - Factor	Assembly Description
1	0.065	0.065	Single Layer, Faced R-19 Fiberglass Blanket with Thermal Blocks and Standing Seam Roof
2			
3			
4	0.055	0.055	Double Layer, Faced R-13 plus Unfaced R-13 Fiberglass Blanket with Thermal Blocks and Standing Seam Roof
5			
6	0.049	0.049	Double Layer, Faced R-13 plus Unfaced R-19 Fiberglass Blanket with Thermal Blocks and Standing Seam Roof
7			
8	0.035	0.035**	Filled Cavity / Long Tab Banded Insulation System - Faced R-25 plus Unfaced R-11 with Thermal Blocks and Standing Seam Roof

** Use with COMcheck - Other Metal Building Roof

ASHRAE 90.1-2007 Building Envelope Requirements, Table 5.5 Non-Residential Metal Building Walls			
Climate Zone	Prescriptive Maximum U-Factor	Compliance Options	
		U - Factor	Assembly Description
1	0.113	0.113	Single Layer, Faced R-13 Fiberglass Blanket
2			
3			
4			
5			
6			
7	0.057	0.052*	Single Layer, Filled Cavity Fiberglass System - R -30 with 1/8" Foam Tape
8			

* Use with COMcheck - Other Metal Building Wall

ASHRAE 90.1-2007 Building Envelope Requirements, Table 5.5 Non-Residential Metal Building Roof			
Climate Zone	Prescriptive Maximum U-Factor	Compliance Options	
		U - Factor	Assembly Description
1 ^a	0.065	0.065	Single Layer, Faced R-19 Fiberglass Blanket with Thermal Blocks and Standing Seam Roof
2 ^a			
3 ^a			
4			
5			
6			
7			
8	0.049	0.049	Double Layer, Faced R-13 plus Unfaced R-19 Fiberglass Blanket with Thermal Blocks and Standing Seam Roof

^a For Metal Building roof panels installed directly above conditioned spaces that are not cooled, where the exterior surface has a Solar Reflectance of 0.70 and a minimum Thermal Emittance of 0.75 or a Solar Reflectance Index of 82, the roof insulation shall comply with a maximum U - Factor of 0.084 for Climate Zone 1, U - Factor of 0.078 for Climate Zone 2, and a U-Factor of 0.076 for Climate Zone 3.