

ACI Building Systems Thermal Performance

In-place Thermal Performance of insulation and panel systems are shown in the In-Place Thermal Performance Table below. LEED® certified buildings require the building meet local energy code requirements or ASHRAE 90.1.

ACI Building Systems can supply a 3", 4" or 6" Single Layer or Double Layer (sag and bag) insulation systems which consist of fiberglass insulation laminated to a vapor retarder.

The thermal performance for your specific building location depends on the Zone Number as provided in ASHRAE 90.1.

Insulation systems can also be supplied by others depending on the customer requirements. For information on insulation not provided by ACI Building Systems please contact the insulation supplier for in-place thermal performance data.

In-Place Thermal Performance Table

Single Layer Insulation									
	Through Fastened Panels				Standing Seam Panels				
	Roof		Wall		Low System		High System		
	R-value	U-value	R-value	U-value	R-value	U-value	R-value	U-value	
3"	4	0.231	4	0.259	5	0.198	7	0.147	
4"	6	0.181	5	0.194	6	0.162	9	0.114	
6"	8	0.131	7	0.135	8	0.131	11	0.091	
Double Layer Insulation (sag and bag)									
3" / 3"	6	0.168	6	0.175	7	0.144	9	0.108	
3" / 4"	6	0.157	6	0.162	7	0.135	10	0.102	
3" / 6"	7	0.142	7	0.143	8	0.122	11	0.093	
4" / 3"	7	0.136	7	0.139	8	0.122	12	0.087	
4" / 4"	8	0.128	8	0.129	9	0.115	12	0.081	
4" / 6"	9	0.115	9	0.114	10	0.104	14	0.074	
6" / 3"	10	0.106	9	0.107	9	0.106	13	0.075	
6" / 4"	10	0.102	10	0.102	10	0.102	14	0.074	
6" / 6"	11	0.094	11	0.092	11	0.094	15	0.066	

Note:

For Double Layer Systems, the first layer is over the purlin and the second layer is on top of the first layer between purlins.

All buildings seeking LEED® certification must meet the local energy code requirements or ASHRAE 90.1 (which ever is more restrictive).

LEED NC 2.2 and LEED BD&C 3.0 are the same for both programs. LEED NC 2.2 applies to buildings that have applied for LEED Certification prior to April 2009. Consult the USGBC regarding which program is applicable for your building project.

<p>Contact: Dennis Johnson at ACI Building Systems for assistance with your LEED project submittal. djohnson@acibuildingsystems.com</p>	<p>ACI Building Systems 10125 Highway 6 West Batesville, MS 38606 Phone 662-563-4574</p>	<p>LEED Data Sheet EA Prerequisite 2 Revision 1.1 October 14, 2009 Page 1 of 1</p>
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