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WALLTITE<sup>®</sup> v.3 Long Term Thermal Resistance Values Reference Guide

The Long Term Thermal Resistance (LLTR) data presented in this table has been derived from testing conducted according to the requirements of standards,

CAN/ULC-S705.1, Standard for Thermal Insulation – Spray Applied Rigid Polyurethane Foam, Medium Density – Material – Specification (including amendments 1 and 2), and

CAN/ULC-S770, Standard Test Method for Determination of Long Term Thermal Resistance of Closed-Cell Thermal Insulating Foams.

Standard CAN/ULC-S770 is referenced in standard CAN/ULC-S705.1 under subsection 5.5.8.

Furthermore, clause 5.5.8.2 of CAN/ULC-S705.1 stipulates the following:

"The thermal resistance value measured shall be the design thermal resistance value for purposes of energy calculation."

Standard CAN/ULC-S705.1 is referenced in the National Building

Code of Canada under the following items:

Section 1.3 Referenced Documents and Organizations Sentence 1.3.1.2.(1) Applicable Editions (see Table 1.3.1.2.)

Section 5.10 Standards

Sentence 5.10.1.1.(1) Compliance with Applicable Standards (see Table 5.10.1.1.)

Section 9.25 Heat Transfer, Air Leakage and Condensation

Control

Subsection 9.25.2 Thermal Insulation Article 9.25.2.2. Insulation Materials (CAN/ULC-705.1)

Standard CAN/ULC-S770 is referenced in the National Building Code of Canada in the explanatory note A-9.36.2.4.(1) (see Table A-9.36.2.4.(1)-D).

LTTR measurements were conducted by Exova Canada Inc. of Mississauga (ON), an independent laboratory, and are recorded in report no. 11-06-M0257.

Additional information on the aging process of foam thermal insulations and the design thermal resistance of polyurethane foams is found in <u>Use of Field-Applied Polyurethane Foams in Buildings</u>, Construction Technology Update No. 32, IRC-NRC, M.T. Bomberg, M.K. Kumaran (December 1999).

Data presented in this document is based on tests and information, which we believe to be reliable. This document is provided for information purposes only and without any representation, warranty or condition, expressed or implied, regarding its accuracy or completeness. Whether or not this data is used or relied upon is within the sole discretion and judgment of user. Since BASF Canada Inc. has no control over the conditions of handling, storage, use and disposal of the products, BASF Canada Inc., does not assume any responsibility or liability and expressly disclaims all liability for any claim, loss, damage, injury or expense resulting therefrom.

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Thermal Resistance		Thickness	
R-Value	RSI	(inches)	(mm)
(ft <sup>2</sup> ·hr·⁰F/Btu)	(m <sup>2</sup> .°C/W)		
6	1.06	1.0	25
7	1.23	1.2	29
8	1.41	1.3	33
9	1.59	1.5	37
10	1.76	1.6	41
11	1.94	1.8	45
12	2.11	1.9	48
13	2.29	2.1	53
14	2.47	2.2	57
15	2.68	2.4	61
16	2.82	2.5	63
17	2.99	2.7	68
18	3.17	2.8	72
19	3.35	3.0	76
20	3.52	3.1	80
21	3.70	3.3	83
22	3.87	3.4	87
23	4.05	3.6	91
24	4.23	3.7	95
25	4.40	3.9	99
26	4.58	4.0	102
27	4.76	4.1	105
28	4.93	4.3	108
29	5.11	4.4	112
30	5.28	4.6	116
31	5.46	4.7	120
32	5.64	4.9	124
33	5.81	5.0	127
34	5.99	5.2	132
35	6.16	5.3	135
36	6.34	5.5	139
37	6.52	5.6	142
38	6.69	5.8	146
39	6.87	5.9	150
40	7.04	6.0	152
41	7.22	6.1	155
42	7.40	6.3	159
43	7.57	6.4	163
44	7.75	6.6	166
45	7.93	6.7	170
46	8.10	6.8	173
47	8.28	6.9	175
48	8.45	7.0	178
49	8.63	7.2	183
50	8.81	7.3	186
51	8.98	7.5	190
52	9.16	7.6	194
53	9.33	7.7	196
54	9.51	7.9	200
	0.00	0.0	000



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