Home Innovation
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Report of Results for ArmadilloNV 419 Sawyer Street, New Bedford, MA 02746

Board Insulation Tested In Accordance With ASTM C518

September 01, 2015

Report 4162.036

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ArmadilloNV Armatherm 500 and Armatherm FRR R-Value Testing

Prepared for

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Disclaimer

Background

AmadilloNV contacted Home Innovation Research Labs concerning the testing of their four materials: Armatherm 500-150, Armatherm 500-200, Armatherm 500-250, and Armatherm FRR, for thermal performance in accordance with ASTM C518 "*Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus*". The four samples have nominal dimensions of 24 inch by 24 inch by 1 inch. Only one specimen per sample was delivered for testing.

An agreement was entered into August 24, 2015, between ArmadilloNV and Home Innovation.

Samples

The four samples were flat board materials as shown in Figure 1.

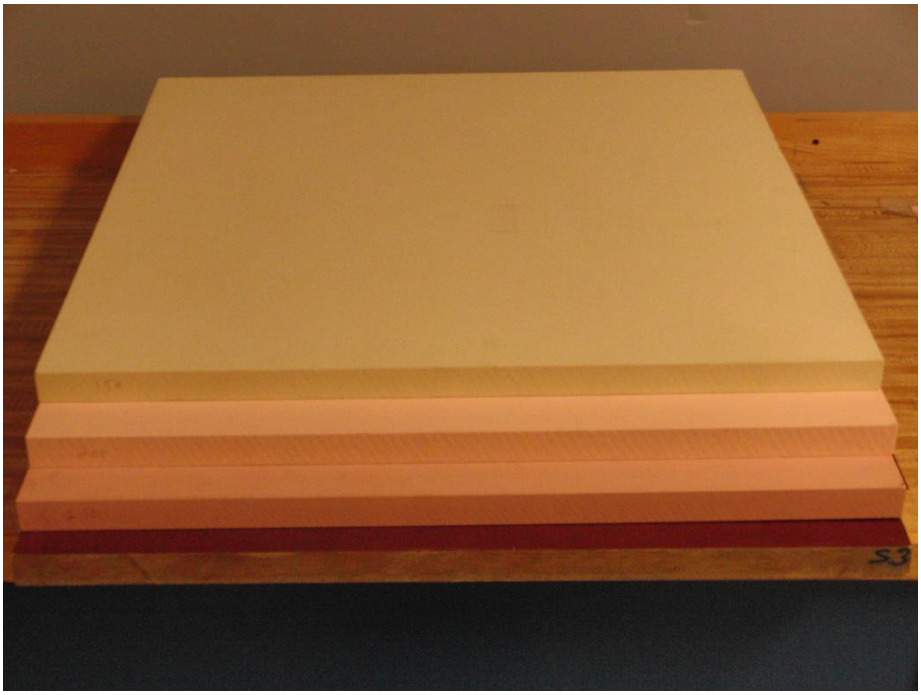

Figure 1 Samples for ASTM C518 Thermal Test

Test Method

The test method followed is ASTM C518 using a heat flow meter apparatus. The test apparatus was calibrated in April 2015 and traceable to NIST (National Institute of Standard and Technology). Its calibration is also verified on a daily basis. The four test samples were conditioned in the standard lab ambient at approximately 70 °F and 50% relative humidity for over 24 hours before thermal testing started.

Results

The thermal test results are listed in Table 1 below:

Table 1 Thermal Test Results for the ArmadilloNV Board Insulation Samples

Specimen	Thickness (in)	Density (pcf)	k value (Btu·in/h·ft^2·°F)	R-Value (h·ft^2·°F/Btu)
Armatherm 500-150	0.998	12.3	0.3031	3.29
Armatherm 500-200	1.000	21.6	0.4043	2.47
Armatherm 500-250	1.001	25.4	0.4481	2.23
Armatherm FRR	1.001	84.6	1.056	0.95

Declarations & Disclaimers

This is a factual report of the results obtained from laboratory tests of the samples provided by the client. The report may be reproduced and distributed at the client's discretion provided it is reproduced in its entirety. Any partial reproduction must receive prior written permission of the Home Innovation Research Labs.

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Testing and Report by: