CONSTRUCTION MATERIALS

TECHNOLOGIES

LABORATORY TEST RESULTS

Report for: Superior Products International II
10835 W. 78th
Shawnee, KS 66214

Attention: Craig Smith

Product Name(s):	HSC 1500	**Manufacturer:**	Superior Products International II
PRI-CMT Project No.:	SPII-010-02-01	**Source:**	Superior Products International II
Date Received:	March 16, 2011	**Dates Tested:**	Mar. 31, 2011 – May 16, 2011

Purpose: Determine product data sheet properties for *Superior Products International II's HSC 1500* in accordance with Standard Test Methods.

Test Methods: Testing was completed as outlined by Superior Products International II and in accordance with Standard Test Methods. Physical properties evaluated include Pull-Off Adhesion, Water Vapor Transmission, and Thermal Transmission.

Pull-Off Adhesion was determined in accordance with ASTM D 4541-09$^{\varepsilon 1}$: *Standard Test Method for Pull-Off Strength of Coatings Using Portable Adhesion Testers*. The Change in Mass with Liquid on One Surface Only procedure was utilized; this procedure is assigned in ASTM D 6878: *Standard Specification for Thermoplastic Polyolefin Based Sheet Roofing*. Water Absorption results have been reported in units of (mass %).

Water Vapor Permeance was determined in accordance with ASTM E 96 / E 96M-10: *Standard Test Methods for Water Vapor Transmission of Materials*. Procedure B was utilized. Water Vapor Transmission and Permeance results have been reported in units of (grains/h·ft^2) and (Perms), respectively.

Thermal Conductivity was determined in accordance with ASTM C 518-10: *Standard Test Method for Steady-State Thermal Transmission Properties by Means of the Heat Flow Meter Apparatus*. Prepared specimens were HSC 1500 applied to fiberboard substrate; thermal conductivity property of substrate was determined prior to application of HSC 1500. Thermal Conductivity results have been reported in units of (Btu·in / ft^2·°F·h).

PRI Construction Materials Technologies LLC 6408 Badger Drive Tampa, FL 33610 Tel: 813-621-5777 Fax: 813-621-5840 e-mail: materialstesting@pricmt.com WebSite: http://www.pricmt.com

Product Sampling: Sample was provided by Superior Products International II on March 16, 2011. PRI-CMT feels that the material tested is representative of the standard manufactured product for which recognition is sought.

Results of Testing:

HSC 1500

Test Sample	Test Method	Property	Results		Requirement
			Average	StdDev	
Pull-Off Strength 10 specimens; 4mil dft (nominal) x 50mm ø; Cond. 14d @ 72°F & 50%RH; Test @ 72°F & 50%RH; DeFelski PosiTest® Adhesion Tester - M	ASTM D 4541	Adhesion to OSB (psi)	64.7 (cohesive)	11.4	Report
		Adhesion to Steel (psi)	76.2 (cohesive)	2.7	Report
Water Vapor Permeance 5 specimens; 27mil thick; Cond. 14d @ 72°F & 50%RH Weathering Side to ↑ P_V	ASTM E 96 (Procedure B)	WVT (grains/h·ft^2)	10.6	1.55	Report
		Permeance (Perms)	26.0	3.77	Report
Thermal Conductivity prepared film (25mil) on fiberboard substrate; Cond. 14d @ 72°F & 50%RH; coating towards hot plate; T_m≈75°F; ΔT≈40°F; Holometrics Model Lambda 2300	ASTM C 518	Thermal Conductivity (Btu·in / ft^2·°F·h)	0.7731	NA	Report

Note(s): N/A indicates "Not Applicable"

Statement of Attestation:

Physical properties testing of this material were determined in accordance with Standard Test Methods. The laboratory test results presented in this report are representative of the material supplied.

Signed: _____ **Signed:** _____

Rick Range
Laboratory Technician

Brad Grzybowski
Managing Director

Date: May 24, 2011 **Date:** May 24, 2011

Report Issue History:

Issue #	Date	Pages	Revision Description (if applicable)
Original	05/24/2011	2	NA

END OF REPORT

PRI Construction Materials Technologies LLC 6408 Badger Drive Tampa, FL 33610 Tel: 813-621-5777 Fax: 813-621-5840 e-mail: materialstesting@pricmt.com WebSite: http://www.pricmt.com