ASTM E 903-96
REFLECTANCE TESTING
FOR
SUPERIOR PRODUCTS INTERNATIONAL II
ON
SUPERTHERM
VTEC #100-1272
TESTED: JANUARY 24, 2001

VTEC Laboratories Inc.

January 31, 2001

Client: Superior Products International II, Inc.
10835 W. 78th Street
Shawnee, KS 66214

Attention: Mr. J.E. Pritchet

Subject: Standard Method For Solar Absorptance, Reflectance and Transmittance of Materials Using Integrating Spheres According to ASTM E 903-96.

Sample Description: Supertherm Coating

TEST METHODS AND PROCEDURES:

Hemispherical spectral reflectance measurements were performed in accordance with ASTM Standard Test Method E 903-96. The measurements were performed with a Beckman 5240 Spectrophotometer utilizing an integrating sphere. Total reflectance measurements were obtained in the solar spectrum from 2500nm to 300nm at an incident angle of 15°. The measurements employ a detector-baffled, wall-mounted integrating sphere that precludes the necessity of employing a reference standard except to define the instrument's 100% line. The measurements are properly denoted as being "hemispherical spectral reflectance".

The spectral data were integrated against Air Mass 1.5 global spectrum utilizing 109 weighted ordinates.

The specimens were tested in accordance with the energy efficiency measurements for Energy Star® Roof Products Program.

DISCLAIMER:

This test result alone does not assess the fire hazard of the material, or a product made from this material, under actual fire conditions. Consequently, the results of this test alone are not to be quoted in support of claims with respect to the fire hazard of the material or product under actual fire conditions. The results when used alone are only to be used for research and development, quality control and material specifications.

RESULTS:

Hemispherical Spectral Reflectance Test Results:

Specimens	Percent Reflectance
Supertherm 16 mil	78.8
Supertherm 20 mil	78.8
Supertherm 24 mil	79.0

Neil Schultz
Executive Director

Amirudin Rahim
Technical Director

NOTICE: VTEC Laboratories Inc. will not be liable for any loss or damage resulting from the use of the data in this report, in excess of the invoice. This report pertains to the sample tested only. Such report shall not be interpreted to be a warranty, either expressed or implied as to the suitability of fitness of said sample for such uses or applications, as the party contracting for the report may apply such sample.

ASTM E 903-96
REFLECTANCE TESTING
FOR
SUPERIOR PRODUCTS INTERNATIONAL II
ON
SUPERTHERM (DADE COUNTY, MIAMI)
VTEC #100-1272-3
TESTED: APRIL 10, 2001

VTEC Laboratories Inc.

April 16, 2001

Client: Superior Products International II, Inc.
10835 W. 78th Street
Shawnee, KS 66214

Attention: Mr. J.E. Pritchett

Subject: Standard Method For Solar Absorptance, Reflectance and Transmittance of Materials Using Integrating Spheres According to ASTM E 903-96.

Sample Description: Supertherm (4-year old roof located in School System for Dade County, Miami, FL)

TEST METHODS AND PROCEDURES:

Hemispherical spectral reflectance measurements were performed in accordance with ASTM Standard Test Method E 903-96. The measurements were performed with a Beckman 5240 Spectrophotometer utilizing an integrating sphere. Total reflectance measurements were obtained in the solar spectrum from 2500nm to 300nm at an incident angle of 15°. The measurements employ a detector-baffled, wall-mounted integrating sphere that precludes the necessity of employing a reference standard except to define the instrument's 100% line. The measurements are properly denoted as being "hemispherical spectral reflectance".

The spectral data were integrated against Air Mass 1.5 global spectrum utilizing 109 weighted ordinates.

The specimens were tested in accordance with the energy efficiency measurements for Energy Star® Roof Products Program.

DISCLAIMER:

This is a factual report of the results obtained from the laboratory test of sample products. The results may be applied only to the products tested and should not be construed as applicable to other similar products of the manufacturer. The report is not a recommendation or disapprobation by VTEC Laboratories, Inc. of the material tested. While this report may be used for obtaining product acceptance, it may not be used in advertising.

RESULTS:

Hemispherical Spectral Reflectance Test Results:

Supertherm
(4-year old roof located in School System for Dade County, Miami, FL)

Specimen #	% Reflectance
1	79.1
2	78.6
3	79.4
AVERAGE:	**79.03**

Neil Schultz
Executive Director

Amirudin Rahim
Technical Director

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