Test Report

Hemispherical Emittance Measurement According to ASTM C1371 and Solar Reflectance Measurement According to ASTM C1549 on Superior Products "Sun Shield' White Coating

Prepared For:

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Report: RD13622

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President

October 15, 2013

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Total Hemispherical Emittance Test Report

Test Number: RD132657HE

Date of Test: October 14, 2013

Specimen Number: 1364131014-1,3

Date of Manufacture: Unknown

Description of Test Specimens: "Sun Shield" White Coating Applied to Metal Panels.

Test Method: ASTM C 1371-04a(2010)e1, "Test Method for Determination of Emittance of Materials near Room Temperature Using Portable Emissometers".

Report Prepared For: Superior Products International II, Inc. /Mr. Craig Smith

Procedure

This report presents the results of the test specimen identified above using a Model AE emissometer manufactured by Devices and Services Company of Dallas, Texas. The emissometer is powered to provide warm-up prior to use. A warm-up time of one hour in a conditioned laboratory has been found to be acceptable. Calibration at high and low emittance is performed after the warm-up period using calibration disks supplied by Devices and Services Company. Test specimens are placed in good contact with the thermal sink that is part of the apparatus. A drop of distilled water between the test specimen and a thermal sink was used to improve the thermal contact. The measurement head of the emissometer is placed on the test specimen and held in place at least 60 seconds for each measurement. The emissometer was calibrated prior to use and calibration was verified at the end of testing. The average emittance reported below is based on three measurements.

R&D Identification	Specimen Description	IR Emittance	Standard Deviation
1364131014-1,3	Sun Shield	0.892	0.002

Uncertainty

The 95 % reproducibility as stated in Section 10 of ASTM C1371-04a is 0.019 units.

Reviewed By:

Date: 10-15-2013

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Solar Reflectance Test Report

Test Number: RD132656SR

Date of Test: October 14, 2013

Specimen Number: 1364131014-1,3

Date of Manufacture: Unknown

Description of Test Specimens: "Sun Shield" White Coating Applied to Metal Panels.

Test Method: ASTM C 1549-09, "Test Method for Determination of Solar Reflectance Near Ambient Temperature Using a Portable Solar Reflectometer."

Report Prepared For: Superior Products International II, Inc. /Mr. Craig Smith

Procedure

The measurement of solar reflectance in accordance with ASTM C 1549-09 was completed using a solar reflectometer built by Devices and Services Company. The reflectometer was calibrated using standards with reflectance 0.0 and reflectance 0.824 prior to use. The solar reflectance measurements were made in a conditioned laboratory space. The solar reflectance was measured at air mass 1.5.

R&D Identification	Specimen Description	Average Reflectance	Standard Deviation
1364131014-1,3	Sun Shield	0.827	0.002

Reviewed By:

10-15-2013
Date: