

Report No.: 25157-0 Order No.: AE25157

Client Reference: Check #4040

Date: June 9, 2008

DSET LABORATORIES

A Division of Atlas Material Testing Technology LLC 45601 North 47th Avenue Phoenix, Arizona 85087-7042 USA Phone (623) 465-7356 Toll Free (800) 255-3738 Fax (623) 465-9409 www.atlaswsg.com

HEMISPHERICAL SPECTRAL REFLECTANCE and TOTAL EMITTANCE TEST REPORT

prepared for:

TILE TECH PAVERS

1914 West Pico Blvd. Los Angeles, CA 90006

presented by:
Atlas Weathering Services Group
DSET Laboratories
45601 North 47th Avenue
Phoenix, AZ 85087-7042
Phone: 623-465-7356

FAX: 623-465-9409

This test report contains only findings and results arrived at after employing the specific test procedures and standards listed herein. It does not constitute a recommendation for, endorsement of, or certification of the product or material tested. Atlas Weathering Services Group makes no warranty, expressed or implied, except that the test has been performed, and a report prepared, based upon the sample or samples furnished by the client. Extrapolation of data from the sample or samples relating to the batch or lot from which it was obtained may not correlate and should be interpreted accordingly with extreme caution. We assume no responsibility for variations in quality, composition, appearance, performance, or other features of similar subject matter produced by persons or under conditions over which we have no control. This report shall not be reproduced except in full without the written approval by Atlas Weathering Services Group.

This report contains 5 pages

Prepared by:

Kathleen R. Foff

Senior Technician, Optics

Approved by:

Marge Awarski

Group Leader, Evaluations Services

TEST INSTRUMENTS GROUP

= ATLAS MATERIAL TESTING TECHNOLOGY

ATLAS MATERIAL TESTING TECHNOLOGY GmbH

WEATHERING SERVICES GROUP

SOUTH FLORIDA TEST SERVICE

DSET LABORATORIES





TILE TECH PAVERS

Report No.: 25157-0 Order No.: AE25157

Client Reference: Check #4040

Date: June 9, 2008 Page 5 of 5

HEMISPHERICAL SPECTRAL REFLECTANCE and TOTAL EMITTANCE TEST REPORT

4.0 RESULTS

Reflectance and SRI:

Specimen Code	% Solar Reflectance	SRI
Penny Lane	73.4	91
White Black Shot	63.9	79
Gray Black	26.8	30
Charcoal	15.1	15
Natural	59.5	73
Vanilla Gray	47.8	57

Emittance:

Specimen Code	Reflectance (ρ) Measured	Near-Normal Emittance (ε) Calculated
Penny Lane	.05	.95
White Black Shot	.05	.95
Gray Black	.05	.95
Charcoal	.05	.95
Natural	.05	.95
Vanilla Gray	.05	.95





DSET LABORATORIES

A Division of Atlas Material Testing Technology LLC 45601 North 47th Avenue Phoenix, Arizona 85087 U.S.A. Phone: +1 623-465-7356 Toll Free: 800-255-3738 (U.S. only)

Fax: +1 623-465-9409 www.atlas-mts.com

Report No.: 30643-0 Order No.: AE30643 Client Reference: Check #6231 Date: September 17, 2011

HEMISPHERICAL SPECTRAL REFLECTANCE and TOTAL EMITTANCE TEST REPORT

prepared for:

TILE TECH PAVERS

1914 West Pico Blvd. Los Angeles, CA 90006

presented by:
Atlas Weathering Services Group
DSET Laboratories
45601 North 47th Avenue
Phoenix, AZ 85087-7042
Phone: 623-465-7356

FAX: 623-465-9409

This test report contains only findings and results arrived at after employing the specific test procedures and standards listed herein. It does not constitute a recommendation for, endorsement of, or certification of the product or material tested. Atlas Weathering Services Group makes no warranty, expressed or implied, except that the test has been performed, and a report prepared, based upon the sample or samples furnished by the client. Extrapolation of data from the sample or samples relating to the batch or lot from which it was obtained may not correlate and should be interpreted accordingly with extreme caution. We assume no responsibility for variations in quality, composition, appearance, performance, or other feature of similar subject matter produced by persons or under conditions over which we have no control. This report shall not be reproduced except in full without the written approval by Atlas Weathering Services Group.

This report contains 5 pages

Prepared by:

Kathleen R. Eoff

Senior Technician, Optics

Approved by:

Marge Awarski

Group Leader, Evaluation Services







DSET LABORATORIES

A Division of Atlas Material Testing Technology LLC 45601 North 47th Avenue Phoenix, Arizona 85087 U.S.A. Phone: +1 623-465-7356 Toll Free: 800-255-3738 (U.S. only)

Fax: +1 623-465-9409 www.atlas-mts.com TILE TECH PAVERS

Report No.: 30643-0 Order No.: AE30643 Client Reference: Check #6231

Date: September 17, 2011

Page 2 of 5

HEMISPHERICAL SPECTRAL REFLECTANCE and TOTAL EMITTANCE TEST REPORT

1.0 INTRODUCTION

This report presents results of spectral reflectance and total emittance measurements on the following six pavers coded:

COOL BLUE 50 COOL GRAY 50 COOL GREEN 50 COOL ORANGE 50 COOL RED 50 COOL YELLOW 50

2.0 TEST METHODS AND PROCEDURES

Reflectance

Hemispherical spectral reflectance measurements were performed in accordance with ASTM Standard Test Method E903 (1996). The measurements were performed with a PerkinElmer Lambda 950 Spectrophotometer utilizing an integrating sphere (Fig A1.3 of E903). Total reflectance measurements were obtained in the solar spectrum from 2500nm to 300nm at an incident angle of 8°. 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'.

Total Solar ρ reflectance was obtained by integrating the spectral data against Air Mass 1.5 (ASTM G159) direct solar spectrum utilizing 105 weighted ordinates. All spectral data are submitted herewith in the original.







DSET LABORATORIES

A Division of Atlas Material Testing Technology LLC 45601 North 47th Avenue Phoenix, Arizona 85087 U.S.A. Phone: +1 623-465-7356 Toll Free: 800-255-3738 (U.S. only)

Fax: +1 623-465-9409 www.atlas-mts.com

TILE TECH PAVERS

Report No.: 30643-0 Order No.: AE30643 Client Reference: Check #6231

Date: September 17, 2011

Page 5 of 5

HEMISPHERICAL SPECTRAL REFLECTANCE and TOTAL EMITTANCE TEST REPORT

4.0 RESULTS

Reflectance and SRI:

Specimen Code	% Solar Reflectance	SRI
COOL BLUE 50	71.4	88
COOL GRAY 50	54.4	65
COOL GREEN 50	66.9	83
COOL ORANGE 50	64.0	79
COOL RED 50	62.8	77
COOL YELLOW 50	68.5	85

Emittance:

Specimen Code	Reflectance (p) Measured	Near-Normal Emittance (ε) Calculated
COOL BLUE 50	.07	.93
COOL GRAY 50	.06	.94
COOL GREEN 50	.06	.94
COOL ORANGE 50	.06	.94
COOL RED 50	.06	.94
COOL YELLOW 50	.06	.94

