CLIENT: Sabic Innovative Plastic US LLC
1 Lexan Lane
Mount Vernon, IN 47620

Test Report No: 177:012509-02 Date: May 8, 2008

The following sample was submitted by the Client as: 16 MM – LTC3T16, LTD3T16, LTT3T16
LTR3T16, LTC3G16, LTC2G16

DATE OF RECEIPT: MAY 8, 2008

TESTING PERIOD: MAY 8, 2008

AUTHORIZATION: Client’s Purchase Order Number Y14073023

TEST REQUESTED: The submitted sample was tested for Surface Burning Characteristics in accordance with the procedures outlined in ASTM E84-07.

TEST RESULTS: Flame Spread Index Smoke Developed Value
5 30

PLEASE SEE PAGE 3 FOR DETAILED DATA

PREPARED BY: SIGNED FOR AND ON BEHALF OF
Arthur D. Fiorino, Senior Technician SGS U.S. TESTING COMPANY INC.
Fire Technology Dominick Lepore, Manager

Building Materials and Products

Page 1 of 3

This report is issued by SGS U.S. Testing Company Inc. under its General Conditions for Testing Services, as printed on reverse side. SGS U.S. Testing’s responsibility under this report is limited to proven negligence and will in no case be more than the amount of the testing fees. Except by special arrangement, samples are not retained by SGS U.S. Testing for more than 30 days. The results shown on this test report refer only to the sample(s) tested unless otherwise stated, under the conditions agreed upon. Anyone relying on this report should understand all of the details of the engagement. Neither the name, seals, marks nor insignia of SGS U.S. Testing may be used in any advertising or promotional materials without the prior written approval of SGS U.S. Testing. The test report cannot be reproduced, except in full, without prior written permission of SGS U.S. Testing Company Inc.
RESULTS:

INTRODUCTION:

This report presents test results of Flame Spread and Smoke Developed Values per ASTM E-84-07. The report also includes Material Identification, Method of Preparation, Mounting and Conditioning of the specimens.

The tests were performed in accordance with the specifications set forth in ASTM E-84-07, Standard Test Method for Surface Burning Characteristics of Building Materials, both as to equipment and test procedure. This test procedure is similar to UL-723, ANSI No. 2.5, NFPA No. 255 and UBC 42-1.

The test results cover two parameters: Flame Spread and Smoke Developed Values during a 10-minute fire exposure. Inorganic cement board and red oak flooring are used as comparative standards and their responses are assigned arbitrary values of 0 and 100, respectively.

PREPARATION AND CONDITIONING:

Three pieces of sample supplied by the client was placed into the fire chamber end to end to form a 21 inch wide X 24 foot long specimen for testing. The samples were placed over screen and rods for support. Inorganic cement boards were placed over the sample prior to testing as a means of protecting the interior of the tunnel lid.

The sample was conditioned at 73° ± 5° Fahrenheit and 50 ± 5% relative humidity.

TEST PROCEDURE:

The tunnel was thoroughly pre-heated by burning natural gas. When the brick temperature, sensed by a floor thermocouple, had reached the prescribed 105° Fahrenheit ± 5° Fahrenheit level, the sample was inserted in the tunnel and test conducted in accordance with the standard ASTM E-84-07 procedures.

The operation of the tunnel was checked by performing a 10-minute test with inorganic board on the day of the test.
RESULTS:

TEST RESULTS:

The test results, calculated in accordance with ASTM E-84-07 for Flame Spread and Smoke Developed Values are as follows:

Test Specimen : 16 MM – L TC3T16, LTD3T16, LTT3T16
                 LTR3T16, LTC3G16, LTC2G16
Flame Spread Index* : 5
Smoke Developed Value* : 30

*Rounded off to the nearest 5 units. Graphs of the Flame Spread, Smoke Developed and Time-Temperature are shown on the attached charts at the end of this report.

OBSERVATIONS:

Ignition was noted at 50 seconds followed by:

- Charring
- Flaming Dripping
- Melting
- Floor Burning
- Dripping

RATING:


The classifications are as follows:

Class A Interior Wall & Ceiling Finish:
  Flame Spread - 0-25
  Smoke Developed - 0-450

Class B Interior Wall & Ceiling Finish:
  Flame Spread - 26-75
  Smoke Developed - 0-450

Class C Interior Wall & Ceiling Finish:
  Flame Spread - 76-200
  Smoke Developed - 0-450

Since the sample received a Flame Spread of 5 and a Smoke Developed Value of 30, it would meet the parameters for a Class A Interior Wall & Ceiling Finish Category.

******
End of Report
Flame Spread Chart

- Test Sample
- Red Oak
- FSI Line

Flame Spread Distance (Feet)

Time (Minutes)

Burners at 4 ft.
Smoke Developed Chart

- Test Sample
- Red Oak

Light Absorption (%)

Time (minutes)