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Impact Testing of Organic coated Glass in accordance with ANSI Z97.1-2009 and CPSC 1201

3M Renewable Energy
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Date: January 23, 2015
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Report Number: ESP018394P.2

Safety Silver S20

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EAR-CONTROLLED DATA

INTRODUCTION:

The following report presents the results of impact testing of organic coated glass in accordance with the ANSI Z97.1-2009 and CPSC 1201 standards. Testing was requested by Paul Neumann of 3M Renewable Energy. The samples were received on, and testing was performed by Adam Scarlett on November 25th, 2014 through December 3rd, 2014.

SUMMARY OF RESULTS:

3M Safety Silver S20 film when applied to nominal ¼" annealed glass **Complies** with the safety glazing impact requirements of ANSI Z97.1-2009 (Class B, Unlimited) and 16 CFR CPSC 1201 (Category I).

TEST METHOD AND RESULTS:

Impact Test

Specimens were kept at a temperature of 70-80° F for a minimum of four hours preceding the test. Specimens were impacted alternating on the glass side and the film side, as noted in the tables in the following results section. Each specimen was struck once within ½ inch of center, with a shot bag constructed in accordance with the specifications referenced, swinging in a pendulum arc, from a drop height shown below.

3M Safety Silver S20 - 1/4"Annealed Glass
ANSI Z97.1-2009 (Class B) and CPSC 1201 (Category I)

Sample Identification	Impact Side	Total Thickness Inches	Drop Height Inches	Results/Size of Opening
#1	Glass	0.233	18	No tears / no openings – PASS
#2	Film	0.231	18	No tears / no openings – PASS
#3	Glass	0.233	18	No tears / no openings – PASS
#4	Film	0.233	18	No tears / no openings – PASS

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CALIBRATED TEST EQUIPMENT:

- PT-173-032 Starrett Micrometer — Calibration Due: 10/24/2015
- PT-170-016 Chatillon Force Gauge — Calibration Due: 02/24/2015
- PT-173-018 Sartorius Scale — Calibration Due: 08/27/2015
- PT-177-012 Tape Measure — Calibration Due: 02/07/2018

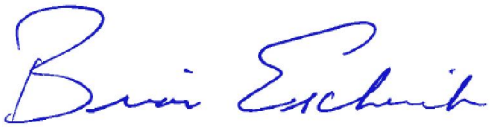
DISPOSITION OF SAMPLE:

Samples were destroyed during testing and disposed of immediately.

Prepared by:

Josh Garrison
Product Evaluation Technician

Reviewed by:



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