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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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Scotchshield Ultra Night Vision S25

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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 Scotchshield Ultra Night Vision S25 film when applied to nominal ¼" annealed glass **Complies** with the safety glazing impact requirements of ANSI Z97.1-2009 (Class A & B, Unlimited) and 16 CFR CPSC 1201 (Category I & II).

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 Scotchshield Ultra Night Vision S25 - 1/4" Annealed Glass ANSI Z97.1-2009 (Class A) and CPSC 1201 (Category I & II)						
Sample Identification	Impact Side	Total Thickness Inches	Drop Height Inches	Largest Fragment (g)	All Ratable Fragments (g)	Results/Size of Opening
#1	Glass	0.234	48	26	27	No tears / no openings – PASS
#2	Film	0.235	48	30	28	No tears / no openings – PASS
#3	Glass	0.233	48	11	40	No tears / no openings – PASS
#4	Film	0.232	48	11	20	No tears / no openings – PASS
#5	Glass	0.233	48	14	24	No tears / no openings – PASS
#6	Glass	0.232	48	14	14	8" x 1" tear – PASS

EAR-CONTROLLED DATA**CALIBRATED TEST EQUIPMENT:**

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

DISPOSITION OF SAMPLE:

Samples were destroyed during testing and disposed of immediately.

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