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DATE: September 30, 1998

MAXIM TECHNOLOGIES, INC.
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Report of CPSC Tests on
Safety Glazing Material For Use In Buildings
7 mil Product
SH7CLARL

Prepared for:
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The test results contained in this report pertain only to the samples submitted for testing and not necessarily to all similar products.

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REPORT OF TESTS ON SAFETY GLAZING MATERIAL

INTRODUCTION:

This report presents the results of impact tests conducted on 3M High Performance Window Film performed in accordance with the Code of Federal Regulations 16, Chapter II, Consumer Product Safety Commission, Part 1201. Safety Standards for Architectural Glazing Material (January '91 Revision). This work was authorized by Ken Smith of 3M Company. Samples were received on June 19, 1998 with the work conducted from June 23 to August 3, 1998.

TEST RESULTS SUMMARY:

SH7CLARL (7 mil clear) - Complies with CPSC Category I and Category II when applied to nominal 1/8" glass and complies with Category I only when applied to 1/4" glass.

DESCRIPTION OF SAMPLES:

Four specimen of 34x76 inch dimension were supplied for testing impact resistance. The samples consisted of nominal 1/4 inch and nominal 1/8 inch clear glass with 3M High Performance Film professionally applied to one side and allowed to cure. The applied film was held back 1/2" from the edge of the glass to avoid "clamping" in the test frame. All samples were prepared prior to delivery to the laboratory.

TEST METHODS 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 placed alternately with the film facing the impact and opposite of the impact as shown below. Each specimen was struck once within 1/2 inch of center, with a shot bag constructed in accordance with the specifications referenced, swinging in a pendulum arc, from a drop height of forty-eight (48) inches for Category II and from eighteen (18) inches for Category I. Samples submitted for testing were prepared by others.

TEST METHODS AND RESULTS: (Cont.)

Results - Category II

CPSC 7 mil product, SH7CLARL On 1/4" and 1/8" Glass				
Sample Number	Impact Side	Total Thickness Inches	Drop Height Inches	Results/Size of Opening
5	Film	0.228	48	Glass broke, no opening in film, totally pulled from frame.
6	Glass	0.230	48	Glass broke, 12" diameter opening*.
5	Film	0.135	48	Glass broke, no opening in film, totally pulled from frame.
6	Glass	0.136	48	Glass broke, no opening in film, pulled from frame three sides.

* The 4 lb solid steel test sphere passes through without resistance. Sample does not comply.

Results - Category I

1/4" Glass Only				
3	Film	0.228	18	Glass broke, no opening in film, 1/3 pulled from frame.
13	Glass	0.229	18	Glass broke, no opening in film, partially pulled from frame.

REMARKS:

All representative pieces of these samples will be discarded thirty days from the date on this report unless further instructed by the client.