



# Inchcape Testing Services

## Warnock Hersey

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REPORT OF: Product Evaluation

AT: Coquitlam Laboratory

PROJECT: 488-5003

REPORTED TO: Monoglass Incorporated  
North Tower 430/650 West 41st. Ave.  
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V5Z 2M9

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Attention: Mr. Douglas R. Eryl

### INTRODUCTION

At the request of Monoglass® Incorporated, Inchcape Testing Services/Warnock Hersey has conducted Dynamic Wind testing on a prepared sample of a blown-on insulation. Testing was conducted in accordance with the AMERICAN SOCIETY FOR TESTING AND MATERIALS (ASTM) test method *No. D3161 (Test Method for Wind-Resistance of asphalt Shingles.)* The method was designed for asphalt shingles, but would be equally effective in determining wind resistance characteristics of insulation as it is used by Monoglass. The actual D3161 test method was modified and expanded to test the effect of the wind at (3) three different angles as well as a "gust" effect of intermittent wind blasts.

The test sample was prepared at Monoglass by Chris Walton and transported to our facility for testing on August 25, 1995.

### PRODUCT TESTED

Product Name: **Monoglass® Spray Applied Glass Fiber Insulation**

Product Description: Product sprayed onto concrete surface at an average thickness of 2 ins.  $\pm$  10% using standard application techniques and equipment. The adhesive content for application is increased from (8) eight parts to (4) four parts water to (1) one part adhesive. The surfaced is then board tamped and oversprayed with the 4:1 water/adhesive mix. The system is then cured for a minimum of one hour. The sample used for testing was cured until September 2, 1995.

### TESTING CONDUCTED

1. 60 mph (100 km/h) wind blown across sample horizontally
2. 60 mph (100 km/h) wind blown across sample @ 45° from horizontal
3. 60 mph (100 km/h) wind blown at sample @ 90° from horizontal
4. Gust effect test at all three above angles

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**SUMMARY**

The product described in this report withstood the sustained 60 mph (100 km/h) wind at all of the test angles as well as the wind gust effect without any detectable damage. The test particulars are described under "Tests & Test Results".

**TEST & TEST RESULTS**

**60 mph sustained wind**

A 60 mph(100km/h) wind was directed toward the sample for a sustained period of 30 minutes and closely observed for any evidence of damage or loss of material. The test was conducted at the three different angles noted.

<i>TEST ANGLE</i>	<i>OBSERVATIONS</i>
1. Horizontal	No damage or loss of material.
2. 45° from horizontal	No damage or loss of material.
3. 90° from horizontal	No damage or loss of material.

**Intermittent ("gust effect")**

The 60 mph (100 km/h) wind was directed toward the sample at the three noted angles in "gusts" of 10 second duration followed by 10 seconds of no wind. The cycle was repeated 10 times at each angle. During testing the sample was observed for any damage or loss of material.

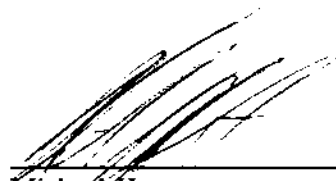
<i>TEST ANGLE</i>	<i>OBSERVATIONS</i>
1. Horizontal	No damage or loss of material.
2. 45° from horizontal	No damage or loss of material.
3. 90° from horizontal	No damage or loss of material.

## CONCLUSION


The Monoglass® Spray Applied Glass Fiber Insulation is highly resistant to sustained or gust winds at 60 mph(100 km/h). The angle of attack of the wind did not appear to have any negative effect on the product as it was applied. A close inspection after testing revealed no damage whatsoever to the test sample.

**WARNOCK HERSEY PROFESSIONAL SERVICES LTD.**

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