

REPORT OF

PRODUCT EVALUATION

CONDUCTED ON A

SKYLIGHT DOME

**FOR** 

**BRISTOLITE SKYLIGHTS 401 E. GOETZ AVENUE** PO BOX 2515 SANTA ANNA, CA 92707

REPORT PREPARED BY

INTERTEK TESTING SERVICES NA LTD. 1500 BRIGANTINE DRIVE COQUITLAM, BC V3K 7C1 **CANADA** 

**REPORT NUMBER: 3075015-3** 

**DATE: MAY 18, 2005** 











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### **PREFACE**

All services undertaken are subject to the following general policy:

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#### INTRODUCTION

Intertek Testing Services NA Ltd. (Intertek) has performed a Load Test on a Fibreglass Dome Skylight. Testing was conducted on April 26 and May 6, 2005.

The tests were performed in accordance with procedure outlined in *Standard Presentation to California Occupational Safety and Health Standards Board – Proposed State Standard, Title 8, Chapter 4* section 1632.

#### PRODUCT DESCRIPTION

Series

• ES-CMG-1-ESA-IR-HW-MF

Designation

• Dome Skylight

Frame

Frame: extruded aluminumCorners: mitred and welded

• Installation: the system was secured to the 2 x 6 test frame through the outer flange about the entire perimeter using #12 x 1-1/2" screws spaced at approximately 12" (305mm)

Overall Size

Width: 51-1/2" (1308 mm) Length: 99-1/2" (2527 mm)

Dome

• Opaque molded fibreglass and acrylic

• Thickness: 0.094"

 Dome was secured about its perimeter to the galvanized steel frame using 0.1880" diameter x 1" SS HEX head screws spaced at 20" to 23-1/2" apart

**Drawings** 

• Set of drawings stamped "Intertek Testing Services" included in Appendix A of this report

#### TEST PROCEDURE

The sample was installed into a  $2 \times 6$  SPF lumber frame. A hydraulic cylinder with a load transducer (Intertek ID# D2723) and a  $12" \times 12"$  (305 mm x 305 mm) 3/4" plywood loading plate, were used to load the dome of the skylight.

#### TEST RESULTS

Load (lbs)	Pass / Fail	Comments				
400	Pass	Held for 1 minute, slight surface cracking of acrylic shell material				
700	Pass	Dome pushed fully inverted				
2200	Fail	Fibreglass broke tearing it.				

#### **CONCLUSIONS**

The skylight system described in this report, met the minimum requirements of being capable of safely supporting 400 lbs imposed on one square foot of area.

## INTERTEK TESTING SERVICES NA LTD.

Tested by:

Kazamír Falconbridge

**Technologist, Fenestration Products** 

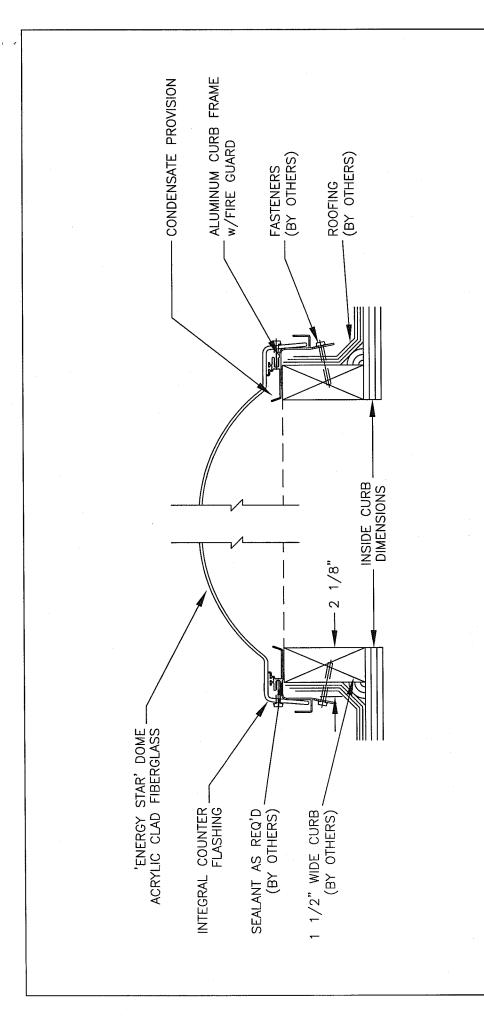
Reviewed by:

Heiko Neugebauer AScT

**Team Leader, Fenestration Products** 

HN/jm

APPENDIX A (Drawing –1 Page)



ES-ENERGY STAR CMG-CURB MOUNTED W/GUARD 1-SINGLE GLAZED	ESA-ES ACRYLIC CLAD FIBERGLASS IR-IMPACT RESISTANT HW-HIGH WIND	MF-MILL FINISH			) BY : JOB NO :	SUBMITTAL DATE : ARCHITECT :
MODEL : ES-CMG-1-ESA-IR-HW-MF scale : 3" = 1'-0"	ME MATERIAL TESTED IN CONFORMANCE WITH: *OSHA FALL PROTECTION—MEETS OSHA STANDARD 29 CFR 1926.502	HIGH WIND RESISTANT-DOME OF THIS UNIT HAS EXCEEDED	90MPH UPLIFT IN TESTING	*FALL PROTECTION TESTING HAS BEEN PERFORMED ON BRISTOLITE'S 48" x 96" DOMES	PREPARED BY :	SUBMITT
OUNTED	QTY DOME MATERIAL *OSHA FALL	HIGH WIN		*FALL PROTECTI	CUSTOMER:	PROJECT :
'ENERGY STAR' CURB MOUNTED SKYLIGHT	INSIDE CURB QTY DIMENSIONS	4848 47 1/2" × 47 1/2"	4896 47 1/2" × 95 1/2"	6072 59 1/2" x 71 1/2"	Bristolite Skylights	401 East Goetz Avenue Santa Ana, California 92707
	MODEL SIZE	4848	4896	6072		

| PAX 714.540.8950 | FAX 714.540.5415 | RFI DRAWING NO: ES-CMG-1-ESA-IR-HW-MF.DWG / 10-1-2004