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Testing. Advising. Assuring.

**FALL IMPACT EVALUATION OF
62.8" x 94.9" DOME SKYLIGHT "6496 FPS-FF"
For: ARTISTIC SKYLIGHT DOMES LTD.**

Report to:	Artistic Skylight Domes Ltd. 255 Regina Rd. Woodbridge, ON L4L 8M3
Attention:	Mr. Nenzio Ferrazzo
E-mail:	nenzio.ferrazzo@artisticskylight.com
Telephone:	416-747-7233
Report No.:	16-06-M0200-2 RV1 3 Pages, 2 Appendix
Proposal No.:	16-006-406643
Date:	August 31, 2016

1.0 INTRODUCTION

At the request of Artistic Skylight Domes Ltd. Exova was retained to evaluate a 1595 mm x 2410 mm (62.8" x 94.9") skylight, identified as "6496 FPS-FF", for fall impact test as outlined in Exova Proposal Number 16-006-406643.

Upon receipt, the specimen was assigned the following Exova Specimen No.: 16-06-M0200-2.

The following drawings and documents in appendix B were as provided by the client and verified by Exova:

- Cross Section assembly configuration
- Bill of materials
- Die Drawings
- Technical Data Sheet

2.0 SAMPLE DESCRIPTION

Product Type:	Interior rigid PVC thermal break frame with Exterior Aluminum retaining frame and Aluminum curb frame.
Designation/model:	6496 FPS-FF
Size:	1595 mm x 2410 mm (62.8" x 94.9")
Glazing Type:	Double sealed Polycarbonate dome, 3 mm (0.118") thick clear interior and exterior dome, sealed together with 6.35 mm (0.25") Polyshim tape and Structural Silicone.
Glazing Method:	Interior dome sealed to the interior rigid PVC frame with Structural Silicone, exterior dome sealed to the exterior aluminum frame with 3.18 mm (0.125") Polyshim glazing type.
Installation:	Exterior Aluminum retaining frame, with welded corners, fastened to the exterior aluminum curb frame with #8 x 1/2" screws at 203 mm (8.0") c/c, aluminum curb frame fastened to the wood buck with #10 x 2" fasteners at 254 mm (10.0") c/c.
Weatherstrip:	One row of bulb, interior rigid PVC frame at the interior dome. One row of fin, interior rigid PVC frame at the exterior aluminum curb frame.
Hardware:	None

3.0 TEST METHOD & PROCEDURE

The Building Performance Centre at Exova was to test a 1595 mm x 2410 mm (62.8" x 94.9") dome skylight in accordance with manufacturer test procedure. Observe and report visual permanent deformation and breakage at 250 lb load drop into the mid-span of dome at a specified height.

Test Equipment:

The following calibrated equipment was used during testing:

- Measuring Tape: MII B14472
- Load Cell: MII B05823

4.0 OBSERVATION

Height (ft)	Load (lbs)	Energy (ft/lbs)	Observation	Photograph (Appendix A)
3	250	750	No Damage	1
3.875	250	968.75	No Damage	
4	250	1000	- Permanent deglazing at the mid-span between the sealed unit and aluminum retaining frame. - Permanent deglazing at the corner between the sealed unit and aluminum retaining frame. - Weight did not pass through the opening	2-3
5	250	1250	N/A	
6	250	1500	N/A	
7	250	1750	N/A	

5.0 REPORT REVISION SUMMARY

Revision No:

Original
RV1

Date:

2016-August-31
2016-September- 08

Description of Revisions:

Report issued
Report revised to:
- Update contact name and email address.
- Modified description to add Structural Silicone to the glazing method and to include Aluminum curb frame.

Reported by:



Haya Soghrati, B.Arch. Sc, (Building Science), Ext. 11227
Building Systems Fenestration Services Project Manager,
Products Testing Division

Reported & Reviewed by:



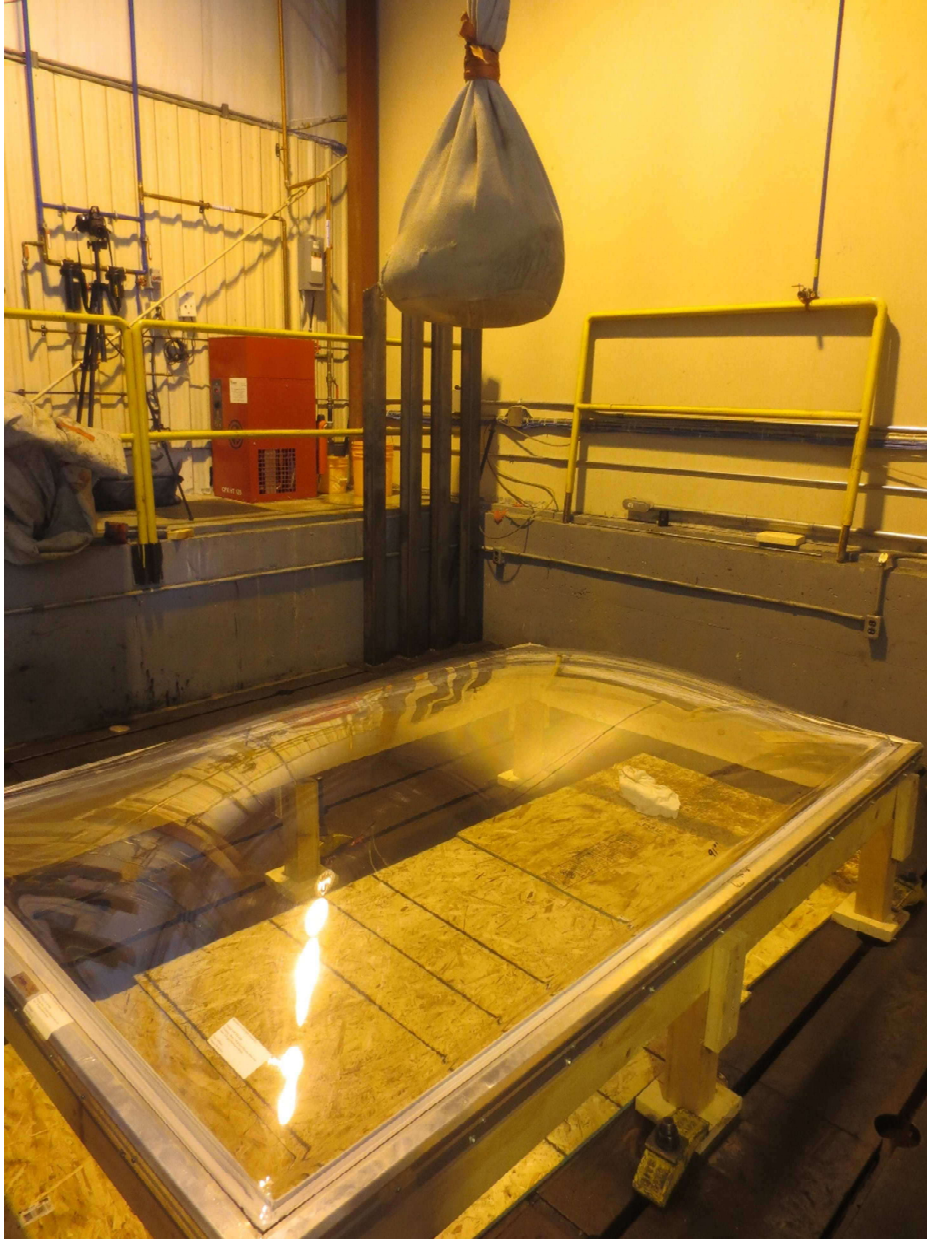
Sunny Ling, C.E.T., Ext. 11412
Supervisor, Building Systems
Products Testing Division

APPENDIX A

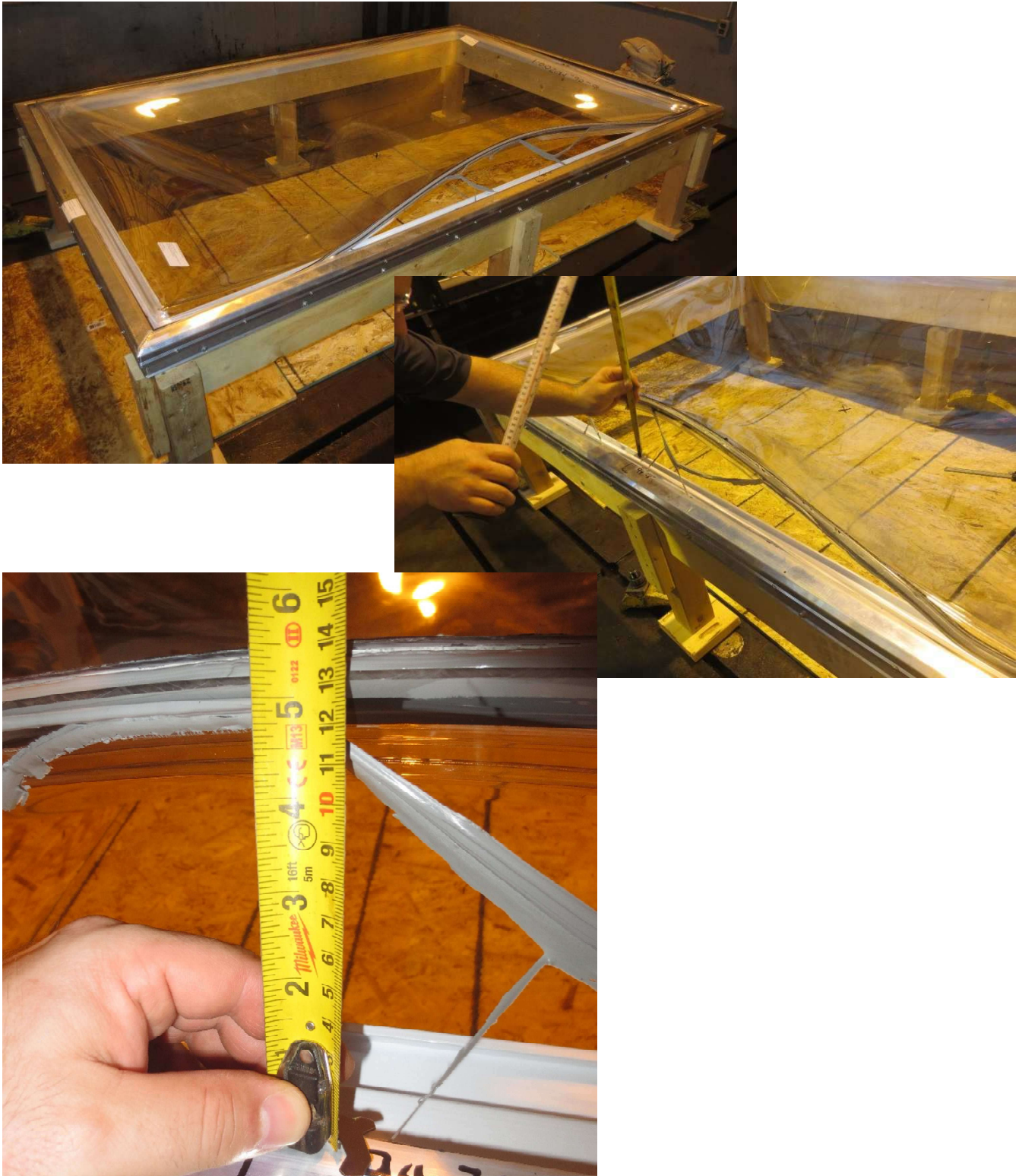
Pictures

(4 pages)

Picture 1



Picture 2
(Permanent deglazing at mid-span)



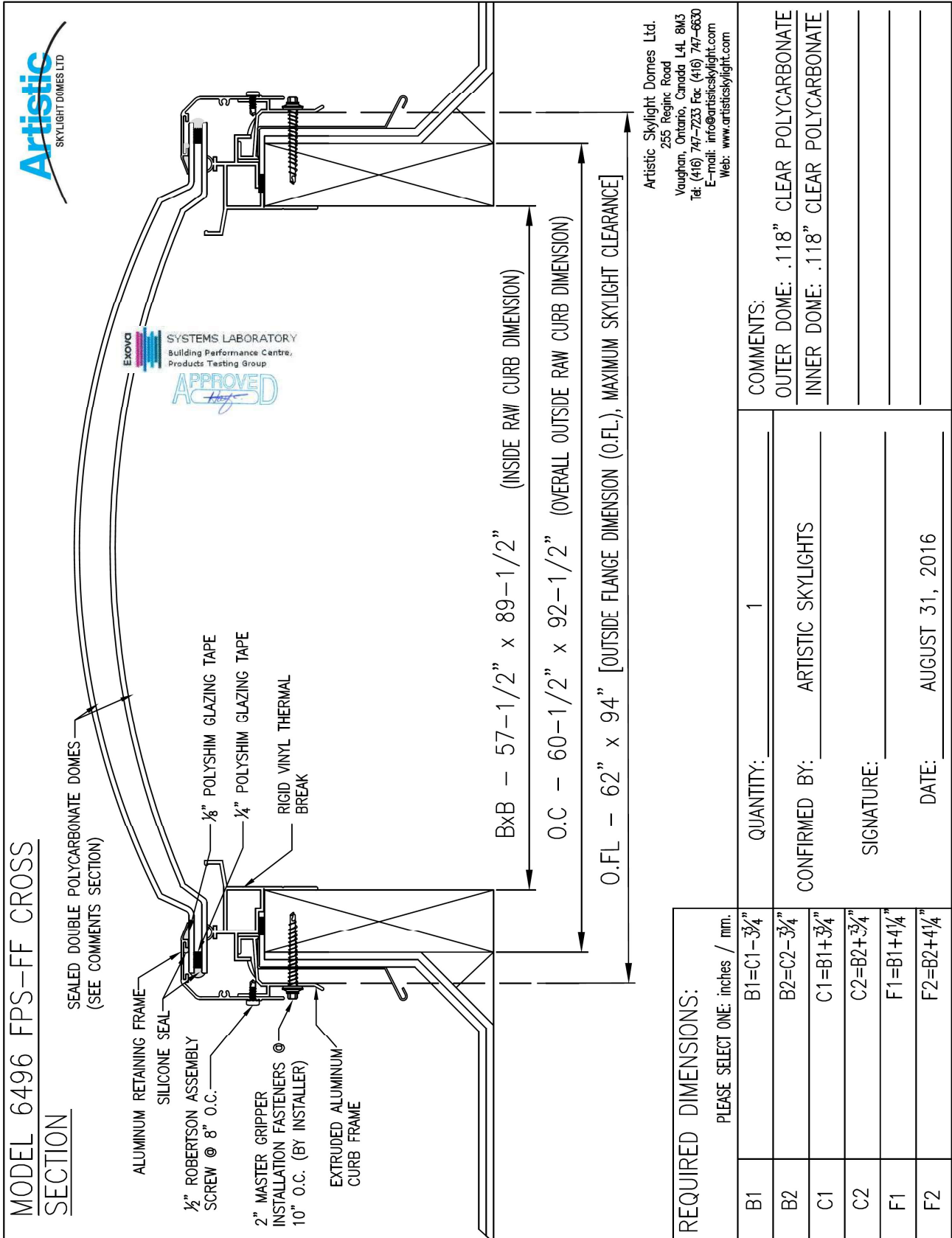
Picture 3
(Permanent deglazing at corner)



APPENDIX B

Specimen Drawings and Technical Data

(17 pages)



REQUIRED DIMENSIONS:

PLEASE SELECT ONE: inches / mm.

B1	B1=C1-3/4"
B2	B2=C2-3/4"
C1	C1=B1+3/4"
C2	C2=B2+3/4"
F1	F1=B1+4 1/4"
F2	F2=B2+4 1/4"

QUANTITY:	1
CONFIRMED BY:	ARTISTIC SKYLIGHTS
SIGNATURE:	
DATE:	AUGUST 31, 2016
COMMENTS:	OUTER DOME: .118" CLEAR POLYCARBONATE INNER DOME: .118" CLEAR POLYCARBONATE