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RENDERED TO

Artistic Skylight Domes Ltd.
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Attention: Nenzio Ferrazzo

PRODUCT EVALUATED: G-PVCSR Fixed Skylights
EVALUATION PROPERTY: Physical Tests

Report of Testing for Artistic Skylights Domes Ltd. on G-PVCSR deck-mounted fixed glass skylight for compliance with the applicable requirements of the following criteria: AAMA/WDMA/CSA 101/I.S.2/A440-08 "NAFS North American Fenestration Standard/Specification for windows, doors, and skylights" and AAMA/WDMA/CSA 101/I.S.2/A440S1-09, Canadian Supplement.

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Report of Testing for Artistic Skylights Domes Ltd. on G-PVCSR deck-mounted fixed glass skylight for compliance with the applicable requirements of the following criteria: AAMA/WDMA/CSA 101/I.S.2/A440-08 “NAFS North American Fenestration Standard/Specification for windows, doors, and skylights” and AAMA/WDMA/CSA 101/I.S.2/A440S1-09, Canadian Supplement.

2 Introduction

Intertek has conducted performance testing for Artistic Skylight Domes Ltd. on three G-PVCSR deck-mounted fixed glass skylights for the Intertek Certification Program.

- (A) 30-1/4"×89-1/2"
- (B) 46-1/4"×67"
- (C) 48"×48"

The skylights were submitted to the Intertek laboratory in Mississauga, Ontario on August 17, 2009. Testing was conducted in accordance with the standard methods of AAMA/WDMA/CSA 101/I.S.2/A440-08 "NAFS North American Fenestration Standard/Specification for windows, doors, and skylights" and AAMA/WDMA/CSA 101/I.S.2/A440S1-09, *Canadian Supplement*. This evaluation began August 31, 2009 and was completed November 3, 2009.

3 Test Specimen

3.1. SPECIMEN AND ASSEMBLY DESCRIPTION

- Designations:**
- (CAN)
 - A - Class R-PG1440 (metric)-Size Tested 900×2405 mm - SKG/RW
 - B - Class R-PG1920 (metric)-Size Tested 1289×1895 mm - SKG/RW
 - C - Class R-PG2400 (metric)-Size Tested 1346×1346 mm - SKG/RW

- (US)
 - A - Class R-PG30-Size Tested 35.5×94.7 in - SKG/RW
 - B - Class R-PG40-Size Tested 50.8×74.6 in - SKG/RW
 - C - Class R-PG50-Size Tested 53.0×53.0 in - SKG/RW

- Model:**
- G-PVCSR Skylight

- Type:**
- Deck-mounted, aluminum capped, plastic frame fixed glass skylight

- Manufacturer:**
- Artistic Skylight Domes Ltd., 2 Guided Court, Etobicoke ON M9V 4K6

- Condition:**
- New and undamaged

Overall Frame Size:

Skylight No.	Overall (incl. Nailing Fin)	
	Width	Height
A	1013 mm (39-7/8")	2515 mm (99")
B	1416 mm (55-3/4")	2011 mm (79-3/16")
C	1464 mm (57-5/8")	1461 mm (57-1/2")

- Frame:**
- Extruded vinyl main frame members (Extrusion Profiles Die No. 329C) with mitred and welded corners. The frame was complete with an integral nailing fin.
-

- Frame (cont'd):**
- Aluminum Cap- Extruded aluminum cap members (Spectra Aluminum Products Die No. SS-1880) having mitred corners fastened with one #6×1-1/4" pan head screw and a chevron corner key. The corners were liberally sealed with silicone on the backside.
 - Aluminum Head Flashing- Brake-formed 'Z'-shaped 0.46 mm (0.018") thick aluminum flashing having a 267 mm (10-1/2") long to 337 mm (13-1/4") long leg (fastened to the roof deck), a 60 mm (2-3/8") outward return, and a 45 mm (1-3/4") long drip edge leg. The top edge of the flashing also had a 13 mm (1/2") wide inward return. For samples B and C, the ends of the large leg were cut at an angle, and the ends of the return folded at an angle so that the drip-edge leg was the dimension listed below. For sample A, the ends of the flashing were not folded, leaving the drip edge the same length as the rest of the flashing section.

Skylight No.	Length of Head Flashing mm (in.)	Length of Drip Edge mm (in.)
A	1372 (54)	-
B	1803 (71)	1327 (52-1/4)
C	1803 (71)	1378 (54-1/4)

- Installation: The unit was installed onto a 2x6 wood support frame with 1/2" plywood sheathing secured to one face, simulating an inclined roof surface, the frame measuring 2438 mm (96") wide by 2743 mm (108") high overall. The skylight was installed over an opening centred width-wise, the edge of the sill nailing fin centred in the support frame. The perimeter of the opening was lined with 2x6 wood members.

Skylight No.	Size of Rough Opening	
	Width mm (in.)	Height mm (in.)
A	768 (30-1/4)	2229 (87-3/4)
B	1181 (46-1/2)	1765(69-1/2)
C	1226 (48-1/4)	1226 (48-1/4)

- The order of installation was as follows:
The exterior of the plywood, from the bottom edge of the support frame up to the bottom edge of the opening and extending up the sides of the opening by 76 mm (3"), was faced with self-adhering peel-and-stick waterproofing membrane. A nominally 102 mm (4") wide bed of silicone was applied to the exposed membrane along the bottom edge of the opening, this silicone bed continued up each side of the opening for approximately 508 mm (20"), applied to the membrane surface near the bottom of the opening continuing along the exposed plywood above the membrane (the bed of silicone varying from 63 mm (2-1/2") to 102 mm (4") wide along the sides of the opening).

- Frame (cont'd):**
- The skylight was then placed over the opening and fastened to the plywood along the head and jambs with 1-1/4" long roofing nails installed in the pre-punched holes along the head and jamb nailing fins, the holes on 122 mm (4-13/16") centres. There were no fasteners used along the exposed sill nailing fin. Strips of waterproofing membrane measuring approximately 457 mm (18") wide were then applied along each side and along the top of the unit, covering the exposed nailing fin and adjacent plywood surface. Conventional three-tab asphalt shingles were then installed over the membrane (butting up against the side of the skylight frame) along each side of the unit using 1-1/4" long roofing nails. The membrane was also applied over the nailing fin and adjacent plywood along the top of the unit, the membrane continuous to the top edge of the plywood, and lapping over the membrane along the sides of the unit.

Skylight No.	Number of Installation Fasteners (Roofing Nails)	
	Head Nailing Fin	Jamb Nailing Fin
A	8	20
B	11	15
C	11	10

- A brake-formed aluminum flashing was then installed over the head of the skylight using the roofing nails, two per end. The top edge of the flashing had a 13 mm (1/2") wide inward return which wrapped over the top edge of the plywood sheathing.

Note: For air tightness testing only, the inside perimeter of the skylight support frame opening was sealed with red air barrier tape to the inside perimeter of the PVC skylight frame such that the plywood sheathing-to-PVC skylight frame joint was sealed as well as the joint between the plywood sheathing and 2x6 wood support members lining the opening. The tape was removed for water tightness testing.

Drainage:

- None (original slots along sill sealed with silicone). The corners of the frame were cut-off at 45° at the frame step above the nailing fin, venting/draining the frame cavity to the exterior.

Glazing:

- Sample A- Factory sealed glazing unit having an exterior sheet of nominally thick 5 mm tempered glass, an interior sheet of laminated 3mm/3mm and a metal spacer with a 6.8 mm (17/64") air gap. The glass was inscribed with the following: "OFG Tempered, ANSI Z97.1 2004, 16 CFR 1201 II, SGCC 3023 3/16 UA ". Overall IG thickness was 17.5 mm .
- Sample B- Factory sealed glazing unit having an exterior sheet of nominally thick 4 mm tempered glass, an interior sheet of laminated 3mm/3mm and a metal spacer with a 11 mm (7/16") air gap. The inscription on the glass could not be verified as the unit was destroyed during testing.
- Sample C- Factory sealed glazing unit having an exterior sheet of nominally thick 4 mm glass, an interior sheet of laminated 3mm/3mm and a metal spacer with a 9.8 mm (3/8") air gap. The glass was inscribed with the following: "OFG Tempered, ANSI Z97.1 2004, 16 CFR 1201 II, SGCC 2482 5/32 UA ". Overall IG thickness was 19.8 mm (25/32").

Glazing Method:

- Laid in glazed on the interior on a bed of silicone measuring nominally 13 mm (1/2") wide applied on a co-extruded flexible vinyl glazing gasket, and retained with the extruded aluminum capping on the exterior, double-sided adhesive backed closed cell foam tape measuring 6.4 mm wide by 3.2 mm thick (1/4"×1/8") being sandwiched between the exterior of the glazing unit and the back side of the aluminum capping. The corners of the sealed unit were also sealed to the back-side of the capping with silicone. The aluminum cap was fastened to the skylight frame using #8×3/4" self-drilling tek screws installed through the side of the capping. Neoprene shims, secured by a dab of caulking, were fitted between the edge of the sealed unit and the down-turned leg of the capping. The shims measured 38 mm long by 25.4 mm wide by 4.8 mm thick (1-1/2"×1"×3/16").

Skylight No.	Number of Aluminum Cap Fasteners	
	Head/Sill	Jambs
A	5 and 4	13 and 15
B	8 and 9	11
C	5	5
Skylight No.	Number of Neoprene Shims	
	Head/Sill	Jambs
A	4	6
B	4	4
C	3	3

Drawings:

- Plan and Cross-Section Drawing:
Artistic Skylight Domes drawing G-PVCSR, undated
- Component Drawings:
Extrusion Profiles Inc. Die No. 329c, titled “Self Flashing Frame”, dated Jan 09, 2004
Spectra Aluminum Products Die No. SS-1880, titled “Retaining Frame”, dated Nov/30/2000

Drawings are enclosed with this report in Appendix A.

4 Testing and Evaluation Methods

The Unit Skylight (glazed with glass) (SKG/RW) as described in this report was tested to the Residential (R) Performance Class as follows: (The skylight met the Gateway Performance Requirements, by virtue of meeting the higher (optional) performance grades to which they was tested):

- Minimum Gateway Test Size: 500 mm × 1100 mm
- Maximum Allowable Air Leakage: 1.5 L/s•m² (0.3 cfm/ft²) (US)
- Maximum Allowable Air Leakage: 0.2 L/s•m² (0.04 cfm/ft²) (FIXED Canadian)
- Minimum Water Pressure: 140 Pa (2.9 psf)
- Minimum Design Pressure: 720 Pa (15 psf)
- Minimum Structural Pressure: 1440 Pa (30 psf)

The skylights were tested for compliance to the above test criteria in order to achieve the Gateway Performance Designation of Class R-PG15 / R-PG720. The skylights tested had an overall size as follows:

- A- 900 mm wide by 2405 mm high (35-7/16" × 94-11/16")
- B- 1289 mm wide by 1895 mm high (50-3/4" × 74-5/8")
- C- 1346 mm wide by 1346 mm high (53" × 53")

Performance testing was conducted in order to meet the overall Optional Performance requirements as follows:

A- 30-1/4" × 89-1/2"

- Optional Water Pressure: 580 Pa (12 psf)
- Optional Water Pressure (Canada): 730 Pa (15 psf)
- Optional Positive Design Pressure: 3360 Pa (70 psf)
- Optional Negative Design Pressure: 1440 Pa (30 psf)
- Optional Positive Structural Test Pressure: 6720 Pa (140 psf)
- Optional Negative Structural Test Pressure: 2880 Pa (60 psf)
- Canada (only) Air Infiltration/Exfiltration Level: Fixed

B- 46-1/4" × 69-1/2"

- Optional Water Pressure: 580 Pa (12 psf)
- Optional Water Pressure (Canada): 730 Pa (15 psf)
- Optional Positive Design Pressure: 2400 Pa (50 psf)
- Optional Negative Design Pressure: 1920 Pa (40 psf)
- Optional Positive Structural Test Pressure: 4800Pa (100 psf)
- Optional Negative Structural Test Pressure: 3840 Pa (80 psf)
- Canada (only) Air Infiltration/Exfiltration Level: Fixed

C- 48" × 48"

- Optional Water Pressure: 580 Pa (12 psf)
 - Optional Water Pressure (Canada): 730 Pa (15 psf)
 - Optional Positive Design Pressure: 5040 Pa (105 psf)
 - Optional Negative Design Pressure: 2400 Pa (50 psf)
 - Optional Positive Structural Test Pressure: 10080 Pa (210 psf)
 - Optional Negative Structural Test Pressure: 4800 Pa (100 psf)
 - Canada (only) Air Infiltration/Exfiltration Level: Fixed
-

DEVIATION FROM THE TEST STANDARD

Testing was not initiated at the minimum Gateway grade levels for the SKG-R class of skylights in all incidences of testing. As testing was performed in conjunction with other skylight test standards, the skylight was tested to the Optional Performance Grades of AAMA/WDMA/CSA 101/I.S.2/A440-08. By default, the minimum Gateway requirements were met by virtue of meeting the requirements at higher test levels.

4.1. AIR LEAKAGE RESISTANCE TEST (Clause 5.3.2)

The Air Leakage Resistance test was performed in accordance with ASTM E283-04, "*Standard Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences Across the Specimen.*"

Air infiltration and exfiltration tests were performed using test pressures of 75 Pa (1.57 psf). The maximum air leakage rate was calculated and compared to the allowable air leakage.

4.2. WATER PENETRATION RESISTANCE TEST (Clause 5.3.3)

The Water Tightness test was conducted and evaluated in accordance AAMA/WDMA/CSA 101/I.S.2/A440-08, Section 5.3.3.4, in conjunction with ASTM E331-00, "*Standard Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Uniform Static Air Pressure Difference.*"

The Water Tightness test was performed with the skylight installed into a make-shift roof opening as installed by the client, the installation details contained herein. For the water penetration test, the roof was placed at a 15° incline from horizontal at the specified pressure differential and a water spray rate of at least 204 L/m² per hour (5.0 US gal/ft² per hour). The test duration was 15 minutes.

4.3. UNIFORM LOAD TEST (Clause 5.3.4)

4.3.1 Uniform Load Deflection Test (Clause 5.3.4.2)

The Uniform Load Deflection test was conducted in accordance with ASTM E330-02, "*Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference,*" Procedure A.

The Deflection test was performed in both the positive and negative directions. A load equal to one-half the anticipated allowable load was applied and held for one minute. Deflection measurements were taken at the mid-span and ends of a jamb. The load was then released and deflection readings were taken after a recovery period of not less than one minute nor more than five minutes at zero load. The test specimen was evaluated for permanent damage. The anticipated allowable load was then be applied and held for one minute. Deflection readings were taken. The load was then released; deflection readings were taken after a recovery period of not less than one minute nor more than five minutes at zero load. The test specimen was evaluated for failure or permanent deformation of any part of the skylight that would cause any operational malfunction.

4.3.2 Uniform Load Structural Test (Clause 5.3.4.2)

The Uniform Load Structural Test was conducted in accordance with ASTM E330-02, "*Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference*," Procedure A.

The Structural test was performed in both the positive and negative directions. A load equal to one-half the structural test pressure was applied and held for one minute. Permanent deflection measurements were taken at the mid-span and ends of a jamb. The load was then released and deflection readings were taken after a recovery period of not less than one minute nor more than five minutes at zero load. The test specimen was evaluated for permanent damage. The structural test pressure was then be applied and held for one minute. Deflection readings were taken. The load was then released; Permanent deflection readings were taken after a recovery period of not less than one minute nor more than five minutes at zero load. The test specimen was evaluated for failure or permanent deformation of any part of the skylight that would cause any operational malfunction.

4.4 THERMOPLASTIC CORNER WELD TEST (Clause 5.3.6.2)

Corner weld tests were conducted in accordance with Clause 5.3.6.2 of the AAMA/WDMA/CSA 101/I.S.2/A440-08. Each corner sample was mounted in a test fixture as per Figure 12 of the standard. The frame corners were loaded as per Figure 12 with a gradually increasing load until breakage of the corner occurred. When loaded to failure, the break shall not extend along the entire weld line.

5 Testing and Evaluation Results

5.1 Air Leakage Test (Clause 5.3.2)

A- G-PVCSR 30-1/4x89-1/2		
Air Infiltration – 75 Pa (1.57 psf)		
Net infiltration:		0.09 L/s (0.2 cfm)
Total Skylight Area		2.165 m ² (23.30 ft ²)
Air Leakage Rate:		0.04 L/s·m ² (0.008 cfm/ft ²)
Air Exfiltration – 75 Pa (1.57 psf)		
Net exfiltration:		0.33 L/s (0.7 cfm)
Total Skylight Area		2.165 m ² (23.30 ft ²)
Exfiltration rate:		0.15 L/s·m ² (0.029 cfm/ft ²)
B- G-PVCSR 46-1/4x69-1/2		
Air Infiltration – 75 Pa (1.57 psf)		
Net infiltration:		0.09 L/s (0.2 cfm)
Total Skylight Area		2.443 m ² (26.29 ft ²)
Air Leakage Rate:		0.04 L/s·m ² (0.008 cfm/ft ²)
Air Exfiltration – 75 Pa (1.57 psf)		
Net exfiltration:		< 0.05 L/s (< 0.1 cfm)
Total Skylight Area		2.443 m ² (26.29 ft ²)
Exfiltration rate:		< 0.02 L/s·m ² (< 0.004 cfm/ft ²)
C- G-PVCSR 48x48		
Air Infiltration – 75 Pa (1.57 psf)		
Net infiltration:		0.42 L/s (0.88 cfm)
Total Skylight Area		1.812 m ² (19.50 ft ²)
Air Leakage Rate:		0.2 L/s·m ² (0.045 cfm/ft ²)
Air Exfiltration – 75 Pa (1.57 psf)		
Net exfiltration:		0.19 L/s (0.39 cfm)
Total Skylight Area		1.812 m ² (19.50 ft ²)
Exfiltration rate:		0.1 L/s·m ² (0.020 cfm/ft ²)
Maximum allowable air leakage rate:		
		1.5 L/s·m ² (0.3 cfm/ft ²)
Maximum allowable air leakage rate (Canadian Fixed):		
		0.2 L/s·m ² (0.04 cfm/ft ²)

The G-PVCSR skylights **MET** the performance levels (as well as FIXED Canadian Infiltration/Exfiltration Levels) specified in AAMA/WDMA/CSA 101/I.S.2/A440-08 for Air Leakage Resistance.

5.2 Water Penetration Resistance Test (Clause 5.3.3)

A- G-PVCSR 30-1/4x89-1/2	
Pressure Differential	730 Pa (15.2 psf)
Skylight Inclination Angle	15°
Results:	No water leakage observed.

B- G-PVCSR 46-1/4x69-1/2	
Pressure Differential	730 Pa (15.2 psf)
Skylight Inclination Angle	15°
Results:	No water leakage observed.

C- G-PVCSR 48x48	
Pressure Differential	730 Pa (15.2 psf)
Skylight Inclination Angle	15°
Results:	No water leakage observed.

The G-PVCSR skylights **MET** the minimum Gateway Water Penetration Resistance requirement at 140 Pa (2.9 psf), and the Optional Performance requirement for Residential class at 580 Pa (12 psf) in AAMA/WDMA/CSA 101/I.S.2/A440-08. Additionally, the skylight system met the maximum water penetration resistance requirements for Canadian applications at 730 Pa (15.2 psf).

5.3 Uniform Load Test (Clause 5.3.4)

Uniform Load Deflection Test - A- G-PVCSR 30-1/4x89-1/2		
Member	Jamb	
Span Length	2311 mm (91")	
Allowable Deflection	Report only	
Test Pressure*	Positive Load	Negative Load
	+3360 Pa (+70 psf)	-1440 Pa (-30 psf)
Maximum Net Deflection	0.01 mm (0.001")	0.00 mm (0.000")
Post-test Details	After the test loads were released, the skylight was inspected and there was found to be no failure or permanent deformation of any part of the skylight that would cause any operational malfunction.	

Uniform Load Deflection Test - B- G-PVCSR 46-1/4x69-1/2		
Member	Jamb	
Span Length	2311 mm (72-1/2")	
Allowable Deflection	Report only	
Test Pressure*	Positive Load	Negative Load
	+2400 Pa (+50 psf)	-1920 Pa (-40 psf)
Maximum Net Deflection	0.04 mm (0.002")	0.78 mm (0.031")
Post-test Details	After the test loads were released, the skylight was inspected and there was found to be no failure or permanent deformation of any part of the skylight that would cause any operational malfunction.	

Uniform Load Deflection Test - C- G-PVCSR 48x48		
Member	Jamb	
Span Length	1300 mm (51-3/16")	
Allowable Deflection	Report only	
Test Pressure	Positive Load*	Negative Load
	+5760 Pa (+120 psf)*	-2400 Pa (-50 psf)
Maximum Net Deflection	2.18 mm (0.086")	1.08 mm (0.043")
Note	* Deflection data was carried out at +5760 Pa (+120 psf) rather than the required design test pressure of +5040 Pa (105 psf).	
Post-test Details	After the test loads were released, the skylight was inspected and there was found to be no failure or permanent deformation of any part of the skylight that would cause any operational malfunction.	

5.3 Uniform Load Tests (cont'd)

Uniform Load Structural Test -Sample A- G-PVCSR 30-1/4x89-1/2		
Member	Jamb	
Span Length	2311 mm (91")	
Allowable Residual Deflection (0.4% × span)	9.24 mm (0.364")	
Test Pressure	Positive Load	Negative Load
	+6720 Pa (+140 psf)	-2880 Pa (-60 psf)
Residual Net Deflection	-0.50 mm (-0.020")	-1.52 mm (-0.060")
Post-test Details	After the test loads were released, the skylight was inspected and there was found to be no failure or permanent deformation of any part of the skylight that would cause any operational malfunction.	

Uniform Load Structural Test - Sample B- G-PVCSR 46-1/4x69-1/2		
Member	Jamb	
Span Length	1840 mm (72-1/2")	
Allowable Residual Deflection (0.4% × span)	7.36 mm (0.290")	
Test Pressure	Positive Load	Negative Load
	+4800 Pa (+100 psf)	-3840 Pa (-80 psf)
Residual Net Deflection	0.01 mm (0.001")	0.45 mm (0.018")
Post-test Details	After the test loads were released, the skylight was inspected and there was found to be no failure or permanent deformation of any part of the skylight that would cause any operational malfunction.	

Uniform Load Structural Test - Sample C- G-PVCSR 48x48		
Member	Jamb	
Span Length	1300 mm (51-3/16")	
Allowable Residual Deflection (0.4% × span)	5.20 mm (0.205")	
Test Pressure	Positive Load	Negative Load
	+10080 Pa (+210 psf)	-4800 Pa (-100 psf)
Residual Net Deflection	0.11 mm (0.004")	0.41 mm (0.016")
Post-test Details	After the test loads were released, the skylight was inspected and there was found to be no failure or permanent deformation of any part of the skylight that would cause any operational malfunction.	

The G-PVCSR skylights met the minimum Gateway Uniform Load Structural Test (200% of Design Pressure) performance requirements at ±1440 Pa (±30 psf). The skylights met the optional performance requirements as specified in AAMA/WDMA/CSA 101/I.S.2/A440-08 as follows:

Skylight No.	Structural Load Achieved	
	Positive Load	Negative Load
A	+6720 Pa (+140 psf)	-2880 Pa (-60 psf)
B	+4800 Pa (+100 psf)	-3840 Pa (-80 psf)
C	+10080 Pa (+210 psf)	-4800 Pa (-100 psf)

5.3 Uniform Load Test (Clause 5.3.4) (cont'd)

The G-PVCSR skylights qualify for the design loads as follows:

Skylight No.	Positive Load	Negative Load
A	+3360 Pa (+70 psf)	-1440 Pa (-30 psf)
B	+2400 Pa (+50 psf)	-1920 Pa (-40 psf)
C	+5040 Pa (+110 psf)	-2400 Pa (-50 psf)

5.4 Thermoplastic Corner Weld Test (Clause 5.3.6.2)

Frame- Break did not extend along entire weld line.

The skylights met the performance requirements specified in AAMA/WDMA/CSA 101/I.S.2/A440-08 for thermoplastic corner weld test.

6 Conclusion

When tested to the requirements in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-08 "NAFS North American Fenestration Standard/Specification for windows, doors, and skylights" and AAMA/WDMA/CSA 101/I.S.2/A440S1-09, *Canadian Supplement*, the G-PVCSR skylights described and tested herein achieved the following Performance Designations:

Primary Designator

- (CAN)
- A - Class R-PG1440 (metric)-Size Tested 900×2405 mm - SKG/RW
 - B - Class R-PG1920 (metric)-Size Tested 1289×1895 mm - SKG/RW
 - C - Class R-PG2400 (metric)-Size Tested 1346×1346 mm - SKG/RW
- (US)
- A - Class R-PG30-Size Tested 35.5×94.7 in - SKG/RW
 - B - Class R-PG40-Size Tested 50.8×74.6 in - SKG/RW
 - C - Class R-PG50-Size Tested 53.0×53.0 in - SKG/RW

Secondary Designator

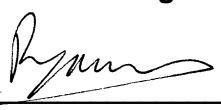
- A
- Positive Design Pressure = +3360 Pa (+70 psf)
 - Negative Design Pressure = -1440 Pa (-30 psf)
 - Water Penetration Resistance (US only) = 580 Pa (12 psf)
 - Water Penetration Resistance (Canada only) = 730 Pa (15.2 psf)
 - Canadian Air Leakage Resistance (Infiltration/Exfiltration) = Fixed
- B
- Positive Design Pressure = +2400 Pa (+50 psf)
 - Negative Design Pressure = -1920 Pa (-40 psf)
 - Water Penetration Resistance (US only) = 580 Pa (12 psf)
 - Water Penetration Resistance (Canada only) = 730 Pa (15.2 psf)
 - Canadian Air Leakage Resistance (Infiltration/Exfiltration) = Fixed
- C
- Positive Design Pressure = +5270 Pa (+110 psf)
 - Negative Design Pressure = -2400 Pa (-50 psf)
 - Water Penetration Resistance = 580 Pa (12 psf)
 - Water Penetration Resistance (Canada) = 730 Pa (15.2 psf)
 - Canadian Air Leakage Resistance (Infiltration/Exfiltration) = Fixed

INTERTEK

Tested by Mustafa Swalah, Ryan Huynh and Claudio Sacilotto

Reported by: 

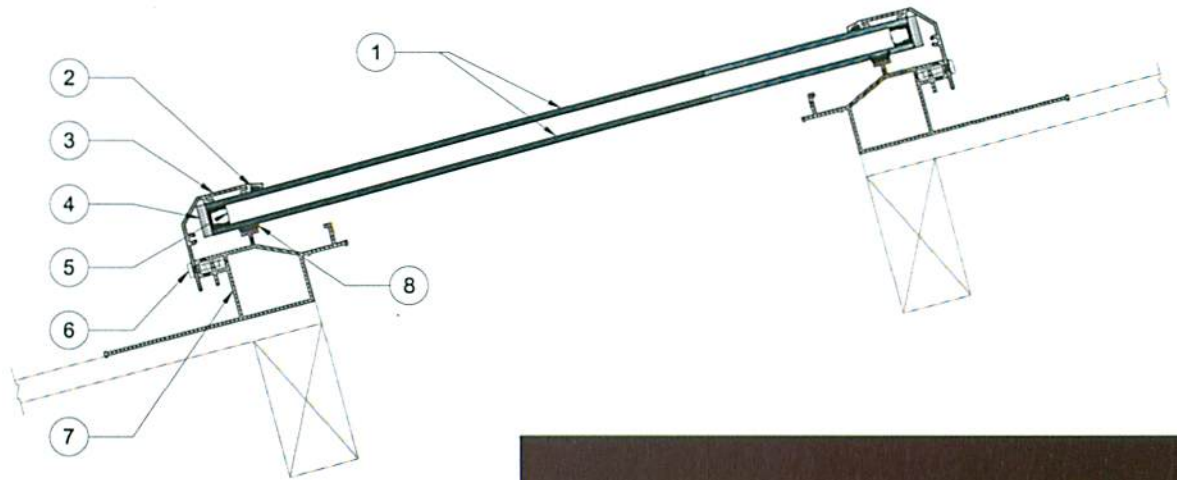
Claudio Sacilotto
Physical Testing Services

Reviewed by: 

Ryan Huynh
Physical Testing Services

Appendix A – Parts List / Drawings

(Parts List / Drawings – 3 pages)



MODEL G-PVCSR (SELF FLASHING FIXED - GLASS GLAZING)

	DETAIL
UNIT 1: LOW-e ON THIRD SURFACE	1 - CLEAR TEMPERED 2 - CLEAR TEMPERED
UNIT 2: LOW-e ON THIRD SURFACE	1 - BRONZE TEMPERED 2 - CLEAR TEMPERED
UNIT 3: LOW-e ON THIRD SURFACE with ARGON GAS FILL	1 - CLEAR TEMPERED 2 - CLEAR TEMPERED
UNIT 4: LOW-e ON THIRD SURFACE with ARGON GAS FILL	1 - BRONZE TEMPERED 2 - CLEAR TEMPERED
UNIT 5: LOW-e ON SECOND SURFACE	1 - CLEAR TEMPERED 2 - CLEAR LAMINATED (0.030)
UNIT 6: LOW-e ON SECOND SURFACE	1 - BRONZE TEMPERED 2 - CLEAR LAMINATED (0.030)
UNIT 7: LOW-e ON SECOND SURFACE with ARGON GAS FILL	1 - CLEAR TEMPERED 2 - CLEAR LAMINATED (0.030)
UNIT 8: LOW-e ON SECOND SURFACE with ARGON GAS FILL	1 - BRONZE TEMPERED 2 - CLEAR LAMINATED (0.030)



PARTS LIST

MODEL G-PVCR (SELF FLASHING FIXED - GLASS GLAZING)

PARTICULAR	MANUFACTURER
1. GLASS GLAZING	GUARDIAN INDUSTRIES CORP., U.S.A.
2. 3/8" x 3/4" DOUBLE FACE VINYL FOAM GLAZING TAPE	GASKA TAPE INC.
3. EXTRUDED ALUMINUM RETAINING FRAME (6063-T5 ALLOY)	SPECTRA DIE # SS-18B0 & AFP DIE # 22B
4. NEOPRENE SETTING BLOCK (3/4"x1"x1 1/2") BACK ADHERED	COMBI-FAB PRODUCTS
5. ALUMINUM SPACER WITH POLYSULFIDE SEALANT	TRIPLE SEAL LTD.
6. #8 - 18 X 3/4" ASSEMBLY SCREW	ROBERTSON, CANADA
7. EXTRUDED RIGID THERMAL PVC SELF-FLASHING FRAME	EXTRUSION PROFILES INC., DIE # 329
8. CO-EXTRUDED RUBBER DRAFT SEAL	EXTRUSION PROFILES INC.

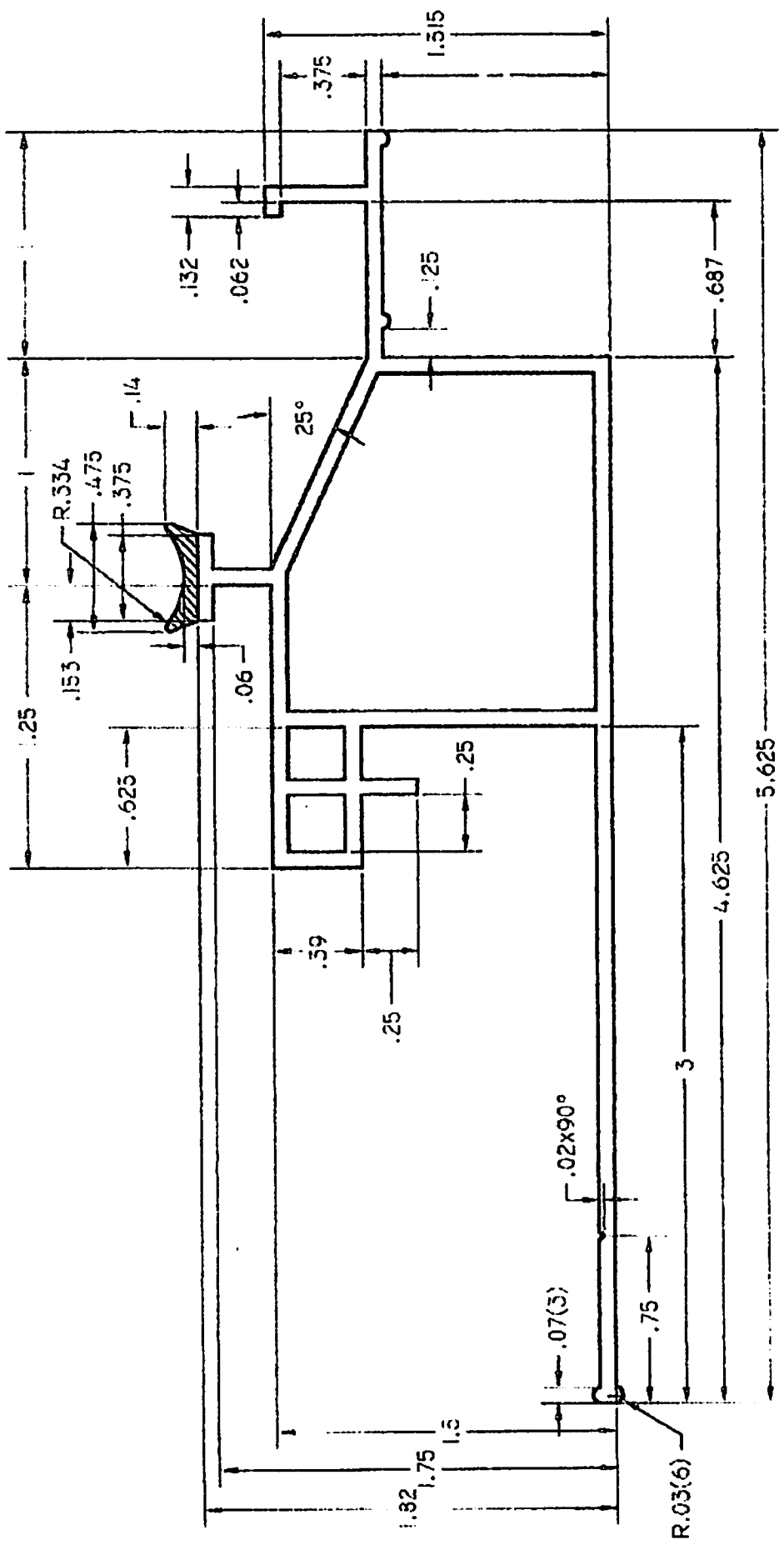
SKYLIGHT MODEL:

G-PVCSR

Artistic
SKYLIGHT DOMES LTD

2 Guided Court
Etobicoke, Ontario, Canada M9V 4K6
E-mail: artistic@istar.ca
Web: www.artisticskylight.com

DATE	DESCRIPTION	APPROVED



9833 Meridian Rd. #17
 Meridian, MS 39301
 Tel. 601-471-3488
 Fax: 601-471-6104

EXTRUSION PROFILES INC.

TITLE **SELF FLASHING FRAME**

SIZE	DWG BY	DWG DATE	REV
	<i>Minomy</i>	JAN.09.2004	
SCALE	DWG NO	DIE #	SHEET
		329C	

DESCRIPTION: **RETAINING FRAME**

PROPOSAL#: **SP-12291**

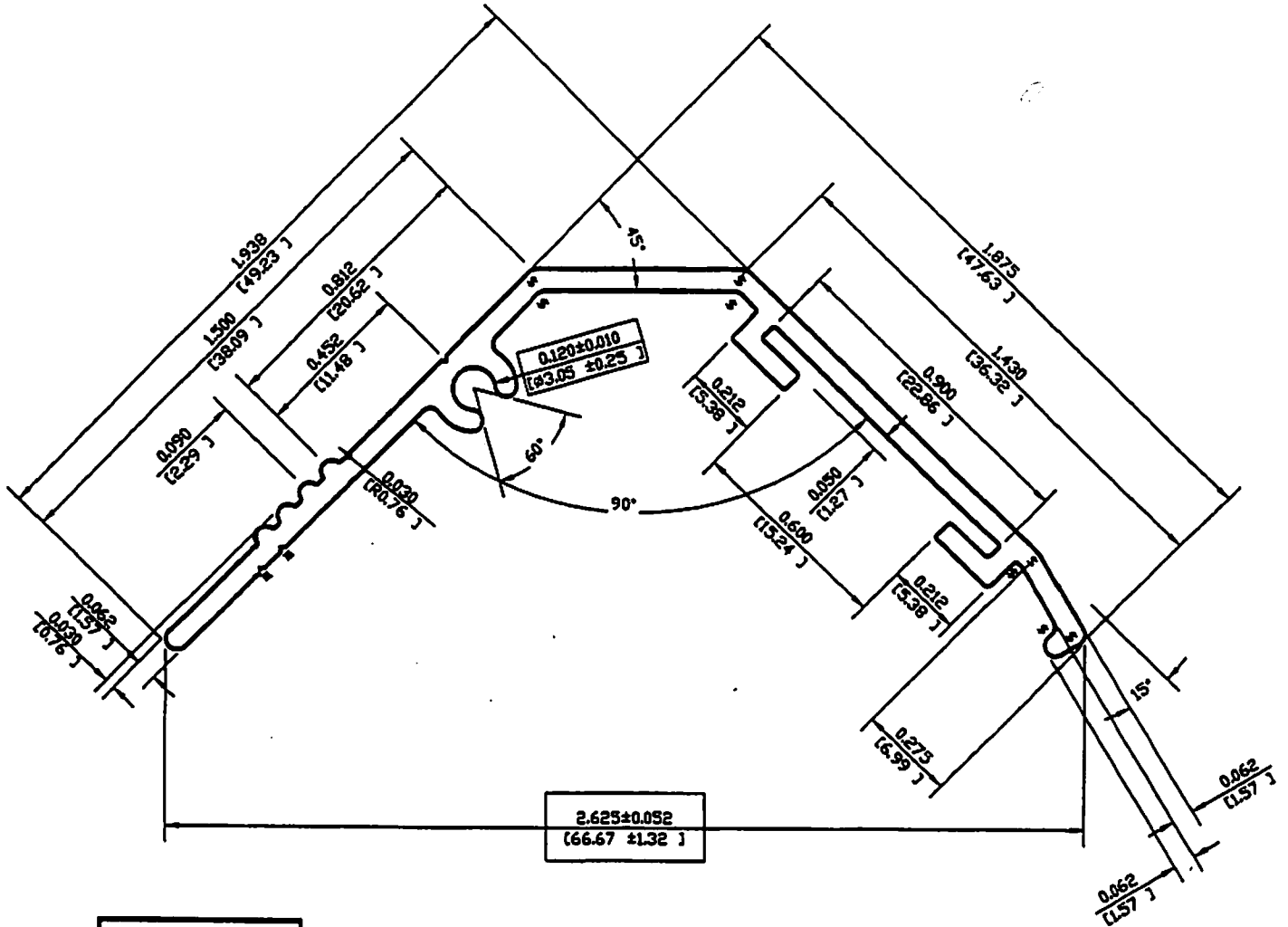
CUSTOMER #
01187233

CUSTOMER: **ARTISTIC SKYLIGHTS**

DIE NO. **SS-1880**

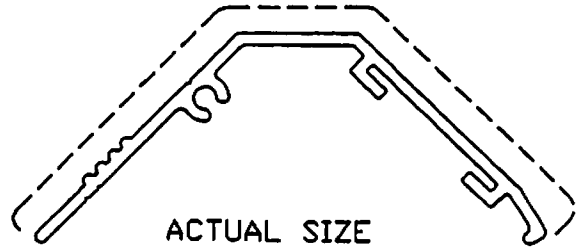
DATE: LET: REVISION: BY:

SPECTRA ALUMINUM PRODUCTS INC.
UNCONTROLLED
 Date: **FEB 20 2007**



CAVITY I.D.

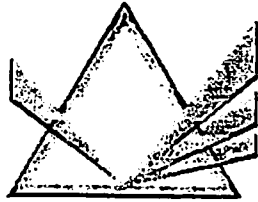
EXPOSED SURFACES



NOTE: WALL THICKNESS IS 0.062" (1.57mm) UNLESS OTHERWISE SHOWN
 NOTE: BREAK ALL CORNERS AT 0.010" (0.25mm) UNLESS OTHERWISE SHOWN
 NOTE: * INDICATES A 0.031" (0.79mm) RADIUS

X.XXX = CRITICAL DIM.
 * = 0.010 (0.25) X 90° (SPECTRA ALUMINUM ID MARK)

NOTE:
 STANDARD ALUMINUM ASSOCIATION TOLERANCES APPLY UNLESS OTHERWISE SPECIFIED.



SPECTRA
 ALUMINUM PRODUCTS INC.

PRICING: WEIGHT <input checked="" type="checkbox"/> PIECE: <input type="checkbox"/>	ALLOY: CHECK P.O.	TEMPER: TS
SS NO.: 1	CONT'R: 6'	PKT: 3/4" EXT. RATIO 50.66
BACKER NO.: BA-1632-1	DIE SIZE: 8" x 1"	
BOLSTER NO.: BD-2B	BACKER SIZE: 8" x 3"	
GUAGE:	NITROGEN: <input type="checkbox"/>	CAV.: 2
DWN. BY: S.B.	SCALE: 2:1	DATE: NOV/30/2000

EST. AREA: 0.279 sq.in 180.00 sq.mm	INS. PER: In MM
OUT. PER: 8.811 in 223.80 mm	FACTOR: 26.78
EST. WT: 0.329 lbs/ft. 0.489 kg/m	CCD: 2.625 in 66.66 mm