



TEST REPORT

Report No.: E3508.03-301-44

Rendered to:

SKYCO SKYLIGHTS Costa Mesa, California

PRODUCT TYPE: Louvered Curb Mount Skylight **SERIES/MODEL**: 4896-A-S-CM-SPW-MF/4896 Vortex Rain Shield CM

Title	Summary of Results
Air Infiltration	130 cfm/ft ² @ 0.040 psf
Air Infiltration	100 cfm/ft ² @ 0.025 psf

Reference must be made to Report No. E3508.03-301-44, dated 01/08/2015 for complete test specimen description and detailed test results.





1.0 Report Issued To:	Skyco Skylights 2995 Airway Avenue, Suite B Costa Mesa, California 92626
2.0 Test Laboratory:	Architectural Testing, Inc. 4 Rancho Circle Lake Forest, California 949-460-9600

3.0 Project Summary:

- 3.1 Product Type: Louvered Curb Mount Skylight
- 3.2 Series/Model: 4896-A-S-CM-SPW-MF/4896 Vortex Rain Shield CM
- **3.3 Compliance Statement**: Results obtained are tested values and were secured by using the designated test method. Test specimen description and results are reported herein.
- **3.4 Test Dates**: 12/09/2014 12/11/2014
- **3.5 Test Record Retention End Date**: All test records for this report will be retained until December 11, 2018.
- **3.6 Test Location**: Architectural Testing, Inc.'s test facility in Lake Forest, California.
- **3.7 Test Specimen Source**: The specimens were selected by Architectural Testing, Inc. personnel. The specimen was witnessed during production and tagged prior to shipment on December 05, 2014, (Reference Architectural Testing Test Specimen Selection Report No. E3507.01-301-15, dated December 08, 2014). Representative samples of the test specimen will be retained by Architectural Testing for a minimum of four years from the test completion date.
- **3.8 Drawing Reference**: The test specimen drawings have been reviewed by Architectural Testing and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Architectural Testing per the drawings located in Appendix A. Any deviations are documented herein or on the drawings.

3.9 List of Official Observers:

<u>Name</u>

<u>Company</u>

Bob Sampson Ryan Marshall Patrick Walsh Jarod Hardman RCS Consulting Skyco Skylights Skyco Skylights Architectural Testing, Inc.



4.0 Test Method:

ASTM E 283-04, Test Method for Determining Rate of Airflow Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen.

5.0 Test Specimen Description:

5.1 Product Sizes:

Overall Area:	Wie	dth	Hei	ght
3.38 m ² (36.37 ft ²)	millimeters	inches	millimeters	inches
Overall skylight size	2546	100-1/4	1327	52-1/4
Dome height	-	-	333	13-1/8
Overall louver curb size	2546	100-1/4	1327	52-1/4
Louver height	-	-	289	11-3/8

5.2 Frame Construction:

Frame Member	Material	Description
Skylight frame	6063 T-5	See attached Drawing #ALCM048 and Drawing
Skyngnt frame	Aluminum	#ALCM096.
Snap-in	6063 T-5	See attached Drawing #SICP048 and Drawing
perimeter cap	Aluminum	#SICP096.
Louver base	20 Gauge steel	See attached Drawing #ASSY021.
Dain guard	24 Cauga ataal	See attached Drawing #SLRG100 and Drawing
Rain guard	24 Gauge steel	#SLRG101.
Exterior louver	20 Gauge steel	See attached Drawing #SLLP100 and Drawing
panel	20 Gauge Steel	#SLLP101.

	Joinery Type	Detail
Skylight frame	Mitered	Corners welded and silicone sealant applied to
corners	Millereu	corner joint inside of condensation track.
Snap-in	Mitered	Cap bead of silicone sealant applied to exterior
perimeter cap	Mitereu	of miter.
Louver base	Mitered	Corners welded at exterior face of joint.
Rain guard and		Corners overlapped one another and the rain
exterior louver	Mitered	guard was secured between the louver panel
panel		and base with $\#10 \ge 1/2$ " hex head tek screws.





5.0 Test Specimen Description: (Continued)

5.3 Weatherstripping:

Description	Quantity	Location
EPDM Gasket	1 row	Press fit into channel of frame (Drawing #ALCM048/ALCM096), see attached drawing #GSKT048/ GSKT096.

5.4 Glazing: No conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made.

Glass Type	Glazing	Glazing Method
Monolithic	0.118" CC1 Polycarbonate	Secured by snap in perimeter cap with 1/2" bead of silicone sealant on top and underside of dome perimeter when secured.

Logation	Quantity	Dayligh	Daylight Opening		
Location	Quantity	millimeters	inches	Glass Bite	
Dome	1	2438 x 1219	96 x 48	1"	

5.5 Drainage:

Drainage Method	Size	Quantity	Location
Weep hole	1/4" diameter	8	One at each corner and mid-span of each side through frame between snap in cap receiver and press fit gasket receiver.

5.6 Hardware: No hardware was utilized.

- **5.7 Reinforcement**: No reinforcement was utilized.
- **5.8 Screen Construction**: No screen was utilized.





6.0 Installation:

The specimen was installed into a Spruce-Pine-Fir wood buck. The rough opening allowed for a 1/2" shim space. The exterior perimeter of the skylight was sealed at the curb with silicone sealant.

Location	Anchor Description	Anchor Location
Full perimeter of skylight to louver	#10 x 1-3/4" slotted hex head screw with neoprene bonded steel washer	3" from each corner and 12" on center spacing for long spans and 3" from each corner and 15- 1/2" on center spacing for short spans.
Full perimeter of louver to curb	#10 x 1/2" hex head tek screw	3" from each corner and 12" on center spacing.

7.0 Test Results: The temperature during testing was 22°C (72°F). The results are tabulated as follows:

Title of Test	Results	Allowed	Note
Air Leakage,			
per ASTM E 283	650 L/s/m ²		
at 1.92 Pa (0.040 psf)	(130 cfm/ft ²)	Report Only	1
Air Leakage,			
per ASTM E 283	500 L/s/m ²		
at 1.20 Pa (0.025 psf)	(100 cfm/ft ²)	Report Only	2

General Note: All testing was performed in accordance with the referenced standard(s).

Note 1: Air infiltration testing was conducted to the maximum air flow capabilities of the equipment used, desired air infiltration pressure of 1.57 psf was not achieved. Any achieved results are as reported.

Note 2: Air infiltration testing pressure and flow were logged at 100 cfm to provide a point of reference for comparison with max flow reading of equipment used.





Architectural Testing will service this report for the entire test record retention period. Test records that are retained such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation will be retained by Architectural Testing, Inc. for the entire test record retention period.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, Inc.

Jarod S. Hardman Laboratory Manager

JSH:ss

Attachments (pages): This report is complete only when all attachments listed are included. Appendix-A: Drawings (25)

This report produced from controlled document template ATI 00479, issued 01/27/12.

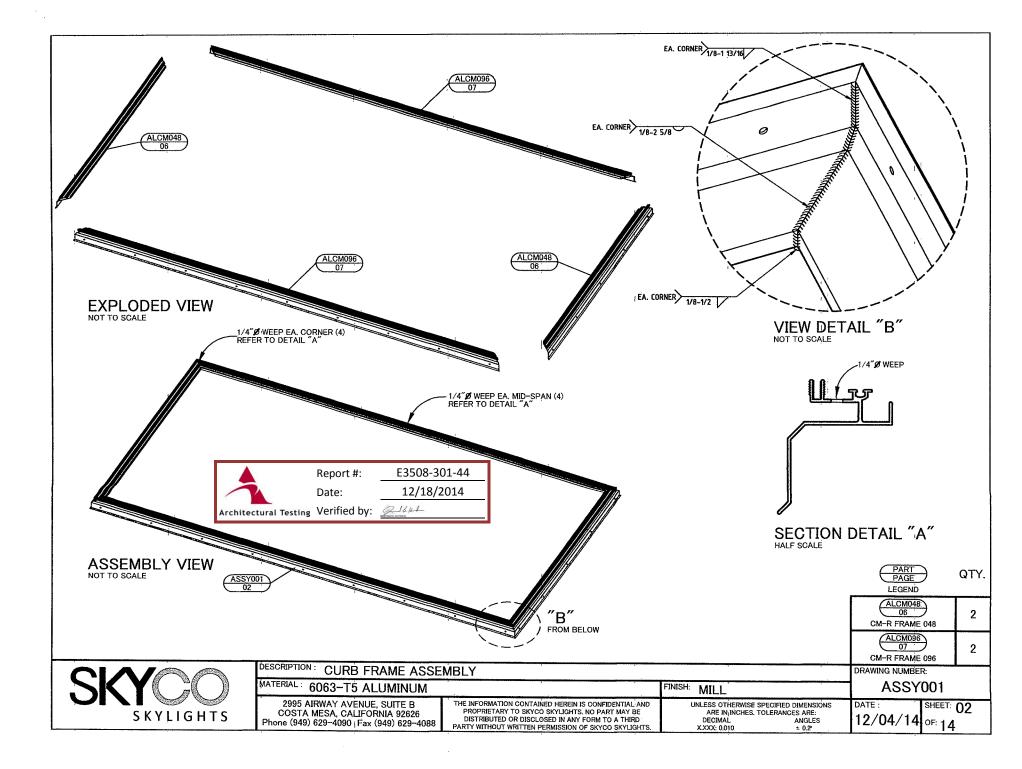


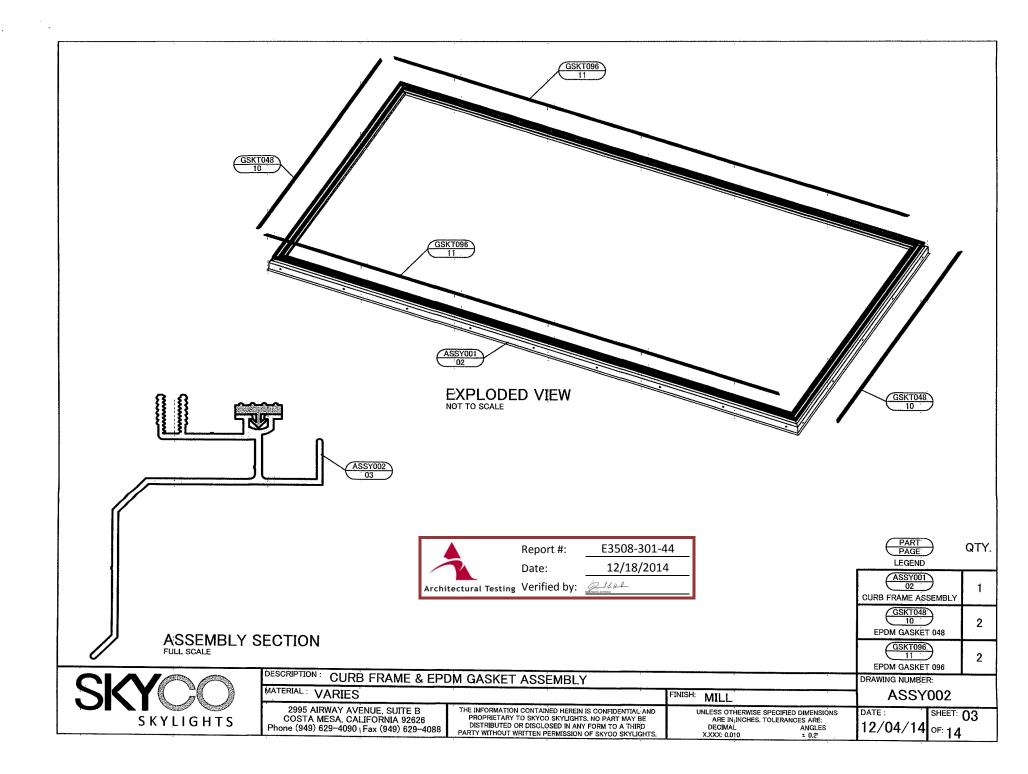


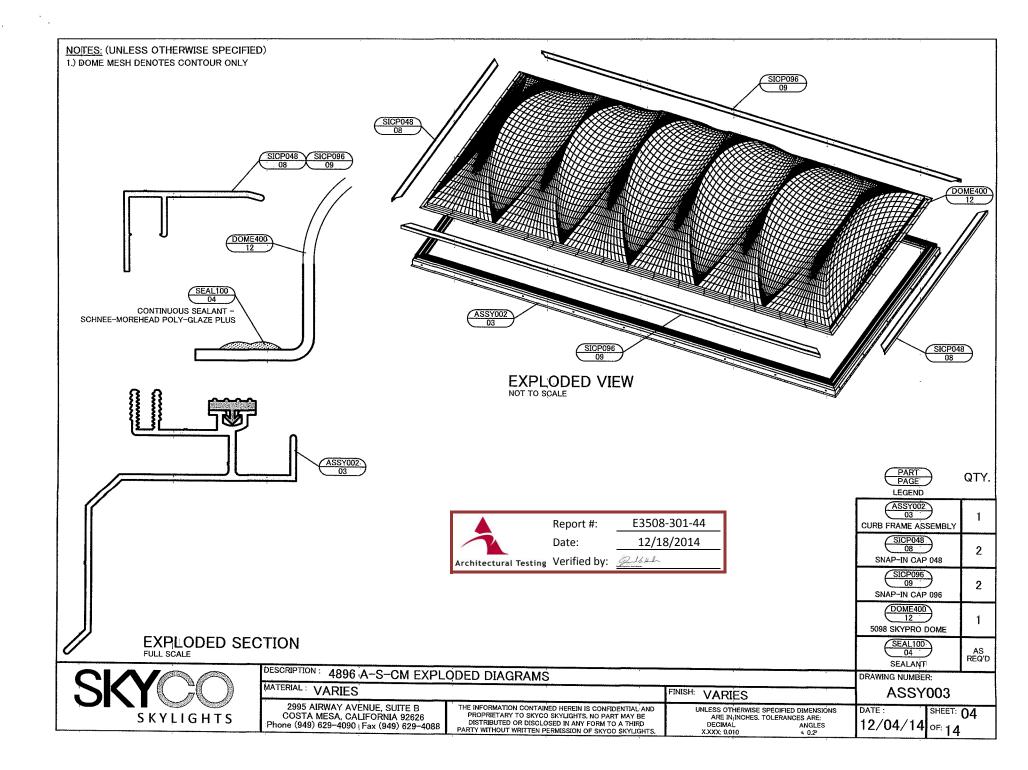
Appendix A

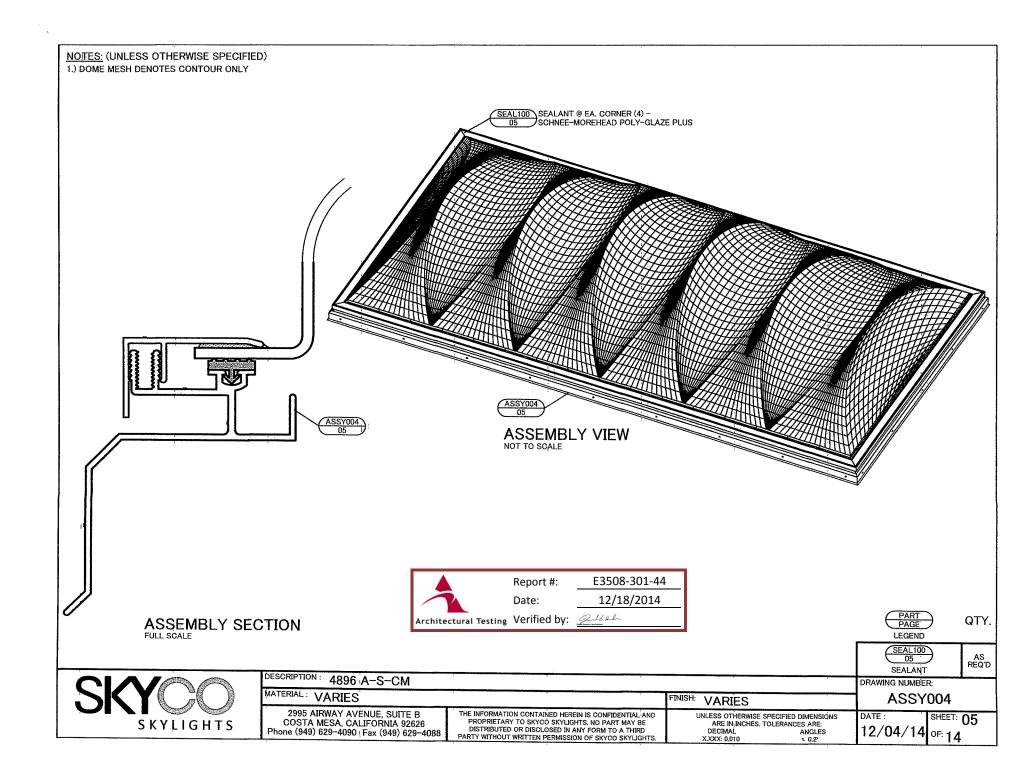
Drawings

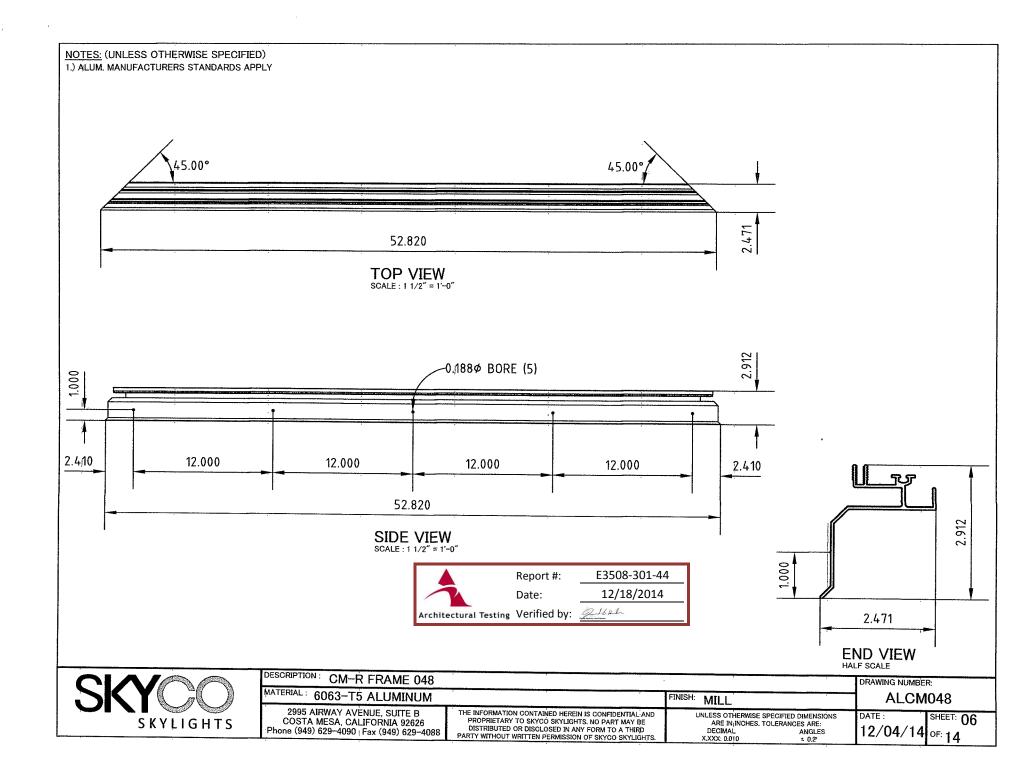
			INDEX			-
PAGE	ILLUS	TRATION	DESCRIPTION			
01		1	INDEX / PARTS LIST			
02	AS	SY001	CURB FRAME ASSEMBLY			
03	AS	SY002	CURB FRAME & EPDM GASKET ASSEMBLY			
04	AS	SY003	4896 A-S-CM EXPLODED DIAGRAMS			
05	AS	SY004	4896 A-S-CM			
06	ALC	CM048	CM-R FRAME 048			
07	ALC	CM096	CM-R FRAME 096			\searrow
08	SIC	P048	SNAP-IN PERIMETER CAP 048			
09	SIC	P096	SNAP-IN PERIMETER CAP 096			
10	GSI	СТ:048	EPDM GASKET 048			
, л 1	GSI	CT 096	EPDM GASKET 096			
12	DO	/IE400	5098 SKYPRO SKYWAVE DOME		Report #: E3508-	201-11
13	E-	8380	CM-R FRAME DIE DRAWING		Report #: E3508- Date: 12/18	
14	E	8381	SNAP-IN PERIMETER CAP DIE DRAWING	Architectural Testin	g Verified by: 21544	
			PA	RTS LIST		
ITEM NO.	PAGE	REFERENCE	DESCRIPTION	MATERIAL	FINISH	QUAI
1.	06		CM-R FRAME 048	6063-T5 ALUMINUM	MILL	
;2.	07		CM-R FRAME 096	6063-T5-ALUMINUM	MILL	
;3.	08	SICP048	SNAP-IN PERIMETER CAP 048	6063-T5 ALUMINUM	MILL	
:4.	09	SICP096 08	SNAP-IN PERIMETER CAP 096	6063-T5,ALUMINUM	MILL	
<u>.</u> 5.	10	GSKT048 09	EPDM GASKET 048	ETHYLENE PROPYLENE DIENE MONOMER RUBBER	BLACK	
;6 .	11	GSKT096 10	EPDM GASKET 096	ETHYLENE PROPYLENE DIENE MONOMER RUBBER	BLACK	
7.	12	DOME400 11	5098 SKYPRO SKYWAVE DOME	0.118" CC1 POLYCARBONATE	HIGH WHITE	-
<u>;</u> 8.	04/05	SEAL100 04/05	SCHNEE-MOREHEAD POLY-GLAZE PLUS SEALANT	SILICONE	CLEAR	AS R
SKY	CO YLIGHTS	2995 COSTA Phone (949	AIRWAY AVENUE, SUITE B MESA, CALIFORNIA 92626) 629-4090 Fax (949) 629-4088 A-S-CM A	R, WATER & STRUCTURAL	EST RELEASE DATE: 12/04/14	SHEET: OF: 14

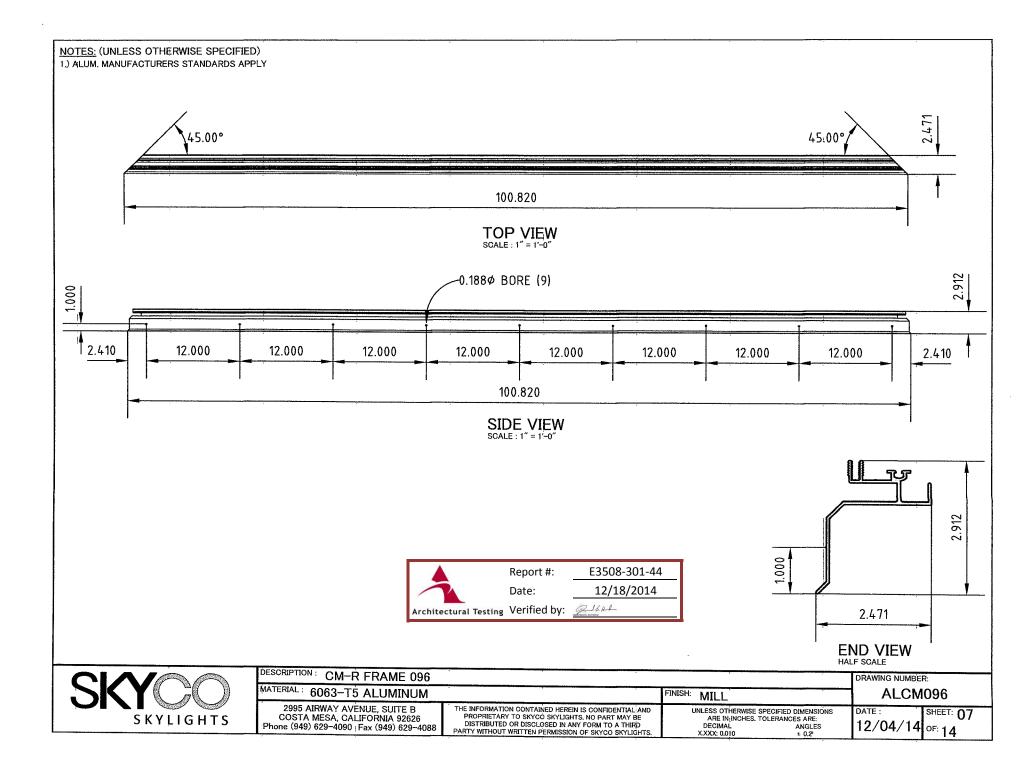


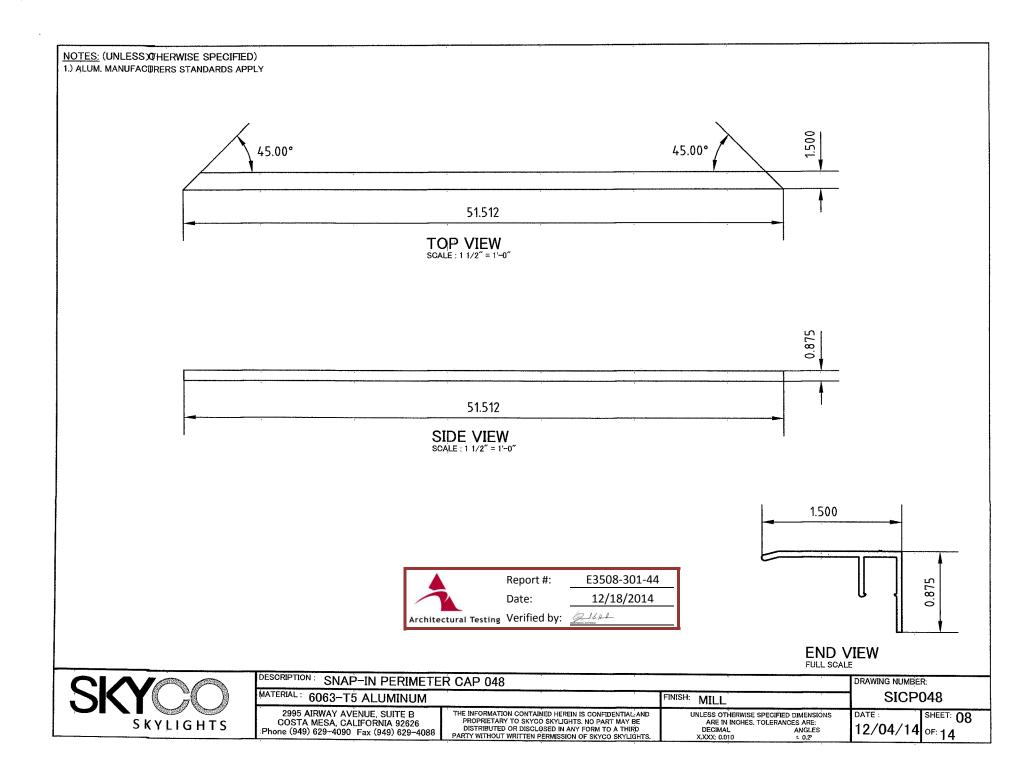


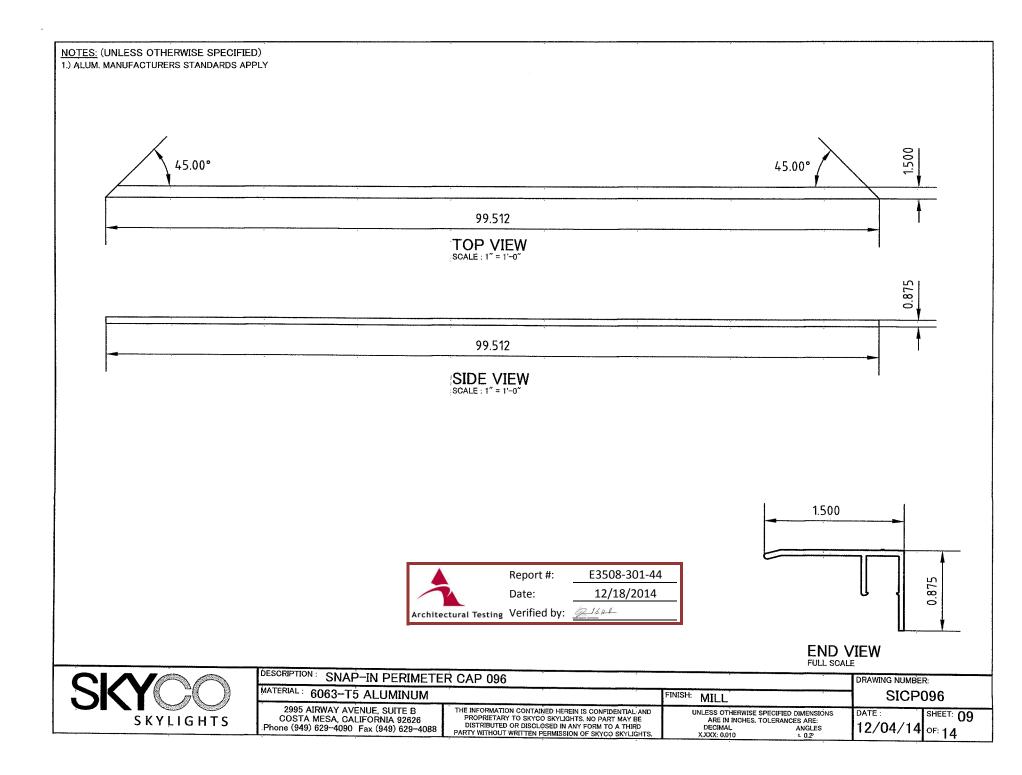


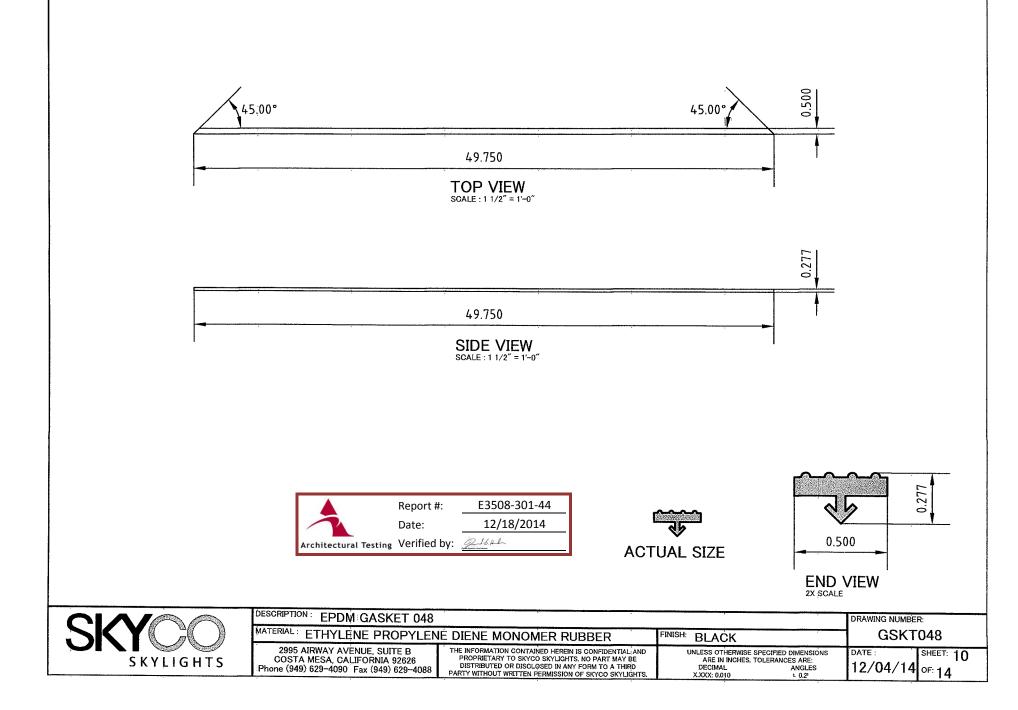




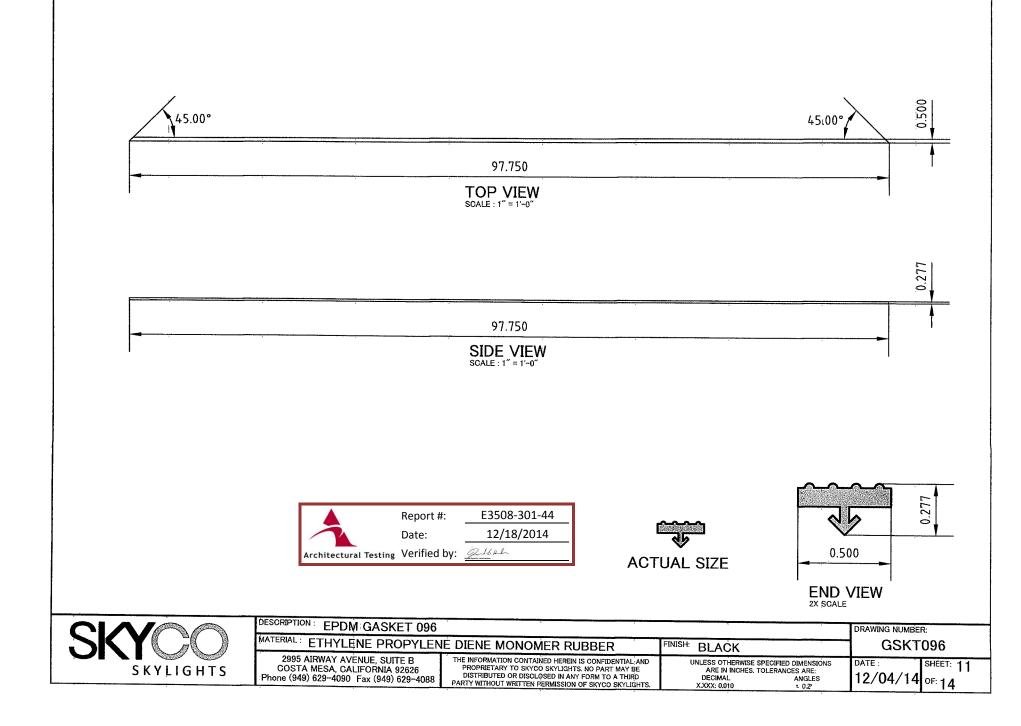


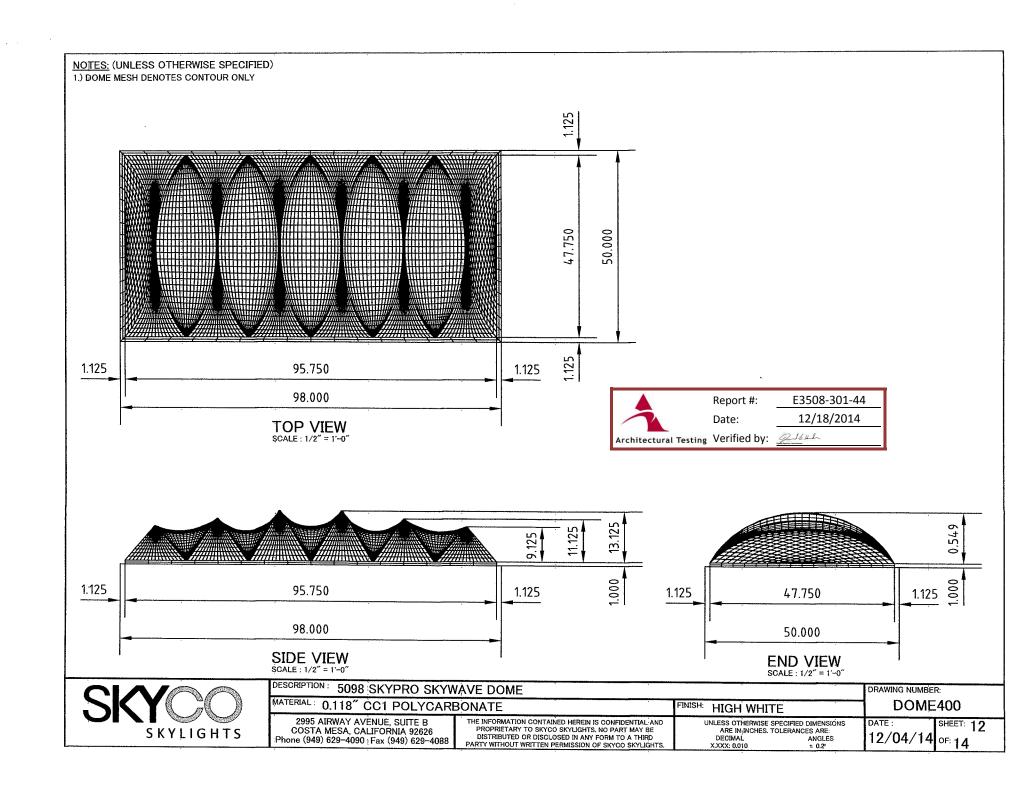


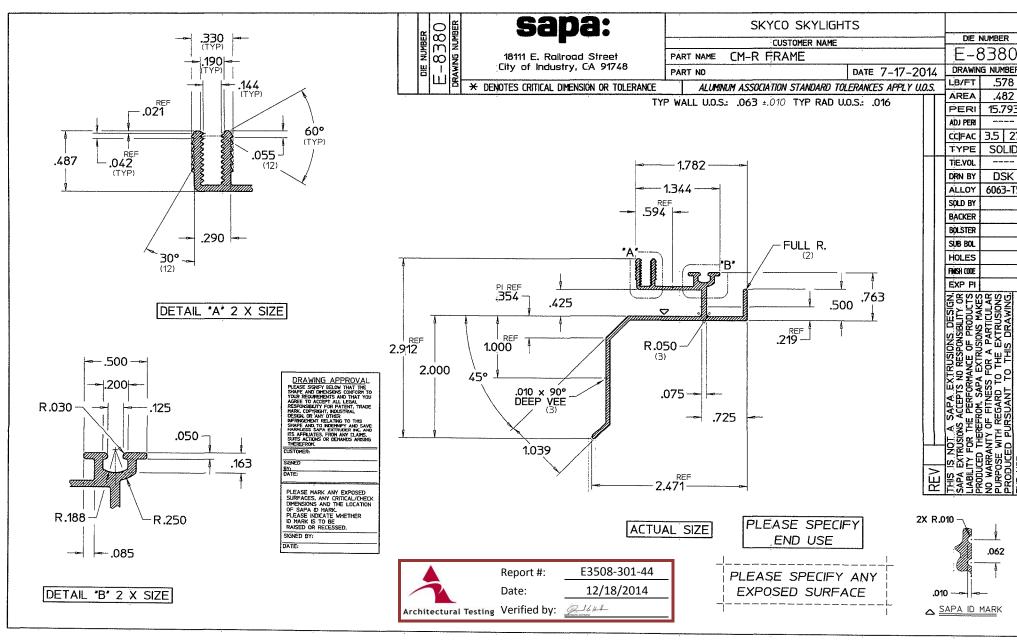




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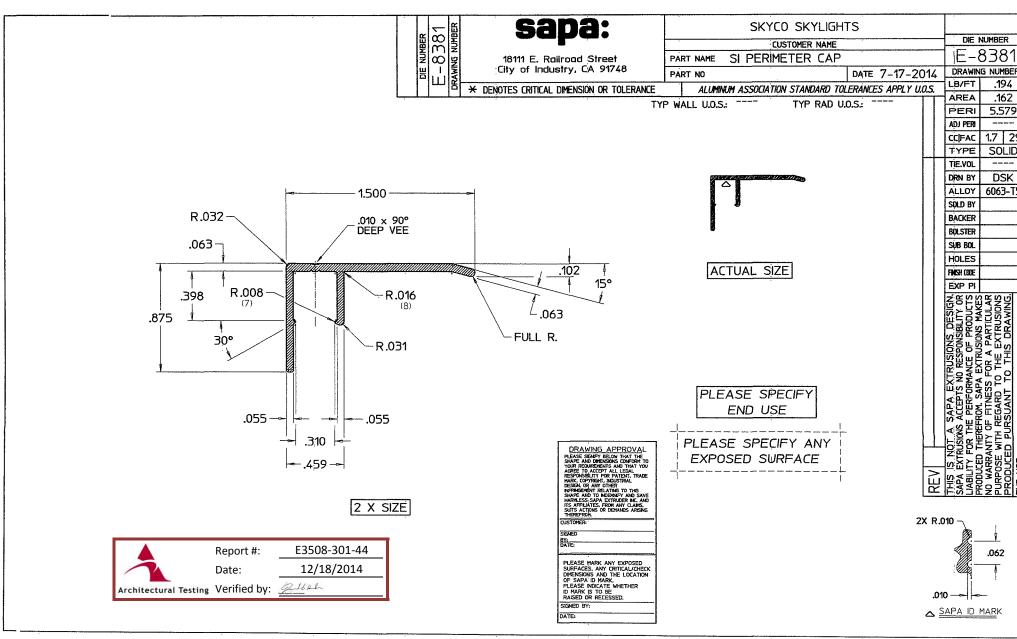






13/14





			INDEX / P	ARTS LIST			
PAGE	ILLUSTRATION	DESCRIPTION		MATERIAL	FINISH	QUANTITY	TOTAL QTY
01		INDEX / PARTS LIST / HARDWARE LIST					
02	ASSY021	VORTEX BASE ASSEMBLY		an a			
03	ASSY022	RAIN GUARD & LOUVER PANEL ASSEMBL	Y - SIDES				
04	ASSY023	RAIN GUARD & LOUVER PANEL ASSEMBLY	Y - ENDS				
05	ASSY024	4896 VORTEX RAIN SHIELD CM					<u> </u>
06	SLCM100	LOUVER BASE - ENDS		20 GA. (0.0396) ASTM A TYPE B	G90 GALVANIZED	2	
07	SLCM101	LOUVER BASE SIDES		20 GA. (0.0396) ASTM A TYPE B	G90 GALVANIZED	2	
08	SLLP100	LOUVER PANEL - ENDS		20 GA. (0.0396) ASTM A TYPE B	G90 GALVANIZED	2	h
09	SLLP101	LOUVER PANEL - SIDES		20 GA. (0.0396) ASTM A TYPE B	G90 GALVANIZED	2	
10	SLRG100	RAIN GUARD - ENDS		24 GA. (0.0276) ASTM A TYPE B	G90 GALVANIZED	2	<u> </u>
11	SLRG101	RAIN GUARD - SIDES		24 GA. (0.0276) ASTM A TYPE B	G90 GALVANIZED	2	
			HARDWA				L
ITEM	REFERENCE	DESCRIPTION		MATERIAL	FINISH	QUANTITY	TOTAL QTY.
1	HDWR01 01	#10-16 X 0.500 HEX HEAD TEK SCREW		999 - 1999 - The State of the	ZINC	44	
					Report #: Date: Architectural Testing Verified b	12/18	
							5
ORI	DER NO.	CUSTOMER	PROJECT	DFLIV		DATE 1	
ORI	DER NO.	CUSTOMER	PROJECT	DELIV	ERY ADDRESS		RELEASE DATE

