

SOLATUBE INTERNATIONAL, INC. TEST REPORT

SCOPE OF WORK FM 4473 IMPACT RESISTANCE TESTING OF SL5252 SKYLIGHT

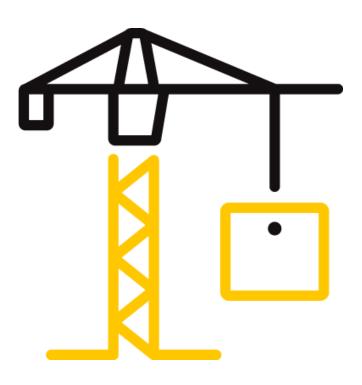
REPORT NUMBER P8519.01-801-44 R0

TEST DATE 04/13/23

ISSUE DATE 04/20/23

PAGES 18

DOCUMENT CONTROL NUMBER RT-R-AMER-Test-2957 (11/28/22) © 2017 INTERTEK





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TEST REPORT FOR SOLATUBE INTERNATIONAL, INC.

Report No.: P8519.01-801-44 R0 Date: 04/20/23

REPORT ISSUED TO

SOLATUBE INTERNATIONAL, INC. 2210 Oak Ridge Way Vista, California 92081

SECTION 1

SCOPE

Architectural Testing, Inc. (an Intertek company) dba Intertek Building & Construction (B&C) was contracted by Solatube International, Inc. to perform impact resistance testing in accordance with FM 4473 on their SL5252 SKYLIGHT. Results obtained are tested values and were secured by using the designated test method(s). Testing was conducted at Intertek B&C test facility in Plano, TX

Unless differently required, Intertek reports apply the "Simple Acceptance" rule also called "Shared Risk approach," of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity.

This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. Intertek B&C will service this report for the entire test record retention period. The test record retention period ends four years after the test date. Test records, such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation, will be retained for the entire test record retention period.

SECTION 2

SUMMARY OF TEST RESULTS

Product Type: Series/Model: Product Classification Achieved: Class 4

For INTERTEK B&C:



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SECTION 3

TEST METHOD(S)

The specimens were evaluated in general accordance with the following:

ANSI/FM 4473-2011 (R2020), American National Standard for Impact Resistance Testing of Rigid Roofing Materials by Impacting with Freezer Ice Balls

SECTION 4

MATERIAL SOURCE/INSTALLATION

Test specimen was provided by the client. Representative samples of the test specimen(s) will be retained by Intertek B&C for a minimum of four years from the test completion date.

Installation of the tested product was performed by Intertek. The 51-3/4" x 51-3/4" specimen was anchored to a 60" x 36" wood deck by bracing the skylight against a wooden batten and securing it in place with a ratcheting strap.

SECTION 5

EQUIPMENT

Cannon: Constructed from steel piping utilizing compressed air to propel the missile Missile: 50.8 mm (2.0") diameter ice balls Cannon Identification Number: 005469 Timing Device: Electronic Beam Type Timing Device Calibration Date: 3/29/23

SECTION 6

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Todd Anderson	Solatube International, Inc.
Fred Muñoz	Intertek B&C



TEST REPORT FOR SOLATUBE INTERNATIONAL, INC.

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SECTION 7

TEST SPECIMEN DESCRIPTION

Product Type: Aluminum-Framed Skylight with Insulating Glass Assembly Insert
Series/Model: SL5252
Color: Brown
Finish: Painted
Overall Assembly Size: 1314 mm (51-3/4") width by 1314 mm (51-3/4") length
Daylight Opening Size: 1143 mm (45") width by 1143 mm (45") length
Nominal Thickness – Insulating Glass Assembly: 23 mm (15/16")
Frame Thickness: 2 mm (0.0675")

Deck Construction

The wood test deck was 3' wide x 4' high and constructed with 2x4 pine construction lumber at the perimeter with one stud located at the midspan. The test deck was covered with 15/32" thick plywood decking secured to the test deck with #6 x 1-5/8" screws located 2" from each end and on 6" centers.

Specimen Construction

The skylight was constructed of an insulating glass assembly mounted in an aluminum frame. The 51-1/2" x 51-1/2" assembly is secured in place by a rigid PVC extrusion attached to the frame by aluminum rivets. The insulating glass assembly is comprised of an exterior lite of clear, 4 mm tempered lite, a 12.5 mm spacer, and an interior lite of laminated glass. The laminated lite is two 3 mm clear annealed lites with an interlayer of 0.03" polyvinyl butyral.



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SECTION 8

TEST RESULTS

FM 4473, Ice Ball Impact Resistance

Sample Conditioning Temperature: 22°C (72°F) for at least 4 hours Sample Conditioning Relative Humidity: 52% for at least 4 hours Ice Ball Conditioning Temperature: -23°C (-10°F) for at least 48 hours Muzzle Distance from Test Specimen: 914 mm (36")

The ambient temperature during testing was 22°C (71°F). The results are tabulated as follows.

	MISSILE							
IMPACT	VELOCITY m/s (fps)	ORIENTATION	WEIGHT g (lbs)	DIAMETER mm (in.)	ENERGY ft-lb	IMPACT AREA	OBSERVATIONS	RESULTS
1	32.4 (106.3)	15° of vertical	63.6 (0.140)	50.8 (2.0)	24.63	Top left corner, 2" from each edge	No visible cracking or breakage	Pass
2	32.6 (106.9)	15° of vertical	64.7 (0.143)	50.8 (2.0)	25.33	Top left corner, 2" from each edge	No visible cracking or breakage	Pass
3	32.7 (107.3)	15° of vertical	63.3 (0.140)	50.8 (2.0)	24.97	Top middle, 2" from edge	No visible cracking or breakage	Pass
4	32.2 (105.7)	15° of vertical	66.1 (0.146)	50.8 (2.0)	25.30	Top middle, 2" from edge	No visible cracking or breakage	Pass
5	32.2 (105.7)	15° of vertical	64.7 (0.143)	50.8 (2.0)	24.77	Center, 24-1/2" from each edge	No visible cracking or breakage	Pass
6	32.4 (106.3)	15° of vertical	65.5 (0.144)	50.8 (2.0)	25.36	Center, 24-1/2" from each edge	No visible cracking or breakage	Pass

Test Unit #1

intertek Total Quality. Assured.

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TEST REPORT FOR SOLATUBE INTERNATIONAL, INC.

Report No.: P8519.01-801-44 R0 Date: 04/20/23

Test Unit #1

	MISSILE							
ІМРАСТ	VELOCITY m/s (fps)	ORIENTATION	WEIGHT g (lbs)	DIAMETER mm (in.)	ENERGY ft-lb	IMPACT AREA	OBSERVATIONS	RESULTS
7	32.4 (106.3)	15° of vertical	64.9 (0.143)	50.8 (2.0)	25.13	Right middle, 4" from right edge and 24-1/2" from bottom edge	No visible cracking or breakage	Pass
8	32.1 (105.3)	15° of vertical	62.9 (0.139)	50.8 (2.0)	23.90	Right middle, 4" from right edge and 24-1/2" from bottom edge	No visible cracking or breakage	Pass
9	32.4 (106.4)	15° of vertical	64.5 (0.142)	50.8 (2.0)	25.02	Bottom right corner, 4" from each edge	No visible cracking or breakage	Pass
10	32.6 (106.9)	15° of vertical	65.7 (0.145)	50.8 (2.0)	25.73	Bottom right corner, 4" from each edge	No visible cracking or breakage	Pass
11	31.9 (104.5)	15° of vertical	63.5 (0.140)	50.8 (2.0)	23.76	Bottom left, 12- 1/4" from each edge	No visible cracking or breakage	Pass
12	32.6 (106.9)	15° of vertical	65.1 (0.144)	50.8 (2.0)	25.49	Bottom left, 12- 1/4" from each edge	No visible cracking or breakage	Pass



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SECTION 9

CONCLUSION

The sample tested met the performance requirements set forth in the referenced test procedures for a Class 4.



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SECTION 10

PHOTOGRAPHS



Photo No. 1 Specimen Anchored to Deck

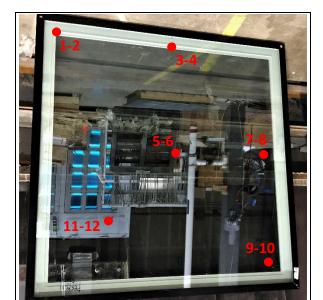


Photo No. 2 Locations of Impacts



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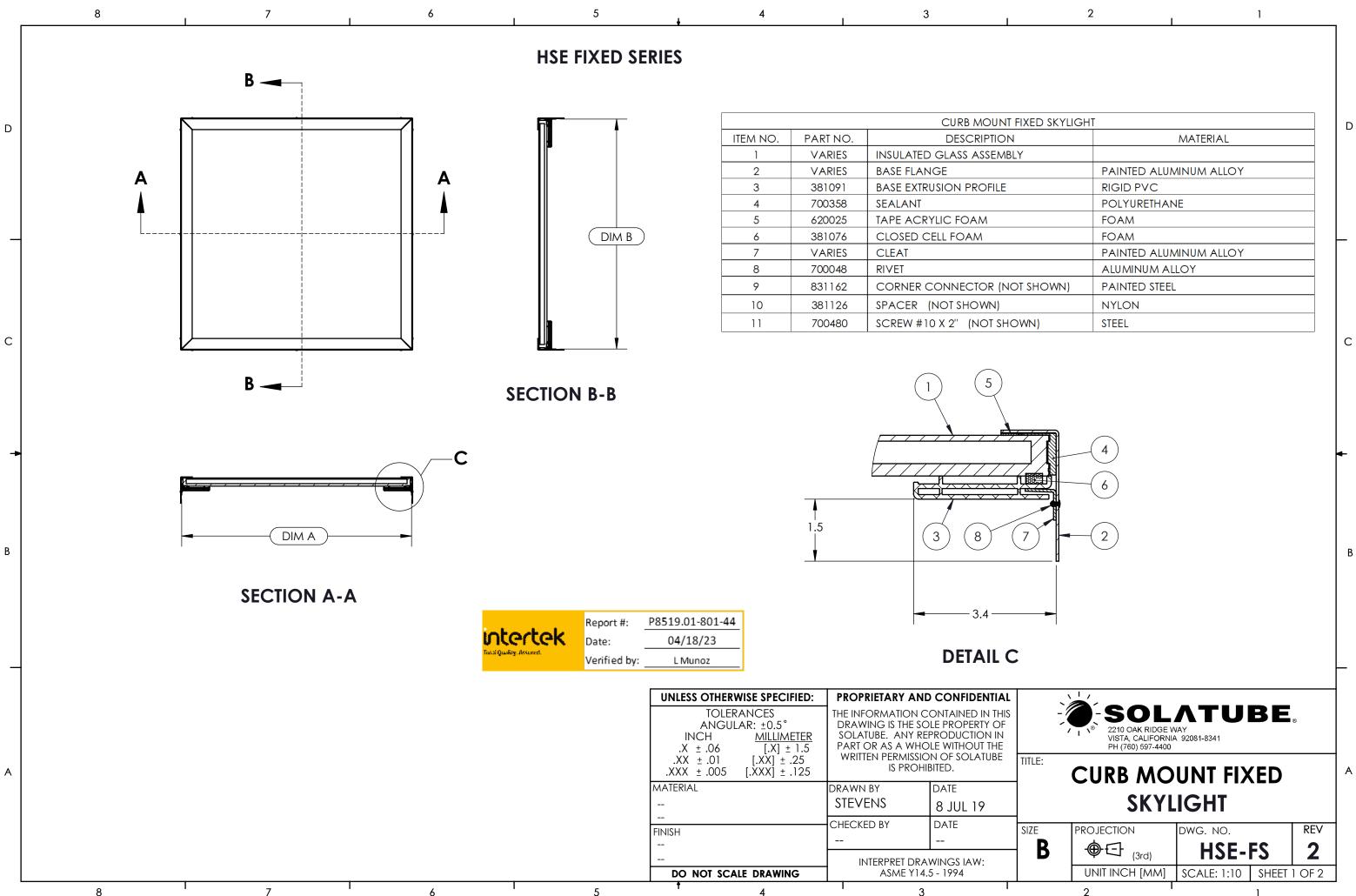
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SECTION 11

DRAWINGS

The test specimen drawings have been reviewed by Intertek B&C and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Intertek B&C per the drawings included in this report. Any deviations are documented herein or on the drawings.

Note: Complete drawings packet on file with Intertek B&C.



f fixed skylight							
N	MATERIAL						
3LY							
	PAINTED ALUMINUM ALLOY						
	RIGID PVC						
	POLYURETHANE						
	FOAM						
	FOAM						
	PAINTED ALUMINUM ALLOY						
	ALUMINUM ALLOY						
ot shown)	PAINTED STEEL						
	NYLON						
OWN)	STEEL						

D

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SKYLIGHT

SL

5

XX

FIXED

-F

MODEL NUMBER KEYSIDE ASIDE B

XX

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2

1

NO.	MODEL	NO.	MODEL	NO.	MODEL
1	SL2020-F	32	SL2541-F	63	SL3352-I
2	SL2023-F	33	SL2543-F	64	SL3636-I
3	SL2025-F	34	SL2546-F	65	SL3639-I
4	SL2028-F	35	SL2549-F	66	SL3641-I
5	SL2031-F	36	SL2552-F	67	SL3643-I
6	SL2033-F	37	SL2828-F	68	SL3646-I
7	SL2036-F	38	SL2831-F	69	SL3649-I
8	SL2039-F	39	SL2833-F	70	SL3652-I
9	SL2041-F	40	SL2836-F	71	SL3939-I
10	SL2043-F	41	SL2839-F	72	SL3941-I
11	SL2046-F	42	SL2841-F	73	SL3943-I
12	SL2049-F	43	SL2843-F	74	SL3946-
13	SL2052-F	44	SL2846-F	75	SL3949-I
14	SL2323-F	45	SL2849-F	76	SL3952-
15	SL2325-F	46	SL2852-F	77	SL4141-I
16	SL2328-F	47	SL3131-F	78	SL4143-I
17	SL2331-F	48	SL3133-F	79	SL4146-I
18	SL2333-F	49	SL3136-F	80	SL4149-I
19	SL2336-F	50	SL3139-F	81	SL4152-
20	SL2339-F	51	SL3141-F	82	SL4343-
21	SL2341-F	52	SL3143-F	83	SL4346-I
22	SL2343-F	53	SL3146-F	84	SL4349-I
23	SL2346-F	54	SL3149-F	85	SL4352-I
24	SL2349-F	55	SL3152-F	86	SL4646-I
25	SL2352-F	56	SL3333-F	87	SL4649-I
26	SL2525-F	57	SL3336-F	88	SL4652-
27	SL2528-F	58	SL3339-F	89	SL4949-I
28	SL2531-F	59	SL3341-F	90	SL4952-I
29	SL2533-F	60	SL3343-F	91	SL5252-
30	SL2536-F	61	SL3346-F		
31	SL2539-F	62	SL3349-F		

SIDE A/B	DIM A/B
20	20.030
23	22.530
25	25.030
28	27.530
31	30.405
33	33.155
36	36.030
39	38.530
41	40.530
43	43.030
46	45.905
49	48.780
52	51.530
55	54.530
58	57.530
61	60.530
64	63.530
67	66.530
70	69.530
73	72.530
76	75.530
79	78.530
82	81.530
85	84.530

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intertek	Date:	04/18/23	
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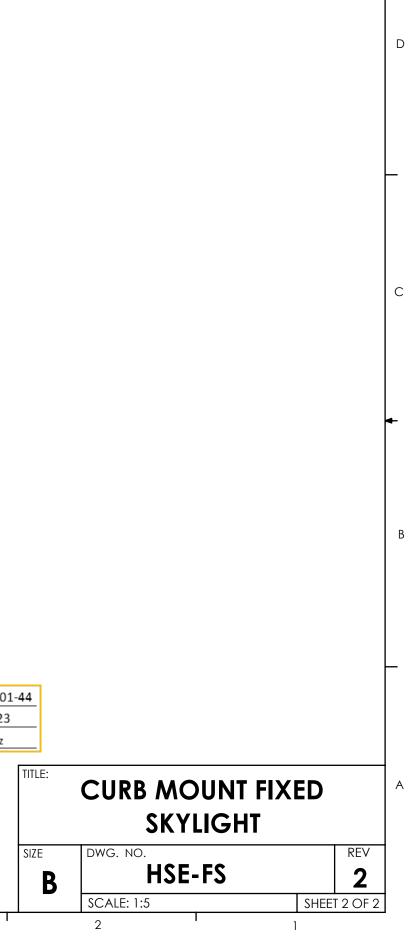
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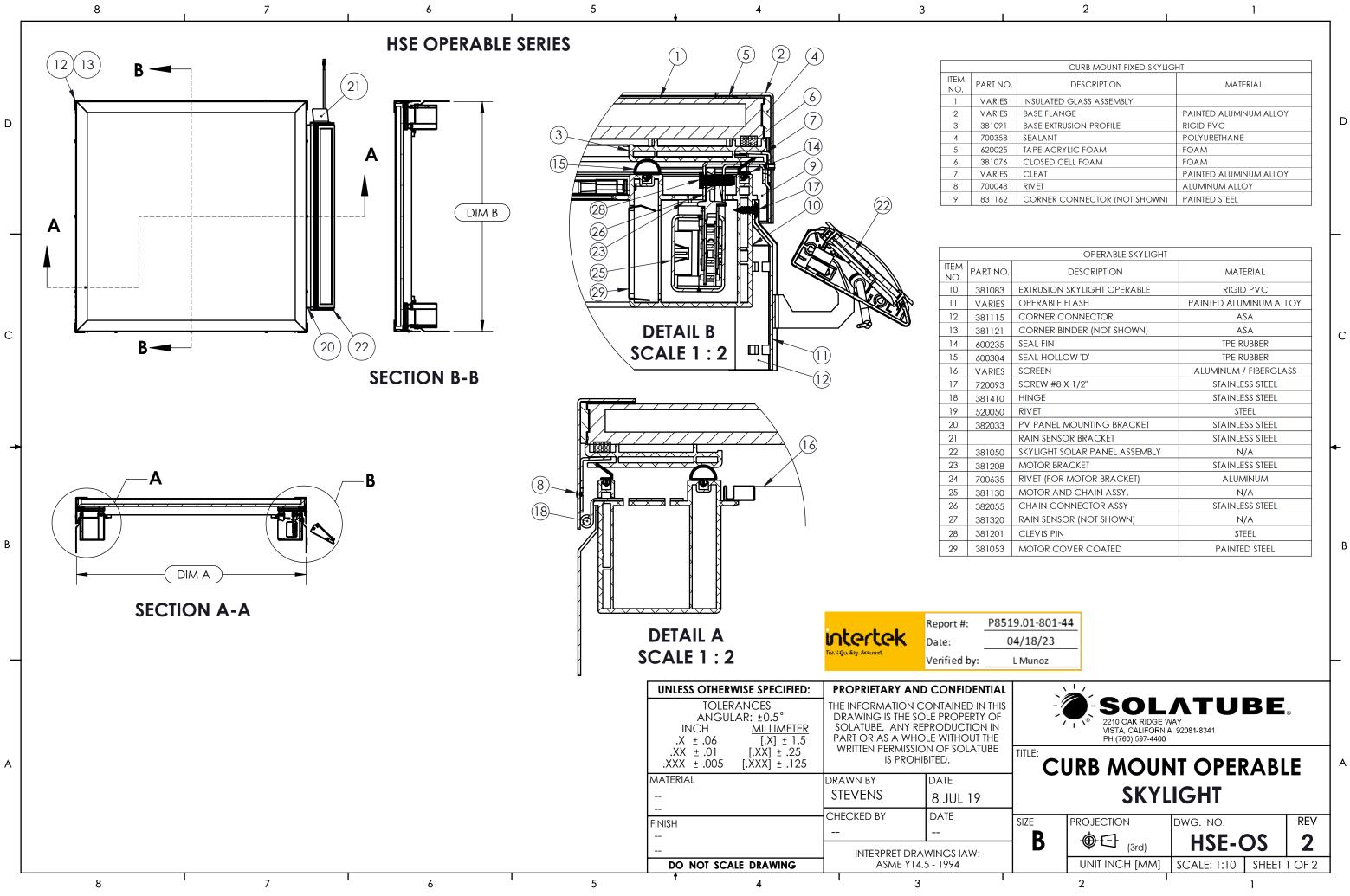
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	CURB MOUNT FIXED SKYLIG	HT
).	DESCRIPTION	MATERIAL
	INSULATED GLASS ASSEMBLY	
	BASE FLANGE	PAINTED ALUMINUM
	BASE EXTRUSION PROFILE	RIGID PVC
	SEALANT	

E	PAINTED ALUMINUM ALLOY
ION PROFILE	RIGID PVC
	POLYURETHANE
IC FOAM	FOAM
L FOAM	FOAM
	PAINTED ALUMINUM ALLOY
	ALUMINUM ALLOY
NNECTOR (NOT SHOWN)	PAINTED STEEL

	OPERABLE SKYLIGHT	
).	DESCRIPTION	MATERIAL
	EXTRUSION SKYLIGHT OPERABLE	RIGID PVC
	OPERABLE FLASH	PAINTED ALUMINUM ALLOY
	CORNER CONNECTOR	ASA
	Corner binder (not shown)	ASA
	SEAL FIN	TPE RUBBER
	SEAL HOLLOW 'D'	TPE RUBBER
	SCREEN	ALUMINUM / FIBERGLASS
	SCREW #8 X 1/2"	STAINLESS STEEL
	HINGE	STAINLESS STEEL
	RIVET	STEEL
	PV PANEL MOUNTING BRACKET	STAINLESS STEEL
	RAIN SENSOR BRACKET	STAINLESS STEEL
	SKYLIGHT SOLAR PANEL ASSEMBLY	N/A
	MOTOR BRACKET	STAINLESS STEEL
	RIVET (FOR MOTOR BRACKET)	ALUMINUM
	MOTOR AND CHAIN ASSY.	N/A
	CHAIN CONNECTOR ASSY	STAINLESS STEEL
	RAIN SENSOR (NOT SHOWN)	N/A
	CLEVIS PIN	STEEL
	MOTOR COVER COATED	PAINTED STEEL
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			OVE	RSIZED SKYLIGH	IT MODEL	NUMBERS		
	NO.	MODEL	NO.	MODEL	NO.	MODEL	NO.	MODEL
	1	SL2055-F	45	SL3155-F	89	SL4155-F	133	SL5255-F
	2	SL2058-F	46	SL3158-F	90	SL4158-F	134	SL5258-F
D	3	SL2061-F	47	SL3161-F	91	SL4161-F	135	SL5261-F
	4	SL2064-F	48	SL3164-F	92	SL4164-F	136	SL5264-F
	5	SL2067-F	49	SL3167-F	93	SL4167-F	137	SL5267-F
	6	SL2070-F	50	SL3170-F	94	SL4170-F	138	SL5270-F
	7	SL2073-F	51	SL3173-F	95	SL4173-F	139	SL5273-F
	8	SL2076-F	52	SL3176-F	96	SL4176-F	140	SL5276-F
	9	SL2079-F	53	SL3179-F	97	SL4179-F	141	SL5279-F
	10	SL2082-F	54	SL3182-F	98	SL4182-F	142	SL5282-F
	11	SL2085-F	55	SL3185-F	99	SL4185-F	143	SL5285-F
	12	SL2355-F	56	SL3355-F	100	SL4355-F	144	SL5555-F
	13	SL2358-F	57	SL3358-F	101	SL4358-F	145	SL5558-F
	14	SL2361-F	58	SL3361-F	102	SL4361-F	146	SL5561-F
с	15	SL2364-F	59	SL3364-F	102	SL4364-F	147	SL5564-F
	16	SL2367-F	60	SL3367-F	104	SL4367-F	148	SL5567-F
	17	SL2370-F	61	SL3370-F	105	SL4370-F	149	SL5570-F
	18	SL2373-F	62	SL3373-F	106	SL4373-F	150	SL5573-F
	19	SL2376-F	63	SL3376-F	107	SL4376-F	151	SL5576-F
	20	SL2379-F	64	SL3379-F	108	SL4379-F	151	SL5579-F
	21	SL2382-F	65	SL3382-F	109	SL4382-F	153	SL5582-F
-	22	SL2385-F	66	SL3385-F	110	SL4385-F	154	SL5585-F
	23	SL2555-F	67	SL3655-F	111	SL4655-F	155	SL5855-F
	24	SL2558-F	68	SL3658-F	112	SL4658-F	156	SL5858-F
	25	SL2561-F	69	SL3661-F	113	SL4661-F	157	SL5861-F
	26	SL2564-F	70	SL3664-F	114	SL4664-F	158	SL5864-F
В	27	SL2567-F	71	SL3667-F	115	SL4667-F	159	SL5867-F
	28	SL2570-F	72	SL3670-F	116	SL4670-F	160	SL5870-F
	29	SL2573-F	73	SL3673-F	117	SL4673-F	161	SL5873-F
	30	SL2576-F	74	SL3676-F	118	SL4676-F	162	SL5876-F
	31	SL2579-F	75	SL3679-F	119	SL4679-F	163	SL5879-F
	32	SL2582-F	76	SL3682-F	120	SL4682-F	164	SL5882-F
	33	SL2585-F	77	SL3685-F	121	SL4685-F	165	SL5885-F
	34	SL2855-F	78	SL3955-F	122	SL4955-F	166	SL6155-F
	35	SL2858-F	79	SL3958-F	123	SL4958-F	167	SL6158-F
	36	SL2861-F	80	SL3961-F	124	SL4961-F	168	SL6161-F
	37	SL2864-F	81	SL3964-F	125	SL4964-F	169	SL6164-F
	38	SL2867-F	82	SL3967-F	126	SL4967-F	170	SL6167-F
	39	SL2870-F	83	SL3970-F	120	SL4970-F	171	SL6170-F
A	40	SL2873-F	84	SL3973-F	128	SL4973-F	172	SL6173-F
	41	SL2876-F	85	SL3976-F	129	SL4976-F	172	SL6176-F
	42	SL2879-F	86	SL3979-F	130	SL4979-F	174	SL6179-F
	43	SL2882-F	87	SL3982-F	131	SL4982-F	175	SL6182-F
	44	SL2885-F	88	SL3985-F	132	SL4985-F	176	SL6185-F

7

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5

SKYLIGHT

SL

MODEL NUMBER KEY

SIDE B

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SIDE A

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			25
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			79
			82
			85

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	Report #:	P8519.01-801-44	
intertek	Date:	04/18/23	
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DIM A/B

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25.030 27.530

30.405 33.155 36.030 38.530 40.530 43.030 45.905 48.780 51.530 54.530 57.530 60.530

63.530

66.530 69.530 72.530 75.530 78.530 81.530 84.530

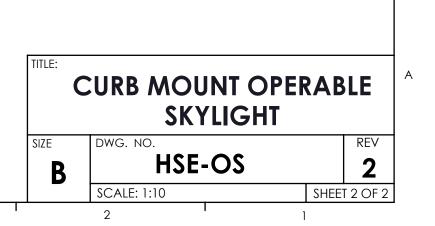
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SIDE A/B

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		•	•		•			
INSULATED GLAZII	NG ASSEMBLY SPECIFICATIO	N				REV.	ECO	
						С	3346	
 <u>1. PERFORMANCE CHARACTERISTICS</u> REFERENCE SCD P/N 990885 FOR ALL SIZES ON SHEET 3; 990887 FOR 							3372-1	
ALL SIZES ON	N SHEET 4					E	3380-1	1
2. MATERIAL / CC • REFERENCE ALL SIZES ON	SCD P/N 990885 FOR ALL SI	izes on sheet 3; 990887 fo	R			L		

3. SUPPLIER REQUIREMENTS

- NAFS SPECIFICATIONS REQUIRE THAT IGUS SHALL BE EV • CONFORMANCE WITH ASTM E2190, STANDARD SPECI INSULATING GLASS UNIT PERFORMANCE AND EVALUA 2010 PROVIDES DETAILS FOR CERTIFICATION PROGRAM
- NFRC 700 AND NFRC 705 REQUIRE THAT IGUS BE CERTI • PARTICIPATING IG CERTIFICATION PROGRAM. SUPPLIE BE LISTED IN THE "IGC DIRECTORY."

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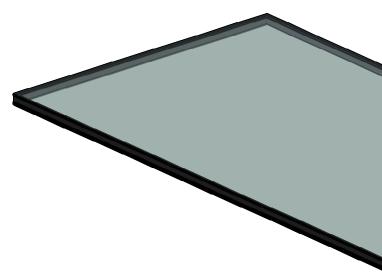
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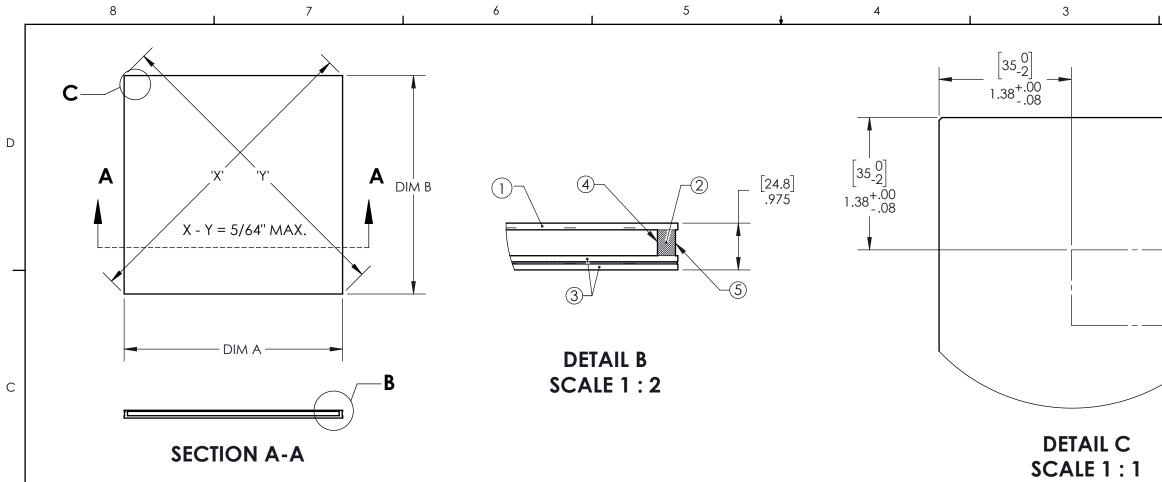
4. MARKING & ETCHING

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• SEE SHEET 2



6	5	↓ 4	3		2			I	
		·			•	REVISIONS			
				REV. ECO	DATE	REVISED	CHECKED	APPROVED	
				C 3346	6/11/2021	STEVENS			
EET 3; 990887 FOR				D 3372-	9/15/2021	STEVENS			D
				E 3380-	1 10/22/2021	STEVENS			
EET 3; 990887 FOR E EVALUATED FOR ECIFICATION FOR LUATION. NFRC 706- GRAMS. ERTIFIED WITH A PLIER OF IGU MUST									C
	interte Tatai Quality, Assured.	Report #: <u>P8519.01-801-44</u> Date: <u>04/18/23</u> Verified by: <u>L Munoz</u>							В
		UNLESS OTHERWISE SPECIFIED: TOLERANCES ANGULAR: ±0.5° INCH <u>MILLIMETER</u> .X ± .06 [.X] ± 1.5 .XX ± .01 [.XX] ± .25 .XXX ± .005 [.XXX] ± .125 MATERIAL SEE NOTE 2 FINISH DO NOT SCALE DRAWING	STEVENS CHECKED BY INTERPRET DRAW ASME Y14.5	PNTAINED IN THE E PROPERTY O RODUCTION IN E WITHOUT THE OF SOLATUBE TED. DATE 9/17/19 DATE 		SOL 2210 OAK RIDGE V VISTA, CALIFORNI PH (760) 597-4400	A 92081-8341 DGLAS MBLY DWG. NO. SEE TAE	S REV	A
6	5	' 4	3		2		1		



	NO.	CODE	DIM max (in)	DIM max (mm)	ORDER SIZE (in)	TOL. (+/-)
	1	20	19.806	503.1	19 3/4	1/16
	2	23	22.306	566.6	22 1/4	1/16
	3	25	24.806	630.1	24 3/4	1/16
	4	28	27.306	693.6	27 1/4	1/16
	5	31	30.181	766.6	30 1/8	1/16
	6	33	32.931	836.4	32 7/8	1/16
	7	36	35.806	909.5	35 3/4	1/16
	8	39	38.306	973.0	38 1/4	1/16
	9	41	40.306	1023.8	40 1/4	1/16
	10	43	42.806	1087.3	42 3/4	1/16
SIDE LENGTH	11	46	45.681	1160.3	45 5/8	1/16
ENC	12	49	48.556	1233.3	48 1/2	1/16
ELI	13	52	51.306	1303.2	51 1/4	1/16
SID	14	55	54.306	1379.4	54 1/4	1/16
	15	58	57.306	1455.6	57 1/4	1/16
	16	61	60.306	1531.8	60 1/4	1/16
	17	64	63.306	1608.0	63 1/4	1/16
	18	67	66.306	1684.2	66 1/4	1/16
	19	70	69.306	1760.4	69 1/4	1/16
	20	73	72.306	1836.6	72 1/4	1/16
	21	76	75.306	1912.8	75 1/4	1/16
	22	79	78.306	1989.0	78 1/4	1/16
	23	82	81.306	2065.2	81 1/4	1/16
	24	85	84.306	2141.4	84 1/4	1/16

ITEM	INSULATED GLASS UNIT		ITEM	INSULA	TED GLASS UNIT (OVERSIZED)
1	Exterior Lite	Clear Glass 4mm (0.157in) Thick Solarban 70 (Low E) on #2 Surface Fully Tempered	1	Exterior Lite	Clear Glass 5mm (0.187in) Thick Solarban 70 (Low E) on #2 Surface Fully Tempered
2	Spacer/Insulation	12.5mm (0.551in) warm spacer (black) 90% Argon filled	2	Spacer/Insulation	9.5mm (0.375in) warm spacer (black) 90% Argon filled
3	Interior Lite	Laminated Glass - 3mm (0.118in) clear/annealed - 0.76mm (0.030in) clear PVB - 3mm (0.118in) clear/annealed	3	Interior Lite	Laminated Glass - 4.7mm (0.188in) clear/annealed - 0.76mm (0.030in) clear PVB - 4.7mm (0.188in) clear/annealed
4	Primary Sealant	Polyurethane or Polyisobutylene or Thermoplastic Spacer (TPS)	4	Primary Sealant	Polyurethane or Polyisobutylene or Thermoplastic Spacer (TPS)
5	Secondary Sealant	Silicone or organic sealant	5	Secondary Sealant	Silicone or organic sealant

	Report #:	P8519.01-801-44
intertek	Date:	04/18/23
Tatai Quality, Assured.	Verified by:	L Munoz

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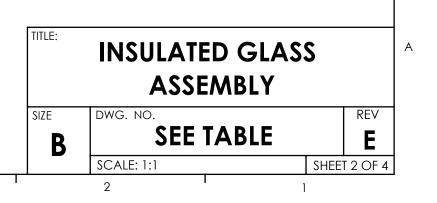
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GLASS LOGO OR 'BUG' MARK: 1. MANUFACTURERS DESIGNATION 2. GLASS TYPE (i.e., TEMPERED) 3. SAFETY GLAZING STANDARD

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	CODE	PN	DESCRIPTION		CODE	PN	DESCRIPTION
1	2020	381515	INSULATED GLASS ASSY 19 3/4" X 19 3/4"	47	3131	383031	INSULATED GLASS ASSY 30 1/8" X 30 1/8"
2	2023	381521	INSULATED GLASS ASSY 19 3/4" X 22 1/4"	48	3133	382067	INSULATED GLASS ASSY 30 1/8" X 32 7/8"
3	2025	381536	INSULATED GLASS ASSY 19 3/4" X 24 3/4"	49	3136	382068	INSULATED GLASS ASSY 30 1/8" X 35 3/4"
4	2028	381520	INSULATED GLASS ASSY 19 3/4" X 27 1/4"	50	3139	383041	INSULATED GLASS ASSY 30 1/8" X 38 1/4"
5	2031	382026	INSULATED GLASS ASSY 19 3/4" X 30 1/8"	51	3141	382072	INSULATED GLASS ASSY 30 1/8" X 40 1/4"
6	2033	382027	INSULATED GLASS ASSY 19 3/4" X 32 7/8"	52	3143	382073	INSULATED GLASS ASSY 30 1/8" X 42 3/4"
7	2036	382031	INSULATED GLASS ASSY 19 3/4" X 35 3/4"	53	3146	382074	INSULATED GLASS ASSY 30 1/8" X 45 5/8"
8	2039	382045	INSULATED GLASS ASSY 19 3/4" X 38 1/4"	54	3149	382077	INSULATED GLASS ASSY 30 1/8" X 48 1/2"
9	2041	382046	INSULATED GLASS ASSY 19 3/4" X 40 1/4"	55	3152	382078	INSULATED GLASS ASSY 30 1/8" X 51 1/4"
10	2043	382036	INSULATED GLASS ASSY 19 3/4" X 42 3/4"	56	3333	382069	INSULATED GLASS ASSY 32 7/8" X 32 7/8"
11	2046	381541	INSULATED GLASS ASSY 19 3/4" X 45 5/8"	57	3336	382071	INSULATED GLASS ASSY 32 7/8" X 35 3/4'
12	2049	381544	INSULATED GLASS ASSY 19 3/4" X 48 1/2"	58	3339	382079	INSULATED GLASS ASSY 32 7/8" X 38 1/4'
13	2052	381540	INSULATED GLASS ASSY 19 3/4" X 51 1/4"	59	3341	382081	INSULATED GLASS ASSY 32 7/8" X 40 1/4'
14	2323	382021	INSULATED GLASS ASSY 22 1/4" X 22 1/4"	60	3343	382082	INSULATED GLASS ASSY 32 7/8" X 42 3/4'
15	2325	382022	INSULATED GLASS ASSY 22 1/4" X 24 3/4"	61	3346	382083	INSULATED GLASS ASSY 32 7/8" X 45 5/8'
16	2328	382023	INSULATED GLASS ASSY 22 1/4" X 27 1/4"	62	3349	382084	INSULATED GLASS ASSY 32 7/8" X 48 1/2'
17	2331	382032	INSULATED GLASS ASSY 22 1/4" X 30 1/8"	63	3352	382086	INSULATED GLASS ASSY 32 7/8" X 51 1/4'
18	2333	382034	INSULATED GLASS ASSY 22 1/4" X 32 7/8"	64	3636	383030	INSULATED GLASS ASSY 35 3/4" X 35 3/4"
19	2336	382037	INSULATED GLASS ASSY 22 1/4" X 35 3/4"	65	3639	382087	INSULATED GLASS ASSY 35 3/4" X 38 1/4'
20	2339	382047	INSULATED GLASS ASSY 22 1/4" X 38 1/4"	66	3641	382088	INSULATED GLASS ASSY 35 3/4" X 40 1/4'
21	2341	382049	INSULATED GLASS ASSY 22 1/4" X 40 1/4"	67	3643	382089	INSULATED GLASS ASSY 35 3/4" X 42 3/4'
22	2343	382051	INSULATED GLASS ASSY 22 1/4" X 42 3/4"	68	3646	382091	INSULATED GLASS ASSY 35 3/4" X 45 5/8'
23	2346	382041	INSULATED GLASS ASSY 22 1/4" X 45 5/8"	69	3649	382092	INSULATED GLASS ASSY 35 3/4" X 48 1/2'
24	2349	382058	INSULATED GLASS ASSY 22 1/4" X 48 1/2"	70	3652	383040	INSULATED GLASS ASSY 35 3/4" X 51 1/4'
25	2352	382059	INSULATED GLASS ASSY 22 1/4" X 51 1/4"	71	3939	383536	INSULATED GLASS ASSY 38 1/4" X 38 1/4'
26	2525	382024	INSULATED GLASS ASSY 24 3/4" X 24 3/4"	72	3941	382093	INSULATED GLASS ASSY 38 1/4" X 40 1/4'
27	2528	382025	INSULATED GLASS ASSY 24 3/4" X 27 1/4"	73	3943	382094	INSULATED GLASS ASSY 38 1/4" X 42 3/4'
28	2531	382038	INSULATED GLASS ASSY 24 3/4" X 30 1/8"	74	3946	383541	INSULATED GLASS ASSY 38 1/4" X 45 5/8'
29	2533	382039	INSULATED GLASS ASSY 24 3/4" X 32 7/8"	75	3949	382098	INSULATED GLASS ASSY 38 1/4" X 48 1/2'
30	2536	382042	INSULATED GLASS ASSY 24 3/4" X 35 3/4"	76	3952	382099	INSULATED GLASS ASSY 38 1/4" X 51 1/4'
31	2539	382052	INSULATED GLASS ASSY 24 3/4" X 38 1/4"	77	4141	382096	INSULATED GLASS ASSY 40 1/4" X 40 1/4'
32	2541	382053	INSULATED GLASS ASSY 24 3/4" X 40 1/4"	78	4143	382097	INSULATED GLASS ASSY 40 1/4" X 42 3/4
33	2543	382054	INSULATED GLASS ASSY 24 3/4" X 42 3/4"	79	4146	382101	INSULATED GLASS ASSY 40 1/4" X 45 5/8'
34	2546	382061	INSULATED GLASS ASSY 24 3/4" X 45 5/8"	80	4149	382102	INSULATED GLASS ASSY 40 1/4" X 48 1/2
35	2549	382028	INSULATED GLASS ASSY 24 3/4" X 48 1/2"	81	4152	382103	INSULATED GLASS ASSY 40 1/4" X 51 1/4
36	2552	382063	INSULATED GLASS ASSY 24 3/4" X 51 1/4"	82	4343	383535	INSULATED GLASS ASSY 40 1/4" X 54 1/4'
37	2828	382020	INSULATED GLASS ASSY 27 1/4" X 27 1/4"	83	4346	382104	INSULATED GLASS ASSY 40 1/4" X 57 1/4
38	2831	382043	INSULATED GLASS ASSY 27 1/4" X 30 1/8"	84	4349	382106	INSULATED GLASS ASSY 40 1/4" X 60 1/4
39	2833	382044	INSULATED GLASS ASSY 27 1/4" X 32 7/8"	85	4352	383540	INSULATED GLASS ASSY 40 1/4" X 63 1/4'
40	2836	382030	INSULATED GLASS ASSY 27 1/4" X 35 3/4"	86	4646	384041	INSULATED GLASS ASSY 45 5/8" X 45 5/8
41	2839	382056	INSULATED GLASS ASSY 27 1/4" X 38 1/4"	87	4649	382107	INSULATED GLASS ASSY 45 5/8" X 48 1/2"
42	2841	382057	INSULATED GLASS ASSY 27 1/4" X 40 1/4"	88	4652	382108	INSULATED GLASS ASSY 45 5/8" X 51 1/4"
43	2843	382035	INSULATED GLASS ASSY 27 1/4" X 42 3/4"	89	4949	382109	INSULATED GLASS ASSY 48 1/2" X 48 1/2"
44	2846	382064	INSULATED GLASS ASSY 27 1/4" X 45 5/8"	90	4952	382111	INSULATED GLASS ASSY 48 1/2" X 51 1/4
45	2849	382066	INSULATED GLASS ASSY 27 1/4" X 48 1/2"	91	5252	384040	INSULATED GLASS ASSY 51 1/4" X 51 1/4"

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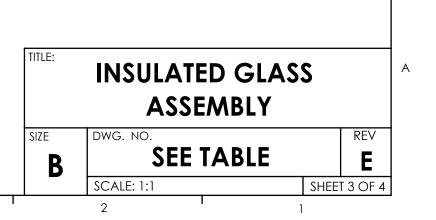
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	Report #:	P8519.01-801-44				
<u>ek</u>	Date:	04/18/23				
	Verified by:	L Munoz				



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		INSULATED GLASS AS	SEMBLIES	(OVERS	SIZED)									
	CODE PN	DESCRIPTION		CODE	PN DESCRIPTIO	N								
	92 2055 38211		163	3670		GLASS ASSY 35 3/4" X 69 1/4"								
	93 2058 38211	13 INSULATED GLASS ASSY 19 3/4" X 57 1/4"	164	3673	382185 INSULATED	GLASS ASSY 35 3/4" X 72 1/4"								
	94 2061 38211		165	3676		GLASS ASSY 35 3/4" X 75 1/4"								
	95 2064 38211		166	3679		GLASS ASSY 35 3/4" X 78 1/4"								
D	96 2067 38211 97 2070 38211		167	3682 3685		GLASS ASSY 35 3/4" X 81 1/4" GLASS ASSY 35 3/4" X 84 1/4"								
	98 2073 38211		169	3955		GLASS ASSY 38 1/4" X 54 1/4"								
	99 2076 38211		170	3958	382191 INSULATED	GLASS ASSY 38 1/4" X 57 1/4"		_						
	100 2079 38212		171	3961		GLASS ASSY 38 1/4" X 60 1/4"		Report #:	P8519.01-801-44					
	101 2082 38212		172	3964		GLASS ASSY 38 1/4" X 63 1/4"	Intertek	Date:	04/18/23					
	102 2085 38212 103 2355 38212		173	3967 3970		GLASS ASSY 38 1/4" X 66 1/4" GLASS ASSY 38 1/4" X 69 1/4"	Total Quality, Assured.	Verified by:	L Munoz					
	104 2358 38212		174	3973		GLASS ASSY 38 1/4" X 72 1/4" GLASS ASSY 38 1/4" X 72 1/4"								
	105 2361 38212		176	3976		GLASS ASSY 38 1/4" X 75 1/4"								
	106 2364 38212	27 INSULATED GLASS ASSY 22 1/4" X 63 1/4"	177	3979	382198 INSULATED	GLASS ASSY 38 1/4" X 78 1/4"								
	107 2367 38212		178	3982		GLASS ASSY 38 1/4" X 81 1/4"								
	108 2370 38212		179	3985		GLASS ASSY 38 1/4" X 84 1/4"								
	109 2373 38213 110 2376 38213		180	4155 4158		GLASS ASSY 40 1/4" X 54 1/4" GLASS ASSY 40 1/4" X 57 1/4"								
	110 2376 38213 111 2379 38213		181	4158		GLASS ASSY 40 1/4 X 57 1/4 GLASS ASSY 40 1/4" X 60 1/4"								
	112 2382 38213		183	4164		GLASS ASSY 40 1/4" X 63 1/4"								
	113 2385 38213	34 INSULATED GLASS ASSY 22 1/4" X 84 1/4"	184	4167		GLASS ASSY 40 1/4" X 66 1/4"								
	114 2555 38213		185	4170		GLASS ASSY 40 1/4" X 69 1/4"								
С	115 2558 38213		186	4173		GLASS ASSY 40 1/4" X 72 1/4"								
Ū.	116 2561 38213 117 2564 38213		187	4176 4179		GLASS ASSY 40 1/4" X 75 1/4" GLASS ASSY 40 1/4" X 78 1/4"								
	118 2567 38213		189	4182		GLASS ASSY 40 1/4" X 81 1/4"								
	119 2570 38214		190	4185		GLASS ASSY 40 1/4" X 84 1/4"								
	120 2573 38214		191	4355		GLASS ASSY 42 3/4" X 54 1/4"								
	121 2576 38214		192	4358		GLASS ASSY 42 3/4" X 57 1/4"								
	122 2579 38214 123 2582 38214		193 194	4361 4364		GLASS ASSY 42 3/4" X 60 1/4" GLASS ASSY 42 3/4" X 63 1/4"								
	123 2582 38214		194	4367		GLASS ASST 42 3/4" X 66 1/4"								
	125 2855 38214		196	4370		GLASS ASSY 42 3/4" X 69 1/4"								
	126 2858 38214	47 INSULATED GLASS ASSY 27 1/4" X 57 1/4"	197	4373	382218 INSULATED	GLASS ASSY 42 3/4" X 72 1/4"								
	127 2861 38214		198	4376		GLASS ASSY 42 3/4" X 75 1/4"								
	128 2864 38214 129 2867 38215		200	4379 4382		GLASS ASSY 42 3/4" X 78 1/4" GLASS ASSY 42 3/4" X 81 1/4"								
	130 2870 38215		200	4385		GLASS ASSY 42 3/4" X 84 1/4"								
	131 2873 38215		202	4655	382223 INSULATED	GLASS ASSY 45 5/8" X 54 1/4"								
	132 2876 38215		203	4658		GLASS ASSY 45 5/8" X 57 1/4"								
	133 2879 38215		204	4661		GLASS ASSY 45 5/8" X 60 1/4"								
В	134 2882 38215 135 2885 38215		205	4664 4667		GLASS ASSY 45 5/8" X 63 1/4" GLASS ASSY 45 5/8" X 66 1/4"								
	136 3155 38215		200	4670		GLASS ASST 45 5/8" X 69 1/4"								
	137 3158 38215		208	4673		GLASS ASSY 45 5/8" X 72 1/4"								
	138 3161 38215		209	4676		GLASS ASSY 45 5/8" X 75 1/4"								
	139 3164 38216		210	4679		GLASS ASSY 45 5/8" X 78 1/4"								
	140 3167 38216 141 3170 38216		211 212	4682 4685		GLASS ASSY 45 5/8" X 81 1/4" GLASS ASSY 45 5/8" X 84 1/4"								
	141 3170 38216		212	4085		GLASS ASSY 48 1/2" X 54 1/4"								
	143 3176 38216		214	4958		GLASS ASSY 48 1/2" X 57 1/4"								
	144 3179 38216		215	4961		GLASS ASSY 48 1/2" X 60 1/4"								
	145 3182 38216		216	4964		GLASS ASSY 48 1/2" X 63 1/4"								
	146 3185 38216 147 3355 38216		217	4967 4970		GLASS ASSY 48 1/2" X 66 1/4" GLASS ASSY 48 1/2" X 69 1/4"								
	148 3358 38216		218	4973		GLASS ASSY 48 1/2" X 72 1/4"								
	149 3361 38217		220	4976		GLASS ASSY 48 1/2" X 75 1/4"								
	150 3364 38217		221	4979		GLASS ASSY 48 1/2" X 78 1/4"								
	151 3367 38217		222	4982		GLASS ASSY 48 1/2" X 81 1/4"								
	152 3370 38217 153 3373 38217		223	4985 5255		GLASS ASSY 48 1/2" X 84 1/4" GLASS ASSY 51 1/4" X 54 1/4"								
А	153 3373 38217 154 3376 38217		224	5255		GLASS ASSY 51 1/4 X 54 1/4 GLASS ASSY 51 1/4" X 57 1/4"						TITLE:		
\frown	155 3379 38217		226	5261		GLASS ASSY 51 1/4" X 60 1/4"							INSULATED	GLA
	156 3382 38217		227	5555		GLASS ASSY 54 1/4" X 54 1/4"								DIV
	157 3385 38217		228	5558		GLASS ASSY 54 1/4" X 57 1/4"							ASSEM	RLI
	158 3655 38217 159 3658 38218		229	5561 5858		GLASS ASSY 54 1/4" X 60 1/4" GLASS ASSY 57 1/4" X 57 1/4"						0.7-		
	160 3661 38218		230	5861		GLASS ASSY 57 1/4 X 57 1/4 GLASS ASSY 57 1/4" X 60 1/4"						SIZE	DWG. NO.	
	161 3664 38218		232	6161		GLASS ASSY 60 1/4" X 60 1/4"						D	SEE TA	BLE
	162 3667 38218	83 INSULATED GLASS ASSY 35 3/4" X 66 1/4"										B	_	
							· · · ·						SCALE: 1:1	

	Report #:	P8519.01-801-44		
ntertek	Date:	04/18/23		
al Quality, Assured.	Verified by:	L Munoz		

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TITLE: INSULATED GLASS ASSEMBLY							
SIZE	DWG. NO.			REV			
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TEST REPORT FOR SOLATUBE INTERNATIONAL, INC.

Report No.: P8519.01-801-44 R0 Date: 04/20/23

SECTION 12

REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	04/20/23	N/A	Original Report Issue