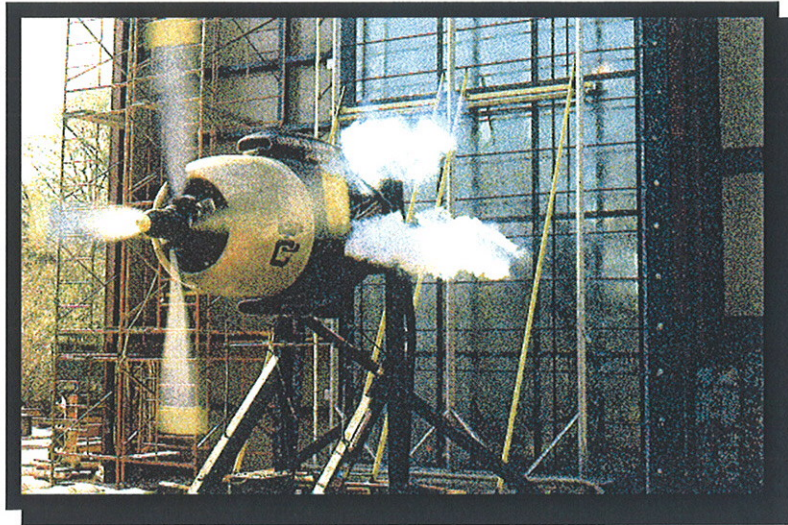




CONSTRUCTION CONSULTING LABORATORY, *INTERNATIONAL*



**TEST REPORT:
UNITED STATES ALUMINUM
SERIES 7600 PROJECT OUT WINDOW
REPORT CCLI #10-165**

**August 6, 2010
Re-issued on September 9, 2010**

Prepared for:

UNITED STATES ALUMINUM
200 Singleton Drive
Waxahachie, TX 75165

1601 Luna Road
Carrollton, Texas 75006

S-UNITED, INC.
A Quality Control Company

Office: (972) 242-0556
FAX: (972) 245-6047



TABLE OF CONTENTS

1. PROJECT DATA 1

2. SUMMARY 1

3. TEST SPECIMEN..... 1


4. PERFORMANCE RESULTS 3

5. DISCLAIMER..... 4

APPENDIX:

APPENDIX A: UNITED STATES ALUMINUM SERIES 7600 PROJECT OUT IN WINDOW DRAWINGS

Refer to mock-up drawing in **Appendix A**. This report is not complete unless this drawing is stamped and initialed by **CCLI** as illustrated below.

Drawing	Date	Stamped as Illustrated
SERIES 7600 PO BILL OF MATERIALS AND ELEV.		 <p>CONSTRUCTION CONSULTING LABORATORY, INTERNATIONAL 1601 Luna Road Carrollton, Texas 75006 Phone (972) 242-8556 Report# <u>10-165</u> Date <u>9-9-10</u> Reviewed BY <u>GW</u></p>
SERIES C7600-22 PAGE 1 OF 4	9/3/10	
SERIES C7600-22 PAGE 2 OF 4	9/3/10	
SERIES C7600-22 PAGE 3 OF 4	9/3/10	
SERIES C7600-22 PAGE 4 OF 4	9/3/10	

Re-issued on September 9, changed Series to 7600.



1. PROJECT DATA

Project: Series 7600 Project Out Window

Date of Testing: AAMA/WDMA/CSA 101/I.S.2/A440-08
July 21, 2010

Tested For: United States Aluminum
200 Singleton Drive
Waxahachie, TX 75165

Witnessed By: (All or Partial Viewing)
Terry Hopgood
International Aluminum

Chevis Wilson Construction Consulting Laboratory, *International*

2. SUMMARY

Series	Product Type	Test Size	Positive DP	Negative DP
7600	Aluminum Project Out	5'-0" x 2'-8"	4800 Pa (100.0 psf)	4800 Pa (100.0 psf)

3. TEST SPECIMEN

PRODUCT TYPE: Aluminum Project Out Window, **Product Drawings, Appendix A**

SERIES/MODEL: Series 7600 Project Out Window

SPECIFICATION: AAMA/WDMA/CSA 101/I.S.2/A440-08
CW-PG100-AP 1524 x 813 (60 x 32)

FRAME SIZE: 1524 x 813 (5'-0"x 2'-8")

PROJECT OUT

VENT SIZE: 1514 x 803 (4'-11⁵/₈" x 2'-7⁵/₈")

PROJECT OUT

DAY LIGHT OPENING: 1413 x 702 (4'-7⁵/₈" x 2'-3⁵/₈")

CONFIGURATION: X



AAMA/WDMA/CSA 101/I.S.2/A440-08
UNITED STATES ALUMINUM
SERIES 7600 PROJECT OUT WINDOW
REPORT #CCLI-10-165

August 6, 2010
Page 2 of 4

WEATHER-STRIP: 4.76mm ($\frac{3}{16}$ ") dual durometer located full perimeter at frame interior leg exterior face full perimeter. Dual durometer 4.76mm ($\frac{3}{16}$ ") located at interior face of the interior leg full perimeter of vent. Continuous finger gasket (part #NP810) located at the exterior lateral face of vent perimeter.

GLASS: Sealed insulating glass. 2 pcs. 6.35mm ($\frac{1}{4}$ ") annealed glass, 12.7mm ($\frac{1}{2}$ ") air space with a 25.4mm (1") overall thickness. Air spacer consists of molded aluminum and desiccant.

GLAZING: Exterior glazed with GT 900 glazing tape and silicone at interior and lateral face of glass.

WEEP ARRANGEMENT: Weep holes 9.52mm ($\frac{3}{8}$ "), spaced 152.4mm (6") from each end of frame subsill.

SEALANT: Sealant at all frame corners and vent corners. Attachment screws sealed. Frame members sealed to sub-frame at the interior. Subsill sealed at interior and exterior at frame sill. Sub-frame filler sealed continuous at all sub-frame members.

HARDWARE: One (1) multi-point lock actuated handle located at center of vent bottom rail. Three (3) lock buttons located at lock slide bar. Lock keepers located 63.5mm ($2\frac{1}{2}$ ") from one jamb and 152.4mm (6") from the other jamb with one at center of sill. Keepers attached with two (2) #10-24 x $\frac{3}{8}$ " screws. Three (3) snubbers located 152.4mm (6") from each end and one at center at vent top rail and frame head. Snubbers attached with aluminum adapter and two (2) #10 x $\frac{1}{2}$ " PHL PH SMS. Four bar friction hinge with hinge adapter (part #61585) located at frame jambs attached to each jamb with three (3) #10 x $\frac{1}{2}$ " screws.

OTHER FEATURES: Vent members are thermally broken with polyurethane. Vent corners are mitered and crimped with one aluminum corner key (part #WN524) per connection. Frame members are coped, butted, and attached with two (2) #8 x $\frac{3}{4}$ " PHSMS per connection. Frame members attached to sub frame members with one (1) #14 x $1\frac{1}{2}$ " PHL PH SMS spaced 101.6mm (4") from each end and 304.8mm (12") on center. Frame sill attached to subsill with #12AB x $\frac{3}{4}$ " screws, 101.6mm (4") from each end and 304.8mm (12") O.C. Filler (part #J-175) attached to sub-frame members with #10 x 19.05mm ($\frac{3}{4}$ ") PHL PH SMS, spaced 152.4mm (6") from each end and 304.8mm (12") on center

INSTALLATION FEATURES: Frame members were attached to aluminum sub-frame with #14 x 31.75mm ($1\frac{1}{2}$ ") screws spaced 101.6mm (4") from each end and 304.8mm (12") on center interior frame head, sill, and jambs. Sub-frame attached to SPF, nominal 50.8mm x 203.2mm (2" x 8") test buck with 9.52mm ($\frac{3}{8}$ ") x 114.3 (4 $\frac{1}{2}$ ") lag bolt, 152.4mm (6") from each end and 304.8mm (12") on center.



4. PERFORMANCE RESULTS

<u>Specification Paragraph No.</u>	<u>Title of Test</u>	<u>Test Method</u>	<u>Measured</u>	<u>Allowed</u>
5.3.1	Project Out Operating Force	ASTM E 2068	Initiated 40N (9 lbs) 31N (7 lbs)	Maintained 135N (30 lbs) 135N (30 lbs)
5.3.2	Air Infiltration @ 300 Pa (6.24 psf)	ASTM E 283-04	.15 l/s·m ² (0.03 cfm/sf)	.5 l/s·m ² (0.10 cfm/sf)
5.3.3	Water Resistance @ 580 Pa (12.00 psf)	ASTM E 547 & 331-00	No Leakage	No Leakage
5.3.4.1	Uniform Deflection @ 5400 Pa (112.50 psf) P.O. Stile	ASTM E 330-02		
	-Positive		1.77mm (.07")	4.57mm (0.180")
	-Negative		1.016mm (.04")	4.57mm (0.180")
5.3.4.1	Uniform Deflection @ 5400 Pa (112.50 psf) P.O. Vent Top Rail	ASTM E 330-02		
	-Positive		5.461mm (.215")	8.63mm (0.340")
	-Negative		1.65mm (.065")	8.63mm (0.340")
5.3.4.2	Uniform Structural -Positive -7200 Pa (150 psf)	ASTM E 330-02	No Damage	No Damage
	-Negative -7200 Pa (150 psf)		No Damage	No Damage
	-Permanent Set		None	4.53mm (.1785")
5.3.5	Forced Entry Resistance	ASTM F 588-07 Grade 40	No Entry	No Entry
5.3.6.6.6	Project Hardware Load Test 135N (30 lbs)		22.22mm (.875") No Damage	5.74mm (2.26")



AAMA/WDMA/CSA 101/I.S.2/A440-08
UNITED STATES ALUMINUM
SERIES 7600 PROJECT OUT WINDOW
REPORT #CCLI-10-165

August 6, 2010
Page 4 of 4

Detailed extrusion and assembly drawings indicating measured wall thickness and corner construction are on file and were compared to the test sample submitted. These records will be retained at **CCLI** for a period of four years.


5. DISCLAIMER

The above results were obtained by using the designated test methods indicating compliance with the above specification. This report does not constitute certification of this product, which may only be granted by the program administrator.

Respectfully submitted,

CONSTRUCTION CONSULTING LABORATORY, *INTERNATIONAL*


JEFFREY CRUMP
TESTING MANAGER


WESLEY WILSON
LABORATORY MANAGER



AAMA/WDMA/CSA 101/I.S.2/A440-08
UNITED STATES ALUMINUM
SERIES 7600 PROJECT OUT WINDOW
REPORT #CCLI-10-165

August 6, 2010

APPENDIX




APPENDIX A

PROJECT DRAWINGS

Drawing	Date
SERIES 7600 PO BILL OF MATERIALS AND ELEV.	
SERIES C7600-22 PAGE 1 OF 4	9/3/10
SERIES C7600-22 PAGE 2 OF 4	9/3/10
SERIES C7600-22 PAGE 3 OF 4	9/3/10
SERIES C7600-22 PAGE 4 OF 4	9/3/10

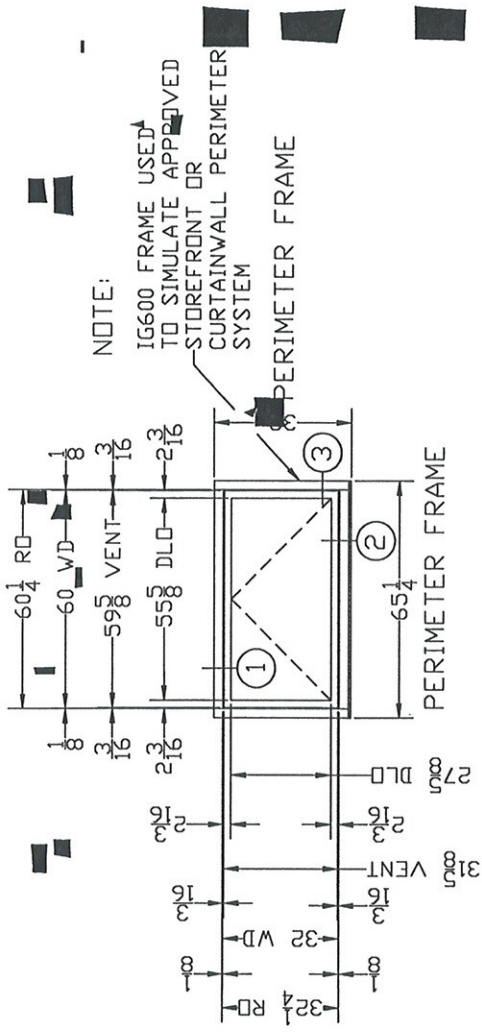
QTY	MARK		CW7500 AAMA	WINDOW WIDTH	X	WINDOW HEIGHT				
1	A			60.0000	X	32.0000				
				GLASS	X	GLASS				
			1" INS	58.5000	X	30.5000				
QTY	PART	DIE	DESCRIPTION	LENGTH						
			HORIZONTALS			OPERATION				
1	WN521	61582	HEAD	59.0000		CW7500-11				
1	WN521	61582	SILL	59.0000		CW7500-11	CW7500-18			
1	WN520	61581	VENT HEAD	59.6250		CW7500-10	CW7500-13			
1	WN520	61581	VENT SILL	59.6250		CW7500-10	CW7500-17			
			VERTICALS							
1	WN523	61583	RIGHT JAMB	32.0000		CW7500-12				
1	WN523	61583	LEFT JAMB	32.0000		CW7500-12				
1	WN520	61581	RIGHT VENT	31.6250		CW7500-13	CW7500-16			
1	WN520	61581	LEFT VENT	31.6250		CW7500-13	CW7500-16			
			ACCESSORIES							
4	WN524	61584	CORNER ANGLE	1.2300		CW7500-21				
2	WN526	61585	HINGE ADAPTER	8.0000		CW7500-16	<OR> NOTE: AMC PART# 1402-16 L or R			
1	WN526	61585	SNUBBER SHIM	4.0000						
1	WH342		WEATHERSTRIP	15.3333	FT	TREMCO				
1	NP810		WEATHER SWEEP	15.3333	FT	TREMCO				
10	RG750		TEMP GLAZING CLIPS							
1	GT900		SHIM TAPE	15.3333	FT	TREMCO				
			HARDWARE							
2	WH641		HYBRID HINGE	14"-16"		AMC				
1	1248		HANDLE			AMC				
1	8021 (OR) 8020		HANDLE CONNECTOR			AMC				
1	1326		DRIVE ARM			AMC				
1	1324		DRIVE PLATE			AMC				
3	1315		LOCK PLATE			AMC				
3	1355		KEEPER			AMC				
3	1356		KEEPER SHIM			AMC				
2	WN526	61585	SLIDE BARS			<OR> AMC 6/6 OR ALUM				
			FASTENERS							
2			SHCS @ HANDLE			AMC				
2	1336		SHFH @ HNDL CONC			AMC				
2			SH SET @ SHIM			AMC				
8	ST241		ASSEMBLY SCREWS							
6			ARM SCREWS							
10	ST361		TEMP CLIP SCREWS							
			PERIMETER FRAMING							
2	IG626			60.3750						
2	IG626			37.3750						
2	IG100			60.3750						
2	IG100			37.3750						
2	J-175			60.3750						
2	J-175			37.3750						
1	IG570			60.6250						



 CONSULTING
 LABORATORY
 INTERIOR
 1601 Linn Drive
 Carrollton, Texas 75006
 Phone (972) 262-1000
 Report # 2159 Date 8/3/08
 Reviewed by [Signature]

QTY	MARK		CW7500	WINDOW		WINDOW														
1	A		AAMA	WIDTH	X	HEIGHT														
				60.0000	X	32.0000														
				GLASS	X	GLASS														
			1" INS	58.5000	X	30.5000														
QTY	PART	DIE	DESCRIPTION	LENGTH																
			HORIZONTALS			OPERATION														
1	WN521	61582	HEAD	59.0000		CW7500-11														
1	WN521	61582	SILL	59.0000		CW7500-11	CW7500-18													
1	WN520	61581	VENT HEAD	59.6250		CW7500-10	CW7500-13													
1	WN520	61581	VENT SILL	59.6250		CW7500-10	CW7500-17													
			VERTICALS																	
1	WN523	61583	RIGHT JAMB	32.0000		CW7500-12														
1	WN523	61583	LEFT JAMB	32.0000		CW7500-12														
1	WN520	61581	RIGHT VENT	31.6250		CW7500-13	CW7500-16													
1	WN520	61581	LEFT VENT	31.6250		CW7500-13	CW7500-16													
			ACCESSORIES																	
4	WN524	61584	CORNER ANGLE	1.2300		CW7500-21														
2	WN526	61585	HINGE ADAPTER	8.0000		CW7500-16	<OR> NOTE: AMC PART# 1402-16 L or R													
3	WN526	61585	SNUBBER SHIM	4.0000																
1	WH342		WEATHERSTRIP	15.3333	FT	TREMCO														
1	NP810		WEATHER SWEEP	15.3333	FT	TREMCO														
10	RG750		TEMP GLAZING CLIPS																	
1	GT900		SHIM TAPE	15.3333	FT	TREMCO														
			HARDWARE																	
2	WH641		HYBRID HINGE	14"-16"		AMC														
1	1248		HANDLE			AMC														
1	8021 (OR) 8020		HANDLE CONNECTOR			AMC														
1	1326		DRIVE ARM			AMC														
1	1324		DRIVE PLATE			AMC														
3	1315		LOCK PLATE			AMC														
3	1355		KEEPER			AMC														
3	1356		KEEPER SHIM			AMC														
3	WH765		SNUBBER DRIVER			AMC														
3	WH766		SNUBBER RECEIVER			AMC														
2	WN526	61585	SLIDE BARS			<OR> AMC 6/6 OR ALUM														
			FASTENERS																	
2			SHCS @ HANDLE			AMC														
2	1336		SHFH @ HNDL CONC			AMC														
2			SH SET @ SHIM			AMC														
8	ST241		ASSEMBLY SCREWS			VARIES														
12	ST242		ARM SCREWS			VARIES														
10	ST361		TEMP CLIP SCREWS			VARIES														
6	ST242		SNUBBER SCREWS			VARIES														
			PERIMETER FRAMING																	
2	IG626			60.3750		INTEX														
2	IG626			37.3750		INTEX														
2	IG100			60.3750		INTEX														
2	IG100			37.3750		INTEX														
2	J-175			60.3750		INTEX														
2	J-175			37.3750		INTEX														
1	IG570			60.6250		INTEX														

SYM	REVISION	DATE	BY



THIS SPACE RESERVED FOR STRUCTURAL ENGINEER

THIS SPACE RESERVED FOR METRO-DADA USE ONLY

(A)
 QTY = 1

CONSTRUCTION CONSULTING LABORATORY INTERNATIONAL
 1601 Luna Road
 Carrollton, Texas 75006
 Phone (972) 242-0556
 Report# 12161, Date 9/2/10
 Reviewed BY [Signature]

SYMBOL KEY			
SYMBOL	DESCRIPTION	QTY	COMMENTS
A	58.625 X 30.625	1	1 INS = INSULATED GLASS

United States Aluminum
 • 720 Cel-River Road
 Rock Hill, SC 29730
 • 200 Singleton Drive
 Waxahatchee, TX 75165

DATE 09.03.10
 PROJECTED VENT
 ELEVATIONS
 SCALE 3/8" = 1'

C7600-22 1 DF 4

SYN	REVISION	DATE	BY

3/8" X 4 1/2" LAG BOLT
6" from end 12" OC

ST260 #10 X 3/4" PHL FH SMS
6" from end 12" OC

NOTE: IG600 STOREFRONT TO
REPRESENT ANY APPROVED
TUBE FRAMING.

#14 X 1 1/2" PHL PH SMS
4" FROM END 12" OC

J-175
(MODIFIED)

TREMCO
SPECTRUM 2

1

NP810 GASKET

TREMCO SPECTRUM 2

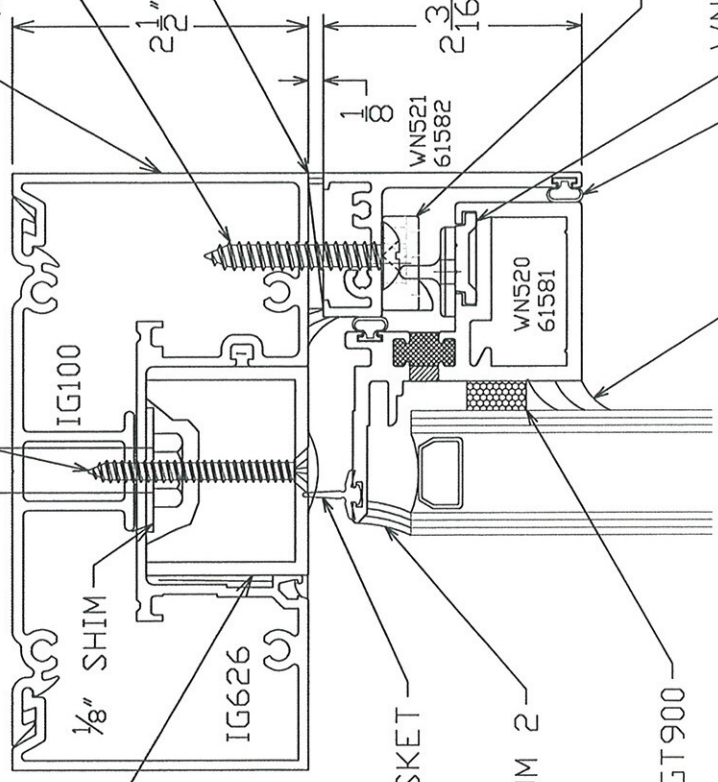
GT900

SNUBBERS:
WH765 DRIVER
WH766 RECEIVER

WN526 / 61585

WH342 BULB GASKET

TREMCO PROGLAZE SSG



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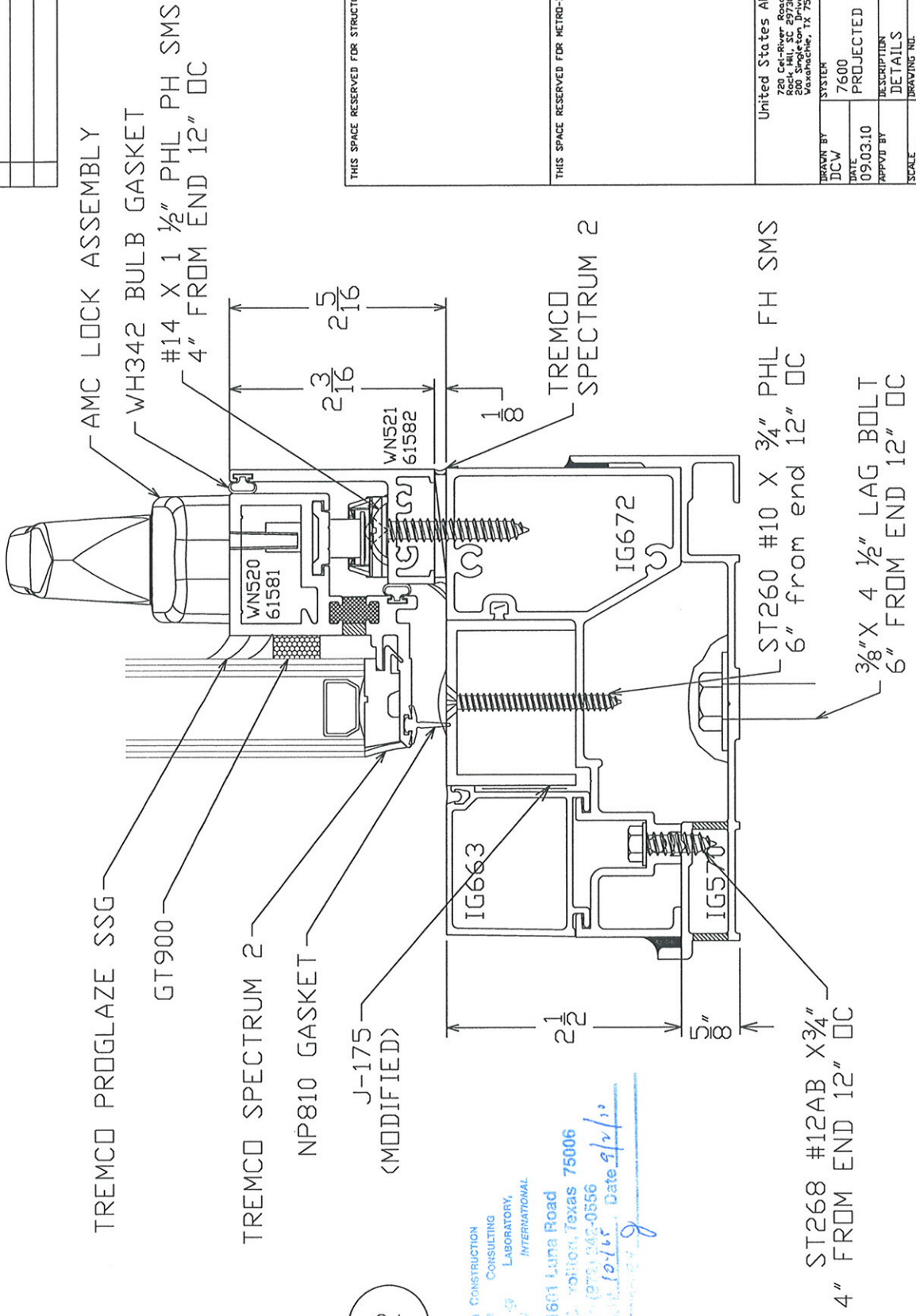


1601 Luna Road
Carrollton, Texas 75006
Phone (972) 242-0556
Report# 12/13 Date 5/1/14
Reviewed BY [Signature]

United States Aluminum
720 Cat-River Road
Rock Hill, SC 29730
Vicksburg, TN 37692

DESIGNED BY	DCV	PROJECTED VENT	7600
DATE	09.03.10	DESCRIPTION	DETAILS
APPROVED BY		DRAWING NO.	C7600-22
SCALE	FULL	SHEET	2 OF 4

SYM	REVISION	DATE	BY



2

CONSTRUCTION CONSULTING LABORATORY INTERNATIONAL
 1601 Luna Road
 Carrollton, Texas 75006
 Phone (972) 462-0356
 Date 9/2/10

THIS SPACE RESERVED FOR STRUCTURAL ENGINEER

THIS SPACE RESERVED FOR METRO-DATE USE ONLY

United States Aluminum	
720 Cat-River Road Rock-Hill, SC 29730 Phone: 803-781-2000 Fax: 803-781-2565	
DESIGN BY	SYSTEM
DCW	7600
DATE	PROJECTED VENT
09.03.10	DETAILS
APPROV BY	DRAWING NO.
	C7600-22
SCALE	SHEET
FULL	3 OF 4

SYM	REVISION	DATE	BY

NOTE: IG600 STOREFRONT TO REPRESENT ANY APPROVED TUBE FRAMING.

3/8" X 4 1/2" LAG BOLT 6" from end 12" OC

4 BAR PROJECTED ARM

#14 X 1 1/2" PHL PH SMS 4" FROM END 12" OC

WH342 BULB GASKET

ST260 #10 X 3/4" PHL FH SMS 6" from end 12" OC

2 1/2" 2 3/16" 1/8"

WN523 61583

WN520 61581

TREMCO PROGLAZE SSG

GT900

TREMCO SPECTRUM 2

TREMCO GASKET

IG626

NP810 GASKET

J-175 (MODIFIED)

IG100



1601 Luna Road
Carrollton, Texas 75006

Phone (972) 242-0556

Approved By: [Signature] Date: 2/2/10

3

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United States Aluminum
720 Cat-River Road
Springdale, TX 75165
200 S. Maple St., Dallas, TX 75215

DRAWN BY	DCW	SYSTEM	7600
DATE	09.03.10	DESCRIPTION	PROJECTED VENT
APPROVED BY		DETAILS	
SCALE	FULL	DRAWING NO.	C7600-22
		SHEET	4 OF 4



AAMA/WDMA/CSA 101/I.S.2/A440-08
UNITED STATES ALUMINUM
SERIES 7600 PROJECT OUT WINDOW
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- END OF REPORT -