

**AAMA 1503-09 THERMAL PERFORMANCE
TEST REPORT**

Rendered to:

**INTERNATIONAL ARCHITECTURAL PRODUCTS, INC.
DBA: UNITED STATES ALUMINUM**

**SERIES/MODEL: 8000
TYPE: Vertical Slider (Single Hung)**

Summary of Results	
Thermal Transmittance (U-Factor)	0.71
Condensation Resistance Factor - Frame (CRF _f)	50
Condensation Resistance Factor - Glass (CRF _g)	54
Unit Size	47-1/4" x 59" (1200 mm x 1499 mm)
Layer 1	1/4" Clear
Gap	0.53" Gap, Aluminum Spacer (A1-D), 100% Air-Filled*
Layer 2	1/4" Clear

Reference must be made to Report No. A0595.03-301-46, dated 06/25/10 for complete test specimen description and data.

AAMA 1503-09 THERMAL PERFORMANCE TEST REPORT

Rendered to:

INTERNATIONAL ARCHITECTURAL PRODUCTS, INC.
DBA: UNITED STATES ALUMINUM
720 Cel-River Road
Rock Hill, South Carolina 29730

Report Number: A0595.03-301-46
Test Date: 06/24/10
Report Date: 06/25/10
Test Record Retention Date: 06/24/14

Test Sample Identification:

Series/Model: 8000

Type: Vertical Slider (Single Hung)

Test Sample Submitted by: Client

Test Procedure: The condensation resistance factor (CRF) and thermal transmittance (U) were determined in accordance with AAMA 1503-09, *Voluntary Test Method for Thermal Transmittance and Condensation Resistance of Windows, Doors and Glazed Wall Sections*

- | | |
|---|---------|
| 1. Average warm side ambient temperature | 69.82 F |
| 2. Average cold side ambient temperature | -0.67 F |
| 3. 15 mph dynamic wind applied to test specimen exterior. | |
| 4. 0.0" $\pm$ 0.04" static pressure drop across specimen. | |

Test Results Summary:

- | | |
|---|------|
| 1. Condensation resistance factor - Frame (CRF _f) | 50 |
| Condensation resistance factor - Glass (CRF _g) | 54 |
| 2. Thermal transmittance due to conduction (U) | 0.71 |
| (U-factors expressed in Btu/hr·ft ² ·F) | |

Test Sample Description:

CONSTRUCTION		Frame	Interior Sash
	Size (in.) Non-Standard	47-1/4 x 59	46 x 30-1/2
	Daylight Opening (in.)	43-1/4 x 24-1/2	43-1/4 x 24-1/2
CORNERS		Coped	Coped
	Fasteners	Screws	Screws
	Sealant	Yes	Yes
MATERIAL		AT (0.25") Skip/Debridge 2"/15"	AT (0.25") Skip/Debridge 2"/15"
	Color Exterior	Gray	Gray
	Finish Exterior	Mill Finish	Mill Finish
	Color Interior	Gray	Gray
	Finish Interior	Mill Finish	Mill Finish
GLAZING METHOD		Exterior	Exterior

Glazing Information:

Layer 1	1/4" Clear
Gap	0.53" Gap, Aluminum Spacer (A1-D), 100% Air-Filled*
Layer 2	1/4" Clear
Gas Fill Method	N/A*

**Stated per Client/Manufacturer*

NA Non-Applicable

See Description Table Abbreviations

Test Sample Description: (Continued)

COMPONENTS		
Type	Quantity	Location
WEATHERSTRIP		
Polypile with center & side fins	2 Rows	Sill.
Polypile with center & side fins	1 Row	Jambs. Interior meeting rail. Exterior meeting rail.
HARDWARE		
Block & tackle balance system	1	Jambs.
Metal auto-lock	2	Interior sill.
DRAINAGE		
2" x 1/4" weephole	2	Sill face.

Test Duration:

1. The environmental systems were started at 13:20 hours, 06/23/10.
2. The thermal performance test results were derived from 02:12 hours, 06/24/10 to 06:12 hours, 06/24/10.

Condensation Resistance Factor (CRF):

The following information, condensed from the test data, was used to determine the condensation resistance factor:

T_h	=	Warm side ambient air temperature	69.82 F
T_c	=	Cold side ambient air temperature	-0.67 F
FT_p	=	Average of pre-specified frame temperatures (14)	36.17 F
FT_r	=	Average of roving thermocouples (4)	26.46 F
W	=	$[(FT_p - FT_r) / (FT_p - (T_c + 10))]$ x 0.40	0.145
FT	=	$FT_p(1-W) + W (FT_r)$ = Frame Temperature	34.76 F
GT	=	Glass Temperature	37.25 F
CRF_g	=	Condensation resistance factor – Glass	54
		$CRF_g = (GT - T_c) / (T_h - T_c) \times 100$	
CRF_f	=	Condensation resistance factor – Frame	50
		$CRF_f = (FT - T_c) / (T_h - T_c) \times 100$	

The CRF number was determined to be 50 (on the size as reported). When reviewing this test data, it should be noted that the frame temperature (FT) was colder than the glass temperature (GT) therefore controlling the CRF number. Refer to the 'CRF Report' page and the 'Thermocouple Location Diagram' page of this report.

Thermal Transmittance (U_o):

T_h	=	Average warm side ambient temperature	69.82 F
T_c	=	Average cold side ambient temperature	-0.67 F
P	=	Static pressure difference across test specimen	0.00 psf
		15 mph dynamic perpendicular wind at exterior	
Nominal sample area			19.36 ft ²
Total measured input to calorimeter			1033.85 Btu/hr
Calorimeter correction			61.29 Btu/hr
Net specimen heat loss			972.56 Btu/hr
U	=	Thermal Transmittance	0.71 Btu/hr·ft ² ·F

Glazing Deflection (in.):

	Frame	Interior Sash
Edge Gap Width	0.53	0.53
Estimated center gap width upon receipt of specimen in laboratory (after stabilization)	0.49	0.49
Center gap width at laboratory ambient conditions on day of testing	0.49	0.49
Center gap width at test conditions	0.41	0.41

The sample was inspected for the formation of frost or condensation, which may influence the surface temperature measurements. The sample showed no evidence of condensation/frost at the conclusion of the test.

A calibration of the Architectural Testing Inc. 'thermal test chamber' (ICN 004287) in Fresno, California was conducted in April 2010 in accordance with Architectural Testing Inc. calibration procedure.

Prior to testing the specimen was sealed with silicone on the interior side and checked for air infiltration per Section 9.3.4.

CRF Report

Time: 04:11 04:42 05:12 05:42 06:12 AVERAGE

Pre-specified Thermocouples - Frame

1	27.41	27.28	27.43	27.32	27.39	27.37
2	29.76	29.66	29.73	29.68	29.73	29.71
3	44.94	44.86	44.89	44.86	44.87	44.88
4	44.28	44.22	44.23	44.25	44.19	44.23
5	42.18	42.17	42.01	42.17	42.23	42.15
6	42.46	42.46	42.43	42.42	42.49	42.46
7	41.76	41.77	41.76	41.76	41.82	41.77
8	35.17	35.24	35.19	35.23	35.22	35.21
9	37.37	37.42	37.32	37.38	37.40	37.38
10	43.43	43.42	43.38	43.36	43.44	43.40
11	28.01	28.05	27.99	28.03	28.09	28.03
12	31.75	31.75	31.69	31.78	31.82	31.76
13	29.96	30.03	29.90	30.04	30.04	29.99
14	27.95	27.99	27.95	27.97	27.99	27.97
FT _p	36.17	36.16	36.14	36.16	36.20	36.17

Pre-specified Thermocouples - Glass

15	27.69	27.63	27.63	27.68	27.71	27.67
16	44.47	44.42	44.42	44.42	44.44	44.43
17	40.71	40.74	40.75	40.64	40.67	40.70
18	27.50	27.46	27.50	27.51	27.58	27.51
19	45.82	45.80	45.81	45.80	45.84	45.81
20	37.41	37.38	37.33	37.38	37.36	37.37
GT	37.27	37.24	37.24	37.24	37.27	37.25

Cold Point (Roving) Thermocouples

21	27.95	27.99	27.95	27.97	27.99	27.97
22	24.12	24.20	24.09	24.19	24.32	24.18
23	27.41	27.28	27.43	27.32	27.39	27.37
24	26.32	26.22	26.36	26.35	26.40	26.33
FT _R	26.45	26.42	26.46	26.46	26.53	26.46
W	0.14	0.15	0.14	0.14	0.14	0.14
FT	34.76	34.75	34.74	34.76	34.80	34.76

Warm Side - Room Ambient Air Temperature

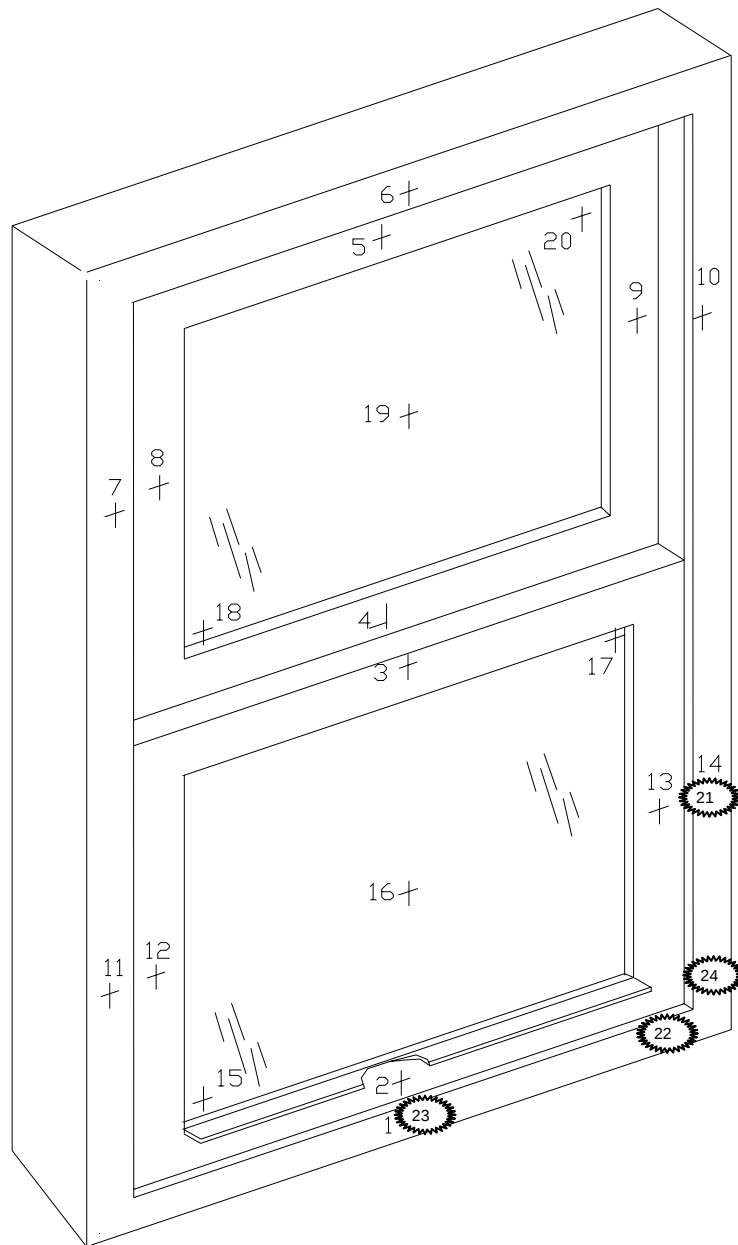
69.87	69.83	69.78	69.79	69.78	69.81
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Cold Side - Room Ambient Air Temperature

-0.67	-0.67	-0.67	-0.67	-0.67	-0.67
-------	-------	-------	-------	-------	-------

CRF _f	50	50	50	50	50	50
CRF _g	54	54	54	54	54	54

Thermocouple Location Diagram



Cold Point Locations

21	21. 27.97
22	22. 24.18
23	23. 27.37
24	24. 26.33

Detailed drawings, data sheets, representative samples of test specimens, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing, Inc. for a period of four years from the original test date. At the end of this retention period such materials shall be discarded without notice and the service life of this report by Architectural Testing will expire. Results obtained are tested values and were secured by using the designated test methods. 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(s) tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC.

Simon Smeds
Technician

Kenny C. White
Laboratory Manager
Individual-In-Responsible-Charge

WSS:he
A0595.03-301-46

Attachments (pages): This report is complete only when all attachments listed are included.

Appendix-A: Description Table Abbreviations (1)

Appendix-B: Drawings (17)

Revision Log

Rev. #	Date	Page(s)	Revision(s)
0	06/25/10	All	Original Report Issue. Work requested by Mr. Don Willard of International Architectural Products, Inc. DBA: United States Aluminum

Appendix A: Description Table Abbreviations

CODE	Frame / Sash Types
AI	Aluminum w/ Vinyl Inserts (Caps)
AL	Aluminum
AP	Aluminum w/ Thermal Breaks - Partial
AS	Aluminum w/ Steel Reinforcement
AT	Aluminum w/ Thermal Breaks - All Members (> 0.21")
AU	Aluminum Thermally Improved - All Members (0.062" - 0.209")
AV	Aluminum / Vinyl Composite
AW	Aluminum-clad Wood
FG	Fiberglass
PA	ABS Plastic w/ All Members Reinforced
PC	ABS Plastic-clad Aluminum
PF	ABS Plastic w/ Foam-filled Insulation
PH	ABS Plastic w/ Horizontal Members Reinforced
PI	ABS Plastic w/ Reinforcement - Interlock
PL	ABS Plastic
PP	ABS Plastic w/ Reinforcement - Partial
PV	ABS Plastic w/ Vertical Members Reinforced
PW	ABS Plastic-clad Wood
ST	Steel
VA	Vinyl w/ All Members Reinforced
VC	Vinyl-clad Aluminum
VF	Vinyl w/ Foam-filled Insulation
VH	Vinyl w/ Horizontal Members Reinforced
VI	Vinyl w/ Reinforcement - Interlock
VP	Vinyl w/ Reinforcement - Partial
VV	Vinyl w/ Vertical Members Reinforced
VW	Vinyl-clad Wood
VY	Vinyl
WA	Aluminum / Wood composite
WD	Wood
WV	Vinyl / Wood composite
WF	Fiberglass/Wood Combination
WC	Composite/Wood Composite (Shaped vinyl/wood composite members)
CW	Copper Clad Wood
CO	Vinyl/Wood Composite Material

CODE	Spacer Types (See sealant)
A1	Aluminum
A2	Aluminum (Thermally-broken)
A3	Aluminum-reinforced Polymer
A4	Aluminum / Wood
A5	Aluminum-reinforced Butyl (Swiggle)
A6	Aluminum / Foam / Aluminum
A7	Aluminum U-shaped
A8	Aluminum-Butyl (Corrugated) (Duraseal)
ER	EPDM Reinforced Butyl
FG	Fiberglass
GL	Glass
OF	Organic Foam
P1	Duralite
PU	Polyurethane Foam
SU	Stainless Steel, U-shaped
CU	Coated Steel, U-shaped (Intercept)
S2	Steel (Thermally-broken)
S3	Steel / Foam / Steel
S5	Steel-reinforced Butyl
S6	Steel U-channel w/ Thermal Cap
SS	Stainless Steel
CS	Coated Steel
TP	Thermo-plastic
WD	Wood
ZE	Elastomeric Silicone Foam
ZF	Silicone Foam
ZS	Silicone / Steel
N	Not Applicable
TS	Thermo-plastic w/ stainless steel substrate

CODE	Tint Codes
AZ	Azurlite
BL	Blue
BZ	Bronze
CL	Clear
EV	Evergreen
GD	Gold
GR	Green
GY	Gray
LE	Low 'e' Coating
OT	Other (use comment field)
RC	Solar or Reflective Coating
RG	Roller Shades between glazing
RS	Silver (reflective coating)
SF	Suspended Polyester Film
SR	Silver
BG	Blinds between the Glazing
DV	Dynamic Glazing-Variable
DY	Dynamic Glazing-NonVariable

CODE	Gap Fill Codes
AIR	Air
AR2	Argon/Krypton Mixture
AR3	Argon / Krypton / Air
ARG	Argon/Air
CO2	Carbon Dioxide
KRY	Krypton/Air
SF6	Sulfur Hexafluoride
XE2	Xenon/Krypton/Air
XE3	Xenon/Argon/Air
XEN	Xenon/Air
N	Not Applicable

DOOR DETAILS	
N	Not Applicable
CODE	Door Type
EM	Embossed
FL	Flush
LF	Full Lite
LH	1/2 - Lite
LQ	1/4 - Lite
LT	3/4 - Lite
RP	Raised Panel
CODE	Skin
AL	Aluminum
FG	Fiberglass
GS	Galvanized Steel
ST	Steel
WD	Wood
VY	Vinyl
CODE	Panel
FG	Fiberglass
PL	Plastic
WP	Wood - Plywood
WS	Wood - Solid
CODE	Sub-Structure
GS	Galvanized Steel
ST	Steel
WD	Wood
VY	Vinyl
CODE	Core Fill
CH	Cellular - Honeycomb
EP	Expanded Polystyrene
PI	Polyisocyanurate
PU	Polyurethane
WP	Wood - Plywood
WS	Wood - Solid
XP	Extruded Polystyrene

CODE	Spacer Sealant
D	Dual Seal Spacer System
S	Single Seal Spacer System

CODE	Grid Description
N	No Muntins
G	Grids between glass
S	Simulated Divided Lites
T	True Muntins

CODE	Grid Size Codes
	Blank for no grids
0.75	Grids < 1"
1.5	Grids >= 1"

CODE	Thermal Breaks
F	Foam
U	Urethane
V	Vinyl
FB	Fiberglass
O	Other
AB	ABS
NE	Neoprene
AI	Air
N	Not Applicable
P	Polyamide

Appendix B: Drawings



A0595

JUN 24 2010

Drawn: *WJS* Date: *06/24/10*

BILL OF MATERIALS FOR 8000 SERIES SINGLE HUNG WINDOW

PRELIMINARY DRAWING
DATE: APRIL 09, 2010

- ADD SP11
- ADD FAS
- ADD LBS

8000-001
1 of 4

ITEM #	EXTRUSION #	PART NO	DESCRIPTION	COMMENTS	VENDOR	VENDOR PART NUMBER	QTY.
F1	61592	SH862	4-1/2" FRAME HEAD	COLOR TO MATCH P.O.	INTEX	61592	1
F2	61593	SH863	4-1/2" FRAME SILL	COLOR TO MATCH P.O.	INTEX	61593	1
F3	61594	SH864	4-1/2" FRAME JAMB	COLOR TO MATCH P.O.	INTEX	61594	2
F4	61596	SH866	MULLION	COLOR TO MATCH P.O.	INTEX	61596	1
F5	61595	SH865	GLAZING BEAD (BLAST)	COLOR TO MATCH P.O.	INTEX	61595	4
F6	NP881	NP881	INTERIOR GLAZING GASKET	BLACK	TREMO	TX18059E	4
F7	NP825	NP825	EXTERIOR GLAZING GASKET	BLACK	TREMO	TR-14677E	4
F8	WH808	WH808	HEAD PVC ISOLATOR	GRAY H-81414 42 "C" (SEE NOTE # 3)	TEK PARTS/BANDLOCK		1
F9	WH811	WH811	SILL PVC ISOLATOR	GRAY H-81414 42 "C" (SEE NOTE # 3)	TEK PARTS/BANDLOCK		1
F10	WH809	WH809	JAMB PVC ISOLATOR	GRAY H-81414 42 "C" (SEE NOTE # 3)	TEK PARTS/BANDLOCK		2
S1	61588	SH854	INTERLOOK	COLOR MATCH TO P.O.	INTEX	61588	1
S2	61587	SH852	BOTTOM RAIL	COLOR MATCH TO P.O.	INTEX	61587	1
S3	61589	SH855	STILE	COLOR MATCH TO P.O.	INTEX	61589	2
S4	61595	SH865	GLAZING BEAD (BLAST)	COLOR MATCH TO P.O.	INTEX	61595	4
S5	NP881	NP881	INTERIOR GLAZING GASKET	BLACK	TREMO	TX18059E	4
S6	NP825	NP825	EXTERIOR GLAZING GASKET	BLACK	TREMO		4
S7							
S8							
S9							
SC1	H-8044	CO676	EXTRUDED SCREEN FRAME	COLOR MATCH TO P.O.	RITE SCREEN	H-8044	4
SC2		WH59100	SCREEN SPLINE	BLACK	RITE SCREEN		4
SC3		WH43616	18 x 16 FIBERGLASS SCREEN MESH	DARK CHARCOAL OR BLACK	RITE SCREEN		1
SC4		WH451	SCREEN TAB		RITE SCREEN		2
SC5		WH452	SCREEN TENSION SPRING		RITE SCREEN		2
SC6		LU802	SCREEN LABEL		RITE SCREEN		1
SC7		WH581	SCREEN CORNER ANGLE		RITE SCREEN		4

NOTE:

1. ALL PARTS MUST BE U.S. MADE.
2. ALL NYLON MOLDED PARTS TO MATCH WITH CLEAR ANODIZING TO BE GR21 (PRESSOUT CHIP IS CSBK758N) FROM:

COLOR SCIENCE
12500 E. GLENWOOD PLACE
SALT LAKE CITY, UT 84127
714/434-1033

3. COLOR: L = +71.60
 a = -0.30
 b = -0.66

International Aluminum Corporation		8000-001
DIVISION		UNITED STATES ALUMINUM CORP.
DATE: 03/01/10	BY: <i>[Signature]</i>	DWG NO. 8000-001
BILL OF MATERIALS FOR 8000 SERIES S/H (SERIES 7300)		1 of 4

A0395

JUN 24 2010

8000-001
 2 of 4

BILL OF MATERIALS FOR 8000 SERIES SINGLE HUNG WINDOW

PRELIMINARY DRAWING
DATE: APRIL 09, 2010

- ADD SP11
- ADD FAS
- ADD LB5

ITEM #	EXTRUSION	PART NO	DESCRIPTION	COMMENTS	VENDOR	VENDOR PART NUMBER	QTY.
SP1	W-805	VENT STOP	MEDIUM GRAY (NOTE 2)		PETERSON MOLD		2
SP2	W-804	SASH CAP	MEDIUM GRAY (NOTE 2)		PETERSON MOLD		2
SP3	W-803	SASH FULL END CAP	MEDIUM GRAY (NOTE 2)		PETERSON MOLD		4
SP4	BL517	SASH CLIP	STAINLESS STEEL		BSI	51700	2
SP5	BL035	BSI CLASS 5 SUPER BOOST/BAL. GUIDE 15600	TRAVEL . TUBE LENGTH-3"		BSI		2
SP6	BL043	PVC GUIDE	BLACK		RYKO	VY8920	A/R
SP7	R1125	WEEP HOLE COVER	MEDIUM GRAY (NOTE 2)		ASTRO EJECTION MOLDING		2
SP8	SB881	SASH SETTING BLOCK	BLACK		TREXCO	TX18060E	2
SP9	SB882	FIXED SETTING BLOCK	BLACK		TREXCO	TX18059E	2
SP10	W-806	BALANCE RETAINER	MEDIUM GRAY (NOTE 2)		PETERSON MOLD		2
• SP11	W-801	EDGE BLOCK	FIXED AND VENT PANEL		TREXCO		4
W1	W-027	.270 x .250 TRI-FIN	GRAY COLOR USED AT JAMB, SILL (2), MULLION & INTERLOCK		ULTRA FAB		A/R
W2							
W3							
W4							
W5							
W6							
G1	GL103115129	1.932 INSULATED GLASS UNIT (IGU) 1/8" x 1/8" x 1/8"	VENT GLASS				1
G2	GL103115429	1.932 INSULATED GLASS UNIT (IGU) 1/8" x 1/8" x 1/8"	FIXED GLASS				1
FA1	ST1212	#8 x 1-1/4" PHIL HEX WASHER HD SMS A SS	MULLION (4) BALANCE (2)				6
FA2	ST206	#8 x 1/2" PHIL PAN HD SMS TYPE AB SS	SASH GUIDE (2)				2
FA3	MS121	#8-32 x 1/4" PHIL FLAT HD UNDERCUT SMS SS	LATCH HOUSING (2)				2
FA4	ST191	#8 x 3/4" PHIL FLAT HD SMS SS	BALANCE RETAINER				4
• FAS	ST196(42)	#8 x 1" PHIL HEX WASHER HD SMS TYPE AB SS	FRAME (8) TOP RAIL (4) BOTTOM RAIL (8)				20
H1	S-857	LATCH HOUSING	DARK GRAY ANODIZED		KENMAR/FABCO		2
H2	S-858	SASH RELEASE LEVER	DARK GRAY ANODIZED		KENMAR/FABCO		2
H3	W-829	SS LATCH SPRING			KELLY TOOL & DIE		2
LB1	LU801	USAC LOGO WITH INSTRUCTIONS	AAMA CERT. + SECURITY TAB + NFRC TAP		USAC PRINTER		1
LB2	LU801	AAMA LABEL			ALI		1
LB3	LU811	NFRC TEMPORARY LABEL			USAC/SC		1
LB4	LU921	NFRC PERMIT LABEL			USAC PRINTER		1
• LB5	LB006	THIS SIDE UP LABEL			USAC PRINTER		1

NOTE:

1. ALL PARTS MUST BE U.S. MADE.
2. ALL NYLON MOLDED PARTS TO MATCH WITH CLEAR ANODIZING TO BE GR21 (PRESSOUT CHIP IS 058K756N) FROM:

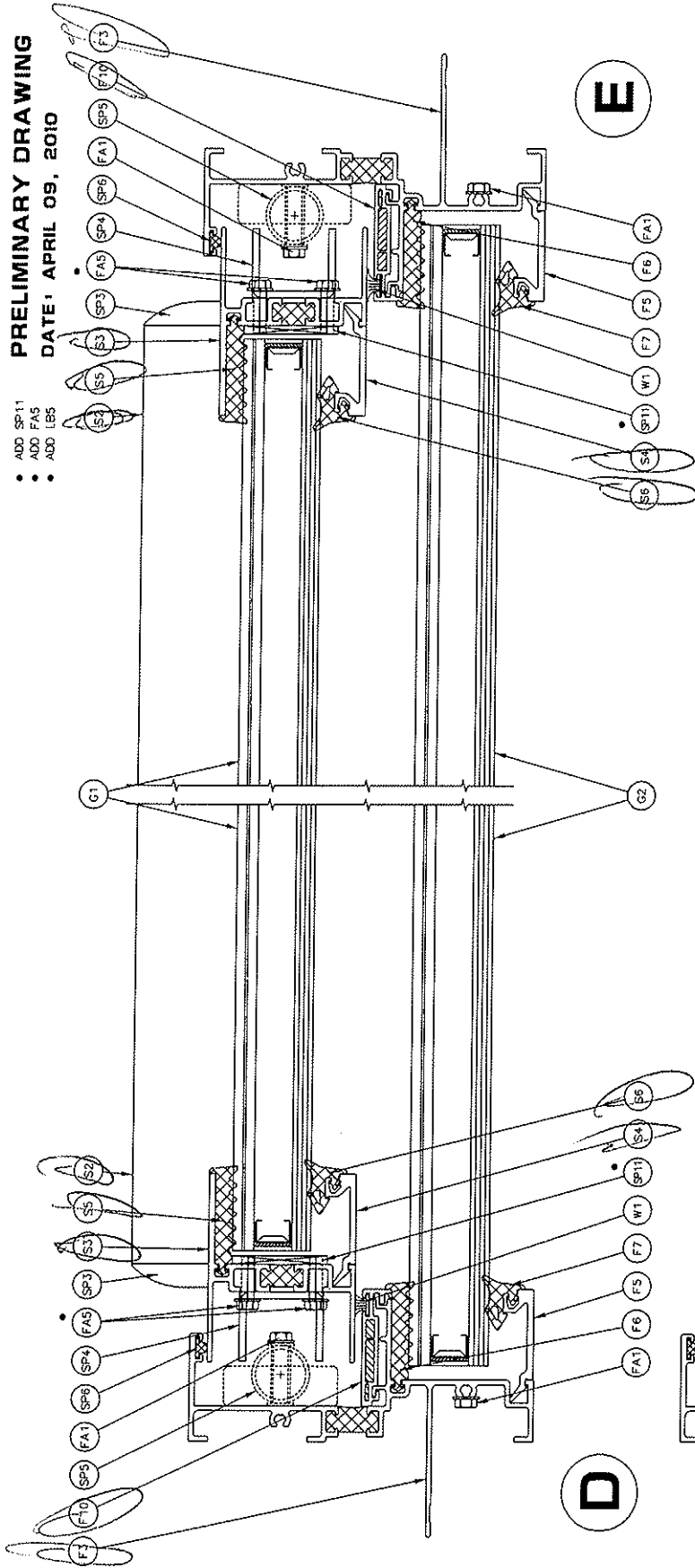
COLOR SCIENCE
 1230 E GLENWOOD PLACE
 SANITARY, CA 92707-3000
 714/434-1033

International Aluminum Corporation			
DIVISION	UNITED STATES ALUMINUM CORP.	DWG NO.	8000-001
DATE	03/01/10	BILL OF MATERIALS	FOR 8000 SERIES S/H
DATE	03/01/10	(SERIES 7300)	2 of 4

PRELIMINARY DRAWING

DATE: APRIL 09, 2010

- ADD SP11
- ADD FAS
- ADD LBS



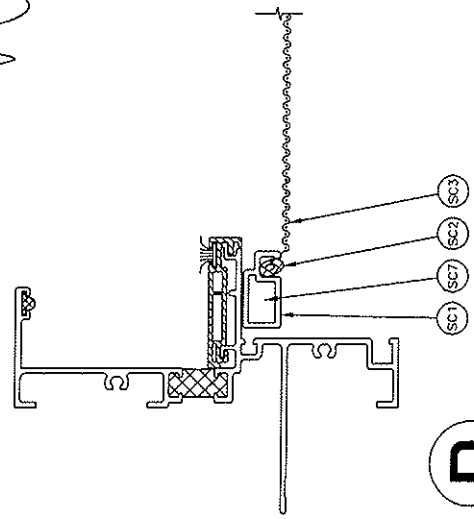
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E



 A0595 JUN 24 2010

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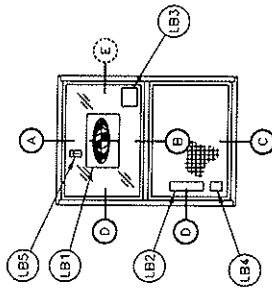


D

SHOWING THE SCREEN

International Aluminum Corporation		U.S. ALUMINUM CORPORATION		DWG. NO.	
DIVISION		SINGLE HUNG LAYOUT		8000SH-001	
DATE: 02/26/10		BY: [Signature]		4 of 4	
REVISION		DATE		SERIES 8000	
SYN		FULL SIZE		SAC. (P. 1000)	

- ADD SP17
- ADD FA5
- ADD LB5

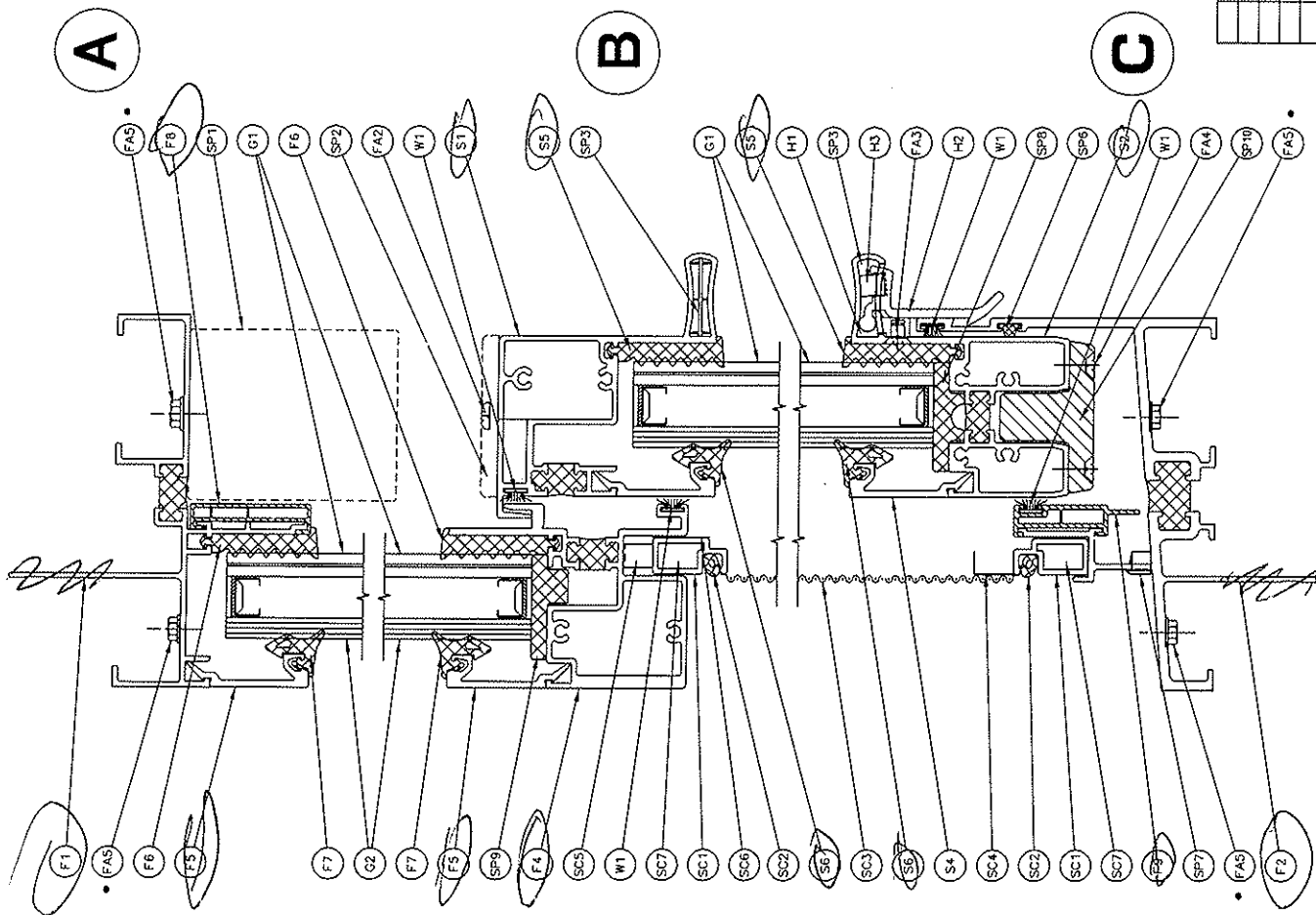


ELEVATION

0
0
0
7
2
11
11
11
11

10
6
18
0
A

22

[illegible]

AC 1095 JUN 24 2010

2000

23

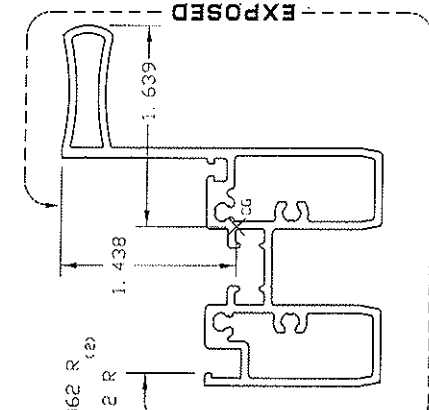
U.S. ALUMINUM CORP.

H-61587

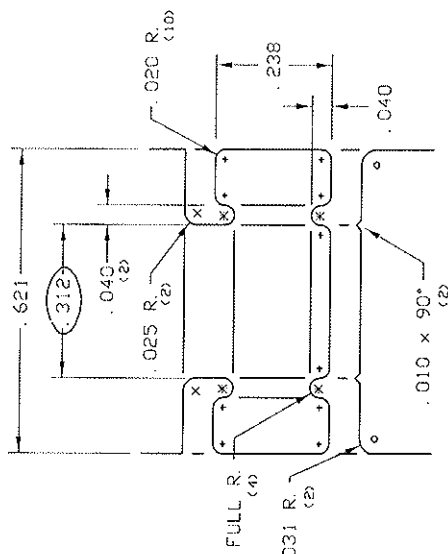
BOOKS RECEIVED

SECRET

02/15/10

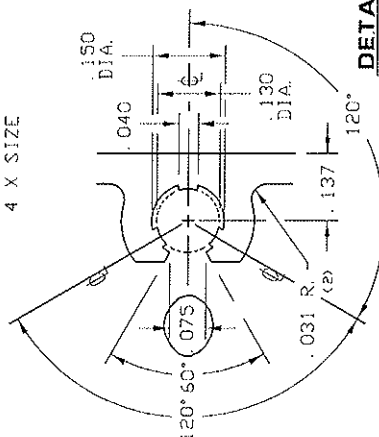


ACTUAL SIZE



DETAIL "A"

4 X SIZE

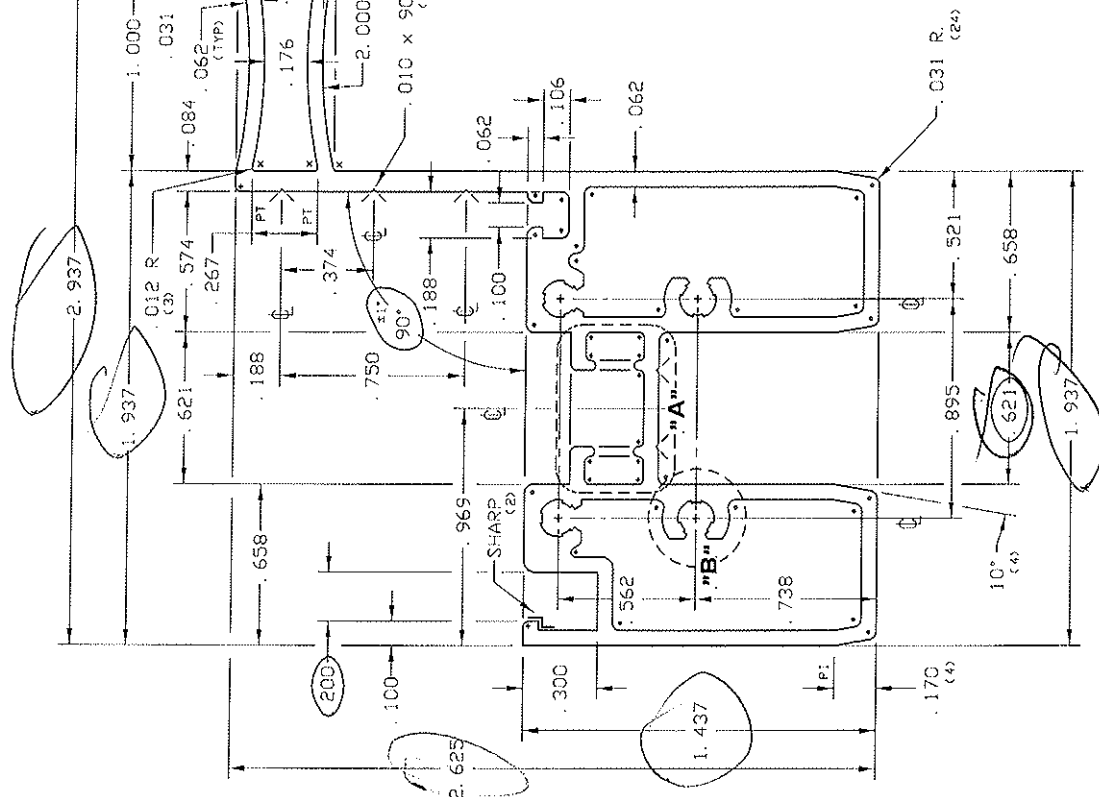


DETAIL "B"

4 X 5173

(SIN 4 PLACES)

- NOTES:
1. 6063-T5 ALLOY AND TEMPER.
 2. NATES WITH SH865; DIE 61589
 3. DEBRIDGE WITH A .312 X
0.15 MAX PENETRATION INTO
THERMAL AREA.
 4. THERMAL DETAIL AREA: .209;
(MODIFIED "DD")
 5. PAINT PERIMETER: 9.708"
 6. OUTSIDE PERIMETER: 15.470



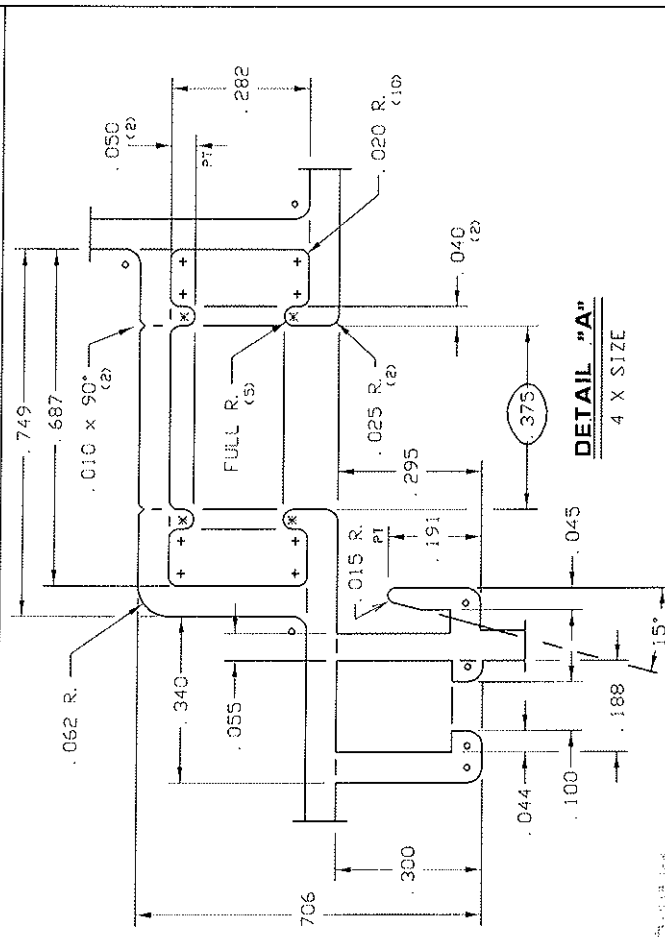
□ □	. 912	C-1789	1	. 062
	1. 094	4. 000	PORTABLE 10X. 5	
	26. 647	HOLLOW III	61588	
	24	8" 59/PRESS 4	H-61587	

T-61592

01/21/20

232

298HS



NOTES:

1. S63-T5 ALLOY AND TEMPER.
2. NATES WITH SH865; DIE 61S95
3. DEBRIDGE WITH A .218 x .015 MAX PENETRATION INTO THERMAL AREA.
4. THERMAL DETAIL AREA: .209; (MODIFIED 'EE')
5. PAINT PERIMETER: 9.144'

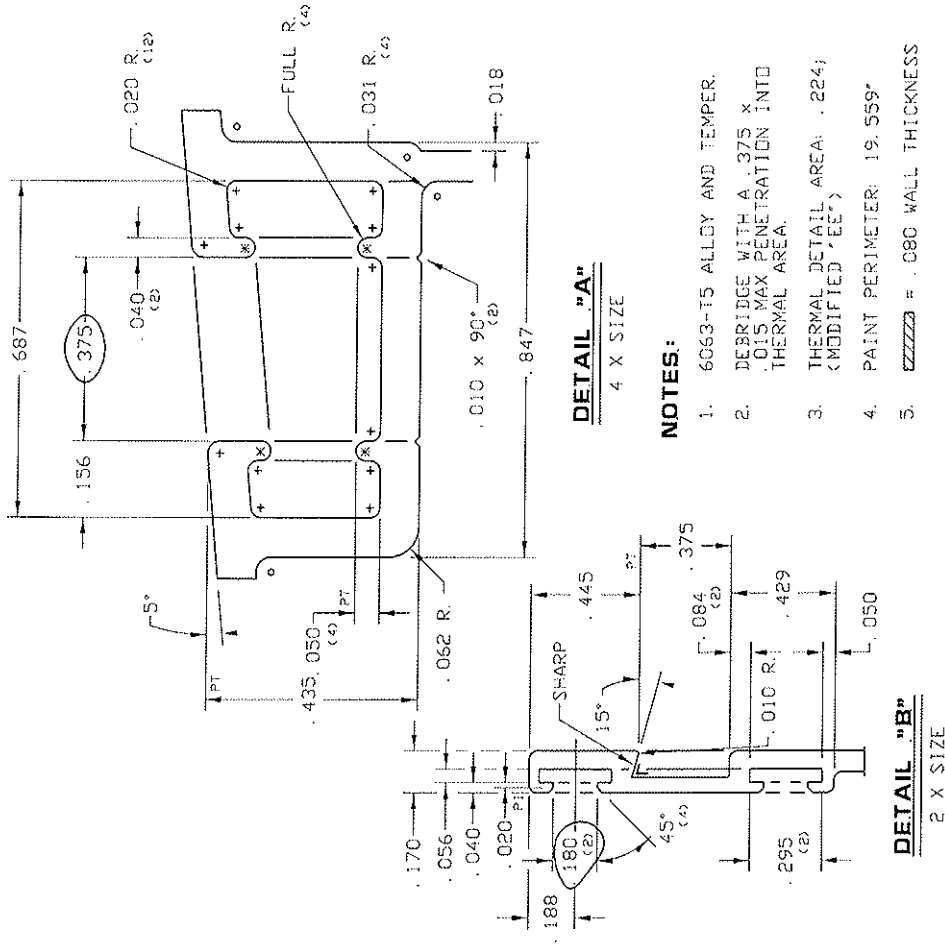
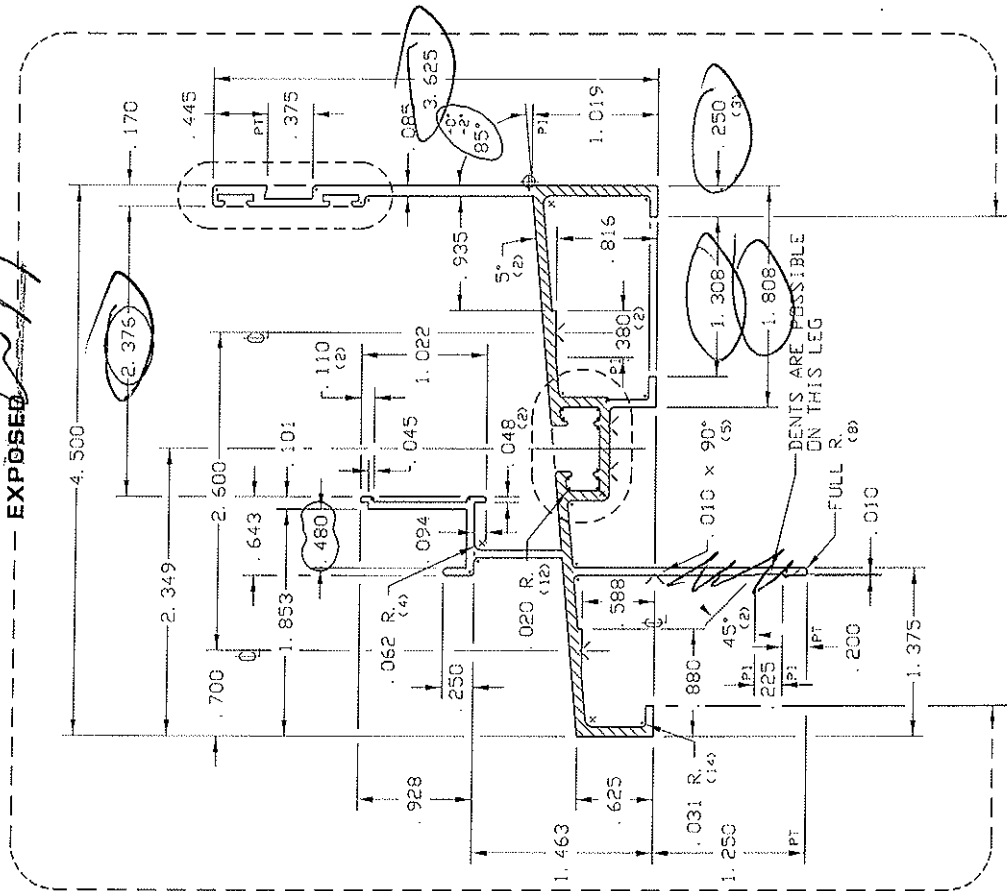
SS303A 2/1 310 2X6

	.814	C-1785	1	.062
	.977	4.661	9 X 61592	
	26.176	SOLID	12X7.5 61592	
	27	8" 65/PRESS 4	T-61592	

405955 2012-4-2010

1000

EXPOSED



DETAIL "B"

2 x 215 Z17E

DETAIL "A"

3ZIS X 7

NOTES:

1. 6063-T5 ALLOY AND TEMPER.
2. DEBRIDGE WITH A .375 x
.015 MAX PENETRATION INTO
THERMAL AREA.
3. THERMAL DETAIL AREA: .224;
(MODIFIED 'EE')
4. PAINT PERIMETER: 19.559"
5. ~~XXXXXXXX~~ = .080 WALL THICKNESS

0	0	. 062		
	1.151	C-179C	1	
	1.381	5.857	12 X 61593	
	31.324	SOLID	15x8.5 61593	
	23	8" 46/PRESS 4	T-61593	

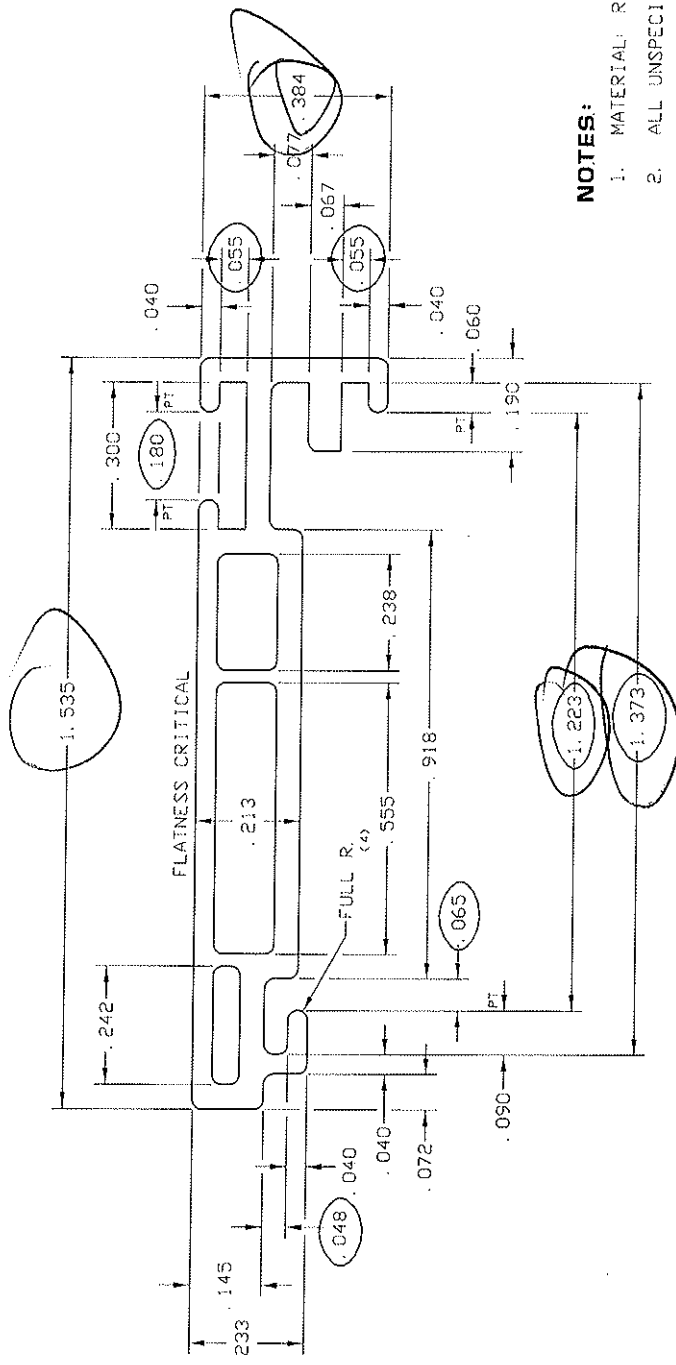
8000SH-038B

REF. DRAWING: 1W1841

RELEASE FOR PRODUCTION
DATE: MARCH 9, 2010
APPROVED BY JOHN FREY



ACTUAL SIZE



RADIUS SCHEDULE

S	SHARP
a	.005 R.
b	.012 R.
c	.015 R.
d	.020 R.
e	.030 R.
f	.045 R.
g	.060 R.

NOTES:

1. MATERIAL: RIGID PVC TO MEET AAMA 303-07
2. ALL UNSPECIFIED RADII = .020
3. TYPICAL EXTERIOR WALL THICKNESS: .050
TYPICAL INTERIOR WALL THICKNESS: .025
4. AREA: .181
5. MINIMUM SHEEN ALLOWED 56.0 USING A GARDNER MICRO-GLOSS 60° GLOSS METER.
6. TOLERANCE UNLESS OTHERWISE NOTED ±.012
7. WALL THICKNESS TOLERANCE TO BE: ±.006

INCH TOLERANCES FOR PVC EXTRUDED SHAPES APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE

INTERNATIONAL WINDOW CORP.

Willie C.	JAMB THERMO ISOLATOR	8000SH-038B
02/05/08		
4 X SIZE		

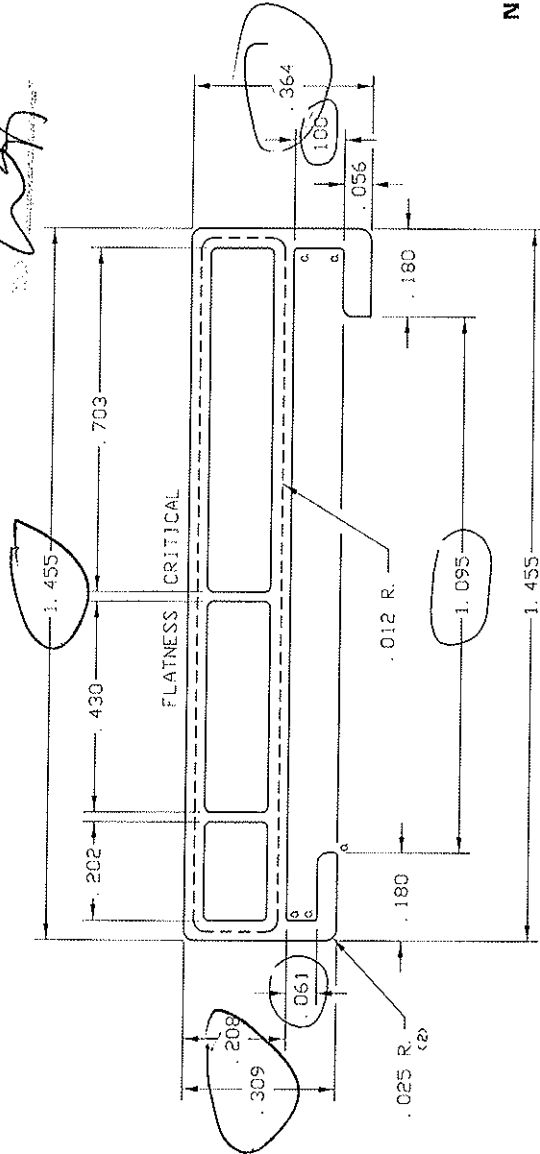
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Approved for Release, Inc.
The release of this information is hereby authorized

AD 695 JUN 24 2010

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1833

1. MATERIAL: RIGID PVC TO MEET AAMA 303-07
2. ALL UNSPECIFIED RADII = .020
3. TYPICAL EXTERIOR WALL THICKNESS: .040
TYPICAL INTERIOR WALL THICKNESS: .020
4. AREA: .155
5. MINIMUM SHEEN ALLOWED 56.0 USING A
GARDNER MICRO-GLOSS 60° GLOSS METER

SHARP	R
00S	R
01S	R
01S	R
020	R
030	R
045	R
060	R

INVC TOLERANCES FOR PVC EXTRUDED SHAPES APPLY UNLESS SPECIFICALLY SHOWN OTHERWISE

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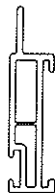
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ACTUAL SIZE

RELEASE FOR PRODUCTION
DATE: MARCH 9, 2010
APPROVED BY JOHN FREY

NOTES:

1. MATERIAL: RIGID PVC TO MEET AAMA 303-07
2. ALL UNSPECIFIED RADII = .012
3. TYPICAL EXTERIOR WALL THICKNESS: .050
TYPICAL INTERIOR WALL THICKNESS: .020
4. AREA: RIGID PVC- .180
5. MINIMUM SHEEN ALLOWED 56.0 USING A
GARDNER MICRO-GLOSS 60° GLOSS METER.
6. TOLERANCE UNLESS OTHERWISE NOTED ± .012.
- ⑦ 7. WALL THICKNESS TOLERANCE TO BE ± .006

RADIUS SCHEDULE

- | | | | | | | |
|-------|------|------|------|------|------|------|
| S | 0 | 0 | 0 | 0 | 0 | 0 |
| - | - | - | - | - | - | - |
| SHARP | .006 | .012 | .015 | .020 | .030 | .060 |

UNLESS SPECIFICALLY SHOWN OTHERWISE

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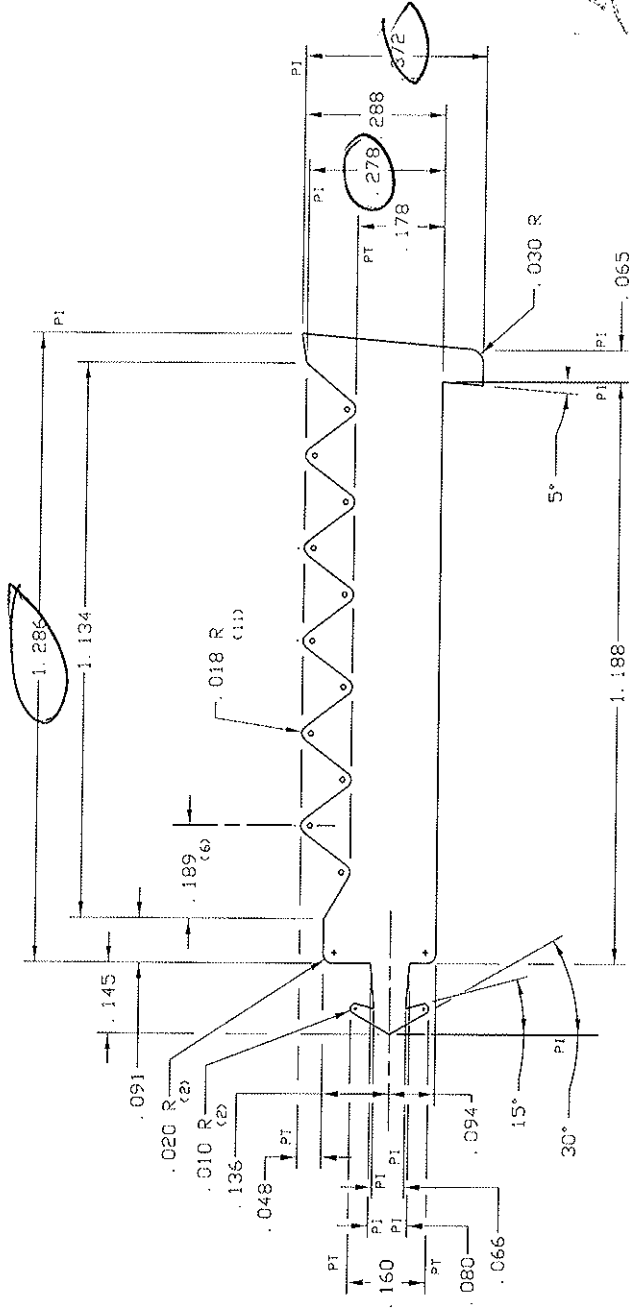
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8000SH-037B

8000SH-011



ACTUAL SIZE



NOTES:

1. AREA: .308 IN²
2. MATERIAL: EPDM SPONGE
3. PART NO. NP881

A0595 JUN 24 2010

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UNITED STATES ALUMINUM CORP.

INTERIOR GLAZING
GASKET (8000 SH WINDOW)
PART# NP881

8000SH-011

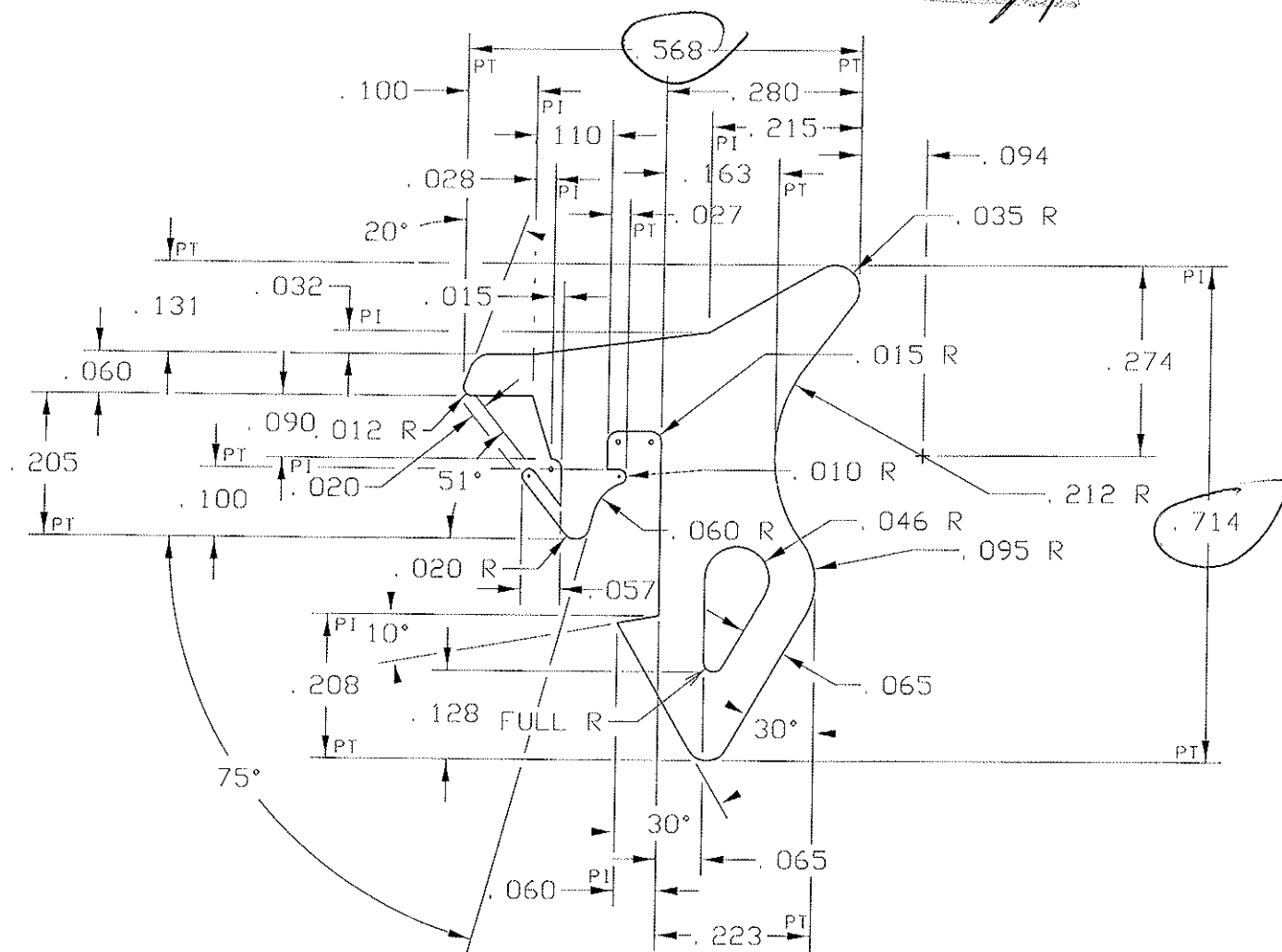
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1. AREA = .151 in²
2. MATERIAL: EPDM DENSE
3. DUROMETER: 70 ±5 SHORE
4. PART NO. NP825

PRESTON

05/16/06

4 X SIZE

EXTERIOR GLAZING GASKET
FOR IG500/IG600 SYSTEM

PART# : NP825

USA--2957

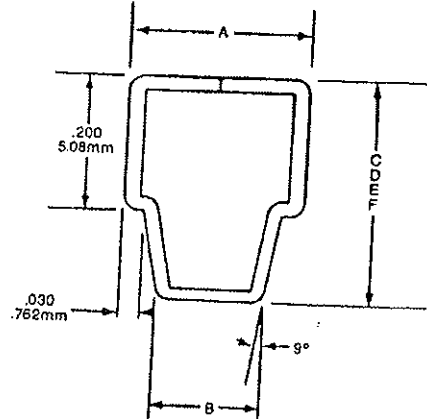
A0598

JUN 24 2010

ALLMETALINC.
SINCE 1915

Report

Date

Standard Air Spacer***LASER WELDED****TOLERANCES:**A, $\pm .005$.127mmB, $\pm .005$.127mmC, D, E, F $\pm .005$.127mmDECIMAL
IN INCHES

*3/16 & 5mm Not Welded at this Time

"C" — .0135" Clear Anodized Aluminum Height — .309 7.85mm

"D" — .0165" Clear Anodized Aluminum Height — .315 8mm

"E" — .0170" Mill Finish Aluminum Height — .316 8.03mm

"F" — .0150" Electro-Galvanized & Black Steel Height — .318 8.07mm

Available with serrations at no extra charge on inside of Aluminum spacer at "A" dimension; not recommended for spacers to be bent.

**FRACTIONAL
DECIMAL IN INCHES**

Size	A	B
3/16	.188	.088
7/32	.219	.119
1/4	.250	.150
17/64	.266	.166
9/32	.281	.181
19/64	.297	.197
5/16	.313	.213
11/32	.344	.244
23/64	.359	.259
3/8	.375	.275
13/32	.406	.306
7/16	.438	.338
15/32	.469	.369
1/2	.500	.400
17/32	.531	.431
9/16	.563	.463
19/32	.594	.494
5/8	.625	.525
21/32	.656	.556
11/16	.688	.588
23/32	.719	.619
3/4	.750	.650
13/16	.813	.713
7/8	.875	.775

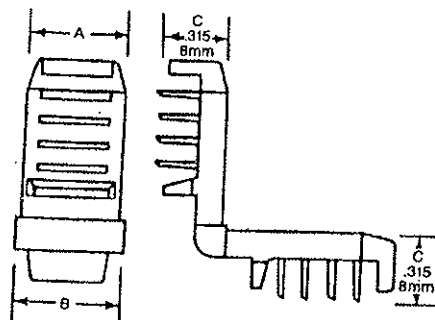
**MILLIMETERS
DECIMAL IN INCHES**

Size	A	B
5	.197	.097
6	.236	.136
7	.276	.176
7.5	.296	.196
8	.315	.215
9	.354	.254
10	.394	.294
11	.433	.333
11.5	.453	.353
12	.472	.372
13	.512	.412
13.2	.520	.420
14	.551	.451
15	.591	.491
15.5	.610	.510
16	.630	.530
17	.669	.569
18	.709	.609
18.5	.728	.628
19	.748	.648
20	.787	.687
22	.866	.766

Standard Fixed Nylock Corner Key with Fin**COMPOUND:**

#6 Nylon

Also available upon request, at no additional cost, glass reinforced nylon for added strength.



DECIMAL IN INCHES

TOLERANCES:A, $\pm .005$.127mmB, $\pm .005$.127mmC, $\pm .005$.127mm**FRACTIONAL
DECIMAL IN INCHES**

Size	A	B
3/16-.188	.148	.178
7/32-.219	.178	.208
1/4-.250	.210	.240
17/64-.266	.226	.256
9/32-.281	.241	.271
19/64-.297	.257	.287
5/16-.313	.273	.303
11/32-.344	.304	.334
23/64-.359	.314	.344
3/8-.375	.335	.365
13/32-.406	.366	.396
7/16-.438	.397	.427
15/32-.469	.438	.468
1/2-.500	.456	.490
17/32-.531	.487	.521
9/16-.563	.518	.552
19/32-.594	.550	.584
5/8-.625	.581	.615
21/32-.656	.612	.646
11/16-.688	.644	.678
23/32-.719	.674	.708
3/4-.750	.706	.740
13/16-.813	.769	.803
7/8-.875	.831	.865

**MILLIMETERS
DECIMAL IN INCHES**

Size	A	B
5 -.197	.148	.178
6 -.236	.196	.226
7 -.276	.241	.271
7.5-.297	.257	.287
8 -.315	.273	.303
9 -.354	.314	.344
10 -.394	.354	.384
11 -.433	.397	.427
11.5-.453	.413	.443
12 -.472	.438	.468
13 -.512	.468	.502
14 -.551	.507	.541
15 -.591	.550	.584
15.5-.610	.566	.600
16 -.630	.581	.615
17 -.669	.625	.659
18 -.709	.664	.698
19 -.748	.706	.740
20 -.787	.737	.771
22 -.866	.831	.865

