

**AAMA 501-05 TEST REPORT**

**Report No.:** A2651.03-401-44

**Rendered to:**

CORAL ARCHITECTURAL PRODUCTS  
Tuscaloosa, Alabama

**PRODUCT TYPE:** 90° Corner Curtain Wall  
**SERIES/MODEL:** PW257 Captured and Butt Glazed

<b>Title</b>	<b>Summary of Results</b>
Design Pressure	3830 Pa ( $\pm 80.00$ psf)
Air Infiltration	$<0.05$ L/s/m <sup>2</sup> ( $<0.01$ cfm/ft <sup>2</sup> )
Water Penetration Resistance Test Pressure	766 Pa (16.00 psf)
Uniform Load Structural Test Pressure	5746 Pa ( $\pm 120.00$ psf)

**This report contains in its entirety:**

**Cover Page:** 1 page  
**Report Body:** 10 pages  
**Sketches:** 1 pages  
**Photographs:** 1 pages  
**Drawings:** 15 pages

Reference must be made to Report No. A2651.03-401-44, dated 01/07/11 for complete test specimen description and detailed test results.

**1.0 Report Issued To:** Coral Architectural Products  
3010 Rice Mine Road  
Tuscaloosa, Alabama 35406

**2.0 Test Laboratory:** Architectural Testing, Inc.  
2250 Massaro Boulevard  
Tampa, Florida 33619  
813-628-4300

**3.0 Project Summary:**

**3.1 Product Type:** 90° Corner Curtain Wall

**3.2 Series/Model:** PW257 Captured and Butt Glazed

**3.3 Compliance Statement:** Results obtained are tested values and were secured by using the designated test method(s). Test specimen description and results are reported herein.

**3.4 Test Dates:** 12/13/2010 - 12/17/2010

**3.5 Test Location:** Architectural Testing, Inc. test facility in Tampa, Florida.

**3.6 Test Sample Source:** The test specimen was provided by the client. Representative samples of the test specimen will be retained by Architectural Testing for a minimum of four years from the test completion date.

**3.7 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 B. Any deviations are documented herein or on the drawings.

**3.8 List of Official Observers:**

<u>Name</u>	<u>Company</u>
Bill Smith	Coral Architectural Products
John McClane	Architectural Testing, Inc.
Don Beltz	Architectural Testing, Inc.
Shawn G. Collins P.E.	Architectural Testing, Inc.

#### 4.0 Test Method(s):

AAMA 501-05, Methods of Tests for Exterior Walls.

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.*

ASTM E 330-02, *Test Method for Structural Performance of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.*

ASTM E 331-00, *Test Method for Water Penetration of Exterior Windows, Curtain Walls and Doors by Uniform Static Air Pressure Difference.*

#### 5.0 Test Specimen Description:

##### 5.1 Product Sizes:

##### Test Specimens #1:

Overall Area: 27.2 m <sup>2</sup> (292.7 ft <sup>2</sup> )	Width		Height	
	millimeters	inches	millimeters	inches
Overall size	5613	221	3810	150
Overall size 90° Return	1524	60	3810	150

**5.0 Test Specimen Description:** (Continued)

*The following descriptions apply to all specimens.*

**5.2 Frame Construction:**

Frame Member	Material	Description
Head / Sill	Extruded Aluminum	Drawing #16 (PW203), #23 (PW613) & #25 (PW652) on sheet 15 of 15
Vertical Mullion	Extruded Aluminum	Drawing #14 (PW151), #15 (PW202) & #24 (PW650) on sheet 15 of 15
Horizontal Mullion	Extruded Aluminum	Drawing #16 (PW203) & # 26 (PW655) on sheet 15 of 15
Jambs	Extruded Aluminum	Drawing #24 (PW650), #15 (PW202), #23 (PW613)

	Joinery Type	Detail
All frame corners	Mechanical	The horizontal members were butt joints, sealed with 0.50" x 0.125" Isocryl joint sealant tape and secured with three (3) #14 x1" hex head screws; through the vertical members into the adjacent horizontal members screw spline.

**5.3 Sash/Vent/Panel Construction:** Not utilized

## 5.0 Test Specimen Description: (Continued)

### 5.4 Weatherstripping:

Description	Quantity	Location
Exterior glazing gasket (NG10)	2 rows	Underside of pressure bar; outer edges
Exterior perimeter gasket (NG11)	1 row	Underside of the pressure bar; outer edge at the perimeter frame members
Pressure bar Isolator (NG12)	1 row	Underside of the pressure bar; center
Interior gasket (NG14)	1 row	Exterior side of vertical and horizontal mullions; glazing perimeter

### 5.5 Glazing:

Glass Type	Spacer Type	Interior Lite	Exterior Lite	Glazing Method
1-5/16" IG	Reinforced Butyl spacer system	1/4" HS - 0.090" SGP interlayer - 1/4" - HS	1/4" - HS	The glass was exterior glazed against a 1/4" rubber stop and back sealed with Dow 995 sealant. The glass was secured from the exterior utilizing #12 x 1-1/4" hex washer head self drilling screws located 2" from ends and 12" on center through the aluminum pressure plates P/N PW204.

Location	Quantity	Daylight Opening		Glass Bite
		millimeters	inches	
Far left side, front face bottom	2	1149.35 x 2438.40	45-1/4" x 96"	3/4"
Far left side, front face top transom	2	1149.35 x 1168.40	45-1/4" x 46"	3/4"
Center front face and 90° return bottom	3	1428.75 x 2438.40	56-1/4" x 96"	3/4"
Center front face and 90° return top transom	3	1428.75 x 1168.40	56-1/4" x 46"	3/4"

**5.0 Test Specimen Description:** (Continued)

**5.6 Drainage:**

Drainage Method	Size	Quantity	Location
Weep holes zoned draining system	1/4"	30	8" in from each vertical mullion on the under side of the horizontal mullion trim caps and 6" in from the vertical mullion on the center of the pressure plates.

**5.7 Hardware:**

**5.8 Reinforcement:**

Drawing Number	Location	Material
Page 9 of 15 butt glaze mullion detail #9 PN SR150	Vertical mullion	A-36 Steel, 1/4" x 4-1/2" x 1-7/8" U-channel with 1/2" x 3-3/4" flat bar steel welded to the interior pocket of the U-channel.
Page 9 of 15 Captured mullion detail #10 PN SR150	Vertical mullion	A-36 Steel, 1/4" x 4-1/2" x 1-7/8" U-channel with 1/2" x 3-3/4" flat bar steel welded to the interior pocket of the U-channel.
Page 9 of 15 Captured corner mullion detail #12 PN SR504	Vertical mullion	A-36 Steel, 1/4" x 4-5/8" x 1-1/4" U-channel

**5.9 Screen Construction:** Not utilized

## 6.0 Installation:

The specimen was installed into a C-8 steel C-channel and plywood chamber. The rough opening allowed for a 1/2" shim space at the top, bottom and at the jambs. The exterior and interior perimeter of the curtain wall was sealed with Dow 795.

Location	Anchor Description	Anchor Location
Head	1/2"-13 x 2" BGJ steel bolts	One anchor 4" from each jamb and 4" and 6" on each side of the vertical mullions, through the head and steel C-8 channel. The anchors were secured with a flat washer, lock washer and nut.
Jambs	1/2"-13 X 4-1/2" JH FNL steel bolts	The anchors were located 100" from the sill plate and above the intermediate horizontal mullion, through the jamb and the steel C-8 channel. The anchors were secured with a flat washer, lock washer and nut at both jambs.

**6.0 Installation:** (Continued)

Location	Anchor Description	Anchor Location
Sill	1/2" x 4-1/2" #4 power wedge anchors	One anchor 4" from each jamb and 4" and 6" on each side of the vertical mullions. The anchors were secured through the sill plate and into the concrete floor with a 3-1/2" embedment.
Vertical mullion reinforcement	1/4"-20 JZ307A bolts	The steel reinforcement was secured to the vertical mullions with one 1/4"-20 x 3" bolt through the mullion at the bottom, above the intermediate horizontal mullion and at the top. Each bolt utilized flat washers, lock washers and nuts. The bottom and top also utilized a second 1/4"-20 x 2" bolt that penetrated through one side of the mullion and steel reinforcement and secured with flat washers, lock washers and nuts.



**7.0 Test Results:** The temperature during testing was 16.1°C (61°F). The results are tabulated as follows:

**Test Specimen #1:**

Title of Test	Results	Allowed	Note
Preload @+1915 Pa (+40.0 psf)	Measured	No damage	
<b>Air Leakage,</b> per ASTM E 283 at 75 Pa (1.6 psf) at 300 Pa (6.2 psf)	<0.05 L/s/m <sup>2</sup> <0.01 cfm/ft <sup>2</sup> <0.05 L/s/m <sup>2</sup> <0.01 cfm/ft <sup>2</sup>	0.30 L/s/m <sup>2</sup> 0.06 cfm/ft <sup>2</sup> max. 0.30 L/s/m <sup>2</sup> 0.06 cfm/ft <sup>2</sup> max.	
<b>Water Penetration,</b> ASTM E 331 at 766 Pa (16.0 psf)	Pass	No leakage	
<b>Uniform Load Deflection,</b> per ASTM E 330 taken at vertical mullion +3830 Pa (+80.0 psf) -3830 Pa (-80.0 psf)	12.70 mm (0.50") 14.98 mm (0.59")	21.84 mm (0.86") max. 21.84 mm (0.86") max.	1, 2
<b>Uniform Load Deflection,</b> per ASTM E 330 taken at horizontal mullion at transom +3830 Pa (+80.0 psf) -3830 Pa (-80.0 psf)	1.52 mm (0.06") 2.03 mm (0.08")	8.38 mm (0.33") max. 8.38 mm (0.33") max.	1, 2
<b>Uniform Load Deflection,</b> per ASTM E 330 taken at corner vertical mullion +3830 Pa (+80.0 psf) -3830 Pa (-80.0 psf)	<0.25 mm (<0.01") 0.25 mm (0.01")	21.84 mm (0.86") max. 21.84 mm (0.86") max.	1, 2
<b>Uniform Load Deflection,</b> per ASTM E 330 taken at sill anchor points +3830 Pa (+80.0 psf) -3830 Pa (-80.0 psf)	<0.25 mm (<0.01") <0.25 mm (<0.01")	7.11 mm (0.28") max. 7.11 mm (0.28") max.	1, 2
<b>Uniform Load Deflection,</b> per ASTM E 330 taken at jamb member +3830 Pa (+80.0 psf) -3830 Pa (-80.0 psf)	0.25 mm (0.01") <0.25 mm (<0.01")	14.22 mm (0.56") max. 14.22 mm (0.56") max.	1, 2

**7.0 Test Results:** (Continued)

**Test Specimen:#1**

<b>Water Penetration,</b> ASTM E 331 at 766 Pa (16.0 psf)	Pass	No leakage	
<b>Uniform Load Structural,</b> per ASTM E 330 taken at vertical mullion +7546 Pa (+120.0 psf) -5746 Pa (-120.0 psf)	<0.25 mm (<0.01") 1.52 mm (0.06")	7.62 mm (0.30") max. 7.62 mm (0.30") max.	1, 2
<b>Uniform Load Structural,</b> per ASTM E 330 taken at horizontal mullion at transom +5746 Pa (+120.0 psf) -5746 Pa (-120.0 psf)	-0.51 mm (-0.02") 0.51 mm (0.02")	2.79 mm (0.11") max. 2.79 mm (0.11") max.	1, 2
<b>Uniform Load Structural,</b> per ASTM E 330 taken at corner vertical mullion +5746 Pa (+120.0 psf) -5746 Pa (-120.0 psf)	<0.25 mm (<0.01") <0.25 mm (<0.01")	7.62 mm (0.30") max. 7.62 mm (0.30") max.	1, 2
<b>Uniform Load Structural,</b> per ASTM E 330 taken at sill anchor points +5746 Pa (+120.0 psf) -5746 Pa (-120.0 psf)	<0.25 mm (<0.01") -1.02 mm (-0.04")	2.54 mm (0.10") max. 2.54 mm (0.10") max.	1, 2
<b>Uniform Load Structural,</b> per ASTM E 330 taken at jamb member +5746 Pa (+120.0 psf) -5746 Pa (-120.0 psf)	<0.25 mm (<0.01") -0.25 mm (-0.01")	5.08 mm (0.20") max. 5.08 mm (0.20") max.	1, 2

## 7.0 Test Results: (Continued)

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

*Note 1: Loads were held for 30 seconds.*

*Note 2: Tape and film were not used to seal against air leakage during structural testing.*

The service life of this report will expire on the stated Test Record Retention End Date, at which time such materials as drawings, data sheets, samples of test specimens, copies of this report, and any other pertinent project documentation, shall be discarded without notice.

If test specimen contains glazing, no conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made. 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.

---

John C McClane  
Laboratory Manager

---

Shawn G. Collins, P.E.  
Laboratory Support Engineer

JCM:ck

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

- Appendix A: Sketches (1)
- Appendix-B: Photographs (1)
- Appendix-C: Drawings (15)

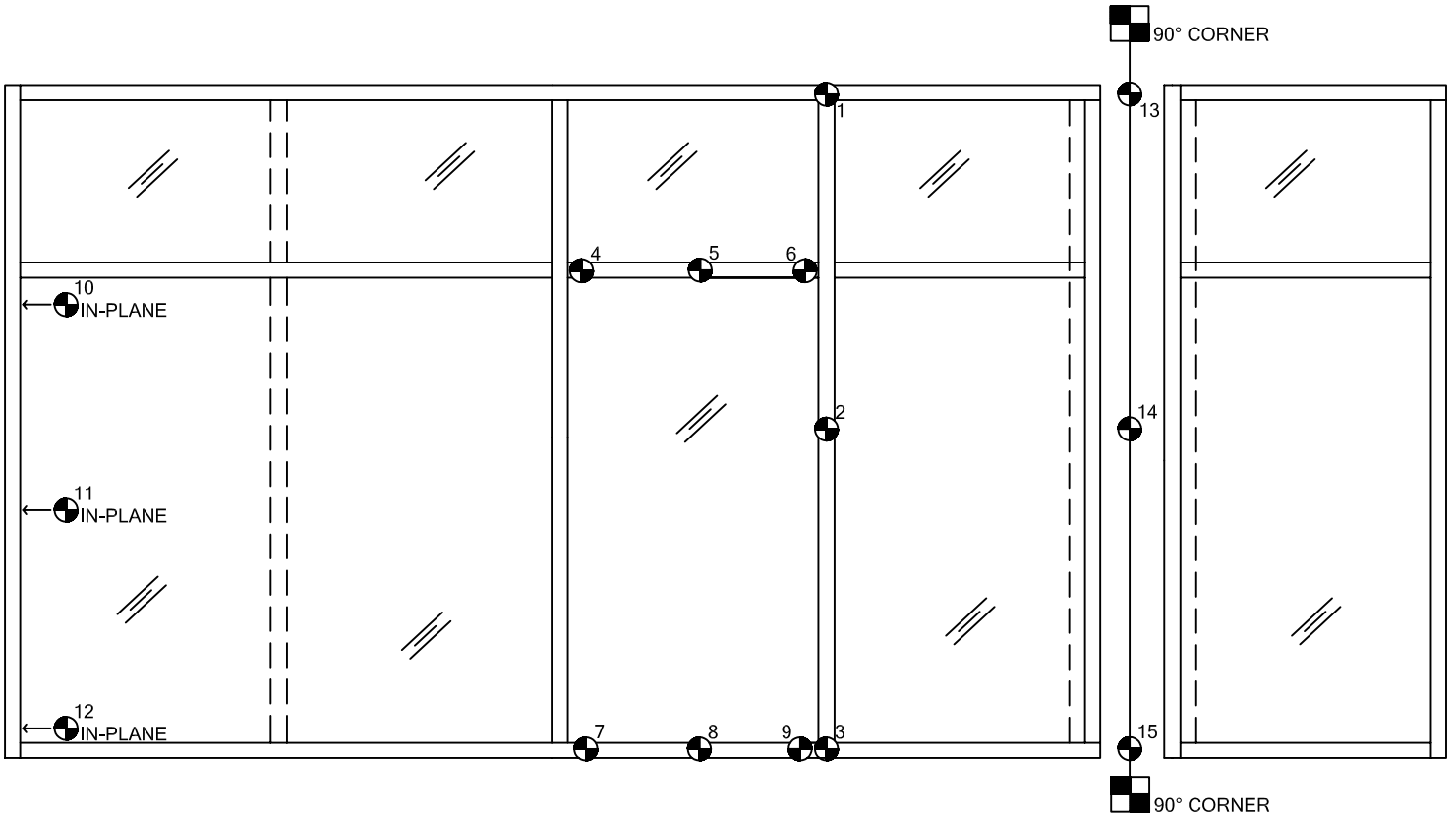


Test Report No.: A2651.03-401-44  
Report Date: 02/17/11  
Test Record Retention End Date: 12/17/14

## **Appendix A**

### **Sketches**

REV	DATE	DESCRIPTION



# INDICATOR LOCATIONS

AAMA 501 SCALE:NTS

LEGEND:

INDICATES INDICATOR NUMBER

INDICATES INDICATOR LOCATION

## Appendix B Photographs



Photo No. 1  
Specimen # 1  
Test equipment



Test Report No.: A2651.03-401-44  
Report Date: 02/17/11  
Test Record Retention End Date: 12/17/14

## **Appendix C**

### **Drawings**


# TEST REPORT DRAWINGS PW257 IMPACT-RESISTANT CURTAIN WALL SYSTEM

## FOR USE IN HURRICANE ZONES REQUIRING LARGE MISSILE IMPACT PROTECTION

INDEX TO DRAWINGS	
1	INDEX TO DRAWINGS AND NOTES
2	FRAMING ELEVATION - E1 CAPTURED AND B.G. MULLIONS WITH STEEL --LONG SPAN--
3	FRAMING ELEVATION - E2 CAPTURED MULLION WITHOUT STEEL --SHORT SPAN--
4	FRAMING ELEVATION - E3 B.G. MULLION WITHOUT STEEL --SHORT SPAN--
5	FRAMING ELEVATION - E4 CAPTURED MULLION WITH STEEL --LONG SPAN-- DRY GLAZE
6	FRAMING ELEVATION FOR DOORS - E5 CAPTURED MULLION WITH STEEL --LONG SPAN--
7	FRAMING DETAILS
8	FRAMING DETAILS
9	FRAMING DETAILS
10	DOOR AND FRAMING DETAILS
11	DOOR AND FRAMING DETAILS
12	FRAMING DETAILS
13	BILL OF MATERIALS
14	BILL OF MATERIALS AND GLAZING SCHEDULE
15	DIE DRAWINGS

**ABBREVIATIONS:**

- D.L.O. = DAY LIGHT OPENING
- D.O.H. = DOOR OPENING HEIGHT
- D.O.W. = DOOR OPENING WIDTH
- ELEYS = ELEVATIONS
- EXT. = EXTERIOR
- INT. = INTERIOR
- MAX. = MAXIMUM
- MIN. = MINIMUM
- OPP. = OPPOSITE
- TYP. = TYPICAL

 **Architectural Testing**

Test sample complies with these details.  
Observations are noted.

Report A2651.03  
2/17/11 Test 5cm

<p style="font-size: 2em; font-weight: bold; margin: 0;">Coral</p> <p style="font-size: 0.8em; margin: 0;">Architectural Products P.O. Box 225707 Miami, FL 33122-5707</p>	<p style="font-size: 0.8em; margin: 0;">TEST REPORT DRAWINGS PW257 IMPACT-RESISTANT CURTAIN WALL SYSTEM</p> <p style="font-size: 0.8em; margin: 0;">INDEX TO DRAWINGS AND NOTES</p>						
<p style="font-size: 0.8em; margin: 0;">DATE: 6/24/2010</p> <table border="1" style="width: 100%; border-collapse: collapse; font-size: 0.7em;"> <tr> <td style="width: 25%;">DRAWN</td> <td style="width: 25%;">CHECKED</td> <td style="width: 25%;">APPROVED</td> </tr> <tr> <td style="text-align: center;">ALL</td> <td style="text-align: center;">DCV</td> <td style="text-align: center;">DCV</td> </tr> </table> <p style="font-size: 0.8em; margin: 0;">PROJECT NO: TEST</p> <p style="font-size: 0.8em; margin: 0;">DRAWING NO: PW257_01</p> <p style="font-size: 0.8em; margin: 0;">SHEET: 1 OF 15</p>		DRAWN	CHECKED	APPROVED	ALL	DCV	DCV
DRAWN	CHECKED	APPROVED					
ALL	DCV	DCV					







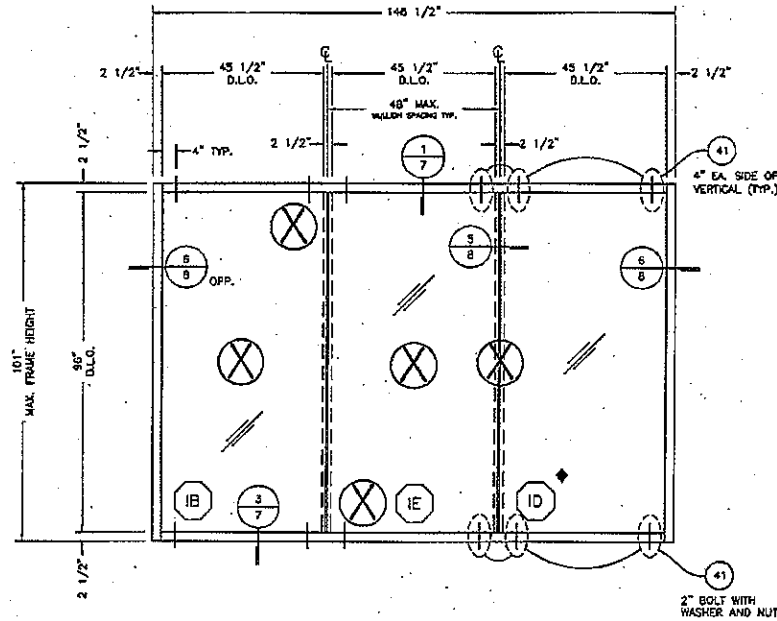


Test sample complies with these details.  
Deviations are noted.

Report# \_\_\_\_\_  
Date \_\_\_\_\_ Tech \_\_\_\_\_

NOT  
USED

SPECIMEN #E3	
TEST METHOD	TEST CONDITIONS
UNIFORM STATIC LOAD TEST (ASTM E1318 AND TAS 202)	+/- 65 PSF DESIGN PRESSURE
LARGE MISSILE IMPACT TEST (ASTM E1863/E1996 AND TAS 301)	HLB 402, 244 @ 50 FT/SEC
CYCLIC LOAD TEST (ASTM E1996 AND TAS 203)	+/- 65 PSF DESIGN PRESSURE



**ELEVATION E3**  
**B.G. MULLION -SHORT SPAN-**  
**WITHOUT REINFORCEMENT**

STEEL BUCK FRAME

TESTING:  
STATIC, IMPACT, AND CYCLE

MAX. ALLOWABLE DEFLECTION (L/180) = 0.561

DESIGN PRESSURE = +/- 65 PSF

X - LARGE MISSILE IMPACT LOCATIONS

◆ = INFILL ONLY (DO NOT IMPACT)

0 1'-4" 2'-8" 5'-4"  
SCALE: 3/8" = 1'-0"

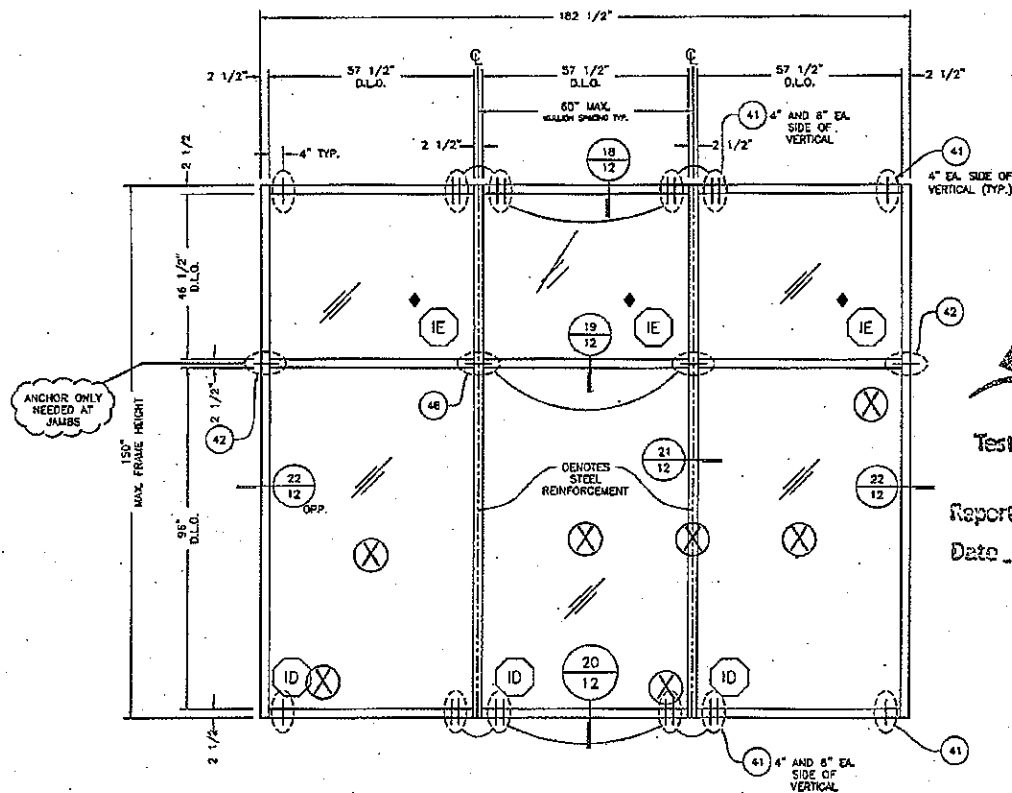
DATE	3/24/2010
DESIGN	ALL
CHECKED	DCW
APPROVED	DCW
PROJECT NO.	TB5T
DRAWING NO.	PW257_01
SHEET	4 OF 15

TEST REPORT DRAWINGS  
PW257 IMPACT-RESISTANT  
CURTAIN WALL SYSTEM

FRAMING ELEVATION

**Coral**  
Architectural Projects  
1000 W. 10th Street, Suite 100  
Phoenix, AZ 85007  
PHONE: 602-272-7771 FAX: 602-251-1301

SPECIMEN #E1	
TEST METHOD	TEST CONDITIONS
AIR INFILTRATION TEST (ASTM E233 AND TAS 202)	1.57 PSF @ 6.24 PSF
WATER INFILTRATION TEST (ASTM E331 AND TAS 202)	30.00 PSF
UNIFORM STATIC LOAD TEST (ASTM E336 AND TAS 202)	+/- 80 PSF DESIGN PRESSURE
LARGE MISSILE IMPACT TEST (ASTM E1861/1916 AND TAS 202)	9-LB 402, 744 @ 50FPS/SEC
CYCLIC LOAD TEST (ASTM E1996 AND TAS 202)	+/- 80 PSF DESIGN PRESSURE



*NOT USED*



Test sample complies with these details. Deviations are noted.

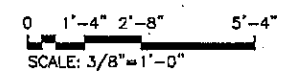
Report# \_\_\_\_\_  
Date \_\_\_\_\_ Tech \_\_\_\_\_

**Coral**  
Architectural Products  
3000 West 10th Street, Suite 100  
Phoenix, AZ 85043  
Phone: 602-772-7237 Fax: 602-438-0851

**ELEVATION E4 - DRY GLAZE  
CAPTURED MULLION -LONG SPAN-  
WITH SR150 & 1/2" X 3-3/4" BAR  
STEEL REINFORCEMENT**

- STEEL BUCK FRAME
- TESTING: IMPACT, AND CYCLE
- MAX. ALLOWABLE DEFLECTION (L/180) = 0.833
- DESIGN PRESSURE = +/- 80 PSF

- ⊗ = SMALL MISSILE IMPACT LOCATIONS
- ◆ = INFILL ONLY (DO NOT IMPACT)



TEST REPORT DRAWINGS  
PW257 IMPACT-RESISTANT  
CURTAIN WALL SYSTEM  
FRAMING ELEVATION

DATE	5/24/2010		
DRAWN	CHECKED	APPROVED	
ALL	DCW	DCV	
PROJECT NO.	PW257 01		
DRAWING NO.	PW257 01		
SHEET	5 OF 15		

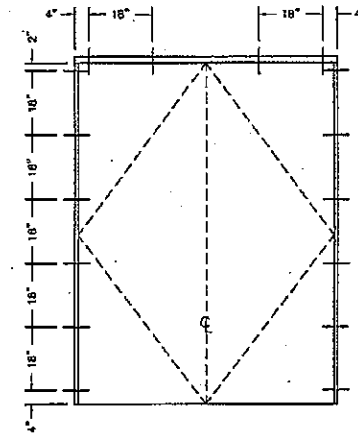


Architectural Testing

Test sample complies with these details.  
Deviations are noted.

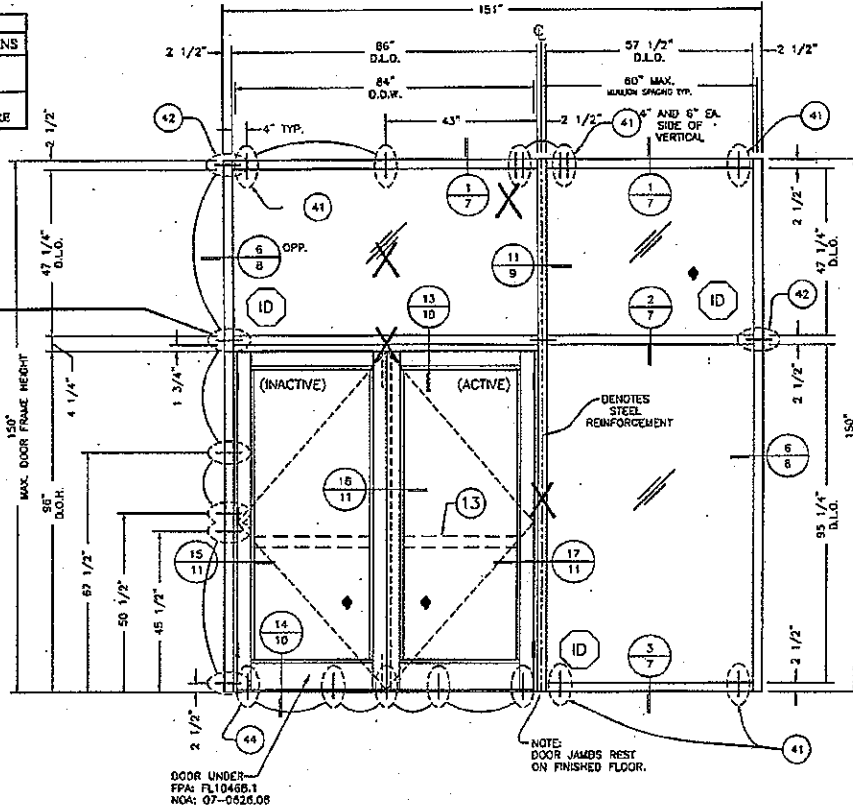
Report# POT USED

Date \_\_\_\_\_ Tech \_\_\_\_\_



**LOCATIONS FOR  
DOOR SUB-FRAME ATTACHMENT  
TO CURTAIN WALL ALUMINUM**

SPECIMEN #E5	
TEST METHOD	TEST CONDITIONS
LARGE MISSILE IMPACT TEST (ASTM E1996 AND TAS 301)	9-LB 40Z, 2x4 @ 50FT/SEC
CYCLIC LOAD TEST (ASTM E1996 AND TAS 301)	+/- 80 PSF DESIGN PRESSURE



\*REVIEW STEEL REQUIREMENTS ONCE DIES ARE APPROVED\*

ANCHOR ONLY NEEDED AT JAMBS

**ELEVATION E5  
CAPTURED MULLION -LONG SPAN-  
WITH SR150 & 3/4"x 3-3/4" BAR STEEL REINFORCEMENT  
FOR SERIES 381 ENTRANCE DOORS**

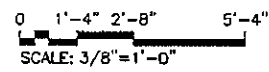
STEEL BUCK FRAME

TESTING:  
IMPACT, AND CYCLE

MAX. ALLOWABLE DEFLECTION (L/180) = 0.833

DESIGN PRESSURE = +/- 80 PSF

- X = LARGE MISSILE IMPACT LOCATIONS
- ◆ = INFILL ONLY (DO NOT IMPACT)

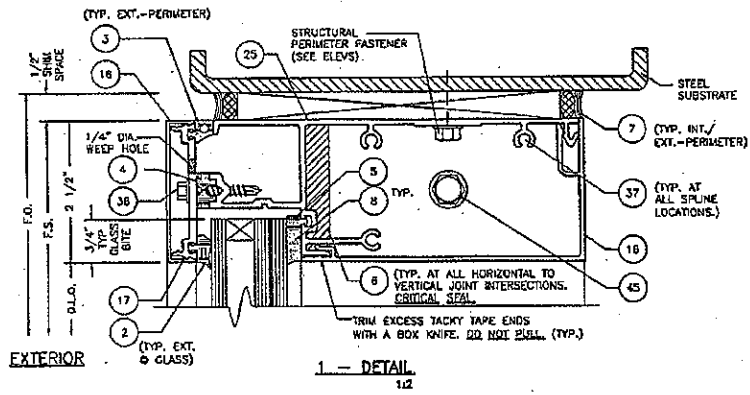


DATE	3/24/2010
DRAWN	ALL
CHECKED	OCV
APPROVED	OCV
PROJECT NO.	TEST
DRAWING NO.	PW257 01
SHEET	6 OF 15

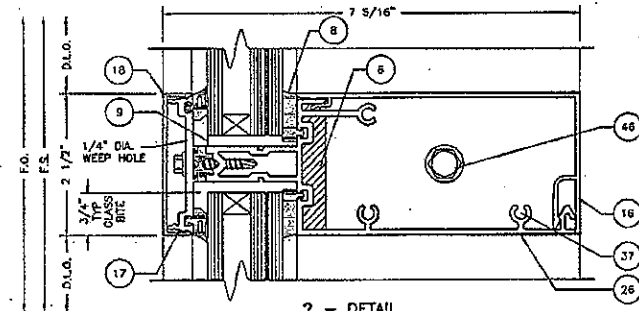
TEST REPORT DRAWINGS  
PW257 IMPACT-RESISTANT  
CURTAIN WALL SYSTEM

FRAMING ELEVATION FOR DOORS

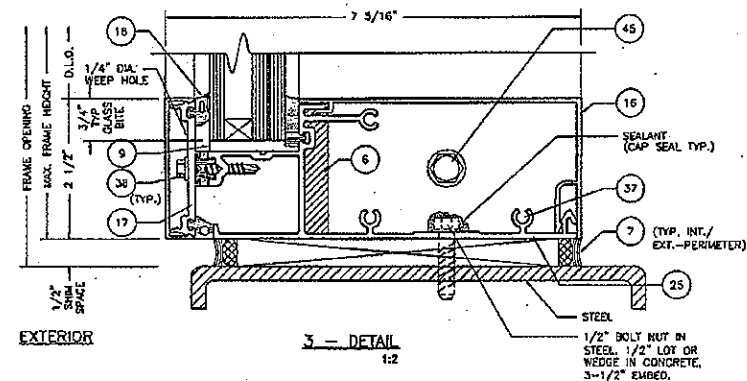
**Coral**  
Architectural Products  
1100 W. W. W. ROAD, TUCSON, AZ 85746  
PHONE: 520-772-7777 FAX: 520-555-5555



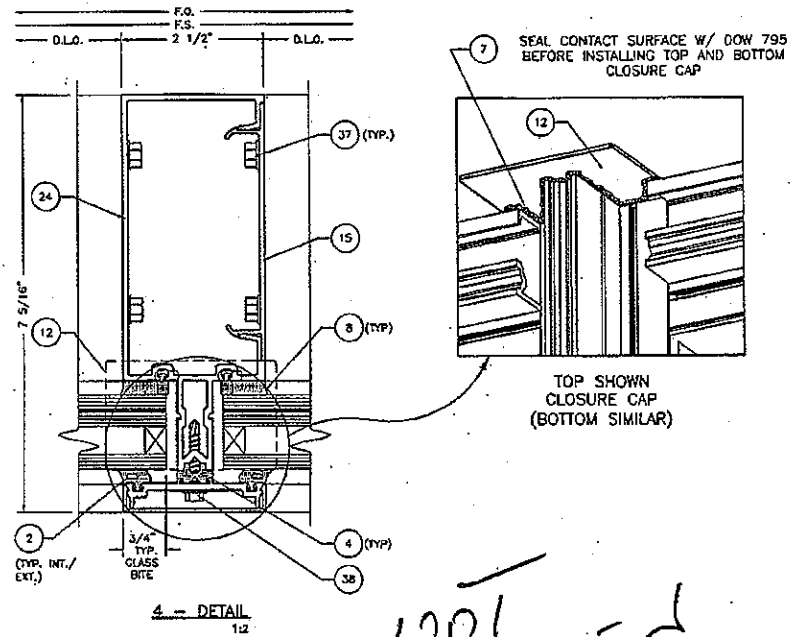
1 - DETAIL  
1:2



2 - DETAIL  
1:2



3 - DETAIL  
1:2



4 - DETAIL  
1:2

NOT USED



Architectural Testing

Test sample complies with these details.  
Deviations are noted.

Report# \_\_\_\_\_  
Date \_\_\_\_\_ Tech \_\_\_\_\_

**Coral**  
Architectural Products  
3000 BULLOCK ROAD, SUITE 100  
PHOENIX, AZ 85016-2727

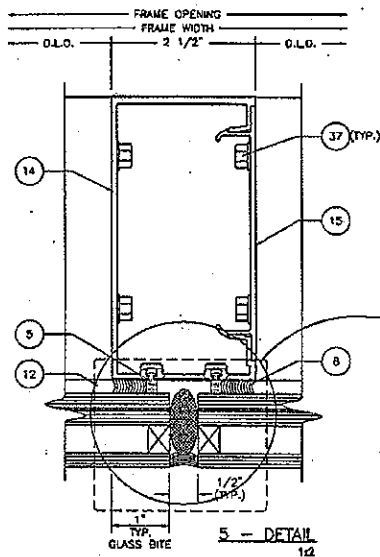
TEST REPORT DRAWINGS  
PW257 IMPACT-RESISTANT  
CURTAIN WALL SYSTEM  
FRAMING DETAILS

DATE	8/24/2010		
DRAWN	CHECKED	APPROVED	
ALL	DCW	DCW	
PROJECT NO.			
DRAWING NO.	PW257_01		
SHEET	7 OF 15		

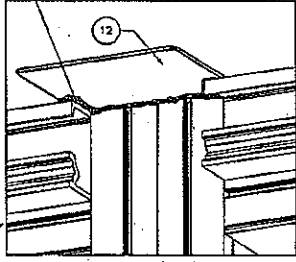
**Architectural Testing**

Test sample complies with these details.  
Deviations are noted.

Report# A2651.03  
Date 2/12/11 Tech JCM



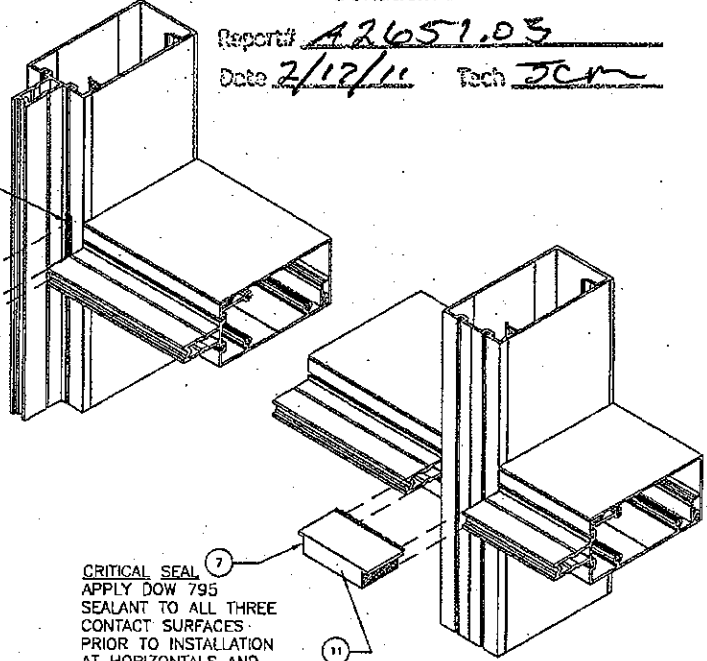
7 SEAL CONTACT SURFACE W/ DOW 795 BEFORE INSTALLING TOP AND BOTTOM CLOSURE CAP



TOP SHOWN CLOSURE CAP (BOTTOM SIMILAR)

7 CRITICAL SEAL FILL GASKET REGLET BEHIND END DAM W/ DOW 795

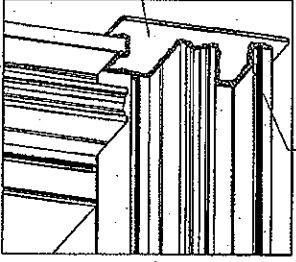
7 CRITICAL SEAL APPLY DOW 795 SEALANT TO ALL THREE CONTACT SURFACES PRIOR TO INSTALLATION AT HORIZONTALS AND SILL



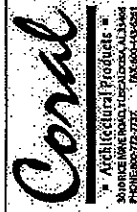
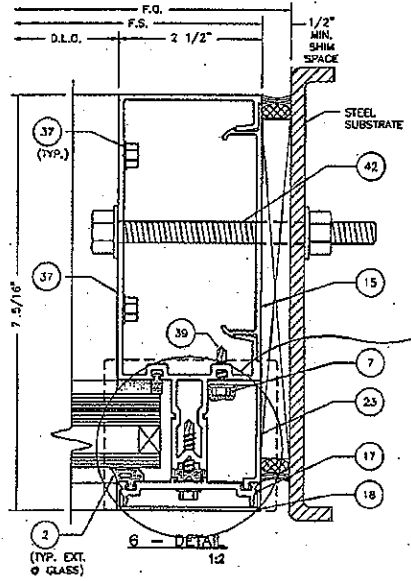
7 CRITICAL SEAL APPLY DOW 795 SEALANT TO ALL THREE CONTACT SURFACES PRIOR TO INSTALLATION AT HORIZONTALS AND SILL

7 SEAL CONTACT SURFACE W/ DOW 795 BEFORE INSTALLING TOP AND BOTTOM CLOSURE CAP

12 FIELD MODIFY @ JAMB IF REQUIRED



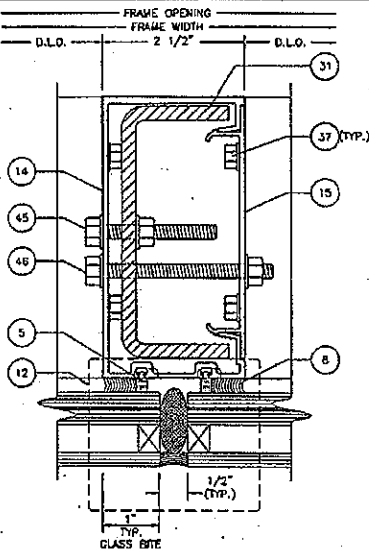
TOP SHOWN CLOSURE CAP (BOTTOM SIMILAR)



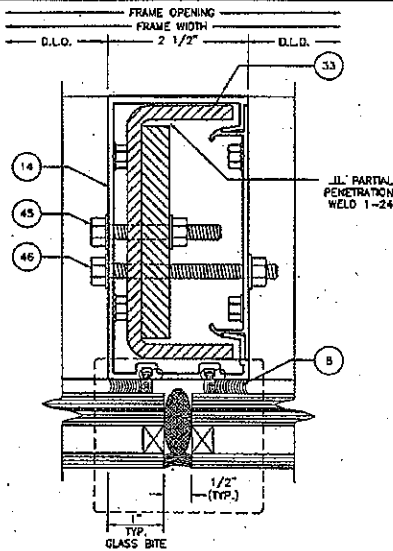
TEST REPORT DRAWINGS  
PW257 IMPACT-RESISTANT  
CURTAIN WALL SYSTEM

FRAMING DETAILS

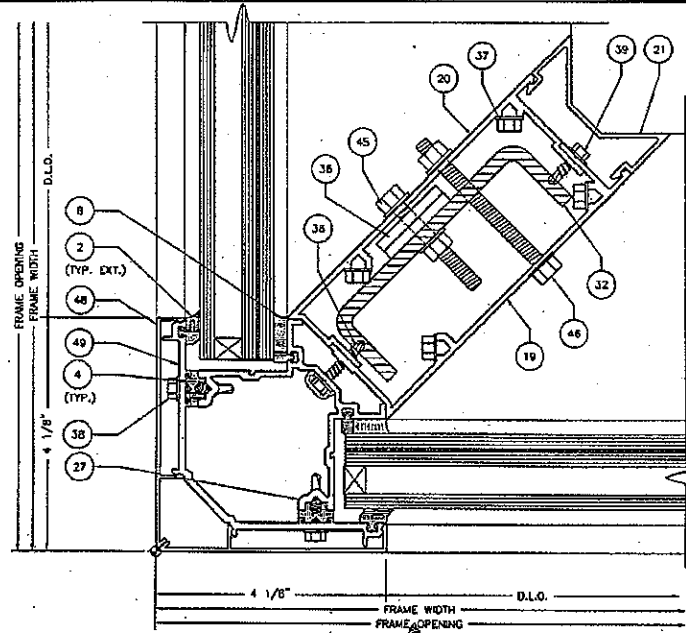
DATE	8/24/2010		
DRAWN	CHECKED	APPROVED	
ALL	DCW	DCW	
PROJECT NO.			
DRAWING NO.			
PW257_01			
SHEET 8 OF 15			



7 - DETAIL  
1/2



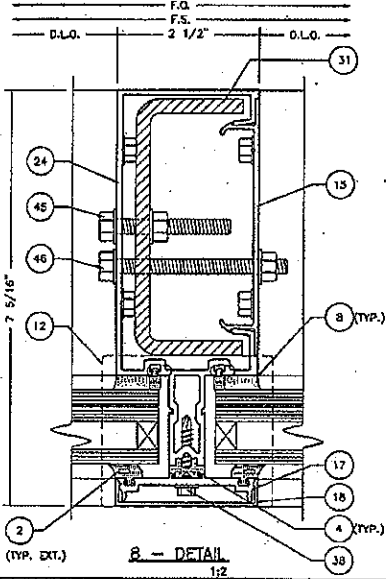
9 - DETAIL  
1/2



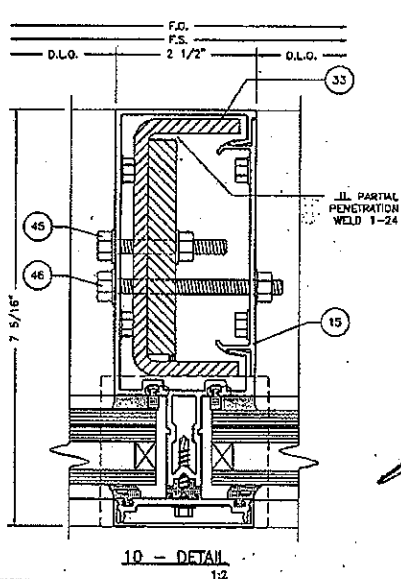
10 - DETAIL  
Architectural Testing

Test sample complies with these details  
Deviations are noted.

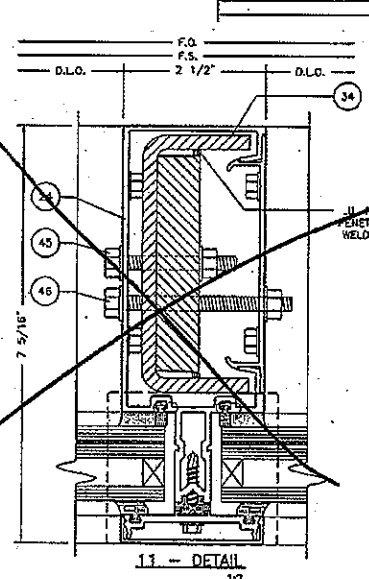
Report# A2651.03  
Date 2/12/11 Tech JCM



8 - DETAIL  
1/2



10 - DETAIL  
1/2



11 - DETAIL  
1/2

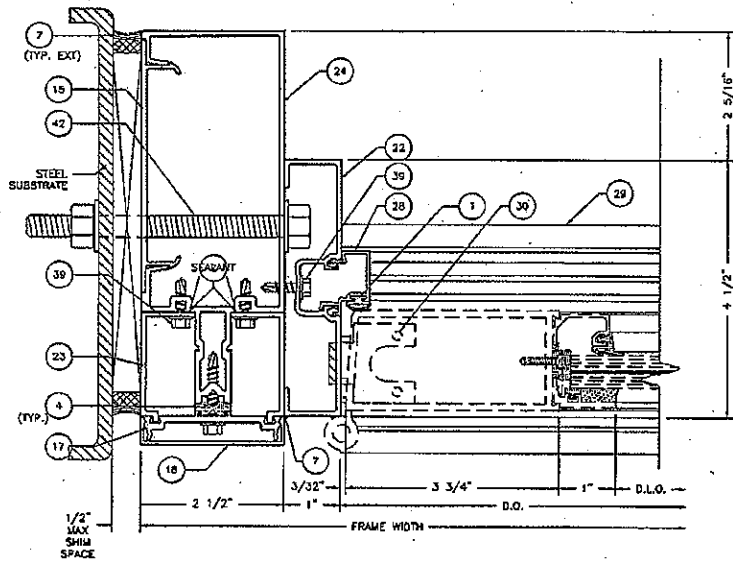
**Coral**  
Architectural Products & Services  
3000 West 10th Street, Suite 100  
Phoenix, AZ 85043  
Phone: 602-727-7777 Fax: 602-433-8241

TEST REPORT DRAWINGS  
PW257 IMPACT-RESISTANT  
CURTAIN WALL SYSTEM  
FRAMING DETAILS

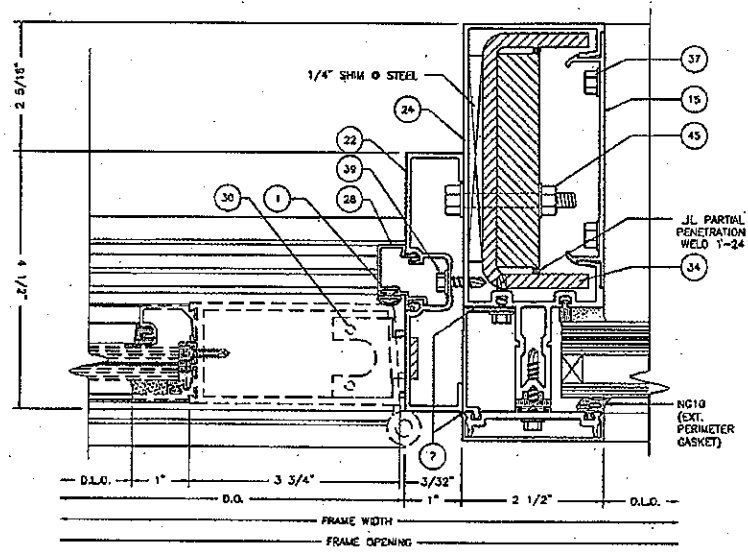
DATE	8/24/2010		
DRAWN	CHECKED	APPROVED	
ALL	DCW	DCW	
PROJECT NO.			
DRAWING NO.			
PW257_01			
SHEET 9 OF 15			







15 - DETAIL  
1:2



17 - DETAIL  
1:2



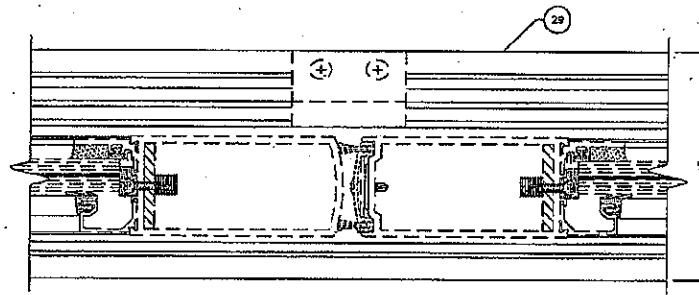
Architectural Testing

Test sample complies with these details.  
Deviations are noted.

Report# \_\_\_\_\_

Date \_\_\_\_\_ Tech \_\_\_\_\_

NOT  
USED



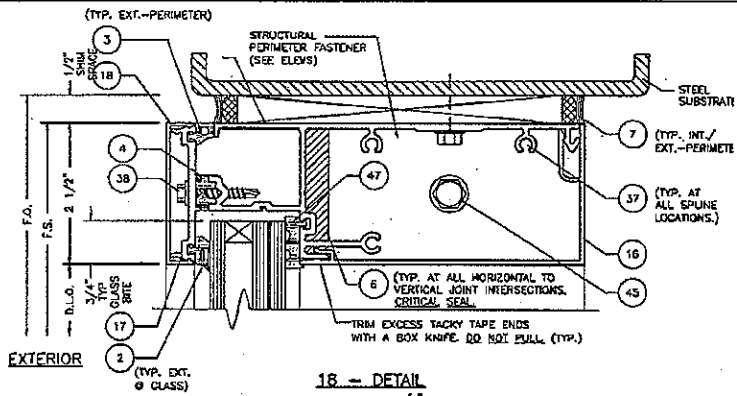
16 - DETAIL  
1:2

DATE			B/24/2010
DRAWN	CHECKED	APPROVED	
ALL	DCW	DCW	
DRAWING NO. PW257 01			
SHEET 11 OF 15			

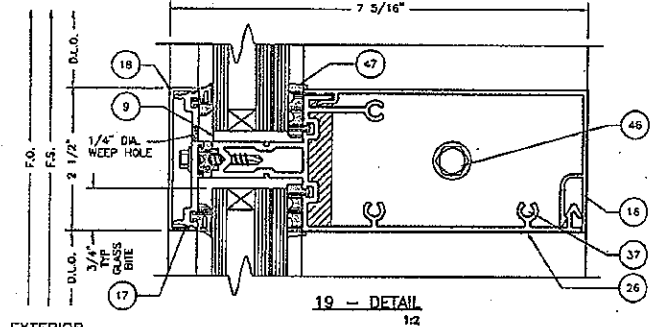
TEST REPORT DRAWINGS  
PW257 IMPACT-RESISTANT  
CURTAIN WALL SYSTEM

DOOR AND FRAMING DETAILS

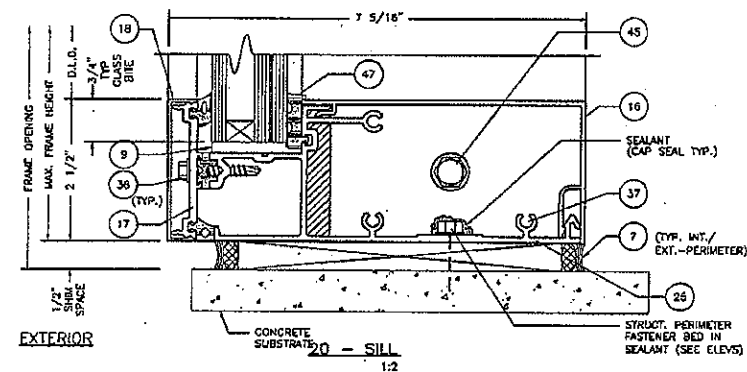
**Coral**  
Architectural Products Inc.  
2000 West 10th Street  
Phoenix, AZ 85001  
PH: 602.233.7277 FAX: 602.415.2891



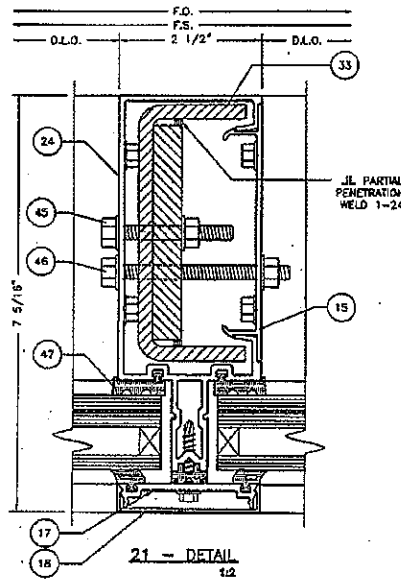
18 - DETAIL  
1/2



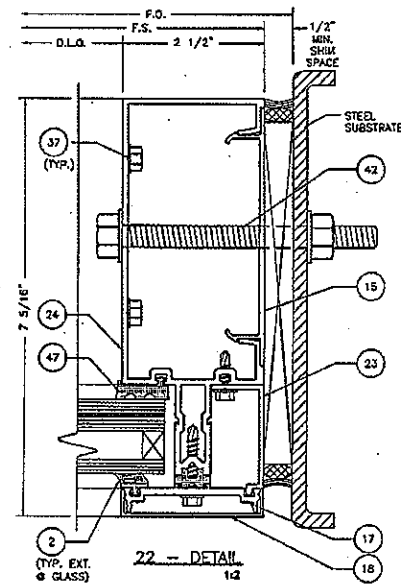
19 - DETAIL  
1/2



20 - SILL  
1/2



21 - DETAIL  
1/2



22 - DETAIL  
1/2



Test sample complies with these details.  
Deviations are noted.

Report# \_\_\_\_\_

Date \_\_\_\_\_ Tech \_\_\_\_\_

NOT USED

**Coral**  
Architectural Products  
10000 W. 10th Ave., Suite 100  
Denver, CO 80202  
Phone: 303.752.7272 Fax: 303.752.7271

TEST REPORT DRAWINGS  
PW257 IMPACT-RESISTANT  
CURTAIN WALL SYSTEM

FRAMING DETAILS

DATE	8/24/2010		
DRAWN	CHECKED	APPROVED	
HILL	BOY	BOY	
PROJECT NO.			
DRAWING NO.	PW257_01		
SHEET	12 OF 15		

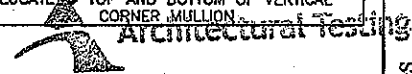


### BILL OF MATERIALS

ITEM NO.	P/N	DESCRIPTION	DIMENSIONS	MATERIAL	MANUFACTURER	NOTES
31	SR150	REINFORCEMENT CHANNEL ✓	4.500 X 1.875 X 0.250	A36 STEEL	VARIES	STEEL REINFORCEMENT FOR (14) AND (24)
32	SR504	REINFORCEMENT CHANNEL ✓	4.562 X 1.250 X 0.250	A36 STEEL	VARIES	STEEL REINFORCEMENT FOR (14) AND (24)
33		SR150 WITH REINFORCEMENT BAR	3.750 X 0.500	A36 STEEL	VARIES	STEEL REINFORCEMENT FOR (14) AND (24)
34		SR150 WITH REINFORCEMENT BAR	3.750 X 0.750	A36 STEEL	VARIES	STEEL REINFORCEMENT FOR (14) AND (24)
35	FL207	DOOR HEADER	1.750 X 4.500 X 0.085	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
36	AS13	SQUARE NUT	1.475 X 1.475 X .180	STEEL	VARIES	
37	AS16	FASTENER	#14 X 1" HHSTS	STEEL	VARIES	TYP. SPLINE SCREW
38	AS32	FASTENER	#12 x 1-1/4" HWH #3 SELF DRILL	STEEL	VARIES	
39	AS25	FASTENER	#12 x 3/4" HWH SELF DRILL	STEEL	VARIES	
40	AS37	FASTENER	#12 X 2" HWH SELF DRILL	STEEL	VARIES	
41	FASTENER	PERIMETER ANCHOR TO STEEL SUBSTRATE ✓	1/2"-13 X 2" BOLT WITH WASHER AND NUT	STEEL	VARIES	
42	FASTENER	PERIMETER ANCHOR TO STEEL SUBSTRATE ✓	1/2"-13 X 4-1/2" BOLT WITH WASHER AND NUT	STEEL	VARIES	
43	FASTENER	PERIMETER ANCHOR TO CONCRETE SUBSTRATE ✓	1/2" X 3-1/2" MIN. EMBED WEDGE ANCHOR POWERS	STEEL	VARIES	
44	FASTENER	PERIMETER ANCHOR TO STEEL SUBSTRATE	#12 X 1-1/2" PFH SELF DRILL	STEEL	VARIES	
45	FASTENER	STEEL REINFORCEMENT ATTACHMENT ✓	1/4"-20 X 2" BOLT WITH WASHER AND NUT	STEEL	VARIES	
46	FASTENER	THROUGH BOLT ✓	1/4"-20 X 3" BOLT WITH WASHER AND NUT	STEEL	VARIES	USED @ HORIZONTALS
47	NG16	DRY GLAZE INTERIOR SPACER GASKET	0.260 SPACE	EPDM	VARIES	
48	PW658	CORNER FACE COVER ✓	4.064 X .500 X 0.076	6063-T6 ALUM	CORAL INDUSTRIES, INC.	
49	PW654	CORNER PRESSURE BAR ✓	3.954 X 3.954 X .125	6063-T6 ALUM	CORAL INDUSTRIES, INC.	
50	SP214	CORNER MULLION CAP ✓	4.000 X 3.826 X 0.048	6063-T6 ALUM	CORAL INDUSTRIES, INC.	LOCATE @ TOP AND BOTTOM OF VERTICAL CORNER MULLION

### GLAZING SCHEDULE

GLASS MARK	GLASS DESCRIPTION	MANUFACTURER	MAXIMUM D.L.O. SIZE (INCHES)	SQUARE FEET	MAXIMUM DESIGN PRESSURE (PSF)
IC	1-5/16" INSULATED -1/4" H.S. -1/2" AIR SPACER -1/4" H.S. - DUPONT BUTCITE OBO PVB INTERLAYER N.O.A. #	DUPONT	57-1/2" X 96"	38.3	± 80
IB	1-5/16" INSULATED -1/4" H.S. -1/2" AIR SPACER -1/4" H.S. -.090 SAFLEX PVB INTERLAYER -1/4" H.S. N.O.A. #	SOLUTIA	45-1/2" X 96"	30.3	± 80
ID	1-5/16" INSULATED -1/4" H.S. -1/2" AIR SPACER -1/4" H.S. -SENTRY GLASS PWS .090 -1/4" H.S.	DUPONT	57-1/2" X 96"	38.3	± 80



Test sample complies with these details. Deviations are noted.

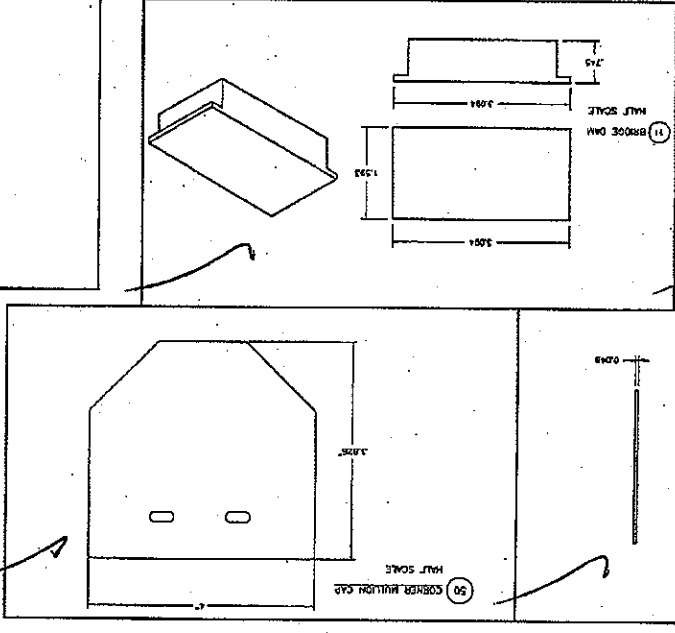
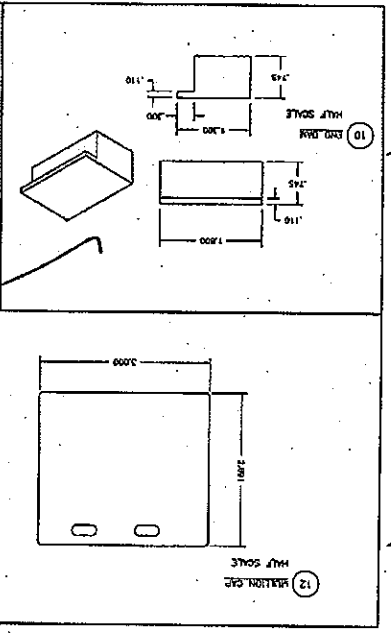
Report# A2451.03  
Date 7/12/11 Tech SEM

**Coral**  
 Architectural Products  
 1101 W. IRLINE ROAD, TUSCALOOSA, AL 35068  
 PHONE: 205-727-7277 FAX: 205-727-4281

TEST REPORT DRAWINGS  
 PW257 IMPACT-RESISTANT  
 CURTAIN WALL SYSTEM  
 BILL OF MATERIALS AND GLAZING  
 SCHEDULE

DATE	6/24/2010
DRAWN	ALL
CHECKED	DCW
APPROVED	DCW
PRACTICE NO.	
DRAWING NO.	PW257_01
SHEET	14 OF 15

- 1. BUSH GASKET
- 2. EXT. GLAZING GASKET
- 3. EXT. SPACER GASKET
- 4. RESILIENT PAD GASKET (SOLUTION)
- 5. INT. SPACER GASKET
- 9. SETTING BRIDGE
- 47. INT. SPACER GASKET

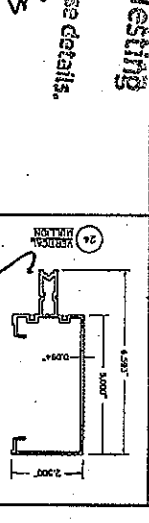
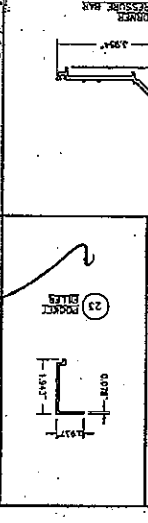
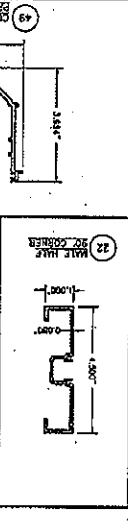
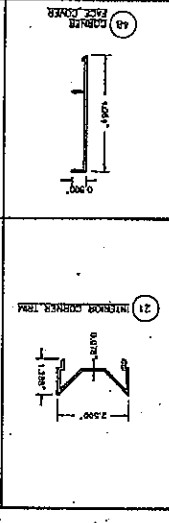
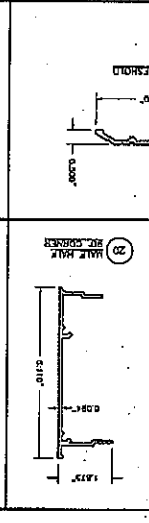
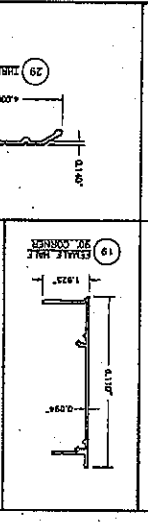
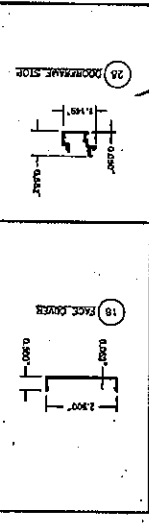
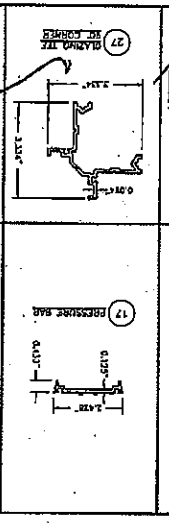
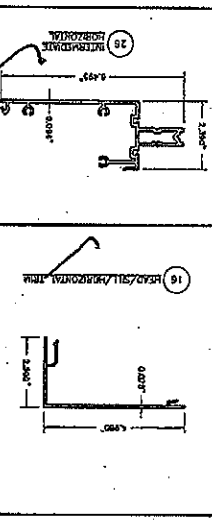
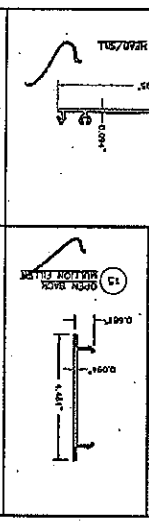
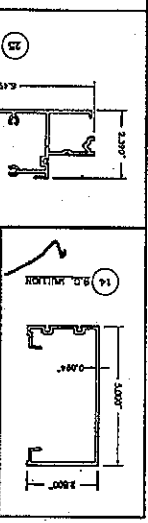


**Architectural Testing**

Test sample complies with these details.  
 Deviations are noted.  
 Report # AB657.03  
 Date 3/13/11

TEST REPORT DRAWINGS  
 PW257 IMPACT-RESISTANT  
 CURTAIN WALL SYSTEM

DIE DRAWINGS



REV	BY	DATE	DESCRIPTION