

MIAMI-DADE COUNTY PERFORMANCE TEST REPORT

Report No.: A2653.01-401-18

Rendered to:

CORAL ARCHITECTURAL PRODUCTS
Tuscaloosa, Alabama

PRODUCT TYPE: Curtain Wall
SERIES/MODEL: PW257 Captured

This report contains in its entirety:

Cover Page: 1 page
Report Body: 18 pages
Sketches: 5 pages
Drawings: 15 pages

Test Dates:	11/11/10
Through:	11/15/10
And:	01/28/11
Report Date:	03/23/11
Test Record Retention End Date:	01/28/21
Miami-Dade County Notification No.:	ATIFL 10006

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: Curtain Wall

3.2 Series/Model: PW257 Captured

3.3 Compliance Statement: Results obtained are tested values and were secured by using the designated test method(s). The samples were tested per Florida Building Code, Test Protocols for High Velocity Hurricane Zone, Protocols TAS 201-94, TAS 202-94, and TAS 203-94. The three samples tested met the performance requirements set forth in the protocols for a ± 65.0 psf *Design Pressure* rating.

3.4 Miami-Dade County Notification No.: ATIFL 10006

3.5 Test Dates: 11/11/2010 - 01/28/2011

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

3.7 Test Sample Source: The test specimen was provided by the client. Representative samples of the test specimen(s) will be retained by Architectural Testing for a minimum of ten years from the test completion date.

3.8 Drawing Reference: The test specimen drawings have been reviewed by Architectural Testing and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Architectural Testing per the drawings located in Appendix C. Any deviations are documented herein or on the drawings.

3.9 List of Official Observers:

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

4.0 Test Specification(s):

TAS 201-94, *Impact Test Procedures.*

TAS 202-94, *Criteria for Testing Impact and Non Impact Resistant Building Envelope Components Using Uniform Static Air Pressure Loading.*

TAS 203-94, *Criteria for Testing Products Subject to Cyclic Wind Pressure Loading.*

5.0 Test Specimen Description:

5.1 Product Sizes:

Overall Area: 109.9 ft ²	Width (inches)	Height (inches)
Overall size	146-1/2"	108"

5.2 Frame Construction:

Frame Member	Material	Description
Head / sill	Extruded aluminum	Drawing #16 (PW203), #23 (PW613) and #25 (PW652) on sheet 15 of 15
Vertical mullion	Extruded aluminum	Drawing #14 (PW151), #15 (PW202) and #24 (PW650) on sheet 15 of 15
Horizontal mullion	Extruded aluminum	Drawing #16 (PW203) and #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 1/2" x 1/8" Isocryl joint sealant and secured with three (3) #14 x 1" hex head screws; through the vertical members into the adjacent horizontal member's screw spline.

5.0 Test Specimen Description: (Continued)

5.3 Weatherstripping:

Description	Quantity	Location
Exterior glazing gasket (NG10)	1 Row	Interior side of pressure bars; outer edges.
Exterior perimeter gasket (NG11)	1 Row	Interior side of pressure bars at the pocket filler on frame members.
Pressure bar isolator gasket (NG12)	1 Row	Interior side of pressure bars; center.
Interior gasket (NG14)	1 Row	Exterior side of the vertical and horizontal mullions; glazing perimeter.

5.4 Glazing:

Glass Type	Spacer Type	Interior Lite	Exterior Lite	Glazing Method
1-5/16" IG	1/2" reinforced butyl system 1/2" metal spacer (replacement units only)	1/4" HS - 0.090 PVB 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 9" on center through the aluminum pressure plates P/N PW204.

Location	Quantity	Daylight Opening	Glass Bite
Bottom, front face	3	45 1/4" x 83-3/4"	3/4"
Top transom, front face	3	45 1/4" x 16-1/4"	3/4"

5.0 Test Specimen Description: (Continued)

5.5 Drainage:

Drainage Method	Size	Quantity	Location
Weep holes zoned draining system	1/4"	36	8" in from each vertical mullion on the under side of the horizontal mullion trim caps and 6" in from each vertical mullion on the center of the pressure plates.

5.6 Hardware: No hardware was utilized.

5.7 Reinforcement: No reinforcement was utilized.

6.0 Installation:

The specimen was installed into a C8 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 C8 channel. The anchors were secured with a flat washer, lock washer and nuts.
Jambs	1/2"-13 x 4-1/2" JH FNL steel bolts	The anchors were located 85" from the sill plate and above the horizontal mullion, through the jamb and the steel C8. The anchors were secured with flat washers, lock washers and nuts at both jambs.
Sill	1/2" x 4-1/2" 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 into the concrete floor with 3-1/2" embedment.
Vertical mullion	1/4"-20 JZ 307A bolts	The open back mullion filler was secured through 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 anchor utilized flat and lock washers with nuts.

7.0 Test Results: The temperature during testing was 61°F. The results are tabulated as follows:

Protocol TAS 202-94, Static Air Pressure Tests

Test Units #1, #2 and #3

Design Pressure: ± 65.0 psf

Title of Test	Results
Air Infiltration at 1.57 psf (25 mph)	NA
Air Infiltration at 6.24 psf (50 mph)	NA

	Indicator Reading (inches)					
Structural Loads 50% of Test Pressure (+48.75 psf)	#1	#2	#3	#4	#5	#6
Maximum Deflection	0.11	0.37	0.09	0.25	0.26	0.25
Permanent Set	0.08	0.08	0.04	0.08	0.07	0.08
Design Pressure (+65.0 psf)						
Maximum Deflection	0.14	0.50	0.12	0.33	0.35	0.34
Permanent Set	0.10	0.10	0.06	0.04	0.10	0.10
	#1	#2	#3	#4	#5	#6
50% of Test Pressure (-48.75 psf)						
Maximum Deflection	0.23	0.50	0.16	0.38	0.40	0.41
Permanent Set	0.15	0.16	0.10	0.15	0.15	0.16
Design Pressure (-65.0 psf)						
Maximum Deflection	0.27	0.64	0.20	0.47	0.51	0.51
Permanent Set	0.16	0.18	0.11	0.17	0.17	0.17

Note: See Architectural Testing Sketch #1 for indicator locations.

7.0 Test Results: Test Results: (Continued)

Protocol TAS 202-94, Static Air Pressure Tests

Test Units #1, #2 and #3

Design Pressure: ± 65.0 psf

Structural Loads 50% of Test Pressure (+48.75 psf)	Indicator Reading (inches)					
	#7	#8	#9	#10	#11	#12
Maximum Deflection	<0.0 1	<0.0 1	<0.0 1	0.07	0.07	0.10
Permanent Set	<0.0 1	<0.0 1	<0.0 1	0.03	0.04	0.04
Design Pressure (+65.0 psf)						
Maximum Deflection	<0.0 1	<0.0 1	<0.0 1	0.11	0.11	0.12
Permanent Set	<0.0 1	<0.0 1	<0.0 1	0.05	0.05	0.06
	#7	#8	#9	#10	#11	#12
50% of Test Pressure (-48.75 psf)						
Maximum Deflection	<0.0 1	<0.0 1	<0.0 1	0.16	0.18	0.19
Permanent Set	<0.0 1	<0.0 1	<0.0 1	0.09	0.10	0.08
Design Pressure (-65.0 psf)						
Maximum Deflection	<0.0 1	<0.0 1	<0.0 1	0.20	0.21	0.22
Permanent Set	<0.0 1	<0.0 1	<0.0 1	0.08	0.10	0.09

Note: See Architectural Testing Sketch #1 for indicator locations.

7.0 Test Results: (Continued)

Protocol TAS 202-94, *Static Air Pressure Tests*

Test Units #1, #2 and #3

Design Pressure: ± 65.0 psf

	Indicator Reading (inches)					
Structural Loads	#1	#2	#3	#4	#5	#6
Test Pressure (+97.5 psf)						
Maximum Deflection	0.29	0.87	0.23	0.58	0.62	0.59
Permanent Set	0.21	0.25	0.14	0.22	0.21	0.22
Structural Loads	#7	#8	#9	#10	#11	#12
Test Pressure (+97.5 psf)						
Maximum Deflection	<0.0 1	<0.0 1	<0.0 1	0.22	0.20	0.20
Permanent Set	<0.0 1	<0.0 1	<0.0 1	0.13	0.12	0.11
Structural Loads	#1	#2	#3	#4	#5	#6
Test Pressure (-97.5 psf)						
Maximum Deflection	0.44	1.05	0.31	0.75	0.80	0.79
Permanent Set	0.19	0.26	0.15	0.23	0.23	0.23
Structural Loads	#7	#8	#9	#10	#11	#12
Test Pressure (-97.5 psf)						
Maximum Deflection	<0.0 1	<0.0 1	<0.0 1	0.31	0.32	0.33
Permanent Set	<0.0 1	<0.0 1	<0.0 1	0.14	0.15	0.12

Note: See Architectural Testing Sketch #1 for indicator locations.

7.0 Test Results: (Continued)

Protocol TAS 201-94, *Impact Test Procedures*

Missile Weight: 9.25 lbs

Missile Length: 8' 1"

Muzzle Distance from Test Specimen: 17' 0"

Test Unit #1:

Impact #1: Missile Velocity: 49.7 fps	
Impact Area:	Center of the glazing
Observations:	Missile hit target area, broke the exterior glass with no penetration.
Results:	Pass

Impact #2: Missile Velocity: 49.7 fps	
Impact Area:	Upper right corner of glazing
Observations:	Missile hit target area, re-fractured glass with no penetration.
Results:	Pass

Test Unit #2:

Impact #1: Missile Velocity: 49.6 fps	
Impact Area:	Lower left corner of glazing
Observations:	Missile hit target area, broke the exterior glass with no penetration.
Results:	Pass

Impact #2: Missile Velocity: 49.8 fps	
Impact Area:	Center of the glazing
Observations:	Missile hit target area, re-fractured the exterior glass with no penetration.
Results:	Pass

Note: See Architectural Testing Sketch #2 for impact locations.

7.0 Test Results: (Continued)

Protocol TAS 201-94, *Impact Test Procedures*

Missile Weight: 9.25 lbs

Missile Length: 8' 1"

Muzzle Distance from Test Specimen: 17' 0"

Test Unit #3:

Impact #3: Missile Velocity: 49.7 fps	
Impact Area:	Center of the vertical mullion
Observations:	Missile hit target area, dented mullion.
Results:	Pass

Note: See Architectural Testing Sketch #2 for impact locations.

7.0 Test Results: (Continued)

Protocol TAS 203-94, Cyclic Wind Pressure Loading

Test Units #1, #2 and #3

Design Pressure: ± 65.0 psf

POSITIVE PRESSURE

Pressure Range psf	Number of Cycles	Average Cycle Time (seconds)	Maximum Deflection at Indicator (inches)					
			#1	#2	#3	#4	#5	#6
13.0 to 32.5	3500	2.37	0.13	0.30	0.09	0.20	0.23	0.25
0 to 39.0	300	4.47	0.13	0.41	0.17	0.26	0.26	0.28
32.5 to 52.0	600	2.30	0.16	0.52	0.23	0.32	0.32	0.34
19.5 to 65.0	100	3.63	0.19	0.64	0.26	0.40	0.41	0.42
			Permanent Set (inches)					
			0.11	0.17	0.17	0.13	0.12	0.14

POSITIVE PRESSURE

Pressure Range (psf)	Number of Cycles	Average Cycle Time (seconds)	Maximum Deflection at Indicator (inches)		
			#7	#8	#9
13.0 to 32.5	3500	2.37	0.07	0.07	0.08
0 to 39.0	300	4.47	0.21	0.20	0.20
32.5 to 52.0	600	2.30	0.28	0.26	0.24
19.5 to 65.0	100	3.63	0.30	0.28	0.27
			Permanent Set (inches)		
			0.21	0.20	0.18

Observations: Glazing was starting to pull away at the right vertical side of the center lite, 10" long and 1/2" wide; testing was continued. No additional damage or deglazing was observed.

Result: Pass

Note: See Architectural Testing Sketch #3 for indicator locations. Test Specimens #1, #2 and #3 were cycled in a common chamber.

7.0 Test Results: (Continued)

Protocol TAS 203-94, Cyclic Wind Pressure Loading

Test Unit #1, 2 and 3

Design Pressure: ± 65.0 psf

NEGATIVE PRESSURE

Pressure Range psf	Number of Cycles	Average Cycle Time (seconds)	Maximum Deflection at Indicator (inches)					
			#1	#2	#3	#4	#5	#6
19.5 to 65.0	50	4.35	0.39	0.81	0.28	0.60	0.61	0.63
32.5 to 52.0	1050	2.60	0.14	0.41	0.07	0.25	0.27	0.27
0 to 39.0	50	n/a	n/a	n/a	n/a	n/a	n/a	n/a
13.0 to 32.5	3350	n/a	n/a	n/a	n/a	n/a	n/a	n/a
			Permanent Set (inches)					
			n/a	n/a	n/a	n/a	n/a	n/a

NEGATIVE PRESSURE

Pressure Range (psf)	Number of Cycles	Average Cycle Time (seconds)	Maximum Deflection at Indicator (inches)		
			#7	#8	#9
19.5 to 65.0	50	4.35	0.30	0.29	0.30
32.5 to 52.0	1050	2.60	n/a	n/a	n/a
0 to 39.0	50	n/a	n/a	n/a	n/a
13.0 to 32.5	3350	n/a	n/a	n/a	n/a
			Permanent Set (inches)		
			n/a	n/a	n/a

Observations: 829 cycles into the 50 to 80 percent, deglazing was observed the left side lite of glass, midspan 8-1/2" long and 1/4" wide; testing was discontinued.

Result: Failed

Note: See Architectural Testing Sketch #3 for indicator locations. Test Specimens #1, #2 and #3 were cycled in a common chamber.

7.0 Test Results: (Continued), Replacement units

Protocol TAS 201-94, *Impact Test Procedures*

Missile Weight: 8.85 lbs

Missile Length: 8' 1"

Muzzle Distance from Test Specimen: 17' 0"

Test Unit #R-1:

Impact #1: Missile Velocity: 50.1 fps	
Impact Area:	Center of the glazing
Observations:	Missile hit target area, broke the exterior glass with no penetration.
Results:	Pass

Impact #2: Missile Velocity: 50.0 fps	
Impact Area:	Upper right corner of the glazing
Observations:	Missile hit target area, re-fractured the exterior glass with no penetration.
Results:	Pass

Test Unit #R-2:

Impact #1: Missile Velocity: 49.6 fps	
Impact Area:	Lower left corner of glazing
Observations:	Missile hit target area, broke the exterior glass with no penetration.
Results:	Pass

Impact #2: Missile Velocity: 49.3 fps	
Impact Area:	Center of the glazing
Observations:	Missile hit target area, re-fractured the exterior glass with no penetration.
Results:	Pass

Note: See Architectural Testing Sketch #4 for impact locations.

7.0 Test Results: (Continued)

Protocol TAS 201-94, *Impact Test Procedures*

Missile Weight: 8.85 lbs

Missile Length: 8' 1"

Muzzle Distance from Test Specimen: 17' 0"

Test Unit #R-3:

Impact #1: Missile Velocity: 49.8 fps	
Impact Area:	Upper right corner of the glazing
Observations:	Missile hit target area, broke the exterior glass with no penetration.
Results:	Pass

Impact #2: Missile Velocity: 49.7 fps	
Impact Area:	Center of the vertical mullion
Observations:	Missile hit target area, dented mullion.
Results:	Pass

Impact #3: Missile Velocity: 49.6 fps	
Impact Area:	Center of glazing
Observations:	Missile hit target area, re-fractured glass with no penetration.
Results:	Pass

Note: See Architectural Testing Sketch #4 for impact locations.

7.0 Test Results: (Continued)

Protocol TAS 203-94, Cyclic Wind Pressure Loading

Test Units #R1, #R2 and #R3

Design Pressure: ± 65.0 psf

POSITIVE PRESSURE

Pressure Range psf	Number of Cycles	Average Cycle Time (seconds)	Maximum Deflection at Indicator (inches)					
			#1	#2	#3	#4	#5	#6
13.0 to 32.5	3500	2.14	0.22	0.24	0.24	0.16	0.33	0.12
0 to 39.0	300	4.24	0.31	0.32	0.31	0.16	0.42	0.13
32.5 to 52.0	600	2.44	0.34	0.37	0.35	0.17	0.48	0.15
19.5 to 65.0	100	4.26	0.39	0.41	0.40	0.18	0.56	0.16
			Permanent Set (inches)					
			0.13	0.15	0.14	0.12	0.06	0.07

POSITIVE PRESSURE

Pressure Range (psf)	Number of Cycles	Average Cycle Time (seconds)	Maximum Deflection at Indicator (inches)		
			#7	#8	#9
13.0 to 32.5	3500	2.14	0.02	0.10	0.10
0 to 39.0	300	4.24	0.13	0.13	0.13
32.5 to 52.0	600	2.44	0.14	0.14	0.14
19.5 to 65.0	100	4.26	0.16	0.16	0.16
			Permanent Set (inches)		
			0.08	0.08	0.08

Observations: No additional damage or deglazing was observed.

Result: Pass

Note: See Architectural Testing Sketch #5 for indicator locations. Test Specimens #1, #2 and #3 were cycled in a common chamber.

7.0 Test Results: (Continued)

Protocol TAS 203-94, Cyclic Wind Pressure Loading

Test Units #R1, #R2 and #R3

Design Pressure: ± 65.0 psf

NEGATIVE PRESSURE

Pressure Range psf	Number of Cycles	Average Cycle Time (seconds)	Maximum Deflection at Indicator (inches)					
			#1	#2	#3	#4	#5	#6
19.5 to 65.0	50	4.10	0.51	0.54	0.56	0.33	0.76	0.27
32.5 to 52.0	1050	2.61	0.46	0.47	0.51	0.33	0.67	0.25
0 to 39.0	50	4.68	0.40	0.42	0.46	0.31	0.57	0.21
13.0 to 32.5	3350	2.61	0.37	0.36	0.39	0.30	0.48	0.21
			Permanent Set (inches)					
			0.21	0.21	0.23	0.25	0.25	0.15

NEGATIVE PRESSURE

Pressure Range (psf)	Number of Cycles	Average Cycle Time (seconds)	Maximum Deflection at Indicator (inches)		
			#7	#8	#9
19.5 to 65.0	50	4.10	0.26	0.26	0.22
32.5 to 52.0	1050	2.61	0.23	0.23	0.21
0 to 39.0	50	4.68	0.21	0.20	0.18
13.0 to 32.5	3350	2.61	0.19	0.17	0.17
			Permanent Set (inches)		
			0.16	0.13	0.11

Observations: No additional damage or deglazing was observed.

Result: Pass

Note: See Architectural Testing Sketch #5 for indicator locations. Test Specimens #1, #2 and #3 were cycled in a common chamber.

8.0 Test Equipment:

Cannon: Constructed from steel piping utilizing compressed air to propel the missile

Missile: 2x4 Southern Pine

Timing Device: Electronic Beam Type

Cycling Mechanism: Computer controlled centrifugal blower with electronic pressure measuring device

Deflection Measuring Device: Linear transducers and 1" dial indicators.

9.0 Laboratory Compliance Statements: The following are provided as required by the protocols for the testing reported herein.

Upon completion of testing, specimens tested for TAS 201-94 met the requirements of Section 1626 of the Florida Building Code, Building (2007).

Upon completion of testing, specimens tested for TAS 202-94 met the requirements of Section 1620 of the Florida Building Code, Building (2007).

Upon completion of testing, specimens tested for TAS 203-94 met the requirements of Section 1626 of the Florida Building Code, Building (2007).

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:cmd/ck

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

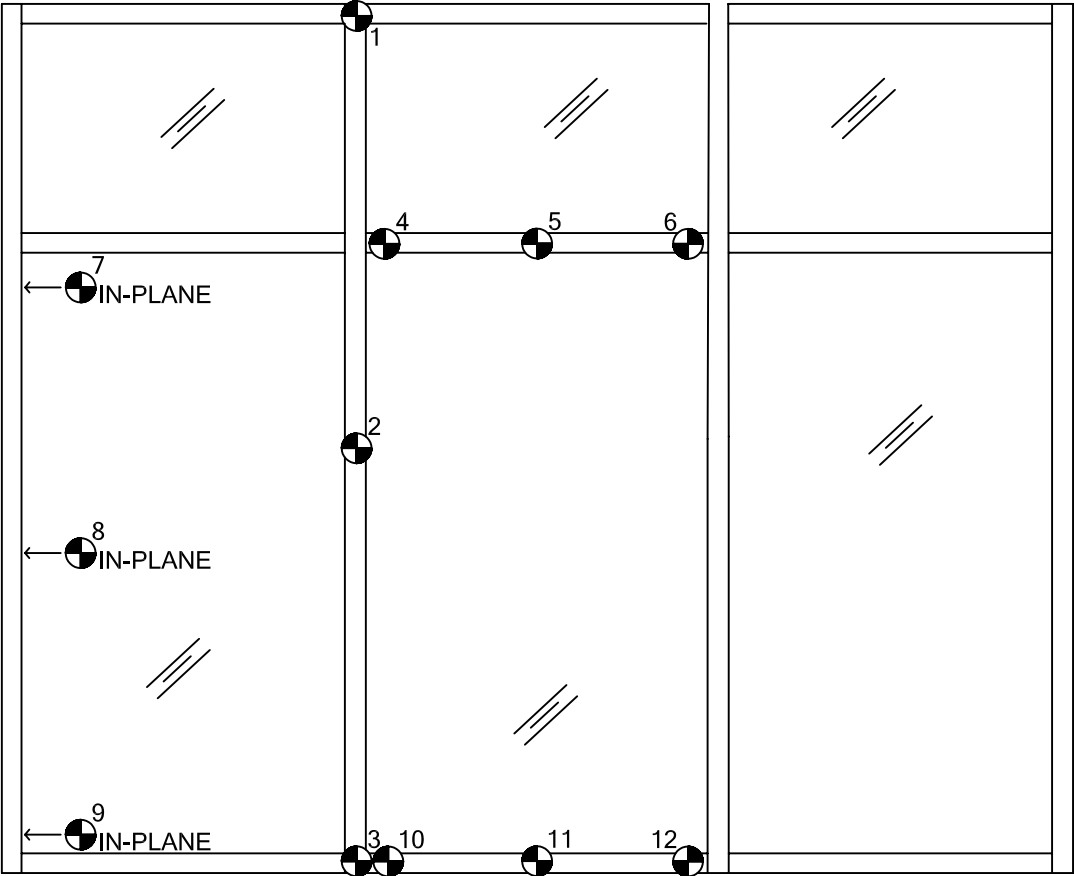
Appendix-A: Sketches (5)

Appendix-B: Drawings (15)

Appendix A

Sketches

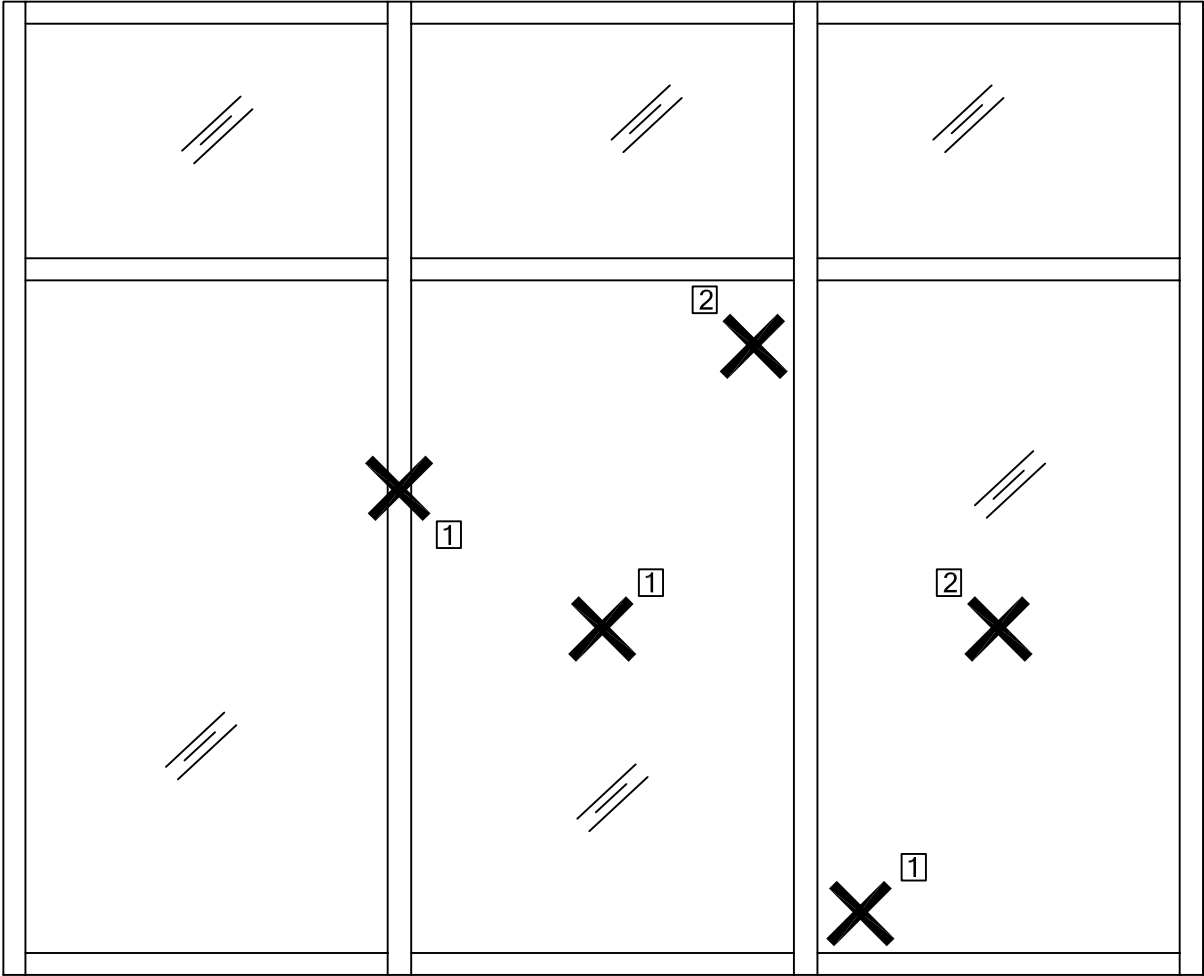
REV	DATE	DESCRIPTION



INDICATOR LOCATIONS
SCALE:NTS

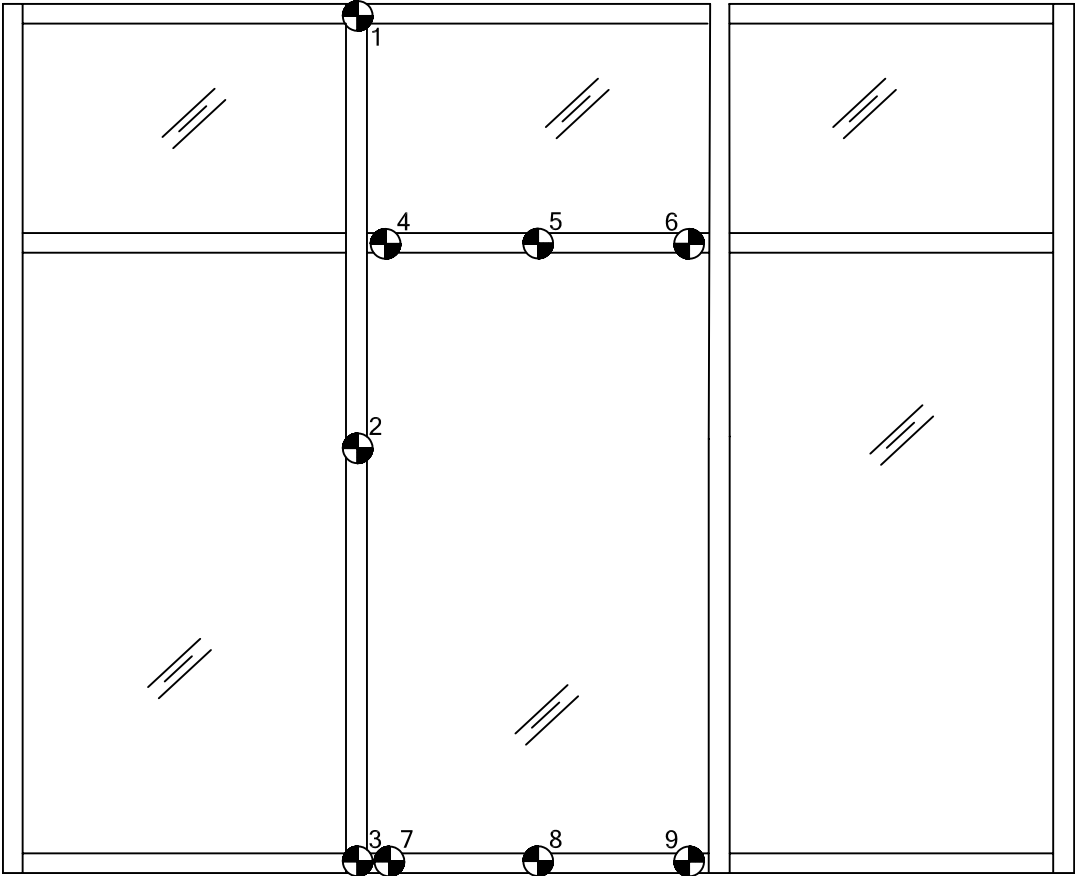


REV	DATE	DESCRIPTION



LARGE MISSILE IMPACT LOCATIONS
 SCALE:NTS

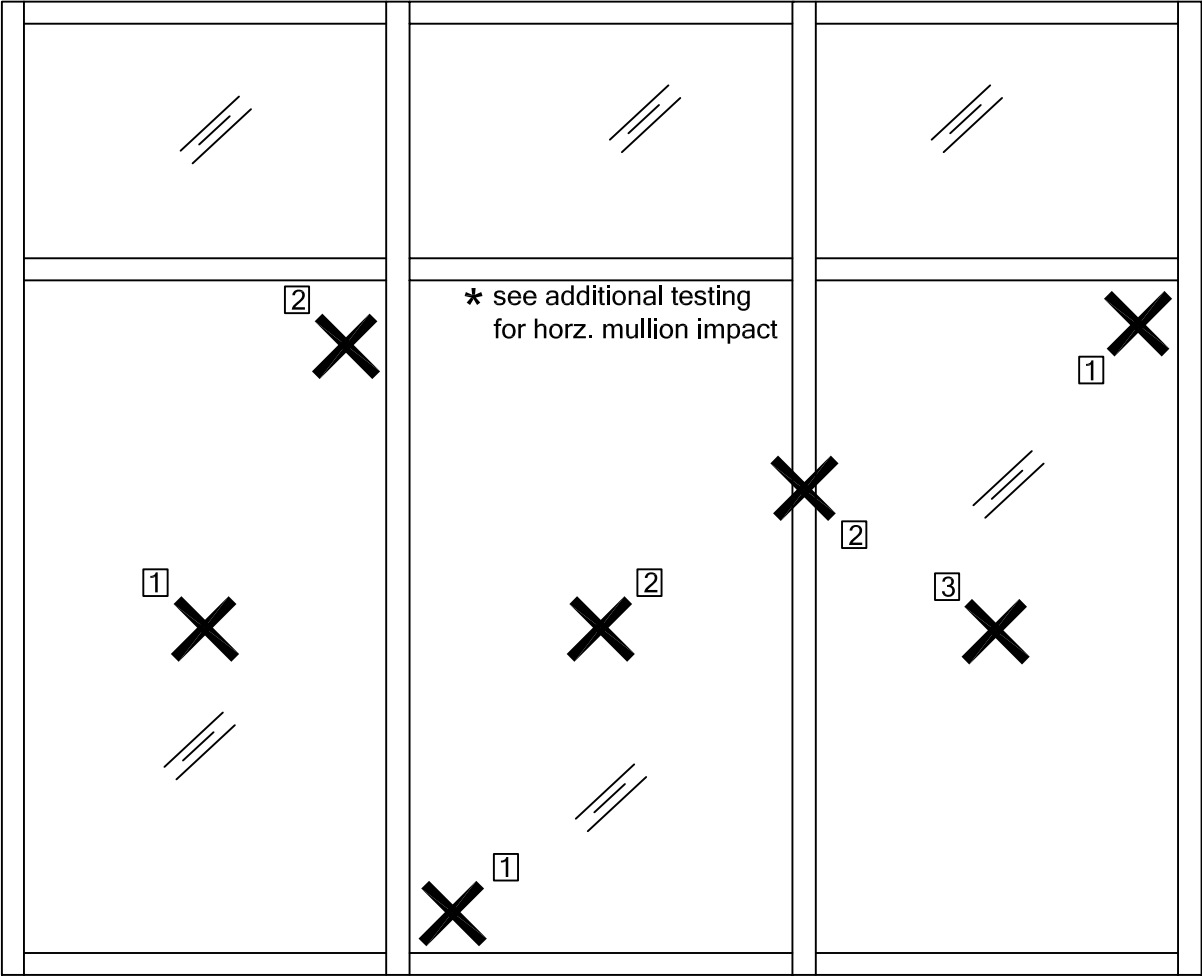
REV	DATE	DESCRIPTION



INDICATOR LOCATIONS
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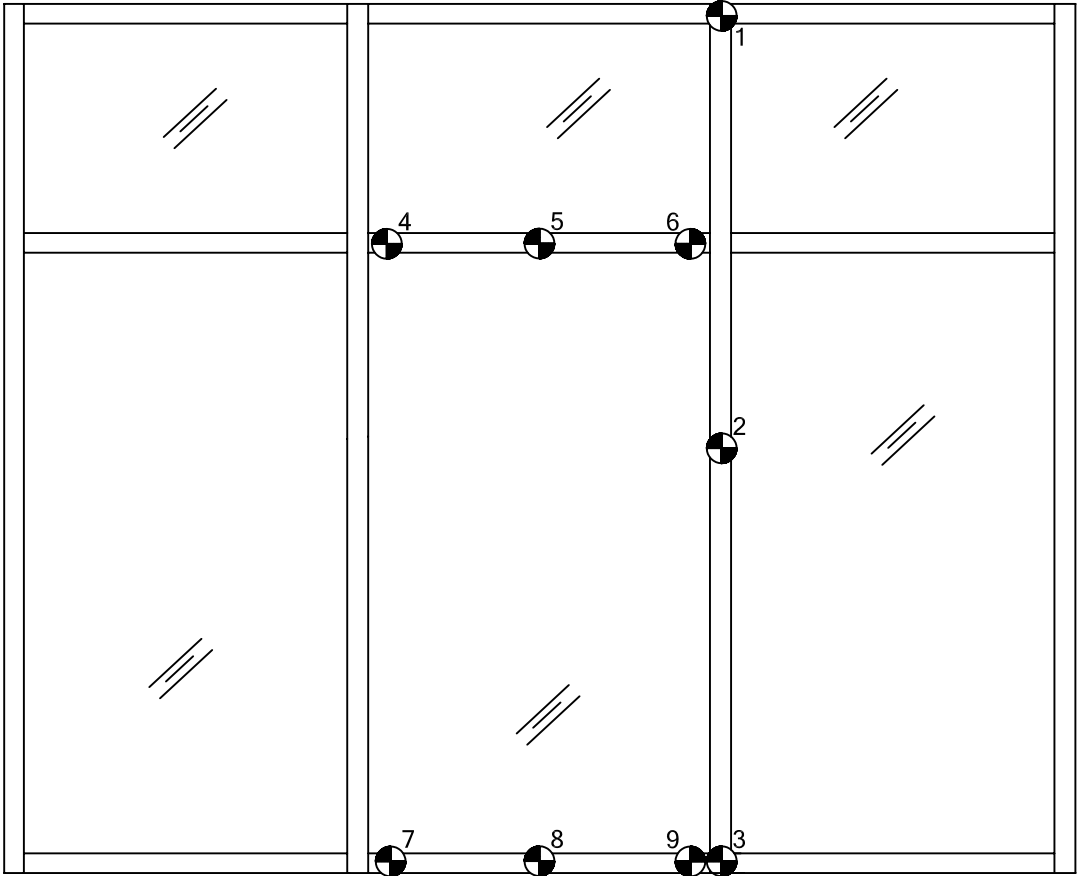


REV	DATE	DESCRIPTION



LARGE MISSILE IMPACT LOCATIONS
 SCALE:NTS

REV	DATE	DESCRIPTION



INDICATOR LOCATIONS
SCALE:NTS

Appendix B

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
 ELEVS = ELEVATIONS
 EXT. = EXTERIOR
 INT. = INTERIOR
 MAX. = MAXIMUM
 MIN. = MINIMUM
 OPP. = OPPOSITE
 TYP. = TYPICAL

 Architectural Testing

Test sample complies with these details.
No details are noted.

42653.01

2/28/11

JCM

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Phone: (305) 444-1111

TEST REPORT DRAWINGS
PW257 IMPACT-RESISTANT
CURTAIN WALL SYSTEM

INDEX TO DRAWINGS AND NOTES

DATE 8/24/2010		
DRAWN HLL	CHECKED DCW	APPROVED DCW
PROJECT NO. TEST		
DRAWING NO. PW257_01		
SHEET 1 OF 15		

SPECIMEN #E1	
TEST METHOD	TEST CONDITIONS
AIR INFILTRATION TEST (ASTM E283 AND TAS 202)	1.57 PSF & 6.24 PSF
WATER INFILTRATION TEST (ASTM E331 AND TAS 202)	20.00 PSF
UNIFORM STATIC LOAD TEST (ASTM E330 AND TAS 202)	+/- 80 PSF DESIGN PRESSURE
LARGE MISSILE IMPACT TEST (ASTM E186/E196 AND TAS 201)	9-LB 40Z 3x4 @ 30FT/SEC
CYCLIC LOAD TEST (ASTM E1996 AND TAS 203)	+/- 80 PSF DESIGN PRESSURE



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A2653.01

Date 2/28/11

Tech JCN

STEEL BUCK FRAME

TESTING:

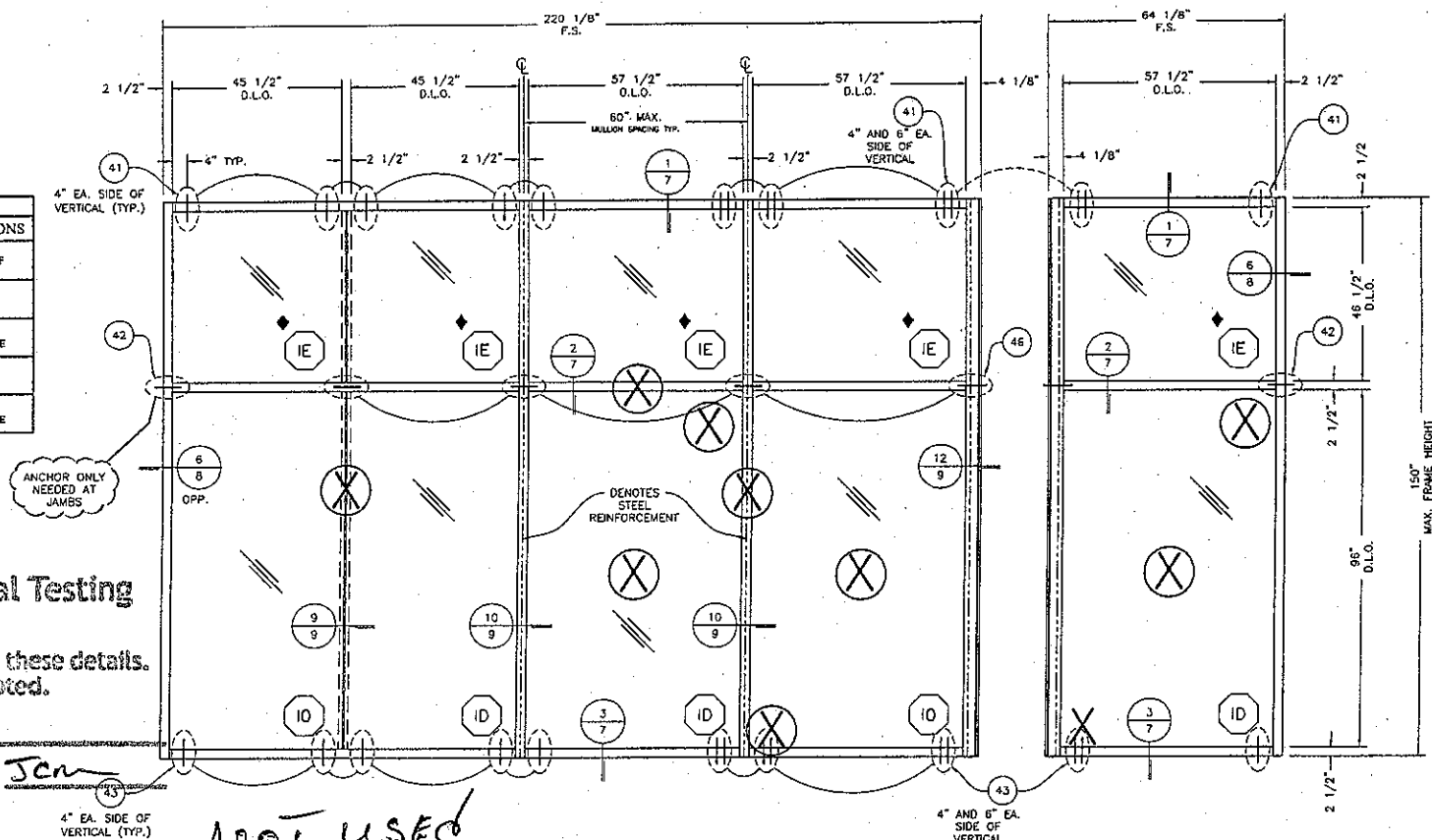
AIR, WATER, STATIC, IMPACT, AND CYCLE

MAX. ALLOWABLE DEFLECTION ($L/180$) = 0.833

DESIGN PRESSURE = +/- 80 PSF

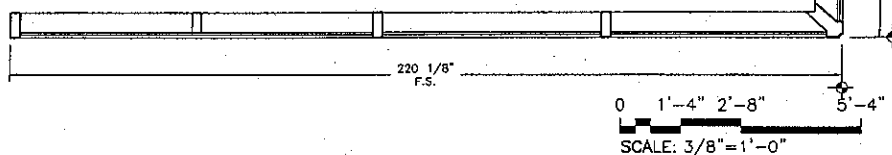
(X) = LARGE MISSILE IMPACT LOCATIONS

◆ = INFILL ONLY (DO NOT IMPACT)



NOT USED

ELEVATION E1
CAPTURED & B.G. MULLIONS -LONG SPAN-
WITH SR150 & 1/2\"x 3-3/4\" BAR
STEEL REINFORCEMENT



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

Coral
Architectural Products
510 RICE AVE. ROAD, TUSCALOOSA, AL 35406
PHONE: 205.727.1731 FAX: 205.727.1800

TEST REPORT DRAWINGS
PW257 IMPACT-RESISTANT
CURTAIN WALL SYSTEM

FRAMING ELEVATION

DATE	3/24/2010
DRAWN	ALL
CHECKED	DCW
APPROVED	DCW
PROJECT NO.	TEST
DRAWING NO.	PW257_01
SHEET	2 OF 15



Architectural Testing

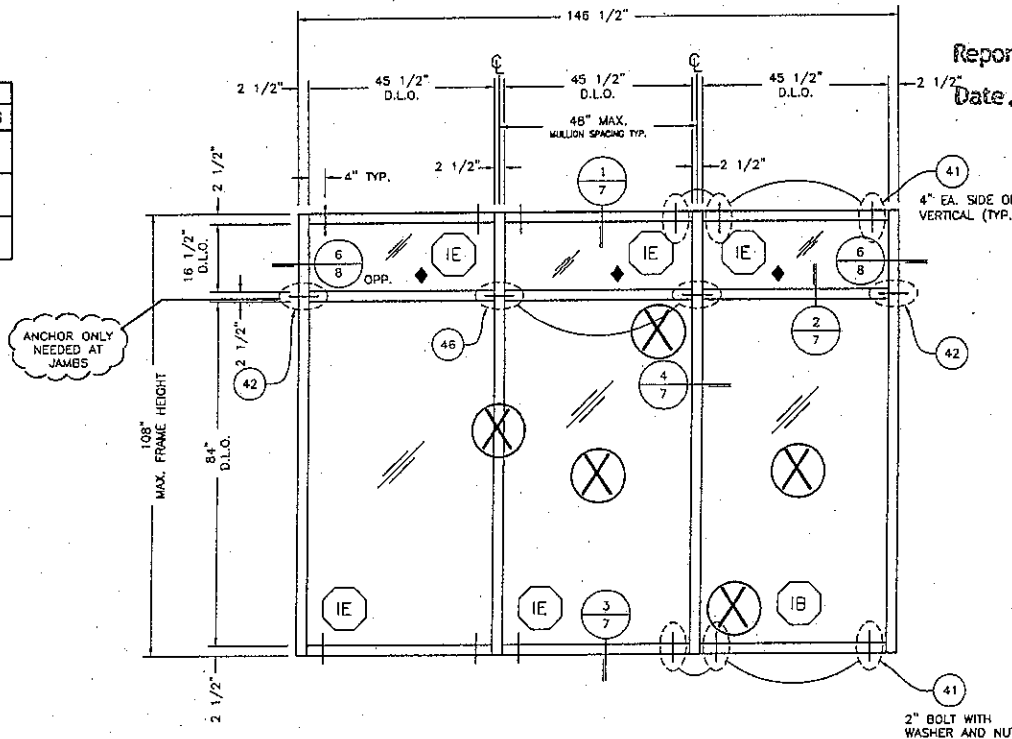
Test sample complies with these details.
Deviations are noted.

Report# A2653.01

Date 2/28/11

Tech SCM

SPECIMEN #E2	
TEST METHOD	TEST CONDITIONS
UNIFORM STATIC LOAD TEST (ASTM E330 AND TAS 202)	+/- 65 PSF DESIGN PRESSURE
LARGE MISSILE IMPACT TEST (ASTM E1886/E1996 AND TAS 201)	9-LB 40Z, 2x4 45 50FT/SEC
CYCLIC LOAD TEST (ASTM E1996 AND TAS 203)	+/- 65 PSF DESIGN PRESSURE



ELEVATION E2 **CAPTURED MULLION -SHORT SPAN-** **WITHOUT REINFORCEMENT**

STEEL BUCK FRAME

TESTING:
STATIC, IMPACT, AND CYCLE

MAX. ALLOWABLE DEFLECTION (L/180)= 0.600

DESIGN PRESSURE = +/- 65 PSF

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

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

Coral
Architectural Products
3010 RICE WARE ROAD, TUSCALOOSA, AL 35405
PHONE 800-753-7272 FAX 205-335-1200

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

DATE 3/24/2010
DRAWN ALL CHECKED DCW APPROVED DCW
PROJECT NO. TEST
DRAWING NO. PW257_01
SHEET 3 OF 15

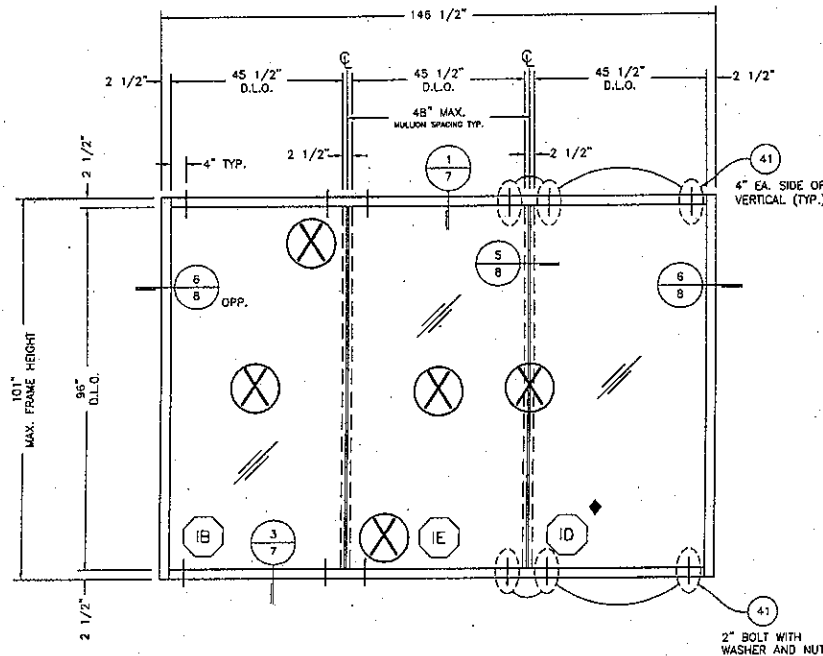


Test sample complies with these details.
Deviations are noted.

Report# A2653.01
Date 2/28/11 Tech JCM

NOT USED

SPECIMEN #E3	
TEST METHOD	TEST CONDITIONS
UNIFORM STATIC LOAD TEST (ASTM E1330 AND TAS 202)	+/- 65 PSF DESIGN PRESSURE
LARGE MISSILE IMPACT TEST (ASTM E1986/E1996 AND TAS 201)	9-LB 40Z, 3x4 (@ 50FT/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

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

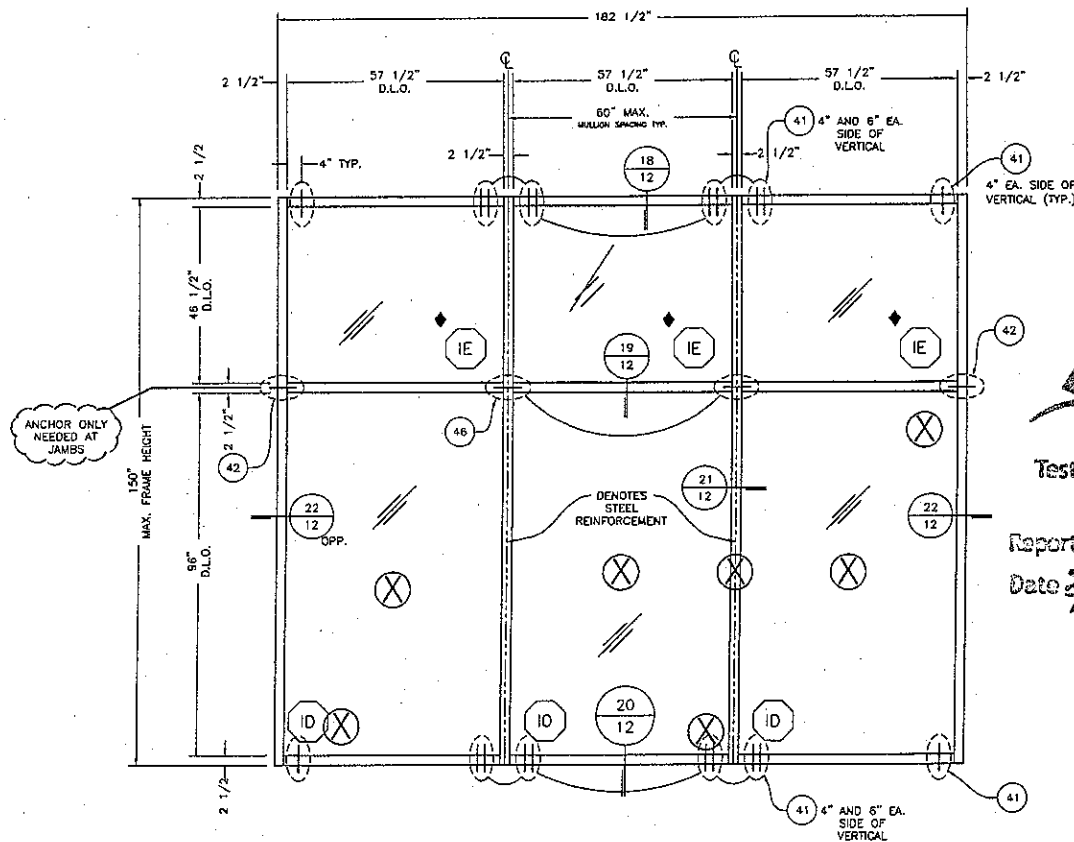
0 1'-4" 2'-8" 5'-4"
SCALE: 3/8"=1'-0"

Coral
Architectural Products
3510 RICE AVE. ROAD, TUSCALOOSA, AL 35406
PHONE 800-772-7277 FAX 205-325-7200

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

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

SPECIMEN #E1	
TEST METHOD	TEST CONDITIONS
AIR INFILTRATION TEST (ASTM E283 AND TAS 203)	1.57 PSF & 6.24 PSF
WATER INFILTRATION TEST (ASTM E331 AND TAS 203)	20.00 PSF
UNIFORM STATIC LOAD TEST (ASTM E330 AND TAS 203)	+/- 80 PSF DESIGN PRESSURE
LARGE MISSILE IMPACT TEST (ASTM E1996 AND TAS 203)	9-LB #02, 2x4 @ 50FT/SEC
CYCLIC LOAD TEST (ASTM E1995 AND TAS 203)	+/- 80 PSF DESIGN PRESSURE



**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)

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

NOT USED



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A2653.01

Date 2/28/11 Tech Jcm

Coral

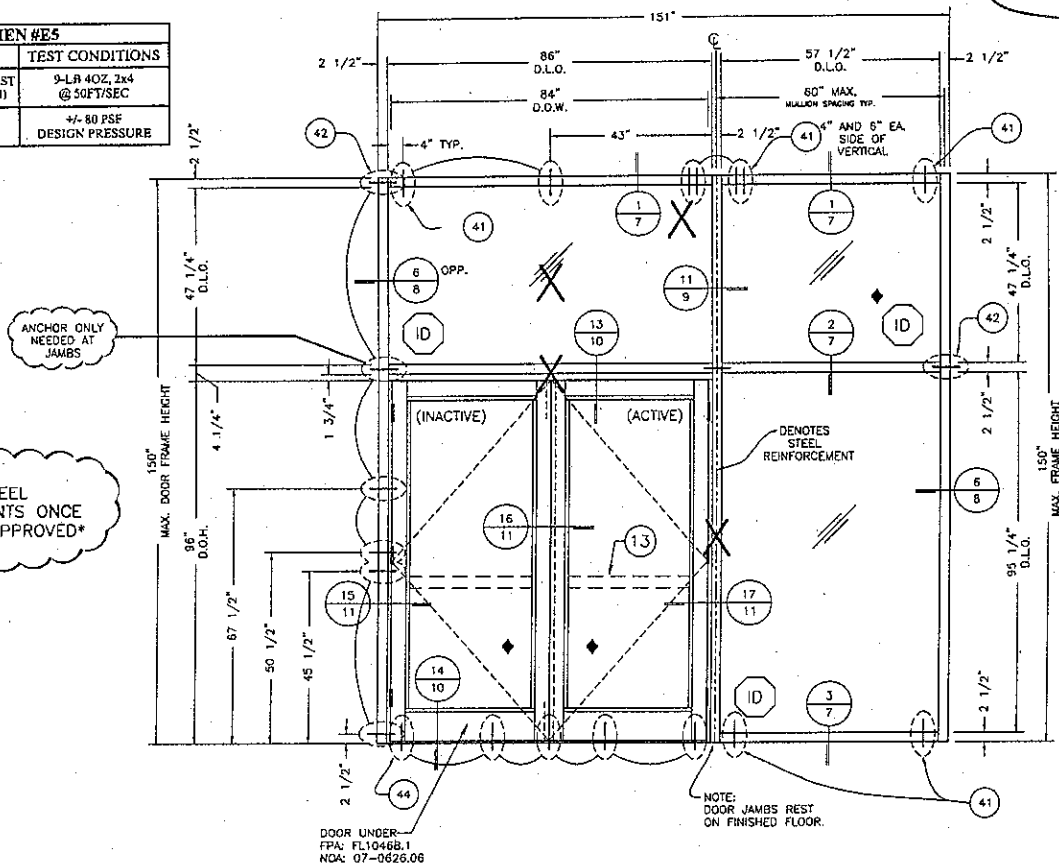
Architectural Products
3010 BEE HIVE ROAD, TUCKER, GA 30084
PHONE: 800-772-7237 FAX: 800-443-5291

TEST REPORT DRAWINGS
PW257 IMPACT-RESISTANT
CURTAIN WALL SYSTEM

FRAMING ELEVATION

DATE	3/24/2010
DRAWN	ALL
CHECKED	DCW
APPROVED	DCW
PROJECT NO.	
DRAWING NO.	PW257_01
SHEET	5 OF 15

SPECIMEN #E5	
TEST METHOD	TEST CONDITIONS
LARGE MISSILE IMPACT TEST (ASTM E1863/E1996 AND TAS 201)	9-LR 40Z, 3rd @ 50FT/SEC
CYCLIC LOAD TEST (ASTM E1996 AND TAS 201)	+/- 80 PSF DESIGN PRESSURE



REVIEW STEEL REQUIREMENTS ONCE DIES ARE APPROVED

ANCHOR ONLY NEEDED AT JAMBS

NOTE: DOOR JAMBS REST ON FINISHED FLOOR.

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

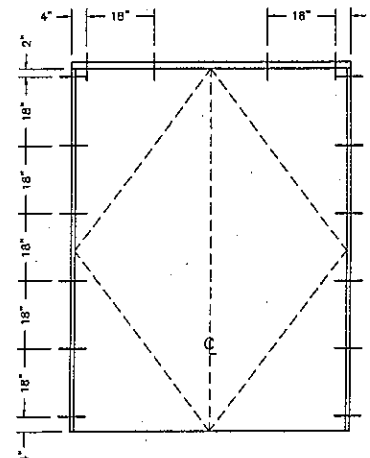
X = LARGE MISSILE IMPACT LOCATIONS

◆ = INFILL ONLY (DO NOT IMPACT)

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

Architectural Testing
Test sample complies with these details.
Deviations are noted.

Report# 42653.01
Date 2/28/11 Tech JCM



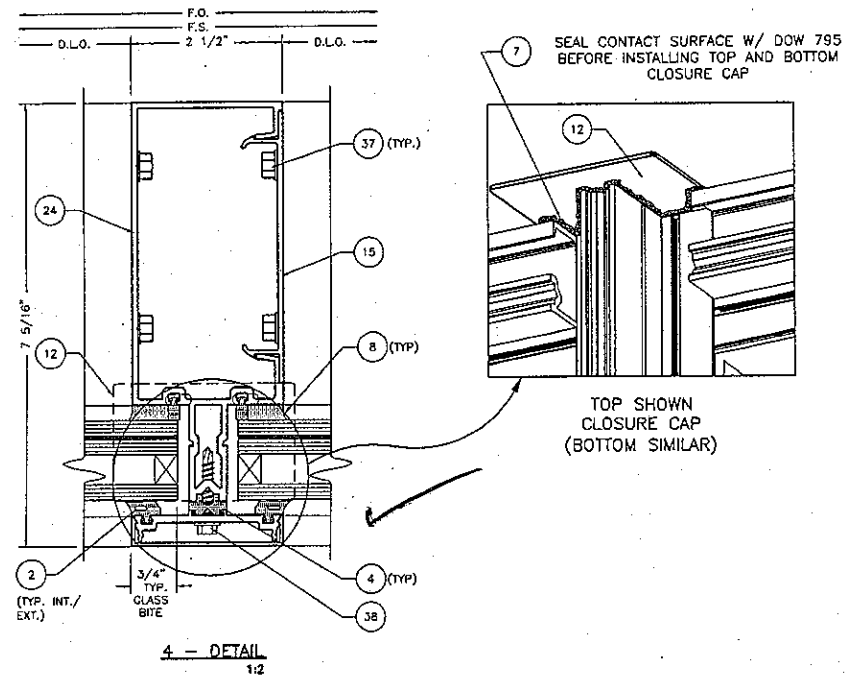
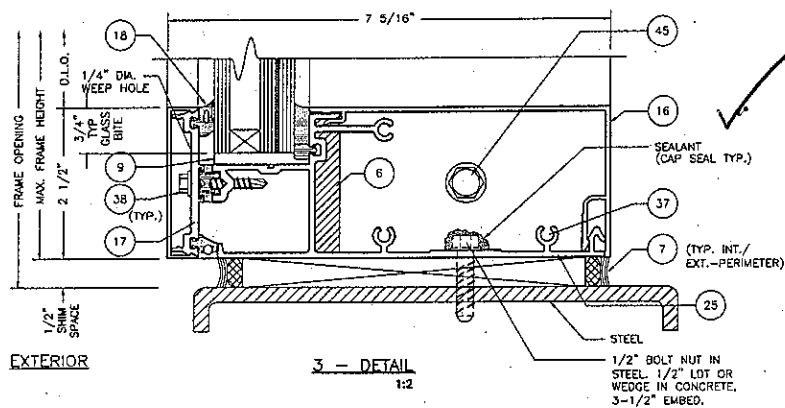
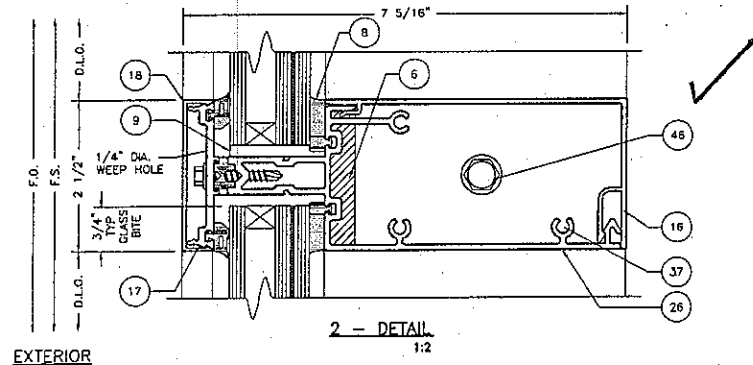
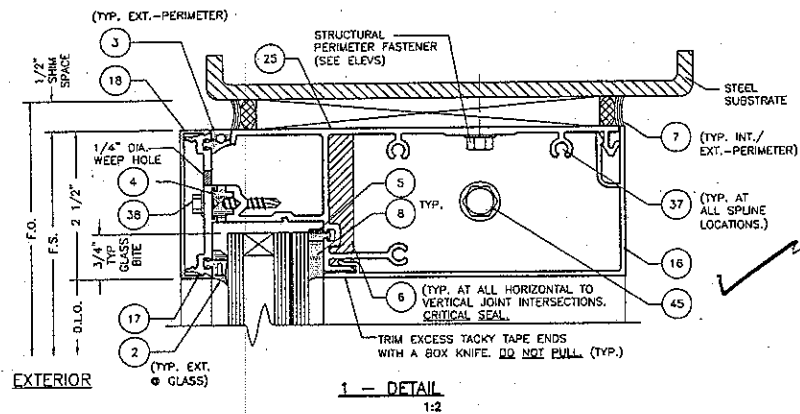
LOCATIONS FOR
DOOR SUB-FRAME ATTACHMENT
TO CURTAIN WALL ALUMINUM

Coral
Architectural Products
500 RICE AVE. SUITE 200, TUCSON, AZ 85706
PHONE: 800-772-7271 FAX: 800-255-1300

TEST REPORT DRAWINGS
PW257 IMPACT-RESISTANT
CURTAIN WALL SYSTEM

FRAMING ELEVATION FOR DOORS

DATE	3/24/2010
DRAWN	ALL
CHECKED	DCW
APPROVED	DCW
PROJECT NO.	TEST
DRAWING NO.	PW257_01
SHEET	6 OF 15



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# 42653.01

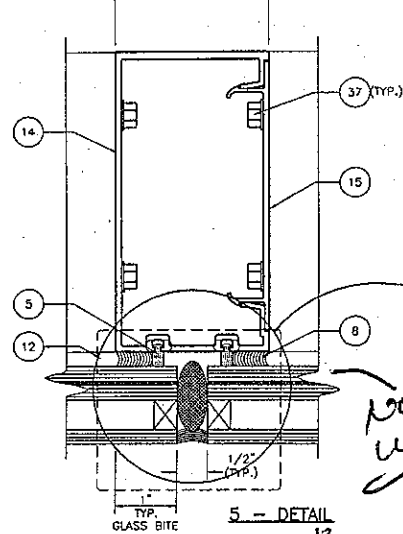
Date 2/28/11 Tech JCM

Coral
Architectural Products
3015 ICE WINE ROAD, TUSCALOOSA, AL 35404
PHONE: 205-712-7277 FAX: 205-712-7278

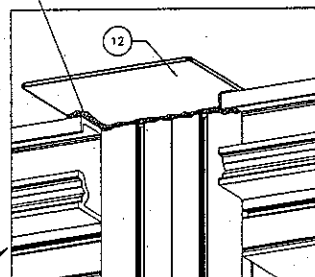
TEST REPORT DRAWINGS
PW257 IMPACT-RESISTANT
CURTAIN WALL SYSTEM
FRAMING DETAILS

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

FRAME OPENING
FRAME WIDTH
D.L.O. 2 1/2" D.L.O.



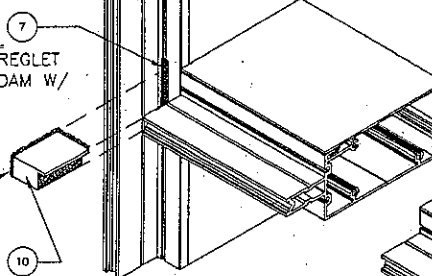
7 SEAL CONTACT SURFACE W/ DOW 795
BEFORE INSTALLING TOP AND BOTTOM
CLOSURE CAP



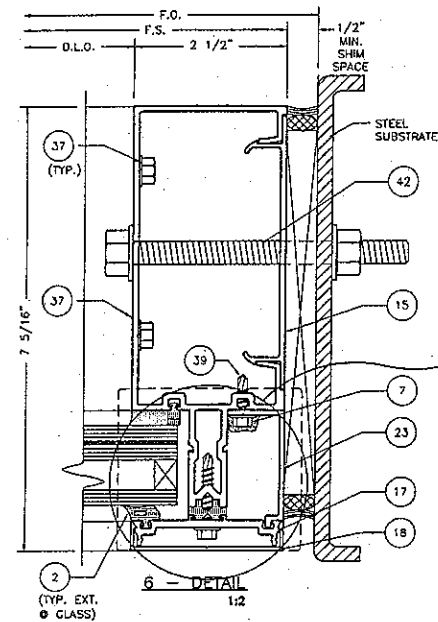
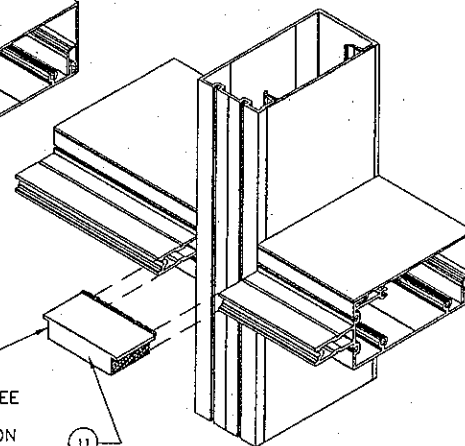
TOP SHOWN
CLOSURE CAP
(BOTTOM SIMILAR)

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

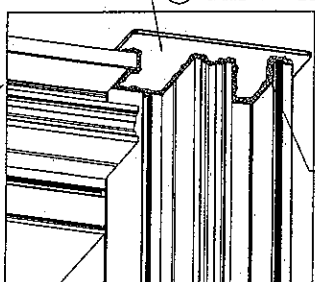
7 CRITICAL SEAL
APPLY DOW 795
SEALANT TO ALL THREE
CONTACT SURFACES
PRIOR TO INSTALLATION
AT HORIZONTALS AND
SILL.



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



12 FIELD MODIFY @
JAMB IF REQUIRED



TOP SHOWN
CLOSURE CAP
(BOTTOM SIMILAR)

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



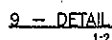
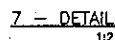
Test sample complies with these details.
Deviations are noted.

Report# A2653.01
Date 2/28/11 Tech JCR

Coral
Architectural Products
30180 WARE ROAD, SUITE 200, ALI, AL 36406
PHONE 900-772-7727 FAX 900-443-6261

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

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



NOT used



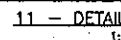
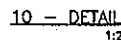
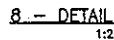
DETAIL Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report#

Date

Teach

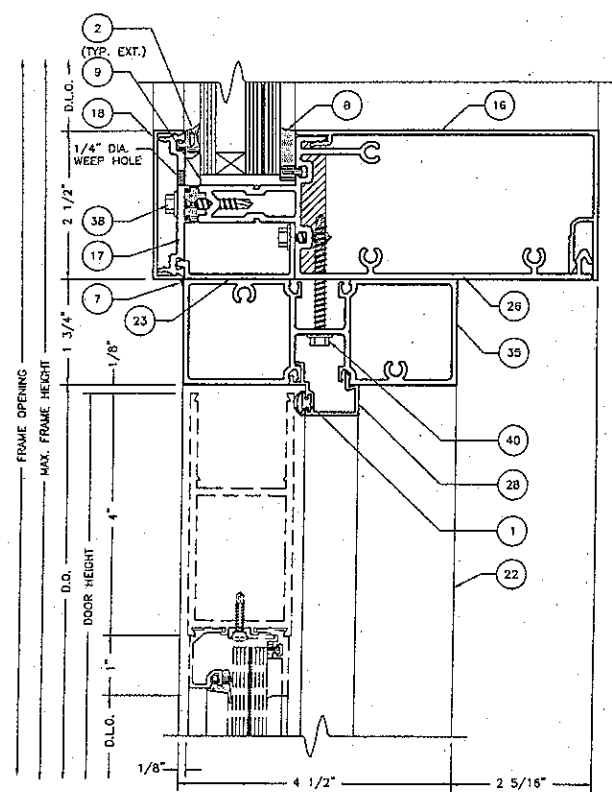


DATE 8/24/2010		
DRAWN ALL	CHECKED DCW	APPROVED DCW
PROJECT NO.		
DRAWING NO. PW257_01		
SHEET 9 OF 15		

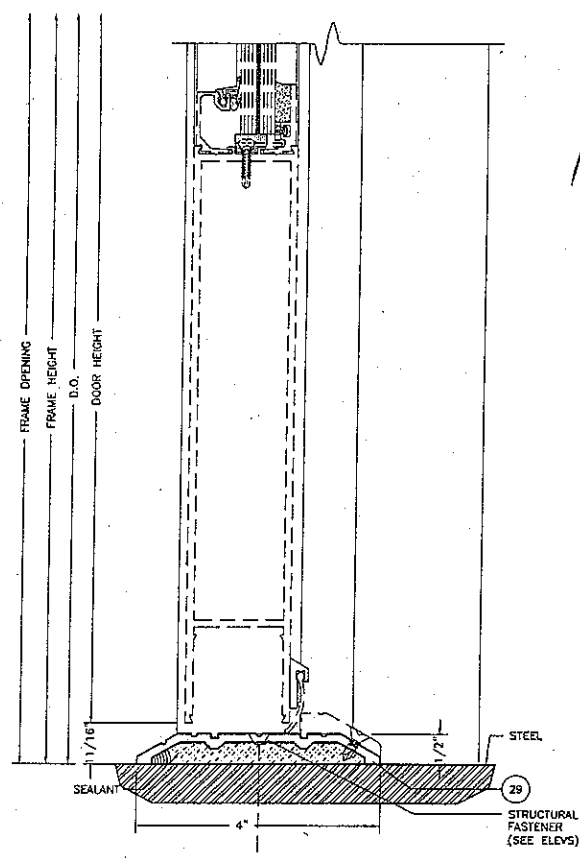
Architectural Testing
 Test sample complies with these details.
 Deviations are noted.

Report# _____
 Date _____ Tech _____

NOT USED



13 - DETAIL
 1:2



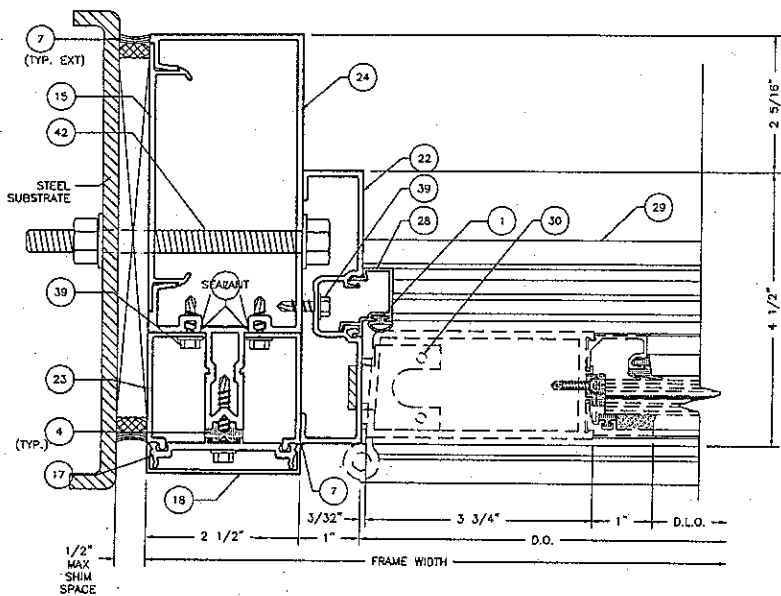
14 - DETAIL
 1:2

DATE		6/24/2010	
DRAWN	ALL	CHECKED	DCW
APPROVED	DCW	APPROVED	DCW
PROJECT NO.			
DRAWING NO.			
PW257_01			
SHEET 10 OF 15			

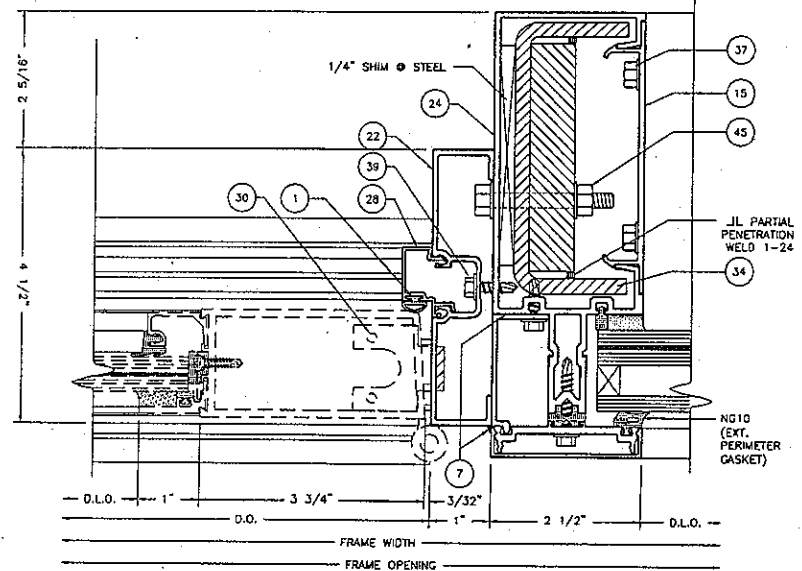
TEST REPORT DRAWINGS
 PW257 IMPACT-RESISTANT
 CURTAIN WALL SYSTEM

DOOR AND FRAMING DETAILS

Coral
 Architectural Products
 3000 LINDEN ROAD, TUCULOGA, N. 1564
 PHONE: 800-775-7737 FAX: 800-443-9281

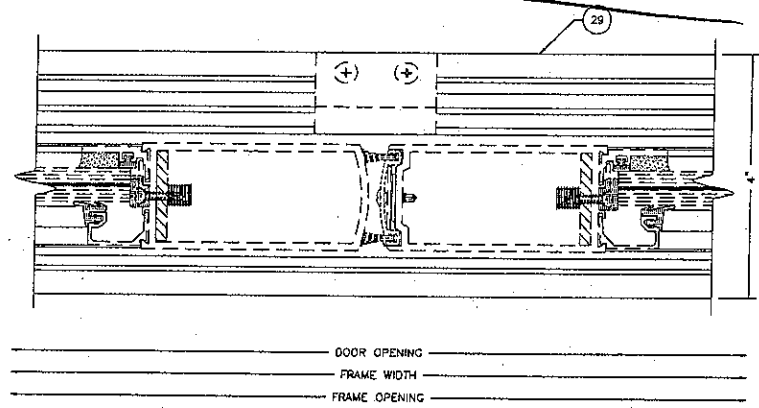


15 - DETAIL
1:2



17 - DETAIL
1:2

NOT USED



16 - DETAIL
1:2

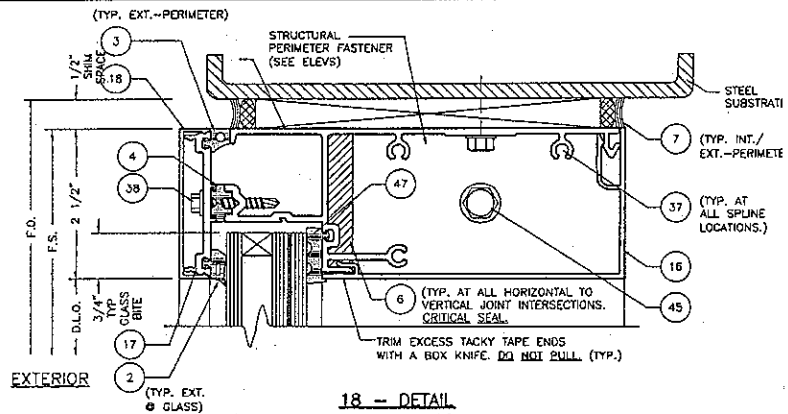
Architectural Testing
Test sample complies with these details.
Deviations are noted.

Report# _____
Date _____ Tech _____

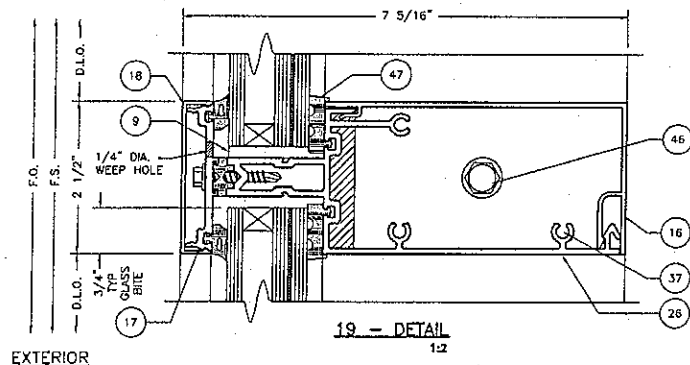
Coral
Architectural Products
5015 IRE ROAD, TUSCALOOSA, AL 35404
PHONE: 205-775-7277 FAX: 205-775-7277

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

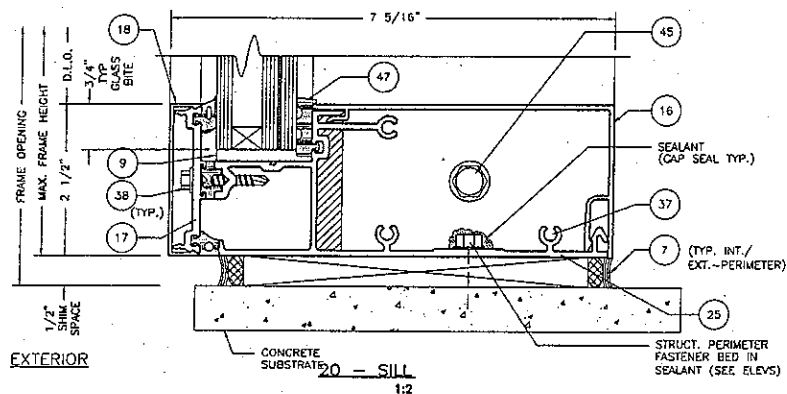
DATE	8/24/2010
DRAWN	ALL
CHECKED	DCW
APPROVED	DCW
PROJECT NO.	
DRAWING NO.	PW257_01
SHEET	11 OF 15



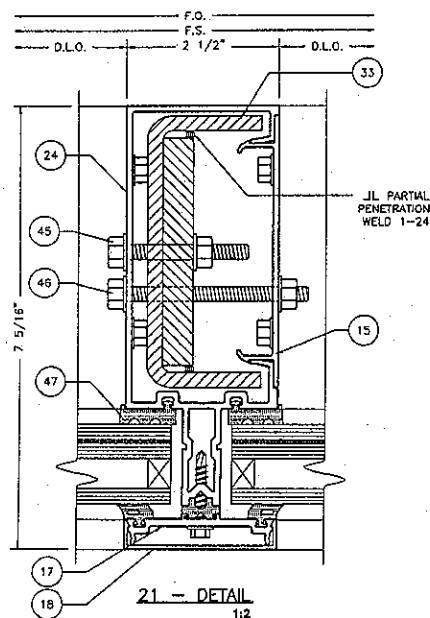
18 - DETAIL
1:2



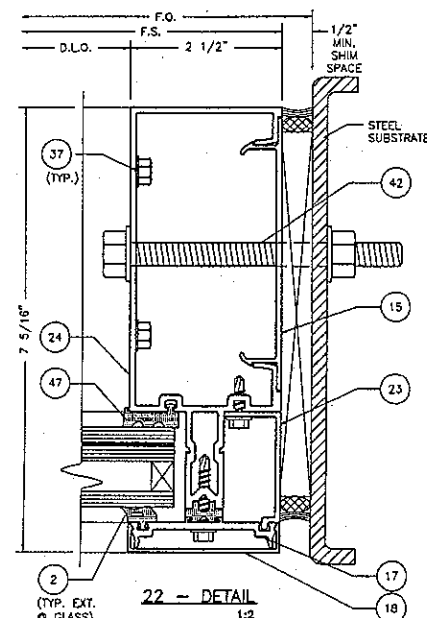
19 - DETAIL
1:2



20 - SILL
1:2



21 - DETAIL
1:2



22 - DETAIL
1:2



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# _____
Date _____ Tech _____

NOT USED

TEST REPORT DRAWINGS
PW257 IMPACT-RESISTANT
CURTAIN WALL SYSTEM

FRAMING DETAILS

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

Coral
Architectural Products
3018 BEE HIVE ROAD, TUCULUMSA, AL 36864
PHONE: 904-772-7272 FAX: 904-443-5531

BILL OF MATERIALS

ITEM NO.	P/N	DESCRIPTION	DIMENSIONS	MATERIAL	MANUFACTURER	3NOTES
1	NG5	BULB GASKET - DOORFRAME STOP	0.165 SPACE	EPDM	VARIES	
2	NG10	EXTERIOR GLAZING GASKET	0.250 SPACE	EPDM	VARIES	
3	NG11	EXTERIOR PERIMETER GASKET	0.300 SPACE	EPDM	VARIES	
4	NG12	PRESSURE BAR GASKET (ISOLATOR)	0.140 SPACE	EPDM	VARIES	
5	NG14	INTERIOR SPACER GASKET	0.250 SPACE	EPDM	VARIES	
6	SM5601	JOINT SEALANT TAPE	0.500 X 0.125 X VARIES	BUTYL	SCHNEE-MOOREHEAD	
7	795	SILICONE - PERIMETER SEALANT	FILL SPACE	SILICONE	DOW CORNING	USED @ PERIMETER
8	995	SILICONE - GLASS TO METAL	FILL SPACE	SILICONE	DOW CORNING	GLASS TO METAL AND INTERNAL
9	SB18	SETTING BLOCK @ SILL & HORIZONTAL	1.562 X 0.188 X 4.000	EPDM	VARIES	2 PER LITE
10	SP204	END DAM @ CAPTURED MULLION	1.287 X 1.787 X 0.745	EVA FOAM	CORAL INDUSTRIES, INC.	LOCATE 1 @ EACH END OF HORIZONTAL
11	SP208	BRIDGE DAM @ B.G. MULLION	3.123 X 1.562 X 0.745	EVA FOAM	CORAL INDUSTRIES, INC.	LOCATE 1 @ HORIZONTAL AND B.G. MULLION
12	SP211	MULLION CAP	3.000 X 2.691 X 0.048	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	LOCATE @ TOP AND BOTTOM OF VERTICAL
13	2086	JACKSON 2086 PANIC	38.000 X 7.3125 X 3.000	ALUMINUM	JACKSON	
14	PW151	B.G. MULLION	2.500 X 5.000 X 0.094	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
15	PW202	OPEN BACK MULLION FILLER	0.681 X 4.484 X 0.094	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
16	PW203	HEAD/ SILL/ HORIZONTAL TRIM	2.500 X 4.980 X 0.078	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
17	PW204	PRESSURE BAR	2.443 X 0.433 X 0.125	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
18	PW205	FACE COVER	2.500 X 0.500 X 0.062	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
19	PW208	FEMALE HALF 90° CORNER	1.625 X 6.110 X 0.094	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
20	PW209	MALE HALF 90° CORNER	1.875 X 6.110 X 0.094	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
21	PW210	INTERIOR CORNER TRIM	2.500 X 1.288 X 0.078	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
22	PW214	SUB DOORFRAME	1.000 X 4.500 X 0.080	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
23	PW613	POCKET FILLER FOR PW650	0.937 X 1.943 X 0.078	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
24	PW650	VERTICAL MULLION	2.500 X 6.593 X 0.094	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
25	PW652	HEAD/SILL	2.390 X 6.495 X 0.094	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
26	PW655	INTERMEDIATE HORIZONTAL	2.390 X 6.495 X 0.094	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
27	PW656	GLAZING TEE - 90° CORNER	3.334 X 3.334 X 0.094	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
28	DS200	DOORFRAME STOP	0.882 X 1.149 X 0.050	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
29	TH4	THRESHOLD	0.500 X 4.000 X 0.125	6063-T6 ALUMINUM	CORAL INDUSTRIES, INC.	
30	TH403	THRESHOLD CLIP	1.390 X 1.516 X 1.909	STEEL	VARIES	

(CONTINUED ON SHEET 15)



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# A2653.01
Date 2/28/11 Tech SCM

TEST REPORT DRAWINGS
PW257 IMPACT-RESISTANT
CURTAIN WALL SYSTEM

BILL OF MATERIALS

DATE 8/24/2010		
DRAWN ALL	CHECKED DCW	APPROVED DCW
PROJECT NO.		
DRAWING NO. PW257_01		
SHEET 13 OF 15		

Coral
Architectural Products -
3018 BICE LINE ROAD, TUSCALOOSA, AL 35408
PHONE 800-775-7737 FAX 800-448-6381

BILL OF MATERIALS

ITEM NO.	P/N	DESCRIPTION	DIMENSIONS	MATERIAL	MANUFACTURER	3NOTES
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"X3-1/2" 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 0.078	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)
IE	1-5/16" INSULATED -1/4" H.S. -1/2" AIR SPACER -1/4" H.S. - DUPONT BUTCITE 090 PBV 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

Architectural Testing

Test sample complies with these details
Deviations are noted.

Report# A2653.01
Date 7/28/11 Tech JCM

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

DATE 8/24/2010
DRAWN HLL CHECKED DCW APPROVED DCW
PROJECT NO.
DRAWING NO. PW257_01
SHEET 14 OF 15

<p>14 B.C. MULLION</p>	<p>15 OPEN BACK MULLION FILLER</p>	<p>16 HEAD/SILL/HORIZONTAL TRIM</p>	<p>17 PRESSURE BAR</p>	<p>18 FACE COVER</p>	<p>19 FEMALE HALF 90° CORNER</p>	<p>20 MALE HALF 90° CORNER</p>	<p>21 INTERIOR CORNER TRIM</p>	<p>22 MALE HALF 90° CORNER</p>	<p>23 SOCKET FILLER</p>	<p>24 VERTICAL MULLION</p>
<p>25 HEAD/SILL</p>	<p>26 INTERMEDIATE HORIZONTAL</p>	<p>27 GLAZING TIE 90° CORNER</p>	<p>28 DOORFRAME STOP</p>	<p>29 THRESHOLD</p>	<p>48 CORNER FACE COVER</p>	<p>49 CORNER PRESSURE BAR</p>	<p>Architectural Testing</p> <p>Test sample complies with these details. Deviations are noted.</p> <p>Report# 47653.01</p> <p>Date 2/28/11</p>			

<p>1 BUILD GASKET</p> <p>FULL SCALE</p>	<p>2 EXT. GLAZING GASKET</p> <p>FULL SCALE</p>	<p>3 EXT. PERIMETER GASKET</p> <p>FULL SCALE</p>	<p>4 PRESSURE BAR GASKET (ISOLATOR)</p> <p>FULL SCALE</p>	<p>5 INT. SPACER GASKET</p> <p>FULL SCALE</p>	<p>9 SETTING BLOCK</p> <p>FULL SCALE</p>	<p>47 INT. SPACER GASKET</p> <p>FULL SCALE</p>							
<p>12 MULLION CAP HALF SCALE</p>							<p>50 CORNER MULLION CAP HALF SCALE</p>						
<p>10 END DAM HALF SCALE</p>							<p>11 BRIDGE DAM HALF SCALE</p>						

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TEST REPORT DRAWINGS
PW257 IMPACT-RESISTANT
CURTAIN WALL SYSTEM

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