

**GEORGIA OFFICE** 

1701 Westfork Drive, Suite 106 Lithia Springs, GA 30122 HTLTEST.COM P: 888.477.2454 F: 770.941.2930

October 31, 2011

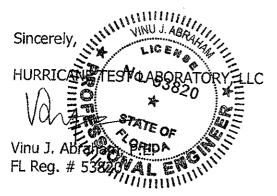
William Smith, Sr. Coral Architectural Products 3010 Rice Mine Rd. Tuscaloosa, Alabama 35406

Re: PW-251 Curtain Wall System

Dear Mr. Smith;

All testing conducted for the above mentioned product, reported in HTL test report # G402-0501-06 was performed in strict accordance with the current editions of ASTM E283, E330, and E331. The results are valid per the latest editions of said standards.

If you have any further questions regarding the attached reports, please contact our office.





HURRICANE TEST LABORATORY, LLC
TESTING AND EVALUATION SOLUTIONS
1701 WESTFORK DRIVE, SUITE 106
LITHIA SPRINGS, GEORGIA 30122
(770) 941-6916
FAX (770) 941-2930
www.httest.com

Report #: G402-0501-06

Specimen # 1

Test Date: 5/1-3/06

Records Retention Date: 5/24/11 Page 1 of 5

#### MANUFACTURER'S IDENTIFICATION

1.0 NAME OF APPLICANT:

CORAL ARCHITECTURAL PRODUCTS

3010 Rice Mine Road

Tuscaloosa, Alabama 35406

(800) 772-7737

2.0 CONTACT PERSON:

J.D. Williams

3.0 HTL TEST NOTIFICATION #: N/A

4.0 HTL LAB CERTIFICATION:

Miami-Dade County (04-0806.02) and Florida Building Code (#TST3892)

#### PRODUCT IDENTIFICATION

5.0 Product Type: Curtain Wall System

6.0 Model Number: PW251

10.0

7.0 Performance Class: +/- 60 psf

**8.0** Overall Sample Size: 182-1/2'' (w) x 144'' (h)

**9.0 Configuration:** The unit consisted of three (3) bays, two (2) lites per bay. See Coral drawings "PW251", sheet 2 of 7 for an elevation of these test units.

**Drawing:** This report is incomplete if not accompanied by Coral Architectural Products Drawing "PW251-

HTL" and accompanying sheets bearing the raised seal of Hurricane Test Laboratory, LLC.

11.0 Sample Source: Samples provided by Coral Architectural Products.

#### PRODUCT DESCRIPTION

#### 12.0 MATERIAL CHARACTERISTICS:

**Frame Construction:** All of the main members of the frame were fabricated using the aluminum extrusions (6063-T6) with the following cross-sectional properties:

Description	Item #	Part #
Captured Mullion	14	PW150
Head/Sill	16	PW152
Intermediate Horizontal	17	PW155
Mullion Filler	18	PW202
Jamb Pocket Filler	22	PW213
Interior Trim	19	PW203

The following procedures (typical) were utilized when assembling each individual frame: <u>Frame Corner Construction</u>: At each frame corner, the vertical frame member ran through while the horizontal frame member was square cut, butted, and mechanically fastened to the vertical frame member using  $\#14 \times 1"$  HHSTS fasteners that passed through the vertical and threaded into the horizontal member's screw splines.

<u>Mullion Reinforcement:</u> The center vertical mullions were both reinforced using a 4.500"  $\times$  1.875"  $\times$  0.250" (144" long) steel reinforcing channel (Part # SR150). The steel channel was attached to the mullion at head, sill, and mid hidraphtal locations using a  $\frac{1}{4}$ "-20  $\times$  1-1/4" bolt with washer and nut.

with washer and nut.

Frame Joint Sealant: Each frame joint was scaled using strips of Schnee-Morehead SM5601

TackyTape® Industrial Sealant Tape sealant at the exterior side only.

Vinu J. Aplenam of For FL Reg. 4 77820



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Report #: G402-0501-06 Specimen #1

Test Date: 5/1-3/06

Records Retention Date: 5/24/11

Page 2 of 5

Mullion End Cap @ Intermediate Mullion and Jambs: There was a mullion end cap (Item #8, Part # SP209) applied to the top and bottom of each mullion that provided a uniform surface against which the perimeter seals could be applied. Each cap was compressed in place to the adjacent mullion. There was a bead of Dow Corning 995 Structural Silicone Sealant applied to all frame surfaces that the mull cap came in contact with prior to its installation.

End Dams: There was an end dam (Item #6, Part # SP203) used at each end of all horizontal members (head, intermediate and sill) that was sealed at all three contact surfaces using Dow Corning 995 structural silicone sealant. This part created a zone dam at the bottom of each glass lite so infiltrated water could weep through a series of weep holes to the exterior.

12.2 Pressure Bar and Snap Cover Assembly: Following are the extrusions used in the fabrication of all pressure bar and exterior snap covers used in this sample:

Description	Item #	Part #
Pressure Bar	20	PW204
Vertical/Horizontal Face Cover	21	PW205

The following procedures (typical) were utilized when installing the pressure bars: Pressure Bar: Each continuous pressure bar was square cut at each end and secured to the adjacent framing member using a single row of #12-14 x 1 1/4" HWH #3 self drilling screws located 1 ½" from each end and approximately 9" on center. NOTE: A continuous strip of 0.140" x 0.625" EPDM thermal separator gasket (Part # NG12) was inserted into the center reglet of each pressure bar prior to its installation to the vertical and horizontal mullions. NOTE: A continuous strip of (Item # 2) Part Number NG11 was inserted into the reglet on the perimeter side of the pressure bar to serve as a seal and thermal isolator.

<u>Snap Cover Assembly:</u> Each snap cover was attached to the pressure bar by snap-fitting it in place.

#### 12.3 Glazing:

**12.3.1 Glass Type:** 1" Insulated Glass with the following components:

- ¼" tempered glass
- ½" air space
- ¼" tempered glass

**12.3.2 Glazing Method:** The glass lites used in this test specimen were glazed using the following (typical) procedures:

Exterior and Interior Side: Using a single row of extruded EPDM gasket (Item #1).

12.3.3 Daylight Opening:

Qty.	Daylight Opening	Glass Bite
3	57-1/2" (w) x 96" (h)	1/2"
3	57-1/2" (w) x 40-1/2" (h)	

#### 12.4 Weep Holes:

#### 12.4.1 Pressure Bars:

Location	Weep Description
Head Pressure Bar	None used
Sill Pressure Bar	1/4" diameter weep hoies located 6" from each end of horizontal pressure bar for a total of two per lite.
Intermediate Horizontal Pressure Bar	1/4" diameter weep holes located 6" from each end of horizontal pressure bar for a total of two per lite.

#### 12.4.2 Horizontal Face Covers:

Location	Weep Description
Head Pressure Bar	None used
Sill Face Cover	1/4" diameter weep holes located 6" from each end on the underneath side for a total of two per lite.

ENGINEER OF RECORD

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Report #: G402-0501-06 Specimen #1

Test Date: 5/1-3/06

Records Retention Date: 5/24/11

Page 3	3 of 5
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Location		Weep Description
Intermediate		1/4" diameter weep holes located 6" from each end on
Horizontal Pre	ssure Bar	the underneath side for a total of two por lite

#### 12.5 Sealants Used:

Location	Sealant
Perimeter Sealant	Dow 795 Structural Silicone Sealant
Frame Joint Sealant	Dow 995 Structural Silicona Content

#### **INSTALLATION**

**13.0** Following is a description of how this sample was installed in the steel opening when viewed from the exterior:

Location	Anchor Schedule
Frame Head	The frame head was attached using six (6) $\frac{1}{2}$ "-13 x 2" HH bolts, located 4" from each vertical.
Frame Sill	The frame sill was attached using six (6) $\frac{1}{2}$ "-13 x 2" HH bolts, located 4" from each vertical.
Frame Jambs	The frame jamb was attached using two (2) [one per side] $\frac{1}{2}$ "-13 x 2" HH bolts at center of mid horizontal member.

#### **TEST RESULTS**

#### 14.0 SUMMARY OF RESULTS:

Test Method	Test Conditions	Measured	Allowed
Air Infiltration Test	1.57 psf	0.01 cfm/ft <sup>2</sup>	0.06 cfm/ft <sup>2</sup>
(ASTM E283)	6.24 psf	0.01 cfm/ft <sup>2</sup>	0.06 cfm/ft <sup>2</sup>
Water Infiltration Test (ASTM E331)	20 psf	PASSED per	ASTM E331
		Deflection	
Uniform Load Deflection Test	+ 60 psf	Vertical Mullion (left)	
(ASTM E330)		0.59"	0.82"
		Center Horizontal	
		0.05"	0.32"
	Į	Vertical Mullion (left)	
Uniform Load Deflection Test (ASTM E330)	- 60 psf	0.63"	0.82"
		Center Horizontal	
		0.04"	0.32"

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Report #: G402-0501-06

Specimen #1

Test Date: 5/1-3/06

Records Retention Date: 5/24/11
Page 4 of 5

	, in		_
Test Method	Test Conditions	Measured	Allowed
Water Infiltration Test (ASTM E331)	20 psf	PASSED per	ASTM E331
		Perman	ent Set
	+ 90 psf	Vertical Mu	ıllion (left)
		0.06"	0.28"
Uniform Load Structural Test		Center H	orizontal
(ASTM E330)		0.01"	0.11"
		Vertical Mu	llion (left)
	- 90 psf	0.05"	0.28"
	σο μαι 	Center Ho	orizontal
THESE TESTS WERE COMPLETED O		0.01"	0.11"

THESE TESTS WERE COMPLETED ON 5/3/06

#### **MISCELLANEOUS INFORMATION**

#### 15.0 CERTIFICATION & DISCLAIMER STATEMENT:

All tests performed on this test specimen were conducted in accordance with the specifications of the applicable codes, standards & test methods listed below by the Hurricane Test Laboratory, LLC located at 1701 Westfork Drive, Suite 106, Lithia Springs, Georgia 30122. HTL does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products tested at HTL. HTL is not owned, operated or controlled by any company manufacturing or distributing products it tests. This report is only intended for the use of the entity named in section 1.0 of this report. Detailed assembly drawings showing wall thickness of all members, corner construction and hardware applications are on file and have been compared to the test specimen submitted. A copy of this test report along with representative sections of the test specimen will be retained at HTL for a period of four (4) years. All results obtained apply only to the specimen tested and they do indicate compliance with the performance requirements of the test methods and specifications listed in the following section. Please note that a copy of this report will be forwarded to the AAMA Validator if requested and that this report does not constitute AAMA certification of this product, which may only be granted by the AAMA Validator.

#### 16.0 APPLICABLE CODES, STANDARDS & TEST METHODS:

**ASTM E283-04** - Standard Test Method For Determining The Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences.

**ASTM E330-02** - Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.

**ASTM E331-00** — Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.

AAMA 501-05 — Methods of Tests for Exterior Walls

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Report #: G402-0501-06

Specimen #1

Test Date: 5/1-3/06

Records Retention Date: 5/24/11 Page 5 of 5

#### 17.0 LIST OF OFFICIAL OBSERVERS:

Vinu J. Abraham, P.E. – HTL, Managing Partner
José E. Colón, E.I. – HTL, Operations Manager
Kevin Rouse – HTL, Engineering Assistant
Ian McKenzie – HTL, Test Technician
Al Fite – HTL, Test Technician
J.D. Williams – CORAL ARICHITECTURAL PRODUCTS
David Long – CORAL ARCHITECTURAL PRODUCTS
Jeff Law – CORAL ARCHITECTURAL PRODCUTS

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HURRICANE TEST LABORATORY, LLC **TESTING AND EVALUATION SOLUTIONS** 1701 WESTFORK DRIVE, SUITE 106 LITHIA SPRINGS, GEORGIA 30122 (770) 941-6916 FAX (770) 941-2930 www.htltest.com

Report #: G402-0501-06

Specimen # 2

Test Date: 5/15-16/06

Records Retention Date: 5/24/11

Page 1 of 5

#### MANUFACTURER'S IDENTIFICATION

1.0 NAME OF APPLICANT:

**CORAL ARCHITECTURAL PRODUCTS** 

3010 Rice Mine Road

Tuscaloosa, Alabama 35406

(800) 772-7737

2.0 **CONTACT PERSON:** 

J.D. Williams

3.0 **HTL TEST NOTIFICATION #: N/A** 

4.0 HTL LAB CERTIFICATION:

Miami-Dade County (04-0806.02) and Florida Building Code (#TST3892)

#### PRODUCT IDENTIFICATION

5.0 Product Type: Curtain Wall System

6.0 Model Number: PW251

7.0 Performance Class: +/- 60 psf

8.0 Overall Sample Size: 146-1/2'' (w)  $\times 144''$  (h)

Configuration: The unit consisted of three (3) bays, two (2) lites per bay. See Coral drawings "PW251", 9.0

sheet 3 of 7 for an elevation of these test units.

10.0 Drawing: This report is incomplete if not accompanied by Coral Architectural Products Drawing "PW251-HTL" and accompanying sheets bearing the raised seal of Hurricane Test Laboratory, LLC.

Sample Source: Samples provided by Coral Architectural Products. 11.0

#### PRODUCT DESCRIPTION

#### 12.0 **MATERIAL CHARACTERISTICS:**

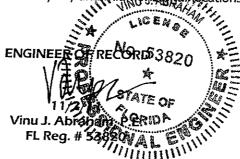
Frame Construction: All of the main members of the frame were fabricated using the aluminum extrusions (6063-T6) with the following cross-sectional properties:

Description	Item #	Part #
Captured Mullion	14	PW150
Butt Glazed Mullion	15	PW151
Head/Sill	16	PW152
Intermediate Horizontal	17	PW155
Mullion Filler	18	PW202
Jamb Pocket Filler	22	PW213
Interior Trim	19	PW203

The following procedures (typical) were utilized when assembling each individual frame: Frame Corner Construction: At each frame corner, the vertical frame member ran through while the horizontal frame member was square cut, butted, and mechanically fastened to the vertical frame member using  $\#14 \times 1"$  HHSTS fasteners that passed through the vertical and threaded into the horizontal member's screw splines.

Mullion Reinforcement: The center vertical mullions were both reinforced using a 4.5000" x 1.8750" x 0.1345" (144" long) steel reinforcing channel (Part # SR151). The steel channel was attached to the mullion at head, sill, and mid florizontal locations using a  $\frac{1}{4}$ "-20 x 1-1/4" bolt

with washer and nut.





#### HURRICANE TEST LABORATORY, LLC **TESTING AND EVALUATION SOLUTIONS** www.htltest.com

Report #: G402-0501-06 Specimen #2

Test Date: 5/15-16/06

Records Retention Date: 5/24/11

Page 2 of 5

Frame Joint Sealant: Each frame joint was sealed using strips of Schnee-Morehead SM5601 TackyTape® Industrial Sealant Tape sealant at the exterior side only.

Mullion End Cap @ Intermediate Mullion and Jambs: There was a mullion end cap (Item #8, Part # SP209) applied to the top and bottom of each mullion that provided a uniform surface against which the perimeter seals could be applied. Each cap was compressed in place to the adjacent mullion. There was a bead of Dow Corning 995 Structural Silicone Sealant applied to all frame surfaces that the mull cap came in contact with prior to its installation.

End Dams: There was an end dam (Item #6, Part # SP203) used at each end of all horizontal members (head, intermediate and sill) that was sealed at all three contact surfaces using Dow Corning 995 structural silicone sealant. This part creates a zone dam at the bottom of each glass lite so infiltrated water could weep through a series of weep holes to the exterior.

12.2 Pressure Bar and Snap Cover Assembly: Following are the extrusions used in the fabrication of all pressure bar and exterior snap covers used in this sample:

Description	Item #	Part #
Pressure Bar	20	PW204
Vertical/Horizontal Face Cover	21	PW205

The following procedures (typical) were utilized when installing the pressure bars: Pressure Bar: Each continuous pressure bar was square cut at each end and secured to the adjacent framing member using a single row of #12-14 x 1 1/4" HWH #3 self drilling screws located 1 1/2" from each end and approximately 9" on center. NOTE: A continuous strip of 0.140" x 0.625" EPDM thermal separator gasket (Part # NG12) was inserted into the center reglet of each pressure bar prior to its installation to the vertical and horizontal mullions. NOTE: A continuous strip of (Item # 2) Part Number NG11 was inserted into the reglet on the perimeter side of the pressure bar to serve as a seal and thermal isolator. Snap Cover Assembly: Each snap cover was attached to the pressure bar by snap-fitting it in

#### 12.3 Glazina:

place.

- 12.3.1 Glass Type: 1" Insulated Glass with the following components:
  - 1/4" tempered glass
  - ½" air space
  - 1/4" tempered glass
- 12.3.2 Glazing Method (Captured): The glass lites used in this test specimen were glazed using the following (typical) procedures:

Exterior and Interior Side: Using a single row of extruded EPDM gasket (Item #1).

12.3.3 Glazing Method (Butt Glazed): The glass lites used in this test specimen were glazed using the following (typical) procedures:

Interior Side: Using a single row of extruded 0.194" x 0.250" EPDM gasket (Item #4) and Dow Corning 995 Structural Silicone Sealant.

Exterior Side: Dow Corning 995 Structural Silicone Sealant.

12.3.4 Daylight Opening:

Qty.	Daylight Opening	Glass Bite
3	/=	½" (captured)
3		1" (butt-glazed)

#### 12.4 Weep Holes:

#### 12.4.1 Pressure Bars:

Location	Weep Description
Head Pressure Bar	None used
Sill Pressure Bar	1/4" diameter weep holes located 10" on each side of vertical mullions for a total of two per lite.



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Report #: G402-0501-06 Specimen #2

Test Date: 5/15-16/06

Records Retention Date: 5/24/11

Page 3 of 5

Location Weep Description	
Intermediate	1/4" diameter weep holes located 10" on each side of
	vertical mullions for a total of two per lite

#### 12.4.2 Horizontal Face Covers:

Location	Weep Description
Head Pressure Bar	None used
Sill Face Cover	1/4" diameter weep holes located 6" from each side of vertical mullions on the underneath side for a total of two per lite.
Intermediate Horizontal Pressure Bar	1/4" diameter weep holes located 6" from each side of vertical mullions on the underneath side for a total of two per lite.

12.5 Sealants Used:

Location	Sealant
Perimeter Sealant	Dow 795 Structural Silicone Sealant
Frame Joint Sealant	Dow 995 Structural Silicone Sealant

#### **INSTALLATION**

**13.0** Following is a description of how this sample was installed in the steel opening when viewed from the exterior:

Location	Anchor Schedule
Frame Head	The frame head was attached using six (6) ½"-13 x 2" HH bolts, located 4" from each vertical.
Frame Sill	The frame sill was attached using six (6) $\frac{1}{2}$ "-13 x 2" HH bolts, located 4" from each vertical.
Frame Jambs	The frame jamb was attached using two (2) [one per side] $\frac{1}{2}$ "-13 x 2" HH bolts at center of mid horizontal member.

#### **TEST RESULTS**

#### 14.0 **SUMMARY OF RESULTS:**

Test Method	Test Conditions	Measured	Allowed
Air Infiltration Test	1.57 psf	0.01 cfm/ft <sup>2</sup>	0.06 cfm/ft <sup>2</sup>
(ASTM E283)	6.24 psf	0.02 cfm/ft <sup>2</sup>	0.06 cfm/ft <sup>2</sup>
Water Infiltration Test (ASTM E331)	20 psf	PASSED per ASTM E331	
		Deflection	
Uniform Load Deflection Test		Vertical Mu	Illion (left)
(ASTM E330)	+ 60 psf	0.82"	0.82"
( 13 11 1 2 2 3 3 )		Center H	orizontal
		0.05"	0.32"

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Report #: G402-0501-06

Specimen #2

Test Date: 5/15-16/06

Records Retention Date: 5/24/11

Page 4 of 5

Test Method	Test Conditions	Measured	Allowed	
11.25		Vertical Mullion (left)		
Uniform Load Deflection Test	- 60 psf	0.71"	0.82"	
(ASTM E330)	, 00 poi	Center Horizontal		
		0.07"	0.32"	
Water Infiltration Test (ASTM E331)	20 psf	PASSED per	ASTM E331	
		Permanent Set		
		Vertical Mullion (left)		
	+ 90 psf	0.09"	0.28"	
Uniform Load Structural Test		Center Horizontal		
(ASTM E330)		0.09"	0.11"	
		Vertical Mu	llion (left)	
	- 90 psf	0.06"	0.28"	
ļ	2 0 psi	Center Horizontal		
THESE TESTS WERE COMPLETED O		0.08"	0.11"	

#### THESE TESTS WERE COMPLETED ON 5/16/06

#### **MISCELLANEOUS INFORMATION**

#### 15.0 CERTIFICATION & DISCLAIMER STATEMENT:

All tests performed on this test specimen were conducted in accordance with the specifications of the applicable codes, standards & test methods listed below by the Hurricane Test Laboratory, LLC located at 1701 Westfork Drive, Suite 106, Lithia Springs, Georgia 30122. HTL does not have, nor does it intend to acquire or will it acquire, a financial interest in any company manufacturing or distributing products tested at HTL. HTL is not owned, operated or controlled by any company manufacturing or distributing products it tests. This report is only intended for the use of the entity named in section 1.0 of this report. Detailed assembly drawings showing wall thickness of all members, corner construction and hardware applications are on file and have been compared to the test specimen submitted. A copy of this test report along with representative sections of the test specimen will be retained at HTL for a period of four (4) years. All results obtained apply only to the specimen tested and they do indicate compliance with the performance requirements of the test methods and specifications listed in the following section. Please note that a copy of this report will be forwarded to the AAMA Validator if requested and that this report does not constitute AAMA certification of this product, which may only be granted by the AAMA Validator.

#### 16.0 APPLICABLE CODES, STANDARDS & TEST METHODS:

**ASTM E283-04** - Standard Test Method For Determining The Rate of Air Leakage Through Exterior Windows, Curtain Walls, and Doors Under Specified Pressure Differences.

**ASTM E330-02 -** Standard Test Method for Structural Performance of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.

**ASTM E331-00** — Standard Test Method for Water Penetration of Exterior Windows, Curtain Walls, and Doors by Uniform Static Air Pressure Difference.

AAMA 501-05 — Methods of Tests for Exterior Walls

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Report #: G402-0501-06

Specimen #2 Test Date: 5/15-16/06

Records Retention Date: 5/24/11

Page 5 of 5

#### 17.0 LIST OF OFFICIAL OBSERVERS:

Vinu J. Abraham, P.E. – HTL, Managing Partner
José E. Colón, E.I. – HTL, Operations Manager
Andrew Bush – HTL, Engineering Assistant
Ian McKenzie – HTL, Test Technician
Al Fite – HTL, Test Technician
J.D. Williams – CORAL ARICHITECTURAL PRODUCTS
David Long – CORAL ARCHITECTURAL PRODUCTS
Jim Bennett – CORAL ARCHITECTURAL PRODUCTS

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# HTL PRODUCT APPROVAL FOR PW251 CURTAIN WALL SYSTEM

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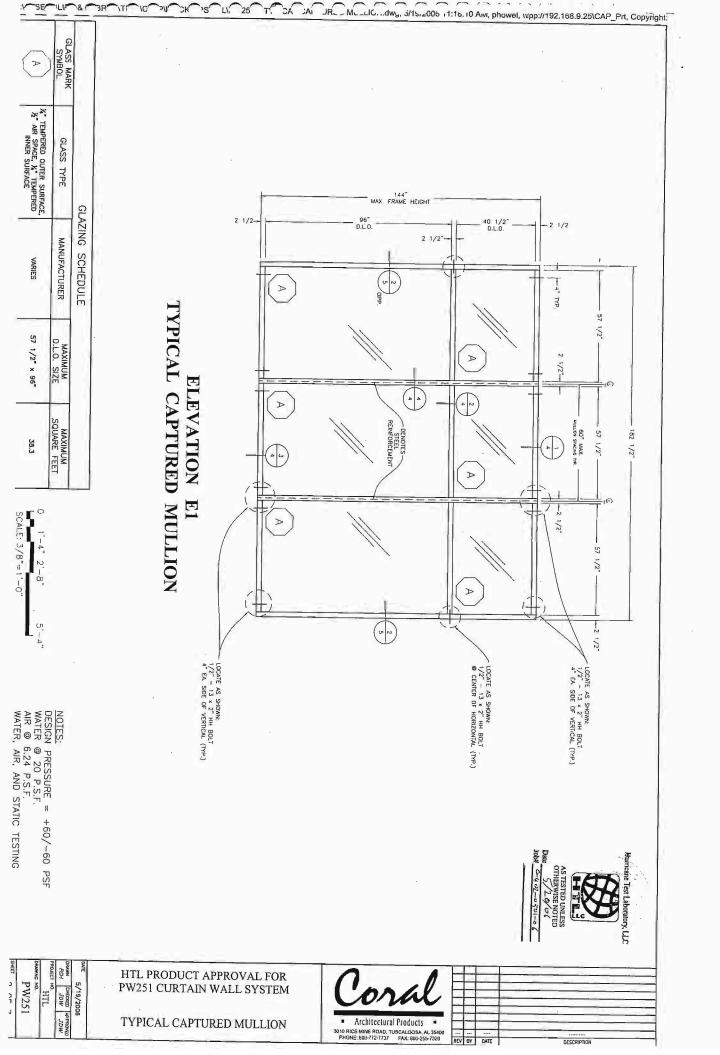
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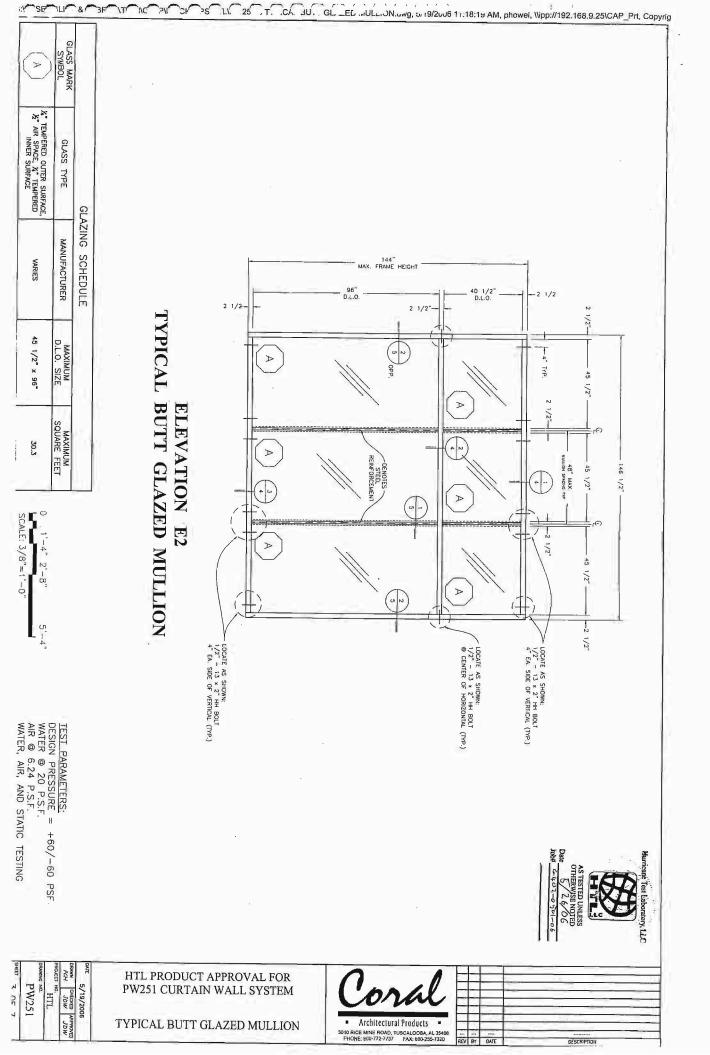
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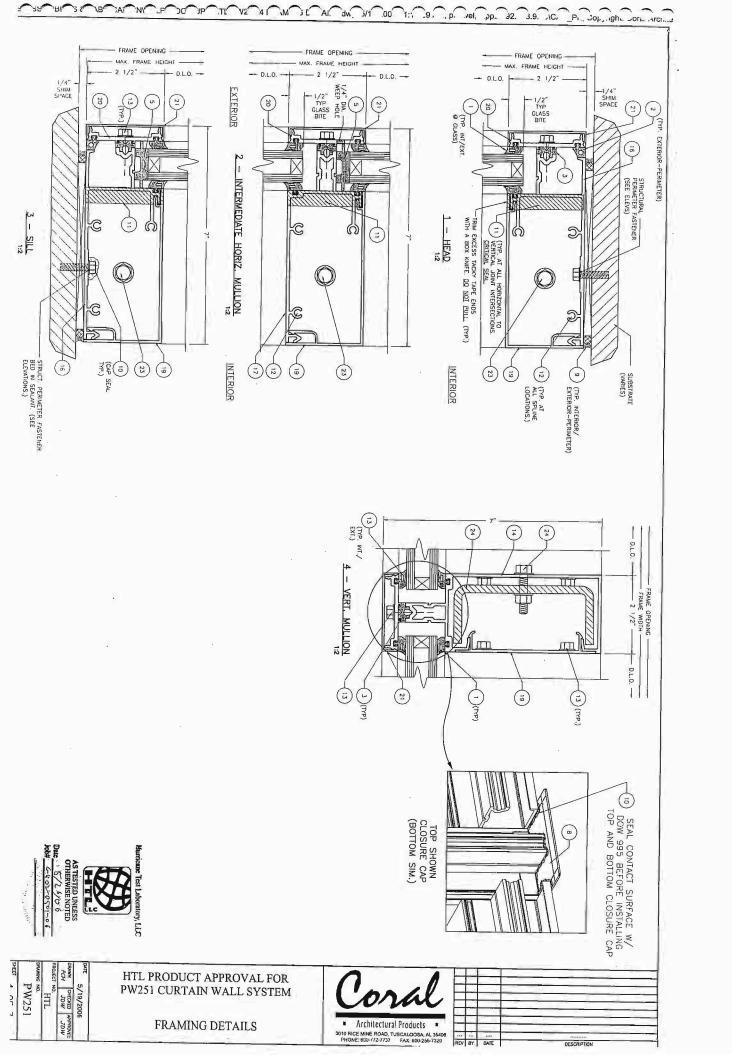
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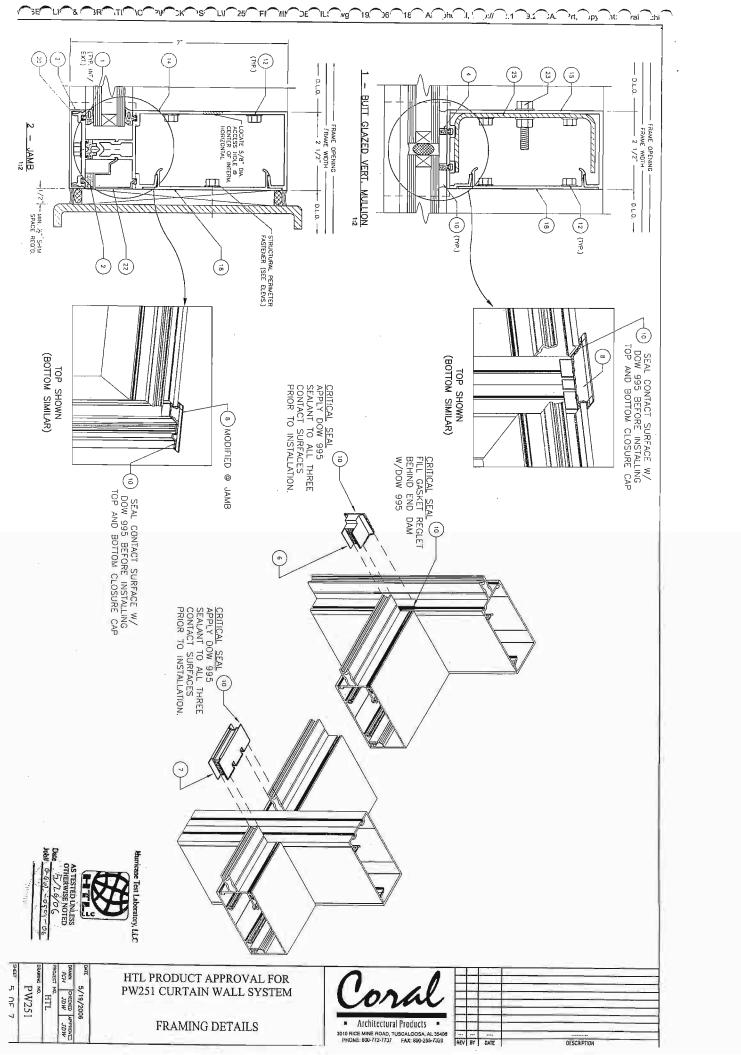
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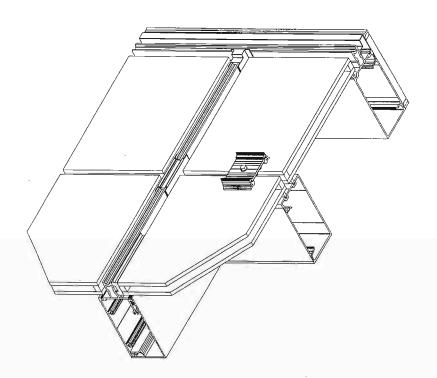








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HTL PRODUCT APPROVAL FOR PW251 CURTAIN WALL SYSTEM

FRAMING DETAILS

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20	REV	BY	DATE	DESCRIPTION

# BILL OF MATERIALS

25	24		22	23	20	19	18	17	16	15	4	Į.	1	1	10	9	0	7	6	O1	4	cu	2	-	TEM
SR151	SR150	FASTENE	PW213	PW205	PW204	PW203	PW202	PW155	PW152	PW151	PW150	A532	ASIB	SM5601	995	795	SP209	SP207	SP203	SB251	NG14	NG12	NG11	NG10	
REINFORCEMENT STEEL	REINFORCEMENT STEEL	FASTENER STL. REINFORCEMENT ATTACHMENT BOLT	JAMB POCKET FILLER	VERTICAL/HORIZONTAL FACE COVER	PRESSURE BAR	HEAD/SILL/HORIZONTAL TRIM	MULLION FILLER	INTERMEDIATE HORIZONTAL	HEAD/SILL	BUTT GLAZED MULLION	CAPTURED MULLION	PRESSURE BAR SCREW	TYPICAL SPLINE SCREW	JOINT SEALANT TAPE	INTERNAL SEALANT	PERIMETER SEALANT	VERTICAL MULLION CLOSURE CAP	BRIDGE DAM @B.G. MULLION	HORIZONTAL END DAM @CAPTURED MULL.	SETTING BLOCK	SPACER GASKET (B.G. MULLION)	PRESSURE BAR GASKET (ISOLATOR)	EXTERIOR PERIMETER GASKET	GLAZING GASKET	DESCRIPTION
4-1/2" X 1-7/8" X 10 GA.	4-1/2" X 1-7/8" X 1/4" CHANNEL	1/4" -20 X 1-1/4" BOLT W/ WASHER & NUT	.999 X 1.375 X .050	.500 X 2.500 X .062	2.443 X .433 X .125	2.500 X 4.980 X .078	.681 X 4.484 X .094	2.390 X 6.168 X .094	2.390 X 6.075 X .094	2.500 X 5.000 X .094	2.500 X 6.281 X .094	#12-14 X 1-1/4" X HWH #3	#14 X 1" HHSTS	.125 X .50 X VARIES	VARIABLE SPACE	VARIABLE SPACE	3 X 2,352 X .550	1.281 X 3.123 X .745	1.287 X 1.500 X .745	1.498 X 4.00 X .437	.194 X .250	.140 SPACE	.30 SPACE	.250 SPACE	DIMENSIONS
AS36	AS36	STEEL	6063-T6 ALUMINUM	6063-T6 ALUMINUM	6063-T6 ALUMINUM	6063-T6 ALUMINUM	6063-T6 ALUMINUM	6063-T6 ALUMINUM	6063-T6 ALUMINUM	6063-T6 ALUMINUM	6063-T6 ALUMINUM	STEEL	STEEL	BUTYL	SILICONE	SILICONE	INJECTION MOLDED PLASTIC	PLASTIC	PLASTIC	EPDM	EPDM	EPDM	EPDM	EPDM	MATERIAL
VARIES	VARIES	VARIES	CORAL	CORAL	CORAL	CORAL	CORAL	CORAL	CORAL	CORAL	CORAL	VARIES	VARIES	SCHNEE-MOREHEAD	MOD	MOD	CORAL	CORAL	CORAL	VARIES	VARIES	VARIES	VARIES	VARIES	MANUFACTURER
USED @ INTERMEDIATE VERTICAL MULLION	USED @ INTERMEDIATE VERTICAL MULLION	LOCATE @HEAD, SILL, AND INTERMEDIATE HORIZONTAL										PRESSURE BAR SCREWS (LOCATE 9" O.C.)	TYPICAL SPLINE SCREW	AT INTERSECTION OF ALL HORIZ TO VERT. JOINTS			LOCATE AT TOP AND BOTTOM OF VERTICAL	LOCATED AT BUTT GLAZE MULLION &	LOCATE ONE AT EACH END OF INTERM, HORIZONTAL	4" LONG (2 PER LITE OF GLASS)	USED FOR STRUCTURAL GLAZING	USED ON PRESSURE BAR	USE AT PERIMETER (METAL TO METAL)	USED ON EXTERIOR AND INTERIOR (GLASS TO GLASS)	NOTES



DRAWN CHECKED APPROVED
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SHEET 7 OF 7

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SELIE & JR. TINC: VIN DK

**BILL OF MATERIALS** 



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REV	BY	DATE	DESCRIPTION

HTL PRODUCT APPROVAL FOR PW251 CURTAIN WALL SYSTEM