

Global Products International Group, LLC "Your Doormay to the World's Products" 2765 Bankers Industrial Drive, Building F, Atlanta GA 30360

GPI Millwork - PVC T-Astragal (NPTA).

Tested for structural, air, water gauge performance and forced entry resistance with Jeld Wen Steel one light and Fiberglass 6 panel doors

General Notes :

- 1. This product has been designed to achieve a high structural and water resistance (water gauge) performance.
- All products tested in compliance with the following: AAMA/WDMA/CSA 101/1.S.2/A440-08 and 11 ASTM E283; ASTM E331; ASTM E330
- 3. Wood bucks by others, must be anchored properly to transfer Loads to the structure.
- 4. Product Anchors: Shall be as listed and spaced as shown on details.
- 5. Product test results, see Table 1, page 1

Test Door Specifications

Test Door #1

Door panel	-	Jeld Wen Steel faced one light - <u>In swing</u>
Jamb & Head	-	Wood - see construction notes below
Astragal	-	PVC T- Astragal (NPTA) -with shoot bolts top & bottom
Sill -	-	GPI in swing with Standard Cap 1.375"
Sill Pan -	-	GPI PVC Level
Door Sweep	-	GPI drive-in
Hardware	-	Simply Elegant Signature Line locksets
Glazing	-	1" IG with tempered 1/8" glass panels and 3/4" airspace

<u>Frame Construction - wood.</u> The frame is constructed of fingerjointed Pine jambs 4-9/16" x 1 %". The head and jambs are mortised and butt joined to the side jambs and attached with (3) 16GA 7/16" crown x 2" long staples on each side. The GPI sill is attached to the side jambs with three (3) 16GA 7/16" crown x 2" long staples on each side. A GPI PVC level sill pan is posited below the frame assembly.

Test Door # 4

<u>Frame Construction - GPI PVC</u>. The frame is constructed of solid PVC Jambs 4-9/16" x 1 %". The head and jambs are mortised and butt Joined to the side jambs and attached with (3) #8 x 2 %" wood screws on each side. The GPI sill is attached to the side jambs with three (3) #8 x 2 1/2" wood screws with counter sunk heads. GPI gaskets or silicone Is placed between the joint faces.

A GPI PVC level sill pan is posited below the frame assembly.

Official Use.







Pg 1

Table of Contents Jeld-Wen Steel **DP** Rating Air Water Gauge Forced entry Sheet # Description Double Door 30 0.29 **R** Limited Water Passed Elevations, General Notes, Results 1 Test Door 1 - Vertical Sections 2 In Swing 3 Test Door 1 - Horizontal Sections 4 Test Door 4 - Vertical Sections Jeld-Wen Fiberglass Test Door 4 - Horizontal Sections 5 6 Astragal Details Double Door 30 0.03 4.5 Passed 7 Buck and Frame Anchoring Bill of Materials and Components 8 Out Swing

Table 1: TEST RESULTS with GPI Millwork - N SERIES PVC T - ASTRAGAL



Test Unit #1

Section A~A





Official Use.













Official Use.



B.O.M.s for Test Doors # 1 and 4

tem 1.

m		Description		Material
1.		Side Jambs 1 ¼" x 4 9/16" Finger Jointed Pine	(Test 1)	Pine
2.		Head 1 ¼" x 4 9/16" Finger jointed Pine	(Test 1)	Pine
3.		Side Jambs 1 ¼" x 4 9/16" GPL Millwork solid PVC	(Test 4)	PVC
4. E		Head 1 %" X 4 9/16"GPT MIIIWORK SOIID PVC	(Test 4)	PVC Staal
5. 6		# 9 x 1" Phillips Elathead Wood screw		Steel
7.		# 10 Phillips HD screw with 1 ½" minimum embed		Steel
8.		#8 x 3" Phillips Flathead Wood Screw		Steel
9.		#8 x 1" Phillips Flathead Wood screw		Steel
10.		Compression Weatherstrip (Q - Lon QDS-650 or similar)		Vinyl
11.		GPI Millwork In swing threshold sill with 1.375" cap	(Test 1)	Vinyl/Alum
12.		GPT Millwork outswing threshold sill w/ high dam 1.75"	(Test 4)	Vinyi/Alum Staal
13.		Astragal Infow Bolt, steel rod 5/16 x 18 Astragal Balt Strika Diata Laastad on Maad		Steel
14.		# 9 y 2 1/ " Dhilling CS Mood Scrows		Steel
15.		# 6 X 2 /1 Finnips C3 Wood Screws, Alternatively, 16 Ga 7/16" crown x 2" long staples		Steel
16	•	Simply Elegant Signature Line Lockset		Aluminum
17		Simply Elegant Dead Bolt		Aluminum
18		GPI Millwork PVC T-Astragal (NPTA)		PVC
19.		Astragal Bolt Strike Plate on bottom sill		
20.		2 x wood buck		Wood
21.		Non compression shim		Wood
22.		Dow 995 silicone sealant (or similar)	(Test 1)	Silicone
23.		1" Impact IG unit by ODL	(Test 1)	Glass
24.		1/8" tempered glass	(Test 1)	Glass
25.		Drive in Weather seal	(Test 1)	PVC
26.		Lock block (solid wood x 12' long)		Wood
27.		Top rail (wood composite)	(Test 4)	Wood
28.		Bottom rail (wood composite)	(Test 4)	Wood
29.		Expanded polystyrene (1.0 to 1.25lbs density by Jeld Wen)		Foam
30.		Top rail (LVL)	(Test 1)	LVL
31.		Bottom rail (25GA min galvanized steel)	(Test 1)	Steel
32.		Jeld Wen Steel door panel skin material (24 GA Galvanized)	(Test 1)	Steel
	٠	A-525 commercial quality 0.021" min thick		Galvanized
33.		ODL lite Allen frame (alum 6063 T5)		Aluminum
34.		Hinge side stile (finger jointed LVL)	(Test 1)	LVL
35.		Latch side stile (finger jointed LVL)	(Test 1)	LVL
36.		3/16" ITW Buildex Tapcon with 1.25" min embedment	(Test 1)	Steel
37.		GPI Millwork PVC level sill pan		PVC
38.		Hinge side stile (wood composite)	(Test 4)	Wood
39.		Latch side stile (wood composite)	(Test 4)	Wood





TEST REPORT

Report No.: E1391.01-550-44

Rendered to:

GLOBAL PRODUCTS INTERNATIONAL GROUP, LLC Atlanta, Georgia

PRODUCT TYPE: In-Swing Doors (XX) **SERIES/MODEL**: with PVC Astragal (Test Door #1)

AAMA/WDMA/CSA 101/I.S.2/A440-11, NAFS - North American Fenestration Standard/Specification for Windows, Doors, and Skylights

Title	Summary of Results
AAMA/WDMA/CSA 101/I.S.2/A440-11	Class PG R-30 1880 mm x 2083 mm (74 x 82in) – LW-SHD
Design Pressure	±1440 Pa (±30.08 psf)
Air Infiltration	<1.5 L/s/m ² (0.29 cfm/ft ²)
Water Penetration Resistance Test Pressure	Limited Water
Uniform Load Structural Test Pressure	±2160 Pa (±45.11 psf)

Test Dates:10/10/14Through:12/02/14Report Date:05/15/15

Reference must be made to Report No. E1391.01-550-44, dated 05/15/15 for complete test specimen description and detailed test results.





1.0 Report Issued To:	Global Products International Group, LLC 2765 Bankers Industrial Drive, Building F Atlanta, Georgia 30360
2.0 Test Laboratory:	Architectural Testing, Inc. an Intertek Company ("Intertek-ATI") 1701 Westfork Drive, Suite 106 Lithia Springs, Georgia 30122 770-941-6916

3.0 Project Summary:

- **3.1 Product Type**: In-Swing Door (XX)
- **3.2 Series/Model**: with PVC Astragal (Test Door #1)
- **3.3 Compliance Statement**: Results obtained are tested values and were secured by using the designated test method(s). The specimens tested successfully met the performance requirements for the following ratings:

Test Specimen(s)	Title	Summary of Results	
1	101/I.S.2/A440-11	PG R-30 1880 mm x 2083 mm (74 x 82in) – LW-SHD	

- 3.4 Test Dates: 10/10/2014 12/02/2014
- **3.5 Test Record Retention End Date**: All test records for this report will be retained until December 2, 2018.
- **3.6 Test Location**: Intertek-ATI test facility in Lithia Springs, Georgia.
- **3.7 Test Sample Source**: The test specimen was provided by the client. Representative samples of the test specimen(s) will be retained by Intertek-ATI for a minimum of four years from the test completion date.
- **3.8 Drawing Reference**: The test specimen drawings have been reviewed by Intertek-ATI and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Intertek-ATI per the drawings located in Appendix D. Any deviations are documented herein or on the drawings.





3.0 Project Summary: (Continued)

3.9 List of Official Observers:

<u>Name</u>	<u>Company</u>
Terry Wiley	Global Products International
Joel Ivey	Intertek-ATI
Jon Gardner	Intertek-ATI
Ian McKenzie	Intertek-ATI
Jacques Johnson	Intertek-ATI
Terry Wiley Joel Ivey Jon Gardner Ian McKenzie Jacques Johnson	Global Products Internationa Intertek-ATI Intertek-ATI Intertek-ATI Intertek-ATI Intertek-ATI

4.0 Test Method(s):

AAMA/WDMA/CSA 101/I.S.2/A440-11, NAFS 2011 - North American Fenestration Standard/Specification for Windows, Doors, and Skylights

5.0 Test Specimen Description:

5.1 Product Sizes

Overall Area:	Wi	dth	Height	
3.9 m ² (41.9 ft ²)	millimeters	inches	millimeters	inches
Overall size	1876	73-7/8	2076	81-3/4
Door Leaf	908	35-3/4	2007	79





5.0 Test Specimen Description: (Continued)

5.2 Frame Construction:

Frame Member Material		Description	
Head/ jamb	Wood	Extruded	
Sill	Al/PVC	GPI In-swing high dam Cap-1.75"	
Sill pan	PVC	Positioned below the frame assembly	
	Joinery Type	Detail	
Head/jamb	Mortised and Butted	Silicone is placed between the joint faces. The head and jamb are mortised and butt joined to the side jambs with three $#8 \times 2-1/2"$ wood screws on each side.	
Sill	Mortised and Butted	Silicone is placed between the joint faces. The sill is secured to the side of the jambs with three $#8 \times 2-1/2"$ wood screws with counter sink heads.	

5.3 Leaf Construction:

Leaf Member	Material	Description	
Door	Steel	24 Ga Steel skin with expanded polystyrene	
Top rail	LVL	Extruded	
Bottom rail	Steel	Extruded 24ga Steel	
Hinge side stile	LVL	Extruded	
Latch side stile	LVL	Extruded	
T-Astragal	PVC	PVC T-Astragal (NPTA - with shoot bolts top &	
1 Histi ugui	170	bottom)	
	Joinery Type	Detail	
All corners	Mortised and	Silicone is used between the joint faces. The	
All corners	Butted	corners are secured with Finger Jointed LVL.	
Actragal	Mechanically	Astragal is fastened to the head and the sill	
Asuagai	Fastened	using two #8 x 2-1/4" screws.	

5.4 Weatherstripping:

Description	Quantity	Location
Compression gasket	3 rows	Interior of vent head/sill/jamb. One row is placed on the Astragal on the meeting stile between the door leaves.





5.0 Test Specimen Description: (Continued)

5.5 Glazing:

Glass Type	Spacer Type	Interior Lite	Exterior Lite	Glazing Method
1" IG	Air Space 3/4"	1/8"	1/8"	Exterior DOW 995 silicone

Location	Quantity	uantity Daylight Opening millimeters inches		Glass Bite	
Location	Quantity				
Door Leaf	2	1600 x 533	63 x 21	3/8"	

5.6 Drainage: No Drainage was utilized.

5.7 Hardware:

Description	Quantity	Location
Butt Hinges	6	Three on each stile of the door leaf.
Strike Plate	4	One on the frame head, one on the sill, and two on the style of the door leaf.
Handle	1	On the primary door leaf.
Simple Elegant Signature Line	1	On the primary door leaf.
Locking Slide Bolt	2	One on the top of the Astragal and one on the bottom of the Astragal.

5.8 Reinforcement: No reinforcement was utilized.

6.0 Installation:

The specimen was installed into a 2x8 Pine wood buck. The rough opening allowed for a 1/4" shim space. The exterior perimeter of the door was sealed with sealant.

Location	Anchor Description	Anchor Location
Hoad cill & jamba	#10 x 1-1/2" Phillips head	6" from each end, 12" on center
neau, sin & jainos	screw	thereafter.
	$#9 \times 2 1/4"$ concut and $#9 \times 1$	Two are secured to the sill of
Astragal	#6 X 5-1/4 SCIEW and #6 X 1-	the frame and two are secured
	1/4 Screws	into the head of the frame.





7.0 Test Results:	The temperature during testing was 21°C (70°F).	The results are
	tabulated as follows:	

Title of Test	Results	Allowed	Note
Air Leakage,			
Infiltration per ASTM E 283	<1.5 L/s/m ²	1.5 L/s/m ²	
at 75 Pa (1.57 psf)	$(0.29 \text{cfm}/\text{ft}^2)$	$(0.3 \text{ cfm/ft}^2) \text{ max.}$	1
Water Penetration,			
per ASTM E 331			
Limited Water (No Pressure)	Pass	No leakage	2
Uniform Load Deflection,			
per ASTM E 330			
taken along astragal			
+1440 Pa (+30.08 psf)	33.0 mm (1.3")		
-1440 Pa (-30.08 psf)	25.4 mm (1.0")	Report Only	4, 5, 6
Uniform Load Deflection,			
per ASTM E 330			
taken along bottom of active door			
+1440 Pa (+30.08 psf)	5.1 mm (0.2")		
-1440 Pa (-30.08 psf)	10.2 mm (0.4")	Report Only	4, 5, 6
Uniform Load Structural,			
per ASTM E 330			
taken along astragal			
+2160 Pa (+45.11 psf)	3.6 mm (0.14")		
-2160 Pa (-45.11 psf)	3.6 mm (0.14")	8.1 mm (0.32") max	5, 6
Uniform Load Structural,			
per ASTM E 330			
taken along bottom of active door			
+2160 Pa (+45.11 psf)	1.3 mm (0.05")		
-2160 Pa (-45.11 psf)	0.8 mm (0.03")	3.6 mm (0.14 ") max	5, 6
Forced Entry Resistance,			
per AAMA 1304,			
Type: N/A - Grade: 10	Pass	No entry	



7.0 Test Results: (Continued)

Note 1: The tested specimen meets (or exceeds) the performance levels specified in AAMA/WDMA/CSA 101/I.S.2/A440 for air leakage resistance.

Note 2: With and without insect screen.

Note 3: The client opted to start at a pressure higher than the minimum required. Test results are reported under Optional Performance.

Note 4: The deflections reported are not limited by AAMA/WDMA/CSA 101/I.S.2/A440 for this product designation. The deflection data is recorded in this report for special code compliance and information only.

Note 5: Loads were held for 10 seconds.

Note 6: Tape and film were used to seal against air leakage during structural testing. In our opinion, the tape and film did not influence the results of the test.

Intertek-ATI will service this report for the entire test record retention period. Test records that are retained such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation will be retained by Intertek-ATI for the entire test record retention period.

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 Intertek-ATI.

For INTERTEK-ATI:

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Jacques R. Johnson Project Technician

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Ian J. McKenzie Lab Manager – Regional Operations

Attachments (pages): This report is complete only when all attachments listed are included. Appendix-A: Alteration Addendum (1) Appendix-B: Location of Air Seal (1) Appendix-C: Photographs (1) Appendix-D: Drawings (8)

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Test Report No.: E1391.01-550-44 Report Date: 05/15/15

Appendix A

Alteration Addendum

Note: No alterations were required.



Appendix B

Location of Air Seal: The air seal between the test specimen and the test wall is detailed below. The seal is made of foam weatherstripping and is attached to the edge of the test specimen buck. The test specimen buck is placed against the test wall and clamped in place, compressing the weatherstripping and creating a seal.







Test Report No.: E1391.01-550-44 Report Date: 05/15/15

Appendix C

Photographs



Photo No. 1 Specimen #1 Rear View





Test Report No.: E1391.01-550-44 Report Date: 05/15/15

Appendix D

Drawings



Global Products International Group, LLC "Your Doormay to the World's Products" 2765 Bankers Industrial Drive, Building F, Atlanta GA 30360

GPI Millwork - PVC T-Astragal (NPTA).

Tested for structural, air, water gauge performance and forced entry resistance with Jeld Wen Steel one light and Fiberglass 6 panel doors

General Notes :

- 1. This product has been designed to achieve a high structural and water resistance (water gauge) performance.
- All products tested in compliance with the following: AAMA/WDMA/CSA 101/1.S.2/A440-08 and 11 ASTM E283; ASTM E331; ASTM E330
- 3. Wood bucks by others, must be anchored properly to transfer Loads to the structure.
- 4. Product Anchors: Shall be as listed and spaced as shown on details.
- 5. Product test results, see Table 1, page 1

Test Door Specifications

Test Door #1

Door panel	-	Jeld Wen Steel faced one light - <u>In swing</u>
Jamb & Head	-	Wood - see construction notes below
Astragal	-	PVC T- Astragal (NPTA) -with shoot bolts top & bottom
Sill -	-	GPI in swing with Standard Cap 1.375"
Sill Pan -	-	GPI PVC Level
Door Sweep	-	GPI drive-in
Hardware	-	Simply Elegant Signature Line locksets
Glazing	-	1" IG with tempered 1/8" glass panels and 3/4" airspace

<u>Frame Construction - wood.</u> The frame is constructed of fingerjointed Pine jambs 4-9/16" x 1 %". The head and jambs are mortised and butt joined to the side jambs and attached with (3) 16GA 7/16" crown x 2" long staples on each side. The GPI sill is attached to the side jambs with three (3) 16GA 7/16" crown x 2" long staples on each side. A GPI PVC level sill pan is posited below the frame assembly.

Test Door # 4

<u>Frame Construction - GPI PVC</u>. The frame is constructed of solid PVC Jambs 4-9/16" x 1 %". The head and jambs are mortised and butt Joined to the side jambs and attached with (3) #8 x 2 %" wood screws on each side. The GPI sill is attached to the side jambs with three (3) #8 x 2 1/2" wood screws with counter sunk heads. GPI gaskets or silicone Is placed between the joint faces.

A GPI PVC level sill pan is posited below the frame assembly.

Official Use.







Pg 1

Table of Contents Jeld-Wen Steel **DP** Rating Air Water Gauge Forced entry Sheet # Description Double Door 30 0.29 **R** Limited Water Passed Elevations, General Notes, Results 1 Test Door 1 - Vertical Sections 2 In Swing 3 Test Door 1 - Horizontal Sections 4 Test Door 4 - Vertical Sections Jeld-Wen Fiberglass Test Door 4 - Horizontal Sections 5 6 Astragal Details Double Door 30 0.03 4.5 Passed 7 Buck and Frame Anchoring Bill of Materials and Components 8 Out Swing

Table 1: TEST RESULTS with GPI Millwork - N SERIES PVC T - ASTRAGAL



Test Unit #1

Section A~A





Official Use.













Official Use.



B.O.M.s for Test Doors # 1 and 4

tem 1.

m		Description		Material
1.		Side Jambs 1 ¼" x 4 9/16" Finger Jointed Pine	(Test 1)	Pine
2.		Head 1 ¼" x 4 9/16" Finger jointed Pine	(Test 1)	Pine
3.		Side Jambs 1 ¼" x 4 9/16" GPL Millwork solid PVC	(Test 4)	PVC
4. E		Head 1 %" X 4 9/16"GPT MIIIWORK SOIID PVC	(Test 4)	PVC Staal
5. 6		# 9 x 1" Phillips Elathead Wood screw		Steel
7.		# 10 Phillips HD screw with 1 ½" minimum embed		Steel
8.		#8 x 3" Phillips Flathead Wood Screw		Steel
9.		#8 x 1" Phillips Flathead Wood screw		Steel
10.		Compression Weatherstrip (Q - Lon QDS-650 or similar)		Vinyl
11.		GPI Millwork In swing threshold sill with 1.375" cap	(Test 1)	Vinyl/Alum
12.		GPT Millwork outswing threshold sill w/ high dam 1.75"	(Test 4)	Vinyi/Alum Staal
13.		Astragal Infow Bolt, steel rod 5/16 x 18 Astragal Balt Strika Diata Laastad on Maad		Steel
14.		# 9 y 2 1/ " Dhilling CS Mood Scrows		Steel
15.		# 6 X 2 /1 Finnips C3 Wood Screws, Alternatively, 16 Ga 7/16" crown x 2" long staples		Steel
16	•	Simply Elegant Signature Line Lockset		Aluminum
17		Simply Elegant Dead Bolt		Aluminum
18		GPI Millwork PVC T-Astragal (NPTA)		PVC
19.		Astragal Bolt Strike Plate on bottom sill		
20.		2 x wood buck		Wood
21.		Non compression shim		Wood
22.		Dow 995 silicone sealant (or similar)	(Test 1)	Silicone
23.		1" Impact IG unit by ODL	(Test 1)	Glass
24.		1/8" tempered glass	(Test 1)	Glass
25.		Drive in Weather seal	(Test 1)	PVC
26.		Lock block (solid wood x 12' long)		Wood
27.		Top rail (wood composite)	(Test 4)	Wood
28.		Bottom rail (wood composite)	(Test 4)	Wood
29.		Expanded polystyrene (1.0 to 1.25lbs density by Jeld Wen)		Foam
30.		Top rail (LVL)	(Test 1)	LVL
31.		Bottom rail (25GA min galvanized steel)	(Test 1)	Steel
32.		Jeld Wen Steel door panel skin material (24 GA Galvanized)	(Test 1)	Steel
	٠	A-525 commercial quality 0.021" min thick		Galvanized
33.		ODL lite Allen frame (alum 6063 T5)		Aluminum
34.		Hinge side stile (finger jointed LVL)	(Test 1)	LVL
35.		Latch side stile (finger jointed LVL)	(Test 1)	LVL
36.		3/16" ITW Buildex Tapcon with 1.25" min embedment	(Test 1)	Steel
37.		GPI Millwork PVC level sill pan		PVC
38.		Hinge side stile (wood composite)	(⊤est 4)	Wood
39.		Latch side stile (wood composite)	(Test 4)	Wood





TEST REPORT

Report No.: E1391.02-550-44

Rendered to:

GLOBAL PRODUCTS INTERNATIONAL GROUP, LLC Atlanta, Georgia

PRODUCT TYPE: Out-Swing Doors (XX) **SERIES/MODEL**: with PVC Astragal (Test Door #4)

Title	Summary of Results
	Class PG R-30
AAMA/WDMA/CSA 101/I.S.2/A440-11	1880 mm x 2057 mm
	(74 x 81in) - SHD
Design Pressure	±1440 Pa (±30.08 psf)
Air Infiltration	<1.5 L/s/m ² (0.03 cfm/ft ²)
Water Penetration Resistance Test Pressure	220 Pa (4.59 psf)
Uniform Load Structural Test Pressure	±2160 Pa (±45.11 psf)

Test Dates :	11/24/14
Through:	12/04/14
Report Date :	05/15/15

Reference must be made to Report No. E1391.02-550-44, dated 05/15/15 for complete test specimen description and detailed test results.





1.0 Report Issued To:	Global Products International Group, LLC 2765 Bankers Industrial Drive, Building F Atlanta, Georgia 30360
2.0 Test Laboratory:	Architectural Testing, Inc. an Intertek Company ("Intertek-ATI") 1701 Westfork Drive, Suite 106 Lithia Springs, Georgia 30122 770-941-6916

3.0 Project Summary:

- 3.1 Product Type: Out-Swing Door (XX)
- 3.2 Series/Model: with PVC Astragal (Test Door #4)
- **3.3 Compliance Statement**: Results obtained are tested values and were secured by using the designated test method(s). The specimens tested successfully met the performance requirements for the following ratings:

Test Specimen(s)	Title	Summary of Results
1	101/I.S.2/A440-11	Class PG R-30 1880 mm x 2057 mm (74 x 81in) – SHD

- **3.4 Test Dates**: 10/10/2014 12/04/2014
- **3.5 Test Record Retention End Date**: All test records for this report will be retained until December 4, 2018.
- **3.6 Test Location**: Intertek-ATI test facility in Lithia Springs, Georgia.
- **3.7 Test Sample Source**: The test specimen was provided by the client. Representative samples of the test specimen(s) will be retained by Intertek-ATI for a minimum of four years from the test completion date.
- **3.8 Drawing Reference**: The test specimen drawings have been reviewed by Intertek-ATI and are representative of the test specimen(s) reported herein. Test specimen construction was verified by Intertek-ATI per the drawings located in Appendix D. Any deviations are documented herein or on the drawings.





3.0 Project Summary: (Continued)

3.1 List of Official Observers:

<u>Name</u>

<u>Company</u>

Terry Wiley	Global Products International
Ryan Chapman	Global Products International
Joel Ivey	Intertek-ATI
Jon Gardner	Intertek-ATI
Ian McKenzie	Intertek-ATI
Jacques Johnson	Intertek-ATI

4.0 Test Method(s):

AAMA/WDMA/CSA 101/I.S.2/A440-11, NAFS 2011 – North American Fenestration Standard/Specification for Windows, Doors, and Skylights

5.0 Test Specimen Description:

5.1 Product Sizes:

Test Specimen #1:

Overall Area:	Width		Hei	ght
3.9 m ² (41.5 ft ²)	millimeters	inches	millimeters	inches
Overall size	1876	73-7/8	2054	80-7/8
Door Leaf	908	35-3/4	2007	79





5.0 Test Specimen Description: (Continued)

5.2 Frame Construction:

Frame Member	Material	Description
Head/ jamb	PVC	Extruded
Sill	Al/PVC	GPI Out-swing high dam Cap-1.75"
Sill pan	PVC	Positioned below the frame assembly

	Joinery Type	Detail
Haad (taash		Silicone is placed between the joint faces. The
	Mortised and	head and jamb are mortise and butt joined to
neau/jallib	Butted	the side jambs with three #8 x 2-1/2" wood
		screws on each side.
Sill		Silicone is placed between the joint faces. The
	Mortised and	sill is secured to the side of the jambs with
	Butted	three #8 x 2-1/2" wood screws with counter
		sink heads.

5.3 Leaf Construction:

Leaf Member	Material	Description
Door	Fiberglass	Fiberglass skin with expanded polystyrene
Top rail	Wood	Extruded
Bottom rail	Wood	Extruded
Hinge side stile	Wood	Extruded
Latch side stile	Wood	Extruded
T. Astrogal	PVC	PVC T-Astragal (NPTA - with shoot bolts top &
I-AStragar		bottom)

	Joinery Type	Detail
All corners	Fastened	Silicone is placed between the joint faces. The corners are fastened.
T-Astragal	Mechanically Fastened	Astragal is fastened to the head and the sill using two $#8 \times 2-1/4$ " screws.





5.0 Test Specimen Description: (Continued)

5.4Weatherstripping:

Description	Quantity	Location
Compression gasket	3 rows	Interior of vent head/sill/jamb. One row is placed on the Astragal on the meeting stile between the door leaves.

5.5 Drainage: No drainage was utilized.

5.6 Hardware:

Description	Quantity	Location
Butt Hinges	6	Three on each stile of the door leaf.
Strike Plate	4	One on the frame head, one on the sill, and two on the style of the door leaf.
Handle	1	On the primary door leaf.
Simple Elegant Signature Line	1	On the primary door leaf.
Locking Slide Bolt	2	One on the top of the Astragal and one on the bottom of the Astragal.

5.7 Reinforcement: No reinforcement was utilized.

6.0 Installation:

The specimen was installed into a 2x8 Spruce-Pine-Fir wood buck. The rough opening allowed for a 1/4" shim space. The exterior perimeter of the door was sealed with sealant.

Location	Anchor Description	Anchor Location
Hoad cill & jamba	#10 x 1-1/2" Phillips head	6" from each end, 12" on center
neau, sin & jainds	screw	thereafter.
	#9 y 2 1 / 4" concur and	Two are secured into the sill of
Astragal	$#0 \times 5 \cdot 1/4$ Screw and $#9 \times 1 \cdot 1/4$ " screws	the frame and two are secured
	#0 x 1-1/4 SCIEWS	into the head of the frame.





7.0 Test Results: The temperature during testing was 21°C (70°F). The results are tabulated as follows:

Title of Test	Results	Allowed	Note
Air Leakage,			
Infiltration per ASTM E 283	<0.2 L/s/m ²	1.5 L/s/m ²	
at 75 Pa (1.57 psf)	(0.03 cfm/ft^2)	$(0.3 \text{ cfm/ft}^2) \text{ max.}$	1
Water Penetration,			
per ASTM E 547			
at 220 (4.59 psf)	Pass	No leakage	2
Uniform Load Deflection,			
per ASTM E 330			
taken along astragal			
+1440 Pa (+30.08 psf)	7.6 mm (0.3")		
-1440 Pa (-30.08 psf)	15.2 mm (0.6")	Report Only	4, 5, 6
Uniform Load Deflection,			
per ASTM E 330			
taken along bottom of active door			
+1440 Pa (+30.08 psf)	2.5 mm (0.1")		
-1440 Pa (-30.08 psf)	17.8 mm (0.7")	Report Only	4, 5, 6
Uniform Load Structural,			
per ASTM E 330			
taken along astragal			
+2160 Pa (+45.11 psf)	0.5 mm (0.02")		
-2160 Pa (-45.11 psf)	0.5 mm (0.02")	8.4 mm (0.33") max	5, 6
Uniform Load Structural,			
per ASTM E 330			
taken along bottom of active door			
+2160 Pa (+45.11 psf)	0.8 mm (0.03")		
-2160 Pa (-45.11 psf)	2.3 mm (0.09")	3.6 mm (0.14") max	5, 6
Forced Entry Resistance,			
per AAMA 1304,			
Type: N/A - Grade: 10	Pass	No entry	



7.0 Test Results: (Continued)

Note 1: The tested specimen meets (or exceeds) the performance levels specified in AAMA/WDMA/CSA 101/I.S.2/A440 for air leakage resistance.

Note 2: With and without insect screen.

Note 3: The client opted to start at a pressure higher than the minimum required. Test results are reported under Optional Performance.

Note 4: The deflections reported are not limited by AAMA/WDMA/CSA 101/I.S.2/A440 for this product designation. The deflection data is recorded in this report for special code compliance and information only.

Note 5: Loads were held for 10 seconds.

Note 6: Tape and film were used to seal against air leakage during structural testing. In our opinion, the tape and film did not influence the results of the test.





Intertek-ATI will service this report for the entire test record retention period. Test records that are retained such as detailed drawings, datasheets, representative samples of test specimens, or other pertinent project documentation will be retained by Intertek-ATI for the entire test record retention period.

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 Intertek-ATI.

For INTERTEK-ATI:

Eight ly signed by shequer Johnson

Jacques R. Johnson Project Technician

Ja The

Ian J. McKenzie Lab Manager – Regional Operations

JRJ:IJM/jab

Attachments (pages): This report is complete only when all attachments listed are included. Appendix-A: Alteration Addendum (1) Appendix-B: Location of Air Seal (1) Appendix-C: Photographs (1)

Appendix-D: Drawings (8)





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Appendix A

Alteration Addendum

Note: No alterations were required.



Appendix B

Location of Air Seal: The air seal between the test specimen and the test wall is detailed below. The seal is made of foam weatherstripping and is attached to the edge of the test specimen buck. The test specimen buck is placed against the test wall and clamped in place, compressing the weatherstripping and creating a seal.







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Appendix C

Photographs



Photo No. 1 Specimen #1 Front View





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Appendix D

Drawings



Global Products International Group, LLC "Your Doormay to the World's Products" 2765 Bankers Industrial Drive, Building F, Atlanta GA 30360

GPI Millwork - PVC T-Astragal (NPTA).

Tested for structural, air, water gauge performance and forced entry resistance with Jeld Wen Steel one light and Fiberglass 6 panel doors

General Notes :

- 1. This product has been designed to achieve a high structural and water resistance (water gauge) performance.
- All products tested in compliance with the following: AAMA/WDMA/CSA 101/1.S.2/A440-08 and 11 ASTM E283; ASTM E331; ASTM E330
- 3. Wood bucks by others, must be anchored properly to transfer Loads to the structure.
- 4. Product Anchors: Shall be as listed and spaced as shown on details.
- 5. Product test results, see Table 1, page 1

Test Door Specifications

Test Door #1

Door panel	-	Jeld Wen Steel faced one light - <u>In swing</u>
Jamb & Hea	d -	Wood - see construction notes below
Astragal	-	PVC T- Astragal (NPTA) -with shoot bolts top & bottom
Sill	-	GPI in swing with Standard Cap 1.375"
Sill Pan	-	GPI PVC Level
Door Sweep) -	GPI drive-in
Hardware	-	Simply Elegant Signature Line locksets
Glazing	-	1" IG with tempered 1/8" glass panels and 3/4" airspace

<u>Frame Construction - wood.</u> The frame is constructed of fingerjointed Pine jambs 4-9/16" x 1 %". The head and jambs are mortised and butt joined to the side jambs and attached with (3) 16GA 7/16" crown x 2" long staples on each side. The GPI sill is attached to the side jambs with three (3) 16GA 7/16" crown x 2" long staples on each side. A GPI PVC level sill pan is posited below the frame assembly.

Test Door # 4

<u>Frame Construction - GPI PVC</u>. The frame is constructed of solid PVC Jambs 4-9/16" x 1 %". The head and jambs are mortised and butt Joined to the side jambs and attached with (3) #8 x 2 %" wood screws on each side. The GPI sill is attached to the side jambs with three (3) #8 x 2 1/2" wood screws with counter sunk heads. GPI gaskets or silicone Is placed between the joint faces.

A GPI PVC level sill pan is posited below the frame assembly.





6-0 X 6-8 (XX) OUTSWING

Pg 1

Jeld-Wen Steel	DP Rating	Air	Water Gauge	Forced entry		Table of Contents
=	0			· · · · · · · · · · · · · · · · · · ·	Sheet #	Description
Double Door	30	0.29	R Limited Water	Passed	1	Elevations, General Notes, Resu
					2	Test Door 1 - Vertical Sections
In Swing					3	Test Door 1 - Horizontal Sectior
					4	Test Door 4 - Vertical Sections
Jeld-Wen Fiberglass					5	Test Door 4 - Horizontal Sectior
Double Deer	20 0.02		Dassad	6	Astragal Details	
Double Dool	50	0.05	4.5	Passeu	7	Buck and Frame Anchoring
Out Swing					8	Bill of Materials and Componen
0 41 0 1118						

Table 1: TEST RESULTS with GPI Millwork - N SERIES PVC T - ASTRAGAL



Test Unit #1

Section A~A





Official Use.

'g '2













Official Use.



B.O.M.s for Test Doors # 1 and 4

tem 1.

m		Description		Material
1.		Side Jambs 1 ¼" x 4 9/16" Finger Jointed Pine	(Test 1)	Pine
2.		Head 1 ¼" x 4 9/16" Finger jointed Pine	(Test 1)	Pine
3.		Side Jambs 1 ¼" x 4 9/16" GPL Millwork solid PVC	(Test 4)	PVC
4. E		Head 1 %" X 4 9/16"GPT MIIIWORK SOIID PVC	(Test 4)	PVC Staal
5. 6		# 9 x 1" Phillips Elathead Wood screw		Steel
7.		# 10 Phillips HD screw with 1 ½" minimum embed		Steel
8.		#8 x 3" Phillips Flathead Wood Screw		Steel
9.		#8 x 1" Phillips Flathead Wood screw		Steel
10.		Compression Weatherstrip (Q - Lon QDS-650 or similar)		Vinyl
11.		GPI Millwork In swing threshold sill with 1.375" cap	(Test 1)	Vinyl/Alum
12.		GPT Millwork outswing threshold sill w/ high dam 1.75"	(Test 4)	Vinyi/Alum Staal
13.		Astragal Infow Bolt, steel rod 5/16 x 18 Astragal Balt Strika Diata Laastad on Maad		Steel
14.		# 9 y 2 1/ " Dhilling CS Mood Scrows		Steel
15.		# 6 X 2 /1 Finnips C3 Wood Screws, Alternatively, 16 Ga 7/16" crown x 2" long staples		Steel
16	•	Simply Elegant Signature Line Lockset		Aluminum
17		Simply Elegant Dead Bolt		Aluminum
18		GPI Millwork PVC T-Astragal (NPTA)		PVC
19.		Astragal Bolt Strike Plate on bottom sill		
20.		2 x wood buck		Wood
21.		Non compression shim		Wood
22.		Dow 995 silicone sealant (or similar)	(Test 1)	Silicone
23.		1" Impact IG unit by ODL	(Test 1)	Glass
24.		1/8" tempered glass	(Test 1)	Glass
25.		Drive in Weather seal	(Test 1)	PVC
26.		Lock block (solid wood x 12' long)		Wood
27.		Top rail (wood composite)	(Test 4)	Wood
28.		Bottom rail (wood composite)	(Test 4)	Wood
29.		Expanded polystyrene (1.0 to 1.25lbs density by Jeld Wen)		Foam
30.		Top rail (LVL)	(Test 1)	LVL
31.		Bottom rail (25GA min galvanized steel)	(Test 1)	Steel
32.		Jeld Wen Steel door panel skin material (24 GA Galvanized)	(Test 1)	Steel
	٠	A-525 commercial quality 0.021" min thick		Galvanized
33.		ODL lite Allen frame (alum 6063 T5)		Aluminum
34.		Hinge side stile (finger jointed LVL)	(Test 1)	LVL
35.		Latch side stile (finger jointed LVL)	(Test 1)	LVL
36.		3/16" ITW Buildex Tapcon with 1.25" min embedment	(Test 1)	Steel
37.		GPI Millwork PVC level sill pan		PVC
38.		Hinge side stile (wood composite)	(Test 4)	Wood
39.		Latch side stile (wood composite)	(Test 4)	Wood