



**TEST REPORT**

**Report No.:** F8490.01-251-47

**Rendered to:**

Endura Products, Inc.  
Colfax, NC

**PRODUCT TYPE:** 6/8, Inswing, XX, Flush Vista Grande Door with Articulating Sill

**SERIES/MODEL:** "Masonite Glazed Series"

**Summary of Results**

	<b>Summary of Results</b>
<b>Title</b>	<b>Test Specimen #1</b>
Design Pressure	+1920 Pa (+40.10 psf)
Negative Design Pressure	-1920 Pa (-40.10 psf)
Air Infiltration	0.26 L/s/m <sup>2</sup> (0.05 cfm/ft <sup>2</sup> )
Water Penetration Resistance Test Pressure	330 Pa (6.89 psf)
Uniform Load Structural Test Pressure	±2880 Pa (±60.15 psf)

**Test Completion Date:** 05/12/16

Reference must be made to Report No. F8490.01-251-47, dated 05/25/16 for complete test specimen description and detailed test results.

- 1.0 Report Issued To:** Endura Products, Inc.  
8817 West Market St.  
Colfax, NC 27235
- 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:** 6/8, Inswing, XX, Flush Vista Grande Door with Articulating Sill
- 3.2 Series/Model:** "Masonite Glazed Series"
- 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:
- 3.4 Test Dates:** 05/11/16 – 05/12/16
- 3.5 Test Record Retention End Date:** All test records for this report will be retained until May 12, 2020.
- 3.6 Test Location:** Endura Products, Inc. test facility in Colfax, NC. Calibration of test equipment was performed by Intertek-ATI in accordance with AAMA 205-01 "In-Plant Testing Guidelines for Manufacturers and Independent Laboratories".
- 3.7 Test Specimen Source:** The test specimens were provided by the client. Representative samples of the test specimens 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 specimens 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>
Corey Adams	Endura Products
Matt Griffin	Endura Products
John David	Intertek-ATI

**4.0 Test Specification(s):**

*ASTM E283 (2012), Test Method for Determining Rate of Air Leakage Through Exterior Windows, Curtain Walls and Doors Under Specified Pressure Differences Across the Specimen*

*ASTM E330/E330M, Test Method for Structural Performance of Exterior Windows, Doors, Skylights and Curtain Walls by Uniform Static Air Pressure Difference*

*ASTM E547, Test Method for Water Penetration of Exterior Windows, Skylights, Doors, and Curtain Walls by Cyclic Static Air Pressure Difference*

**5.0 Test Specimen Description:**

**5.1 Product Sizes:**

**Test Specimen #1: 6/8**

<b>Overall Area:</b> 3.91 m <sup>2</sup> (42.1 ft <sup>2</sup> )	<b>Width</b>		<b>Height</b>	
	<b>millimeters</b>	<b>inches</b>	<b>millimeters</b>	<b>inches</b>
Overall Size	1879	73-31/32	2081	81-15/16
Panels	908	35-3/4	2013	79-1/4

## 5.0 Test Specimen Description: (Continued)

### 5.2 Frame Construction:

Frame Member	Material	Description
Header	Wood	Finger-jointed, kerfed Pine
Jambs	Wood	Finger-jointed, kerfed Pine
Endura Astragal	Aluminum	2.75" x 1.82". Secured to the lock stile of the passive panel using #8 Phillips F.H. C.S. S.M.S. screws. Ultimate Multipoint Astragal
Threshold	Aluminum	Articulating sill – ZAC4565FN

	Joinery Type	Detail
Header/Jambs	Mortised/Butted	Secured with three 0.44" x 2" steel crown staples at each end.
Threshold/ Jambs	Coped/Butted	Secured with three 0.44" x 2" steel crown staples and one #8 x 1.63" screw at each end.

### 5.3 Panel Construction:

#### Test Specimen #1: 6/8

Member	Material	Description
Door Leaf	Fiberglass/Foam	0.075" fiberglass skin filled with polyurethane foam.
Hinge Stile	Laminated Wood	1.58" x 1.625"
Latch Stile	Laminated Wood	1.58" x 1.625"
Top Rail	Wood	1.58" x 0.97"
Bottom Rail	Composite	1.58" x 0.98"
Lock Reinforcement Block	Wood	1.56" X 2.09" x 21"

	Joinery Type	Detail
Operable Door All corners	Butted	Glued faced with fiberglass skin

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

**5.4 Weatherstripping:**

Description	Quantity	Location
Endura PE650, 0.66" x 0.66"	1 Row	Full length of each jamb, astragal and head.
Endura bottom sweep, 1.72" x 0.53"	1	Bottom of each Door Panel. DBK-AC
Simple Solution Corner Pad	3	Each sill/jamb corner and on the astragal bottom bolt.
Articulating cap sill gasket	1	Positioned between each end of the sill and the jamb.

**5.5 Glazing:** *No conclusions of any kind regarding the adequacy or inadequacy of the glass in any glazed test specimen(s) can be made.*

Glass Type	Spacer Type	Interior Lite	Exterior Lite	Glazing Method
1" IG	0.75" stainless steel U spacer with adhesive backing foam	1/8" FT	1/8" FT	Integrally glazed and captured by a two-piece, PVC, mitered frame. Factory applied backbedding.

**Test Specimen #1:** 6/8

Location	Quantity	Daylight Opening		Glass Bite
		millimeters	inches	
Active and Passive Panels	2	533 x 1600	21 x 63	1/2"

**5.6 Drainage:** No drainage was utilized.

**5.0 Test Specimen Description:** (Continued)**5.7 Hardware:****Test Specimen #1:** 6/8

Description	Quantity	Location
One 4" x 4" steel butt hinge secured to frame jambs with three #8 x 3/4" Phillips F.H. C.S. wood screws and one #8 x 2-1/2" Phillips F.H. C.S. wood screw (two on the top hinge). At the hinge stile of each panel the hinges were secured with four #8 x 1" Phillips F.H. C.S. wood screws	6	6-7/16", 37-5/8", and 68-13/16" from the top of the panel hinge stile down
Kwikset Deadbolt Grade 1	1	Located at 38-3/16" measuring from the top of the active panel
Kwikset Keyed Entry Lock Grade 2	1	Located at 43-11/16" measuring from the top of the active panel
Metal Strike Plate (1.85" x 2.26")	1	Located on the astragal opposite the latch
Metal Deadbolt Actuator Plate	1	1.59" x 3.80", was located on the astragal opposite the deadbolt.

**5.8 Reinforcement:** No reinforcement was utilized.

## 6.0 Installation:

The specimen was installed into a Spruce-Pine-Fir wood buck. The exterior perimeter of the window was sealed with 100% Silicone Sealant.

### Test Specimen #1: 6/8

Location	Anchor Description	Anchor Location
Head and Jambs	Twelve #8 x 2.5" Phillips F.H. wood screws	6", 28", 54", and 76" from the frame head to frame sill. One in the frame head located 6" from each end and 6" from each side of the astragal.
Sill	Four #10 x 2.5" Phillips F.H. wood screws	3" from each end and 7.3" from each side of the astragal.



**7.0 Test Results:** The temperature during testing was 19°C (66°F). The results are tabulated as follows:

**Test Specimen #1: 6/8**

Title of Test	Results	Allowed	Note
<b>Operating Force,</b> per ASTM E2068	Force to Latch: 61 N (14 lbf)	Report Only	
	Deadbolt Operation: 1.1 N-m (10 lbf-in) Perpendicular Force on Panel to Engage Deadbolt	Report Only	-
	0 N (0 lbf)	Report Only	-
<b>Air Leakage,</b> Infiltration per ASTM E 283 at 75 Pa (1.57 psf)	0.26 L/s/m <sup>2</sup> (0.05 cfm/ft <sup>2</sup> )	Report Only	1
<b>Air Leakage,</b> Exfiltration per ASTM E 283 at 75 Pa (1.57 psf)	0.07 L/s/m <sup>2</sup> (0.01 cfm/ft <sup>2</sup> )	Report Only	1
<b>Water Penetration,</b> per ASTM E 547 at 330Pa (6.89 psf)	Pass	Report Only	1
<b>Uniform Load Deflection,</b> per ASTM E 330 Deflections taken at lock stile +1920 Pa (+40.10 psf) -1920 Pa (-40.10 psf)	22.2 mm (0.87") 12.7 mm (0.50")	Report Only	1, 2, 3
<b>Uniform Load Deflection,</b> per ASTM E 330 Deflections taken at astragal +1920 Pa (+40.10 psf) -1920 Pa (-40.10 psf)	3.7 mm (0.15") 11.9 mm (0.47")	Report Only	1, 2, 3
<b>Uniform Load Structural,</b> per ASTM E 330 Permanent sets taken at lock stile +2880 Pa (+60.15 psf) -2880 Pa (-60.15 psf)	1.1 mm (0.04") 0.9 mm (0.03")	Report Only	1, 2, 3
<b>Uniform Load Structural,</b> per ASTM E 330 Permanent sets taken at astragal +2880 Pa (+60.15 psf) -2880 Pa (-60.15 psf)	0.5 mm (0.02") <0.3 mm (<0.01")	Report Only	1, 2, 3

## 7.0 Test Results: (Continued)

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

*Note 1: This meets the criteria for NAFS AAMA/WDMA/CSA 101/I.S.2/A440-08 section(s) 5.3.2, 5.3.3, and 5.3.4. This also meets criteria for NAFS AAMA/WDMA/CSA 101/I.S.2/A440-11 section(s) 9.3.2, 9.3.3, and 9.3.4.*

*Note 2: Loads were held for 10 seconds.*

*Note 3: 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 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 specimens tested. This report may not be reproduced, except in full, without the written approval of Intertek-ATI.

For INTERTEK-ATI:

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William Mason  
Technician

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J.P. McDonald  
Operations Manager

WTM JPM:ab

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

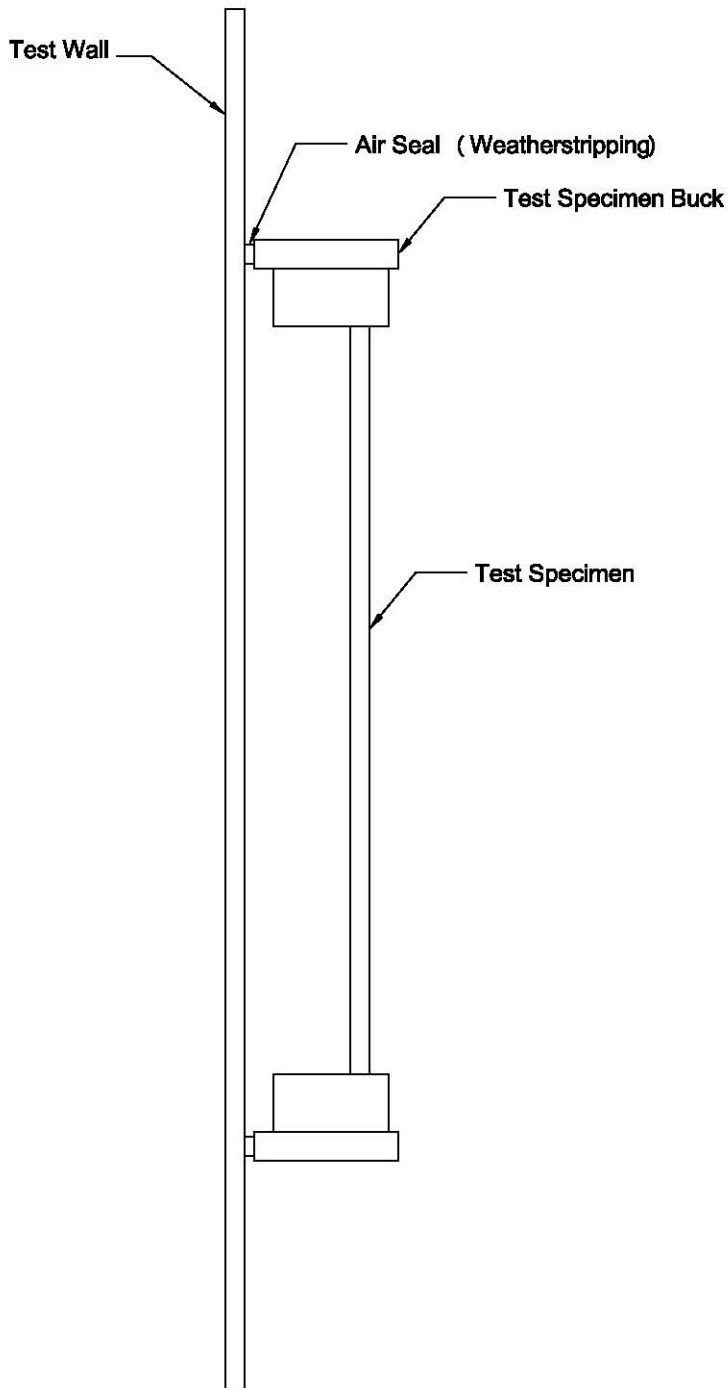
- Appendix-A: Alteration Addendum (1)
- Appendix-B: Location of Air Seal (1)
- Appendix-C: Photographs (2)
- Appendix-D: Drawings (8)

**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.: F8490.01-251-47  
Report Date: 5/25/16

## **Appendix C**

### **Photographs**



**Photo No. 1**  
**Specimen #1**

## **Appendix D**

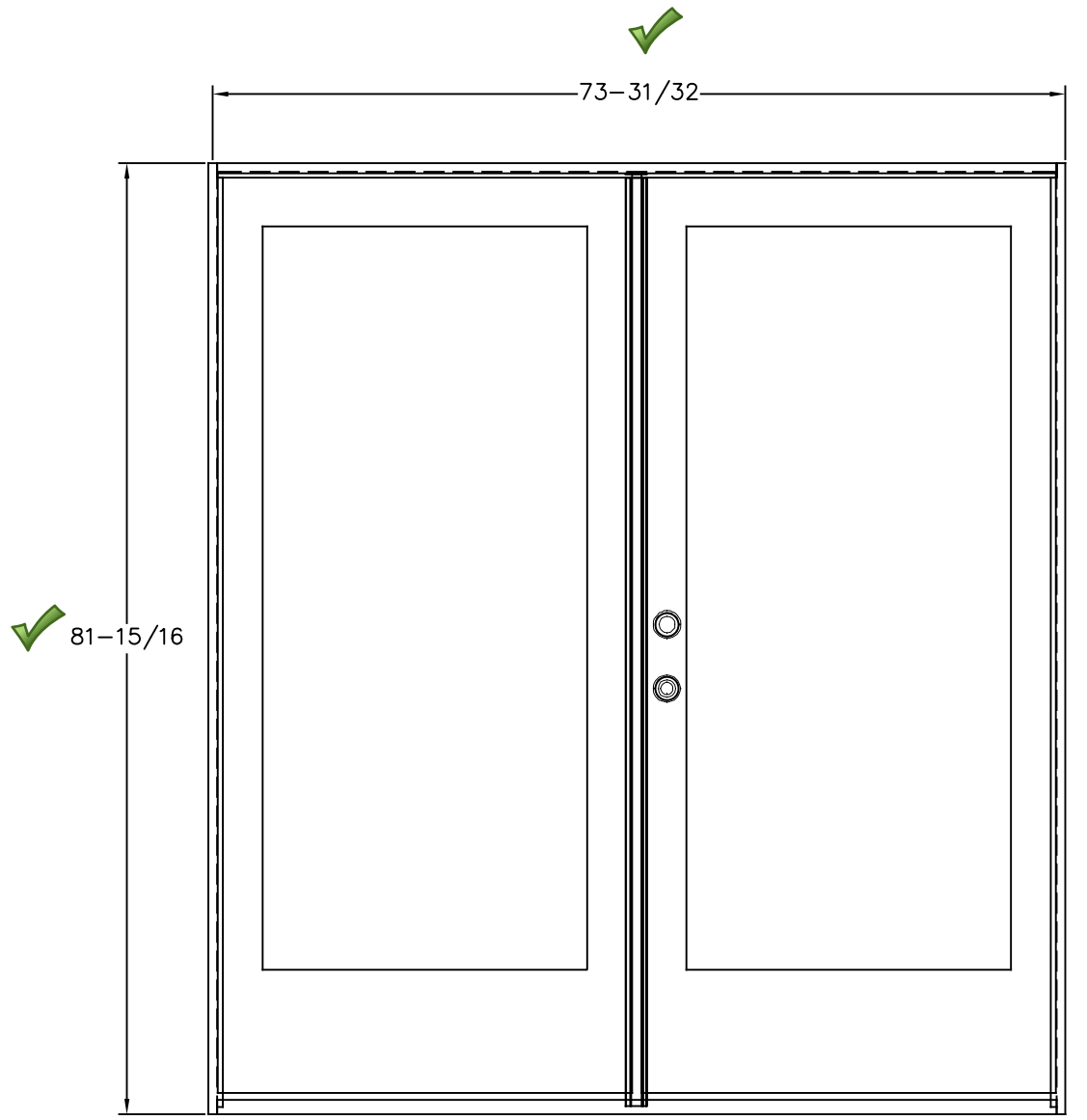
### **Drawings**



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	JAMB	ENDURA 4-9/16" FINGER JOINTED PINE JAMB	2
2	HEADER	ENDURA 4-9/16" FINGER JOINTED PINE HEADER	1
3	ASTRAGAL	ENDURA ULTIMATE MULTI-POINT ASTRAGAL	1
4	SILL	ENDURA ZAC4565FN SILL	1
5	PANEL	MASONITE FIBERGLASS DOOR (VISTAGRANDE FLUSH GLAZED)	2
6	HINGES	4X4 BUTT HINGES	6
7	DOOR BOTTOM	ENDURA DBK-AC DOOR BOTTOM	2
8	WEATHERSTRIP	ENDURA PE650 WEATHERSTRIP	A/R
9	CORNER PAD	ENDURA SIMPLE SOLUTION CORNER PAD	3
10	DOOR HDWRE	KWIKSET LOCK AND DEADBOLT SET	2
11	SCREW	#8 X 2-1/2" COARSE DRYWALL SCREW	A/R
12	HARDWARE	STRIKE PLATE	1
13	HARDWARE	DEADBOLT ACTUATOR ASSEMBLY	1
14	SCREW	#8 X 2 1/2" SCREW	10
15	SCREW	#8 X 3" COARSE DRYWALL SCREW	A/R
16	SCREW	#8 X 1" WOOD SCREW	A/R
17	SCREW	#8 X 1-5/8" COARSE DRYWALL SCREW	A/R
18	FASTENER	7/16" X 2" X 0.062" CROWN STAPLE	A/R
19	BUCK	2" X 10" SPF BUCK	A/R
20	HARDWARE	ASTRAGAL BOLT RECEIVER	1
21	SCREW	#8 X 3" SCREW	A/R
22	SCREW	#10 X 2 1/2" WOOD SCREW	4
23	HARDWARE	KEEPER ASSEMBLY	2
24	SCREW	#8 X 3/4" SCREW	A/R
25	SCREW	#8 x 1" SCREW	4
26	GASKET	SILL GASKET ASSEMBLY	2
28	SCREW	#8 X 1" SCREW	2

- NOTES:
- USE 3 FASTENERS, EACH SIDE.
  - APPLY THREE 1/2" BEADS OF SILICONE CAULKING BETWEEN SILL AND BUCK.
  - CAULK PER ENDURA ASSEMBLY AND INSTALLATION INSTRUCTIONS.
  - CAULK ENTIRE PERIMETER JOINT BETWEEN DOOR UNIT AND BUCK FRAME.

REV	DATE	ECN #	BY	APP	DESCRIPTION
A	5/25/2016		V.L.D.	-	INITIAL REVISION



MARGINS	
DOOR TOP MARGIN:	.125"
HINGE SIDE MARGIN:	.0625"
STRIKE SIDE MARGIN:	.125"
UNDER DOOR MARGIN:	.4375"

OVERALL DIMENSIONS

1/S 6/8 XX

ULTIMATE MULTI-POINT ASTRAGAL

Report #: F8490.01

Date: 05/25/16

Verified by: [Signature]

INSPECTION DIMENSIONS ARE CIRCLED	
UNSPECIFIED RADI	.016
VOLUME	0.000
PERIMETER	-
AREA	-
MATERIAL	Material (not specified)
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CHECKED BY	M.FORTUN
DATE	5/25/2016
APPROVED BY	M. FORTUN
DATE	5/25/2016
RAW PART NUMBER	-

**Endura**  
PRODUCTS, INC.

8817 W. MARKET ST. COLFAX, NC 27235  
PHONE: (336) 668-2472 FAX: (336) 668-4478  
WWW.ENDURAPRODUCTS.COM

TITLE: MASONITE DOORS - 6/8 INSWING FRENCH-MPA

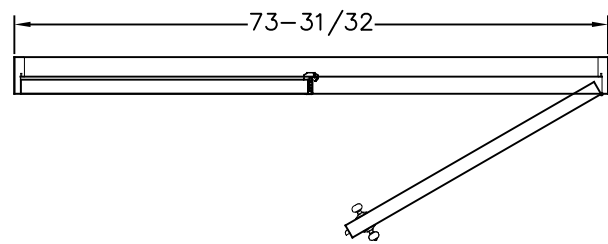
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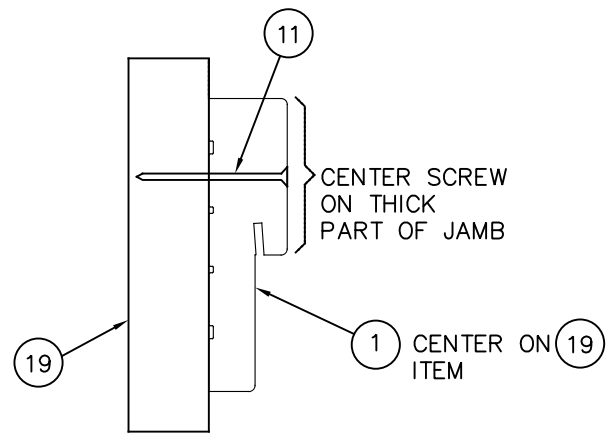
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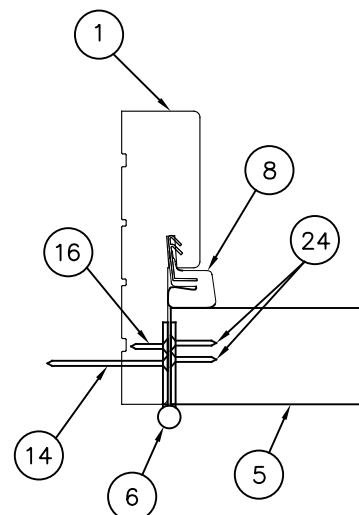
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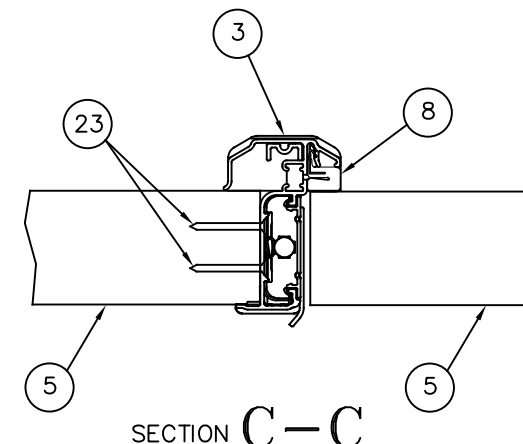
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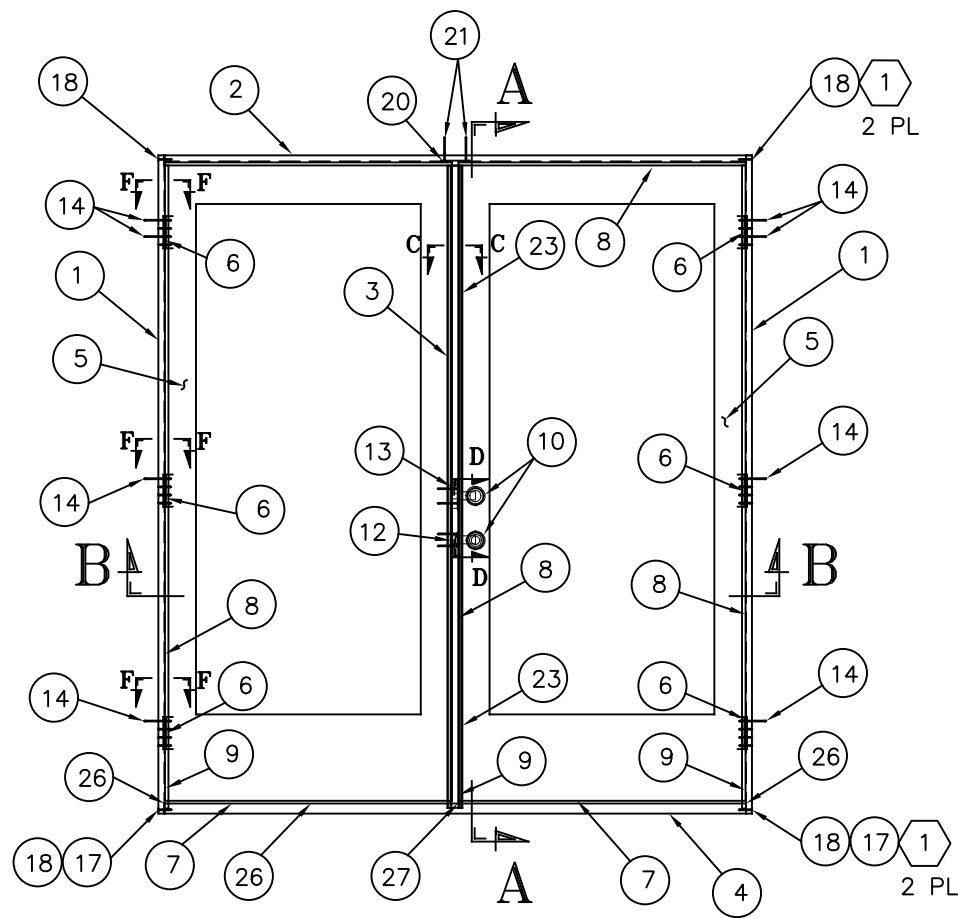
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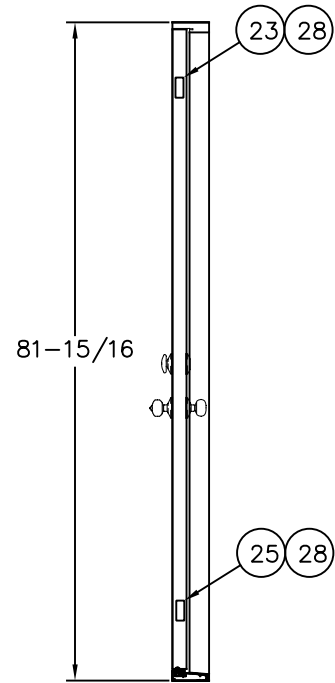
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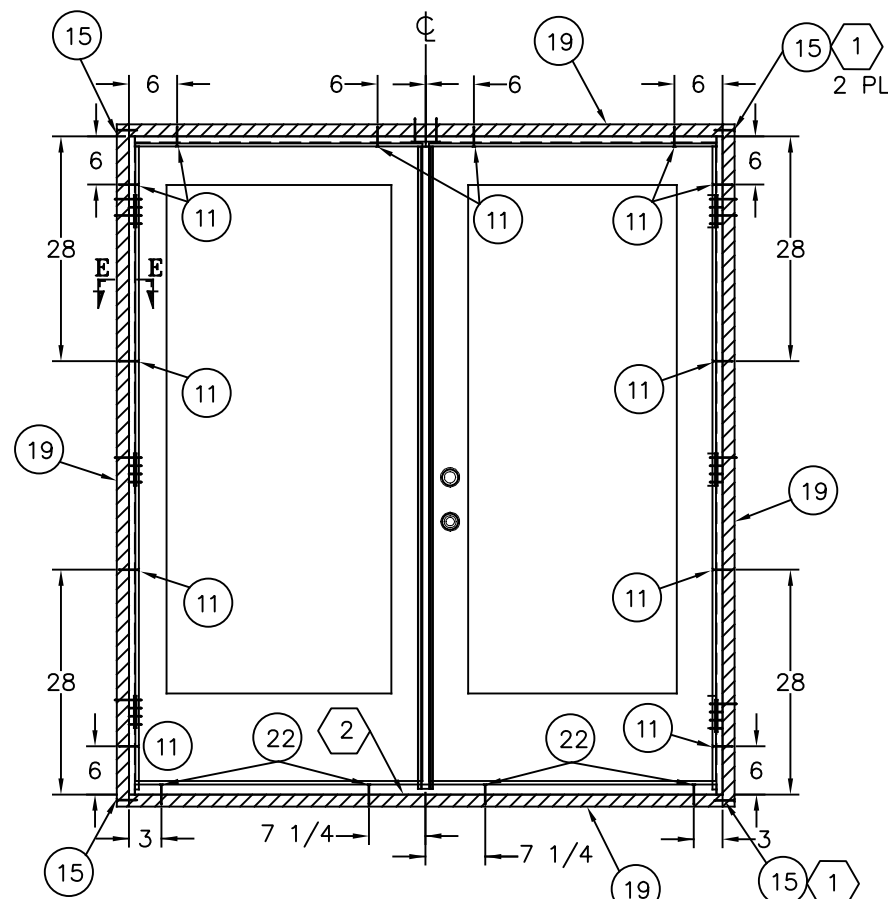
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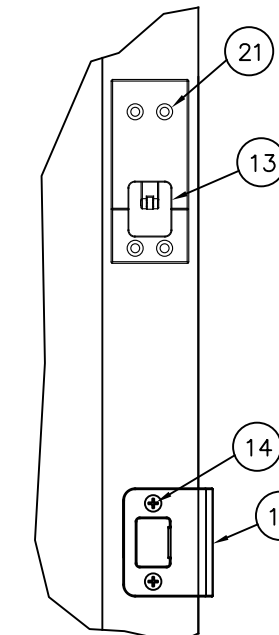
ASSEMBLY FASTENERS



SECTION A-A



INSTALLATION FASTENERS

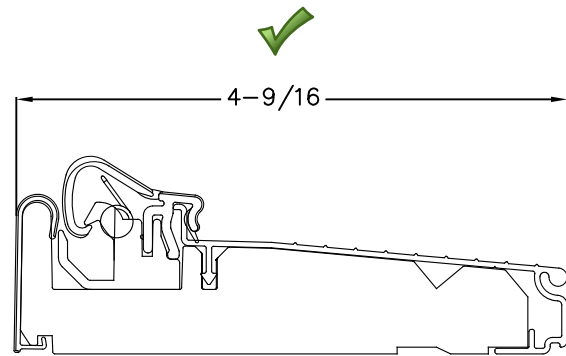


SECTION D-D

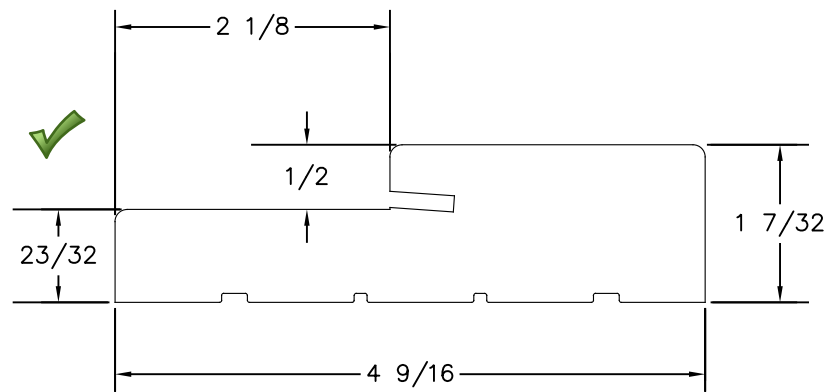
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	Date:	05/25/16
	Verified by:	

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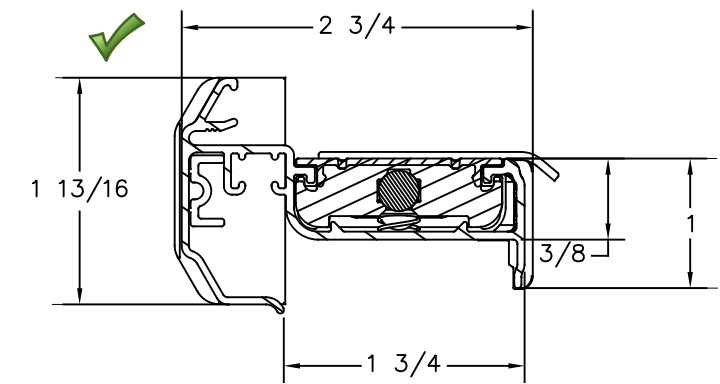
<small>8817 W. MARKET ST. COLFAX, NC. 27225 PHONE: (336) 668-2472 FAX: (336) 668-4478 WWW.ENDURAPRODUCTS.COM</small>	
TITLE	
MASONITE DOORS - 6/8 INSWING FRENCH-MPA	
DRAWING NUMBER	REV
F8490-1	A
SCALE	SIZE
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SHEET 2 OF 4	



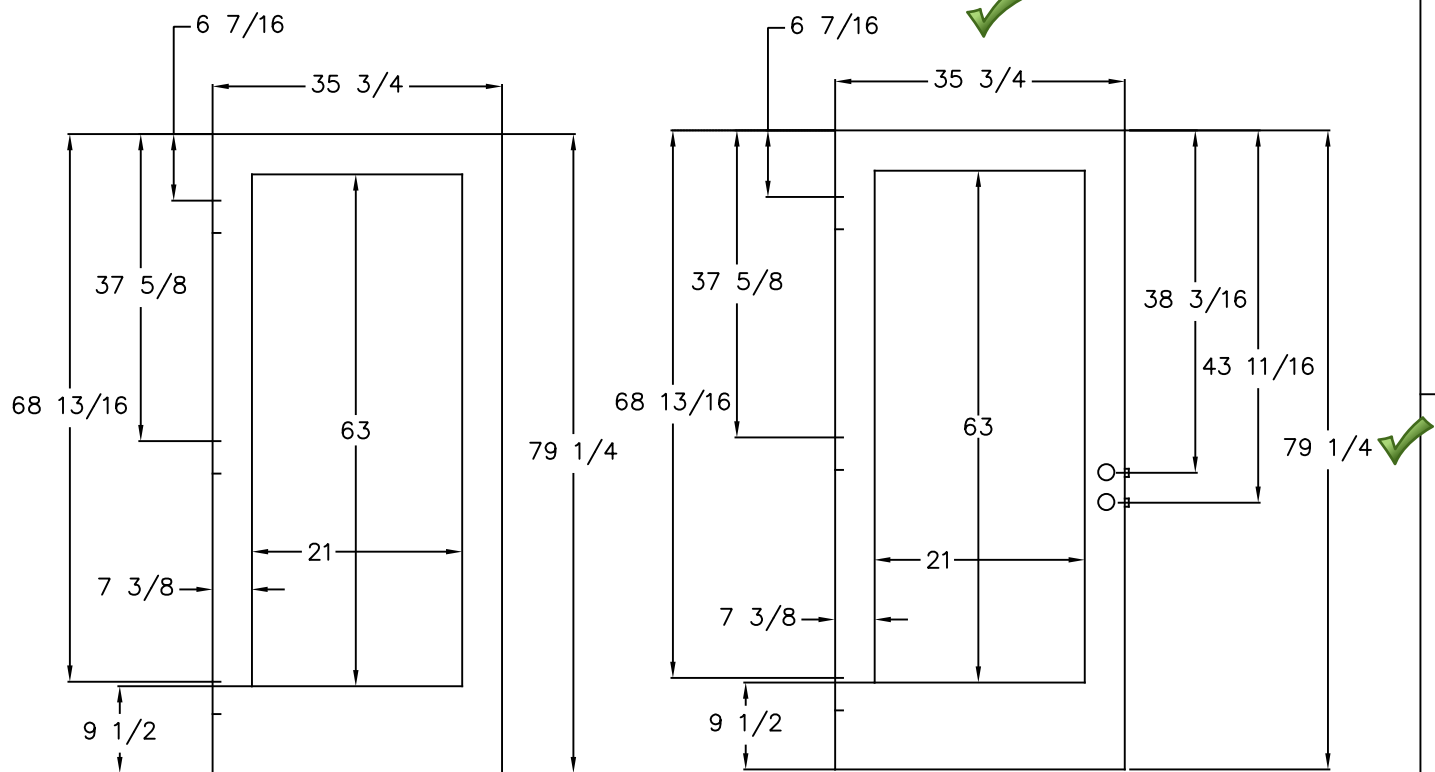
④ ZAC4565FN SILL



① 4 9/16 JAMB  
② 4 9/16 HEADER

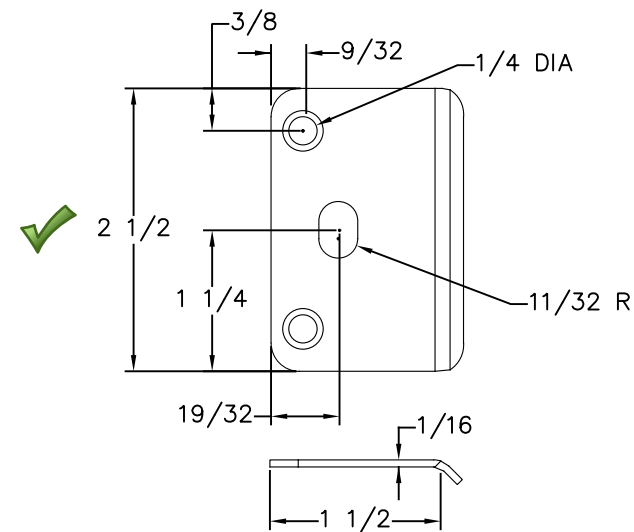


③ ULTIMATE MULTI-POINT ASTRAGAL



⑤ FULL LITE PASSIVE PANEL = 1.750"

⑤ FULL LITE ACTIVE PANEL = 1.750"



②① ASTRAGAL BOLT RECEIVER


**Report #:** F8490.01  
**Date:** 05/25/16  
**Verified by:** 

INSPECTION DIMENSIONS ARE CIRCLED

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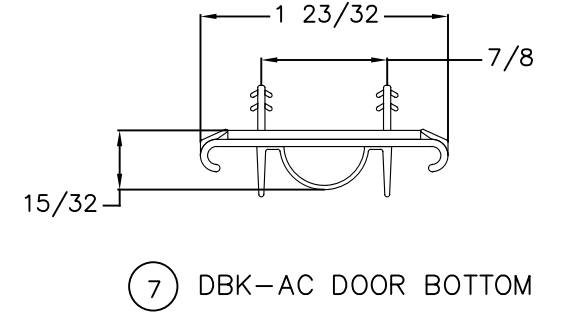
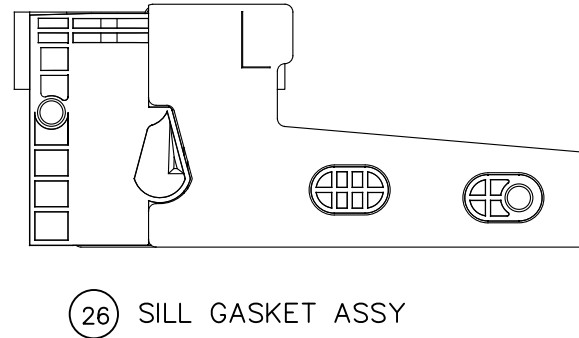
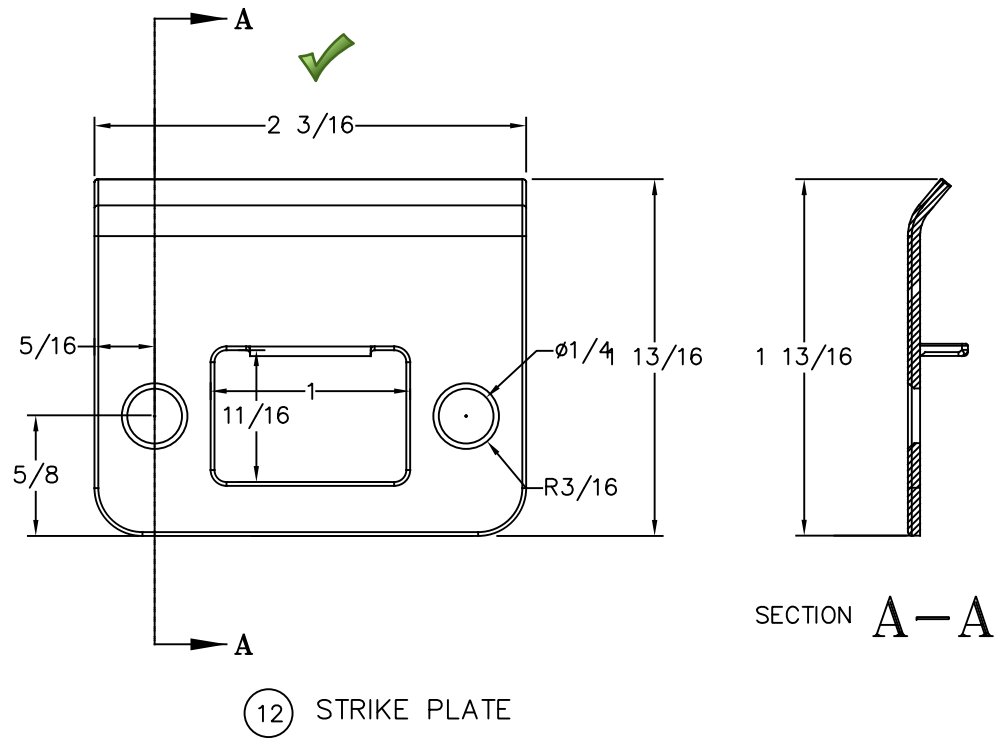
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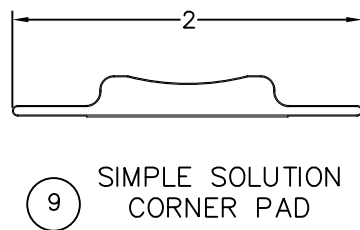
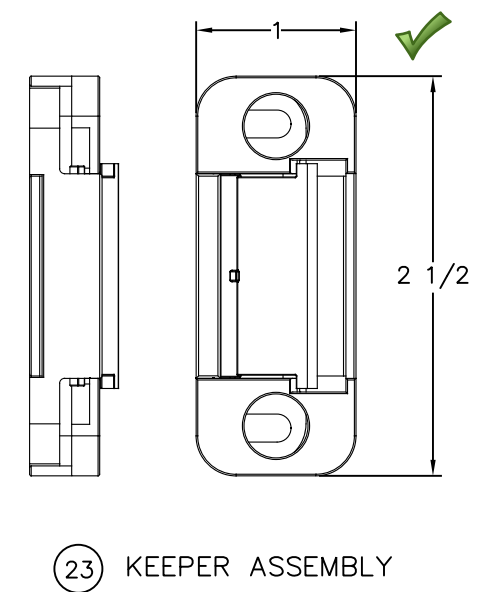
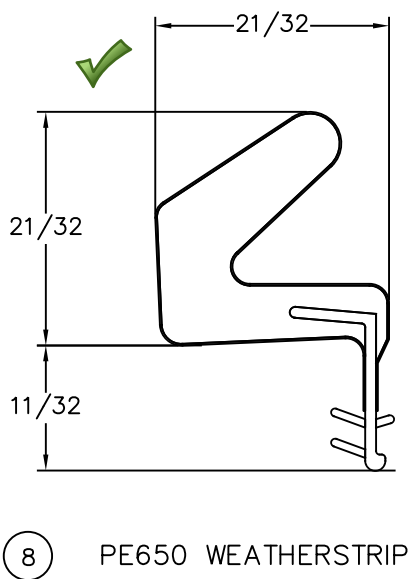
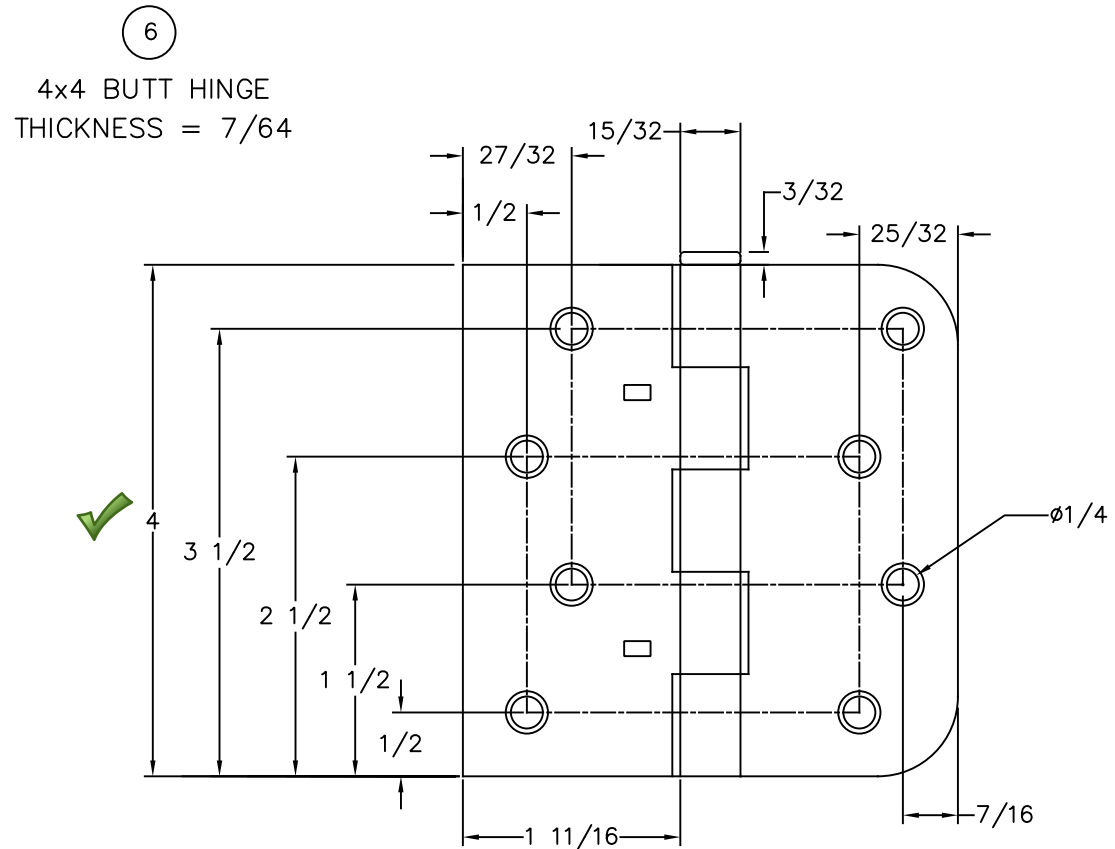
TITLE  
MASONITE DOORS - 6/8 INSWING FRENCH-MPA

DRAWING NUMBER F8490-1	REV A	SCALE 1:24	SIZE B
		SHEET 3 OF 4	



Report #: F8490.01  
 Date: 05/25/16  
 Verified by: *[Signature]*

**Intertek** Architectural Testing



INSPECTION DIMENSIONS ARE CIRCLED	
UNSPECIFIED RADI	VOLUME
.016	0.000
PERIMETER	AREA
-	-
MATERIAL	
Material (not specified)	

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M.FORTUN	5/25/2016
RAW PART NUMBER	
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DRAWING NUMBER: F8490-1

REV: A

SCALE: 1:24

SIZE: B

SHEET 4 OF 4