

TEST REPORT

Report No.: E4545.01-801-44

Rendered to:

GLASSCRAFT DOOR COMPANY
Houston, Texas

PRODUCT TYPE: Inswing and Outswing 8'0" Single Fiberglass Door with Speak Easy

SERIES/MODEL: 8'0" Single Fiberglass Door with Speak Easy

In-Swing (Specimen #1) Out-Swing (Specimen #2)

Title	Summary of Results	
	Test Specimen #1	Test Specimen #2
Design Pressure	±2400 Pa (±50.14 psf)	±2400 Pa (±50.14 psf)
Uniform Load Structural Test Pressure	±3600 Pa (±75.19 psf)	±3600 Pa (±75.19 psf)



Texas Firm F-11869

John H. Waskow P.E.
Digitally Signed by: John H. Waskow

2015.08.12 15:55:36 -05'00'



Tyler Westerling
Digitally Signed by: Tyler Westerling

2015.08.12 11:27:18 -07'00'

Reference must be made to Report No. E4545.01-801-44, dated 07/01/15 for complete test specimen description and detailed test results.

1.0 Report Issued To: Glasscraft Door Company
2002 Brittmoore Street
Houston, Texas 77043

2.0 Test Laboratory: Intertek-ATI
1909 10th Street
Plano, Texas 75074
(469) 814-0687

3.0 Project Summary:

3.1 Product Type: In-Swing and Out-Swing 8'0" Fiberglass Door with Speak Easy

3.2 Series/Model: 8'0" Fiberglass Door with Speak Easy (Inswing is specimen #1, Outswing is specimen #2)

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

3.4 Test Dates: 01/22/2015 - 03/15/2015

3.5 Test Record Retention End Date: All test records for this report will be retained until March 15, 2019.

3.6 Test Location: Architectural Testing, Inc. test facility in Southlake, Texas.

3.7 Test Sample Source: The test specimens were provided by the client. Representative samples of the test specimens will be retained by Architectural Testing for a minimum of four 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 A. Any deviations are documented herein or on the drawings.

3.9 List of Official Observers:

<u>Name</u>	<u>Company</u>
Clint Barnett	Intertek-ATI

4.0 Test Method(s):

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

5.0 Test Specimen Description:

5.1 Product Sizes:

Test Specimens #1 and #2:

Overall Area: 2.4 m ² (25.52 ft ²)	Width		Height	
	millimeters	inches	millimeters	inches
Overall size	953	37-1/2	2489	98
Leaf	914	36	2438	96

The following descriptions apply to all specimens.

5.2 Frame Construction:

Frame Member	Material	Description
Head and jambs	Wood	1-1/4" x 4-5/8" cross section
Threshold	Aluminum-clad vinyl composite with extruded vinyl trim	6" wide with slope towards exterior.

	Joinery Type	Detail
All corners	Screwed partial rabbet	Secured with four #9 x 3" wood screws

5.3 Panel Construction:

Frame Member	Material	Description
All members	Fiberglass	Fiberglass panels filled with foam

	Joinery Type	Detail
All corners	Glued	Panels were backed with foam

5.0 Test Specimen Description: (Continued)

5.4 Weatherstripping:

Description	Quantity	Location
U-shaped foam-filled vinyl gasket with kerf insert	1 Row	Shoulder of the jambs and header
Five fin rubber door sweep	1 Row	Threshold face of leaf

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	1/2" Aluminum box	1/8" Annealed	1/8" Annealed-0.09" PVB Inerlayer-1/8" Annealed	Exterior wet glazed

Location	Quantity	Daylight Opening		Glass Bite
		millimeters	inches	
Speakeasy	1	152 x 292	6 x 11-1/2	1/2"

5.6 Drainage: Sloped threshold was utilized.

5.7 Hardware:

Description	Quantity	Location
Door hinge	4	12" and 28" from bottom; 9" and 34-1/2" from top; attached with two #9 x 3" and two #9 x 1" wood screws
3 point lock set	1	Inserted into lock stile of operable leaf, secured with nine #8 x 3" wood screws at 7-3/8", 14-1/4", 17-9/16", 26-5/16", 45-13/16", 55-13/16", 62-3/16", 65-7/16" and 72-3/4" from bottom
Strike plate	4	On lock jamb in line with 3 point lock and dead bolt; secured with two #9 x 3" wood screws each
Latch	1 per leaf	Centered on speak easy lock stile
Keeper	1 per leaf	In line with latch, on speak easy frame
Hinge	2 per leaf	3" from top and bottom of speak easy

5.8 Reinforcement: No reinforcement was utilized.

5.9 Screen Construction: No screen was utilized.

6.0 Installation:

The specimen was installed into a Spruce-Pine-Fir wood buck. The rough opening allowed for a 1/2" shim space.

Location	Anchor Description	Anchor Location
Jambs	#9 x 3" wood screws	12" from corners and center; through top and bottom mounting holes of hinges
Head and threshold	#9 x 3" wood screws	4" from corners, 12" on center thereafter

7.0 Test Results: The temperature during testing was 26.7°C (80°F). The results are tabulated as follows:

Test Specimen #1: Inswing

Title of Test	Results	Allowed	Note
Uniform Load Deflection, per ASTM E 330 taken at leaf lock edge +2400 Pa (+50.13 psf) -2400 Pa (-50.13 psf)	3 mm (0.13") 1 mm (0.02")	Report Only	1, 2
Uniform Load Structural, per ASTM E 330 taken at leaf lock edge +3600 Pa (+75.19 psf) -3600 Pa (-75.19 psf)	1 mm (0.02") 1 mm (0.02")	10 mm (0.38") max. 10 mm (0.38") max.	1, 2

Test Specimen #2: Outswing

Title of Test	Results	Allowed	Note
Uniform Load Deflection, per ASTM E 330 taken at leaf lock edge +2400 Pa (+50.13 psf) -2400 Pa (-50.13 psf)	1 mm (0.02") 4 mm (0.16")	Report Only	1, 2
Uniform Load Structural, per ASTM E 330 taken at leaf lock edge +3600 Pa (+75.19 psf) -3600 Pa (-75.19 psf)	< 1 mm (0.01") < 1 mm (0.01")	10 mm (0.38") max. 10 mm (0.38") max.	1, 2

7.0 Test Results: (Continued)

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

Note 1: Loads were held for 10 seconds.

Note 2: 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.

Architectural Testing 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 Architectural Testing, Inc. 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 Architectural Testing, Inc.

For ARCHITECTURAL TESTING, Inc.



Digitally Signed by: Clint Barnett

Clint Barnett
Technician



Digitally Signed by: John H. Waskow

John H. Waskow, P.E.
Director – Regional Operations



Digitally Signed by: Tyler Westerling

Tyler Westerling, P.E.
Senior Project Engineer

CB/JW: hd

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

Appendix-A: Drawings (12)

Revision Log

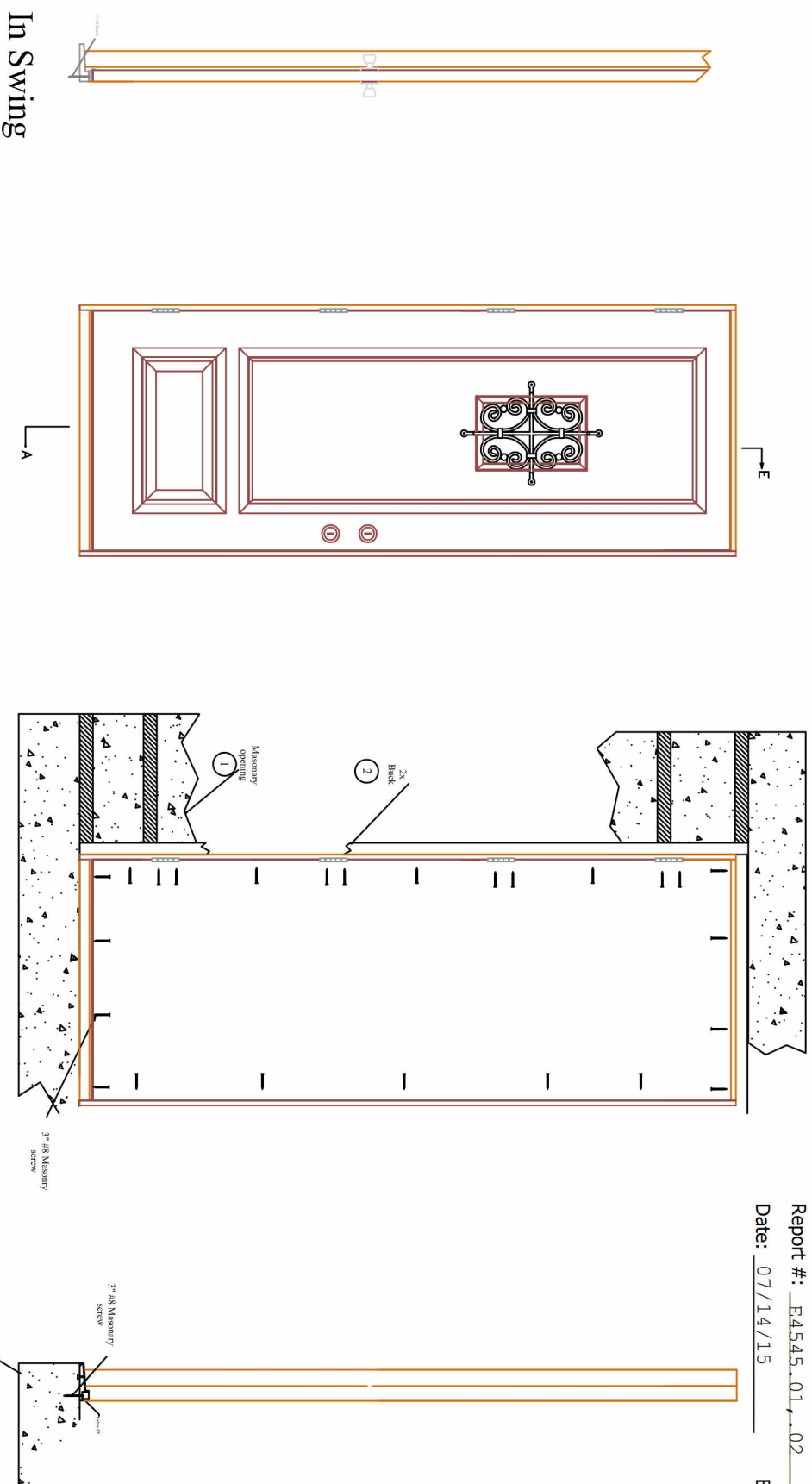
<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
1	07/24/15	4	Changed frame material to fiberglass
2	08/10/15	Cover Page	Added second P.E. Seal
2	08/10/15	6	Added third signature.

Appendix A

Drawings

Report #: E4545.01.02

Date: 07/14/15 By: CB



In Swing

ELEVATION

ANCHORING LAYOUT

Impact Out-swing 8'-0 Fiberglass Door
W/Speakeasy

Inside View / Out swing

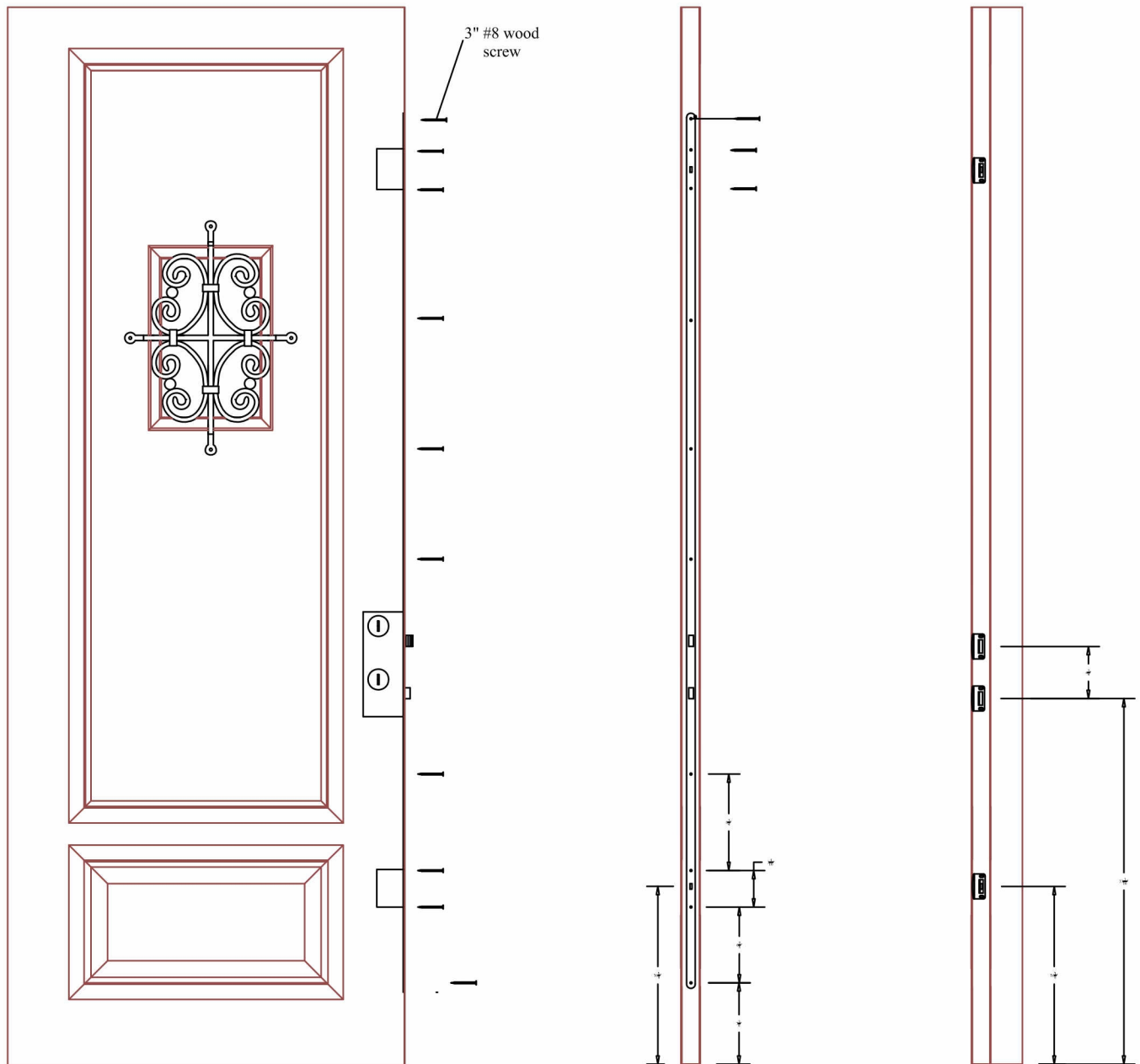
Glass*Craft

Architectural Testing, Inc

Test sample complies with details shown herein. Any deviations are noted in the test report or drawings.

Report #: E4545.01, .02

Date: 07/14/15 By: CB

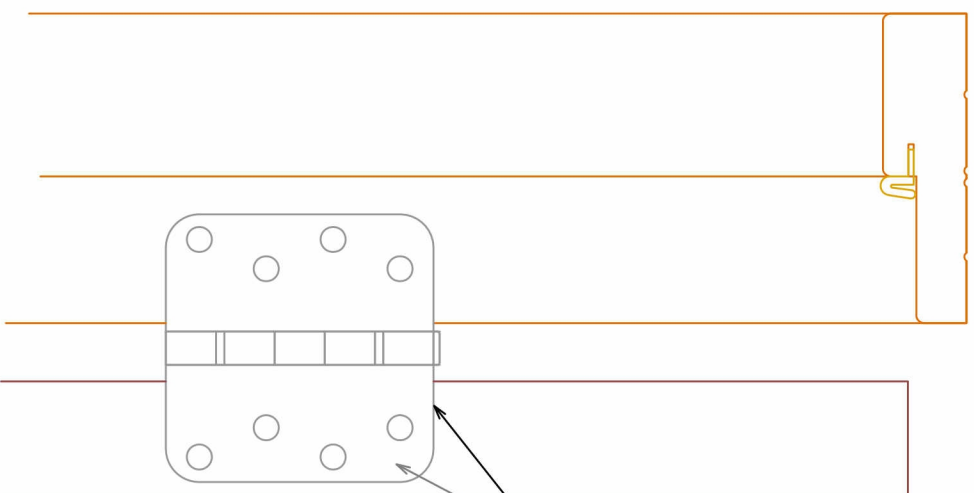


Three point lock set screw location and strike plate

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Impact Fiberglass Glazed Doors

4



Penrond 4"x4" 5/8" Radius Hinge



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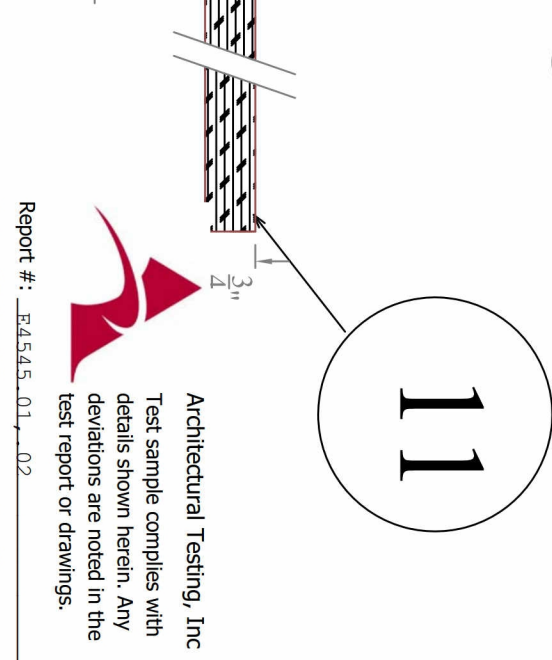
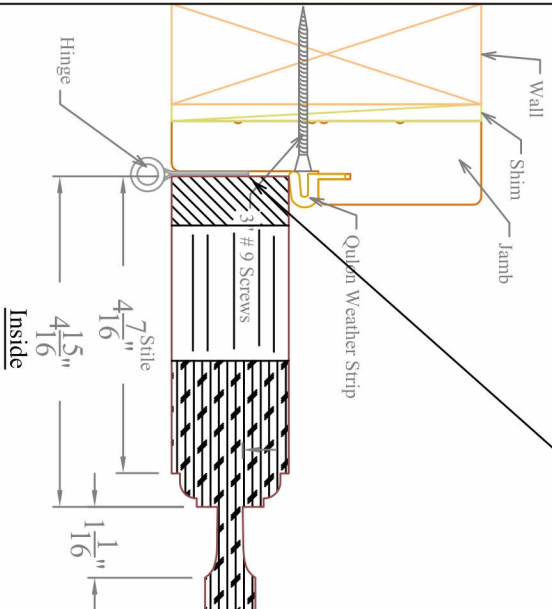
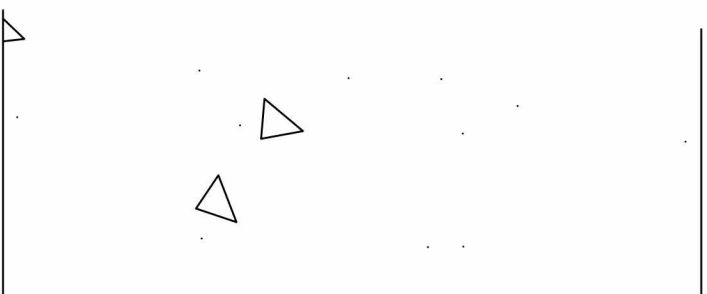
By: CB

D

Door Hinge

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Single 8'0 Fiberglass Door
/ Speakeasy Door



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Date: 07/14/15 By: CB

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12

11

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Single 8'0 Fiberglass Door
/ Speakeasy Door

B

Panel



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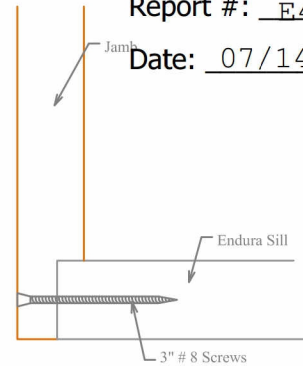
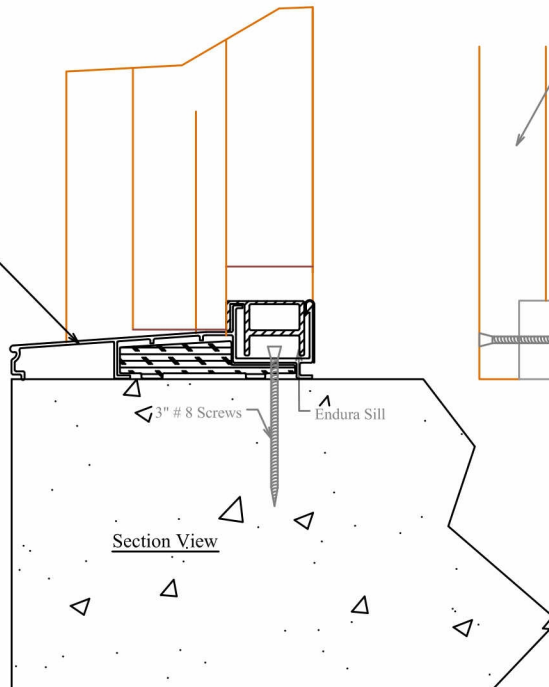
Date: 07/14/15

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17

10

Endura Sill



Inside View

(A) Threshold Out Swing

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Single 8'0 Fiberglass Door
/ Speakeasy Door

Install Outside Housing

NOTE: Do not install adapter ring if using 1 1/2" (38 mm) hole.

- FOR F300/F302: Ensure pin is positioned to slide through correct bracket slot in deadbolt.
- Insert housing through escutcheon and adapter ring and into door. Driver bar should slide under deadbolt.

Instalación del alojamiento exterior

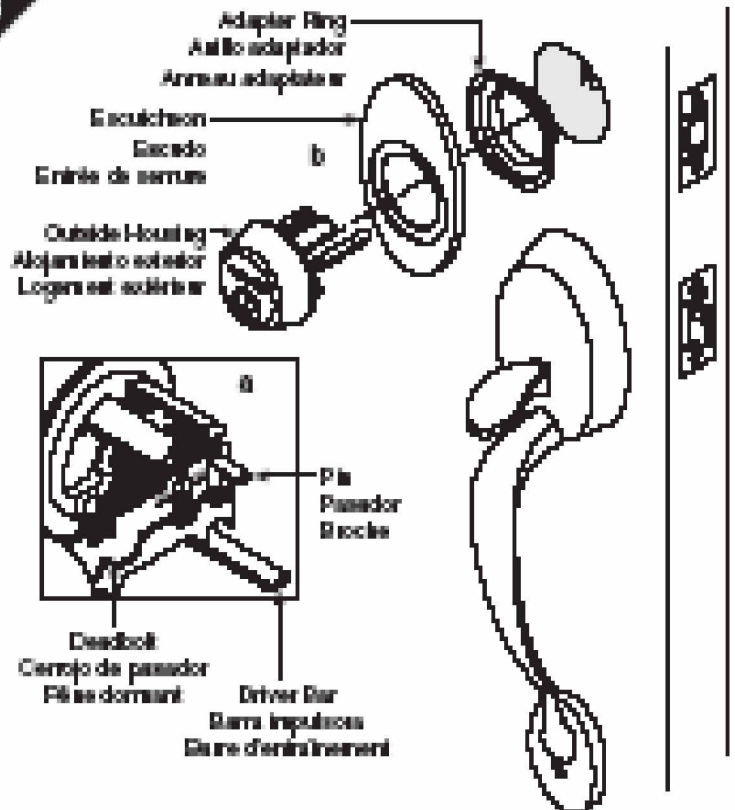
NOTA: Si se usa un agujero de 38 mm no se instala un anillo adaptador.

- PARA LOS MODELOS F300/F302: Se debe verificar que el pasador está colocado de manera que se deslice a través de la ranura en el pasador que corresponde a la distancia correcta del borde de la puerta al centro de la bocallave.
- Introducir el alojamiento en la puerta, a través del escudo y del anillo adaptador. La barra impulsora debe deslizarse debajo del pasador.

Installation du logement extérieur

REMARQUE: Ne pas installer l'anneau adaptateur si le trou 38 mm est utilisé.

- POUR les modèles F300/F302: S'assurer que la broche est placée de sorte à glisser dans la fente d'écartement correct du pêne dormant.
- Insérer le logement par l'entrée de serrure et l'anneau adaptateur et dans la porte. La barre d'entraînement doit glisser sous le pêne dormant.



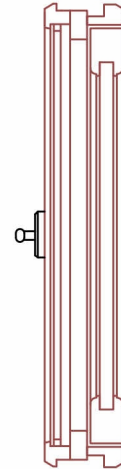
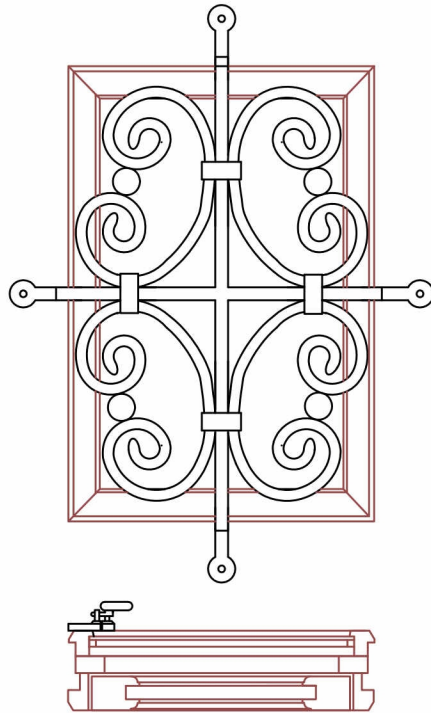


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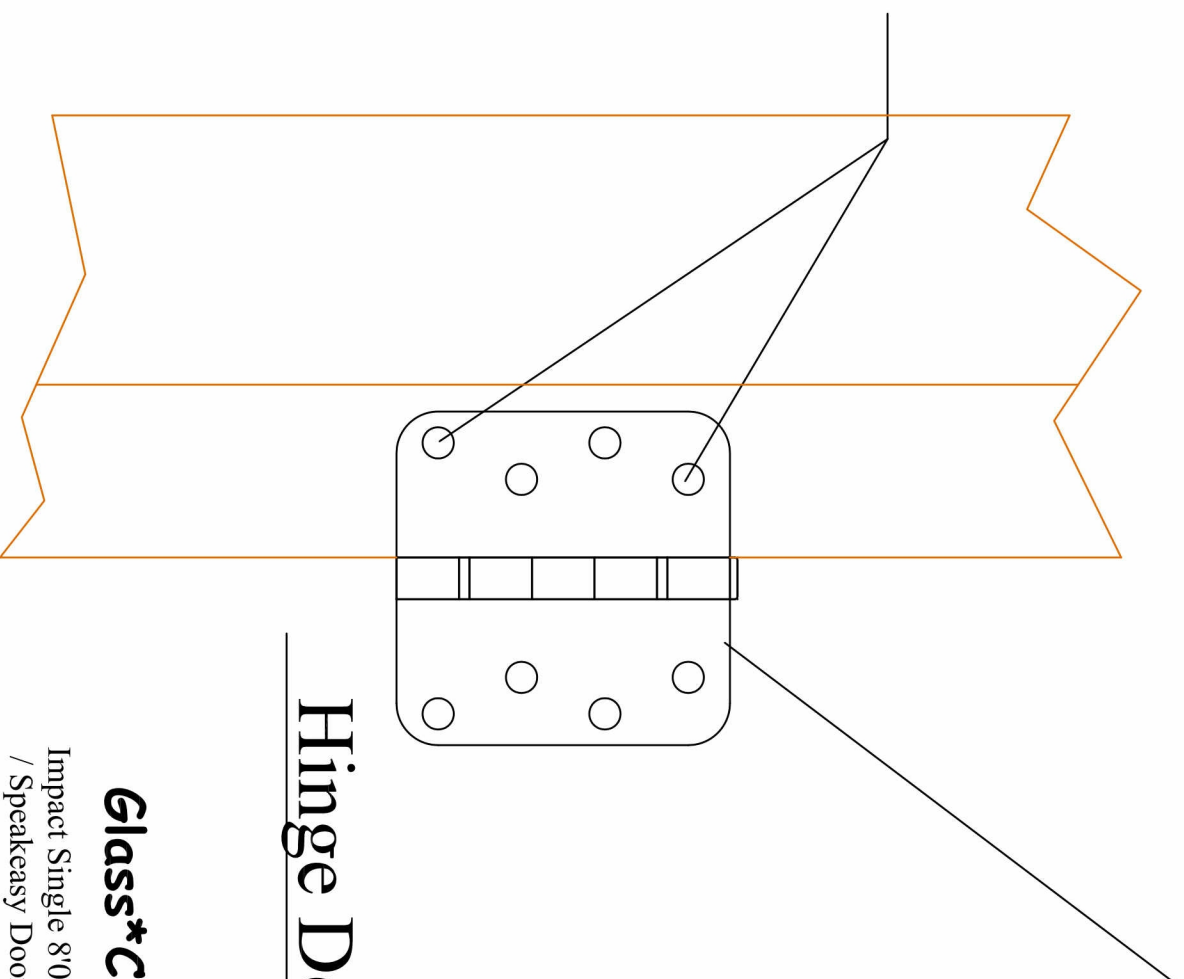


Speakeasy

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Penrond 4"x4" 5/8" Radius Hinge

Install (2) 3" #8 Wood
Screws Per Henge.



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Hinge Detail

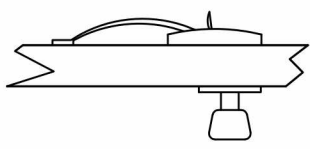
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Impact Single 8'0 Fiberglass Door
/ Speakeasy Door

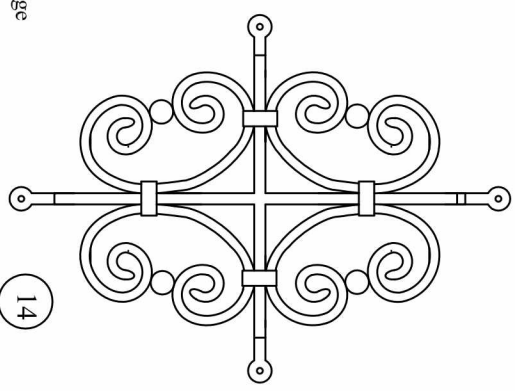
List of Material

Item #	Discription	Material
1	Masonry	CONC.
2	2x Buck	Wood
3	Imperial 3 point lock set	Metal
4	Penrond 4"x4" 5/8" Radius Hinge	Metal
5	Endura Sill ZAIL 5866 / I/S	Alum.
6	3" #9 Wood screw	Metal
7	Door Jam	Fiber
8	Bottom Door sweep	Rubber
9	weather strip	Foam
10	Endura Sill ZAIL 5866 / O/S	Alum.
11	Door Fill	Foam
12	Stile	Composits
14	Impact speakeasy grill	Metal

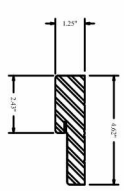
Impact Single 8'0 Fiberglass Door / Speakeasy Door



Imperial 3 point set 3



Penrond 4'x4' 5/8" Radius Hinge 4



Bottom Door sweep 8



Endura Sill ZAIL 5866 / I/S 10

weather strip 9

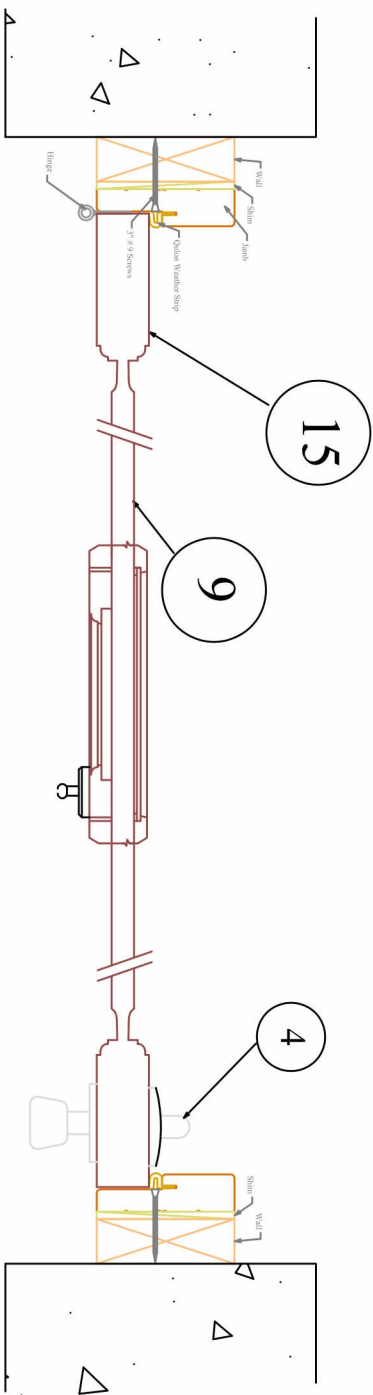


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Exterior



Interior

Horizontal Cross Section

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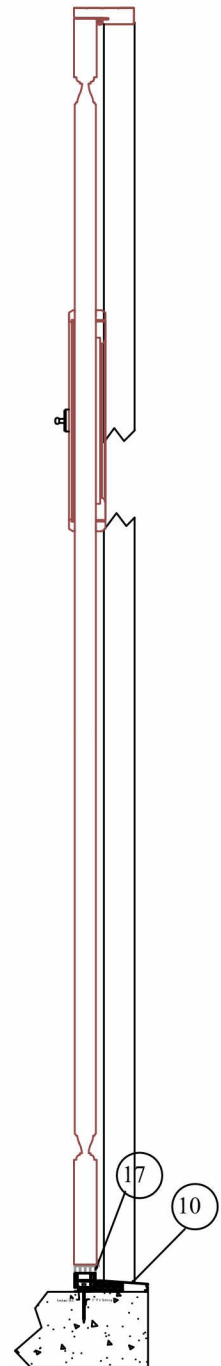
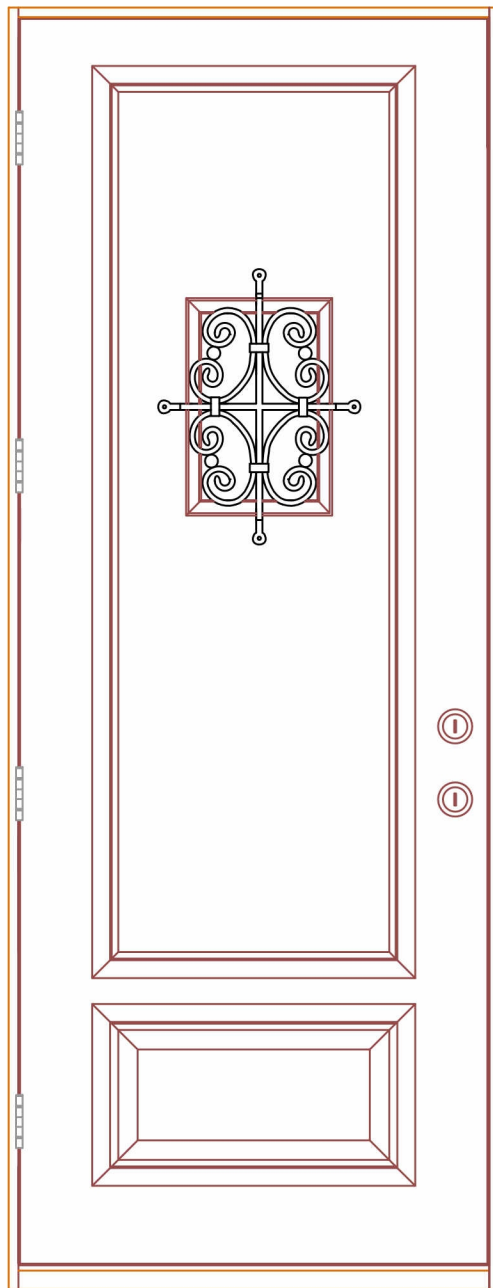
Impact Single 8'0 Fiberglass Door
Class*Craft
/ Speakeasy Door



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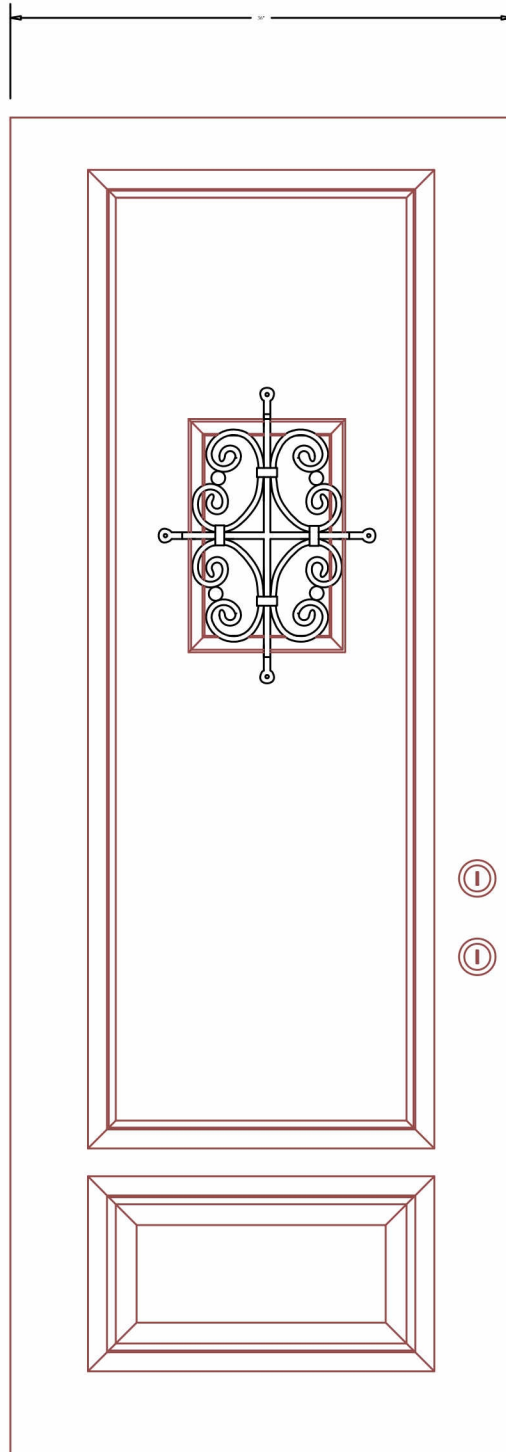
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Section
H-H

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Impact Single 8'0 Fiberglass Door
/ Speakeasy Door



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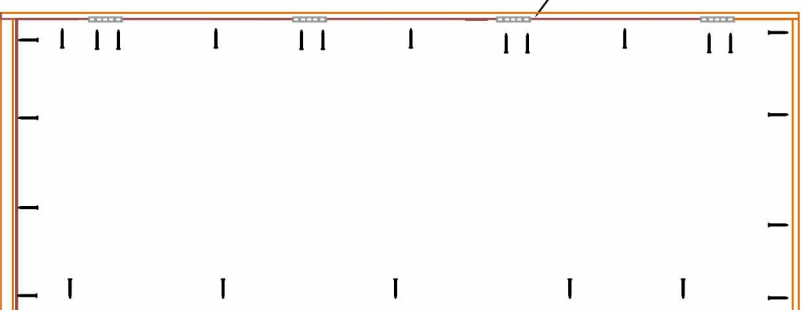
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ImpactSingle 8'0 Impact Fiberglass Door
/ Speakeasy Door

See Hinge Detail



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Test sample complies with
details shown herein. Any
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test report or drawings.

Report #: FA545-01-02

Date: 07/14/15

By: CB

ANCHORING LOCATION

Glass*Craft

Impact Single 8'0" Fiberglass Door / Speakeasy Door