

**PERFORMANCE TEST REPORT**

**Rendered to:**

**GLASSCRAFT DOOR COMPANY**

**PRODUCT TYPE: 3' x 8' Single Outswing Hardwood Door  
with Side Lites and Half Circle Transom**

<b>Title</b>	<b>Summary of Results</b>
Uniform Load Deflection Test Pressure	+36.2 psf / -45.7 psf
Uniform Load Structural Test Pressure	+54.3 psf / -68.6 psf

This report contains in its entirety:

Cover Page: 1 page  
Report Body: 7 pages  
Sketch: 1 page  
Drawings: 7 pages

Reference should be made to Report No. 64142.01-801-44 for complete test specimen description and data.

**PERFORMANCE TEST REPORT**

Rendered to:

GLASSCRAFT DOOR COMPANY  
2002 Brittmoore Road  
Houston, Texas 77043-2209

Report No.: 64142.01-801-44

Revision 1: 07/21/10

Test Dates: 04/04/06

Through: 07/24/06

Report Date: 08/18/06

\*\*Record Retention End Date: 07/24/10

**Project Summary:** Architectural Testing, Inc. was contracted by GlassCraft Door Company to perform testing on a 3' x 8' outswing hardwood door with two side lites and half circle transom. Test specimen description and results are reported herein.

**Test Method:** The test specimen was evaluated in accordance with the following:

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

**Test Specimen Description:**

**Product Type:** 3' x 8' Outswing Hardwood Door with Side Lites and Half Circle Transom

**Door Description**

**Overall Size:** 68-3/4" wide by 97-3/4" high

**Leaf Size:** 36" wide by 96" high

**Daylight Opening:** 21-5/8" wide by 67" high

**Glazing Type:** Sealed insulating glass comprised of 1/8" thick tempered glass at the exterior and 1/8" thick tempered decorative textured glass at the interior. A 1/2" aluminum spacer system was used providing 3/4" overall thickness.

**Glazing Details:** Interior glazed with double-sided butyl tape and a nailed-on wood glazing bead secured by 1" long by 0.040" by 0.050" rectangular shank brad nails with a 0.050" by 0.080" head (18 gauge brad nail) 1" from each corner and on 6" spacing thereafter.

**Weatherstripping:** One five finger vinyl sweep at the bottom of the door leaf. One row of custom shaped foam-filled vinyl weatherstrip at the head and jambs.

**Test Specimen Description:** (Continued)

**Door Description** (Continued)

**Frame Construction:** The doorframe was constructed of 4-5/8" by 1-1/4" hardwood head and jambs, and 3-5/8" by 2-5/8" mullions and included an adjustable extruded aluminum and composite threshold. The head and jambs were kerfed to accept the weatherstripping. The corners were coped and butted and secured with two #8 x 1-1/2" and five #8 x 3" screws at the threshold; and four #8 x 1-1/2" and two #8 x 3" screws at the head. The mullions were attached with five #8 x 3" screws through the head and the threshold.

**Leaf Construction:** The door leaf was constructed of 1-3/4" thick hardwood and utilized a glued cove and bead joint, reinforced with 1/2" diameter by 4-1/2" long wood dowels. Two dowels were located at the top and middle rail to stile joint, and four dowels were located at the bottom rail to stile joint.

**Hardware:** One Schlage F-300 Series single-point lockset was located 36" on center from bottom of the leaf and one Schlage deadbolt was located 41-5/8" on center from the bottom of the leaf. Four 4" butt type hinges fastened to each leaf with four #8 x 3" screws. Each hinge was secured to the jamb with two #8 x 3" screws and two #8 x 1" flat head screws. The hinges were located at 9-1/8", 34-1/2", 59-1/2" and 84-3/4" on center from the top of the jamb. Surface bolts were attached to the top and bottom the leaf with four #10 x 1" flat head machine screws with a 1-1/2" long blind nut. Strike plates for the surface bolts were attached to the head with two #8 x 3" screws and to the threshold with two #10 x 3" sheet metal screws.

**Drainage:** Sloped sill.

**Installation:** The jambs were secured to a #2 Yellow Pine test buck with two #8 x 3" screws 6" from each corner and on 24" spacing (24 total).

**Side Lite Description**

**Overall Size (2):** 1' 3-3/4" wide by 8' 4-3/4" high

**Panel Size (2):** 1' 2" wide by 8' high

**Daylight Opening (2):** 10" wide by 5' 7" high

**Glazing Type:** Sealed insulating glass comprised of 1/8" thick tempered glass at the exterior and 1/8" thick tempered decorative textured glass at the interior. A 1/2" aluminum spacer system was used providing 3/4" overall thickness.

**Glazing Details:** Interior glazed with double-sided butyl tape and a wood glazing bead fastened with 1" long by 0.040" by 0.050" rectangular shank brad nails with a 0.050" by 0.080" head (18 gauge brad nail) 1" from each corner and on 6" spacing.

**Test Specimen Description:** (Continued)

**Side Lite Description** (Continued)

**Weatherstripping:** None

**Panel Construction:** The panel was constructed of 1-3/4" thick hardwood and utilized a glued cove and bead joint, reinforced with #8 x 3" screws. Two screws were located at the stile to top rail and stile to lock rail joints. Four screws were located at the stile to bottom rail joints. The side lite was secured to the mullions with eight #8 x 3" screws, 5" from the ends of the mullion and on 12" spacing. The side lite was secured to the frame with eight #8 x 3" screws, 5" from the ends of the jamb and on 12" spacing. Additional fastening was provided by 1/2" quarter round trim fastened by 1-1/4" long by 0.040" by 0.050" rectangular shank brad nails with a 0.050" by 0.080" head (18 gauge brad nail) 1" from each corner and on 6" spacing.

**Transom Description**

**Overall Size:** 74-1/8" wide by 37-5/8" high

**Panel Size:** 72-3/8" wide by 36" high

**Daylight Opening:** 67-3/4" wide by 31-3/8" high

**Glazing Type:** Sealed insulating glass comprised of 1/8" thick tempered glass at the exterior and 1/8" thick tempered decorative textured glass at the interior. A 1/2" aluminum spacer system was used providing 3/4" overall thickness.

**Glazing Details:** Interior glazed with double-sided butyl tape and a wood glazing bead fastened with 1" long by 0.040" by 0.050" rectangular shank brad nails with a 0.050" by 0.080" head (18 gauge brad nail) 1" from each corner and on 6" spacing.

**Weatherstripping:** None

**Frame Construction:** The frame was constructed of 4-1/2" by 3/4" hardwood. The corners were secured with two #8 x 3" wood screws.

**Panel Construction:** The panel was constructed of 1-3/4" thick laminated hardwood and utilized a glued cove and bead joint. Two #8 x 3" screws were located at each stile to rail joint. The panel was secured to the transom frame with seven #8 x 3" screws 3" from each corner and on 18" spacing around the arch and three #8 x 3" screws 3" from each corner and in the center across the sill and with 1/2" quarter round trim fastened by 1-1/4" long by 0.040" by 0.050" rectangular shank brad nails with a 0.050" by 0.080" head brad nails (18 gauge brad nail) 1" from each corner and on 6" spacing. The transom was attached to the head of the door with six #8 x 1-1/2" screws one 3" from each corner of the head/sill and on 13" spacing across the head/sill.

**Test Specimen Description:** (Continued)

**Transom Description** (Continued)

**Installation:** The jambs were secured to a #2 Yellow Pine test buck with seven #8 x 3" wood screws, one 3" from each corner and on 16" spacing around the arch.

**Overall Area:** 58.72 ft<sup>2</sup>

**Test Results:** The results are tabulated as follows:

	<u>Indicator Number</u>			Net
	1	2	3	
Uniform Load Deflection per ASTM E 330 (Deflections were taken on the door)				
36.2 psf (positive) (load held for 30 seconds)	0.35"	0.71"	0.43"	0.32"
45.7 psf (negative) (load held for 27 seconds)	0.26"	0.67"	0.41"	0.34"

	<u>Indicator Number</u>			Net
	4	5	6	
Uniform Load Deflection per ASTM E 330 (Deflections were taken on the transom sill)				
36.2 psf (positive) (load held for 30 seconds)	0.09"	0.16"	0.09"	0.07"
45.7 psf (negative) (load held for 27 seconds)	0.16"	0.22"	0.13"	0.08"

	<u>Indicator Number</u>			Net
	1	2	3	
Uniform Load Structural per ASTM E 330 ( Permanent sets were taken on the door)				
54.3 psf (positive) (load held for 10 seconds)	0.08"	0.08"	0.06"	0.01"
68.6 psf (negative) (load held for 10 seconds)	0.05"	0.05"	0.04"	<0.01"

	<u>Indicator Number</u>			Net
	4	5	6	
Uniform Load Structural per ASTM E 330 ( Permanent sets were taken on the door)				
54.3 psf (positive) (load held for 10 seconds)	0.02"	0.03"	<0.01"	0.02"
68.6 psf (negative) (load held for 10 seconds)	0.02"	0.02"	0.01"	<0.01"

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

\*\*Detailed drawings, data sheets, representative samples of test specimens, a copy of this report, or other pertinent project documentation will be retained by Architectural Testing, Inc. for a period of four years from the original test date. At the end of this retention period, such materials shall be discarded without notice and the service life of this report will expire.

Results obtained are tested values and were secured by using the designated test methods. If test specimen contains glazing, no conclusions of any kind regarding the adequacy or inadequacy of the glass in the test specimen can be made. This report does not constitute certification of this product nor an opinion or endorsement by this laboratory. It is the exclusive property of the client so named herein and relates only to the specimen(s) tested. This report may not be reproduced, except in full, without the written approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC.

---

Andy Cost  
Laboratory Manager

---

Joseph A. Reed, P.E.  
Director - Engineering and Product Testing

JSL:ajl/cmd

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

Appendix-A: Sketch (1)

Appendix-B: Drawings (7)

### Revision Log

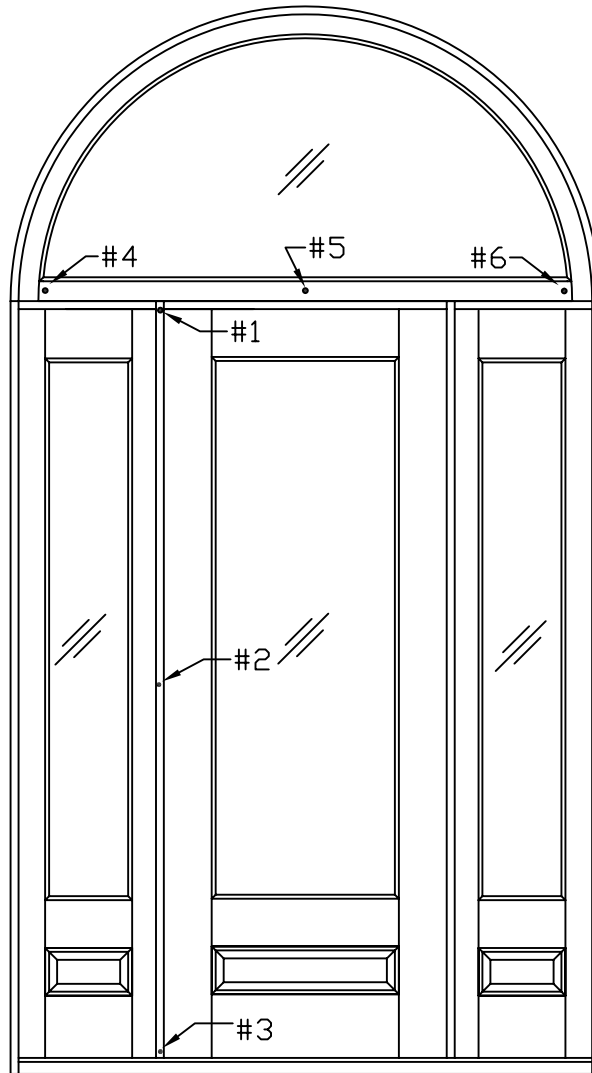
<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	08/18/06	N/A	Original report issue
1	07/21/10	1, 6	Replaced Expiration Date wording with Record Retention End Date. Replaced cosigner James Sturdevant with Andy Cost.



## **Appendix A**

### **Sketch**

REV	DATE	DESCRIPTION	BY



PROJECT NO.  
64142.01  
801-44

PROJECT NAME: INSWING HARDWOOD DOOR  
CLIENT: GLASS CRAFT



DRAWING

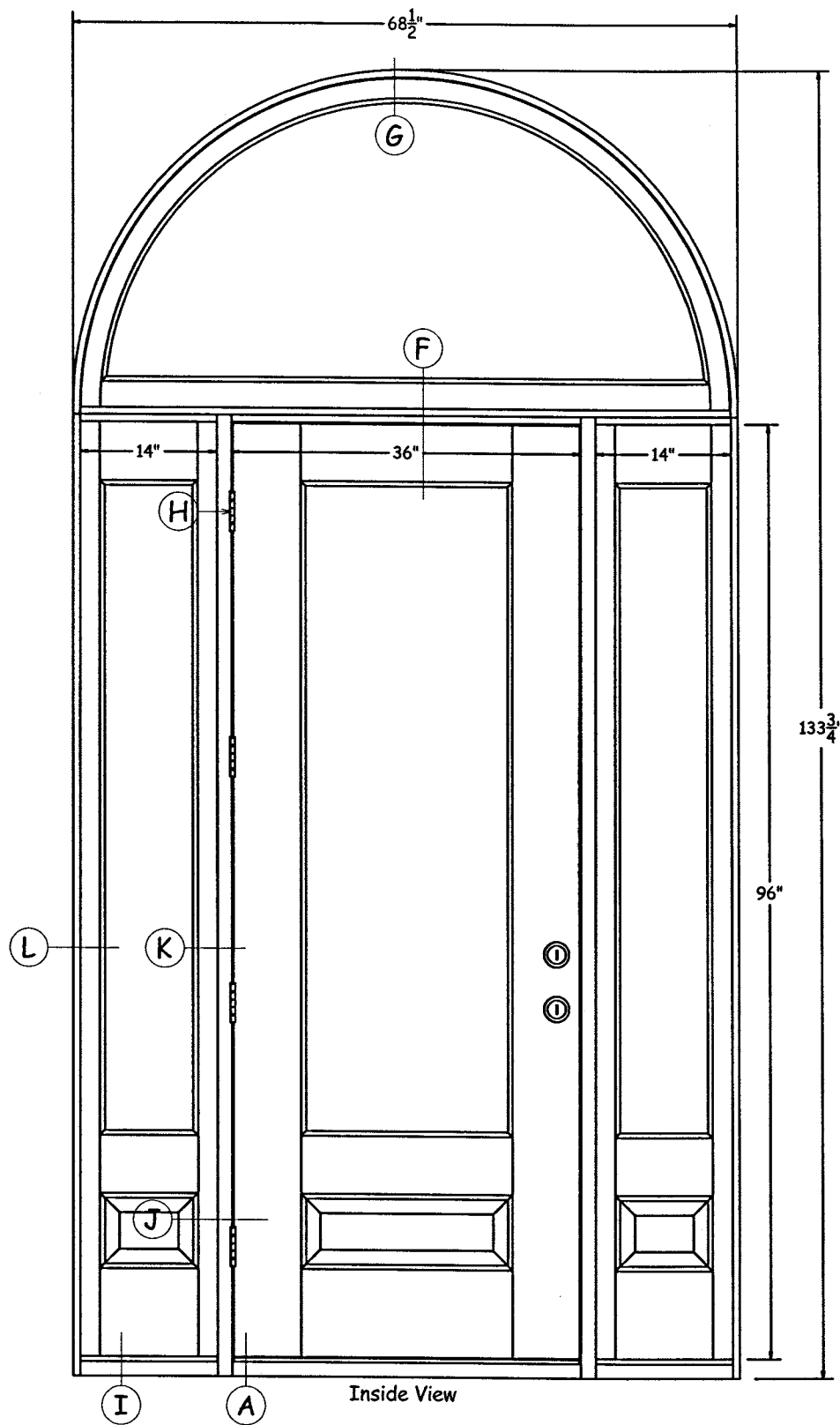
INDICATOR SKETCH

DWG. BY:  
BWM  
DATE:  
08/18/06

SHEET  
1 OF  
1

## **Appendix B**

### **Drawings**



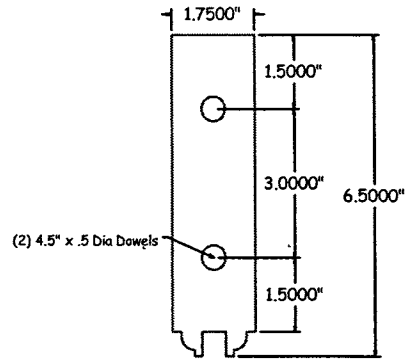
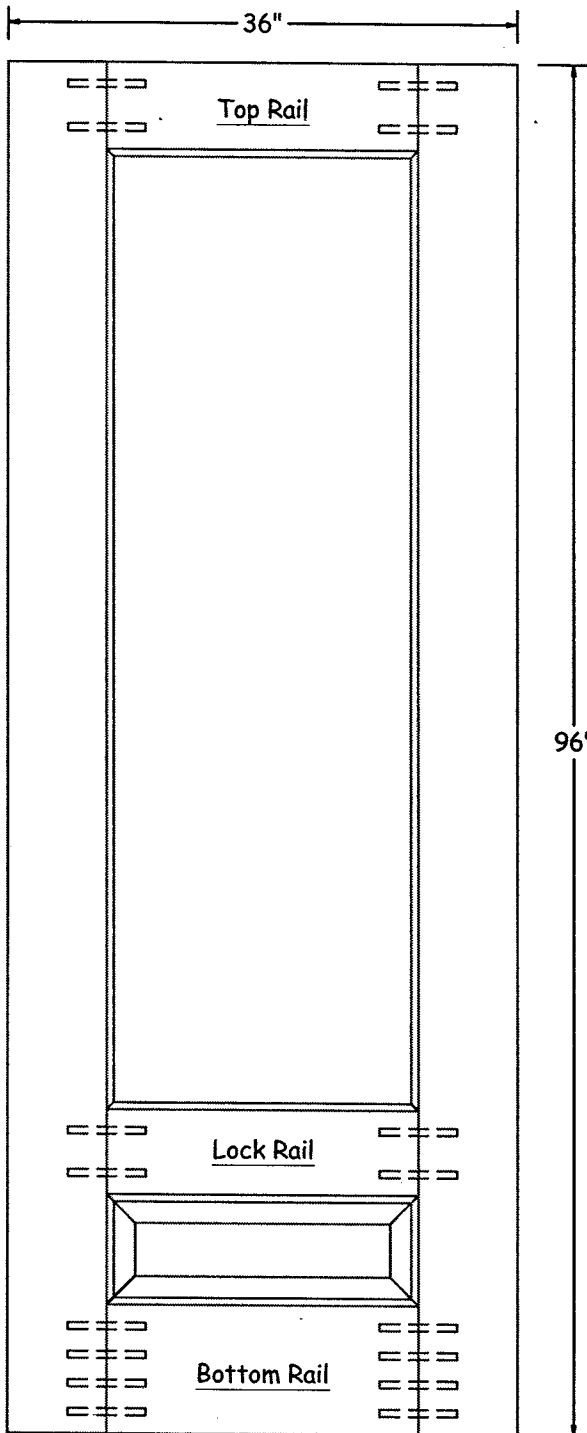
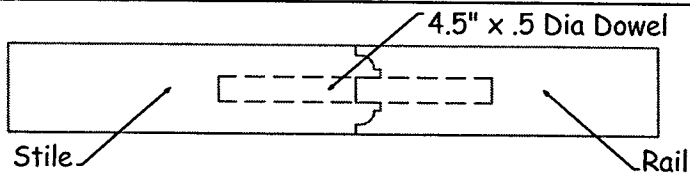
**Architectural Testing**

Test sample complies with these details.  
Deviations are noted.

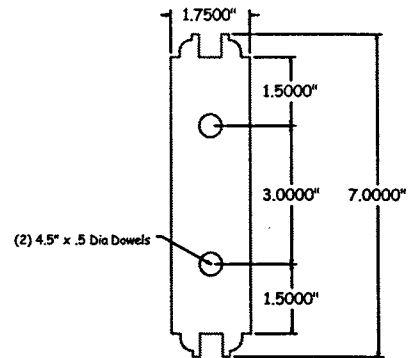
**Glass\*Craft**  
Door Company

Houston Texas 77043 (713)-690-8282

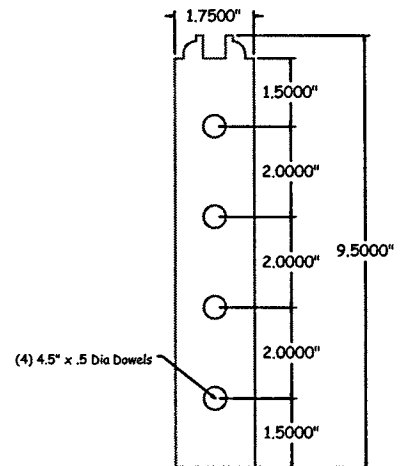
Report# 64141, 64142  
Date 04/08/06 Tech JS



Top Rail



Lock Rail



Bottom Rail



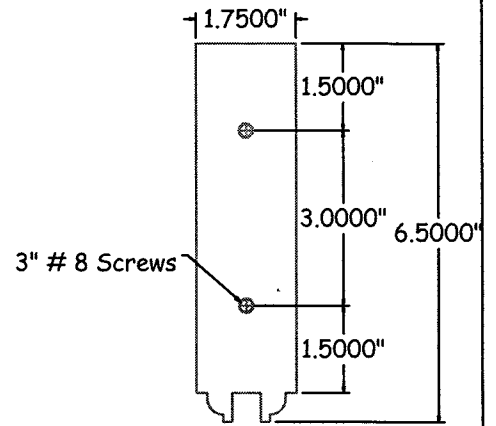
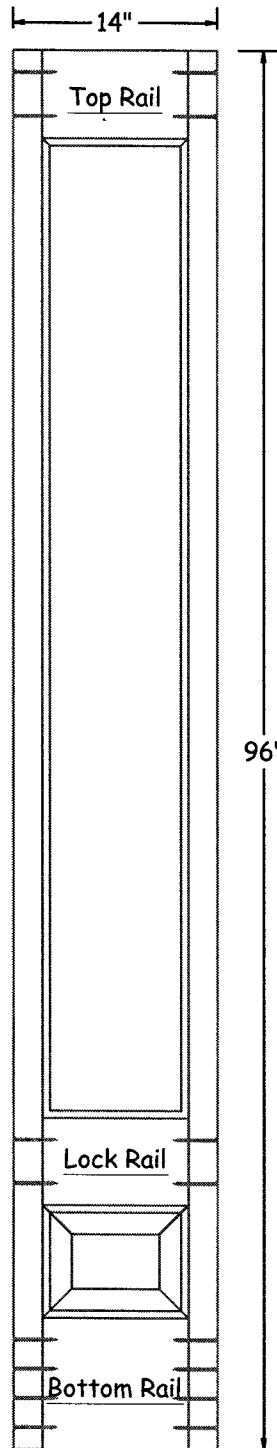
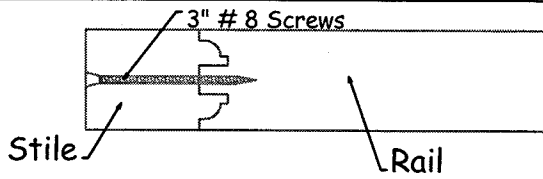
**Architectural Testing**

Test sample complies with these details.  
Deviations are noted.

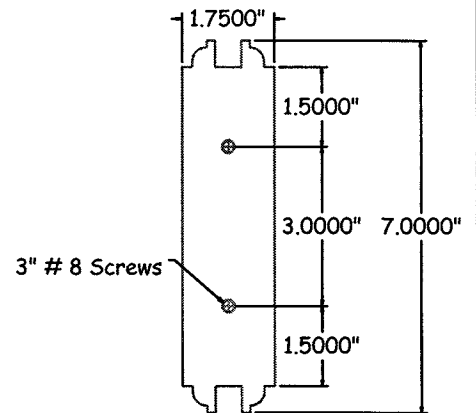
Report# 64137, 64138, 64141, 64142

Date 7/31/06 Tech JS

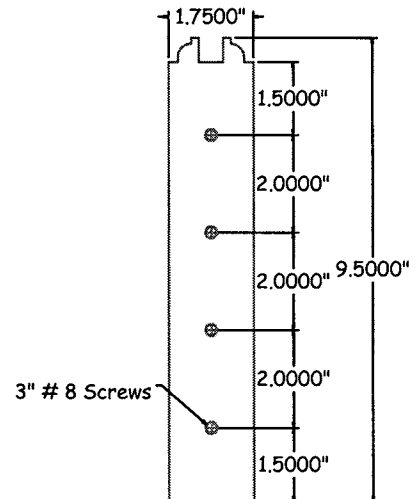
**Glass\*Craft**  
Door Company  
Houston Texas 77043 (713)-690-8282



Top Rail



Lock Rail



Bottom Rail

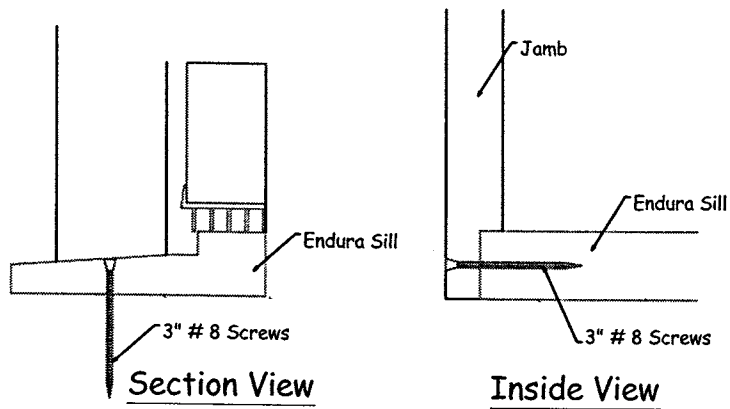


**Architectural Testing**

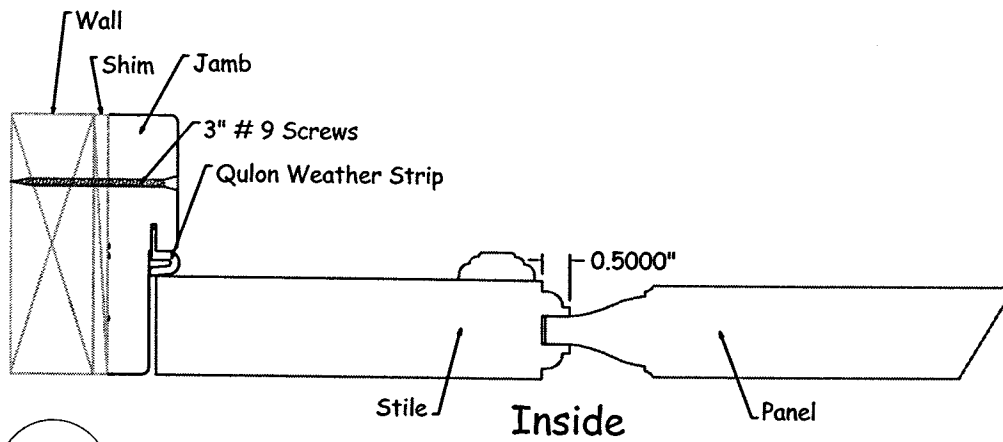
Test sample complies with these details.  
Deviations are noted.

**Glass\*Craft**  
Door Company  
Houston Texas 77043 (713)-690-8282

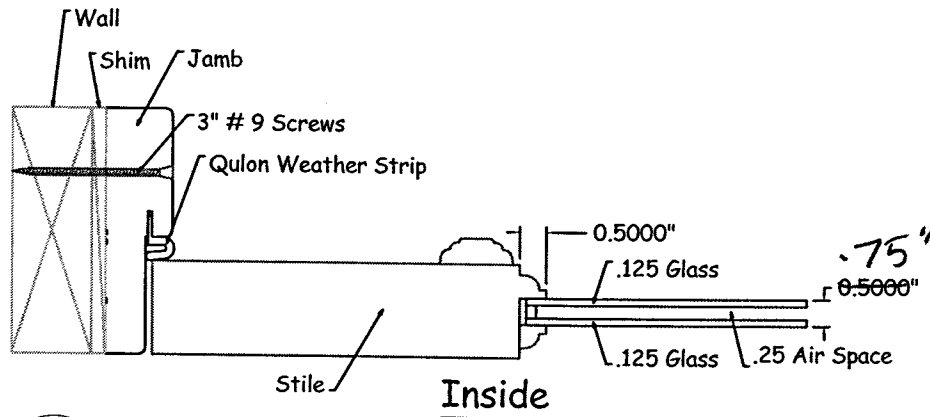
Report# 64141, 64142  
Date 7/31/06 Tech JS



## A Threshold



## B Panel



## C Glass



Architectural Testing

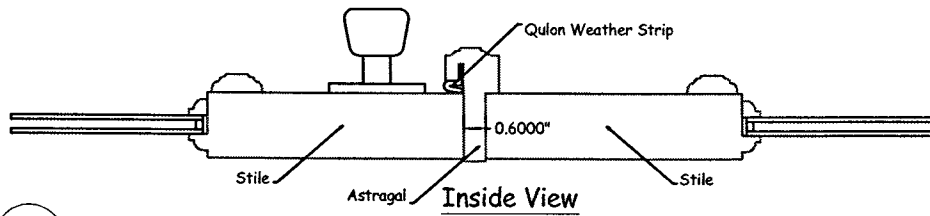
Test sample complies with these details.  
Deviations are noted.

**Glass\*Craft**  
Door Company

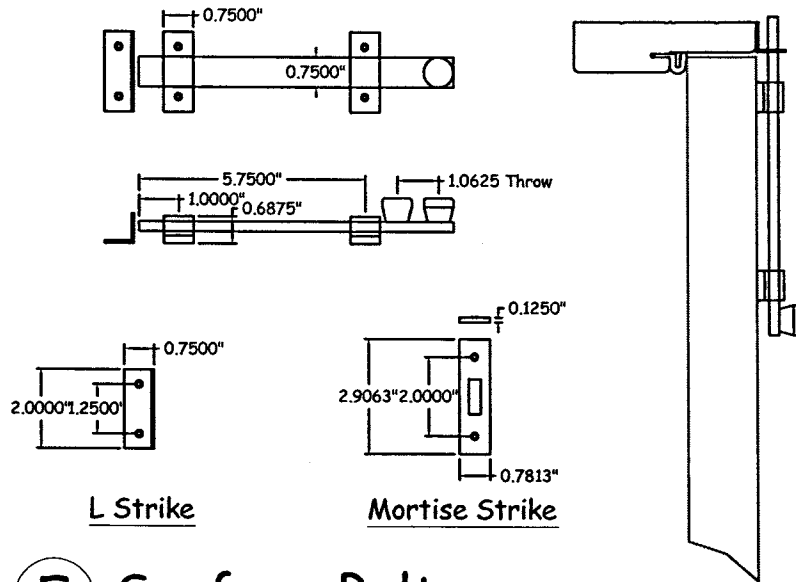
Houston Texas 77043 (713)-690-8282

Report# 64137, 64138, 64141, 64142

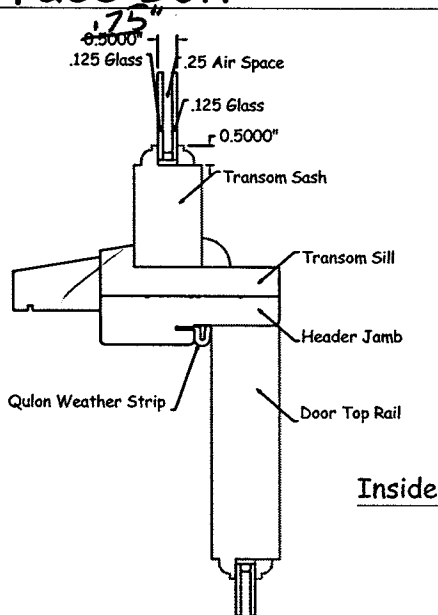
Date 2/31/06 Tech JS



**D** Astragal



**E** Surface Bolt



**F** Header-Sill

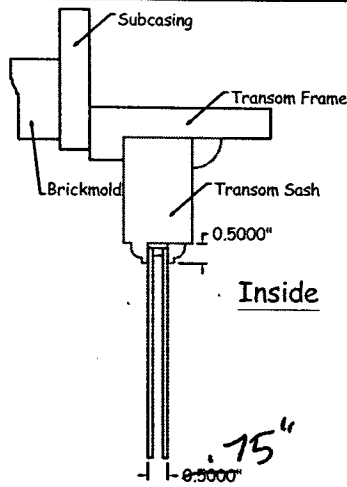
**Architectural Testing**

Test sample complies with these details.  
Deviations are noted.

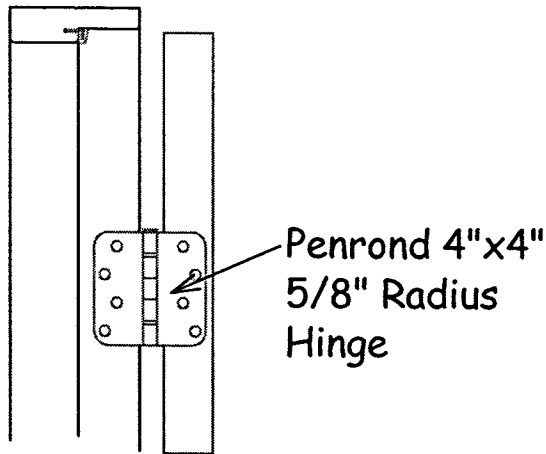
Report# 64137, 64138, 64141, 64142  
Date 7/31/06 Tech JS

**Glass\*Craft**  
Door Company  
Houston Texas 77043 (713)-690-8282

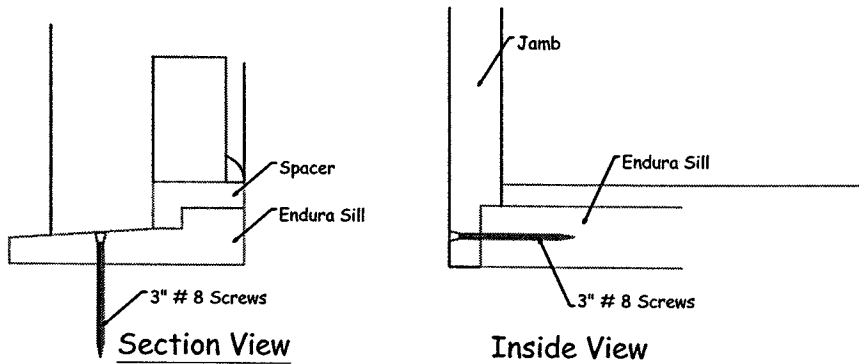




**G** Transom Head



**H** Door Hinge



**I** Threshold @ Sidelite



**Architectural Testing**

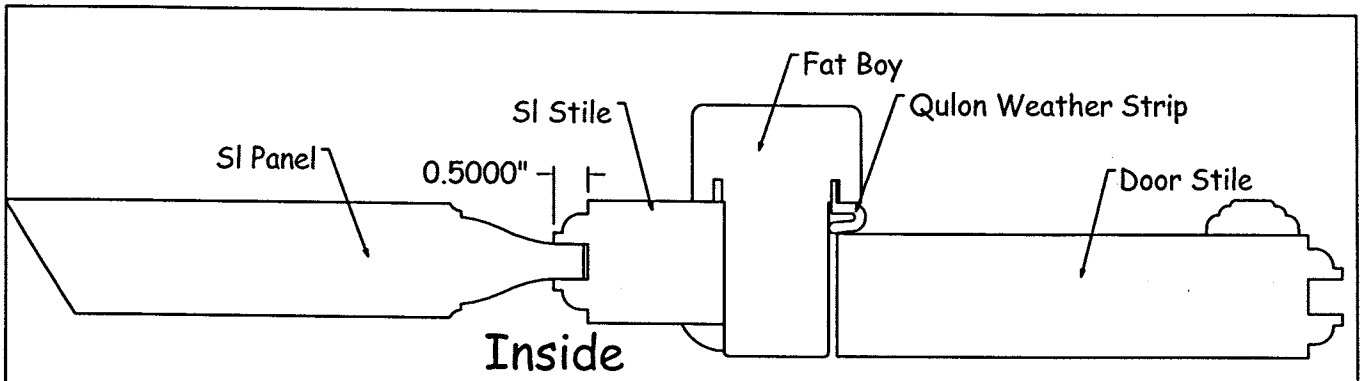
Test sample complies with these details.  
Deviations are noted.

Report# 64141, 64142, 64137, 64138

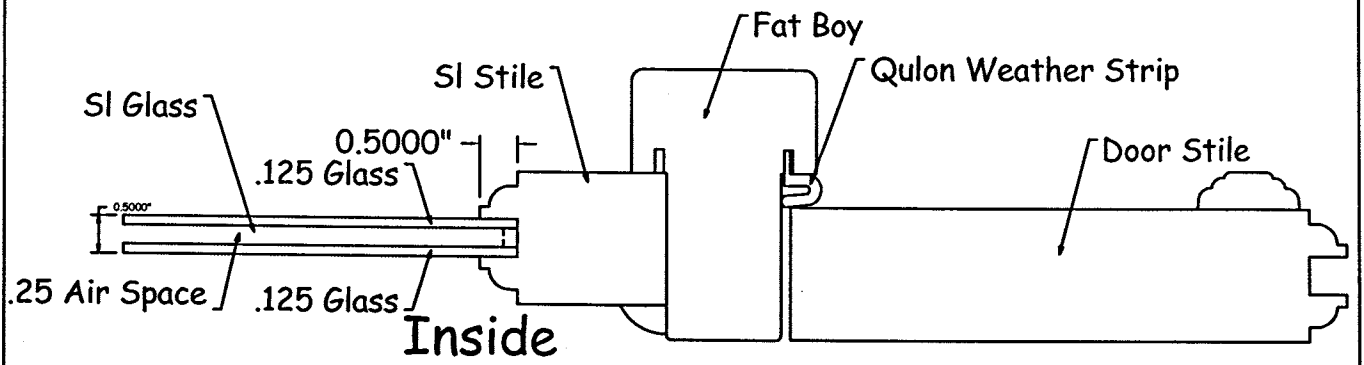
Date 7/21/06 Tech JS

**Glass\*Craft**  
Door Company

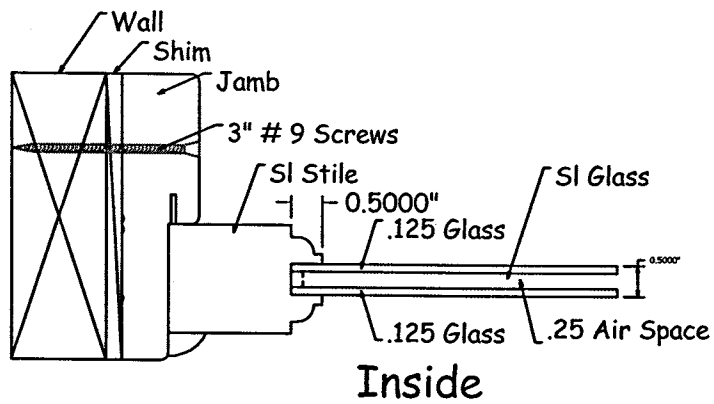
Houston Texas 77043 (713)-690-8282



**J** Sidelite Panel



**K** Sidelite Panel



**L** Sidelite



Architectural Testing

Test sample complies with these details.  
Deviations are noted.

Report# 64141, 64142  
Date 4/8/06 Tech JS

**Glass\*Craft**  
Door Company  
Houston Texas 77043 (713)-690-8282