

**PERFORMANCE TEST REPORT**

**Rendered to:**

**GLASSCRAFT DOOR COMPANY**

**SERIES/MODEL: Buffalo Forge Steel Doors/ Double with Transom**  
**PRODUCT TYPE: LH-A In-swing Double Door with Half-Round Transom**

<b>Title</b>	<b>Summary of Results</b>
Uniform Load Deflection Test Pressure	+2715 Pa (+56.70 psf)
Uniform Load Deflection Test Pressure	-3097 Pa (-64.68 psf)
Uniform Load Structural Test Pressure	+4072Pa (+85.05 psf)
Uniform Load Structural Test Pressure	-4645Pa (-97.02 psf)

This report contains in its entirety:

Cover Page: 1 page  
Report Body: 6 pages  
Drawings: 7 pages

Reference should be made to ATI Report No. 72619.01-801-44 for complete test specimen description and data.

## PERFORMANCE TEST REPORT

Rendered to:

GLASSCRAFT DOOR COMPANY  
2002 Brittmoore Street  
Houston, Texas 77043

Report No.: 72619.01-801-44  
Test Date: 04/18/07  
Report Date: 06/18/07  
Expiration Date: 04/18/11  
Revision 1: 06/22/07

**Project Summary:** Architectural Testing, Inc. (ATI) was contracted by GlassCraft Door Company to perform testing on a Series/Model Buffalo Forge Steel Doors/ Double with Transom, LH-A in-swing double door with half-round transom. Test specimen description and results are reported herein. The sample was provided by the client. Testing was conducted at the Architectural Testing, Inc. laboratory in Southlake, Texas.

**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:**

**Series/Model:** Buffalo Forge Steel Doors/ Double with Transom

**Product Type:** LH-A In-swing Double Door with Half-Round Transom

**Overall Size:** 1889 mm (74-3/8") wide by 3474 mm (136") high

**Transom Size:** 1889 mm (74-3/8") wide by 959 mm (37-3/4") high

**Transom Daylight Opening Size:** 787 mm (31") wide by 1530 mm (60-1/4") high

**Leaf Size (2):** 914 mm (36") wide by 2438 mm (96") high

**Door Daylight Opening Size (2):** 572 mm (22-1/2") wide by 2184 mm (86") high

**Overall Area:** 6.11 m<sup>2</sup> (65.80 ft<sup>2</sup>)

**Test Specimen Description:** (Continued)

**Finish:** Brown paint

**Glazing Details:** The insulating glass unit was exterior glazed. It was comprised of two pieces of 1/8" thick tempered pattern glass with a 1/4" air spacer providing 5/8" overall thickness. Butyl tape was located at the exterior and interior with a screw applied steel glazing bead at the interior. Glazing bead screws were located 7" from each corner and 10" on center thereafter.

**Weatherstripping:**

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Foam filled vinyl leaf	1 Row	Jambs and head
Adhesive back foam 1/2" by 1/4"	1 Row	Perimeter of vent frame

**Frame Construction:** The door frame section was constructed of 4-5/8" thick steel jambs, head and transom frame and included an adjustable extruded aluminum threshold. The steel jambs, head and transom frame were welded at each joint. The aluminum threshold was secured to the jambs with three #8 x 3" screws at each end.

**Leaf Construction:** The door leaf was constructed from steel with a foam core. A glass frame was secured to the door leaf with three barrel hinges and three sweep latches. Sweep latch keepers were welded to the door leaf. A decorative iron grille was secured at the exterior of the unit.

**Hardware:**

<u>Description</u>	<u>Quantity</u>	<u>Location</u>
Prodeco hinge	4	10" and 68" from the bottom of each leaf
Glass frame hinge	6	12" from each end and the midpoint of each glass frame
Lockset	1	37" from the bottom of the lock stile
Deadbolt	1	43" from the bottom of the lock stile
Flush bolt	2	Top and bottom of the fixed leaf
Sweep latch	6	12" from each end and the midpoint of the glass frame
Sweep latch keeper	6	Door leaf corresponding to each sweep latch

**Test Specimen Description:** (Continued)

**Drainage:** Sloped sill

**Mullion Construction:** The transom sill was secured to the door head with #14 x 2-3/4" screws located 14" from each end and 16" on center thereafter.

**Installation:** The jambs and transom head were secured to a #2 Yellow Pine test buck with #14 x 3" screws 9" from each corner and 16" on center thereafter.

**Test Results:** The following results have been recorded:

<u>Test Method</u>	<u>Title of Test</u>	<u>Indicator Readings (inch)</u>		
		<u>#1</u>	<u>#2</u>	<u>#3</u>
ASTM E 330	Uniform Load Deflection			
	(Deflections reported were taken on the transom sill)			
	(Loads were held for 24 seconds)			
	+2715 Pa (+56.70 psf) (positive)	0.39	0.43	0.27
ASTM E 330	Uniform Load Deflection			
	(Deflections reported were taken on the active lock stile)			
	(Loads were held for 24 seconds)			
	+2715 Pa (+56.70 psf) (positive)	1.39	0.85	0.60
ASTM E 330	Uniform Load Structural			
	(Deflections reported were taken on the transom sill)			
	(Loads were held for 10 seconds)			
	+4072 Pa (+85.05 psf) (positive)	0.17	0.14	0.11
ASTM E 330	Uniform Load Structural			
	(Permanent sets reported were taken on the active lock stile)			
	(Loads were held for 10 seconds)			
	+4072 Pa (+85.05 psf) (positive)	0.22	0.13	0.10
	-4645 Pa (-97.02 psf) (negative)	0.49	0.45	0.47

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.

**General Note:** Upon completion of testing, the specimens met the requirements of the referenced standards.

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. 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:

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Andy Cost  
Laboratory Manager

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Joseph Reed  
Director- Engineering/ Product Testing

AC:aly

Attachment(s): This report is complete only when all attachments listed are included.  
Appendix-A: Drawings (7)

### Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	06/18/07	N/A	Original report issue
1	06/22/07	Cover, 1	Removed Buffalo Forge Milabo from series/ model description  Replaced with Buffalo Forge Steel Doors/ Double with Transom

This report produced from controlled document template ATI 00168, revised 05/03/07.

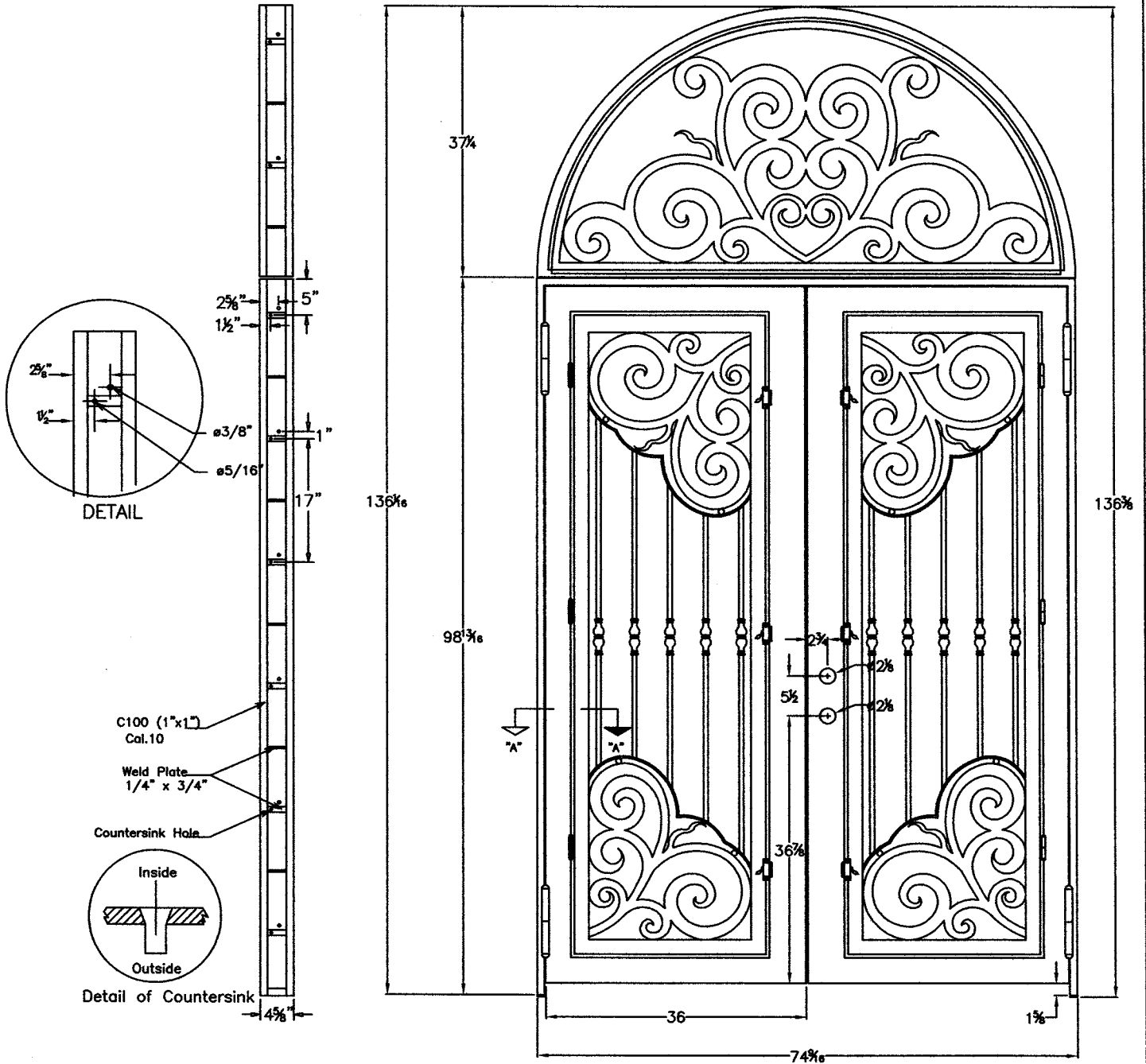
## **APPENDIX A**

### **Drawings**

Straight top  
 Double door  
 w/  
 Full arch transom

Report# 7269-01-108-10-9-972L  
 Date 6-21-97  
 Tech  
 Test sample complies with these details.  
 Deviations are noted.

Architectural Testing



**Glass\*Craft**  
 Door Company

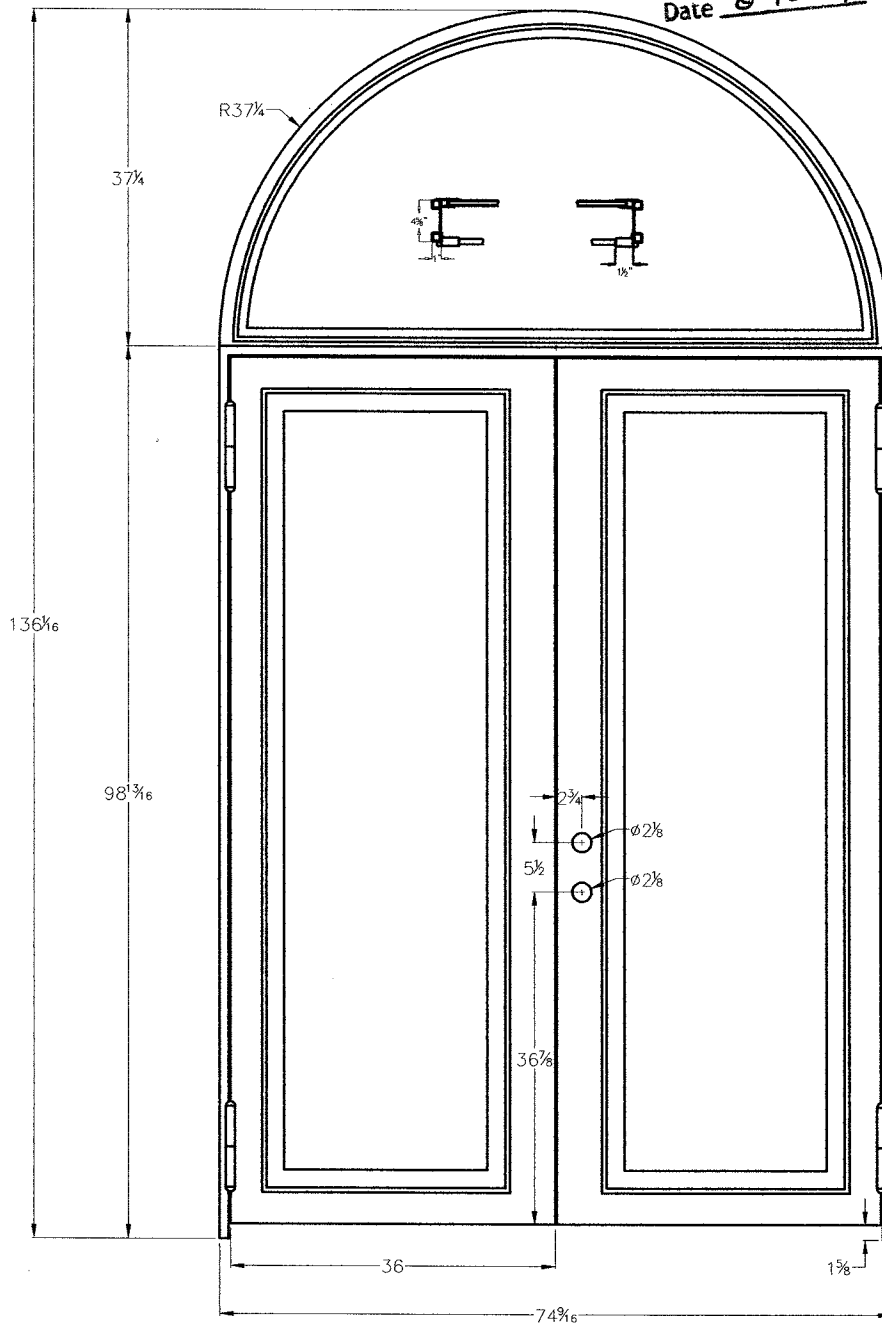
Straight top  
Double door  
w/  
Full arch transom



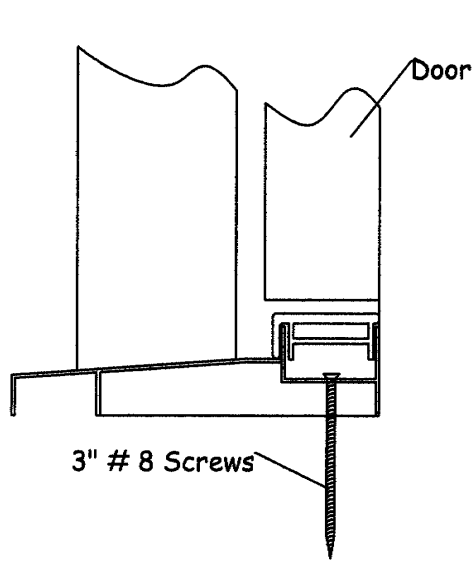
Architectural Testing

Test sample complies with these details.  
Deviations are noted.

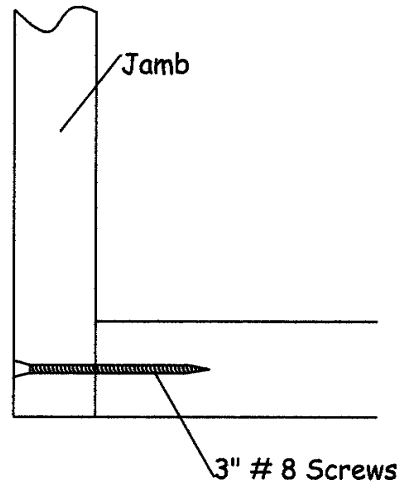
Report# 72619.01-801-44  
Date 6-12-07 Tech Q



**Glass\*Craft**  
Door Company



End Section View



Front View

Threshold In Swing



**Architectural Testing**

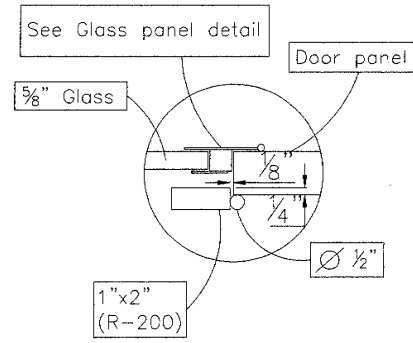
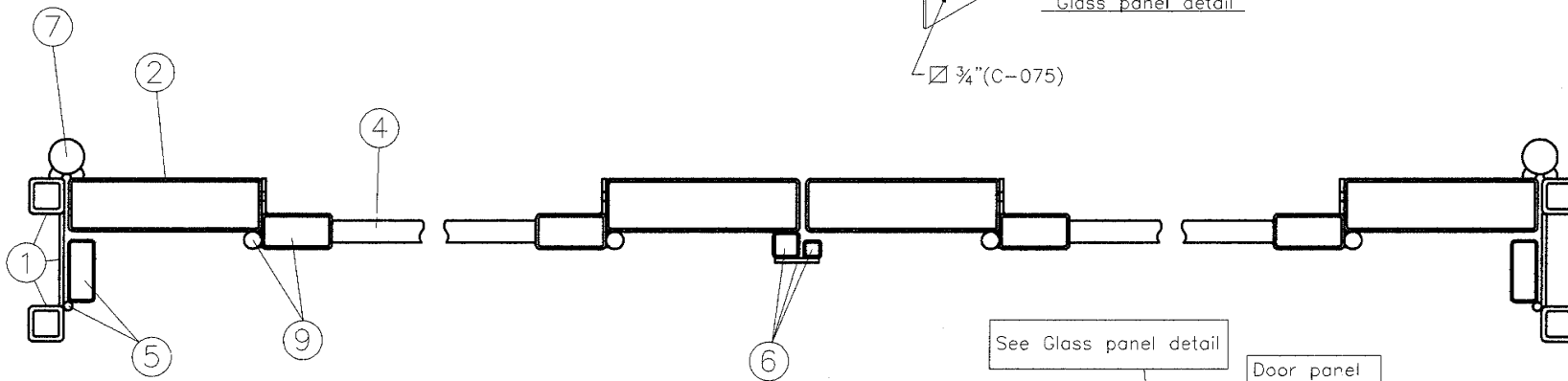
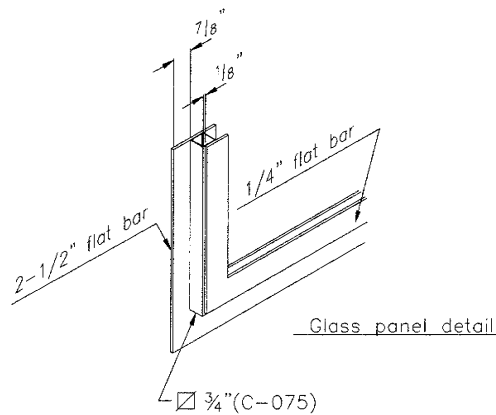
Test sample complies with these details.  
Deviations are noted.

Report# 73619.01-801-44

Date 6-12-07 Tech R

**Glass\*Craft**  
Door Company

Double door  
Cross Section  
(glass frame not shown)



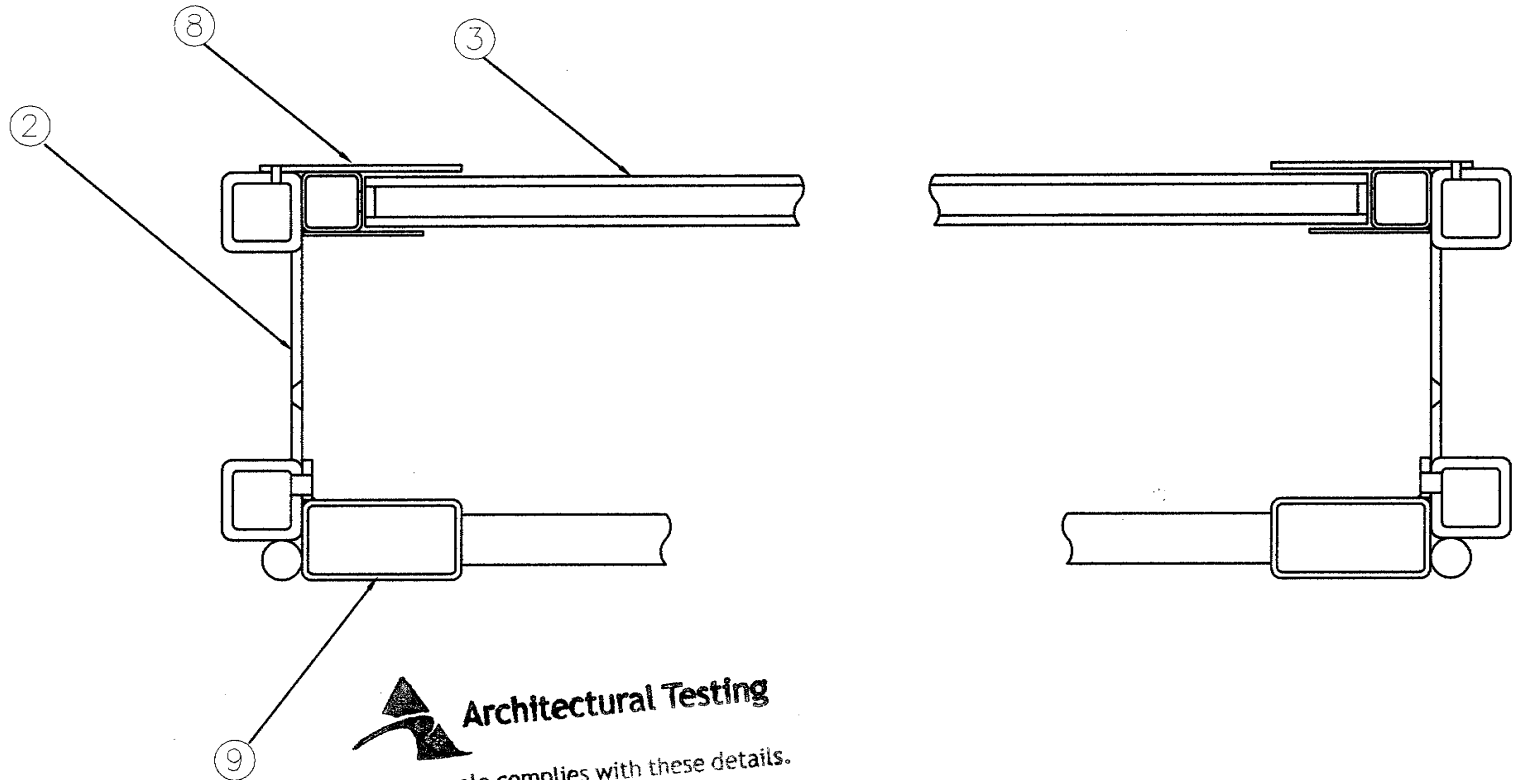
- 1 Jamb
- 2 Stile
- 3 Glass
- 4 Forge
- 5 Door stop
- 6 Astragal
- 7 Prodeco hinge
- 8 Glass frame hinge
- 9 Forge frame
- 10 Fixed glass stop
- 11 Screwed glass stop




Test sample complies with these details.  
Deviations are noted.  
Report# 72619.01-801-44  
Date 6-12-07 Tech RP

**Glass\*Craft**  
Door Company

Transom  
Cross Section



- 2 Stile
- 3 Glass
- 4 Forge
- 5 Door stop
- 6 Astragal
- 7 Prodeco hinge
- 8 Glass frame
- 9 Forge frame
- 10 Fixed glass stop
- 11 Screwed glass stop

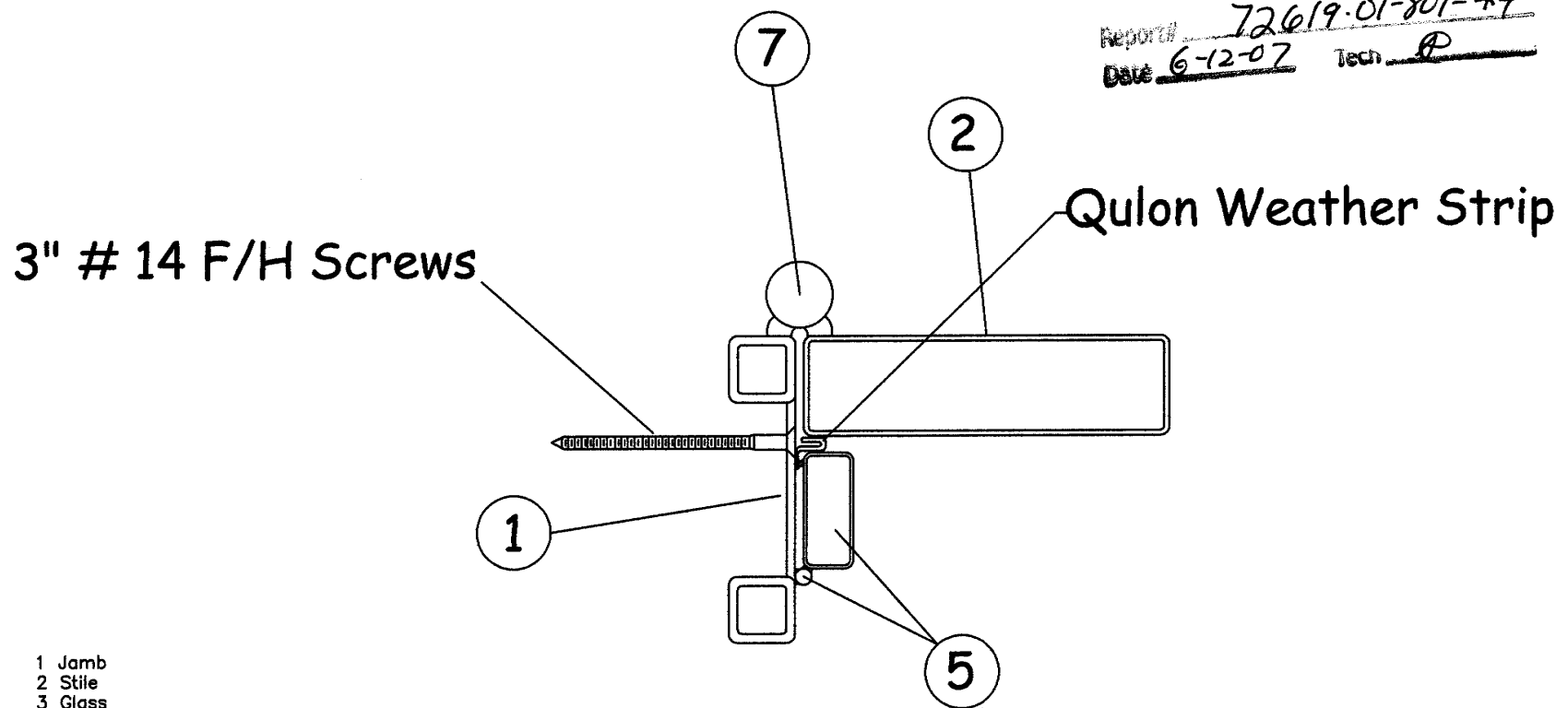
 **Architectural Testing**  
 Test sample complies with these details.  
 Deviations are noted.

Report# 72619.01-801-14  
 Date 6-12-07 Tech JE

**Glass\*Craft**  
 Door Company

# Door Jam Cross Section

Architectural Testing  
 Test No. \_\_\_\_\_  
 Report # 72619-01-801-44  
 Date 6-12-07 Tech. P



- 1 Jamb
- 2 Stile
- 3 Glass
- 4 Forge
- 5 Door stop
- 6 Astragal
- 7 Prodeco hinge
- 8 Glass frame hinge
- 9 Forge frame
- 10 Fixed glass stop
- 11 Screwed glass stop

**Glass\*Craft**  
 Door Company



Architectural Test

Test sample complies with the  
Deviations are:

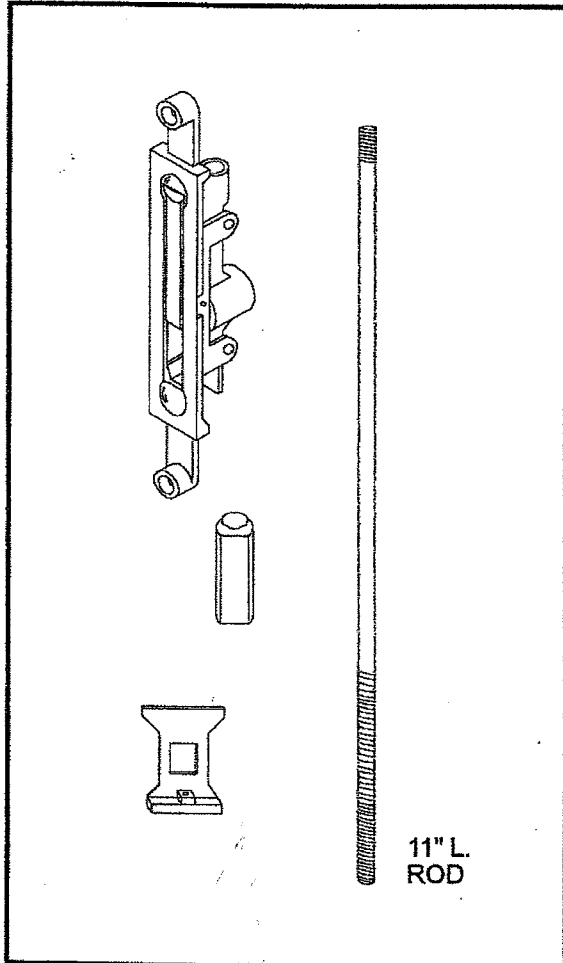
Report# 72619.01-801-44

Date 6-2-07 Initials [Signature]

# Z/C FLUSH BOLT

**Product code: FB1**  
**Zinc alloy flush bolt with**  
**11" rod.**

- \*Positive "U" joint actuator with 7/8" throw
- \*1/8" offset with 3/4" backset.
- \*5/8" adjustment on rod length.
- \*Round brass tip
- \*Finish option:  
AL: Baked satin aluminum.  
DU: Baked duronodic.  
BK: Baked black.



## Technical Information

