

**AAMA/WDMA/CSA 101/LS.2/A440-05
TEST REPORT**

Rendered to:

NAN YA PLASTICS CORPORATION

**PRODUCT TYPE: Glazed Transom Fixed Window
SERIES/MODEL: GTI 12020**

Title	Summary of Results
Primary Product Designator	TR-R75 3692 x 610 (145-3/8 x 24)
Design Pressure*	3840 Pa (80.20 psf)
Negative Design Pressure*	3840 Pa (80.20 psf)
Air Infiltration	<0.05 L/s/m ² (<0.01 cfm/ft ²)
Water Penetration Resistance Test Pressure*	540 Pa (11.28 psf)
Uniform Load Structural Test Pressure	± 5760 Pa (120.30 psf)

*-Optional Secondary Designators

Test Completion Date: 02/10/06

Reference must be made to Report No. 62723.01-801-44, dated 03/21/06 for complete test specimen description and data.

AAMA/WDMA/CSA 101/I.S.2/A440-05 TEST REPORT

Rendered to:

**NAN YA PLASTICS CORP.
8909 North Loop East
Suite 800
Houston, TX 77029**

Report No.: 62723.01-801-44
Test Dates: 02/08/06
Through: 02/10/06
Report Date: 03/21/06
Expiration Date: 02/08/10

Project Summary: Architectural Testing, Inc. (ATI) was contracted by Nan Ya Plastics Corp. to perform testing on a Glazed transom fixed window. The sample tested successfully met the performance requirements for a TR-R75 3692 x 610 (145-3/8 x 24) rating. Test specimen description and results are reported herein.

Test Specification: The test specimen was evaluated in accordance with AAMA/WDMA/CSA 101/I.S.2/A440-05, *Standard/Specification for Windows, Doors, and Unit Skylights*.

Test Specimen Description:

Series/Model: GTI 12020

Product Type: Glazed transom fixed window

Overall Size: 3692 mm (145-3/8") wide by 610 mm (24") high

Glass Opening Size: 3615 mm (142-5/16") wide by 536 mm (21-1/8") high

Overall Area: 2.25 m² (24.22 ft²)

Finish: PVC parts were white.

Frame Construction: The frame head, jambs, and sill were formed from co-extruded PVC/foam. The corners were mitered and secured using sealant, four #10 x 2-1/4" screws, and a die cast corner key attached with one #9 x 1-1/2" screw. The foam PVC glazing bead was secured to the frame using sealant and one 16 gauge x 1-13/16" brad nail 5" from each corner and on 5" centers. A cap bead of sealant was applied to the sill glazing beads. The foam PVC astragals were attached at the head and sill with sealant and three #10 x 2-1/2" screws.

Test Specimen Description: (Continued)

Frame Component Parts List:

<u>Description</u>	<u>Quantity</u>	<u>Part#</u>	<u>Manufacturer</u>
Top, Bottom, and Side jambs	4	1	Nan-Ya Plastics Corp.
Glazing bead	12	4	Nan-Ya Plastics Corp.
Astragal	2	16	Nan-Ya Plastics Corp.
Corner key	4	15	Micota Locks Co.

Glazing Type: The unit utilized a nominal 16 mm (5/8") thick sealed insulating glass unit fabricated from two pieces of nominal 3 mm (1/8") tempered glass and an aluminum spacer system.

Glazing Details: The unit was interior glazed using backbedding compound and a foam PVC glazing bead.

Drainage: None.

Reinforcement: None.

Installation: The unit was sealed into a 2" x 10" pine test buck and secured through the frame using #10 x 3" screws 5" from each corner and on 15-3/4" centers thereafter.

Test Results: The results are tabulated as follows:

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
5.3.2.1	Air Leakage Resistance per ASTM E 283 80 Pa (1.67 psf)	<0.05 L/s/m ² (<0.01 cfm/ft ²)	1.5 L/s/m ² (0.3 cfm/ft ² max.)

Note #1: *The tested specimen meets (or exceeds) the performance levels specified in AAMA/WDMA/CSA 101/I.S.2/A440-05 for air leakage resistance.*

5.3.3.2 Water Penetration Resistance per ASTM E 547 (See Note #2)

5.3.4.2 Uniform Load Deflection per ASTM E 330 (See Note #2)

5.3.4.3 Uniform Load Structural per ASTM E 330 (See Note #2)

Test Results: (Continued)

<u>Paragraph</u>	<u>Title of Test - Test Method</u>	<u>Results</u>	<u>Allowed</u>
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Note #2: *The client opted to start at a pressure higher than the minimum required. Those results are listed under "Optional Performance".*

2.1.8	Forced Entry Resistance per ASTM F588		
5.3.5	Type: D Grade: 10		
	Tool Manipulation Test	No entry	No entry

Optional Performance

4.4.2.6	Water Penetration Resistance per ASTM E 547 540 Pa (11.28 psf)	No leakage	No leakage
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4.4.2.6	Uniform Load Deflection per ASTM E 330 (Deflections were taken on the jamb) (Loads were held for 10 seconds)		
	3840 Pa (80.20 psf) (positive)	1.3 mm (0.05")	See Note #3
	3840 Pa (80.20 psf) (negative)	1.3 mm (0.05")	See Note #3

Note #3: *The deflections reported are not limited by AAMA/WDMA/CSA 101/I.S.2/A440-05 for this product designation. The deflection data is recorded in this report for special code compliance and information only.*

4.4.2.6	Uniform Load Structural per ASTM E 330 (Permanent sets were taken on the jamb) (Loads were held for 10 seconds)		
	5760 Pa (120.30 psf) (positive)	<0.3 mm (<0.01")	2.0 mm (0.08") max.
	5760 Pa (120.30 psf) (negative)	<0.3 mm (<0.01")	2.0 mm (0.08") max.

Drawing Reference: The test specimen drawings have been reviewed by ATI and match the test specimen reported herein.

Detailed drawings, representative samples of the test specimen, and a copy of this report will be retained by ATI for a period of four years from the original test date. The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the above referenced specification. This report does not constitute certification of this product, which may only be granted by the certification program administrator. This report may not be reproduced, except in full, without the approval of Architectural Testing, Inc.

For ARCHITECTURAL TESTING, INC.

Andy Cost
Laboratory Manager

John Waskow
Director of Regional Operations

JHW: ajl
62723.01-801-44-r0
Attachments (pages):
 Appendix-A: (1)
 Appendix-B: Drawings (7)

Revision Log

<u>Rev. #</u>	<u>Date</u>	<u>Page(s)</u>	<u>Revision(s)</u>
0	03/31/06	N/A	Original report issue



Appendix A:

Alteration Addendum

Note: No alterations were required.

Appendix B:
Drawings

BILL OF MATERIALS FOR GLAZE/TRANSON OF 2' HEIGHT-INSWING G11 6020						
ITEM	NO.	QTY	PART DESCRIPTION	MATERIALS	MANUFACTURER	
FRAME	1	4	TOP & BOTTOM & SIDE JAMB	FOAMPVC CO-EX	NAN-YA PLASTIC CORP.	
	4	4	GLAZE BEAD	FOAMPVC	NAN-YA PLASTIC CORP.	
	8	4	NAILING FIN	PVC CO-EX	NAN-YA PLASTIC CORP.	
	15	4	CORNER KEY	DIE CAST	MICOTA LOCKS CO.	
	17	16	#10 X 2 1/2" PHILLIPS FLAT HEAD	STAINLESS STEEL	ZHONG-QUN SCREWS CO.	
	18	4	#9 X 1 1/2" PHILLIPS FLAT HEAD	STAINLESS STEEL	ZHONG-QUN SCREWS CO.	
	19	34	1-3/16" NAIL	STEEL	STANLEY CO.	

BILL OF MATERIALS FOR GLAZE/TRANSON OF 2' HEIGHT-OUTSWING G10 6020						
ITEM	NO.	QTY	PART DESCRIPTION	MATERIALS	MANUFACTURER	
FRAME	2	4	TOP & BOTTOM & SIDE JAMB	FOAMPVC CO-EX	NAN-YA PLASTIC CORP.	
	4	4	GLAZE BEAD	FOAMPVC	NAN-YA PLASTIC CORP.	
	9	4	NAILING FIN	PVC CO-EX	NAN-YA PLASTIC CORP.	
	15	4	CORNER KEY	DIE CAST	MICOTA LOCKS CO.	
	17	16	#10 X 2 1/2" PHILLIPS FLAT HEAD	STAINLESS STEEL	ZHONG-QUN SCREWS CO.	
	18	4	#9 X 1 1/2" PHILLIPS FLAT HEAD	STAINLESS STEEL	ZHONG-QUN SCREWS CO.	
	19	34	1-3/16" NAIL	STEEL	STANLEY CO.	

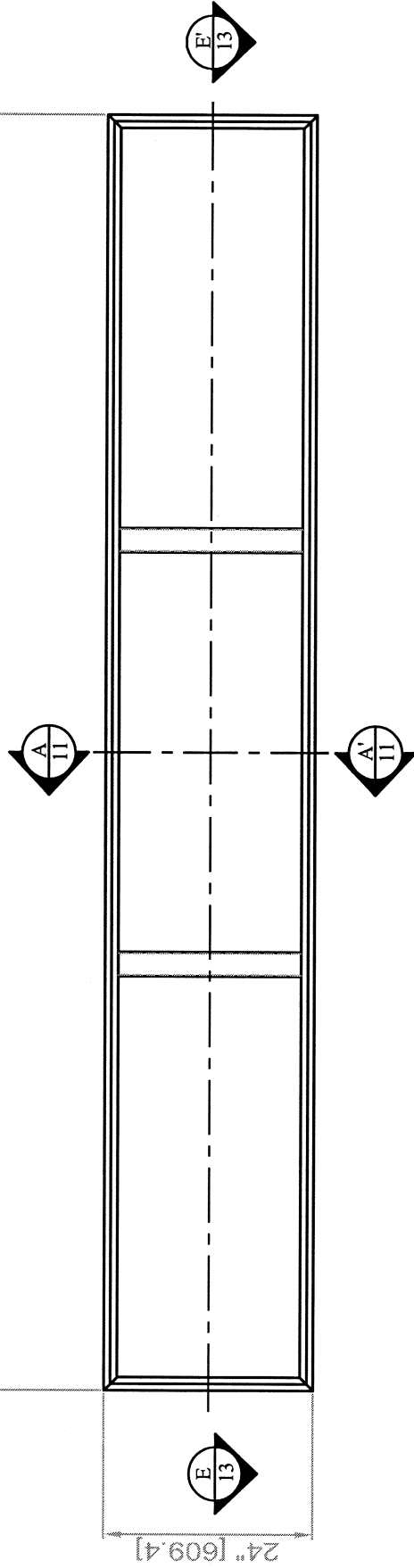
BILL OF MATERIALS FOR GLAZE/TRANSON OF 2' HEIGHT-INSWING G11 12020						
ITEM	NO.	QTY	PART DESCRIPTION	MATERIALS	MANUFACTURER	
FRAME	1	4	TOP & BOTTOM & SIDE JAMB	FOAMPVC CO-EX	NAN-YA PLASTIC CORP.	
	4	12	GLAZE BEAD	FOAMPVC	NAN-YA PLASTIC CORP.	
	16	2	ASTRAGAL	FOAMPVC	NAN-YA PLASTIC CORP.	
	8	4	NAILING FIN	PVC CO-EX	NAN-YA PLASTIC CORP.	
	15	4	CORNER KEY	DIE CAST	MICOTA LOCKS CO.	
	17	28	#10 X 2 1/2" PHILLIPS FLAT HEAD	STAINLESS STEEL	ZHONG-QUN SCREWS CO.	
	18	4	#9 X 1 1/2" PHILLIPS FLAT HEAD	STAINLESS STEEL	ZHONG-QUN SCREWS CO.	
	19	78	1-3/16" NAIL	STEEL	STANLEY CO.	

BILL OF MATERIALS FOR GLAZE/TRANSON OF 2' HEIGHT-OUTSWING G10 12020						
ITEM	NO.	QTY	PART DESCRIPTION	MATERIALS	MANUFACTURER	
FRAME	2	4	TOP & BOTTOM & SIDE JAMB	FOAMPVC CO-EX	NAN-YA PLASTIC CORP.	
	4	12	GLAZE BEAD	FOAMPVC	NAN-YA PLASTIC CORP.	
	16	2	ASTRAGAL	FOAMPVC	NAN-YA PLASTIC CORP.	
	9	4	NAILING FIN	PVC CO-EX	NAN-YA PLASTIC CORP.	
	15	4	CORNER KEY	DIE CAST	MICOTA LOCKS CO.	
	17	28	#10 X 2 1/2" PHILLIPS FLAT HEAD	STAINLESS STEEL	ZHONG-QUN SCREWS CO.	
	18	4	#9 X 1 1/2" PHILLIPS FLAT HEAD	STAINLESS STEEL	ZHONG-QUN SCREWS CO.	
	19	78	1-3/16" NAIL	STEEL	STANLEY CO.	

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

Report# 62723.01
 Date 3/16/06 Tech CH
 DATE MAR/05/06
 DRAWN BY Morris Huang
 DWG NO. REVISIONS

145 3/8" [3691.7]



① Glaze Transom (12'-1 3/8" X 24") For Inswing Door
 AAMA 101-05



Architectural Testing

Test sample complies with these details.
 Deviations are noted.

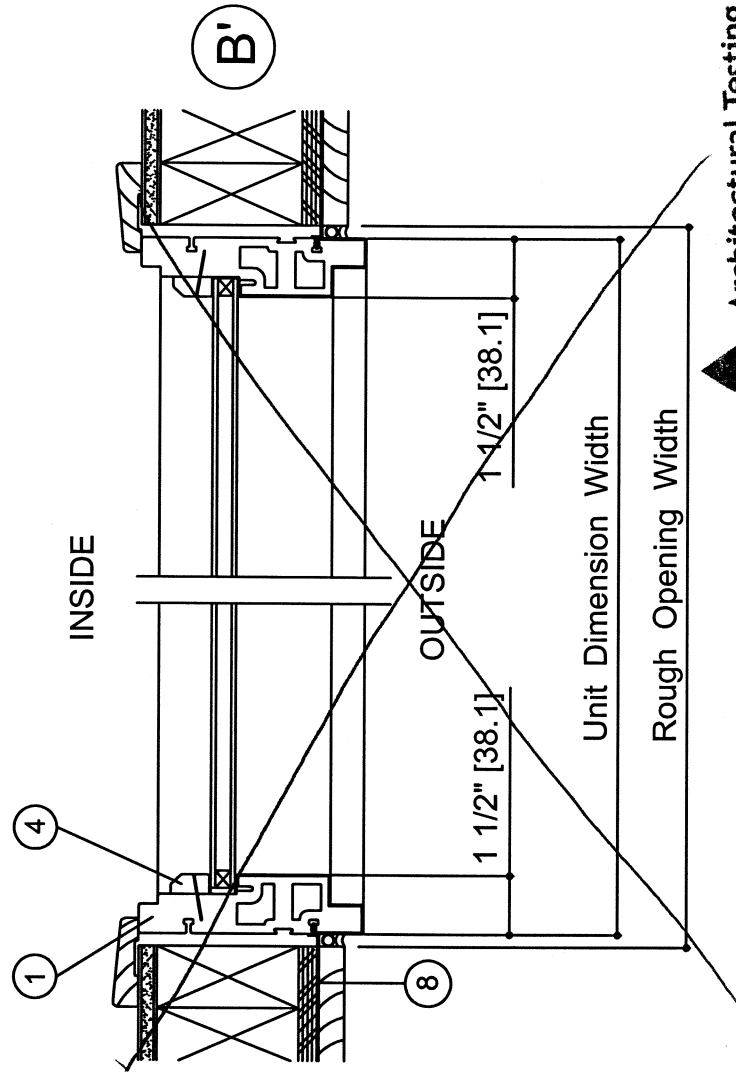
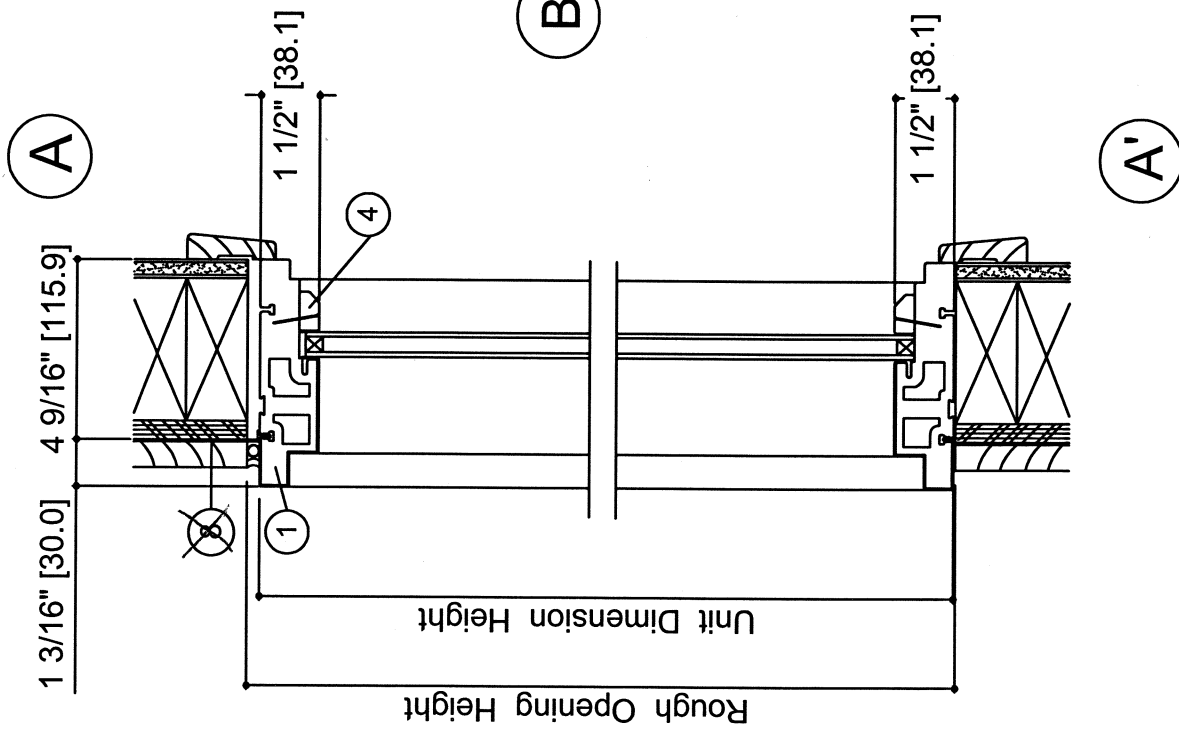
Report# 62723.01

Date 3/9/06 Tech gk

* Exterior view shown

DATE	Feb/23/06	SHEET	SHEET TITLE:	
DRAWN BY	Morris Huang	3 OF 32	Glaze Transom (12'-1 3/8" X 24")	
DWG NO.	-		Series: GT 12020	
REVISIONS				

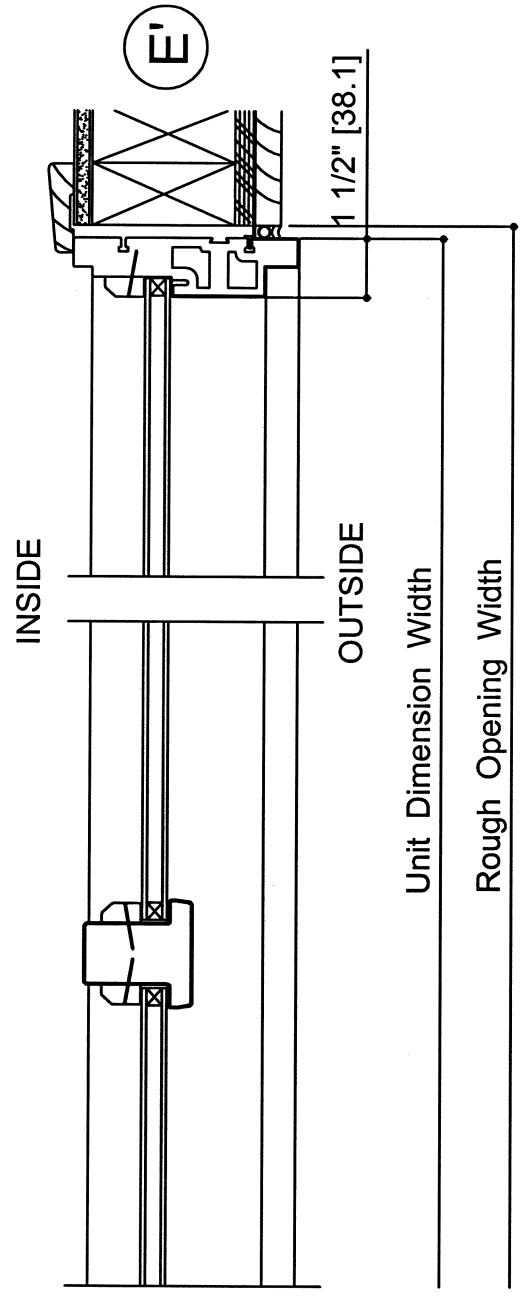
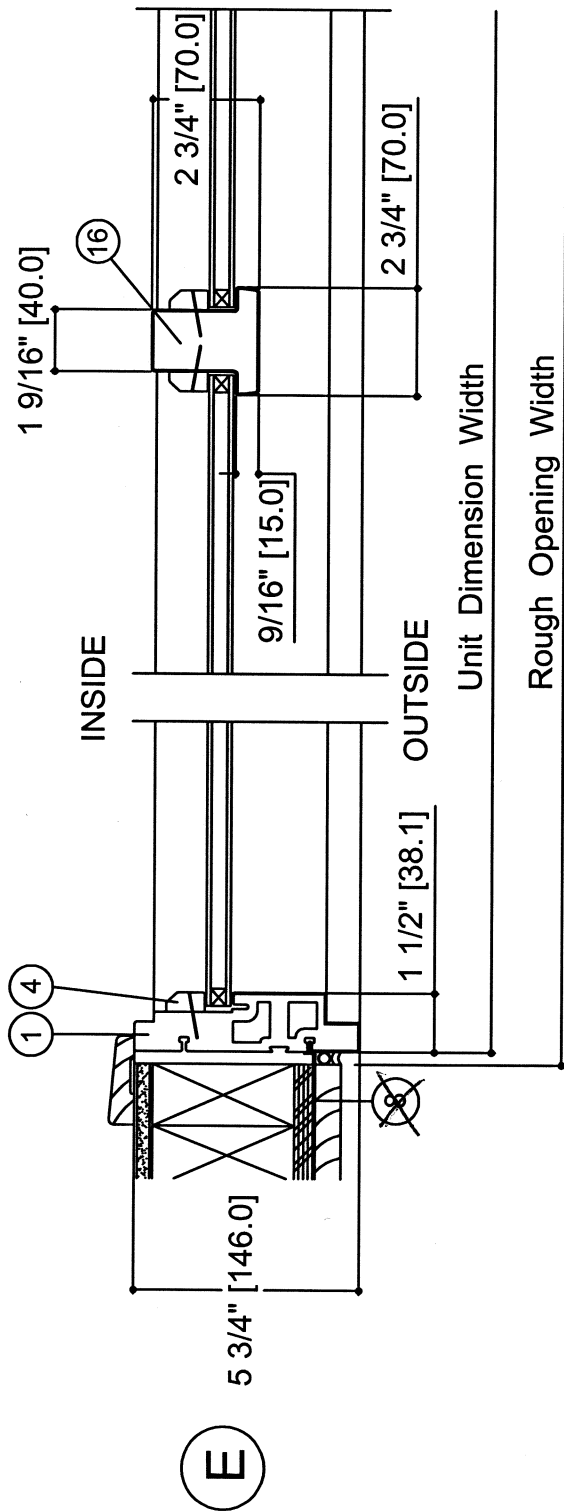
NAN YA PLASTICS CORPORATION
 BFL, 201, Tung Hwa N. Road Taipei, Taiwan
 Tel: (886)2-2712-2211; Fax: (886)2-2717-8512



Architectural Testing
 Test sample complies with these details.
 Deviations are noted.
 Report# 62723.01
 Date 3/9/06 Tech *AW*

DATE	FEB/23/06	SHEET	11 OF 32	SHEET TITLE:	Glaze Transom for Inswing door A-A' & B-B' Section
DRAWN BY	Morris Huang				
DWG NO.					
REVISIONS					

NAN YA PLASTICS CORPORATION
 6FL201, Tung Hwa N. Road Taipei, Taiwan
 Tel: (886)2-2712-2211 ; Fax: (886)2-2717-8512

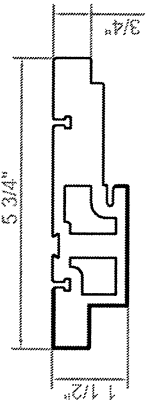


Architectural Testing

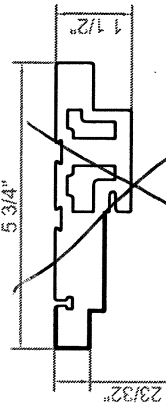
Test sample complies with these details.
Deviations are noted.

Report# G2723.01
Date 3/9/06 Tech gh

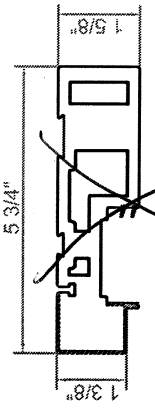
DATE	FEB/23/06	SHEET	13 OF 32	SHEET TITLE:	Glaze Transom for Inswing door E-E' Section
DRAWN BY	Morris Huang				
DWG NO.					
REVISIONS					



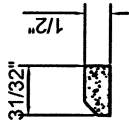
① 5 3/4" INSWING FRAME
FOAM PVC CO-EX.



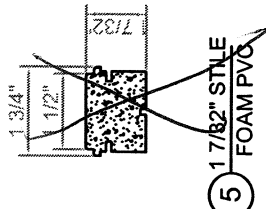
② 5 3/4" OUTSWING FRAME
FOAM PVC CO-EX.



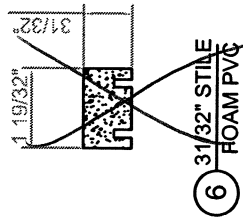
③ 5 3/4" SLIDING FRAME
FOAM PVC CO-EX.



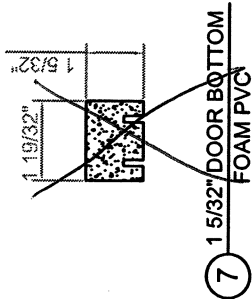
④ GLAZING BEAD
FOAM PVC



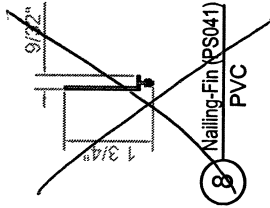
⑤ 1 7/8" STILE
FOAM PVC



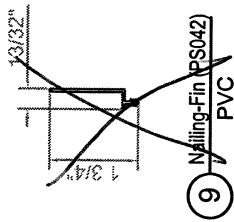
⑥ 3/16" STILE
FOAM PVC



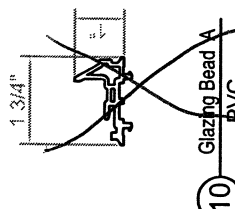
⑦ 1 5/32" DOOR BOTTOM
FOAM PVC



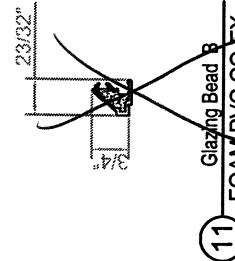
⑧ Nailing-Fin (PS041)
PVC



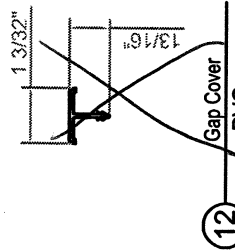
⑨ Nailing-Fin (PS042)
PVC



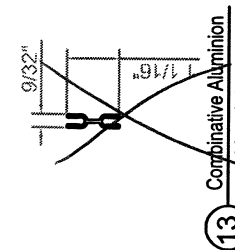
⑩ Glazing Bead A
PVC



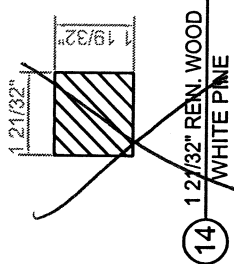
⑪ Glazing Bead B
FOAM PVC CO-EX.



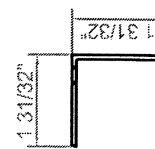
⑫ Gap Cover
PVC



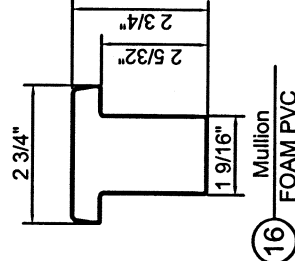
⑬ Combinative Aluminum
Aluminum



⑭ 1 2/32" REN. WOOD
WHITE PINE



⑮ CORNER KEY
DIE CAST



⑯ Mullion
FOAM PVC

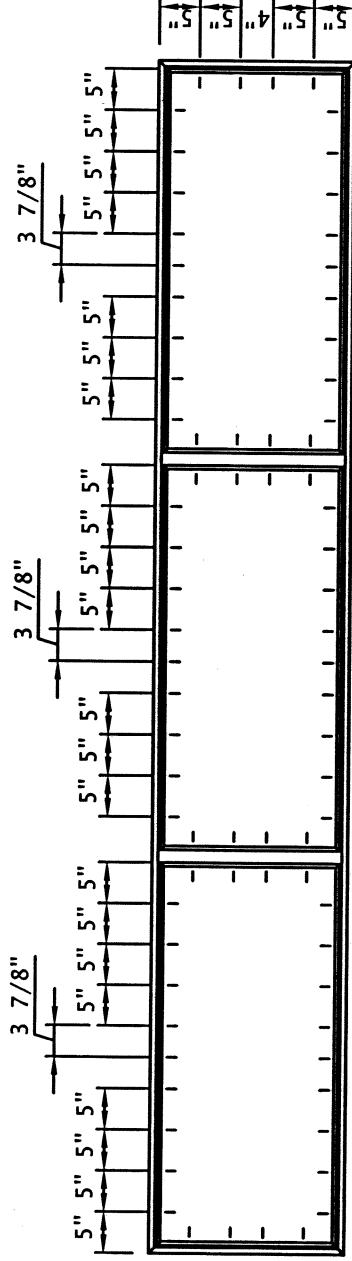


Test sample complies with these details.
Deviations are noted.

Report# 02723.01
Date 3/9/06 Tech AW

DATE	FEB/27/06	SHEET	25 of 32	
DRAWN BY	Morris Huang	SHEET TITLE:		
DWG NO.		Glazed Transom & French Transom Door Hardware & Accessories		
REVISIONS		NAN YA PLASTICS CORPORATION 6F.L.201, Tung Hwa N. Road Taipei, Taiwan Tel:(886)2-2712-2211 : Fax:(886)2-2717-8512		

ANCHORING OF GLAZE BEAD IN GLAZE TRANSOM



NAIL SCHEDULE	QTY
1-3/16" NAIL	78



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# 62723.01

Date 3/9/06 Tech AW

NAN YA PLASTICS CORPORATION
8FL, 201, Tung Hwa N. Road Taipei, Taiwan
Tel: (886)2-2712-2211, Fax: (886)2-2717-5512

SHEET TITLE:
GLAZE TRANSOM
GLAZE BEAD NAIL SCHEDULE
TYPE: GTI 12020 \ GTO 12020

SHEET
30 OF 32

DATE
FEB/25/06

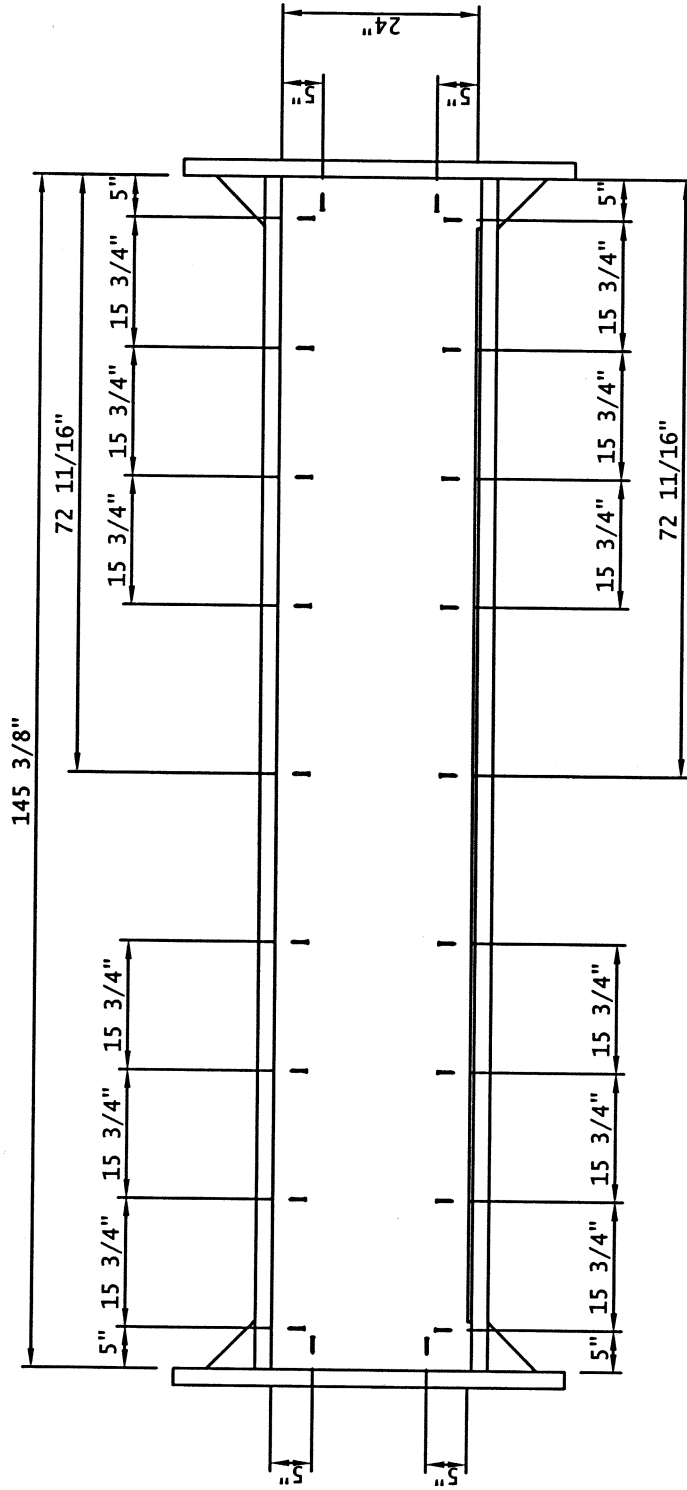
DRAWN BY
Morris Huang

DWG NO.

REVISIONS

△

ANCHORING FOR GLAZE TRANSOM TO THE WOOD BUCK



SCREW SCHEDULE	
ITEM	QTY
#10 X 3" PHILLIPS SQUARE DRIVE SCREWS	22



Architectural Testing

Test sample complies with these details.
Deviations are noted.

Report# G2723.01

Date 3/9/06 Tech JW

SHEET TITLE:
GLAZE TRANSOM FOR INSURING DOOR
TO WOOD BUCK SCREW SCHEDULE
Series: GTI 12020 \ GTO 12020

SHEET
22 OF 32

DATE FEB/25/06
DRAWN BY Morris Huang
DWG NO.

REVISIONS



NAN YA PLASTICS CORPORATION
6FL, 201, Tung Hua N. Road Taipei, Taiwan
Tel: (886)2-2712-2211 ; Fax: (886)2-2717-8512