Farabaugh Engineering and Testing Inc.

PERFORMANCE TEST REPORT

4300/5100 SERIES
PICTURE WINDOW

FIXED WINDOW

F-R40
(60" X 60")

FOR

DOVE INDUSTRIES
767 SAN SOUCI PARKWAY
WILKES BARRE, PA 18702

Project No. T206D-04

10/14/04

REVISED:5/2/07

401 Wide Drive • McKeesport, PA 15135
(412) 751-4001 • FAX (412) 751-4003

PERFORMANCE TEST REPORT

Manufacturer: DOVE INDUSTRIES
767 SAN SOUCI PARKWAY
WILKES BARRE, PA 18702

Product Identification

Product Type: Fixed Window

Series/Model #: 4300/5100 Series Picture Window

Specification: AAMA/NWWDA 101/I.S.2-97

Designation: F-R40 (60" X 60") AAMA/NWWDA 101/I.S.2-97 GRADE 40

Product Description: Attached

Test Results: Attached

Test Equipment: FET

Testing Date: 10/11/03

Detailed assembly drawings showing wall thickness of all members, corner construction and hardware application are on file and have been compared to the sample submitted. A copy of this report and test sample will be retained at FET for a period of 4 years. The results obtained apply only to the specimen tested. No conclusions of any kind regarding the adequacy or inadequacy of the glass in the test specimen may be drawn form this test.

The above results were secured by using the designated test methods and they indicate compliance with the performance requirements of the referenced specification. This report does not constitute certification of this product, which may only be granted by the certification program administrator.

Prepared by: Approved by:

Paul G. Farabaugh Patrick J. Farabaugh, PE

Product Description

General:
Test sample was comprised of Dove Industries, 4300/5100 Series, Picture Vinyl Window, with an overall master frame size measuring 60-1/2" wide X 60-3/8" high. The frame was of welded mitered type corner construction. A 1-1/2" nailing flange was around the perimeter of the frame.

Weather-stripping:
None

Operators and Other Hardware:
None

Glazing System:
The fixed lite was interior drop glazed with 3/4" (nominal) thick insulated glass. The fixed lite utilized two (1/8" nominal) thick clear annealed glass lites with a 1/2" perimeter metal spacer. The glazing was set on a bead of silicone along the perimeter of the frame. A interior snap-in rigid vinyl-glazing bead secured the glass.

Weep Holes:
Four (3/16" diameter) weep holes were located on the bottom of the glazing track, two (one on top and one just below into middle layer) 2-1/4" from each end. Two each end of sill. Two (1-3/8" w x 5/16"h reduced to 1-3/16" w x 1/8" h) weep slots with flap were located on the exterior face of the sill, one 3-1/4" in from each end.

Sealant:
Silicone sealant was applied to all the following areas:

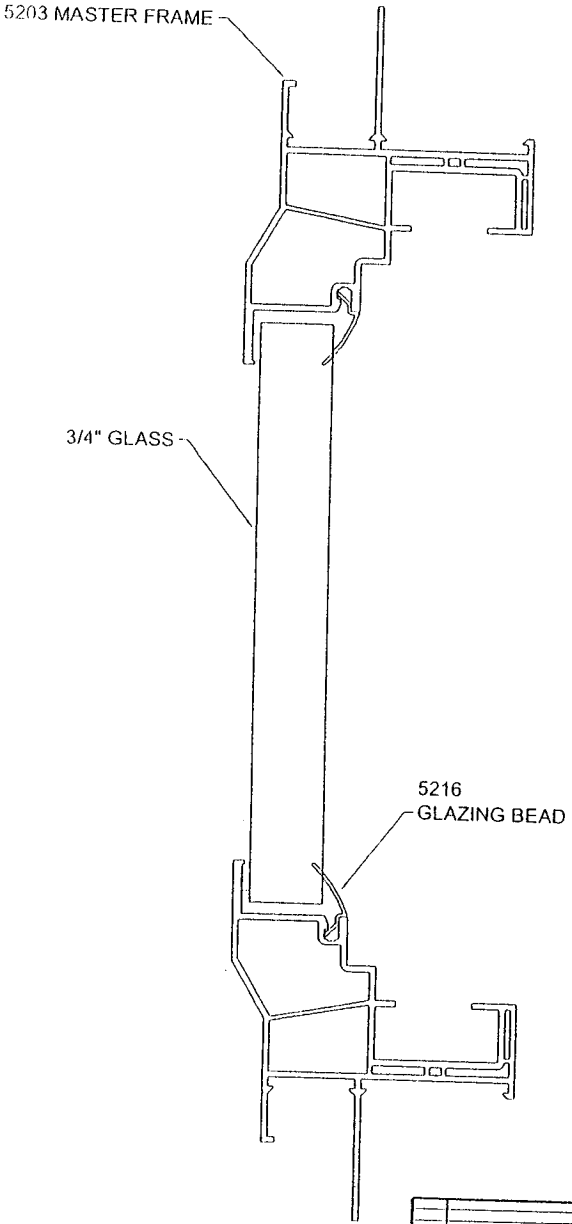
- Perimeter of the glazing was set in continuous bead of silicone.
- Nailing flange was set in continuous bead of silicone on perimeter of the buck

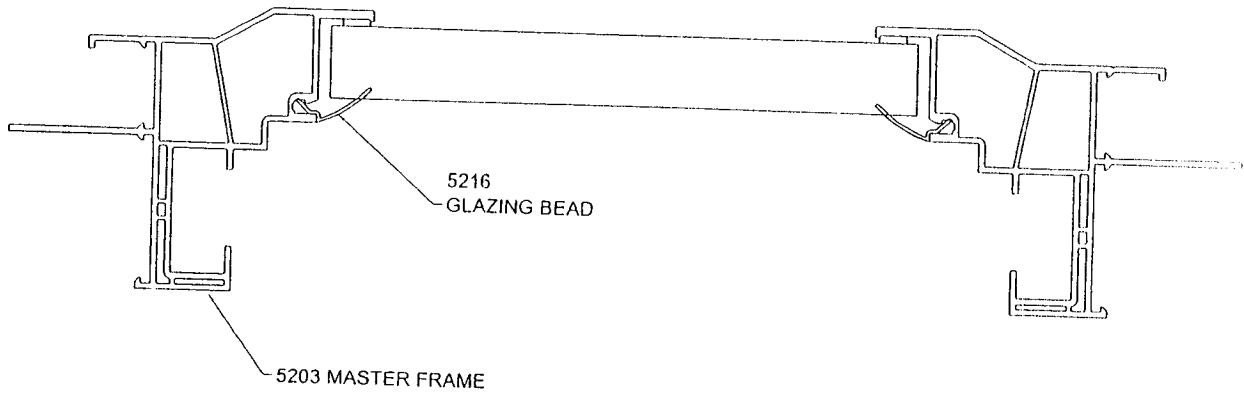
Anchorage:
The perimeter of the wood buck framing members consisting of Grade 2 S.P.F lumber frame. A 1-1/2" nailing flange was around the perimeter of the frame. A #6 x 1-1/4" long flat head wood screws were used to attach the nailing flange to the buck. The screw pattern for the nailing flange into the buck was 11" c/c around the perimeter. Silicone sealant was used at nailing flange to buck location and around the perimeter.

4300/5100 SERIES PICTURE FIXED WINDOW
(MODEL 4300/5100)
Test Results

Paragraph	Test Title / Referenced Test Method	Test Results	Allowable
	Gateway Performance Requirements		
2.1.2	**Air Infiltration Test** (ASTM E-283-91) @ 1.57 psf	0.02 cfm/sf	0.30 cfm/sf
	The test specimen meets the performance levels specified in AAMA/NWWDA 101/I.S.2-97 for Air Infiltration.		
2.1.3	**Water Resistance Test** (ASTM E547-96) @ 2.86 psf	No penetration	No penetration
2.1.4.2	**Uniform Load Structural Test** (see optional performance results)		
2.1.7	**Welded Corner Test**	meets	As Stated
2.1.8	**Forced Entry Resistance** (ASTM F588-97) Type D (Section 10) Sec. 10.2.4.2 Hand & Tool Manipulation Test	No Failure	As Stated
	Specific Window Performance Results		
	Optional Performance Results		
4.3	**Water Resistance Test** (ASTM E547-96) @ 8.25 psf	No penetration	No penetration
4.4.2	**Uniform Load Structural Test** (ASTM E-330-97)		(0.4%xL)
	@ 60 psf positive	0.005" *	0.044"
	@ 60 psf negative	0.004" *	0.044"

* - Maximum Deformations.





FARABAUGH ENGINEERING AND TESTING, INC.

PGF T206D-04

No.	REVISION	BY	DATE

CHELSEA BUILDING PRODUCTS, INC.
565 CEDAR WAY, OAKMONT PA 15139

PRELIMINARY PART #

TITLE: MODEL 5200-PW-T002
NEW CONSTRUCTION PICTURE WINDOW

DRAWN BY:	DESIGNED BY:	DATE	SCALE
JPP		05-08-01	NTS-1
CHECKED BY:	APPROVED BY:	DRAWING No.	
		5200S011	

QC PRINT NUMBER: 5203QC | DR[redacted] BY: EAS | APPROVED BY: [redacted] | DATE: [redacted] | DEVELOP | INPROCESS | PRODUCTION

PART NAME: 5203

DESCRIPTION: SINGLE HUNG JAMB

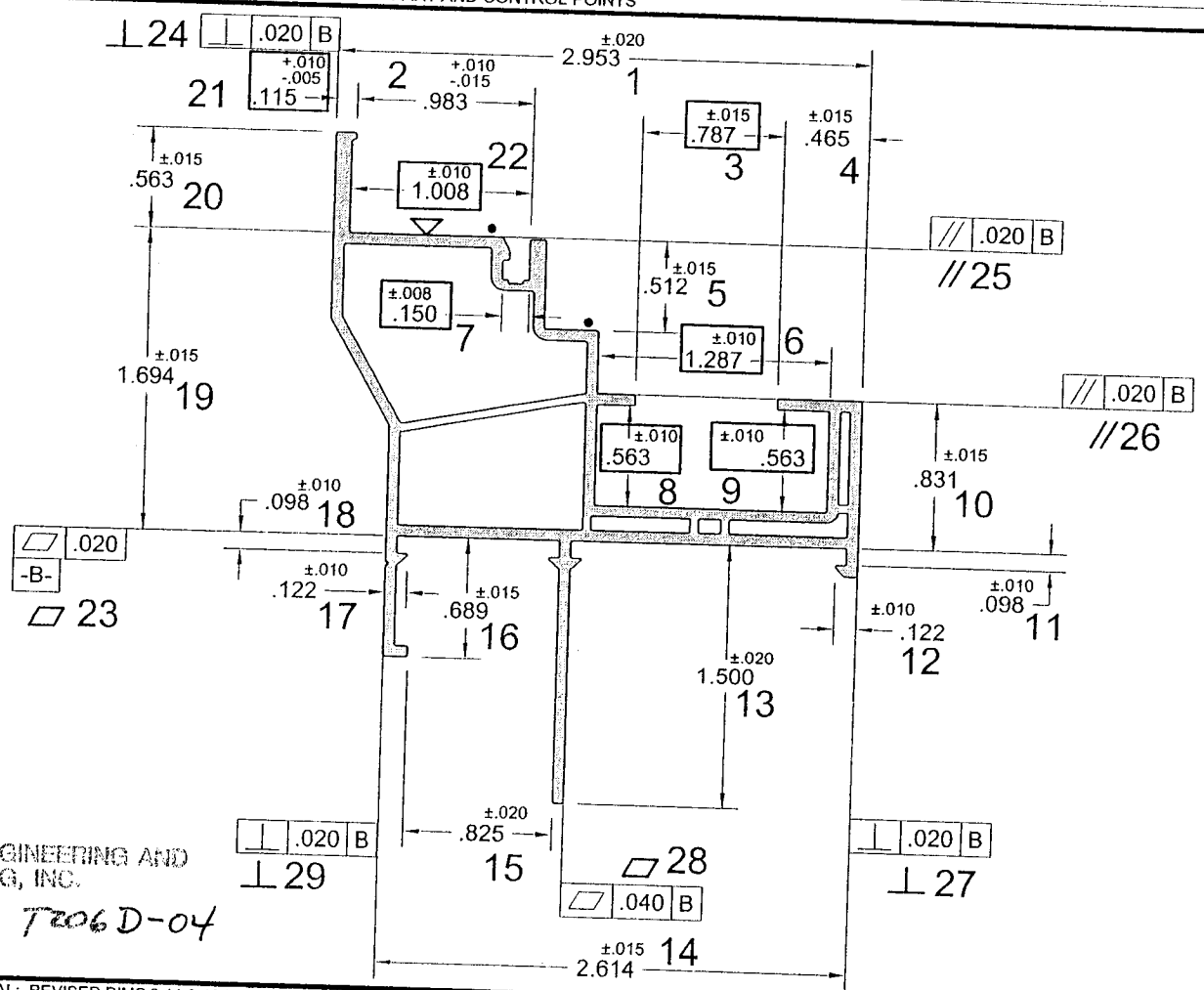
SUPPLIER/PLANT: CHELSEA BUILDING PRODUCTS

CHELSEA BUILDING PRODUCTS, INC.
565 CEDAR WAY, OAKMONT PA 15139

NOTES:

1. MATERIAL = RIGID P.V.C.
2. FLEXIBLE P.V.C. =
3. EXTERIOR COATING =
4. LAMINATE =
5. THINNER INTERIOR WALLS =
6. WALL THICKNESS = .062
7. RADIUS = .010 R
8. LOCATION FOR IMPACT TEST
9. ANGULARITY =
10. PERPENDICULARITY =
11. PARALLELISM =
12. FLATNESS =
13. SPECIFICATION LENGTH TO ±3/8"
14. ANGULARITY TO BE ± 1°
15. PROFILE MUST MEET Q-303 PER AAMA SPECIFICATIONS
16. PROFILE MUST MEET Q-304 PER AAMA SPECIFICATIONS
17. PROFILE MUST MEET Q-901 PER AAMA SPECIFICATIONS
18. PROFILE MUST MEET Q-902 IMPACT RESISTANCE PER AAMA SPECIFICATIONS

ILLUSTRATION OF PART AND CONTROL POINTS



FARABAUGH ENGINEERING AND TESTING, INC.
P&F T206D-04

WEATHERSTRIP SPECIFICATION

POSITION	SIZE	WEATHERSTRIP TYPE

FUNCTIONAL CHECK

5266 GLAZING BEAD

BSI HIDDEN BALANCE

5286 MULLION

DRAWN DATE: 04-11-01

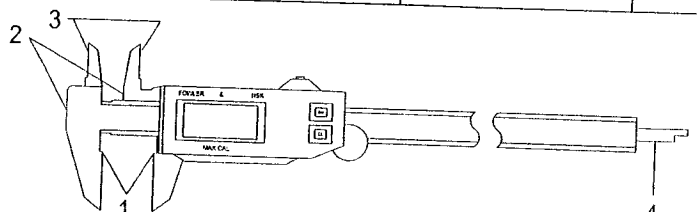
NO.	REVISION	BY	DATE
12	DIM .983 WAS CRITICAL; REVISED DIMS 3,14 & 16 IN SPEC LIST; WO #498	EAS	03-29-04
11	REVISED DIM 22; WO #487	JPP	03-09-04
10	ADDED DIM 22; WO #3233	JPP	07-02-03
9	REVISED DIMS; WO #287	JPP	10-30-02
8	REVISED GLAZING BEAD POCKET; WO #0034	EAS	02-25-02
7	ADDED DIM DOTS TO .512 DIM; WAS CALIPER MEASUREMENT	EAS	12-14-01

CUSTOMER LENGTH	CHELSEA CUT LENGTH	TOLERANCE

the caliper diagram as your guide to measure the following control points.
sure the following control points using #1 on the caliper diagram:
sure the following control points using #2 on the caliper diagram:
sure the following control points using #3 on the caliper diagram:
sure the following control points using #4 on the caliper diagram:

uency of sampling: Process Specialist- 3 samples per shift recorded every 4 hours.
tor- 1 sample per shift recorded 1 hour after shift start.

ANY CONTROL POINTS ARE NOT IN SPEC.
ORRECTIVE ACTION REQUIRED



[redacted] PRINT NUMBER: 5216QC | DRAWN BY: EAS | APPROVED BY: | DATE: | [redacted] LEVEL | [redacted] PROCESS | [redacted] PRODUCTION

PART NAME:	DESCRIPTION:	SUPPLIER/PLANT:
5216	GLAZING BEAD	CHELSEA BUILDING PRODUCTS

ILLUSTRATION OF PART AND CONTROL POINTS

CHELSEA BUILDING PRODUCTS, INC.
565 CEDAR WAY, OAKMONT PA 15139

OTES:

- MATERIAL = RIGID P.V.C.
- FLEXIBLE P.V.C. =
- EXTERIOR COATING =
- LAMINATE =
- THINNER INTERIOR WALLS =
- WALL THICKNESS = .035
- RADIUS = .010 R
- LOCATION FOR IMPACT TEST
- ANGULARITY =
- . PERPENDICULARITY =
- . PARALLELISM =
- . FLATNESS =
- . SPECIFICATION LENGTH TO ±3/8"
- . ANGULARITY TO BE ± 1°
- . PROFILE MUST MEET Q-303 PER AAMA SPECIFICATIONS
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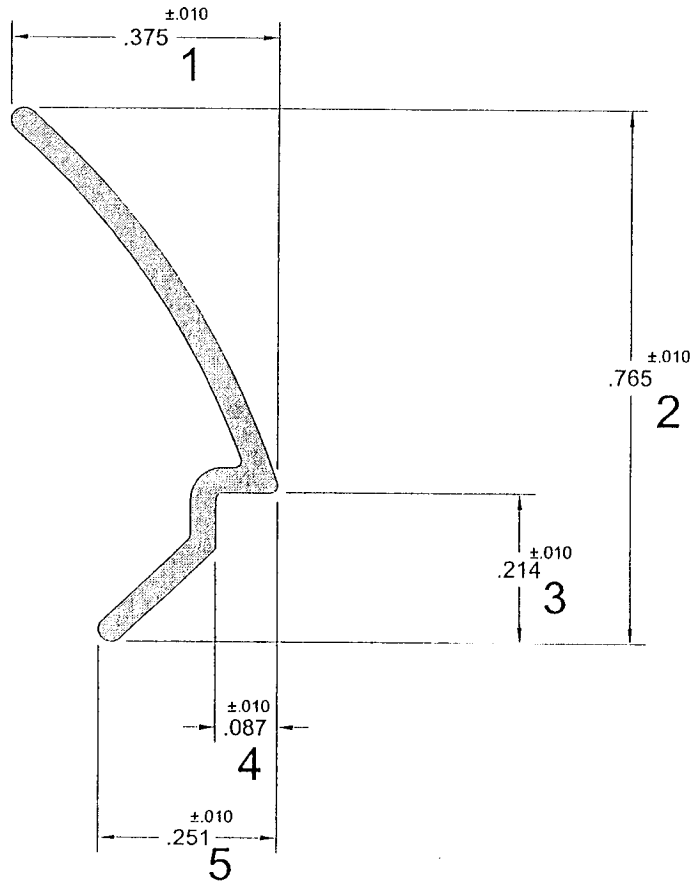
- . PROFILE MUST MEET Q-901 PER AAMA SPECIFICATIONS
- . PROFILE MUST MEET Q-902 IMPACT RESISTANCE PER AAMA SPECIFICATIONS



WEATHERSTRIP SPECIFICATION		
SITION	SIZE	WEATHERSTRIP TYPE

FUNCTIONAL CHECK
5203 JAMB
5204 FRAME
5231 FRAME
5241 FRAME
5207 MEETING RAIL
5208 STILE

RAWN DATE: 06-18-02

FARABAUGH ENGINEERING AND TESTING, INC.

PGF T206D-04

NO.	REVISION	BY	DATE
2	DIM. #1 .375 WAS .379, PER WO#290	BLG	10/30/02
2	DIM. #2 .765 WAS .775	BLG	10/22/02
1	DIM. #1 WAS .353 AND DIM #2 WAS .750	BLG	7/22/02

CUSTOMER LENGTH	CHELSEA CUT LENGTH	TOLERANCE

se the caliper diagram as your guide to measure the following control points.
easure the following control points using #1 on the caliper diagram: 1,2,5
easure the following control points using #2 on the caliper diagram: 4
easure the following control points using #3 on the caliper diagram:
easure the following control points using #4 on the caliper diagram:

equency of sampling: Process Specialist- 3 samples per shift recorded every 4 hours.
uditor- 1 sample per shift recorded 1 hour after shift start.

F ANY CONTROL POINTS ARE NOT IN SPEC.
CORRECTIVE ACTION REQUIRED