

# HURRICANE ENGINEERING & TESTING INC.

Computer Controlled Product Testing & Design,  
.....Wind Load Analysis

## Uniform Static Air Pressure Test (FBC TAS 202) (ASTM E 330-02) (Miami-Dade County Protocol PA 202-94)

December 2, 2003.

REPORT NUMBER: **HETI-03-1875**

MANUFACTURER: Wayne-Dalton Corporation.  
3395 Addison Dr., Pensacola, FL 32514.

TEST LOCATION: Hurricane Engineering & Testing Inc.  
6120 NW 97 AVE, Miami, FL 33178.

SBCCI LISTING No.: TL - 9596B.

LAB. CERT. NUMBER: 02-0415.01 (MIAMI-DADE COUNTY).

PRODUCT: Fabric Shield™ Storm Panel, with Center Seam

PRODUCT DESCRIPTION: 0.037" thick PVC Coated Woven Polyester fabric.  
(Reference Tensile Test Reports: HETI-04-T107, & HETI-04-T108).

PRODUCT SIZE: 63" w x 111 7/8" h

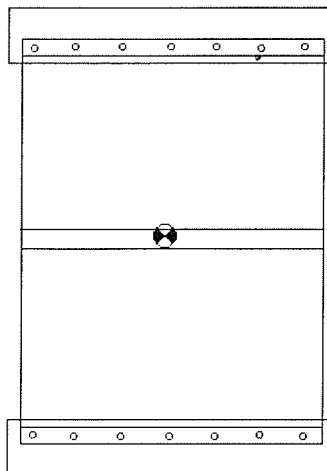
DESIGN LOADS (psf): **+62, -66**


DRAWING NUMBER: EX-04005, EX-04006, 01/09/2004, EX-03086 dated 2/17/03, and  
EX-03125 dated 03/27/2003, EX 02628 dated 3/25/03 by Wayne-  
Dalton Corporation

NOTE: *HETI stamped drawing is an integral part of this report.*

TEST WITNESSED BY: Syed Waqar Ali, Ph. D. (HETI)  
Dr. Nasreen K. Ali, E.I. (HETI)

WITNESSING ENGINEER: Mr. Rafael E. Droz-Seda, P.E. (HETI)



 Gage Location

*Handwritten signature and date:*  
3/12/04

## Construction Details

**PRODUCT** Fabric Shield™ Storm Panel with Center Seam

**PRODUCT SIZE** 63" w x 111 7/8" h

**Opening Size** 62 7/8" x 106 1/4" h

**Fabric Material**

A 0.037" PVC coated woven polyester fabric.

**Storm Panel Construction**

Two pieces of PVC coated woven polyester fabric were cut to 63" w x 62 15/16" h. A 1 1/2" overlap at center was welded, the top and bottom edge was folded twice creating a 3X fold and welded to create 63" x 111 7/8" panel. The finished edge on top and bottom was 2 1/8" wide.

**Grommets**

(7) 1/2" hole size x 1.05" flange DIA X 0.017" thick brass, trade size#4 grommet and grommet washer installed @12" O.C and at 1 7/16" from vertical edge along the top and (7) along the bottom of the fabric. The center of the grommets was 1 3/8" from edge of the fabric.

**INSTALLATION**

**SUBSTRATUM** SYP, 4x6 Wood,

| Location | Fastener Type  | Spacing   | Quantity |
|----------|--|---|----------|
| Bottom   | 1/4" x 2" (3.44" overall)<br>Elco PANELMATE plus<br>(male) | 1 7/16" from end and<br>12" O.C. .75" from<br>edge of substrate | Seven    |
| Top      | 1/4" x 2" (3.44" overall)<br>Elco PANELMATE plus<br>(male) | 1 7/16" from end and<br>12" O.C. .75" from<br>edge of substrate | Seven    |

## Test Results

### Uniform Static Air Pressure Results

|                          | Pressure<br>(Psf) | Deflection<br>at center<br>(in) | Set<br>(in) | Recovery<br>(%) | Duration<br>(seconds) |
|--------------------------|-------------------|---------------------------------|-------------|-----------------|-----------------------|
| <b>Positive Pressure</b> |                   |                                 |             |                 |                       |
| Half test load           | +47               | 12.53                           | 0.00        | 100             | 30                    |
| Design Load              | +62               | 15.86                           | 0.00        | 100             | 30                    |
| Test Load                | +93               | 17.83                           | 0.00        | 100             | 30                    |
| <b>Negative Pressure</b> |                   |                                 |             |                 |                       |
| Half test load           | -50               | 16.11                           | 0.00        | 100             | 30                    |
| Design Load              | -66               | 17.07                           | 0.00        | 100             | 30                    |
| Test Load                | -99               | 18.36                           | 0.00        | 100             | 30                    |

*Uniform Load Test was performed in accordance with ASTM E330-02. No extension in fabric was observed.*

*Handwritten signature and date: 3/11/04*


## Conclusion

The sample was tested and passed for structural wind load only in accordance with Miami-Dade County protocol PA 202, Florida Building Code Test Application Standard TAS 202, and ASTM E 330-02 Test Standards as indicated along with the test results. The sample was structurally intact at the conclusion of the test.

*NOTE: The above results were obtained using the designated test methods, which indicates compliance with the performance requirements of the referenced specifications. This report does not constitute certification of the specimens tested.*

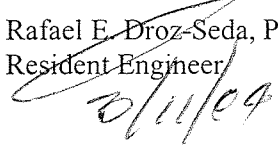
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Syed Waqar Ali, Ph. D.  
President



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Rafael E. Droz-Seda, P.E.  
Resident Engineer



2/11/09