

RAMMS ENGINEERING, INC.

Structural Design

2100 W. 76TH STREET, SUITE 311
HIALEAH, FLORIDA 33016

ROBERT S. MONSOUR, P.E.

305-822-3141

PRODUCT EVALUATION REPORT

Page 1 of 3

REPORT NO: 09-0127.01
DATE: January 27, 2009
PRODUCT CATEGORY: Shutters
PRODUCT SUB-CATEGORY: Storm Panels
PRODUCT NAME: 24ga FBC MAXIMUM IMPACT
STORM PANEL
MANUFACTURER: Metal Tech, Inc.
7635 W. 2nd Ct.
Hialeah, FL 33014

1. PURPOSE OF EVALUATION:

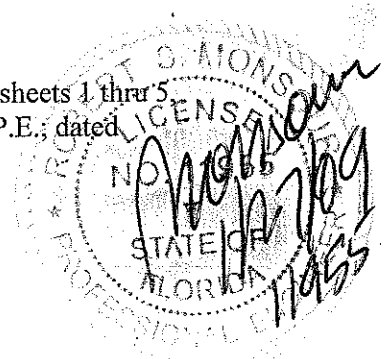
This is a Product Evaluation Report issued by Ramms Engineering, Inc. and Robert S. Monsour P.E. to Metal Tech, Inc., based on Rule Chapter No. 9B-72.070, Method 1d of the State of Florida Product Approval, Department of Community Affairs-Florida Building Commission.

This product is being issued an Evaluation Report as described herein, and has been verified for compliance in accordance with the 2007 edition of the Florida Building Code, and verify that the product is for a purpose intended at least equivalent to requirements of the Code, for statewide use.

2. EVIDENCE SUBMITTED:

2.1 PRODUCT EVALUATION DOCUMENT:

Drawing No. 051410, titled 24ga FBC MAXIMUM IMPACT STORM PANEL, sheets 1 thru 5, prepared by Ramms Engineering, Inc.; signed and sealed by Robert S. Monsour P.E.; dated 01/27/2009



RAMMS ENGINEERING, INC.

Structural Design

2100 W. 76TH STREET, SUITE 311
HIALEAH, FLORIDA 33016

ROBERT S. MONSOUR, P.E.

Page 2 of 3 ³⁰⁵⁻⁸²²⁻³¹⁴¹

PRODUCT EVALUATION REPORT NO. 09-0127.01

2.2. TEST REPORTS:

Large missile impact under SSTD 12-99 Standard. As per section 1609.1.4 of the Florida Building Code. Uniform Static loads in accordance with ASTM E 330. Test reports prepared by American Test Lab of South Florida, Report No.0214.01-01, dated March 13, 2001, signed by Kieth Harker, Assistant Director, signed and sealed by William R. Mehner P.E.; and addendum to Report No. 0214.01-01, dated May 1, 2001, signed and by William R. Mehner,P.E. and Henry Hatten P.E.

2.3. STRUCTURAL ENGINEERING CALCULATIONS:

On 24ga MAXIMUM IMPACT STORM PANEL for maximum shutter span vs. design wind load, as well as maximum anchor spacing vs. design wind load and shutter span based on rational and comparative analysis. Calculation prepared by Ramms Engineering , Inc.

No increase in allowable stress has been used in the design of this product.

3. MISSILE IMPACT RESISTANCE:

Large missile impact of the Florida Building Code, as per SSTD 12-99 standard.

4. WIND LOADS RESISTANCE:

Storm Panel has been verified to sustain wind pressures. Maximum panel span shall be as indicated on sheet 3 of 5 of Product Evaluation Document, drawing No. 051410. Maximum Anchor Spacing shall be as indicated on sheets 3 and 4 of 5 of Product Evaluation Document, drawing No. 051410. Storm Panel has been verified for compliance to work as a non-porous storm shutter, as per SSTD 12-99 Standard.

5. INSTALLATION:

Shall be performed strictly in accordance with the details indicated on sheets 2 and 3 of 5, of Product Evaluation Document, drawing No. 051410



RAMMS ENGINEERING, INC.

Structural Design

2100 W. 76TH STREET, SUITE 311
HIALEAH, FLORIDA 33016

ROBERT S. MONSOUR, P.E.

305-822-3141

Page 3 of 3

PRODUCT EVALUATION REPORT NO. 09-0127.01

6. MATERIAL CHARACTERISTICS AND SPECIFICATIONS:

Shall be strictly in accordance with General Notes indicated on sheet 1 of 5, of Product Evaluation Document, drawing No. 051410. Anchor specifications shall be as indicated on sheets 4 and 5 of 5, of Product Evaluation Document, drawing No. 051410.

7. LIMITATIONS AND CONDITIONS OF USE:

Product shall be installed within NON HIGH VELOCITY HURRICANE ZONES of the Florida Building Code.

Product Evaluation Report prepared by Robert S. Monsour P.E. (Florida License No. 11955,
Ramms Engineering, Inc. (Florida EB-0006024)

