



MIAMI-DADE COUNTY
BUILDING CODE COMPLIANCE OFFICE (BCCO)
PRODUCT CONTROL DIVISION

MIAMI-DADE COUNTY, FLORIDA
METRO-DADE FLAGLER BUILDING

140 WEST FLAGLER STREET, SUITE 1603
MIAMI, FLORIDA 33130-1563
(305) 375-2901 FAX (305) 375-2908

www.miamidade.gov

NOTICE OF ACCEPTANCE (NOA)

WeatherGuard Building Products, Inc.
9040 Belvedere Road
West Palm Beach, Florida 33411

SCOPE:

This NOA is being issued under the applicable rules and regulations governing the use of construction materials. The documentation submitted has been reviewed by Miami-Dade County Product Control Division and accepted by the Board of Rules and Appeals (BORA) to be used in Miami Dade County and other areas where allowed by the Authority Having Jurisdiction (AHJ).

This NOA shall not be valid after the expiration date stated below. The Miami-Dade County Product Control Division (In Miami Dade County) and/or the AHJ (in areas other than Miami Dade County) reserve the right to have this product or material tested for quality assurance purposes. If this product or material fails to perform in the accepted manner, the manufacturer will incur the expense of such testing and the AHJ may immediately revoke, modify, or suspend the use of such product or material within their jurisdiction. BORA reserves the right to revoke this acceptance, if it is determined by Miami-Dade County Product Control Division that this product or material fails to meet the requirements of the applicable building code.

This product is approved as described herein, and has been designed to comply with the High Velocity Hurricane Zone of the Florida Building Code.

DESCRIPTION: 0.063" (min.) Aluminum Storm Panels Shutter

APPROVAL DOCUMENT: Drawing No. 07-309, titled "0.063" Aluminum Storm Panel", sheets 1 through 5 of 5, prepared by Thornton Tomasetti, dated April 10, 2007, signed and sealed by J. W. Knezevich, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Division.

MISSILE IMPACT RATING: Large and Small Missile Impact

LABELING: Each panel shall bear a permanent label with the manufacturer's name or logo, city, state and the following statement: "Miami-Dade County Product Control Approved", unless otherwise noted herein.

RENEWAL of this NOA shall be considered after a renewal application has been filed and there has been no change in the applicable building code negatively affecting the performance of this product.

TERMINATION of this NOA will occur after the expiration date or if there has been a revision or change in the materials, use, and/or manufacture of the product or process. Misuse of this NOA as an endorsement of any product, for sales, advertising or any other purposes shall automatically terminate this NOA. Failure to comply with any section of this NOA shall be cause for termination and removal of NOA.

ADVERTISEMENT: The NOA number preceded by the words Miami-Dade County, Florida, and followed by the expiration date may be displayed in advertising literature. If any portion of the NOA is displayed, then it shall be done in its entirety.

INSPECTION: A copy of this entire NOA shall be provided to the user by the manufacturer or its distributors and shall be available for inspection at the job site at the request of the Building Official.

This NOA **revises & renews** NOA #02-0417.06 and consists of this page 1, evidence submitted pages E-1 & E-2 as well as approval document mentioned above.

The submitted documentation was reviewed by **Helmy A. Makar, P.E., M.S.**



Helmy A. Makar
 05/10/2007

NOA No 06-0706.17
 Expiration Date: 04/18/2012
 Approval Date: 05/10/2007
 Page 1

WeatherGuard Building Products, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 95-0717.06

A. TESTS

1. *Test report on: 1) Large Missile Impact Test, 2) Cyclic Wind Pressure Test, 3) Uniform Static Air Pressure Test of 0.063" aluminum storm panels x 104" high, prepared by Construction Testing Corp., Report No. CTC-96-008, dated 02/16/96, signed and sealed by Christopher G. Tyson, P.E.*

B. DRAWINGS

1. *Drawing No. 96-47, Poma Corporation, .063" Aluminum Storm Panel Drawing, Sheet 1 through 3 of 3, prepared by Knezevich & Associates, Inc., dated 02/15/96, Revision No. 2, dated 03/25/96, signed and sealed by V.J. Knezevich, P.E.*

C. MATERIAL CERTIFICATIONS

1. *Mill Certified Inspection Report, dated 11/27/95, for Aluminum Alloy 5052-H36 by Precision Coil Incorporated, with chemical composition and physical properties.*
2. *Tensile Test Reports from QC Metallurgical, Inc., QCM Job No. 6BM-410, dated February 16, 1996 for Aluminum sample.*

D. CALCULATIONS

1. *Storm panel anchor calculations, pages 1 through 10 of 10, dated 02/28/96, prepared by Knezevich & Associates, signed and sealed by V.J. Knezevich, P.E.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 99-0219.01

A. DRAWINGS

1. *None. (Drawings originally in file 95-0717.06.)*

B. TESTS

1. *None. (Tests originally in file 95-0717.06.)*

C. CALCULATIONS

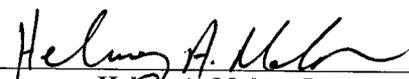
1. *None. (Calculations originally in file 95-0717.06.)*

D. MATERIAL CERTIFICATIONS

1. *None. (Material certifications originally in file No. 95-0717.06.)*

E. OTHER

1. *Letter issued by Al Purino stating that all documents are unchanged copies of 0.063" Aluminum Storm Panel submittals, Acceptance No. 95-0717.06.*



Henry A. Makar, P. E., M.S.
Product Control Examiner
NOA No 06-0706.17
Expiration Date: 04/18/2012
Approval Date: 05/10/2007

WeatherGuard Building Products, Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 02-0417.06

A. DRAWINGS

See NOA 99-0219.01

B. TESTS

See NOA 99-0219.01

C. CALCULATIONS

See NOA 99-0219.01

D. MATERIAL CERTIFICATIONS

See NOA 99-0219.01

E. STATEMENTS

See NOA 99-0219.01

F. OTHER

See NOA 99-0219.01

4. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 07-309, titled " 0.063" Aluminum Storm Panel ", sheets 1 through 5 of 5, prepared by Thornton Tomasetti, dated April 10, 2007, signed and sealed by J. W. Knezevich, P.E.*

B. TESTS

1. *Test report on Uniform Static Air Pressure Test, Large Missile Impact Test, and Cyclic Wind Pressure Test of 0.063" Aluminum Storm Panels Shutter, prepared by Hurricane Test Laboratory, LLC, Report No. 0411-1011-05, dated February 09, 2006, signed and sealed by Vinu J. Abraham, P.E.*

C. CALCULATIONS

1. *0.063" Aluminum Storm Panels Calculations, Sheets 1 through 45 of 45, by Thornton Tomasetti, dated April 09, 2007, signed and sealed by John W. Knezevich, P.E.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building Code Compliance Office.*

E. MATERIAL CERTIFICATIONS

1. *None.*



Helmy A. Makar, P. E., M.S.

Product Control Examiner

NOA No 06-0706.17

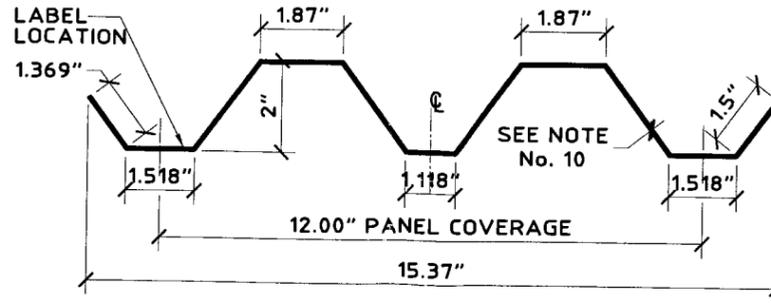
Expiration Date: 04/18/2012

Approval Date: 05/10/2007

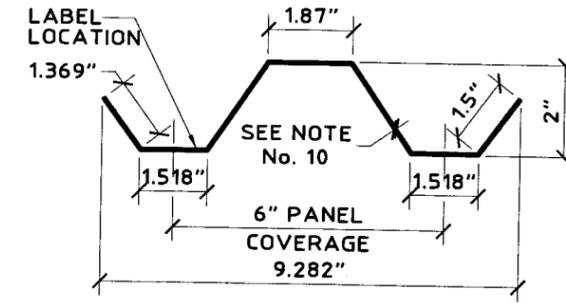
GENERAL NOTES:

1. THESE PRODUCT EVALUATION DOCUMENTS REPRESENT A LARGE MISSILE IMPACT PROTECTIVE SHUTTER SYSTEM ANALYZED WITH THE PROVISION SET FOR THE ISSUANCE OF A NOTICE OF ACCEPTANCE (NOA) BY MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION FOR THE HIGH VELOCITY HURRICANE ZONE (HVHZ) OF THE FLORIDA BUILDING CODE 2004 WITH 2005 & 2006 SUPPLEMENTS.
2. NO INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS PRODUCT. WIND LOAD DURATION FACTOR Cd = 1.6 WAS USED FOR WOOD SCREW DESIGN.
3. DETERMINE THE POSITIVE AND NEGATIVE DESIGN LOADS TO USE WHEN REFERENCING THESE DOCUMENTS IN ACCORDANCE WITH THE GOVERNING CODE AND GOVERNING WIND VELOCITY. FOR WIND LOAD CALCULATIONS IN ACCORDANCE WITH ASCE 7-02, A DIRECTIONALITY FACTOR OF Kd = 0.85 SHALL BE USED.
4. THESE PRODUCT EVALUATION DOCUMENTS ARE GENERIC AND DO NOT INCLUDE INFORMATION FOR SITE-SPECIFIC APPLICATION OF THIS SHUTTER SYSTEM.
5. USE OF THESE PRODUCT EVALUATION DOCUMENTS SHALL COMPLY WITH CHAPTER 61G15-23 OF THE FLORIDA ADMINISTRATIVE CODE.
6. THESE PRODUCT EVALUATION DOCUMENTS ARE INTENDED FOR USE ONLY BY A LICENSED CONTRACTOR, PROFESSIONAL ENGINEER OR REGISTERED ARCHITECT AND ARE SUITABLE TO BE APPLIED BY THE CONTRACTOR PROVIDED THE CONTRACTOR DOES NOT DEVIATE FROM THE CONDITIONS DETAILED HEREIN AND THE CONTRACTOR VERIFIES THAT THE EXISTING STRUCTURE DOES NOT DEVIATE IN EITHER FORM OR MATERIAL FROM THE STRUCTURAL SUBSTRATES DETAILED HEREIN. CONTRACTOR SHALL VERIFY EXISTING STRUCTURE CAN WITHSTAND SUPERIMPOSED LOAD OF SHUTTER.
7. ANY MODIFICATIONS OR ADDITIONS TO THESE PRODUCT EVALUATION DOCUMENTS WILL VOID THE PRODUCT EVALUATION DOCUMENTS.
8. WHEN THE SITE CONDITIONS DEVIATE FROM THESE PRODUCT EVALUATION DOCUMENTS, THE BUILDING OFFICIAL MAY ELECT ONE OF THE FOLLOWING OPTIONS:
 - A) REQUIRE THAT SITE SPECIFIC DOCUMENTS BE PREPARED, SIGNED, DATED AND SEALED BY A LICENSED ENGINEER OR REGISTERED ARCHITECT, WHICH DETAIL AND JUSTIFY THE DEVIATION. SAID DOCUMENTS SHALL BE SUBMITTED TO THE PRODUCT ENGINEER FOR REVIEW AS A CONDITION TO THE BUILDING OFFICIAL GRANTING HIS/HER APPROVAL.
 - B) REQUIRE THAT A ONE-TIME SITE SPECIFIC APPROVAL BE APPLIED FOR AND SECURED FROM THE MIAMI-DADE COUNTY PRODUCT CONTROL DIVISION
9. PRODUCT MARKINGS SHALL BE WITHIN 12" OF ONE END OF THE PANEL WITH A MINIMUM OF ONE MARKING PER PANEL AND SHALL BE PERMANENTLY LABELED AS FOLLOWS:

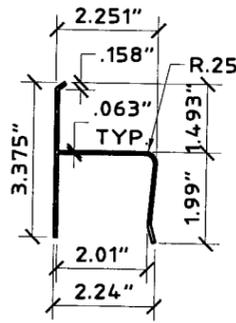
WEATHERGUARD BUILDING PRODUCTS, INC.
WEST PALM BEACH, FLORIDA
MIAMI-DADE COUNTY PRODUCT APPROVED
10. STORM PANELS SHALL BE 0.063" THICK, 3004-H34 ALUMINUM ALLOY WITH A MIN. Fy=25.0 KSI OR 5052-H32 ALUMINUM ALLOY WITH A MIN. Fy=23.0 KSI.
11. ALL EXTRUSIONS SHALL BE 6063-T6 ALUMINUM ALLOY, U.O.N.
12. ALL BOLTS AND WASHERS SHALL BE GALVANIZED OR STAINLESS STEEL WITH A MINIMUM TENSILE STRENGTH OF 60 K.S.I., U.O.N.
13. TOP AND BOTTOM DETAILS MAY BE INTERCHANGED AS FIELD CONDITIONS REQUIRE.



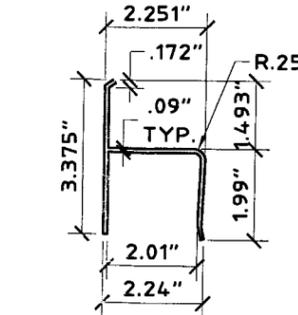
1 FULL ALUMINUM STORM PANEL
SCALE: 3" = 1' - 0"



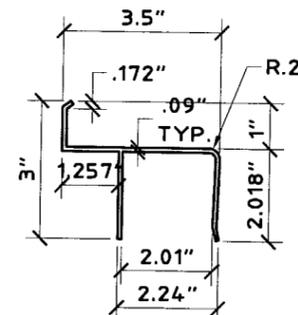
2 HALF ALUMINUM STORM PANEL
SCALE: 3" = 1' - 0"



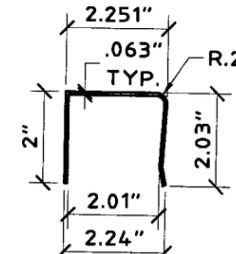
3 "h" HEADER
SCALE: 3" = 1' - 0"



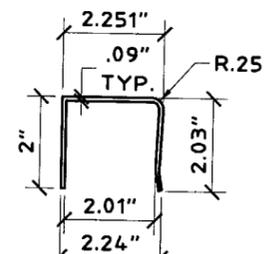
4 HEAVY "h" HEADER
SCALE: 3" = 1' - 0"



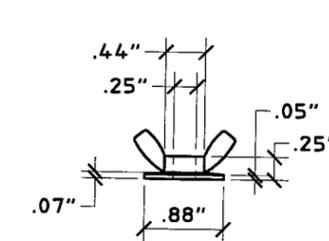
5 BUILD-OUT "h" HEADER
SCALE: 3" = 1' - 0"



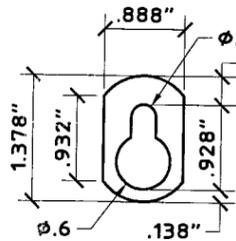
6 "U" HEADER
SCALE: 3" = 1' - 0"



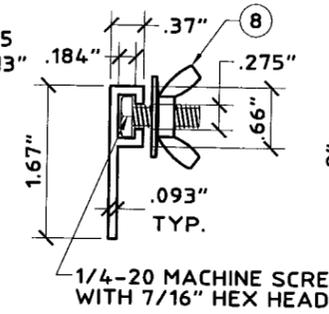
7 HEAVY "U" HEADER
SCALE: 3" = 1' - 0"



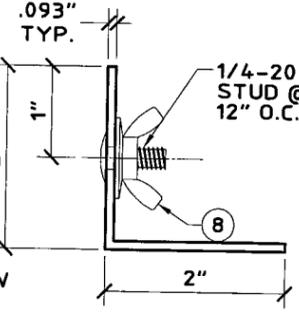
8 WASHERED WING NUT
SCALE: HALF SIZE



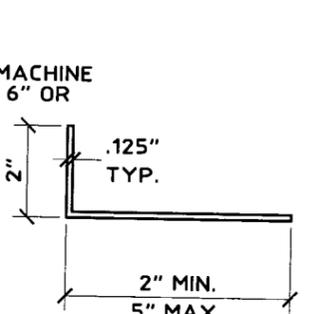
9 KEYHOLE WASHER
SCALE: HALF SIZE



10 "F" TRACK
SCALE: HALF SIZE

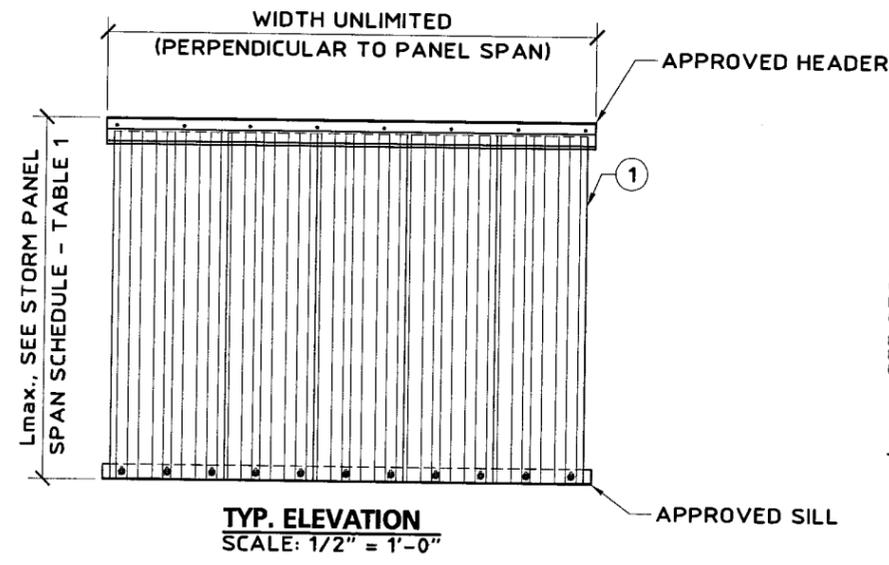


11 STUD ANGLE
SCALE: HALF SIZE

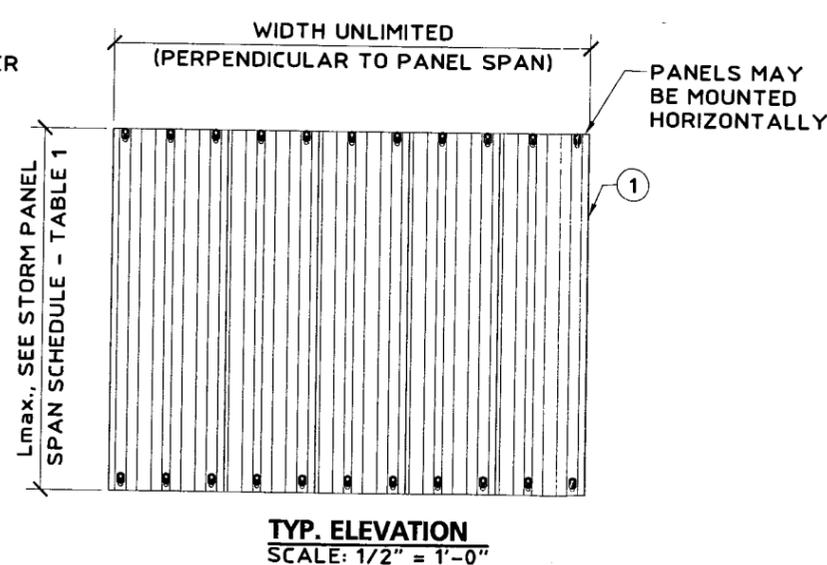


12 BUILD-OUT ANGLE
SCALE: 3" = 1' - 0"

MATERIAL: ZAMAC 3 ALLOY



TYP. ELEVATION
SCALE: 1/2" = 1'-0"



TYP. ELEVATION
SCALE: 1/2" = 1'-0"

PRODUCT REVISED
As complying with the Florida Building Code
Acceptance No. 06-0706.17
Expiration Date 04/18/2012
By *Helena A. Mohr*
Miami Dade Product Control Division

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J.W. Knezevich
Professional Engineer
FL License No.: PE 0041961

APR 10 2007

no	date	description

date 04/10/2007
scale AS NOTED
design by NW
drawing no. 07-309
sheet 1 of 5

T A B L E 2	MINIMUM STORM PANEL SEPARATION FROM GLASS			
	POSITIVE DESIGN LOAD (W) (P.S.F.)	MAXIMUM STORM PANEL SPAN (FT-IN)	MINIMUM SEP. FOR ALL INSTALLATIONS LESS THAN 30' ABOVE GRADE (INCHES)	MINIMUM SEP. FOR ALL INSTALLATIONS GREATER THAN 30' ABOVE GRADE (INCHES)
30.00	5' - 0"	3"	1"	
30.00	7' - 0"	3"	1-1/4"	
30.00	9' - 0"	3"	1-1/2"	
30.00	10' - 0"	3"	1-7/8"	
50.00	5' - 0"	3"	1-1/8"	
50.00	7' - 0"	3"	1-3/8"	
50.00	9' - 0"	3"	1-7/8"	
50.00	10' - 0"	3"	2-3/8"	
70.00	5' - 0"	3"	1-1/8"	
70.00	7' - 0"	3"	1-1/2"	
70.00	9' - 0"	3"	2-1/4"	
70.00	10' - 0"	3"	3"	
90.00	5' - 0"	3"	1-1/8"	
90.00	6' - 0"	3"	1-3/8"	
90.00	7' - 0"	3"	1-1/2"	
120.00	5' - 0"	3"	1-1/4"	
120.00	5' - 6"	3"	1-1/4"	

TABLE 1 NOTES:

- TABLE 1 IS APPLICABLE FOR BOTH POSITIVE AND NEGATIVE LOADS.
- FOR DESIGN LOADS BETWEEN TABULATED VALUES. USE NEXT HIGHER LOAD OR LINEAR INTERPOLATION MAY BE USED TO DETERMINE ALLOWABLE SPANS.

TABLE 2 NOTE:

- ENTER TABLE 2 WITH POSITIVE DESIGN LOAD TO DETERMINE MINIMUM STORM SHUTTER SEPARATION FROM GLASS.

T A B L E 1	STORM PANEL MAXIMUM SPAN SCHEDULE	
	DESIGN LOAD W (P.S.F.)	ALL MOUNTING CONDITIONS L MAX. (FT-IN)
73.00	8' - 8"	
75.00	8' - 6"	
80.00	8' - 0"	
85.00	7' - 6"	
90.00	7' - 1"	
95.00	6' - 8"	
100.00	6' - 4"	
105.00	6' - 1"	
110.00	5' - 9"	
115.00	5' - 6"	
120.00	5' - 4"	
125.00	5' - 1"	
130.00	5' - 0"	
135.00	5' - 0"	
140.00	5' - 0"	
145.00	5' - 0"	
150.00	5' - 0"	
160.00	4' - 9"	
170.00	4' - 5"	
180.00	4' - 2"	
190.00	4' - 0"	
200.00	3' - 9"	

PRODUCT REVISED
 as complying with the Florida Building Code
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 By *Helmut A. Knezevich*
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0.063" ALUMINUM STORM PANEL

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J.W. Knezevich
 Professional Engineer
 FL License No.: PE 0041961

JWK
 APR 10 2007

no	date	description

date 04/10/2007
 scale AS NOTED drawn by MCR
 design by NW checked by JWK
 drawing no. 07-309
 sheet 5 of 5