

DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES (RER) BOARD AND CODE ADMINISTRATION DIVISION

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION

11805 SW 26 Street, Room 208 Miami, Florida 33175-2474 T (786) 315-2590 F (786) 315-2599

www.miamidade.gov/economy

NOTICE OF ACCEPTANCE (NOA)

American Metal Fabrications, Inc. dba AMF Building 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 and accepted by Miami-Dade County RER- Product Control Section 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 Section (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. RER reserves the right to revoke this acceptance if it is determined by Miami-Dade County Product Control Section 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: Extruded Aluminum Hinged Bi-Fold Colonial Shutter

APPROVAL DOCUMENT: Drawing No. AMF004, titled "Aluminum Hinged Bi-Fold Colonial Shutter", sheets 1 through 3 of 3, prepared by Building Drops, Inc., dated June 27, 2015, last revised on 12/17/2020, signed & sealed by Hermes F. Norero, P.E., 12/17/2020, bearing Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: Large and Small Missile Impact Resistant

LABELING: Each unit shall bear a permanent label with the manufacturer's name or logo, city, state, the following statement: "Miami-Dade County Product Control Approved", and NOA number, per TAS-201, TAS-202, and TAS-203, 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 NOA #18-0719.02 and consists of this page 1, evidence submitted pages E-1, E-2, E-3, E-4 & E-5 as well as approval document mentioned above.

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

H.M.

NOA No. 20-1223.11 Expiration Date: Approval Date: Page 1

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #95-0717.07

A. DRAWINGS

1. Drawing No. **96-121**, Poma Corp. Colonial Shutter, Sheets 1 through 3 of 3, by Knezevich & Associates, Inc., dated 11/14/97, signed and sealed by V. J. Knezevich, P.E.

B. TESTS

1. Test Report on: 1) Large Missile Impact Test, per PA-201, 2) Cyclic Wind Pressure Test, per PA-203 and 3) Uniform Static Air Pressure test per PA-202, of colonial shutters with four sections and two horizontal bars, prepared by Hurricane Test Laboratory Inc., Report No. 0031-0316-95, dated March 16, 1995, signed and sealed by Timothy S. Marshall, P.E.

C. CALCULATIONS

- 1. Anchor analysis and calculations dated 6/28/95, Pages 1 to 19, prepared by John M. Averkamp, Inc., signed and sealed by John M. Averkamp, P.E.
- 2. Anchor analysis and locking bar analysis, dated 5/28/96, Pages 1 to 8, prepared by Knezevich & Associates, Inc., signed and sealed by V. J. Knezevich, P.E.

D. MATERIAL CERTIFICATION

- 1. Certified Inspection Report including material certification by T & C Metals, for Alum. alloy 3003 H14 .050" thick sheet.
- 2. Certified Tensile Test Report No. 5GM-1726, for colonial shutter specimen, prepared by QC Metallurgical Inc., dated 7/27/95, per ASTM E8-93, signed and sealed by Frank Grate, P.E.

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #98-0512.01 A. DRAWINGS

1. Drawing prepared by Knezevich & Associates, Inc., titled "Colonial Shutter", Drawing No. 98-004, dated 05/08/98, last revision #2 dated 07/27/98, sheets 1 through 4 of 4, signed and sealed by V. J. Knezevich, P.E.

B. TESTS

1. Test report on Large Missile Impact Test of "Colonial Shutter", prepared by Construction Testing Corporation, Report No. 97-056, dated 10/23/97, signed and sealed by Yamile Kuri, P.E.

C. CALCULATIONS

1. Analysis and anchor calculations dated 05/11/98, pages 1 through 5 of 5, prepared by Knezevich & Associates, Inc., signed and sealed by V. J. Knezevich, P.E.

Helmy A. Makar, P.E., M.S. Product Control Section Supervisor NOA No. 20-1223.11 Expiration Date: Approval Date:

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

D. MATERIAL CERTIFICATIONS

1. Tensile Test Report No. CTL-799C, prepared by Certified Testing Laboratories, dated 11/11/97, signed and sealed by Ramesh Patel, P.E.

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #00-1114.01

A. DRAWINGS

1. None.

B. TESTS

1. None.

C. CALCULATIONS

1. None.

D. MATERIAL CERTIFICATIONS

1. None.

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #06-1011.04

A. DRAWINGS

1. Drawing No. 06-552, titled "Colonial Shutter", sheets 1 through 4 of 4, prepared by Thornton Tomasetti, dated January 15, 2007, last revision #0 dated January 15, 2007, signed & sealed by J. W. Knezevich, P.E.

B. TESTS

1. None.

C. CALCULATIONS

1. Revised Anchor analysis and calculations dated January 04, 2007, 14 Pages, prepared by Thornton Tomasetti, signed and sealed by John W. Knezevich, P.E. on January 04, 2007.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 08-0530.04

A. DRAWINGS

1. Drawing No. 07-WBP-0011, titled "Colonial Shutter", sheets 1 through 4 of 4, prepared by Engineering Express, dated May 19, 2008, signed and sealed by Frank L. Bennardo, P.E., on September 09, 2008.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

B. TESTS

1. Test Report on: 1) Large Missile Impact Test, per TAS-201, 2) Cyclic Wind Pressure Test, per TAS-203 and 3) Uniform Static Air Pressure test per TAS-202, of colonial shutters, prepared by Construction Testing Corporation, Report No. 07-017 TAS WXG, dated April 25, 2008, signed and sealed by Yamil G. Kuri, P.E.

C. CALCULATIONS

1. Revised Anchor analysis and calculations dated May 22, 2008, 15 Pages, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E. on May 22, 2008.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

6. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 12-0809.03

A. DRAWINGS

1. Drawing No. 12-168, titled "Colonial Shutter", sheets 1 through 3 of 3, prepared by Knezevich Associates Consulting Engineers, dated July 17, 2012, signed and sealed by V. J. Knezevich, P.E., on July 17, 2012.

B. TESTS

1. None.

C. CALCULATIONS

1. Revised Anchor analysis and calculations dated July 20, 2012, 7 Pages, prepared by Knezevich Associates Consulting Engineers, signed and sealed by V. J. Knezevich, P.E., on July 20, 2012.

D. QUALITY ASSURANCE

1. By Miami-Dade County Department of Regulatory and Economic Resources.

E. MATERIAL CERTIFICATIONS

1. None.

Helmy A. Makar, P.E., M.S. Product Control Section Supervisor NOA No. 20-1223.11 Expiration Date: Approval Date:

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

7. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 13-1010.08

- A. DRAWINGS
 - 1. None.
- B. TESTS
 - 1. None.
- C. CALCULATIONS
 - 1. None.
- D. QUALITY ASSURANCE
 - 1. By Miami-Dade County Department of Regulatory and Economic Resources.
- E. MATERIAL CERTIFICATIONS
 - 1. None.
- 8. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 15-1207.06
- A. DRAWINGS
 - 1. Drawing No. AMF004, titled "Aluminum Hinged Bi-Fold Colonial Shutter", sheets 1 through 3 of 3, prepared by Building Drops, Inc., dated June 27, 2015, signed and sealed by Hermes F. Norero, P.E., on June 02, 2016.
- B. TESTS
 - 1. None.
- C. CALCULATIONS
 - 1. Revised Anchor analysis and calculations dated June 02, 2016, 5 Pages, prepared by Building Drops, Inc., dated June 27, 2015, signed and sealed by Hermes F. Norero, P.E., on June 02, 2016.
- D. OUALITY ASSURANCE
 - By Miami-Dade County Department of Regulatory and Economic Resources.
- E. MATERIAL CERTIFICATIONS
 - 1. None.

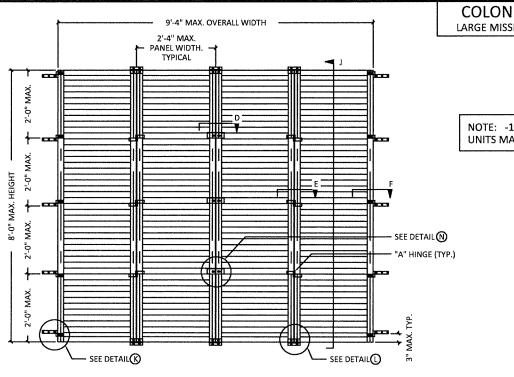
American Metal Fabrications, Inc.

dba AMF Building

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

- 9. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 18-0719.02
- A. DRAWINGS
 - 1. None.
- B. TESTS
 - 1. None.
- C. CALCULATIONS
 - 1. None.
- D. QUALITY ASSURANCE
 - 1. By Miami-Dade County Department of Regulatory and Economic Resources.
- E. MATERIAL CERTIFICATIONS
 - 1. None.
- F. OTHERS
 - 1. Florida Building Code, 2017 Edition, compliance letter dated August 21, 2017 issued by Building Drops, signed and sealed by Hermes F. Norero, P.E., on October 24, 2017.
- 10. NEW EVIDENCE SUBMITTED
- A. DRAWINGS
 - 1. Drawing No. AMF004, titled "Aluminum Hinged Bi-Fold Colonial Shutter", sheets 1 through 3 of 3, prepared by Building Drops, Inc., dated June 27, 2015, last revised on 12/17/2020, signed & sealed by Hermes F. Norero, P.E., 12/17/2020.
- B. TESTS
 - 1. None.
- C. CALCULATIONS
 - 1. None.
- D. QUALITY ASSURANCE
 - By Miami-Dade County Department of Regulatory and Economic Resources.
- E. MATERIAL CERTIFICATIONS
 - 1. None.
- F. OTHERS
 - 1. Florida Building Code, 2020 Edition, compliance letter dated 11/02/20 issued by Building Drops, signed and sealed by Hermes F. Norero, P.E., on 12/17/20.

Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 20-1223.11
Expiration Date:
Approval Date:



COLONIAL SHUTTER LARGE MISSILE IMPACT RESISTANT

NOTE: -1, -2, -3 OR -4-PANEL UNITS MAY BE INSTALLED

CONFIGURATION 'A' 96" ASSEMBLY

ANCHOR NOTES

- SEE ANCHOR SCHEDULE FOR MINIMUM QUANTITIES AT VARIOUS LOCATIONS.
 ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS RECOMENDATIONS
- 3. UNLESS OTHERWISE NOTED HEREIN, ALL ANCHORS SHALL HAVE A MINIMUM SPACING OF
- 4. WOOD HOST STRUCTURE SHALL BE "S-Y-P" G = .55 OR GREATER DENSITY.
- 5. MINIMUM EMBEDMENT AND EDGE DISTANCE SHALL BE AS NOTED IN ANCHOR SCHEDULE, MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK AND OTHER WALL FINISHES.
- 6. WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY, FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO
- MACHINE SCREWS SHALL HAVE A MINIMUM OF 1/2" ENGAGEMENT OF THREADS IN BASE ANCHOR AND MAY HAVE EITHER A PAN HEAD, TRUSS HEAD, OR WAFER HEAD ("SIDEWALK BOLT") U.O.N.
- *DESIGNATES ANCHOR THAT IS REMOVABLE.
- INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:
- A. WOOD MINIMUM SPECIFIC GRAVITY OF 0.55.
- B. CONCRETE -MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
- C. GROUT-FILLED CMU- UNIT STRENGTH CONFORMS TO ASTM C-90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI AND GROUT CONFORMS TO ASTM C 476, MINIMUM GROUT COMPRESSIVE STRENGTH OF 2000 PSI.
- D. HOLLOW BLOCK CMU UNIT STRENGTH CONFORMS TO ASTM C-90 WITH MINIMUM COMPRESSIVE STRENGTH OF 2000 PSI.

ALLOWABLE DESIGN PRESSURES		
CONFIGURATION 'A'	+38.3 / -55.5 PSF	
CONFIGURATION 'B'	+85.0 / -90.9 PSF	

ANCHOR SCHEDULE			
	NUMBER OF ANCHORS REQUIRED		
ANCHOR	HINGE	Z-CLIP	
	CONFIGURATIONS 'A' & 'B'	CONFIGURATION	
		'A'	'B'
1/4" POWERS TAPPER+ W/1-1/4" MIN. EMBED. IN CMU AND 1-3/4" MIN. EMBED. IN CONCERTE AND 3" MIN. EDGE DIST. IN HOLLOW CONCRETE BLOCK OR CONCRETE	2	N/A	N/A
* 1/4-20 ALL POINTS SOLID SET ANCHOR W/ ½" MIN. EMBED AT 3" MIN. EDGE DIST. IN HOLLOW CONCRETE BLOCK & CONCRETE	N/A	2	2
¼" LAG SCREW OR 1/4" POWERS TAPPER+ W/1-1/2" MIN. THREAD PENETRATION AND 3" MIN. EDGE DIST. IN WOOD	2	N/A	N/A
1/4"Ø ELCO FEMALE PANEL MATE WITH 1.875" PENETRATION AND 3" EDGE DIST. IN WOOD	N/A	2	2

9'-4" MAX. OVERALL WIDTH 2'-4" MAX PANEL WIDTH. SEE DETAIL® - SEE DETAIL(L)

B CONFIGURATION 'B' 72" ASSEMBLY

GENERAL NOTES

- 1. THIS COLONIAL SHUTTER SYSTEM HAS BEEN TESTED IN ACCORDANCE WITH THE TAS 201, 202 & 203 STANDARDS, OF THE 7TH EDITION FLORIDA BUILDING CODE FOR USE IN THIS HVHZ AS WELL AS AREAS OUTSIDE THE HVHZ
- 2. NO ¼ (33%) INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD RATION FACTOR Cd = 1.6 HAS BEEN USED FOR WOOD ANCHOR 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 7-10 A DIRECTIONALITY FACTOR OF Kd = 0.85 SHALL BE USED.
- 4. THESE PRODUCT EVALUATION DOCUMENTS ARE INTENDED FOR USE 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 FITHER FORM OR MATERIAL FROM THE STRUCTURAL SUBSTRATES DETAILED HEREIN. CONTRACTOR SHALL VERIFY EXISTING STRUCTURE CAN WITHSTAND SUPERIMPOSED LOAD OF SHUTTER.
- 5. ANY MODIFICATIONS OR ADDITIONS TO THESE APPROVAL DOCUMENTS WILL VOID THE PRODUCT APPROVAL
- 6. WHEN THE SITE CONDITIONS DEVIATE FROM THESE APPROVAL 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 SECTION

WHEN THIS SITE CONDITIONING DEVIATION OCCUR WITHIN THE HIGH VELOCITY HURRICANE ZONE AREAS ONLY OPTION "B" SHALL BE ACCEPTED BY THE BUILDING OFFICIAL

7. EACH SHUTTER ASSEMBLY SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE MARKING LABEL PER

AMF BUILDING PRODUCTS MIAMI-DADE COUNTY PRODUCT CONTROL SECTION APPROVED

- 8. ALL EXTRUSIONS SHALL BE 6063-T6 ALUMINUM ALLOY, U.O.N.
- 9. ALL BOLTS AND WASHERS SHALL BE 300 SERIES STAINLESS STEEL, ALL POP RIVETS SHALL BE 3/16" OR 1/4" DIAMETER 300 SERIES STAINLESS STEEL OR 5052-H32 ALUMINUM ALLOY.
- 10. THIS SHUTTER SHALL BE PROVIDED WITH A PERMANENT LABEL INSTRUCTING THE OWNER OR TENANT TO CLOSE THE SHUTTER DURING PERIODS OF TIME AS ARE DESIGNED BY THE U.S. WEATHER BUREAU AS BEING HURRICANE WARNING OR ALERT.

Digitally signed by Hermes F Norero Reason: I am approving this document Date: 2020.12.17 19:43:13 -05'00'

AMERICAN METAL FABRICATORS, INC. 1501 53rd Street Mangonia Park, FL 33407 PH: (561)790-5799 FAX: (561)790-2320 BUILDING DROPS, INC. E. DANIA BEACH BLVD. #338 DANIA BEACH, FL 33004 ITLE: ALUMINUM HINGED BI-FOLD COLONIAL SHUTTER GENERAL NOTES 338 DATE ₽ Z O **EVISI** -BC 2020 UPDA DESCRIPTION α * PROF **AMF004**

