SUBJECT: FIRE STATION WIND RETROFIT BAY SHUTTERS – RE-BID

BID #: XF-0292-21

OPEN DATE: 12/16/2020

GENERAL GOVERNMENT AWARDS COMMITTEE

KIND AND BASIS OF CONTRACT: SUPPLY CONTRACT – ONE-TIME PURCHASE

AGENCY: JACKSONVILLE FIRE RESCUE DEPARTMENT

BASIS OF AWARD: ALL OR NONE TO THE LOWEST RESPONSIVE, RESPONSIBLE BIDDER

NUMBER OF BIDS INVITED: 10 **NUMBER RECEIVED:** 1 **OTHER:** 0

SUMMARY OF BIDS AND RECOMMENDED ACTIONS:
Subject bid was opened on 12/16/20 with one response received from ONAS Corporation. Recommend approval to reject ONAS Corporation for submitting a bid that exceeds the agency's allocated budget for the project.

This solicitation will be reissued on a later date.

ATTACHMENTS: Recommendation Memo, Rejection Letter, Bid Tabulation, Terms & Conditions, Specifications

ANALYST: _____
DAVID KLAGES

RESPECTFULLY SUBMITTED: _____
GREGORY PEASE, CHIEF
PROCUREMENT DIVISION

CONCURRENCE BY: KEITH POWERS, DIRECTOR/FIRE CHIEF, JACKSONVILLE FIRE RESCUE DEPARTMENT

(ALL AWARD ACTIONS SUBJECT TO LAWFULLY APPROPRIATED FUNDS)
ACTION OF GGAC COMMITTEE ON RECOMMENDATIONS ABOVE

MEMBERS APPROVING _____ MEMBERS DISAPPROVING _____ DATE: _____

_____ _____ OTHER: _____

_____ _____

_____ _____

ACTION OF AWARDING AUTHORITY DATE _____

APPROVED _____ DISAPPROVED _____

OTHER _____

SIGNATURE OF AUTHENTICATION _____

FIRE AND RESCUE DEPARTMENT

January 11, 2021

TO: Gregory Pease, Chief of Procurement

FROM: Steven Woodard, Director of Emergency Preparedness

RE: Bid # XF-0292-21 FIRE STATION WIND RETRO-FIT SHUTTERS RE-BID

Recommend approval to reject the one received bid response from Onas Corporation due to the bid amount exceeding the allocated budget for this project and request that this project be put back out for solicitation.

If you have any questions, please contact Cindy Davis at (904) 255-3265.

KP/cad/dp

PROCUREMENT DIVISION

NOTIFICATION OF RECOMMENDED BID REJECTION

DATE: JANUARY 13, 2021

VIA EMAIL: BANDELE@ONASCORPORATION.COM

BIDDER'S NAME: ONAS CORPORATION

ADDRESS: 2050 UNIVERSITY BOULEVARD NORTH, JACKSONVILLE, FL 32211

CONTACT NAME: BANDELE ONASANYA

BID NO: XF-0292-21

TITLE: FIRE STATION WIND RETROFIT BAY SHUTTERS – RE-BID

DATE OPENED: DECEMBER 16, 2020

REASON FOR RECOMMENDED BID REJECTION: FOR SUBMITTING A BID RESPONSE THAT EXCEEDS THE AGENCY'S ALLOCATED BUDGET FOR THE PROJECT.

IF YOU WISH TO PROTEST THE RECOMMENDED REJECTION OF THIS BID, PLEASE RESPOND IN ACCORDANCE WITH THE CITY OF JACKSONVILLE'S BID PROTEST PROCEDURES. PLEASE DIRECT YOUR PROTEST TO DAVID KLAGES, PURCHASING ANALYST, AT EMAIL ADDRESS DKLAGES@COJ.NET. THIS ACTION IS SCHEDULED FOR THE GENERAL GOVERNMENT AWARDS COMMITTEE MEETING ON **THURSDAY, JANUARY 21, 2020 AT 1:00 P.M.**

BUYER'S SIGNATURE: _____

DAVID KLAGES, PURCHASING ANALYST

BID TABULATION

Title:	FIRE STATION WIND RETROFIT SHUTTERS - RE-BID	**ONAS Corporation**
Bid No:	XF-0292-21	
Open Date:	DECEMBER 16, 2020	
Analyst:	DAVID KLAGES	
No. Invited:	(5) **No. Received:** (1) **Other:** (0)	
Recorded By:	DAVID KLAGES	
Item #	**Description**	**Price**
1	Fire Station #15 6403 N. Pearl Street, Jacksonville, FL 32208 Quote per detailed specifications in Scope of Work.	$24,750.00
2	Fire Station #17 710 Huron Street, Jacksonville, FL 32254 Quote per detailed specifications in Scope of Work.	$24,750.00
3	Fire Station #25 5423 Manor Drive, Jacksonville, FL 32210 Quote per detailed specifications in Scope of Work.	$24,750.00
4	Fire Station #27 6241 Fort Caroline Road, Jacksonville, FL 32277 Quote per detailed specifications in Scope of Work.	$24,750.00
5	Fire Station #36 2926 Lippia Road, Jacksonville, FL 32209 Quote per detailed specifications in Scope of Work.	$24,750.00
6	Fire Station #45 15725 Sawpit Road, Jacksonville, FL 32223 Quote per detailed specifications in Scope of Work.	$24,750.00
7	Fire Station #48 9647 Blount Island Drive, Jacksonville, FL 32226 Quote per detailed specifications in Scope of Work.	$24,750.00
	Total Base Bid (Lines 1 - 7):	**$173,250.00**
	Terms:	Not stated.
	Delivery:	Not stated.
	Signed Bid Form:	Yes
	Bid Proposal Form:	Yes
	Conflict of Interest Certificate:	Yes
	Insurance Agent Acknowledgement Form	Yes
	Form 1 – Debarment (Attachment A):	Yes
	Form 2 – Lobbying (Attachment A):	Yes

TERMS AND CONDITIONS

FIRE STATION WIND RETROFIT SHUTTERS – RE-BID

1. **SCOPE**
The City of Jacksonville's Fire and Rescue Department is currently accepting bids to obtain a source of supply for the items/services as outlined in the bid documents provided. The purpose of this bid invitation is to obtain information about your firm and its ability to provide these items/services and to obtain pricing commitments for Fire Station Wind Retrofit Shutters as listed in the bid documents.

2. **AWARD**
Award will be **ALL or NONE** to the lowest responsive, responsible bidder. Bidders must bid on **all** items to be considered for award. The City reserves the right to reject any or all bids. All awards are subject to the availability of funds.

As per Section 126.114 of the City of Jacksonville Ordinance Code, preference will be given to a responsive and responsible vendor offering American manufactured, assembled, or produced goods, and who is within 5% of the lowest responsive and responsible bidder. To receive this preference, the bidder must complete the attached Buy American Preference Compliance Certificate and attach supporting documentation and/or evidence attesting that at least 51% offered in the bid response is manufactured, assembled or produced in the United States..

- Bidder is not required to submit for the Buy American Preference. Bidders may quote items less than 51% American made but will not be eligible for the preference.
- Restrictions and exemptions may apply. Please refer to Section 126.114 for specifics.

3. **TERM OF AGREEMENT**
One-time project. Work must be started within two (2) weeks of issuance of Purchase Order and project must be completed no later than February 28, 2021.

4. **MINIMUM REQUIREMENTS**
Bidders must comply with the following requirements; failure to comply with either of these requirements may be grounds for rejection:
   a. Registered to conduct business in the State of Florida at time of bid submittal.
   b. Businesses located within Duval County must provide a Local Business Tax License.

5. **PRE-BID CONFERENCE**
N/A.

6. **STATE CONTRACTS**
The City reserves the right to utilize contracts established by the State of Florida and/or other governmental agencies for item(s)/service(s) covered under this bid. The City reserves the right to cancel this contract in whole or in part for such item(s)/service(s).

7. **QUANTITIES**
Quantities indicated reflect the estimated quantities to be purchased throughout the contract period and are subject to fluctuation in accordance with actual requirements. The City reserves the right to add or delete items, to increase the volume of services required, or not to make any purchase against this bid if it so deems necessary at any time during the contract period. The City shall provide the awarded supplier with reasonable notice of any such changes.

8. **DELIVERY**
Various Fire Station locations in Jacksonville, FL as outlined in the Bid Specifications. Gary Daly (904) 334-9967 will be the point of contact. A packing list shall accompany all shipments, which shall indicate, at a minimum, the following; purchase order number, item number and description, date of shipment, quantity ordered and shipped, unit prices, and unit of measure.

NO deliveries shall be made without prior authorization via Purchase Order.

9. **ESCALATION/DE-ESCALATION**
All pricing submitted shall remain firm.

10. **PRICES**
All unit prices shall remain firm for the term of the award and shall include freight, delivery, and handling charges to the delivery location(s). In case of errors, unit prices will govern. Proposals in which the prices obviously are unbalanced will be rejected.

11. **PICK UP AND RETURNS**
The City reserves the right to return an order in whole or in part if the merchandise is not in compliance with the bid specifications. The City or its agencies will determine compliance with bid specifications. Pick up and returns will be made within forty-eight (48) hours of notification at no charge to the City or its agencies.

12. **COMPLIANCE WITH SPECIFICATIONS**
The bidder, by affixing their signature to the bid form submitted, agrees to provide item(s)/service(s) in accordance with the bid documents provided. Bid only a single offering for each bid item. **Multiple offerings, alternates (unless stated) and/or stipulations may be cause for bid rejection.** Bid only on forms provided herein unless otherwise stated. Bid submissions shall be in ink or typewritten. All corrections must be initialed.

13. **INVOICING**
Invoices will be issued once supplies/services are delivered and/or rendered to the City of Jacksonville or its agencies. At a minimum, invoices must include: Purchase Order number or contract number, item number and description, date of shipment, quantity ordered and shipped, unit prices, unit of measure, and extended totals. Payment terms are Net 30 days. All original invoices shall be submitted to: City of Jacksonville, General Accounting Division, 117 West Duval Street, Suite 375, Jacksonville, Florida 32202. **No partial payments will be allowed. Payment of invoice will be processed after the City Buildings Department and State of Florida have certified the project has complied with the specifications.**

14. **INSURANCE/INDEMNIFICATION**
Each supplier shall maintain, for the entire term of this bid, current insurance coverage as stated in the bid documents. All insurance certificates shall list the City of Jacksonville as an additional insured. Bid number should be listed on certificate.

15. **REPORTING**
The City may request, during the term of award, reports including but not limited to: usage, pricing, and delivery. Awarded supplier will be required to provide reports requested in hard copy and electronic format as requested.

16. **SUPPLIER ACCESSIBILITY**
The City of Jacksonville or its representative must be able to contact, during normal business hours, by telephone or email, any supplier providing goods or services to the City or its agencies. Any supplier accessibility requirements outlined in the specifications supersede this section.

SPECIFICATIONS

FIRE STATION WIND RETROFIT SHUTTERS

Labor and Materials to Wind Retro-fit shutters, doors and exterior openings at Fire Stations #15, 17, 25, 27, 36, 45, 48 in Jacksonville, Florida. Vendor must visit each location to verify window, door and louver dimensions, as well as quantities.

Below is the list of Fire Stations to be fitted with shutters per detailed Scope of Work.

1. Fire Station #15: 6403 N. Pearl Street, 32208 (3 doors, 16 windows, 1 vent)
2. Fire Station #17: 710 Huron Street, 32254 (3 doors, 22 windows)
3. Fire Station #25: 5423 Manor Drive, 32210 (3 doors, 16 windows)
4. Fire Station #27: 6241 Fort Caroline Road, 32277 (4 doors, 22 windows)
5. Fire Station #36: 2926 Lippia Road, 32209 (2 doors, 16 windows)
6. Fire Station #45: 15725 Sawpit Rd, 32226 (2 doors, 10 windows, 2 vents)
7. Fire Station #48: 9647 Blount Island Boulevard, 32226 (2 doors, 14 windows, 2 vents)

The project shall wind retrofit the Fire Stations from wind-blown debris resulting from high wind storms, which shall allow the function of the structures to continue, following a severe wind event Each fire station shall be retrofitted with hurricane shutters for all openings to prevent wind damage to the fire stations and the valuable equipment and fire apparatus inside each structure.

Wind protection shall be provided on all exterior openings, such as windows, doors, skylights, vents, louvers and exhaust fans on each building. All installation shall be done in strict compliance with the Florida Building Code and all materials shall be certified to meet the Large Missile Impact Standards.

Detailed specifications for work to be performed at each station are listed in the Scope of Work. Vendors must have a State Certification and need to complete Debarment Form before they can be awarded any work. All work must pass City Building codes and be certified the project has complied with standards. No payment for work will be made until after the City of Jacksonville Building Department and the State of Florida have inspected and approved work completed.

This is FEMA project number **4283-85-R** and is funded under HMGP; FEMA-Matthew 4283-DR-FL and must adhere to all program guidelines established for the HMGP in accordance with the PAS Operational Agreement for Disaster 4283.

The project shall protect the building from windblown debris resulting from high windstorms which shall allow the function of the structure(s) to continue following a severe wind event. The structure shall upgrade to meet Florida Building Code and/or Miami Dade Requirements, includes all exterior openings (must protect against 132 MPH winds or the wind speed protection indicated effective by the Florida Building Code and/or Miami Dade Requirements at the time the permits are issued). All labor and material for these projects are to be furnished by the vendor.

Scope of Work:

Install .050 Aluminum Storm Panel Shutters on all windows and required openings

- Mill finish perforated panels must be Bertha or equivalent
- Bertha Aluminum Storm Panels NOA (No. 18-0516.06) or equivalent
- Panels of equal gauge material shall be fit for small openings

All panels and attachments shall meet strength requirements associated with wind design.

- Large and Small Impact Resistant

Panels will also be required for all other openings other than windows as listed:

- Storefronts
- Louvers and Vents
- Exterior Doors

AH work will be permitted and inspected by City of Jacksonville (COJ) Building Department.

- Vendor will be responsible for the obtaining and cost of all permits.
- Permits must be posted at each location and vendor is responsible for scheduling of Inspections. All installations will be done in compliance with Florida Building Code.

Vendor will provide manufacturers supporting documentation with bid.

Glazing in buildings shall be impact resistant or protected with an impact resistant covering meeting the requirements of SSTD 12, ASTM E 1886 and ASTM E 1996, ANSI/DASMA 115 (for garage doors and rolling doors) or Miami-Dade TAS 201, 202 and 203 or AAMA 506 referenced therein as follows:

a) Glazed openings located within 30 feet (9.1 m) of grade shall meet the requirements of the Large Missile Test

b) Glazed openings located more than 30 feet (9.1 m) above grade shall meet the provisions of the Small Missile Test.

c) Louvers protecting intake and exhaust ventilation ducts not assumed to be open that are located within 30 feet (9144 mm) of grade shall meet requirements of the Large Missile Test.

Below is list of Fire Station locations and door quantities for this project. Vendor should visit each location to verify shutter and door dimensions.

1. Fire Station #15: 6403 N. Pearl Street, Jacksonville, FL 32208

Retrofit existing ingress/egress door with appropriate fitting (shutters or roll-up style storm door panel), sixteen (16) windows, and one (1) vent with .050 Aluminum Storm Panel Shutters.

2. Fire Station #17: 710 Huron Street, Jacksonville, FL 32254

Retrofit existing ingress/egress door with appropriate fitting (shutters or roll-up style storm door panel) and twenty-two (22) windows with .050 Aluminum Storm Panel Shutters.

3. Fire Station #25: 5423 Manor Drive, Jacksonville, FL 32210

Retrofit existing ingress/egress door with appropriate fitting (shutters or roll-up style storm door panel) and sixteen (16) windows with .050 Aluminum Storm Panel Shutters.

4. Fire Station #27: 6241 Fort Caroline Road, Jacksonville, FL 32277

Retrofit existing ingress/egress door with appropriate fitting (shutters or roll-up style storm door panel) and twenty-two (22) windows with .050 Aluminum Storm Panel Shutters.

5. Fire Station #36: 2926 Lippia Road, Jacksonville, FL 32209

Retrofit existing ingress/egress door with appropriate fitting (shutters or roll-up style storm door panel) and sixteen (16) windows with .050 Aluminum Storm Panel Shutters.

6. Fire Station #45: 15725 Sawpit Road, Jacksonville, FL 32226

Retrofit existing ingress/egress door with appropriate fitting (shutters or roll-up style storm door panel), ten (10) windows, and two (2) vents with .050 Aluminum Storm Panel Shutters.

7. Fire Station #48 - 9647 Blount Island Blvd, 32226

Retrofit existing ingress/egress door with appropriate fitting (shutters or roll-up style storm door panel), fourteen (14) windows, and two (2) vents with .050 Aluminum Storm Panel Shutters.

Impact-resistant coverings shall be tested at 1.5 times the design pressure (Positive or Negative) expressed in pounds per square feet as determined by the Florida Building Code, Building Section1609 for which the specimen is to be tested.

Pursuant to subsection 553.896(2), Florida Statutes, projects including the construction of new or retrofitted window or door coverings must conform to design drawings that are signed, sealed, and inspected by a structural engineer who is registered in this state. The Sub-Recipient shall provide an inspection report and attestation or a copy of the signed and sealed plans to the Division before payment will be made. Contractor must provide Certification Regarding Debarment, Suspension, ineligibility and voluntary exclusion.

The vendor shall follow all applicable State, Local and Federal Laws Regulations and requirements, and obtain (before starting project work) and comply with all required permits and approvals. Failure to obtain all appropriate Federal, State, and Local permits and clearances will jeopardize payment.

Upon completion of the work, the City of Jacksonville shall schedule and participate in a final inspection of the completed project by the local municipal building department (official). The official shall inspect and certify that all installation was in accordance with the manufacturer's specifications. The vendor shall correct any deficiencies found during this final inspection prior to payment for services.

Upon completion of the project, the vendor shall submit the following documents with sufficient supporting documentation, and provide a summary of all contract scope of work and scope of work changes, if any. Additional documentation shall include:

a) Copy of permit(s), notice of commencement.
b) Local Building Official Inspection Report and Final Approval.
c) Signed and sealed copy of the As-built plans, as applicable.
d) A copy of electrical designs, specifications and/or drawings elaborated to complete the scope, as applicable.
e) Certified Letter of Completion, as applicable –
    i. Affirming that the project has been completed in conformance with the approved project drawings, specifications, and scope.
    ii. Certify Compliance with all applicable codes.
f) All Product Specifications / Data Sheet(s) (technical standards) satisfying protection requirements on all products utilized.
g) Proof of compliance with Project Requirements and Conditions contained herein.

As this project is funded in part by federal Hazard Mitigation Assistance program funds, any change addition or supplement to the approved mitigation measure or scope of work that alters the project (including other work not funded by FEMA, but done substantially at the same time) shall require resubmission to the Florida Division of Emergency Management (the Division) and FEMA for revaluation of compliance with the National Environmental Protection Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA) prior to initiation of any work. Non-compliance with these requirements may jeopardize FEMA's ability to fund this project. A change in the scope of work shall be approved by the Division and FEMA in advance regardless of the budget implications.

Mandatory Contract Provisions
Provisions:
Any contract or subcontract funded by this Agreement must contain the applicable provisions outlined in Appendix II to 2 C.F.R. Part 200. The City of Jacksonville provides the following list of sample provisions that may be required:

APPENDIX II TO PART 200—CONTRACT PROVISIONS FOR NON-FEDERAL ENTITY CONTRACTS UNDER FEDERAL AWARDS

In addition to other provisions required by the Federal agency or non-Federal entity, all contracts made by the non-Federal entity under the Federal award must contain provisions covering the following, as applicable.

(A) Contracts for more than the simplified acquisition threshold currently set at $150,000, which is the inflation adjusted amount determined by the Civilian Agency Acquisition Council and the Defense Acquisition Regulations Council (Councils) as authorized by 41 U.S.C. 1908, must address administrative, contractual, or legal remedies in instances where contractors violate or breach contract terms, and provide for such sanctions and penalties as appropriate.

(B) All contracts in excess of $10,000 must address termination for cause and for convenience by the non-Federal entity including the manner by which it will be effected and the basis for settlement.

(C) Equal Employment Opportunity. Except as otherwise provided under 41 CFR Part 60, all contracts that meet the definition of ''federally assisted construction contract'' in 41 CFR Part 60–1.3 must include the equal opportunity clause provided under 41 CFR 60–1.4(b), in accordance with Executive Order 11246, ''Equal Employment Opportunity'' (30 FR 12319, 12935, 3 CFR Part, 1964– 1965 Comp., p. 339), as amended by Executive Order 11375, ''Amending Executive Order 11246 Relating to Equal Employment Opportunity,'' and implementing regulations at 41 CFR part 60, ''Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor.''

(D) Davis-Bacon Act, as amended (40 U.S.C. 3141–3148). When required by Federal program legislation, all prime construction contracts in excess of $2,000 awarded by non-Federal entities must include a provision for compliance with the Davis-Bacon Act (40 U.S.C. 3141–3144, and 3146–3148) as supplemented by Department of Labor regulations (29 CFR Part 5, ''Labor Standards Provisions Applicable to Contracts Covering Federally Financed and Assisted Construction''). In accordance with the statute, contractors must be required to pay wages to laborers and mechanics at a rate not less than the prevailing wages specified in a wage determination made by the Secretary of Labor. In addition, contractors must be required to pay wages not less than once a week. The non-Federal entity must place a copy of the current prevailing wage determination issued by the Department of Labor in each solicitation. The decision to award a contract or subcontract must be conditioned upon the acceptance of the wage determination. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency. The contracts must also include a provision for compliance with the Copeland ''Anti- Kickback'' Act (40 U.S.C. 3145), as supplemented by Department of Labor regulations (29 CFR Part 3, ''Contractors and Subcontractors on Public Building or Public Work Financed in Whole or in Part by Loans or Grants from the United States''). The Act provides that each contractor or subrecipient must be prohibited from inducing, by any means, any person employed in the construction, completion, or repair of public work, to give up any part of the compensation to which he or she is otherwise entitled. The non-Federal entity must report all suspected or reported violations to the Federal awarding agency.

(E) Contract Work Hours and Safety Standards Act (40 U.S.C. 3701–3708). Where applicable, all contracts awarded by the non-Federal entity in excess of $100,000 that involve the employment of mechanics or laborers must include a provision for compliance with 40 U.S.C. 3702 and 3704, as supplemented by Department of Labor regulations (29 CFR Part 5). Under 40 U.S.C. 3702 of the Act, each contractor must be required to compute the wages of every mechanic and laborer on the basis of a standard work week of 40 hours. Work in excess of the standard work week is permissible provided that the worker is compensated at a rate of not less than one and a half times the basic rate of pay for all hours worked in excess of 40 hours in the work week. The requirements of 40 U.S.C. 3704 are applicable to construction work and provide that no laborer or mechanic must be required to work in surroundings or under working conditions which are unsanitary, hazardous or dangerous. These requirements do not apply to the purchases of supplies or materials or articles ordinarily available on the open market, or contracts for transportation or transmission of intelligence.

(F) Rights to Inventions Made Under a Contract or Agreement. If the Federal award meets the definition of ''funding agreement'' under 37 CFR § 401.2 (a) and the recipient or subrecipient wishes to enter into a contract with a

small business firm or nonprofit organization regarding the substitution of parties, assignment or performance of experimental, developmental, or research work under that "funding agreement," the recipient or subrecipient must comply with the requirements of 37 CFR Part 401, "Rights to Inventions Made by Nonprofit Organizations and Small Business Firms Under Government Grants, Contracts and Cooperative Agreements," and any implementing regulations issued by the awarding agency.

(G) Clean Air Act (42 U.S.C. 7401–7671q.) and the Federal Water Pollution Control Act (33 U.S.C. 1251–1387), as amended—Contracts and subgrants of amounts in excess of $150,000 must contain a provision that requires the non-Federal award to agree to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act (42 U.S.C. 7401–7671q) and the Federal Water Pollution Control Act as amended (33 U.S.C. 1251–1387). Violations must be reported to the Federal awarding agency and the Regional Office of the Environmental Protection Agency (EPA).

(H) Mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act (42 U.S.C. 6201).

(I) Debarment and Suspension (Executive Orders 12549 and 12689)—A contract award (see 2 CFR 180.220) must not be made to parties listed on the governmentwide Excluded Parties List System in the System for Award Management (SAM), in accordance with the OMB guidelines at 2 CFR 180 that implement Executive Orders 12549 (3 CFR Part 1986 Comp., p. 189) and 12689 (3 CFR Part 1989 Comp., p. 235), "Debarment and Suspension." The Excluded Parties List System in SAM contains the names of parties debarred, suspended, or otherwise excluded by agencies, as well as parties declared ineligible under statutory or regulatory authority other than Executive Order 12549.

(J) Byrd Anti-Lobbying Amendment (31 U.S.C. 1352)—Contractors that apply or bid for an award of $100,000 or more must file the required certification. Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any agency, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier must also disclose any lobbying with non-Federal funds that takes place in connection with obtaining any Federal award. Such disclosures are forwarded from tier to tier up to the non-Federal award.

(K) See § 200.322 Procurement of recovered materials.

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MIAMI-DADE COUNTY
DEPARTMENT OF REGULATORY AND ECONOMIC RESOURCES
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 Fabricators, Inc.
dba AMF Building Products
1501 53rd Street
Mangonia Park, FL 33407

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: **0.050" Aluminum Storm Panels Shutter**

APPROVAL DOCUMENT: Drawing No. AMF001, titled " 0.050" Aluminum Storm Panel", sheets 1 through 4 of 4, prepared by Building Drops, Inc., dated June 27, 2015, signed and sealed by Hermes F. Norero, P.E., bearing the Miami-Dade County Product Control Revision stamp with the Notice of Acceptance number and the expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: **Large and Small Missile Impact Resistant**

LABELING: Each panel 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 # 17-0118.07** 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.**

MIAMI-DADE COUNTY APPROVED

Helmy A. Makar
06/14/2018

NOA No. 18-0516.06
Expiration Date: 08/16/2022
Approval Date: 06/14/2018
Page 1

American Metal Fabricators, Inc.
dba AMF Building Products

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 01-0410.10

A. DRAWINGS

1. *Drawing No. 00-408, titled "0.050" Aluminum Storm Panel", prepared by Knezevich & Associates, Inc., signed and sealed by V. J. Knezevich, P.E., dated March 30, 2001, last revision #2 dated August 13, 2001, sheets 1 through 4 of 4.*

B. TESTS

1. *Test report on: 1) Uniform Static Air Pressure test Loading, per PA 202-94; 2) Large Missile Impact Test, per PA 201-94, and 3) Cyclic Loading Wind Pressure Test, per PA 203-94 of aluminum storm panels, prepared by Construction Testing Corporation, Report No. 01-005, dated 02/24/2001, signed and sealed by Christopher G. Tyson, P.E.*

C. CALCULATIONS

1. *Comparative analysis and anchor calculation, titled 0.050" Aluminum Alloy Storm Panels, dated March 30, 2001, pages 1 through 31 and anchor manufacturers appendix, prepared by Knezevich and Associates Inc., signed and sealed by V.J. Knezevich, P.E.*
2. *Comparative analysis, dated July 16, 2001, 3 pages, prepared by Knezevich and Associates Inc., signed and sealed by V.J. Knezevich, P.E.*

D. MATERIAL CERTIFICATIONS

1. *Mill Certified Inspection Invoice #167143 B, dated 08/18/00 for Aluminum Alloy 5052-H32 by Commonwealth Aluminum.*
2. *Certified Tensile Test Report No. CTL #0296G, issued by Certified Testing Laboratories dated 03/13/01 for Aluminum sample CTC-01-005, signed and sealed by Ramesh Patel, P.E.*

2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #06-0823.06

A. DRAWINGS

1. *Drawing No. 06-537, titled " 0.050" Aluminum Storm Panel", sheets 1 through 4 of 4, prepared by Thornton Tomasetti, dated December 06, 2006, last revision #0 dated December 06, 2006, signed and sealed by V. J. Knezevich, P.E.*

B. TESTS

1. *None.*

Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 18-0516.06
Expiration Date: 08/16/2022
Approval Date: 06/14/2018

American Metal Fabricators, Inc.
dba AMF Building Products

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

C. CALCULATIONS

1. *Revised Anchor Calculations and details for 0.050" Aluminum Storm Panels, dated December 05, 2006, pages 1 through 15 of 15, prepared by Thornton Tomasetti, signed and sealed by V. J. Knezevich, P.E.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *None.*

3. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 11-0810.01

A. DRAWINGS

1. *None.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *None.*

D. QUALITY ASSURANCE

1. *By Miami-Dade County Building and Neighborhood Compliance Department (BNC).*

E. MATERIAL CERTIFICATIONS

1. *None.*

F. OTHERS

1. *Compliance letter by Knezevich Associates Consultant Engineers, dated July 27, 2011, certify compliance with the FBC, 2007 Edition with the 2010 supplement requirements, signed and sealed by V. John Knezevich, P.E.*
2. *A letter by Blackwater Testing, Inc., dated August 08, 2011, notes a contract for verification test of the 0.050" Aluminum Storm Panel, signed by Dennis W. Duffy.*

Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 18-0516.06
Expiration Date: 08/16/2022
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American Metal Fabricators, Inc.
dba AMF Building Products

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

4. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #12-0403.01

A. DRAWINGS

1. *Drawing No. 12-104, titled " 0.050" Aluminum Storm Panel", sheets 1 through 4 of 4, prepared by Knezevich Associates Consulting Engineers, dated January 24, 2012, signed and sealed by V. J. Knezevich, P.E.*

B. TESTS

1. *Test report on: 1) Uniform Static Air Pressure test Loading, per PA 202-94; 2) Large Missile Impact Test, per PA 201-94, and 3) Cyclic Loading Wind Pressure Test, per PA 203-94 of aluminum storm panels, prepared by Blackwater Testing, Inc., Report No. AE-11-001, dated 01/16/2012, signed and sealed by Yamil Kuti, P.E.*

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. *Compliance letter by Knezevich Associates Consultant Engineers, dated January 24, 2012, certify compliance with the FBC, 2010 Edition, signed and sealed by V. John Knezevich, P.E.*
2. *Bill of Sales.*

5. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #15-1207.03

A. DRAWINGS

1. *Drawing No. AMF001, titled " 0.050" Aluminum Storm Panel", sheets 1 through 4 of 4, prepared by Building Drops, Inc., dated June 27, 2015, signed and sealed by Hermes F. Norero, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

1. *Revised Anchor Calculations and details for 0.050" Aluminum Storm Panels, dated June 02, 2016, pages 1 through 21 of 21, prepared by Building Drops, Inc., signed and sealed by Hermes F. Norero, P.E.*

Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 18-0516.06
Expiration Date: 08/16/2022
Approval Date: 06/14/2018

American Metal Fabricators, Inc.
dba AMF Building Products

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

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

E. MATERIAL CERTIFICATIONS
1. None.

F. OTHERS
1. Compliance letter prepared by Building Drops, Inc., signed and sealed by Hermes F. Norero, P.E., certify compliance with the FBC, 2014 Edition.

6. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL #17-0118.07
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 (RER).

E. MATERIAL CERTIFICATIONS
1. None.

7. NEW EVIDENCE SUBMITTED
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 (RER).

E. MATERIAL CERTIFICATIONS
1. None.

Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 18-0516.06
Expiration Date: 08/16/2022
Approval Date: 06/14/2018

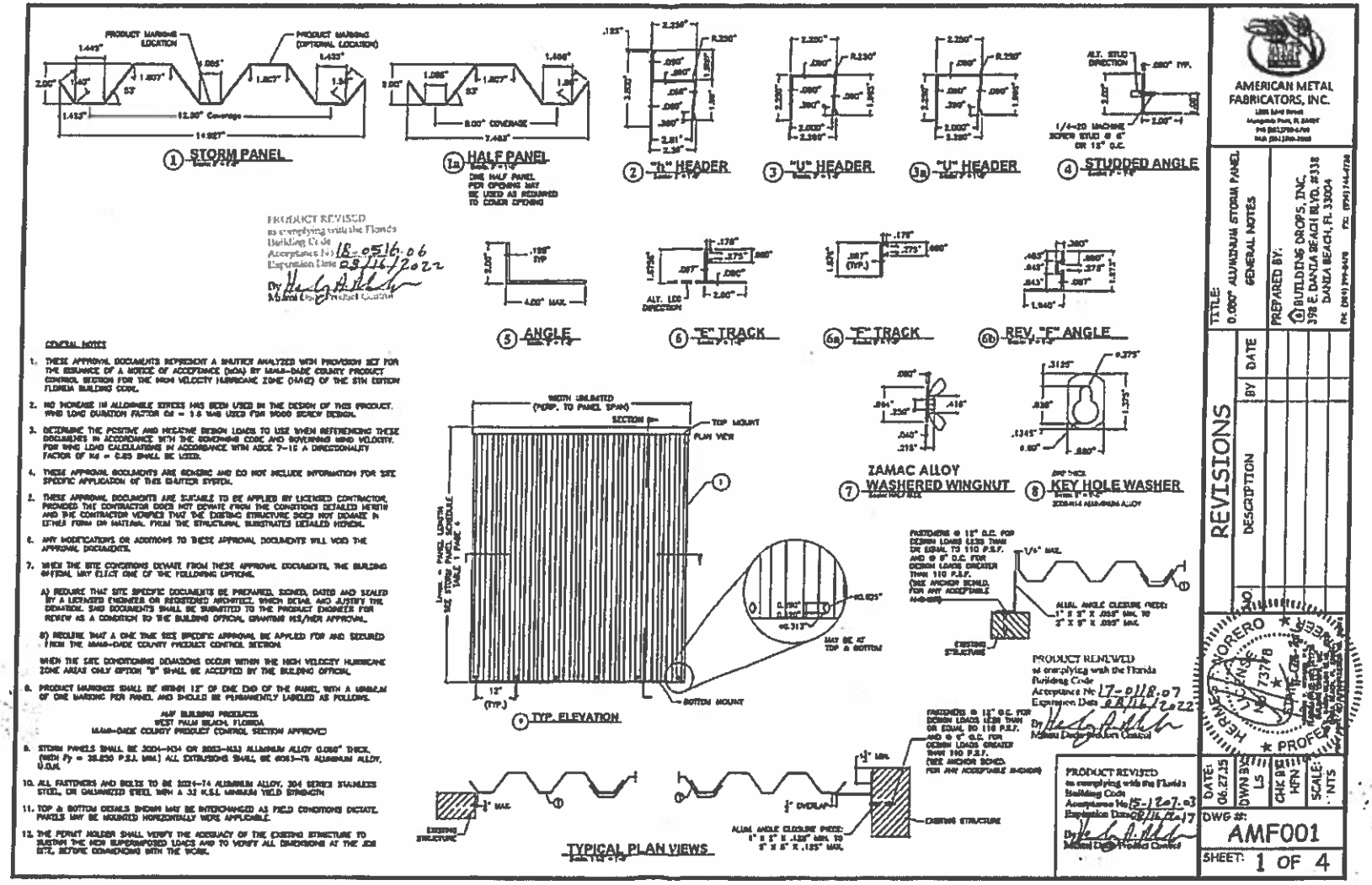
American Metal Fabricators, Inc.
dba AMF Building Products

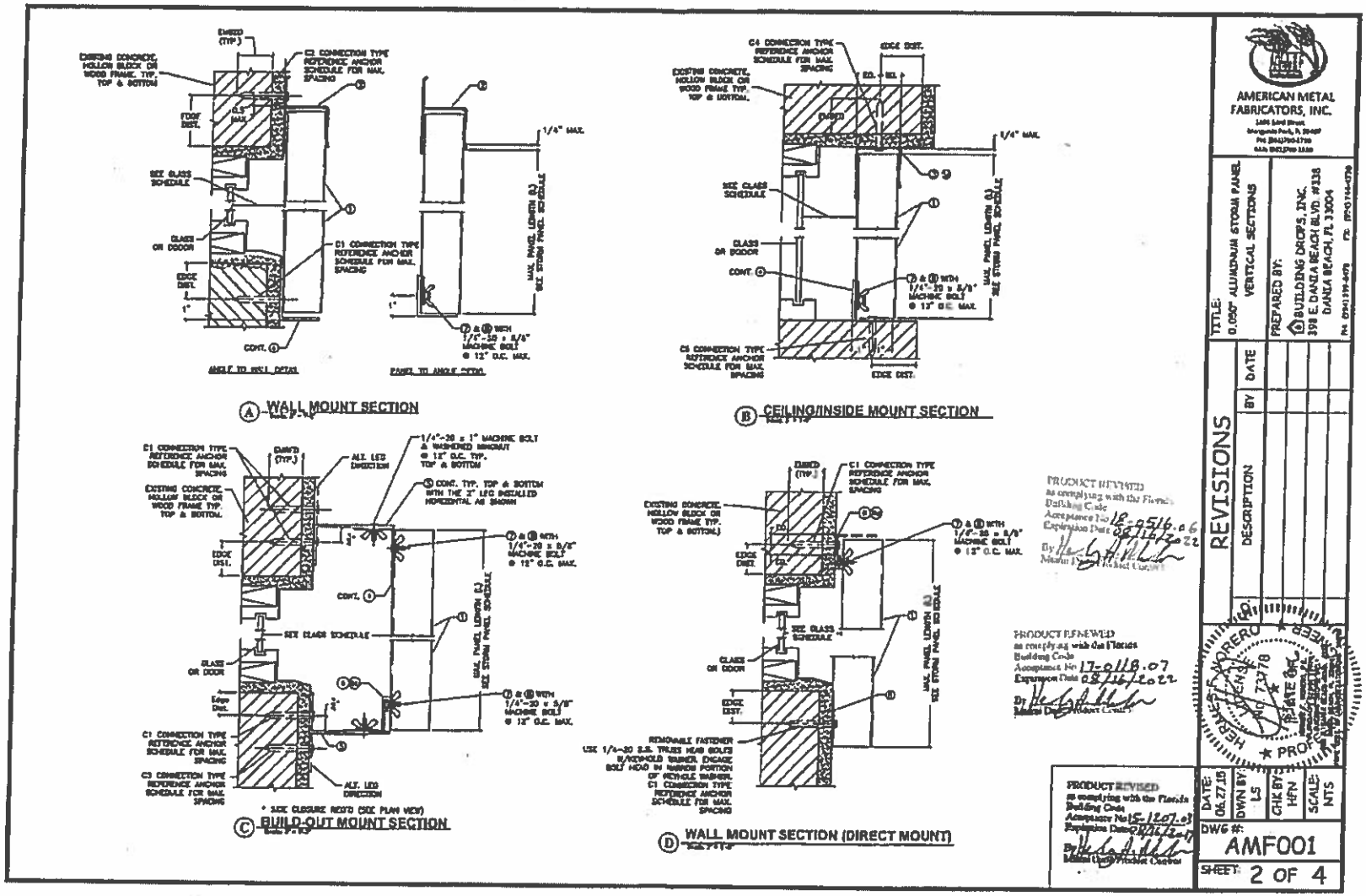
NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

F. OTHERS

1. *Compliance letter, dated 08/21/17, prepared by Building Drops, Inc., signed and sealed by Hermes F. Norero, P.E., certify compliance with the FBC, 2017 Edition.*

Helmy A. Makar, P.E., M.S.
Product Control Section Supervisor
NOA No. 18-0516.06
Expiration Date: 08/16/2022
Approval Date: 06/14/2018


1 STORM PANEL
1a HALF PANEL
2 "h" HEADER
3 "U" HEADER
3a "U" HEADER
4 STUDDED ANGLE
5 ANGLE
6 "E" TRACK
6a "F" TRACK
6b REV. "F" ANGLE
ZAMAC ALLOY WASHERED WINGNUT
7
8 KEY HOLE WASHER
9 TYP. ELEVATION
TYPICAL PLAN VIEWS
PRODUCT REVISED
PRODUCT RENEWED
AMERICAN METAL FABRICATORS, INC.
TITLE: 0.080" ALUMINUM STORM PANEL GENERAL NOTES
PREPARED BY:
BUILDING DROPS, INC.
REVISIONS
DATE
BY
DESCRIPTION
NO
DATE: 06.27.25
DWN BY: LS
CHK BY: HPN
SCALE: NTS
DWG #: AMF001
SHEET: 1 OF 4


A WALL MOUNT SECTION
B CEILING/INSIDE MOUNT SECTION
C BUILD-OUT MOUNT SECTION
D WALL MOUNT SECTION (DIRECT MOUNT)
AMERICAN METAL FABRICATORS, INC.
TITLE: 0.050" ALUMINUM STORM PANEL VERTICAL SECTIONS
PREPARED BY: BUILDING DROPS, INC. 398 E. DANIA BEACH BLVD. #338 DANIA BEACH, FL 33004
REVISIONS
DATE
BY
DESCRIPTION
NO.
DATE: 06.27.18
DWN BY: LS
CHK BY: HFN
SCALE: NTS
DWG #: AMF001
SHEET: 2 OF 4
PRODUCT REVIEWED as complying with the Florida Building Code Acceptance No 18-0516.06 Expiration Date 08.16.2022
PRODUCT REVIEWED as complying with the Florida Building Code Acceptance No 17-0118.07 Expiration Date 08.16.2022
PRODUCT REVIEWED as complying with the Florida Building Code Acceptance No 15-1207.07 Expiration Date 08.16.2022
HERBERT F. MORERO LICENSED STATE OF FLORIDA PROFESSIONAL ENGINEER

ANCHOR SCHEDULE

FASTENER MAXIMUM SPACING (INCHES) REQUIRED FOR VARIOUS DESIGN LOADS AND SPANS

MIN. 1" EDGE DISTANCE

EXIST. STRUC.	ANCHOR TYPE	LOAD (W) P.S.F. MAX. (SEE NOTE 1)	SPANS UP TO 5'-6" (SEE NOTE 1) CONNECTION TYPE (SEE NOTE 3) C1	C2	C3	C4	C5	SPANS UP TO 8'-6" (SEE NOTE 1) CONNECTION TYPE (SEE NOTE 3) C1	C2	C3	C4	C5	SPANS UP TO 10'-8" (SEE NOTE 1) CONNECTION TYPE (SEE NOTE 3) C1	C2	C3	C4	C5
CONCRETE	[illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	* [illegible]	48															
		62															
		72															
		96															
		100															
	* [illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HOLLOW CONC. BLOCK	[illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	* [illegible]	48															
		62															
		72															
		96															
		100															
	* [illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

MIN. 3" EDGE DISTANCE

EXIST. STRUC.	ANCHOR TYPE	LOAD (W) P.S.F. MAX. (SEE NOTE 1)	SPANS UP TO 5'-6" (SEE NOTE 1) CONNECTION TYPE (SEE NOTE 3) C1	C2	C3	C4	C5	SPANS UP TO 8'-6" (SEE NOTE 1) CONNECTION TYPE (SEE NOTE 3) C1	C2	C3	C4	C5	SPANS UP TO 10'-8" (SEE NOTE 1) CONNECTION TYPE (SEE NOTE 3) C1	C2	C3	C4	C5
CONCRETE	[illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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	* [illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
HOLLOW CONC. BLOCK	[illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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		100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
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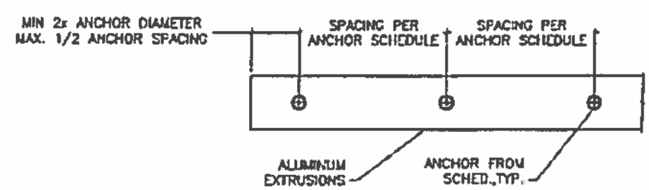
		62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	* [illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]



ANCHOR SCHEDULE

FASTENER MAXIMUM SPACING (INCHES) REQUIRED FOR VARIOUS DESIGN LOADS AND SPANS

MIN. 3/4" EDGE DISTANCE

EXIST. STRUC.	ANCHOR TYPE	LOAD (W) P.S.F. MAX. (SEE NOTE 1)	SPANS UP TO 5'-6" (SEE NOTE 1) CONNECTION TYPE (SEE NOTE 3) C1	C2	C3	C4	C5	SPANS UP TO 8'-6" (SEE NOTE 1) CONNECTION TYPE (SEE NOTE 3) C1	C2	C3	C4	C5	SPANS UP TO 10'-8" (SEE NOTE 1) CONNECTION TYPE (SEE NOTE 3) C1	C2	C3	C4	C5
WOOD	2" MIN. [illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	2" MIN. [illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
	* [illegible]	48	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		62	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		72	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		96	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]
		100	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

ANCHOR NOTES:

1. SPANS AND LOADS SHOWN HERE ARE FOR DETERMINING ANCHOR SPACING ONLY. ALLOWABLE STORM PANEL SPANS FOR SPECIFIC LOADS MUST BE LIMITED TO THOSE SHOWN IN TABLE 1.
2. ENTER ANCHOR SCHEDULE BASED ON THE EXISTING STRUCTURE MATERIAL, ANCHOR TYPE AND EDGE DISTANCE. SELECT DESIGN LOAD GREATER THAN OR EQUAL TO NEGATIVE DESIGN LOAD ON SHUTTER AND SELECT SPAN GREATER THAN OR EQUAL TO SHUTTER SPAN.
3. SEE MOUNTING SECTION DETAILS FOR IDENTIFICATION OF CONNECTION TYPE.
4. EXISTING STRUCTURE MAY BE CONCRETE, HOLLOW BLOCK OR WOOD FRAMING. REFERENCE ANCHOR SCHEDULE FOR PROPER ANCHOR TYPE BASED ON TYPE OF EXISTING STRUCTURE.
5. ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
6. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES WALL FINISH OR STUCCO.
7. WHERE EXISTING STRUCTURE IS POST-TENSIONED CONCRETE CONTRACTOR SHALL LOCATE CABLES PRIOR TO ANCHORING AND COORDINATE ANCHORAGE SUCH THAT CABLES ARE NOT DAMAGED.
8. WHERE EXISTING STRUCTURE IS WOOD FRAMING, WOOD FRAMING CONDITIONS VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT PLYWOOD. FASTENING TO PLYWOOD IS ACCEPTABLE ONLY FOR SIDE CLOSURE PIECES.
9. WHERE LAG SCREWS FASTEN TO NARROW FACE OF STUD FRAMING, FASTENER SHALL BE LOCATED IN CENTER OF NOMINAL 2" x 4" (MIN.) WOOD STUD. 3/4" EDGE DISTANCE IS ACCEPTABLE FOR WOOD FRAMING. WOOD STUD SHALL BE "SOUTHERN PINE" G=0.55 OR GREATER DENSITY. LAG SCREWS SHALL HAVE PHILLIPS PAN HEAD OR HEX HEAD.
10. MACHINE SCREWS SHALL HAVE 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.
11. ▇ DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE USES.
12. * DESIGNATES ANCHORS WHICH ARE REMOVABLE BY REMOVING MACHINE SCREW, NUT OR WASHERED WINGNUT.
13. THE ALL POINTS SOLID SET ANCHOR MAY NOT BE USED IN CONCRETE FLOORS BEAMS OR CEILINGS. EXCEPTION: CONCRETE SLABS ON GRADE.

PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 18-0516.06 Expiration Date 08/11/2022 By [signature] Miami-Dade Product Control

PRODUCT RENEWED as complying with the Florida Building Code Acceptance No. 17-0412.07 Expiration Date 08/11/2022 By [signature] Miami-Dade Product Control

PRODUCT REVISED as complying with the Florida Building Code Acceptance No. 15-1207.03 Expiration Date 08/11/2017 By [signature] Miami-Dade Product Control

AMERICAN METAL FABRICATORS, INC.

TITLE: 0.050" ALUMINUM STORM PANEL ANCHOR SCHEDULES

PREPARED BY: BUILDING DROPS, INC. 398 E. DANIA BEACH BLVD. #338 DANIA BEACH, FL 33004 PH (954) 399-8478 FX (954) 744-4738

REVISIONS

DESCRIPTION	BY	DATE

HERMES F. NORERO LICENSE No. 73778 STATE OF FLORIDA PROFESSIONAL ENGINEER

DATE: 06.27.15	DWN BY: LS	CHK BY: HFN	SCALE: NTS

DWG #: AMF001

SHEET: 3 OF 4

TABLE 2 — MINIMUM STORM PANEL SEPARATION FROM GLASS*

POSITIVE DESIGN LOAD (W) (PSF)	ACTUAL SPAN (L) (FT-IN)	MIN SEPARATION FROM GLASS FOR INSTALLATIONS LESS THAN 30' ABOVE GRADE (INCHES)	MIN SEPARATION FROM GLASS FOR INSTALLATIONS GREATER THAN 30' ABOVE GRADE (INCHES)
30.0	3-6	3-1/2	1-5/16
	8-6	3-1/2	1-7/16
	10-8	4-1/4	2-3/4
40.0	3-6	3-1/2	1-5/16
	8-6	3-1/2	2-1/16
	10-8	4-1/4	3-1/8
50.0	3-6	3-1/2	1-5/16
	8-6	3-1/2	2-3/8
	9-11	4-1/4	3-1/8
60.0	3-6	3-1/2	1-5/16
	8-6	3-1/2	2-5/16
	9-6	4-1/4	3-1/8
70.0	3-6	3-1/2	1-5/16
	8-6	3-1/2	2-3/4
	9-0	4-1/4	3
80.0	3-6	3-1/2	1-5/16
	8-6	3-1/2	1-13/16
	8-2	3-1/2	2-5/8
90.0	3-6	3-1/2	1-5/16
	8-6	3-1/2	1-5/16
	7-3	3-1/2	2-3/16
100.0	3-6	3-1/2	1-5/16
	6-7	3-1/2	2
110.0	3-6	3-1/2	1-5/16
	5-11	3-1/2	1-3/4

*SEE TABLES 1 & 2 NOTES NUMBER 3

TABLE 1 — MAXIMUM ALLOWABLE STORM PANEL SPAN SCHEDULE

NEG. DESIGN LOAD (PSF)	L max. (FT-IN)
30.0	10-6
35.0	10-0
40.0	10-4
45.0	10-0
42.0	9-10
50.0	9-6
55.0	9-2
60.0	9-2
62.0	9-0
65.0	8-1
67.0	8-1
70.0	8-11
72.0	8-10
75.0	8-6
80.0	8-2
90.0	7-3
100.0	6-7
110.0	6-11
115.0	6-8
120.0	6-6
130.0	6-0
140.0	5-8
150.0	5-4
160.0	5-1
170.0	4-10
180.0	4-7
190.0	4-5
200.0	4-3

TABLE 1 & 2 NOTES:

1. ENTER TABLE 1 WITH NEGATIVE DESIGN LOAD TO DETERMINE MAX. PANEL SPAN (Lmax.) POSITIVE LOADS LESS THAN OR EQUAL TO THE NEGATIVE LOAD ARE ACCEPTABLE.
2. FOR DESIGN LOADS BETWEEN TABULATED VALUES, USE NEXT HIGHER LOAD OR LINEAR INTERPOLATION MAY BE USED TO DETERMINE ALLOWABLE SPANS.
3. ENTER TABLE 2 WITH POSITIVE DESIGN LOAD TO DETERMINE MIN. SEPARATION FROM GLASS.

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Miami Dade Product Control

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PRODUCT REVISED
as complying with the Florida Building Code
Acceptance No 15-1207.07
Expiration Date 08/16/2017
By
Miami Dade Product Control

AMERICAN METAL FABRICATORS, INC.

TITLE: 0.080" ALUMINUM STORM PANEL STORM PANEL SPAN SCHEDULE

PREPARED BY: BUILDING DROPS, INC. 398 E. DANIA BEACH BLVD. #338 DANIA BEACH, FL 33004

REVISIONS

DESCRIPTION	BY	DATE
TABLE 2 DIMENSIONS UPDATED	SAK	11.23.16

DATE: 06.27.15 | DWN BY: LS | CHK BY: HPN | SCALE: NTS

DWG #: AMF001

SHEET: 4 OF 4