



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)

Hurricane Fabric, LLC
1505 Poinsettia Drive Suite H-3
Delray Beach, Florida 33444

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: "Astro Guard " Flexible Wind Abatement System

APPROVAL DOCUMENT: Drawing No. 14-2202, titled " Astro Guard Wind Abatement System ", sheets 1 through 11 of 11, prepared by Engineering Express, dated July 16, 2012, last revision dated February 27, 2015, signed and sealed by Frank L. Bennardo, 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, Delray Beach, FL 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 #12-1004.02 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
07/02/2015

NOA No. 15-0316.09
Expiration Date: 10/20/2020
Approval Date: 07/02/2015
Page 1

Hurricane Fabric, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

1. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 10-0607.02

A. DRAWINGS

1. *Drawing No. 09-0408, titled " Astro Guard Wind Abatement System ", sheets 1 and 2 of 2, prepared by MEA Engineers, Inc., dated May 04, 2009, last revision #2 dated September 22, 2010, signed and sealed by John H. Kampmann Jr., P.E.*

B. TESTS

1. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of Astro Guard Hurricane Fabric Flexible Hurricane Wind Abatement System, prepared by Fenestration Testing Laboratory, Inc., Report No. 08-541, dated January 13, 2009, signed and sealed by Jorge A. Causo, P.E.*

C. CALCULATIONS

1. *Comparative Analysis and Anchor calculations dated January 8, 2009, 10 pages, prepared by MEA Engineering, Inc., signed and sealed by John H. Kampmann Jr., P.E.*
2. *Comparative Analysis and Anchor calculations dated September 11, 2010, 8 pages, prepared by MEA Engineering, Inc., signed and sealed by John H. Kampmann Jr., P.E.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *Fabric specifications.*

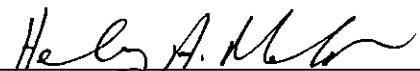
2. EVIDENCE SUBMITTED UNDER PREVIOUS APPROVAL # 12-1004.02

A. DRAWINGS

1. *Drawing No. 12-HFC-04, titled " Astro Guard Wind Abatement System ", sheets 1 through 11 of 11, prepared by Engineering Express, dated July 16, 2012, last revision dated March 22, 2013, signed and sealed by Frank L. Bennardo, P.E., on March 25, 2013.*

B. TESTS

1. *Test report on Large Missile Impact Test, Cyclic Wind Pressure Test and Uniform Static Air Pressure Test of Astro Guard Hurricane Fabric Flexible Hurricane Wind Abatement System, prepared by Fenestration Testing Laboratory, Inc., Report No. 10-541, LAB #6359, dated September 11, 2012, signed and sealed by Marlin D. Brinson, P.E.*



Helmy A. Makar, P.E., M.S.
Product Control Unit Supervisor
NOA No. 15-0316.09
Expiration Date: 10/20/2020
Approval Date: 07/02/2015

Hurricane Fabric, LLC

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

2. *Test report on Large Missile Impact Test of Aluminum Storm Bar, prepared by Fenestration Testing Laboratory, Inc., Report No. 12-541, LAB #6384, dated July 11, 2012, signed and sealed by Marlin D. Brinson, P.E.*

C. CALCULATIONS

1. *Comparative Analysis and Anchor calculations dated September 26, 2012, 56 pages, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.*

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. *Fabric specifications.*

3. NEW EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. 14-2202, titled "Astro Guard Wind Abatement System", sheets 1 through 11 of 11, prepared by Engineering Express, dated July 16, 2012, last revision dated February 27, 2015, signed and sealed by Frank L. Bennardo, P.E.*

B. TESTS

1. *None.*

C. CALCULATIONS

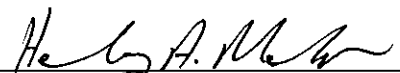
1. *Comparative Analysis and Anchor calculations dated March 03, 2015, 59 pages, prepared by Engineering Express, signed and sealed by Frank L. Bennardo, P.E.*

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 Unit Supervisor
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ASTRO GUARD

WIND ABATEMENT SYSTEM

GENERAL NOTES

1. THE SYSTEM DESCRIBED HEREIN HAS BEEN DESIGNED AND TESTED IN ACCORDANCE WITH THE FLORIDA BUILDING CODE FIFTH EDITION (2014), FOR USE WITHIN THE HIGH VELOCITY HURRICANE ZONE PER TAS 201, 202 AND 203 TESTING STANDARDS.
 2. NO 33-1/3% INCREASE IN ALLOWABLE STRESS HAS BEEN USED IN THE DESIGN OF THIS SYSTEM. WIND LOAD DURATION FACTOR $C_d=1.6$ HAS BEEN USED FOR WOOD ANCHOR DESIGN.
 3. POSITIVE AND NEGATIVE DESIGN PRESSURES CALCULATED FOR USE WITH THIS SYSTEM SHALL BE DETERMINED PER SEPARATE ENGINEERING IN ACCORDANCE WITH THE GOVERNING CODE. PRESSURE REQUIREMENTS AS DETERMINED IN ACCORDANCE WITH ASCE 7-10 AND CHAPTER 1609 OF THE FLORIDA BUILDING CODE FIFTH EDITION (2014) SHALL BE LESS THAN OR EQUAL TO THE POSITIVE OR NEGATIVE DESIGN PRESSURE CAPACITY VALUES LISTED HEREIN FOR ANY ASSEMBLY AS SHOWN.
 4. DESIGN PRESSURES NOTED HEREIN ARE BASED ON MAXIMUM TESTED PRESSURES DIVIDED BY A 1.5 SAFETY FACTOR. PANELS HAVE BEEN DESIGN WITH A TOTAL 2" PRE-LOAD SLACK.
 5. THE SYSTEM DETAILED HEREIN IS GENERIC AND DOES NOT PROVIDE INFORMATION FOR A SPECIFIC SITE. FOR SITE CONDITIONS DIFFERENT FROM THE CONDITIONS DETAILED HEREIN, A LICENSED ENGINEER OR REGISTERED ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE IN CONJUNCTION WITH THIS DOCUMENT.
 6. PERMIT HOLDER SHALL VERIFY THE ADEQUACY OF THE EXISTING STRUCTURE TO WITHSTAND SUPERIMPOSED LOADS. WOOD BUCKS (BY OTHERS) SHALL BE ANCHORED PROPERLY TO TRANSFER LOADS TO THE EXISTING STRUCTURE.
 7. THIS SYSTEM IS INTENDED FOR USE ONLY DURING WIND STORM EVENTS. WHEN NOT IN USE, PRODUCT SHALL BE PROPERLY STORED AWAY FROM PROLONGED EXPOSURE TO DIRECT SUNLIGHT OR OTHER WEATHERING CONDITIONS.
 8. UNLESS OTHERWISE NOTED HEREIN, ALL SCREWS SHALL BE 304 OR 316 STAINLESS STEEL OR CORROSION RESISTANT COATED SAE GR. 5 CARBON STEEL.
 9. MAXIMUM PANEL SPAN: 18'-2"
 10. MAXIMUM ALLOWABLE DESIGN PRESSURE: ± 60 PSF
 11. PANELS SHALL BE PERMANENTLY LABELED WITH A MINIMUM OF ONE LABEL PER PANEL CONTAINING THE FOLLOWING:
HURRICANE FABRIC.COM LLC
PO BOX 50153
CLAYTON, MD 63105
TAS 201, 202, 203
MIAMI-DADE NOA NUMBER
 12. HURRICANE FABRIC PANELS MAY BE MOUNTED VERTICALLY OR HORIZONTALLY AS APPLICABLE.
 13. DISSIMILAR MATERIALS SHALL BE INSULATED FROM TO PREVENT CORROSION AND ELECTROLYSIS AS NECESSARY IN ACCORDANCE WITH THE ABOVE REFERENCED BUILDING CODE.
 14. EXCEPT AS EXPRESSLY PROVIDED HEREIN, NO ADDITIONAL CERTIFICATIONS OR AFFIRMATIONS ARE INTENDED.
- RETENTION CLIP END CONNECTOR:**

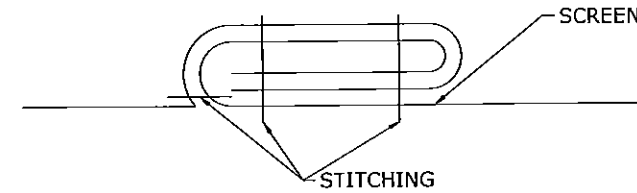
RHODIA ENGINEERING PLASTICS
POLYAMIDE 66

FABRIC SPECIFICATION:

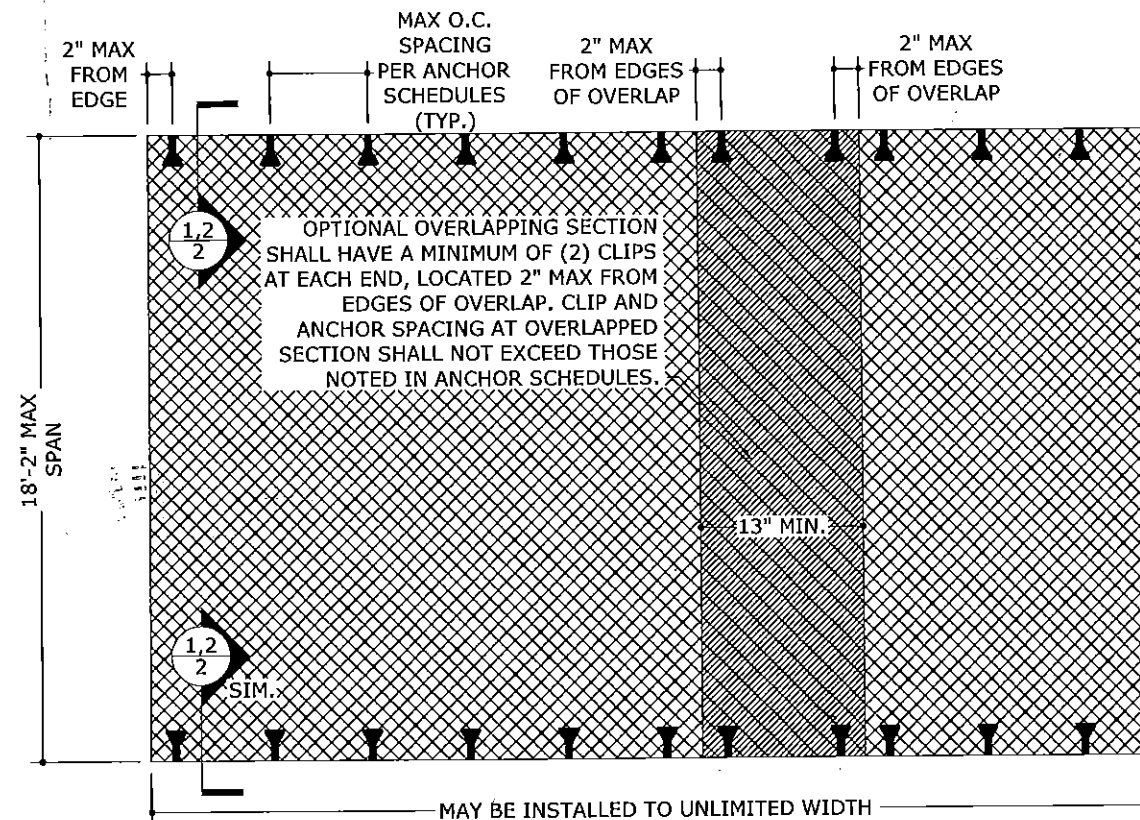
TYPE OF YARN: TEXTILE FABRIC
CONSTRUCTION: 25 X 25 WEAVE
THICKNESS: 1000 MICRONS \pm 5%
FINISH: RESIN COATED
WEIGHT (ASTM D 3776): 10.83 OZ/YD²
TENSILE STRENGTH (GRAB METHOD, ASTM D 4632): WARP: 879 LBS, WEFT: 879 LBS
BURST STRENGTH (ASTM D 3786): 1500 PSI
ABRASION RESISTANCE (ASTM D 4886): 95% STRENGTH RETAINED

SEWING:

SEWING ONLY AT SPLICE (SEE SPLICE DETAIL), NO SEWING AT EDGES.



1 SPLICE DETAIL
1 N.T.S.



NOTE: PANELS CAN OPTIONALLY BE ANCHORED ON THREE OR FOUR SIDES. FOR FOUR SIDE ATTACHMENT, THE SPAN IS THE SHORT DIMENSION BETWEEN FASTENERS.

2 TYPICAL PANEL INSTALLTION
1 N.T.S. EXTERIOR ELEV

FRANK L. BENNARDO, P.E.
PE0046549

05/19/2020

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A FRANK L. BENNARDO, P.E., INC. MIAMI, FLORIDA

HURRICANE FABRIC, LLC
1505 POINSETTA DR, SUITE H-3
DELRAY BEACH, FL 33444
WWW.HURRICANEFABRIC.COM

ASTRO GUARD
WIND ABATEMENT SYSTEM
MIAMI-DADE NOTICE OF ACCEPTANCE

DRWN	CHKD	DATE
KL	FLB	07/16/12
KL	FLB	03/22/13
CSL	TSB	02/27/15

REMARKS

INIT ISSUE

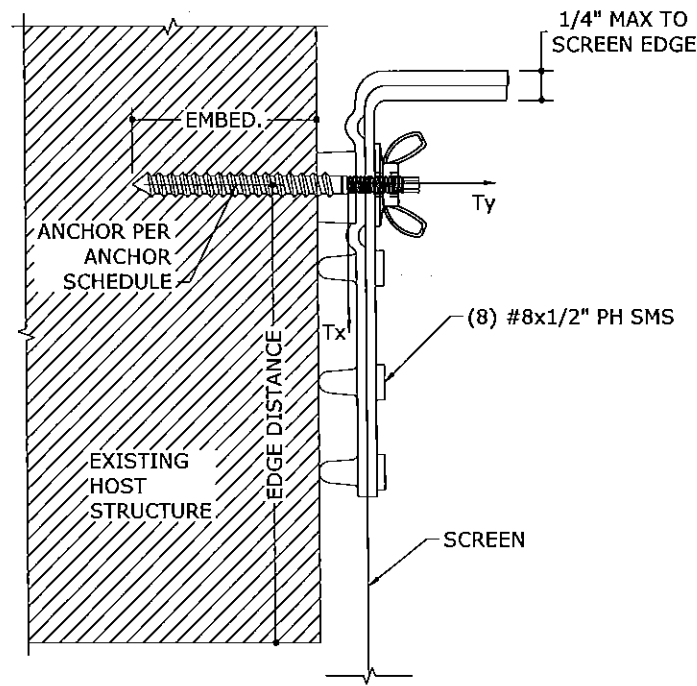
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REV: FBC 5TH (2014)

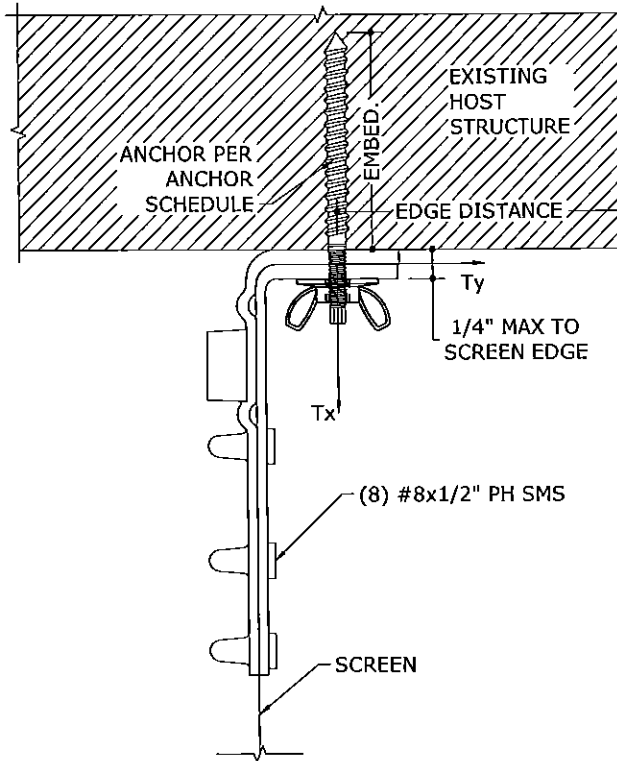
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0316.09
Expiration Date 10/20/2020

By *Healy A. DeLo*
Miami Dade Product Control

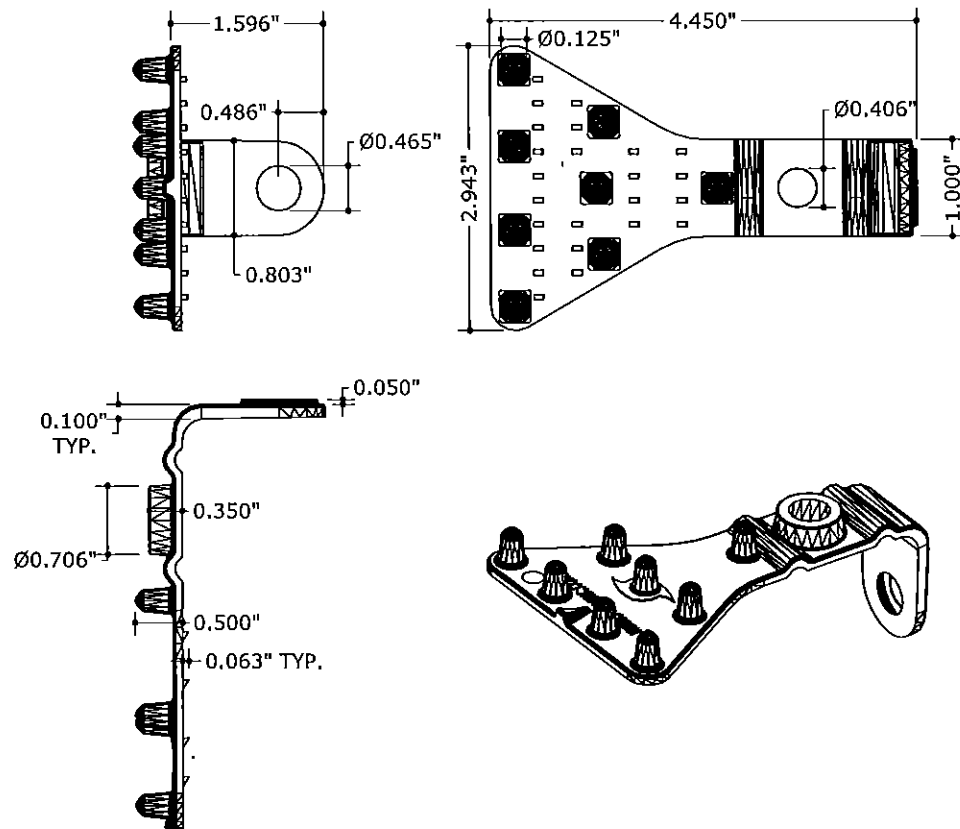
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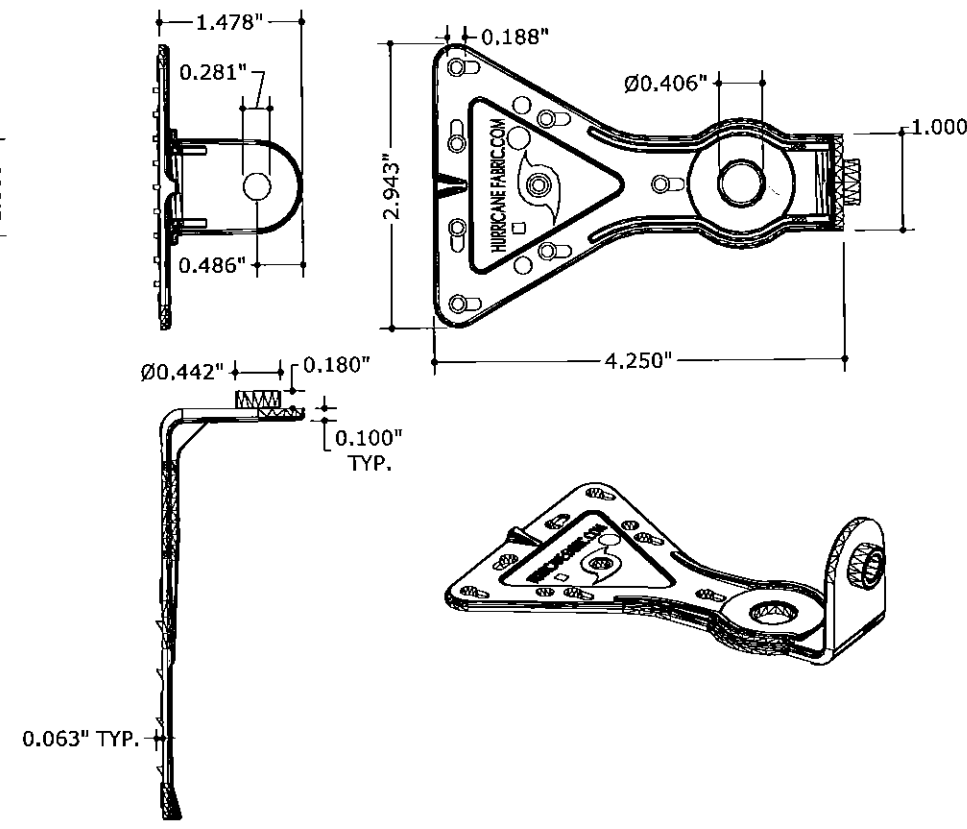
1 WALL MOUNT CONDITION
N.T.S. SECTION VIEW



2 INTERIOR MOUNT CONDITION
N.T.S. SECTION VIEW



1 BOTTOM MOUNTING CLIP
N.T.S. POLYAMIDE 66



2 TOP MOUNTING CLIP
N.T.S. POLYAMIDE 66

SPAN	MINIMUM GLAZING SEPARATION FROM GLASS INCLUDING INSTALLATION SLACK			
	POSITIVE DESIGN LOAD (PSF)			
	+60 PSF	+50 PSF	+40 PSF	+30 PSF
4'-0"	6.88"	6.63"	6.13"	5.71"
6'-0"	11.13"	10.50"	9.88"	9.00"
8'-0"	15.75"	14.88"	14.00"	12.88"
10'-0"	20.88"	19.75"	18.38"	16.88"
12'-0"	26.38"	24.88"	23.13"	21.13"
14'-0"	32.13"	30.38"	28.25"	25.75"
14'-8"	34.13"	32.38"	32.38"	32.38"
16'-0"	38.25"	36.88"	36.88"	36.88"
17'-0"	41.38"	39.00"	36.88"	36.88"
18'-2"	45.13"	42.50"	39.50"	36.88"

- NOTES:
 1. SEPARATION FROM GLAZING IS REQUIRED FOR ALL INSTALLATIONS.
 2. INTERPOLATION OF THIS TABLE IS NOT PERMITTED. UTILIZE NEXT HIGHEST SEPARATION FROM GLAZING VALUE IF NEEDED.

SPAN	LOAD ON EXISTING STRUCTURE FROM SCREEN SYSTEM Tx = PARALLEL LOADS (PLF)			
	DESIGN PRESSURE (+/- PSF)			
	60	50	40	30
4'-0"	235.4	208.5	179.6	148.3
6'-0"	308.5	273.2	235.4	194.3
8'-0"	373.7	330.9	285.2	235.4
10'-0"	433.6	384.0	330.9	273.2
12'-0"	489.7	433.6	373.7	308.5
14'-0"	542.7	480.6	414.1	341.9
14'-8"	559.8	495.7	427.2	352.6
16'-0"	593.2	525.3	452.7	373.7
17'-0"	617.7	547.0	471.4	389.1
18'-2"	645.6	571.7	492.7	406.7

SPAN	LOAD ON EXISTING STRUCTURE FROM SCREEN SYSTEM Ty = PERPENDICULAR LOADS (PLF)			
	DESIGN PRESSURE (+/- PSF)			
	60	50	40	30
4'-0"	120.0	100.0	80.0	60.0
6'-0"	180.0	150.0	120.0	90.0
8'-0"	240.0	200.0	160.0	120.0
10'-0"	300.0	250.0	200.0	150.0
12'-0"	360.0	300.0	240.0	180.0
14'-0"	420.0	350.0	280.0	210.0
14'-8"	440.0	366.7	293.3	220.0
16'-0"	480.0	400.0	320.0	240.0
17'-0"	510.0	425.0	340.0	255.0
18'-2"	545.0	454.2	363.3	272.5

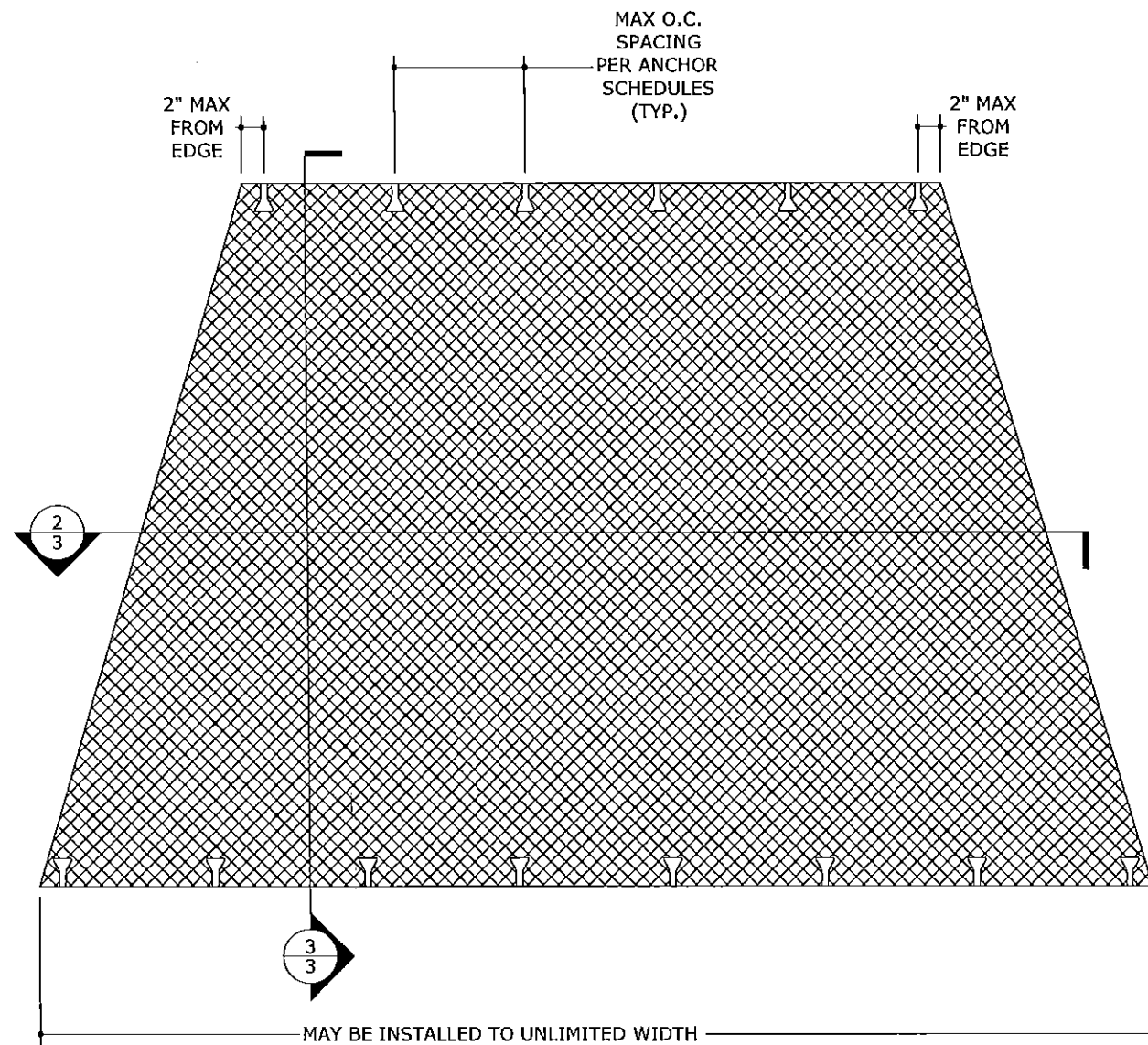
PRODUCT REVISED
 as complying with the Florida
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 Acceptance No 15-0316.09
 Expiration Date 10/20/2020
 By *[Signature]*
 Miami Dade Product Control

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 WWW.HURRICANEFABRIC.COM
 ASTRO GUARD
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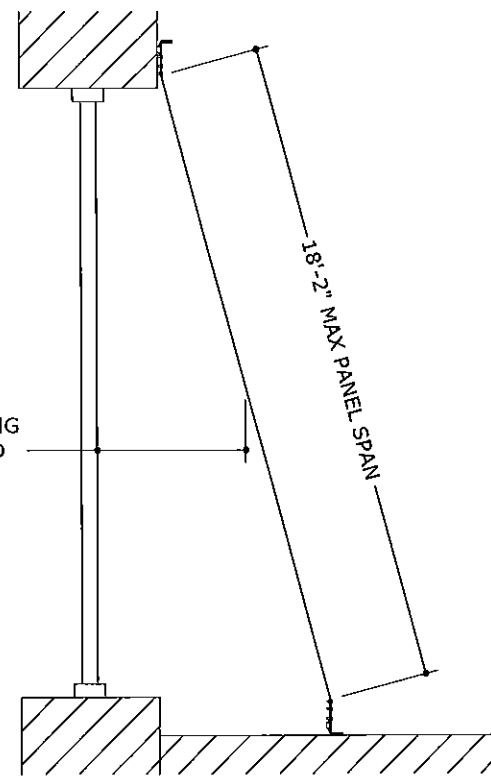
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CSL	T-SB	02/27/15

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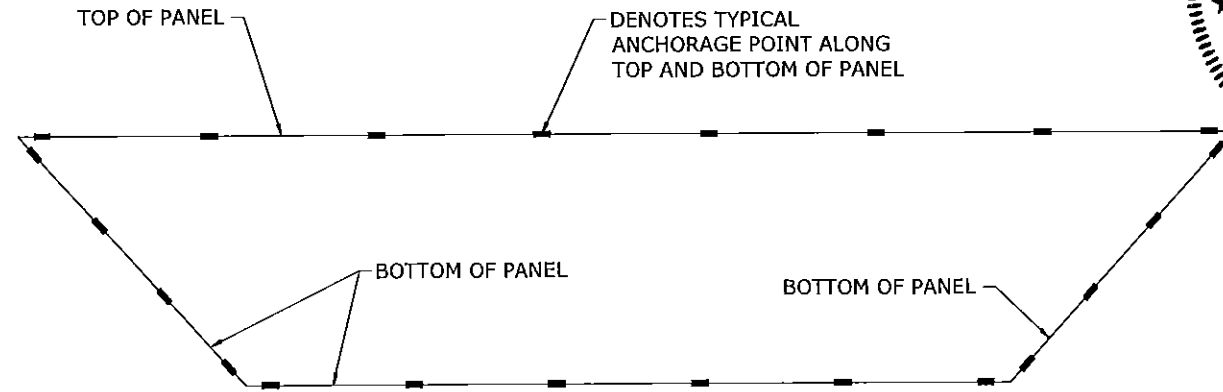


1 ANGLLED PANEL INSTALLTION
3 N.T.S. EXTERIOR ELEV

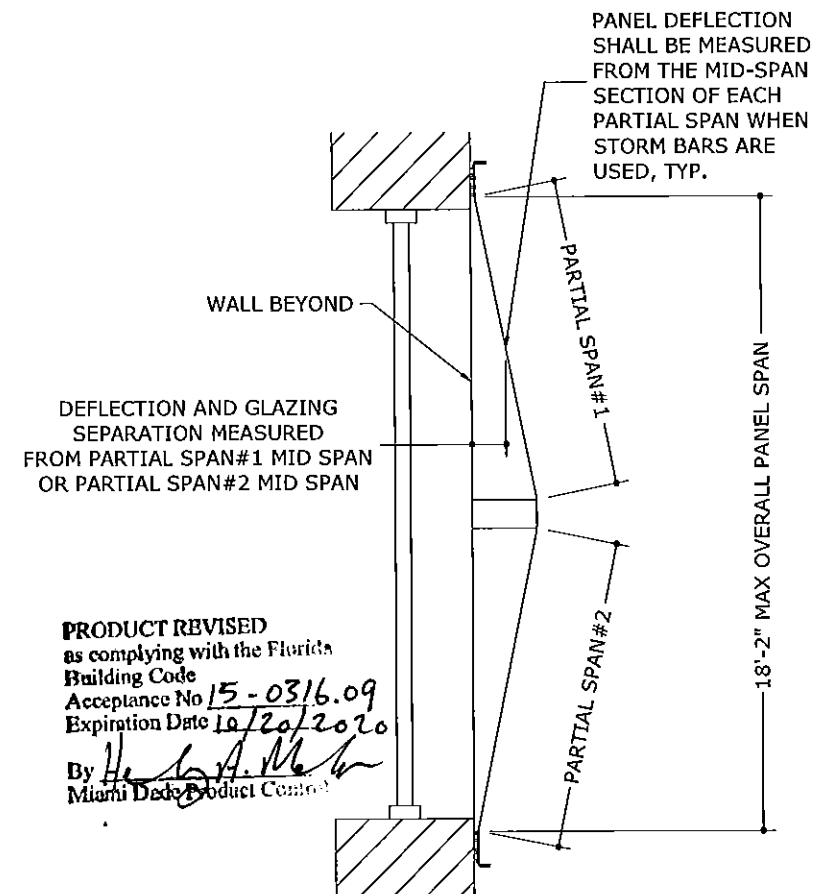
NOTE: NON-SPAN OVERLAP SHALL BE A MINIMUM OF 1.5 X THE PANEL PROJECTION FROM OPENING



3 ANGLLED PANEL INSTALLTION
3 N.T.S. VERTICAL SECTION



2 ANGLLED PANEL INSTALLTION
3 N.T.S. PLAN VIEW



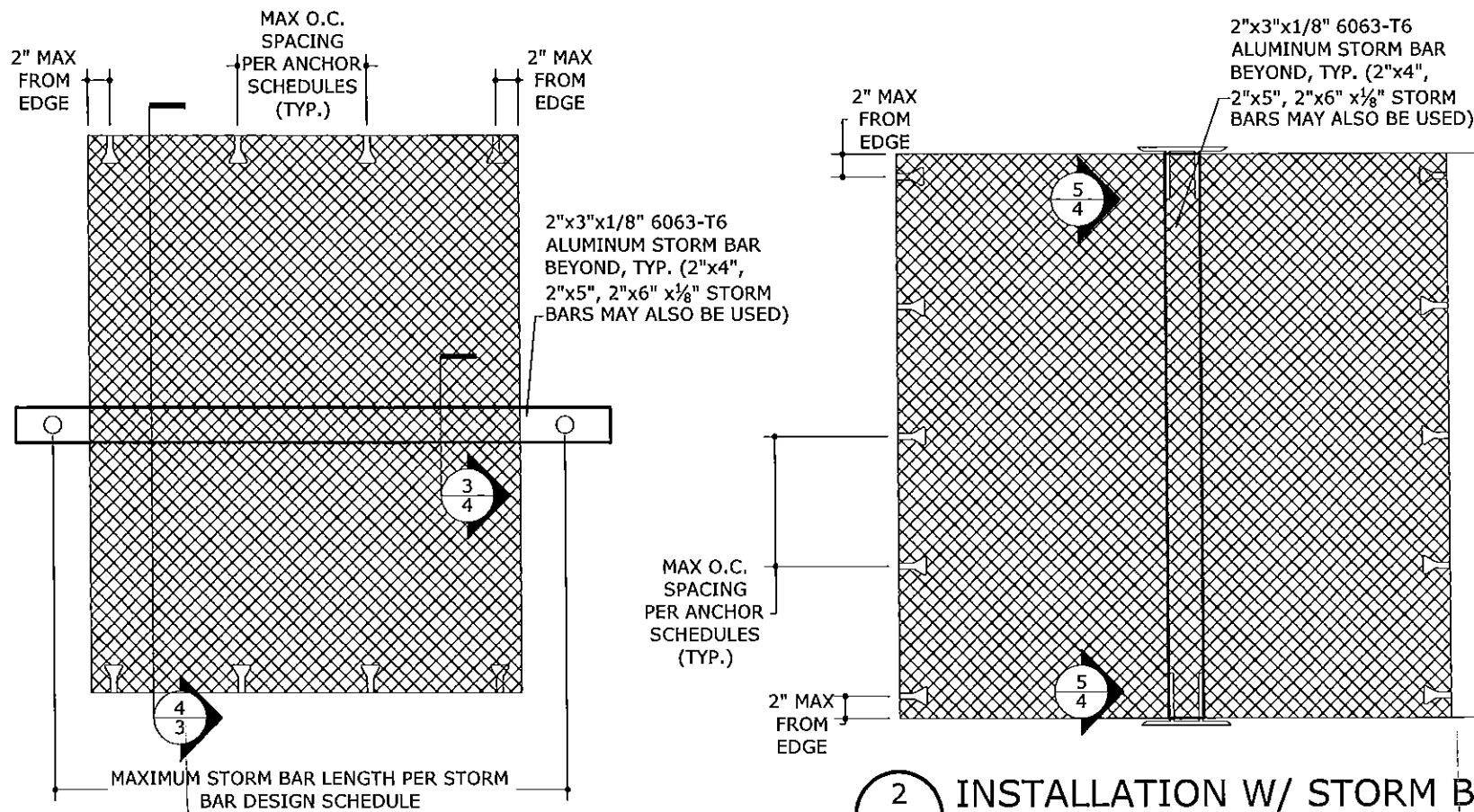
4 INSTALLATION W/ STORM BAR
3 N.T.S. VERTICAL SECTION

FRANK L. BENNARDO, P.E.
PROFESSIONAL ENGINEER
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CERT OF AUTH #8885
A. FRANK L. BENNARDO, P.E., INC. (MEMBER)

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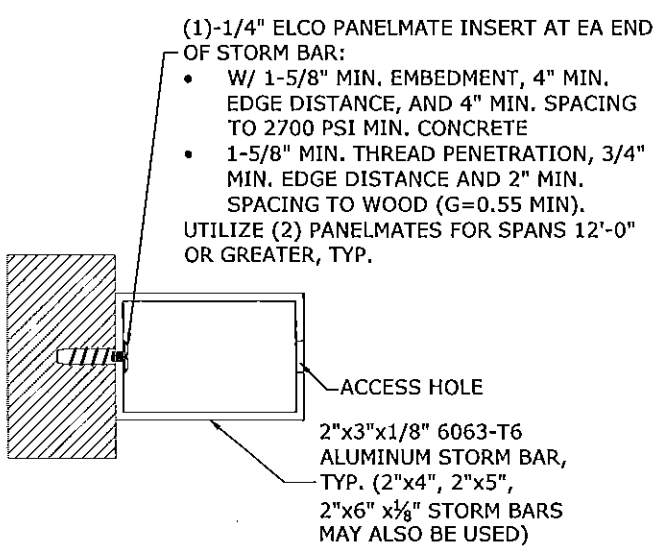


1 INSTALLATION W/ STORM BAR
 4 N.T.S. EXTERIOR ELEV

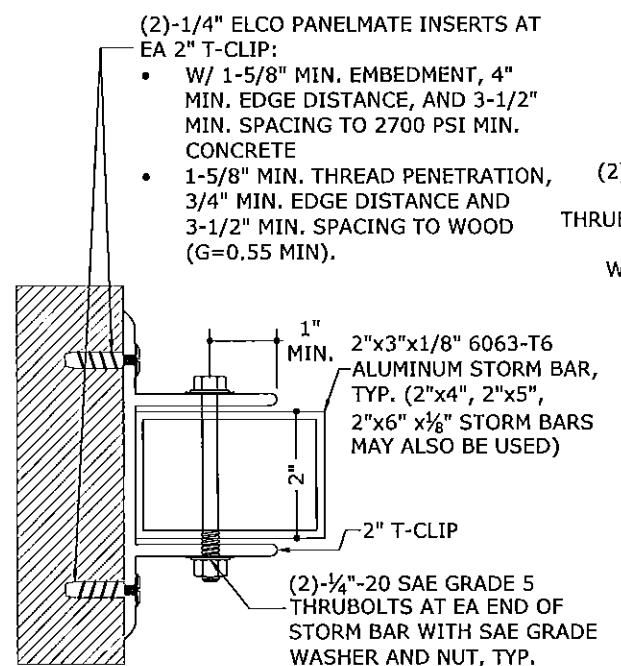
STORM BARS & FABRIC MAY BE INSTALLED HORIZONTALLY OR VERTICALLY AS APPLICABLE (HORIZONTAL STORM BAR INSTALLATION WITH VERTICAL PANEL SPAN SHOWN HEREIN)

2 INSTALLATION W/ STORM BAR
 4 N.T.S. EXTERIOR ELEV

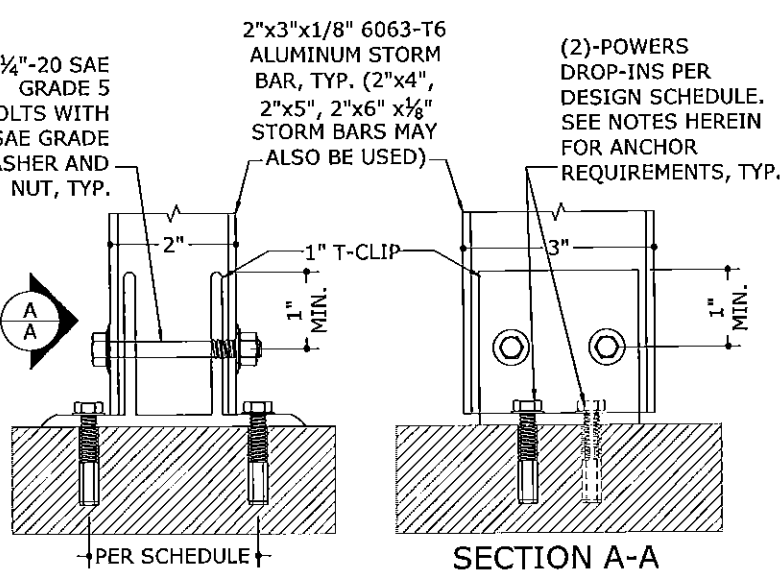
STORM BARS & FABRIC MAY BE INSTALLED HORIZONTALLY OR VERTICALLY AS APPLICABLE (VERTICAL STORM BAR INSTALLATION WITH HORIZONTAL PANEL SPAN SHOWN HEREIN)



3 STORM BAR DIRECT MOUNT
 4 4" = 1'-0" SECTION



4 STORM BAR 2" T-CLIP MOUNT
 4 4" = 1'-0" SECTION



5 STORM BAR 1" T-CLIP MOUNT
 4 4" = 1'-0" SECTION

STORM BAR SCHEDULE (FOR USE WITH DIRECT MOUNT & 2" T-CLIP MOUNT):

MAX OVERALL PANEL SPAN	ANCHORS PER DETAIL 3/4 & 4/4			
	+60 PSF	+50 PSF	+40 PSF	+30 PSF
3 FT	75"	80"	86"	94"
4 FT	68"	72"	78"	86"
5 FT	63"	67"	72"	80"
6 FT	60"	63"	68"	75"
7 FT	56"	60"	65"	71"
8 FT	53"	57"	62"	68"
9 FT	50"	54"	60"	65"
10 FT	47"	52"	57"	63"
11 FT	45"	49"	55"	61"
12 FT	43"	47"	53"	60"
13 FT	41"	45"	51"	58"
14 FT	40"	44"	49"	56"
15 FT	39"	42"	47"	54"

STORM BAR SCHEDULE (FOR USE WITH 1" T-CLIP MOUNT):

MAX OVERALL PANEL SPAN	(2)-1/4" POWERS DROP-INS				(2)-3/8" POWERS DROP-INS			
	+60 PSF	+50 PSF	+40 PSF	+30 PSF	+60 PSF	+50 PSF	+40 PSF	+30 PSF
3 FT	75"	80"	86"	94"	75"	80"	86"	94"
4 FT	68"	72"	78"	86"	68"	72"	78"	86"
5 FT	63"	67"	72"	80"	63"	67"	72"	80"
6 FT	60"	63"	68"	75"	60"	63"	68"	75"
7 FT	56"	60"	65"	71"	56"	60"	65"	71"
8 FT	53"	57"	62"	68"	53"	57"	62"	68"
9 FT	47"	54"	60"	65"	50"	54"	60"	65"
10 FT	42"	51"	57"	63"	47"	52"	57"	63"
11 FT	39"	46"	55"	61"	45"	49"	55"	61"
12 FT	35"	42"	53"	60"	43"	47"	53"	60"
13 FT	33"	39"	49"	58"	41"	45"	51"	58"
14 FT	30"	36"	45"	56"	40"	44"	49"	56"
15 FT	28"	34"	42"	54"	39"	42"	47"	54"

NOTES:
 1. STORM BAR SCHEDULES ARE GOVERNED BY POSITIVE WIND LOAD DIRECTIONS ONLY. NEGATIVE WIND LOAD DIRECTIONS DO NOT SUBJECT THE STORM BARS TO ANY EXTERIOR LOADING.

1" T-CLIP ANCHOR SCHEDULE:

NUMBER OF ANCHORS/CLIP	DESCRIPTION
(2)-1/4" POWERS DROP-INS	UTILIZE (2) DROP-INS PER CLIP WITH 1" MIN EMBED, 3-1/2" SPACING, 5-1/4" EDGE DISTANCE TO 3000 PSI MIN CONCRETE
(2)-3/8" POWERS DROP-INS	UTILIZE (2) DROP-INS PER CLIP WITH 1-9/16" MIN EMBED, 2.88" SPACING, 5-1/4" EDGE DISTANCE TO 3000 PSI MIN CONCRETE

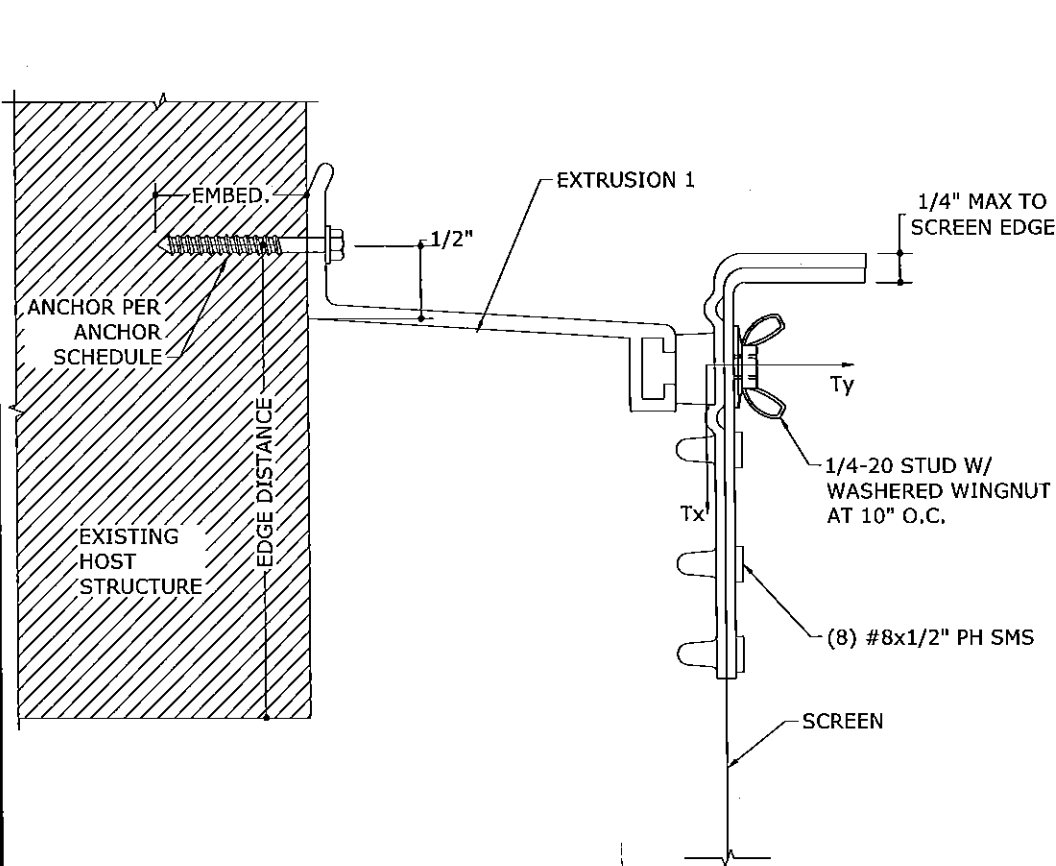
PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 15-0316.09
 Expiration Date 10/20/2020
 By *[Signature]*
 Miami Dade Product Control

FRANK L. BENNARDO, P.E.
 PROFESSIONAL ENGINEER
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 WWW.ENGINEERINGEXPRESS.COM
 CERT OF AUTH #9886
 A FRANK L. BENNARDO, P.E., INC. INNOVATION

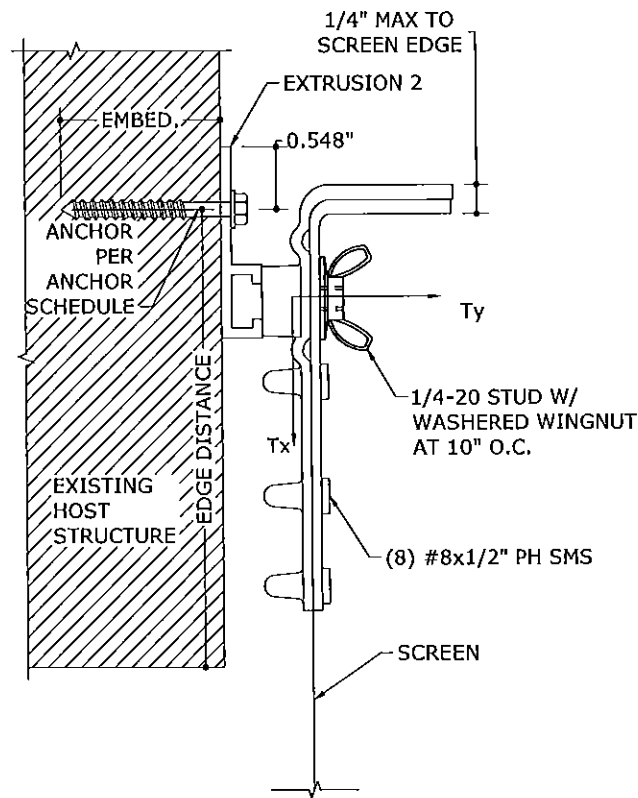
HURRICANE FABRIC, LLC
 1505 POINSETTA DR, SUITE H-3
 DELRAY BEACH, FL 33444
 WWW.HURRICANEFABRIC.COM
ASTRO GUARD
 WIND ABATEMENT SYSTEM
 MIAMI-DADE NOTICE OF ACCEPTANCE

DRWN	CHKD	DATE
KL	FLB	07/16/12
KL	FLB	03/22/13
CSL	TSB	02/27/15

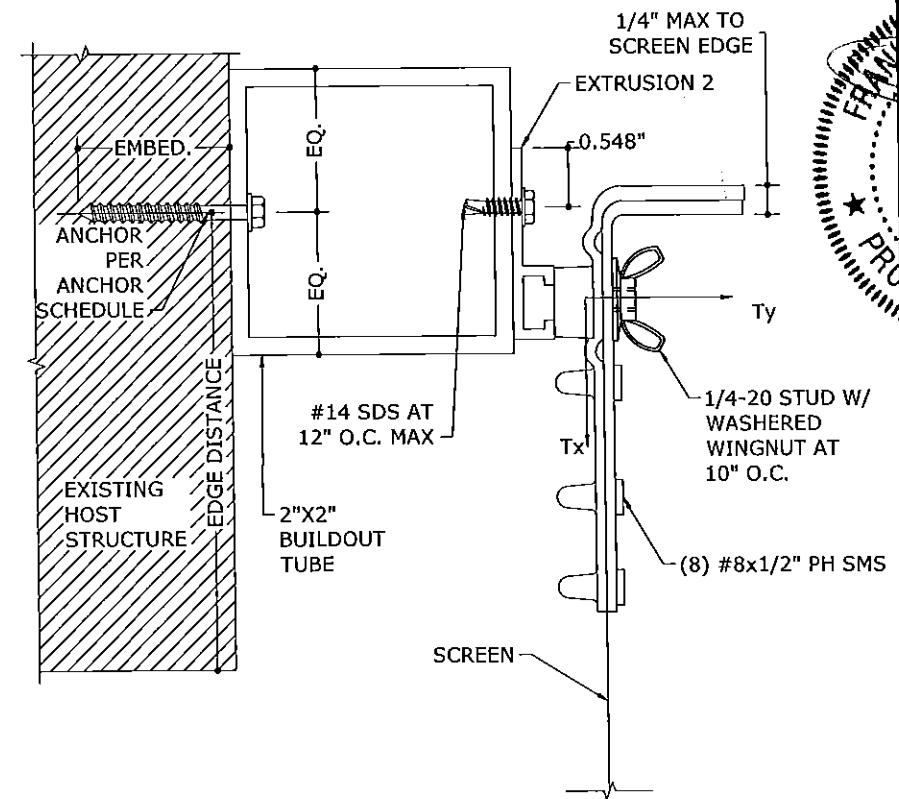
14-2202
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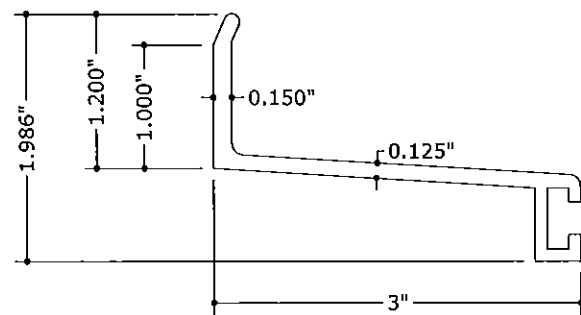
1
5 N.T.S. SECTION VIEW
ALTERNATE ATTACHMENT
EXTRUSION 1 MOUNT



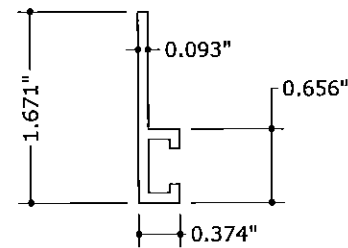
2
5 N.T.S. SECTION VIEW
ALTERNATE ATTACHMENT
EXTRUSION 2 MOUNT



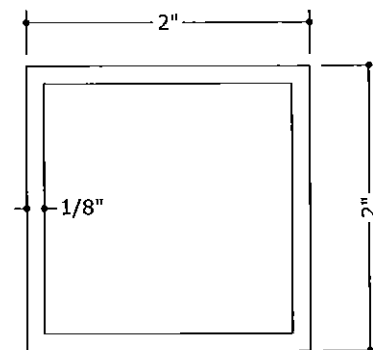
3
5 N.T.S. SECTION VIEW
ALTERNATE ATTACHMENT
BUILD OUT TUBE MOUNT



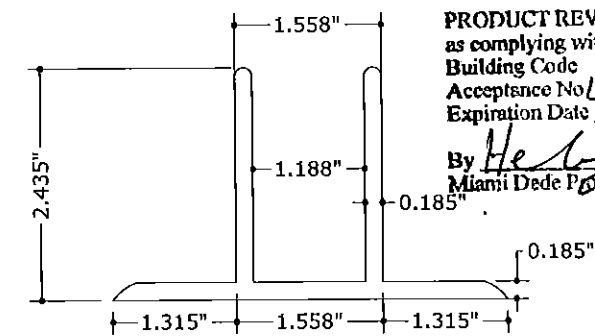
1 N.T.S. 6063-T6 ALUM
BUILD OUT F TRACK



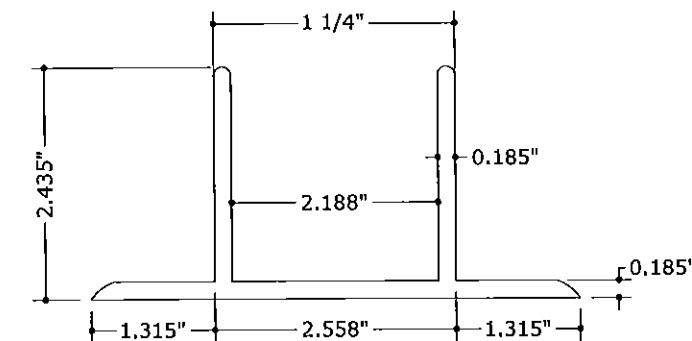
2 N.T.S. 6063-T6 ALUM
F TRACK



3 N.T.S. 6063-T6 ALUM
2"X2" BUILDOUT TUBE



4 N.T.S. 6063-T6 ALUM
1" T-CLIP 2-3/4" LONG



5 N.T.S. 6063-T6 ALUM
2" T-CLIP 3" LONG

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0316.09
Expiration Date 10/20/2020
By *Heidi A. Mohr*
Miami Dade Product Control

FRANK L. BENNARDO, P.E.
#00000000
BENNARDO
05/19/2015
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ASTRO GUARD
WIND ABATEMENT SYSTEM
MIAMI-DADE NOTICE OF ACCEPTANCE

REMARKS	DRWN	CHKD	DATE
INIT ISSUE	KL	FLB	07/16/12
REV COM: (12-HFC-04-02)	KL	FLB	03/22/13
REV. FBC 5TH (2014)	CSL	TSB	02/27/15

ANCHOR NOTES:

- SEE EXTERIOR ELEVATION FOR ANCHOR LOCATIONS AND/OR SPACING.
- PRESSURES LISTED IN ANCHOR SPACING SCHEDULES REPRESENT BOTH POSITIVE AND NEGATIVE PRESSURES.
- ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
- UNLESS OTHERWISE NOTED HEREIN, WHERE ANCHORS FASTEN TO NARROW FACE OF STUD FRAMING, ANCHOR SHALL BE LOCATED IN CENTER OF NOMINAL 2x (MIN) WOOD STUD (i.e. 3/4" EDGE DISTANCE IS ACCEPTABLE FOR ANCHORS TO WOOD FRAMING).
- WOOD HOST STRUCTURE SHALL BE "SOUTHERN PINE" G=0.55 OR GREATER DENSITY.
- MINIMUM EMBEDMENT SHALL BE AS NOTED IN ANCHOR SCHEDULE. MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDES STUCCO, FOAM, BRICK, AND OTHER WALL FINISHES.
- ANCHOR SCHEDULE APPLIES TO ALL PRODUCTS CERTIFIED HEREIN, BUT ONLY PROVIDES MAXIMUM ALLOWABLE ANCHOR SPACING. MAXIMUM ALLOWABLE SPANS AND PRESSURES INDICATED IN SPAN SCHEDULE SHALL APPLY.
- ALL CONCRETE ANCHOR SHALL BE INSTALLED TO NON-CRACKED CONCRETE ONLY. ALL EXISTING BLOCK SHALL BE ASTM C-90 MIN.
- WHERE EXISTING STRUCTURE IS WOOD FRAMING, EXISTING CONDITIONS MAY VARY. FIELD VERIFY THAT FASTENERS ARE INTO ADEQUATE WOOD FRAMING MEMBERS, NOT INTO PLYWOOD.
- 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.N.O.
- /// DESIGNATES ANCHOR CONDITIONS WHICH ARE NOT ACCEPTABLE FOR USE.
- EDGE DISTANCES AND EMBEDMENT REQUIREMENTS ARE AS FOLLOWS:

12.1. 1/4" ITW SAMMY SSC

- 2-1/4" EMBEDMENT AND 2-1/2" EDGE DISTANCE TO CONCRETE
- 1-1/4" EMBEDMENT AND 2-1/2" EDGE DISTANCE TO HOLLOW CONCRETE BLOCK
- 2-1/2" EMBEDMENT AND 2-1/2" EDGE DISTANCE TO GROUT-FILLED CONCRETE BLOCK

12.2. 1/4" ELCO PANELMATE (MALE OR FEMALE)

- 1-3/4" EMBEDMENT AND 2-1/2" EDGE DISTANCE TO CONCRETE
- 1-1/4" EMBEDMENT AND 3" EDGE DISTANCE TO HOLLOW AND GROUT-FILLED CONCRETE BLOCK
- 1-7/8" EMBEDMENT AND 3/4" EDGE DISTANCE TO WOOD

12.3. 1/4" POWERS HOLLOW-SET DROPIN

- 7/8" EMBEDMENT AND 3-1/2" EDGE DISTANCE TO CONCRETE AND HOLLOW AND GROUT-FILLED CONCRETE BLOCK

12.4. 1/4" ELCO PANELMATE INSERT

- 1-5/8" EMBEDMENT AND 4" EDGE DISTANCE TO CONCRETE
- 1-1/4" EMBEDMENT AND 3-1/2" EDGE DISTANCE TO HOLLOW CONCRETE BLOCK
- 1-1/2" EMBEDMENT AND 3-1/2" EDGE DISTANCE TO GROUT-FILLED CONCRETE BLOCK

12.5. 1/4" ALL POINTS SOLID-SET

- 7/8" EMBEDMENT AND 3" EDGE DISTANCE TO CONCRETE AND HOLLOW AND GROUT-FILLED CONCRETE BLOCK

12.6. 1/4" POWERS STEEL DROPIN

- 1" EMBEDMENT AND 3-1/2" EDGE DISTANCE TO CONCRETE

12.7. 3/8" POWERS STEEL DROPIN

- 1-9/16" EMBEDMENT AND 5-1/4" EDGE DISTANCE TO CONCRETE

12.8. 1/4" POWERS POWER-STUD (STAINLESS STEEL)

- 2" EMBEDMENT AND 3" EDGE DISTANCE TO CONCRETE
- 2" EMBEDMENT AND 5-1/4" EDGE DISTANCE TO GROUT-FILLED CONCRETE BLOCK

12.9. 1/4" ELCO PANELMATE TVAS

- 2" EMBEDMENT AND 2-1/2" EDGE DISTANCE TO CONCRETE
- 1-1/4" EMBEDMENT AND 3" EDGE DISTANCE TO HOLLOW AND GROUT-FILLED CONCRETE BLOCK
- 1-7/8" EMBEDMENT AND 3/4" EDGE DISTANCE TO WOOD

12.10. 1/4" ELCO PANELMATE FEMALE ID

- 1-3/4" EMBEDMENT AND 2-1/2" EDGE DISTANCE TO CONCRETE
- 1-1/4" EMBEDMENT AND 3" EDGE DISTANCE TO HOLLOW AND GROUT-FILLED CONCRETE BLOCK
- 1-7/8" EMBEDMENT AND 3/4" EDGE DISTANCE TO WOOD

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No 15-0316.09
Expiration Date 10/20/2020
By *Heidi A. Miller*
Miami Dade Product Control

SPAN	3295 PSI MIN CONCRETE				HOLLOW CONCRETE BLOCK				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	8.2	9.4	10.0	10.0	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	6.5	7.5	9.0	10.0	8.8	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0	5.4	6.3	7.5	9.4	7.2	8.5	10.0	10.0
12'-0"	10.0	10.0	10.0	10.0	4.6	5.4	6.5	8.2	6.1	7.2	8.8	10.0
14'-0"	10.0	10.0	10.0	10.0	4.1	4.7	5.7	7.2	5.3	6.3	7.6	9.9
14'-8"	9.6	10.0	10.0	10.0	///	4.6	5.5	6.9	5.1	6.0	7.3	9.5
16'-0"	8.9	10.0	10.0	10.0	///	4.2	5.1	6.5	4.7	5.5	6.8	8.8
17'-0"	8.4	9.9	10.0	10.0	///	4.0	4.9	6.2	4.4	5.3	6.4	8.3
18'-2"	7.9	9.3	10.0	10.0	///	///	4.6	5.8	4.2	4.9	6.1	7.8

SPAN	3295 PSI MIN CONCRETE				HOLLOW CONCRETE BLOCK				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	9.7	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	7.2	8.2	9.7	10.0	8.3	9.4	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	5.8	6.7	7.8	9.7	6.8	7.7	9.0	10.0
10'-0"	10.0	10.0	10.0	10.0	4.9	5.6	6.7	8.2	5.8	6.6	7.7	9.4
12'-0"	10.0	10.0	10.0	10.0	4.3	4.9	5.8	7.2	5.1	5.8	6.8	8.3
14'-0"	9.0	10.0	10.0	10.0	///	4.4	5.2	6.4	4.6	5.2	6.1	7.4
14'-8"	8.7	10.0	10.0	10.0	///	4.2	5.0	6.2	4.4	5.0	5.9	7.2
16'-0"	8.2	9.4	10.0	10.0	///	///	4.7	5.8	4.1	4.7	5.5	6.8
17'-0"	7.8	9.0	10.0	10.0	///	///	4.5	5.6	///	4.5	5.3	6.5
18'-2"	7.4	8.5	10.0	10.0	///	///	4.3	5.3	///	4.3	5.1	6.2

SPAN	3323 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	8.9	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	6.5	7.5	8.9	10.0	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	5.2	6.0	7.2	8.9	8.6	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0	4.4	5.1	6.0	7.5	7.1	8.3	10.0	10.0
12'-0"	8.8	10.0	10.0	10.0	///	4.4	5.2	6.5	6.0	7.1	8.6	10.0
14'-0"	7.7	9.0	10.0	10.0	///	///	4.6	5.8	5.3	6.2	7.5	9.6
14'-8"	7.4	8.7	10.0	10.0	///	///	4.5	5.6	5.0	5.9	7.2	9.2
16'-0"	6.9	8.1	9.7	10.0	///	///	4.2	5.2	4.7	5.5	6.7	8.6
17'-0"	6.6	7.7	9.2	10.0	///	///	///	5.0	4.4	5.2	6.3	8.1
18'-2"	6.2	7.2	8.7	10.0	///	///	///	4.7	4.2	4.9	6.0	7.7

SPAN	3323 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	8.7	9.9	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	6.4	7.3	8.7	10.0	8.9	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	5.1	5.9	7.0	8.7	7.2	8.3	9.7	10.0
10'-0"	9.4	10.0	10.0	10.0	4.3	5.0	5.9	7.3	6.1	7.0	8.3	10.0
12'-0"	8.2	9.4	10.0	10.0	///	4.3	5.1	6.4	5.3	6.1	7.2	8.9
14'-0"	7.3	8.3	9.9	10.0	///	///	4.6	5.7	4.8	5.5	6.4	8.0
14'-8"	7.0	8.1	9.5	10.0	///	///	4.4	5.5	4.6	5.3	6.2	7.7
16'-0"	6.6	7.5	8.9	10.0	///	///	4.1	5.1	4.3	4.9	5.8	7.2
17'-0"	6.3	7.2	8.5	10.0	///	///	///	4.9	4.1	4.7	5.6	6.9
18'-2"	6.0	6.8	8.1	10.0	///	///	///	4.7	///	4.5	5.3	6.6

FRANK L. BENNARDO, P.E.
PE0046549

ENGINEERING EXPERTS

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A FRANK L. BENNARDO, P.E., INC. MEMBER

HURRICANE FABRIC, LLC

1505 POINSETTIA DR, SUITE H-3
DELRAY BEACH, FL 33444
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ASTRO GUARD
WIND ABATEMENT SYSTEM
MIAMI-DADE NOTICE OF ACCEPTANCE

DRWN	CHKD	DATE
KL	FLB	07/16/12
KL	FLB	03/22/13
CSL	TSB	02/27/15

REMARKS

INIT ISSUE

REV COM. (12-HFC-04-02)

REV. FBC 5TH (2014)

14-2202

SCALE:

PAGE DESCRIPTION:

11

1/4" POWERS POWER-STUD ANCHOR SCHEDULE - INTERIOR MOUNT CONDITION (IN. O.C.)								
SPAN	4000 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	9.5	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	7.5	8.8	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0	6.3	7.3	8.8	10.0
12'-0"	8.6	10.0	10.0	10.0	5.4	6.3	7.5	9.5
14'-0"	7.6	8.9	10.0	10.0	4.7	5.5	6.7	8.4
14'-8"	7.3	8.5	10.0	10.0	4.6	5.3	6.4	8.1
16'-0"	6.8	7.9	9.5	10.0	4.2	4.9	6.0	7.5
17'-0"	6.5	7.5	9.1	10.0	4.0	4.7	5.7	7.2
18'-2"	6.1	7.1	8.6	10.0		4.4	5.4	6.8

1/4" POWERS POWER-STUD ANCHOR SCHEDULE - WALL MOUNT CONDITION (IN. O.C.)								
SPAN	4000 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	8.4	9.6	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	6.8	7.7	9.1	10.0
10'-0"	9.3	10.0	10.0	10.0	5.7	6.6	7.7	9.6
12'-0"	8.1	9.3	10.0	10.0	5.0	5.7	6.8	8.4
14'-0"	7.2	8.3	9.8	10.0	4.5	5.1	6.0	7.5
14'-8"	7.0	8.0	9.5	10.0	4.3	4.9	5.8	7.2
16'-0"	6.5	7.5	8.9	10.0	4.0	4.6	5.5	6.8
17'-0"	6.2	7.2	8.5	10.0		4.4	5.2	6.5
18'-2"	5.9	6.8	8.1	10.0		4.2	5.0	6.2

1/4" ELCO PANELMATE FEMALE ID ANCHOR SCHEDULE - INTERIOR MOUNT CONDITION (IN. O.C.)												
SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	8.9	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	6.5	7.5	8.9	10.0	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	5.2	6.0	7.2	8.9	8.6	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0	4.4	5.1	6.0	7.5	7.1	8.3	10.0	10.0
12'-0"	8.8	10.0	10.0	10.0		4.4	5.2	6.5	6.0	7.1	8.6	10.0
14'-0"	7.7	9.0	10.0	10.0			4.6	5.8	5.3	6.2	7.5	9.6
14'-8"	7.4	8.7	10.0	10.0			4.5	5.6	5.0	5.9	7.2	9.2
16'-0"	6.9	8.1	9.7	10.0			4.2	5.2	4.7	5.5	6.7	8.6
17'-0"	6.6	7.7	9.2	10.0				5.0	4.4	5.2	6.3	8.1
18'-2"	6.2	7.2	8.7	10.0				4.7	4.2	4.9	6.0	7.7

1/4" ELCO PANELMATE FEMALE ID ANCHOR SCHEDULE - WALL MOUNT CONDITION (IN. O.C.)												
SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	8.7	9.9	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	6.4	7.3	8.7	10.0	8.9	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	5.1	5.9	7.0	8.7	7.2	8.3	9.7	10.0
10'-0"	9.4	10.0	10.0	10.0	4.3	5.0	5.9	7.3	6.1	7.0	8.3	10.0
12'-0"	8.2	9.4	10.0	10.0		4.3	5.1	6.4	5.3	6.1	7.2	8.9
14'-0"	7.3	8.3	9.9	10.0			4.6	5.7	4.8	5.5	6.4	8.0
14'-8"	7.0	8.1	9.5	10.0			4.4	5.5	4.6	5.3	6.2	7.7
16'-0"	6.6	7.5	8.9	10.0			4.1	5.1	4.3	4.9	5.8	7.2
17'-0"	6.3	7.2	8.5	10.0				4.9	4.1	4.7	5.6	6.9
18'-2"	6.0	6.8	8.1	10.0				4.7		4.5	5.3	6.6

1/4" ELCO PANELMATE TVAS ANCHOR SCHEDULE - INTERIOR MOUNT CONDITION (IN. O.C.)												
SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	9.5	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	7.0	8.0	9.5	10.0	10.0	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	5.7	6.5	7.7	9.5	8.6	10.0	10.0	10.0
10'-0"	10.0	10.0	10.0	10.0	4.8	5.5	6.5	8.0	7.1	8.3	10.0	10.0
12'-0"	10.0	10.0	10.0	10.0	4.2	4.8	5.7	7.0	6.0	7.1	8.6	10.0
14'-0"	9.7	10.0	10.0	10.0		4.3	5.0	6.3	5.3	6.2	7.5	9.6
14'-8"	9.4	10.0	10.0	10.0		4.1	4.9	6.1	5.0	5.9	7.2	9.2
16'-0"	8.7	10.0	10.0	10.0			4.6	5.7	4.7	5.5	6.7	8.6
17'-0"	8.3	9.6	10.0	10.0			4.4	5.4	4.4	5.2	6.3	8.1
18'-2"	7.9	9.1	10.0	10.0			4.1	5.2	4.2	4.9	6.0	7.7

1/4" ELCO PANELMATE TVAS ANCHOR SCHEDULE - WALL MOUNT CONDITION (IN. O.C.)												
SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0	10.0
6'-0"	10.0	10.0	10.0	10.0	7.7	8.9	10.0	10.0	8.9	10.0	10.0	10.0
8'-0"	10.0	10.0	10.0	10.0	6.1	7.1	8.4	10.0	7.2	8.3	9.7	10.0
10'-0"	10.0	10.0	10.0	10.0	5.1	5.9	7.1	8.9	6.1	7.0	8.3	10.0
12'-0"	10.0	10.0	10.0	10.0	4.4	5.1	6.1	7.7	5.3	6.1	7.2	8.9
14'-0"	9.6	10.0	10.0	10.0		4.5	5.4	6.8	4.8	5.5	6.4	8.0
14'-8"	9.2	10.0	10.0	10.0		4.3	5.2	6.6	4.6	5.3	6.2	7.7
16'-0"	8.6	9.9	10.0	10.0		4.0	4.8	6.1	4.3	4.9	5.8	7.2
17'-0"	8.2	9.5	10.0	10.0			4.6	5.8	4.1	4.7	5.6	6.9
18'-2"	7.8	9.0	10.0	10.0			4.4	5.5		4.5	5.3	6.6

1/4" ITW SAMMY SSC ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)								
SPAN	3295 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	6.1	6.9	8.0	9.8		4.4	5.1	6.2
6'-0"	4.6	5.2	6.1	7.4				4.7
8'-0"		4.2	5.0	6.1				
10'-0"			4.2	5.2				
12'-0"				4.6				

1/4" ELCO PANELMATE (MALE OR FEMALE) ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)								
SPAN	3323 PSI MIN CONCRETE				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.3	4.9	5.7	7.0		4.5	5.3	6.4
6'-0"			4.3	5.3				4.9
8'-0"				4.3				

1/4" ELCO PANELMATE INSERT ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)								
SPAN	2700 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.4	5.0	5.9	7.2				4.3
6'-0"			4.4	5.4				
8'-0"				4.4				

NOTE: SEE SHEET 6 FOR ANCHOR NOTES

PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 15-0316.09
 Expiration Date 10/20/2020
 By Heba A. M...
 Miami Dad's Product Control

FRANK L. BENNARDO, P.E.
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 WIND ABATEMENT SYSTEM
 MIAMI-DADE NOTICE OF ACCEPTANCE

REMARKS	DATE
INT ISSUE	07/16/12
REV. COM. (12-HFC-04-02)	03/22/13
REV. FBC 5TH (2014)	02/27/15

14-2202
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1/4" ALL POINTS SOLID-SET ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)

SPAN	3000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.4	5.0	5.8	7.1
6'-0"			4.4	5.4
8'-0"				4.4

3/8" POWERS STEEL DROPIN ANCHOR SCHEDULE EXTRUSION 1 MOUNT (IN. O.C.)

SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	8.5	9.6	11.2	12.0
6'-0"	6.4	7.3	8.5	10.4
8'-0"	5.2	5.9	6.9	8.5
10'-0"		5.1	5.9	7.3
12'-0"			5.2	6.4
14'-0"			4.7	5.7
14'-8"			4.5	5.6
16'-0"				5.2
17'-0"				5.0
18'-2"				4.8

1/4" POWERS STEEL DROPIN ANCHOR SCHEDULE EXTRUSION 1 MOUNT (IN. O.C.)

SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.0	4.6	5.3	6.5
6'-0"			4.0	4.9

1/4" ITW SAMMY SSC ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)

SPAN	3295 PSI MIN CONCRETE				HOLLOW CONCRETE BLOCK				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0	6.9	8.0	9.6	12.0	9.2	10.6	12.0	12.0
6'-0"	12.0	12.0	12.0	12.0	5.0	5.8	6.9	8.8	6.8	7.8	9.2	11.4
8'-0"	9.7	11.3	12.0	12.0		4.5	5.5	6.9	5.4	6.2	7.4	9.2
10'-0"	8.1	9.4	11.3	12.0			4.5	5.8	4.5	5.2	6.2	7.8
12'-0"	6.9	8.1	9.7	12.0				5.0		4.5	5.4	6.8
14'-0"	6.1	7.1	8.6	10.9				4.4		4.0	4.8	6.0
14'-8"	5.9	6.8	8.3	10.5				4.2			4.6	5.8
16'-0"	5.4	6.4	7.7	9.7							4.3	5.4
17'-0"	5.2	6.0	7.3	9.3							4.1	5.2
18'-2"	4.9	5.7	6.9	8.8								4.9

1/4" ELCO PANELMATE (MALE OR FEMALE) ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)

SPAN	3323 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0	5.7	6.6	8.0	10.1	9.1	10.4	12.0	12.0
6'-0"	9.4	11.0	12.0	12.0	4.0	4.7	5.7	7.2	6.6	7.6	9.1	11.3
8'-0"	7.4	8.6	10.4	12.0			4.4	5.7	5.2	6.1	7.2	9.1
10'-0"	6.1	7.1	8.6	11.0				4.7	4.4	5.1	6.1	7.6
12'-0"	5.2	6.1	7.4	9.4				4.0		4.4	5.2	6.6
14'-0"	4.6	5.4	6.5	8.3							4.6	5.8
14'-8"	4.4	5.1	6.2	8.0							4.5	5.6
16'-0"	4.1	4.8	5.8	7.4							4.2	5.2
17'-0"		4.5	5.5	7.0								5.0
18'-2"		4.3	5.2	6.6								4.7

1/4" POWERS POWER-STUD ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)

SPAN	4000 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.1	4.7	5.5	6.7				4.3
6'-0"			4.1	5.1				

1/4" ELCO PANELMATE TVAS ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)

SPAN	3350 PSI MIN CONCRETE				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.9	5.6	6.6	8.0		4.5	5.3	6.4
6'-0"		4.2	4.9	6.0				4.9
8'-0"			4.1	4.9				
10'-0"				4.2				

1/4" POWERS HOLLOW-SET DROPIN ANCHOR SCHEDULE EXTRUSION 2 MOUNT (IN. O.C.)

SPAN	4000 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	8.5	9.9	12.0	12.0		4.3	5.2	6.8
6'-0"	5.9	6.9	8.5	10.9				4.7
8'-0"	4.6	5.4	6.6	8.5				
10'-0"		4.4	5.4	6.9				
12'-0"			4.6	5.9				
14'-0"				5.1				
14'-8"				4.9				
16'-0"				4.6				
17'-0"				4.3				
18'-2"				4.1				

1/4" ELCO PANELMATE FEMALE ID ANCHOR SCHEDULE - EXTRUSION 1 MOUNT (IN. O.C.)

SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	4.3	4.9	5.7	7.0					4.5	5.3	6.4	
6'-0"			4.3	5.3								4.9
8'-0"				4.3								

1/4" ELCO PANELMATE INSERT ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)

SPAN	2700 PSI MIN CONCRETE				HOLLOW CONCRETE BLOCK				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	11.1	12.0	12.0	12.0	8.4	9.8	11.8	12.0	8.6	10.0	12.0	12.0
6'-0"	8.1	9.3	11.1	12.0	6.0	7.0	8.4	10.7	6.1	7.1	8.6	10.9
8'-0"	6.4	7.4	8.9	11.1	4.6	5.4	6.6	8.4	4.8	5.6	6.7	8.6
10'-0"	5.4	6.2	7.4	9.3		4.5	5.4	7.0		4.6	5.6	7.1
12'-0"	4.7	5.4	6.4	8.1			4.6	6.0			4.8	6.1
14'-0"	4.1	4.8	5.7	7.2			4.1	5.2			4.2	5.3
14'-8"		4.6	5.5	6.9				5.0				5.1
16'-0"		4.3	5.1	6.4				4.6				4.8
17'-0"		4.1	4.9	6.1				4.4				4.5
18'-2"			4.6	5.8				4.2				4.3

NOTE: SEE SHEET 6 FOR ANCHOR NOTES

PRODUCT REVISED as complying with the Florida Building Code
 Acceptance No 15-0316.09
 Expiration Date 10/20/2020
 By *Heidi A. Decker*
 Miami Dade Product Control

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 WIND ABATEMENT SYSTEM
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DRWN/CHKD	DATE	REMARKS
KL	07/16/12	INIT ISSUE
KL	03/22/13	REV. COM. (12-HFC-04-02)
CSL	02/27/15	REV. FBC 5TH (2014)

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1/4" ALL POINTS SOLID-SET ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)								
SPAN	3000 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0	8.7	10.2	12.0	12.0
6'-0"	10.7	12.0	12.0	12.0	6.1	7.2	8.7	11.1
8'-0"	8.3	9.7	11.8	12.0	4.8	5.6	6.8	8.7
10'-0"	6.8	8.0	9.7	12.0		4.6	5.6	7.2
12'-0"	5.8	6.8	8.3	10.7			4.8	6.1
14'-0"	5.0	5.9	7.2	9.3			4.2	5.4
14'-8"	4.8	5.7	6.9	9.0				5.2
16'-0"	4.5	5.3	6.4	8.3				4.8
17'-0"	4.2	5.0	6.1	7.9				4.5
18'-2"		4.7	5.7	7.4				4.3

1/4" ELCO PANELMATE TVAS ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)												
SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0	6.2	7.3	8.8	11.3	9.1	10.4	12.0	12.0
6'-0"	11.6	12.0	12.0	12.0	4.3	5.1	6.2	8.0	6.6	7.6	9.1	11.3
8'-0"	9.1	10.6	12.0	12.0			4.8	6.2	5.2	6.1	7.2	9.1
10'-0"	7.4	8.7	10.6	12.0				5.1	4.4	5.1	6.1	7.6
12'-0"	6.3	7.4	9.1	11.6				4.3		4.4	5.2	6.6
14'-0"	5.5	6.5	7.9	10.2							4.6	5.8
14'-8"	5.3	6.2	7.6	9.8							4.5	5.6
16'-0"	4.9	5.8	7.0	9.1							4.2	5.2
17'-0"	4.6	5.5	6.7	8.6								5.0
18'-2"	4.4	5.1	6.3	8.1								4.7

1/4" POWERS STEEL DROPIN ANCHOR SCHEDULE EXTRUSION 2 MOUNT (IN. O.C.)				
SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0
6'-0"	9.8	11.5	12.0	12.0
8'-0"	7.6	8.9	10.9	12.0
10'-0"	6.2	7.3	8.9	11.5
12'-0"	5.3	6.2	7.6	9.8
14'-0"	4.6	5.4	6.6	8.6
14'-8"	4.4	5.2	6.4	8.2
16'-0"	4.1	4.8	5.9	7.6
17'-0"		4.6	5.6	7.2
18'-2"		4.3	5.2	6.8

1/4" ELCO PANELMATE FEMALE ID ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)												
SPAN	3350 PSI MIN CONCRETE				HOLLOW AND GROUT-FILLED CONCRETE BLOCK				G=0.55 MIN. WOOD			
	DESIGN PRESSURE				DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0	5.7	6.6	8.0	10.1	9.1	10.4	12.0	12.0
6'-0"	9.4	11.0	12.0	12.0	4.0	4.7	5.7	7.2	6.6	7.6	9.1	11.3
8'-0"	7.4	8.6	10.4	12.0			4.4	5.7	5.2	6.1	7.2	9.1
10'-0"	6.1	7.1	8.6	11.0				4.7	4.4	5.1	6.1	7.6
12'-0"	5.2	6.1	7.4	9.4				4.0		4.4	5.2	6.6
14'-0"	4.6	5.4	6.5	8.3							4.6	5.8
14'-8"	4.4	5.1	6.2	8.0							4.5	5.6
16'-0"	4.1	4.8	5.8	7.4							4.2	5.2
17'-0"		4.5	5.5	7.0								5.0
18'-2"		4.3	5.2	6.6								4.7

3/8" POWERS STEEL DROPIN ANCHOR SCHEDULE EXTRUSION 2 MOUNT (IN. O.C.)				
SPAN	4000 PSI MIN CONCRETE			
	DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0
6'-0"	12.0	12.0	12.0	12.0
8'-0"	12.0	12.0	12.0	12.0
10'-0"	12.0	12.0	12.0	12.0
12'-0"	11.2	12.0	12.0	12.0
14'-0"	9.8	11.5	12.0	12.0
14'-8"	9.4	11.0	12.0	12.0
16'-0"	8.6	10.2	12.0	12.0
17'-0"	8.2	9.7	11.8	12.0
18'-2"	7.7	9.1	11.1	12.0

1/4" POWERS POWER-STUD ANCHOR SCHEDULE - EXTRUSION 2 MOUNT (IN. O.C.)								
SPAN	4000 PSI MIN CONCRETE				GROUT-FILLED CONCRETE BLOCK			
	DESIGN PRESSURE				DESIGN PRESSURE			
	60 PSF	50 PSF	40 PSF	30 PSF	60 PSF	50 PSF	40 PSF	30 PSF
4'-0"	12.0	12.0	12.0	12.0	8.1	9.4	11.2	12.0
6'-0"	9.2	10.8	12.0	12.0	5.8	6.7	8.1	10.2
8'-0"	7.2	8.4	10.2	12.0	4.5	5.3	6.4	8.1
10'-0"	6.0	7.0	8.4	10.8		4.4	5.3	6.7
12'-0"	5.1	6.0	7.2	9.2			4.5	5.8
14'-0"	4.5	5.2	6.3	8.1				5.1
14'-8"	4.3	5.0	6.1	7.8				4.9
16'-0"		4.6	5.6	7.2				4.5
17'-0"		4.4	5.4	6.9				4.3
18'-2"		4.2	5.1	6.5				4.1

NOTE: SEE SHEET 6 FOR ANCHOR NOTES

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ASTRO GUARD
 WIND ABATEMENT SYSTEM
 MIAMI-DADE NOTICE OF ACCEPTANCE

PRODUCT REVISED
 as complying with the Florida
 Building Code
 Acceptance No 15-0316.09
 Expiration Date 10/20/2020
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 Miami Dade Product Control

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