



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

MIAMI-DADE COUNTY
PRODUCT CONTROL SECTION
11805 SW 26 Street, Room 208
T (786) 315-2590 F (786) 315-2599

NOTICE OF ACCEPTANCE (NOA)

www.miamidade.gov/economy

Nudo Products, Inc.
1500 Taylor Avenue
Springfield, IL 62703

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: Endurex 555 Insulated Glazing for Aluminum Fixed Window – L.M.I.

APPROVAL DOCUMENT: Drawing No. ND0001, titled "Endurex 555 Insulated Glazing for Fixed Window", sheets 1 through 4 of 4, dated 04/07/14, last revision A, dated 01/30/15, prepared by Building Drops, Inc., signed and sealed by Hermes F. Norero, P.E., bearing the Miami-Dade County Product Control Approval 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 unit shall bear a permanent label with the manufacturer's name or logo, city, state, model/series, and 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 consists of this page 1 and evidence page E-1 as well as approval document mentioned above. The submitted documentation was reviewed by Helmy A. Makar, P.E., M.S.



Helmy A. Makar
12/31/2015

NOA No. 14-0211.07
Expiration Date: 12/31/2020
Approval Date: 12/31/2015

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. *Drawing No. ND0001, titled "Endurex 555 Insulated Glazing for Fixed Window", sheets 1 through 4 of 4, dated 04/07/14, last revision A, dated 01/30/15, prepared by Building Drops, Inc., signed and sealed by Hermes F. Norero, P.E.*

B. TESTS

1. *Test reports on: 1) Air Infiltration Test, per FBC, TAS 202-94
2) Uniform Static Air Pressure Test, Loading per FBC TAS 202-94
3) Water Resistance Test, per FBC, TAS 202-94
4) Large Missile Impact Test per FBC, TAS 201-94
5) Cyclic Wind Pressure Loading per FBC, TAS 203-94
6) Forced Entry Test, per FBC 2411 3.2.1, TAS 202-94
along with marked-up drawings and installation diagram of Endurex 555 aluminum fixed window with insulated glazing, prepared by Architectural Testing, Test Report No. D4848.01-109-18, dated 03/17/14, signed & sealed by Michael D. Stremmel, P.E.*
2. *Test reports on Plastic Material testing of Endurex 555 per ASTM D 638, ASTM D 1929, ASTM D2843, ASTM D 635, prepared by Architectural Testing, Test Report No. E8595.01-106-18, dated 07/06/15, signed and sealed by Gray T. Hartman, P.E.*

C. CALCULATIONS

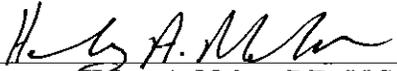
1. *Calculations and structural analysis, complying with FBC 5th Edition (2014), dated 09/25/14, prepared by Building Drops, signed and sealed by Hermes F. Norero, P.E.*

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. 14-0211.07
Expiration Date: 12/31/2020
Approval Date: 12/31/2015

NUDO PRODUCTS, INC

ENDUREX 555 INSULATED GLAZING FOR FIXED WINDOW

NUDO

1500 TAYLOR AVENUE
SPRINGFIELD, IL 62703
PH: (800) 826-4132 FX: (217) 528-8722

INSTALLATION NOTES:

1. **ONE (1) INSTALLATION ANCHOR CLIP IS REQUIRED AT EACH ANCHOR LOCATION SHOWN, UNLESS OTHERWISE STATED.**
2. **INSTALLATION CLIP: FOR INSTALLATION INTO 2X BUCK USE ONE (1) #8 WOOD SCREW PER INSTALLATION CLIP (TYPE 1 CLIP) OR PER LOCATION (TYPE 2 CLIP) OF SUFFICIENT LENGTH TO ACHIEVE 1 1/2 INCH MINIMUM EMBEDMENT INTO WOOD SUBSTRATE.**
3. **INSTALLATION CLIP: FOR INSTALLATION THROUGH 1X BUCK TO CONCRETE/MASONRY, OR DIRECTLY INTO CONCRETE/MASONRY, USE ONE (1) 3/16 INCH ITW TAPCON PER INSTALLATION CLIP (TYPE 1 CLIP) OR PER LOCATION (TYPE 2 CLIP) OF SUFFICIENT LENGTH TO ACHIEVE 1 1/4 INCH MINIMUM EMBEDMENT.**
4. **INSTALLATION CLIP: FOR INSTALLATION THROUGH METAL STUD USE ONE (1) #8 SELF-TAPPING SCREW PER INSTALLATION CLIP (TYPE 1 CLIP) OR PER LOCATION (TYPE 2 CLIP) OF SUFFICIENT LENGTH TO ACHIEVE 3 THREADS MINIMUM PENETRATION BEYOND METAL FRAME SUBSTRATE.**
5. **INSTALLATION CLIP: FOR ALL INSTALLATIONS, USE TWO (2) #8 X 1/2" SELF-TAPPING SCREW PER CLIP (TYPE 1 CLIP) OR ONE (1) #8 X 1/2" SELF-TAPPING SCREW AT 8.5" MAX. O.C. PER LOCATION (TYPE 2 CLIP) TO ATTACH CLIP TO PANEL FRAME.**
6. **MINIMUM EMBEDMENT AND EDGE DISTANCE EXCLUDE WALL FINISHES, INCLUDING BUT NOT LIMITED TO STUCCO, FOAM, BRICK VENEER, AND SIDING.**
7. **INSTALLATION ANCHORS AND ASSOCIATED HARDWARE MUST BE MADE OF CORROSION RESISTANT MATERIAL OR HAVE A CORROSION RESISTANT COATING.**
8. **FOR HOLLOW BLOCK AND GROUT FILLED BLOCK, DO NOT INSTALL INSTALLATION ANCHORS INTO MORTAR JOINTS. EDGE DISTANCE IS MEASURED FROM FREE EDGE OF BLOCK OR EDGE OF MORTAR JOINT INTO FACE SHELL OF BLOCK.**
9. **INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH ANCHOR MANUFACTURER'S INSTALLATION INSTRUCTIONS, AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTHS LESS THAN THE MINIMUM STRENGTH SPECIFIED BY THE ANCHOR MANUFACTURER.**
10. **INSTALLATION ANCHOR CAPACITIES FOR PRODUCTS HEREIN ARE BASED ON SUBSTRATE MATERIALS WITH THE FOLLOWING PROPERTIES:**
 - A. WOOD - MINIMUM SPECIFIC GRAVITY OF 0.55.
 - B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3000 PSI.
 - C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-90
 - D. STEEL - MINIMUM YIELD STRENGTH OF 33 KSI. MINIMUM WALL THICKNESS OF 49 MILS (18 GAUGE).
 - E. ALUMINUM - MINIMUM WALL THICKNESS OF 1/16". 6063-T5 ALLOY OR BETTER.

GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 2010 & 5TH EDITION FLORIDA BUILDING CODE (FBC), INCLUDING HVHZ AND HAS BEEN EVALUATED ACCORDING TO THE FOLLOWING:
 - TAS 201-94
 - TAS 202-94
 - TAS 203-94
2. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE/MASONRY, 2X AND METAL STUD FRAMING AS A COMPONENT & CLADDING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
3. 1X AND 2X BUCKS (WHEN USED) SHALL BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO THE STRUCTURE. BUCK DESIGN AND INSTALLATION IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
4. THE INSTALLATION DETAILS DESCRIBED HEREIN ARE GENERIC AND MAY NOT REFLECT ACTUAL CONDITIONS FOR A SPECIFIC SITE. IF SITE CONDITIONS CAUSE INSTALLATION TO DEVIATE FROM THE REQUIREMENTS DETAILED HEREIN, A LICENSED ENGINEER OR ARCHITECT SHALL PREPARE SITE SPECIFIC DOCUMENTS FOR USE WITH THIS DOCUMENT.
5. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED TO PROTECT THIS PRODUCT IN AREAS REQUIRING IMPACT RESISTANCE.
6. WINDOW FRAME MATERIAL: ALUMINUM 6063-T6.
7. IN ACCORDANCE WITH THE 2010 FBC SEC. 2003.8.4, DISSIMILAR METALS INCLUDING FASTENERS THAT MAY COME INTO CONTACT WITH ALUMINUM UNIT FRAMING SHALL BE PROTECTED AS DEFINED IN SEC. 2003.8.4.2.
8. SEE SHEET 4 FOR PANEL DETAIL.
9. DESIGNATION "O" STANDS FOR THE FOLLOWING:
O: FIXED PANEL

TABLE OF CONTENTS		
SHEET	REVISION	SHEET DESCRIPTION
1	A	GENERAL & INSTALLATION NOTES
2	A	ELEVATION & ANCHOR LAYOUT
3	A	VERTICAL & HORIZONTAL SECTIONS
4	A	COMPONENTS, BILL OF MATERIALS, AND PANEL DETAIL

DESIGN PRESSURE RATING			
SIZE	INSTALLATION METHOD	DESIGN PRESSURE	MISSILE IMPACT RATING
99 1/2" X 51 5/8"	THROUGH ANGLE CLIP	+70.0 / -70.0 PSF	LARGE AND SMALL MISSILE IMPACT

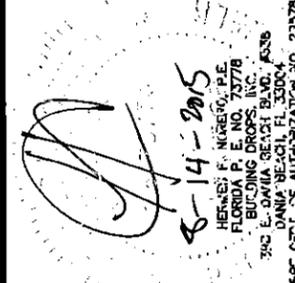
Approved as complying with the
Florida Building Code
Date 12/31/2015
NOA# 14-0211.07
Miami Dade Product Control
By *[Signature]*

TITLE: ENDUREX 555 INSULATED GLAZING & CURTAINWALL PANEL

GENERAL & INSTALLATION NOTES

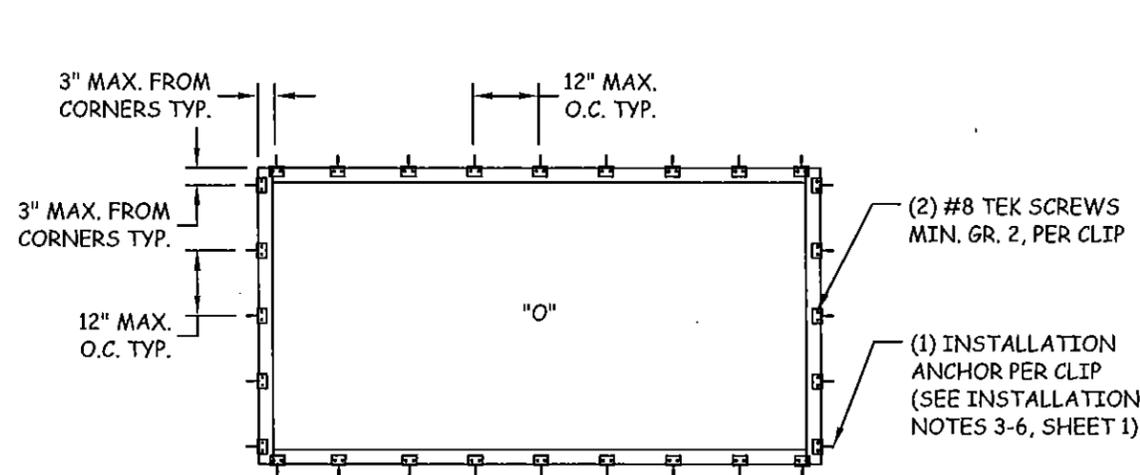
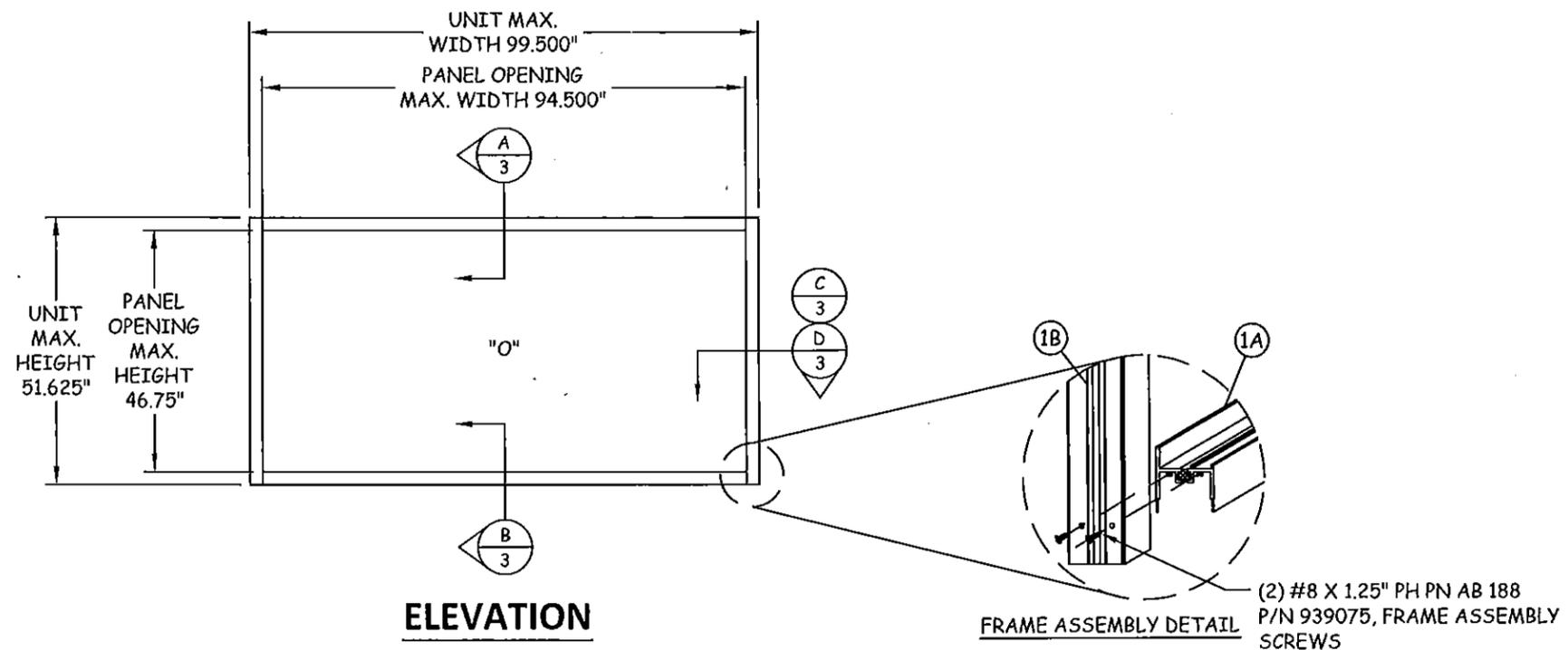
PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
PH: (954) 399-8478 FX: (954) 744-4738

REVISIONS		
NO.	DESCRIPTION	DATE
A	REV. PER M-D COMMENTS, 01/20/15	01/30/15



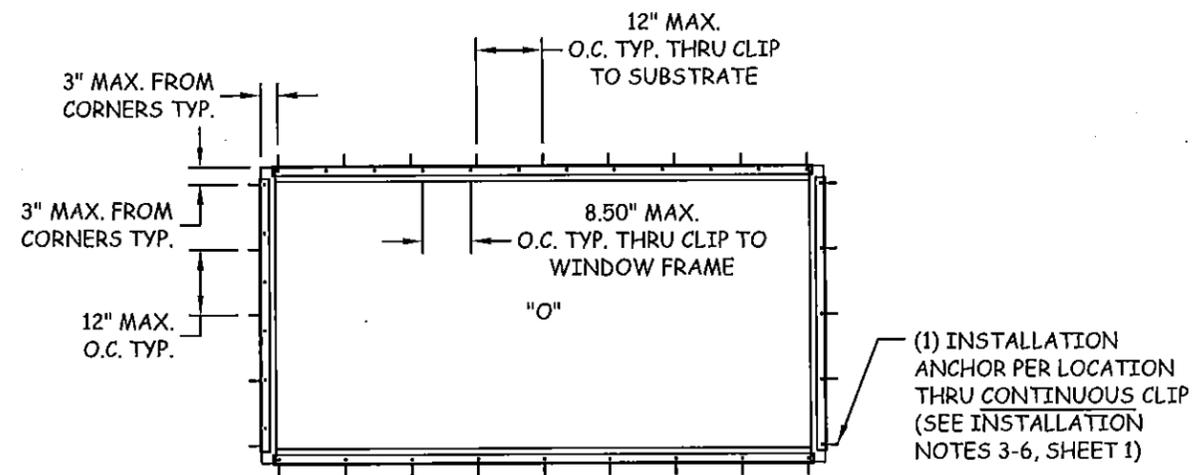
 REG. CERT. OF AUTHORIZATION NO. 23378

DATE: 4.7.14	DWN BY: TJM	CHK BY: MSS	SCALE: NTS
DWG #: NDO001			
SHEET: 1 OF 4			



ANCHOR LAYOUT

TYPE 1 CLIP
1/8" THICKNESS, TO BE USED
IN MIN. 2 1/2" LENGTHS



ANCHOR LAYOUT

TYPE 2 CLIP
0.062" THICKNESS, TO BE USED
CONTINUOUSLY ALONG JAMBS

Approved as complying with the
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Date 12/31/2015
NOA# 14-0211-07
Miami Dade Product Control
By *[Signature]*

TITLE: ENDUREX 555 INSULATED
GLAZING & CURTAINWALL PANEL

ELEVATION & ANCHOR LAYOUT

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

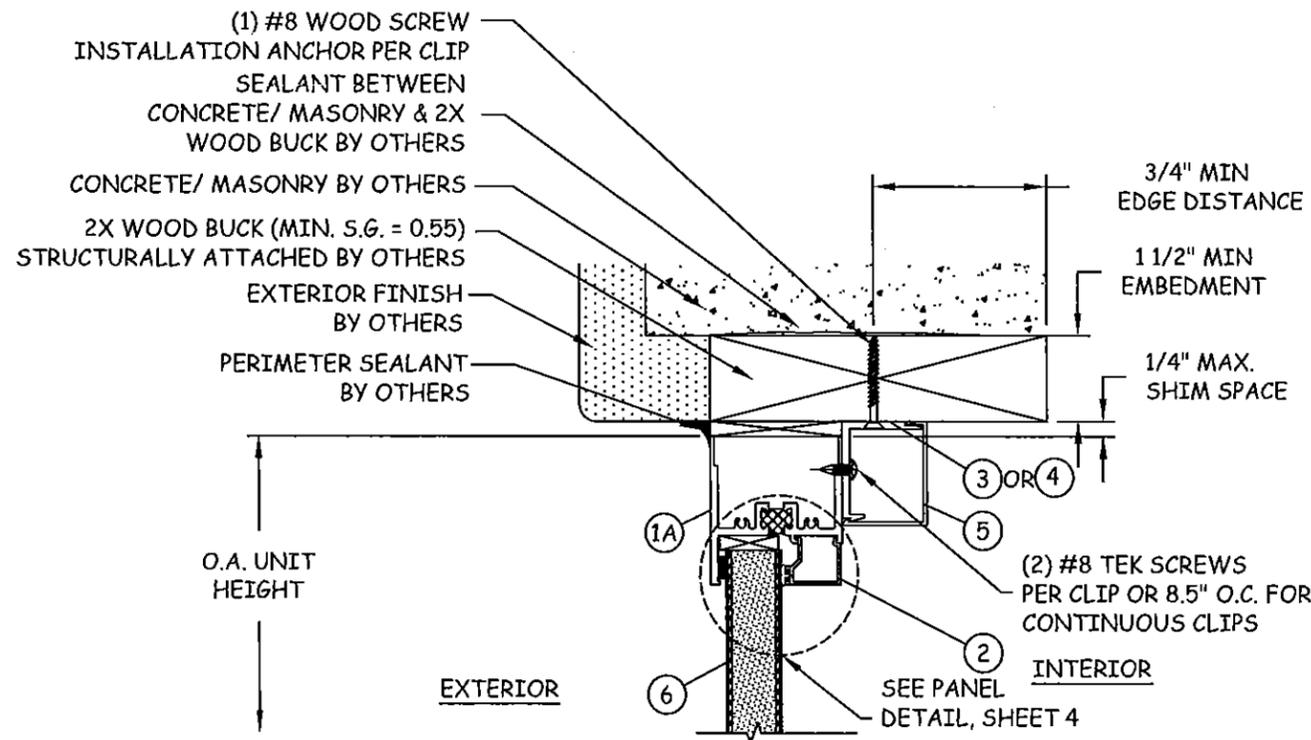
REVISIONS		BY	DATE
NO.	DESCRIPTION	MS	01/30/15
A	REV. PER M-D COMMENTS, 01/20/15		

[Signature]
8-19-2015
HERNANDEZ, P.E.
FLORIDA P.E. NO. 72778
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
FBPE CERT. OF AUTHORIZATION NO. 28578

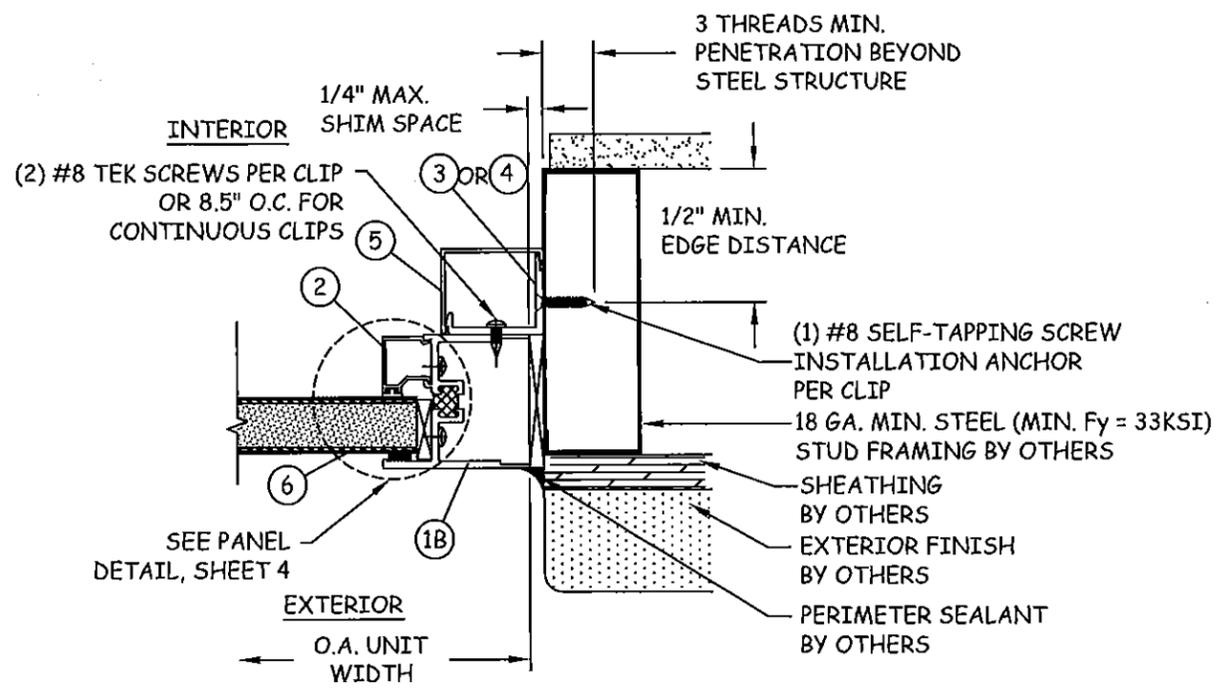
DATE: 4.7.14
DWN BY: TJM
CHK BY: MSS
SCALE: NTS

DWG #: **NDO001**
SHEET: 2 OF 4

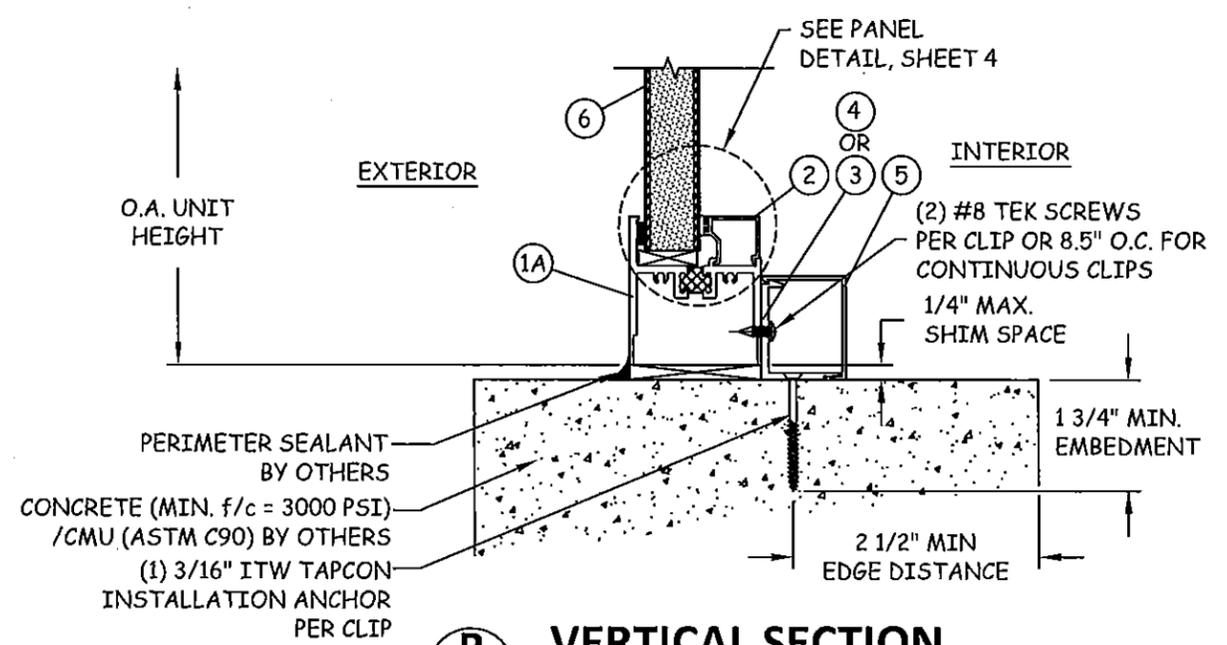
TITLE: ENDUREX 555 INSULATED GLAZING & CURTAINWALL PANEL
VERTICAL & HORIZONTAL SECTIONS
PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
PH: (954) 399-8478 FX: (954) 744-4738



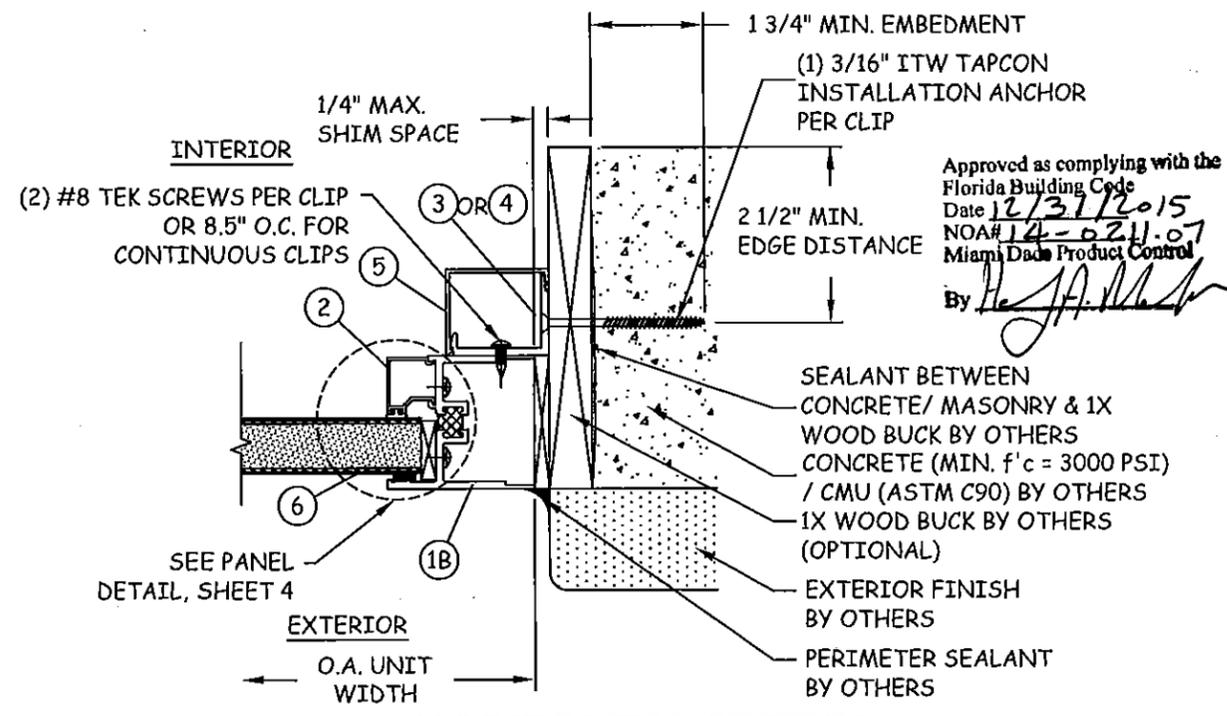
A
3 **VERTICAL SECTION**
HEAD - 2X WOOD BUCK
SEE INSTALLATION NOTE #3



C
3 **HORIZONTAL SECTION**
JAMB - STEEL STUD FRAME
SEE INSTALLATION NOTE #5



B
3 **VERTICAL SECTION**
SILL - CONCRETE/MASONRY
SEE INSTALLATION NOTE #4



D
3 **HORIZONTAL SECTION**
JAMB - 1X BUCK TO CONCRETE/MASONRY
SEE INSTALLATION NOTE #4

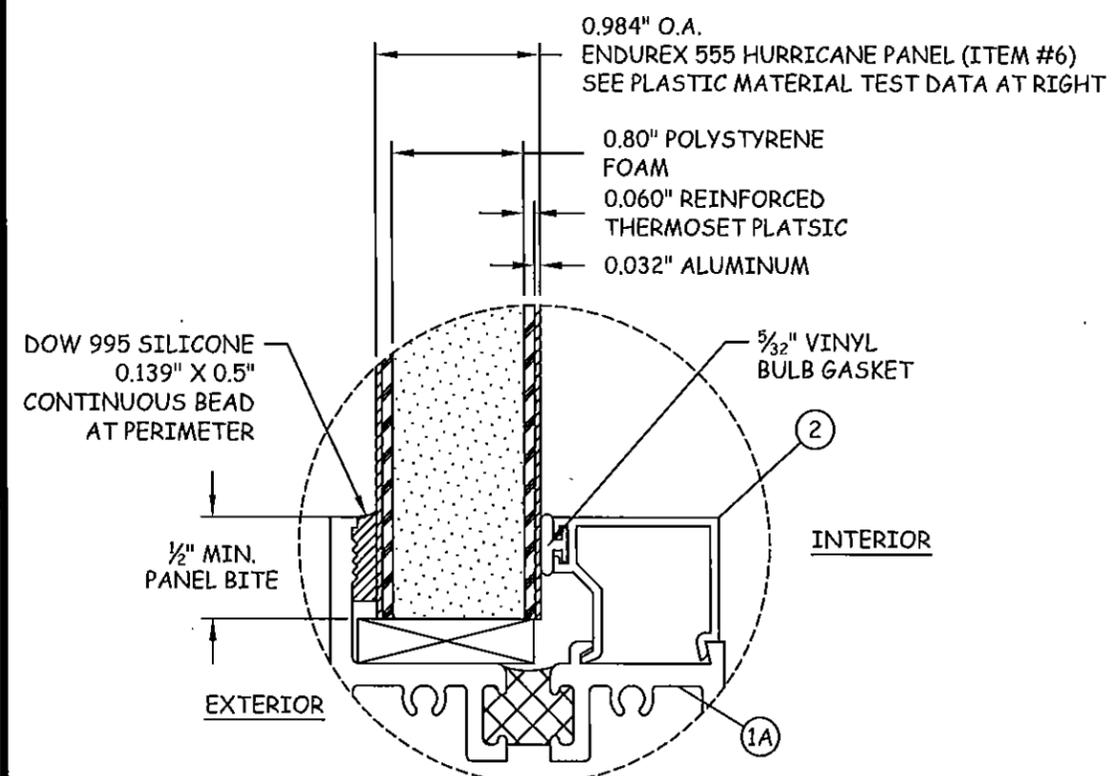
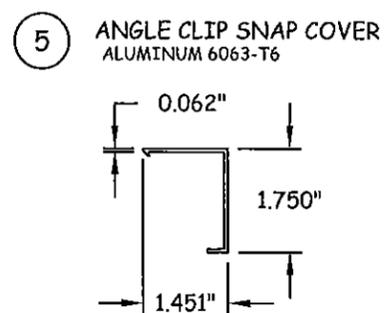
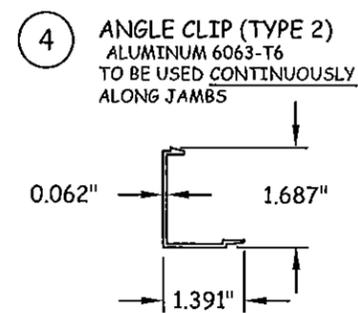
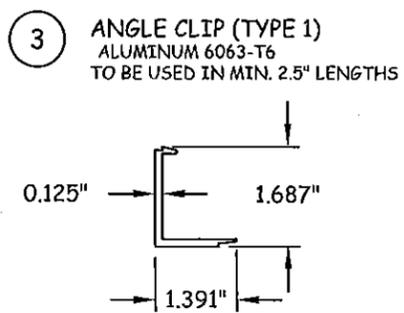
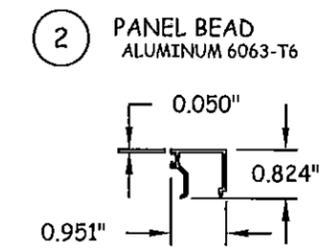
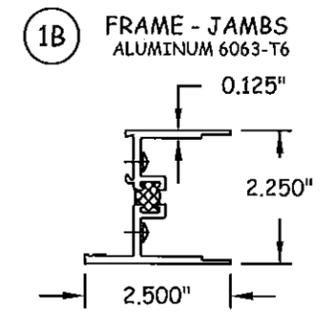
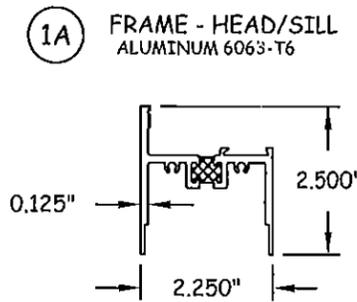
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Date 12/31/2015
NOA# 14-0211-07
Miami Dade Product Control
By *[Signature]*

REVISIONS	
NO.	DESCRIPTION
1	REV. PER M-D COMMENTS, 01/20/15
BY	DATE
MS	01/30/15

8-14-2015
HERMES F. NORRERO, P.E.
FLORIDA P. E. NO. 75778
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
FPE CERT. OF AUTHORIZATION NO. 28578

DATE: 4.7.14
DWN BY: TJM
CHK BY: MSS
SCALE: NTS
DWG #: **NDO001**
SHEET: **3 OF 4**

BILL OF MATERIALS			
ITEM NO.	DESCRIPTION	MATERIAL	MANUFACTURER
1A	FRAME - HEAD/SILL	6063-T6	GRAHAM ARCHITECTURAL
1B	FRAME - JAMBS	6063-T6	GRAHAM ARCHITECTURAL
2	PANEL BEAD	6063-T6	GRAHAM ARCHITECTURAL
3	ANGLE CLIP (TYPE 1)	6063-T6	GRAHAM ARCHITECTURAL
4	ANGLE CLIP (TYPE 2)	6063-T6	GRAHAM ARCHITECTURAL
5	ANGLE CLIP SNAP COVER	6063-T6	GRAHAM ARCHITECTURAL
6	ENDUREX 555 INSULATING PANEL	COMPOSITE	NUDO



PANEL DETAIL

ENDUREX 555-HURRICANE PANEL, LP-S6-B-GRAY-KAL		
TEST	RESULT	MIAMI-DADE ACCEPTANCE CRITERIA
ASTM D638: TENSILE STRENGTH	DIRECTION 1 AVG:	23,800 PSI
	DIRECTION 2 AVG:	26,300 PSI
	OVERALL AVERAGE:	25,100 PSI
ASTM D1929: SELF-IGNITION TEMPRATURE	842 °F (450 °C)	> 650 °F (343 °C)
ASTM D1929: FLASH IGNITION TEMPRATURE	734 °F (390 °C)	N/A
ASTM D2843: AVERAGE SMOKE DENSITY RATING	63.6	< 75
ASTM D635: AVERAGE LINEAR RATE OF BURN	26.4 MM/MIN, CLASS CC2	CLASS CC1 OR CC2

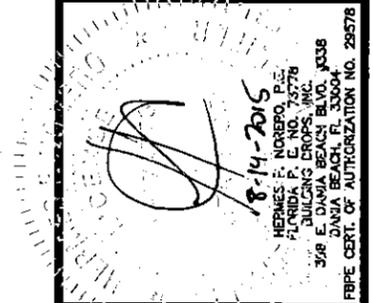
Approved as complying with the
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By *H. J. [Signature]*

NUDO

1500 TAYLOR AVENUE
SPRINGFIELD, IL 62703
PH: (800) 826-4132 FX: (217) 528-8722

TITLE: ENDUREX 555 INSULATED
GLAZING & CURTAINWALL PANEL
COMPONENTS, BOM &
PANEL DETAIL
PREPARED BY:
BUILDING DROPS, INC.
398 E. DANIA BEACH BLVD. #338
DANIA BEACH, FL 33004
PH: (954) 399-8478 FX: (954) 744-4738

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	BY DATE
	MS 01/30/15



DATE: 4.7.14
DWN BY: TJM
CHK BY: MSS
SCALE: NTS
DWG #: **NDO001**
SHEET: 4 OF 4