

Florida Building Code Product Approval
FL10185.8-R3 Impact- 6'0" x 24" Outswing Transom DP80

FL #	FL10185-R3
Application Type	Revision
Code Version	2010
Application Status	Approved
	*Approved by DBPR. Approvals by DBPR shall be reviewed and ratified by the POC and/or the Commission if necessary.
Comments	
Archived	<input type="checkbox"/>
Product Manufacturer	Nan Ya Plastics Corporation USA
Address/Phone/Email	8989 North Loop East Houston, TX 77029 (713) 674-7822 Ext 105 ajen96@yahoo.com.tw
Authorized Signature	RUSKIN WU ajen96@yahoo.com.tw
Technical Representative	Ruskin Wu
Address/Phone/Email	8989 North Loop East Houston, TX 77029-1217 (713) 674-7822 Ext 105 ajen96@yahoo.com.tw
Quality Assurance Representative	
Address/Phone/Email	
Category	Windows
Subcategory	Fixed
Compliance Method	Certification Mark or Listing
Certification Agency	National Accreditation & Management Institute
Validated By	National Accreditation & Management Institute,

Florida Building Code Product Approval

FL10185.8-R3 Impact- 6'0" x 24" Outswing Transom DP80

FL #	Model, Number or Name	Description
10185.8	GTO 6020 OUT-SWING TRANSOM	GTO 6020 OUT-SWING TRANSOM - IMPACT
Limits of Use Approved for use in HVHZ: Yes Approved for use outside HVHZ: Yes Impact Resistant: Yes Design Pressure: +80/-80 Other:		Certification Agency Certificate FL10185_R3_C_CAC_NI011368.pdf Quality Assurance Contract Expiration Date 08/31/2016 Installation Instructions FL10185_R3_II_08-01896A.pdf Verified By: Luis Roberto Lomas 62514 Created by Independent Third Party: Yes Evaluation Reports FL10185_R3_AE_11062401.pdf FL10185_R3_AE_512588A.pdf Created by Independent Third Party: Yes

Florida Building Code Product Approval

FL10185.8-R3 Impact- 6'0" x 24" Outswing Transom DP80

NOTICE OF PRODUCT CERTIFICATION



CERTIFICATION NO: NI011368
 DATE: 12/19/2012
 CERTIFICATION PROGRAM: Structural
 COMPANY: Nan Ya
 CODE: 661-1

To verify that the "Notice of Product Certification" is valid, please visit www.NAMICertification.com to assure that the product is active and currently listed. This certification represents product conformity to the applicable specification and that certification criteria has been satisfied. A NAMI approved certification label must be applied to the product to claim certification status. Please review and advise NAMI if any corrections are required to this document.

COMPANY NAME AND ADDRESS	PRODUCT DESCRIPTION
Nan Ya Plastics Corporation USA 8989 North Loop East, Suite 800 Houston, TX 77029	Series "Out-Swing Transom" Vinyl Transom Window Configuration: O Glazing: IG-1/8" Tempered Glass/Laminate-1/8" Annealed Glass/0.090" PVB Interlayer/1/8" Annealed Glass Frame: W-1810mm(71.25") H-610mm(24.00") DLO: W-1734mm(68.25") H-534mm(21.00")

SPECIFICATION	PRODUCT RATING
TAS 201/202/203-94	Design Pressure = +80/-80 psf Water Penetration Resistance Test Pressure = 575 Pa (12.0 psf) Large Missile Impact Rated

Product Tested By: ETC Laboratories
 Report No: ETC-08-209-21116.0
 Expiration Date: August 31, 2016

Administrator's Signature: _____

NATIONAL ACCREDITATION AND
 MANAGEMENT INSTITUTE, INC.
 4794 George Washington Memorial Highway
 Hayes, VA 23072
 Tel: (804) 684-5124/Fax: (804) 684-5122

Florida Building Code Product Approval

FL10185.8-R3 Impact- 6'0" x 24" Outswing Transom DP80

L. Roberto Lomas P.E.

233 W. Main St.
Danville, VA 24541
434-688-0609
rlomas@rlomaspe.com

Engineering Evaluation Report

Report No.: 512588A

Manufacturer: Nan Ya Plastics Corporation
8989 North Loop East
Houston, TX 77029

Product Line: GTO 6020 Out-Swing Transom - Impact

Compliance:

The above mentioned product has been evaluated for compliance with the requirements of the Florida Department of Community Affairs for Statewide Acceptance per Rule 9N-3.005 method 1(a). The product listed herein complies with requirements of the Florida Building Code.

Supporting Technical Documentation:

1. Approval document: drawing number 08-01896 Revision A, titled GTO 6020 Out-Swing Transom - Impact, prepared, signed and sealed by Luis Roberto Lomas P.E.
2. Report No.: ETC-08-209-21118.0 signed by Joseph L Doldan, P.E.
ETC Laboratories, Rochester, NY
TAS 201-94 Large Missile Impact Test, Level D, Wind Zone 4
TAS 202-94 Uniform Static Air Pressure, ± 80.0 psf design pressure, 12.0psf water penetration.
TAS 203-94 Cyclic Pressure loading ± 80.0 psf design pressure
3. Rigid PVC Plastic Testing:
Test report ETC-05-255-17144.1, signed and sealed by Joseph Labora Doldan P.E.
ETC Laboratories, Rochester, NY, ASTM D 638-03
Tensile strength of unexposed samples 6,140psi
Tensile strength of 4500 hour Xenon Arc exposed samples 6,053psi
Self-ignition 900°F
ASTM D635-03 Rate of burning classification: C-1 (10mm/min, 0.38in/min)
ASTM D2843-99 Smoke density rating: 37.4
4. Phenolic Foam Board Testing:
Test report ETC-06-255-17412.1, signed and sealed by Joseph Labora Doldan P.E.
ETC Laboratories, Rochester, NY, ASTM E 84-07
Flame spread Index: 10
Smoke developed index: 95
5. SMC Fiberglass Testing:
Test report ETC-05-255-16776.1, signed and sealed by Joseph Labora Doldan P.E.
ETC Laboratories, Rochester, NY, ASTM D 638-03
Tensile strength of unexposed samples 11,860psi
Tensile strength of 4500 hour Xenon Arc exposed samples 11,063psi
Self-ignition 1080°F
ASTM D635-03 Rate of burning classification: C-1 (15.2mm/min, 0.60in/min)
ASTM D2843-99 Smoke density rating: 52.1
6. Cellular PVC Testing:
Test report ETC-05-255-16777.1, signed and sealed by Joseph Labora Doldan P.E.
ETC Laboratories, Rochester, NY, ASTM D 638-03
Tensile strength of unexposed samples 6,019psi
Tensile strength of 4500 hour Xenon Arc exposed samples 6,014psi
Self-ignition 950°F
ASTM D635-06 Rate of burning classification: C-1 (10.2mm/min, 0.4in/min)
ASTM D2843-99 Smoke density rating: 49.6
7. Anchor calculations, report number 512588-1, prepared, signed and sealed by Luis Roberto Lomas P.E.



Florida Building Code Product Approval

FL10185.8-R3 Impact- 6'0" x 24" Outswing Transom DP80

L. Roberto Lomas P.E.

233 W. Main St.
Danville, VA 24541
434-688-0609
rlomas@lrlomaspe.com

Engineering Evaluation Report

Report No.: 512588A

Limitations and Conditions of use:

- Maximum design pressure: ± 80.0 psf
- Maximum unit size: 71 1/4" x 24" (GTO 6020)
- Units must be glazed per ASTM E 1300-04, see installation instructions for glass options.
- This product is rated to be used in the HVHZ.
- This product is impact resistant and does not require impact protection in wind borne debris regions.
- Frame material to be foam PVC.

Installation: Units must be installed in accordance with approval document, 08-01896 Revision A.

Certification of Independence: Please note that I don't have nor will acquire a financial interest in any company manufacturing or distributing the product(s) for which this report is being issued. Also, I don't have nor will acquire a financial interest in any other entity involved in the approval process of the listed product(s).



Luis R. Lomas, P.E.
FL No.: 62514
03/25/2013

Florida Building Code Product Approval

FL10185.8-R3 Impact- 6'0" x 24" Outswing Transom DP80



BUILDING AND NEIGHBORHOOD COMPLIANCE DEPARTMENT (BNC)
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/building

NOTICE OF ACCEPTANCE (NOA)

E.I. DuPont De Nemours & Co., Inc.

DuPont P&IP Chestnut Run Plaza, 712/161, P.O. Box 80712
Wilmington, DE 19880

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 BNC -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. BNC 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 Florida Building Code, including the High Velocity Hurricane Zone.

DESCRIPTION: DuPont Butacite® PVB Interlayer

APPROVAL DOCUMENT: Drawing No. 10-0922.09, titled "DuPont Butacite® PVB Interlayer", Sheet 1 and 2 of 2, dated 03/25/11, prepared by E. I. DuPont De Nemours & Co., Inc, signed and sealed by Allan A. Kozich, P.E., bearing the Miami-Dade County Product Control revision stamp with the Notice of Acceptance number and expiration date by the Miami-Dade County Product Control Section.

MISSILE IMPACT RATING: None

LABELING: Laminated lites under this Product Approval shall be permanently marked in a corner of the glass with: "MDCA-Butacite® PVB", standing for "Miami-Dade County Approved - Butacite® PVB", and the laminator's identification mark. These marks shall be applied by the individual laminator producing the finished laminated glass product containing the Butacite® PVB interlayer.

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 renews and revises NOA # 10-0922.09 and consists of this page 1 and evidence page E-1, as well as approval document mentioned above.

The submitted documentation was reviewed by Carlos M. Utrera, P.E.



Handwritten signature and date: 09/31/11

NOA No. 11-0624.01
Expiration Date: December 11, 2016
Approval Date: September 08, 2011
Page 1

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FL10185.8-R3 Impact- 6'0" x 24" Outswing Transom DP80

E.I. DuPont De Nemours & Co., Inc.

NOTICE OF ACCEPTANCE: EVIDENCE SUBMITTED

A. DRAWINGS

1. Drawing No. **10-0922.09**, titled "DuPont Butacite® PVB Interlayer", Sheet 1 and 2 of 2, dated 03/25/11, prepared by E. I. DuPont De Nemours & Co., Inc, signed and sealed by Allan A. Kozich, P.E.

B. TESTS

	<u>Test report</u>	<u>Standard</u>	<u>Date</u>	<u>Signature</u>
1.	A2280.01-10-18	ASTM D1929-96	03/29/11	Joseph A. Reed, P.E.
2.	A2280.01-10-18	ASTM D 635-03	03/29/11	Joseph A. Reed, P.E.
3.	A2280.01-10-18	ASTM D 2843-99	03/29/11	Joseph A. Reed, P.E.
4.	A2280.01-10-18	ASTM G 155-04	03/29/11	Joseph A. Reed, P.E.
5.	A2280.01-10-18	ASTM G 158-02	03/29/11	Joseph A. Reed, P.E.

C. CALCULATIONS

1. None.

D. QUALITY ASSURANCE

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

E. MATERIAL CERTIFICATIONS

1. None.

F. STATEMENTS

1. Statement letter of code conformance to 2007 FBC and no financial interest issued by Allan A. Kozich & Associates, dated 08/09/11, signed and sealed by Allan A. Kozich, P.E.



08/31/11

Carlos M. Utrera, P.E.
Product Control Examiner
NOA No. 11-0624.01

Expiration Date: December 11, 2016
Approval Date: September 08, 2011

Florida Building Code Product Approval

FL10185.8-R3 Impact- 6'0" x 24" Outswing Transom DP80

DUPONT BUTACITE® PVB INTERLAYER



A B C
SECTION

PRODUCT DESCRIPTION

MANUFACTURED BY: E.I. DUPONT DE NEMOURS & CO., INC.
A PLASTIC INTERLAYER MATERIAL FOR LAMINATION WITH GLASS
ON BOTH SIDES. A TYPICAL GLAZING IS MADE OF THE FOLLOWING
COMPONENTS:

A	- 1/8" (3.0 mm) Annealed Glass
B	- 0.090" (0.76 mm) DuPont Butacite® PVB Interlayer
C	- 1/8" (3.0 mm) Annealed Glass

MATERIAL CHARACTERISTICS Butacite® PVB Interlayer (Clear)

Designation	Test	Properties
		Butacite® PVB Interlayer (Clear)
Self Ignition Temperature	ASTM D1929	788 °F (420 °C)
Flash Ignition Temperature	ASTM D1929	788 °F (420 °C)
Avg Smoke Density Rating	ASTM D2843	7.2
Burning Rate	ASTM D635	0 mm/min.
Xenon Weathering (4500 hrs)	ASTM C158-02 Method A	* Weathering Flexural Strength (ASTM C158-02 Method A)
		Before
		After
		2940 psi
		3189 psi

*WEATHERING PER SECTION 2605.2 OF THE FLORIDA BUILDING CODE

THIS IS A COMPONENT APPROVAL AND DOES NOT INCLUDE AN EVALUATION OF STRUCTURAL PERFORMANCE OF THIS COMPONENT. SYSTEMS INCORPORATING THIS COMPONENT SHALL APPLY FOR A PRODUCT APPROVAL TO THIS OFFICE AND SHALL SUBMIT TEST REPORTS AND OTHER REQUIRED DOCUMENTS SHOWING THAT THE SYSTEM USING THIS COMPONENT WILL RESIST THE LOADS ACCORDING TO CHAPTER 16 OF THE FLORIDA BUILDING CODE.

PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 11-0624.01
Expiration Date 12/11/2016
By: *[Signature]*
Miami-Dade Product Control

	DuPont Butacite® PVB Interlayer E.I. duPont de Nemours & Co., Inc. DuPont P&IP - GLS Chestnut Run Plaza Bldg 712/161 P. O. Box 80712 Wilmington DE 19880-0712 Phone: 302-999-2125 Dwg. # 10-0922.09 rev 1 Sheet 1 of 2 Drawing Date: 03/25/11 Allan A. Kozich, PE Registration # 16864
	C.A. No. 1765

Florida Building Code Product Approval

FL10185.8-R3 Impact- 6'0" x 24" Outswing Transom DP80


DUPONT BUTACITE® PVB INTERLAYER

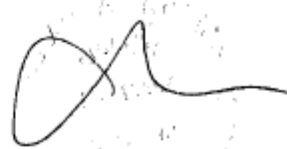
Material Characteristics Butacite® PVB Interlayer (Colors)

Designation	Test	Properties
Self Ignition Temperature [1]	ASTM D1929	788 °F (420 °C)
Self Ignition Temperature [2]	ASTM D1929	788 °F (420 °C)
Self Ignition Temperature [3]	ASTM D1929	788 °F (420 °C)
Self Ignition Temperature [4]	ASTM D1929	788 °F (420 °C)
Self Ignition Temperature [5]	ASTM D1929	788 °F (420 °C)
Flash Ignition Temperature [1]	ASTM D1929	788 °F (420 °C)
Flash Ignition Temperature [2]	ASTM D1929	770 °F (410 °C)
Flash Ignition Temperature [3]	ASTM D1929	770 °F (410 °C)
Flash Ignition Temperature [4]	ASTM D1929	788 °F (420 °C)
Flash Ignition Temperature [5]	ASTM D1929	788 °F (420 °C)
Avg Smoke Density Rating [1]	ASTM D2843	7.2
Avg Smoke Density Rating [2]	ASTM D2843	9.1
Avg Smoke Density Rating [3]	ASTM D2843	10.2
Avg Smoke Density Rating [4]	ASTM D2843	10.1
Avg Smoke Density Rating [5]	ASTM D2843	8.1
Burning Rate [1]	ASTM D635	0 mm/min.
Burning Rate [2]	ASTM D635	0 mm/min.
Burning Rate [3]	ASTM D635	0 mm/min.
Burning Rate [4]	ASTM D635	0 mm/min.
Burning Rate [5]	ASTM D635	0 mm/min.

- [1] Clear Butacite® PVB Interlayer
- [2] Charcoal Grey Butacite® PVB Interlayer
- [3] Blue-Green Butacite® PVB Interlayer
- [4] Azure Blue Butacite® PVB Interlayer
- [5] Solar Bronze Butacite® PVB Interlayer

THIS IS A COMPONENT APPROVAL AND DOES NOT INCLUDE AN EVALUATION OF STRUCTURAL PERFORMANCE OF THIS COMPONENT. SYSTEMS INCORPORATING THIS COMPONENT SHALL APPLY FOR A PRODUCT APPROVAL TO THIS OFFICE AND SHALL SUBMIT TEST REPORTS AND OTHER REQUIRED DOCUMENTS SHOWING THAT THE SYSTEM USING THIS COMPONENT WILL RESIST THE LOADS ACCORDING TO CHAPTER 16 OF THE FLORIDA BUILDING CODE.

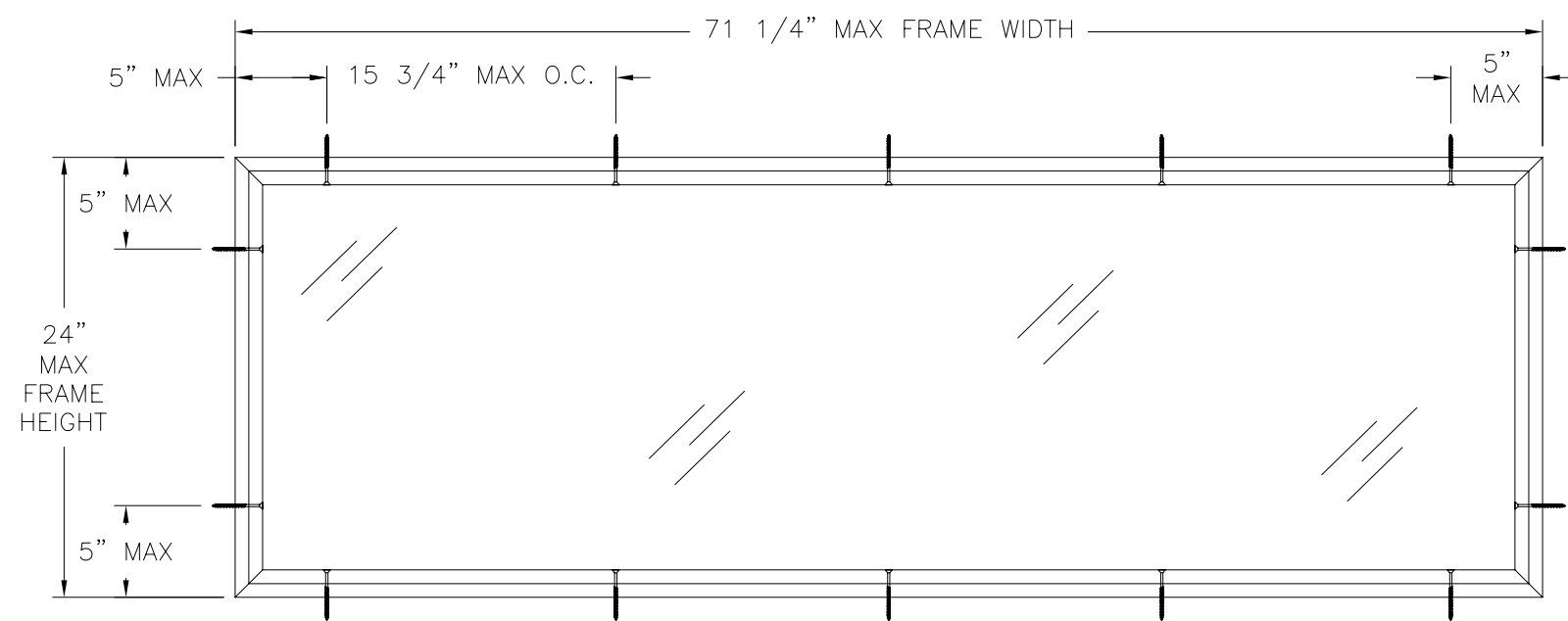
PRODUCT REVISED
as complying with the Florida
Building Code
Acceptance No. 11-0624-01
Expiration Date 12/31/2016
By: 
Miami/Dade Product Control



JUN 22 2011

DuPont Butacite® PVB Interlayer
E.I. duPont de Nemours & Co., Inc.
DuPont P&IP - GLS
Chestnut Run Plaza Bldg 712/161
P. O. Box 80712
Wilmington DE 19880-0712
Phone: 302-999-2125
Dwg. # 10-0922.09 rev 1 Sheet 2 of 2
Drawing Date: 03/25/11
Allan A. Kozich, PE
Registration # 16864
C.A. No. 1765

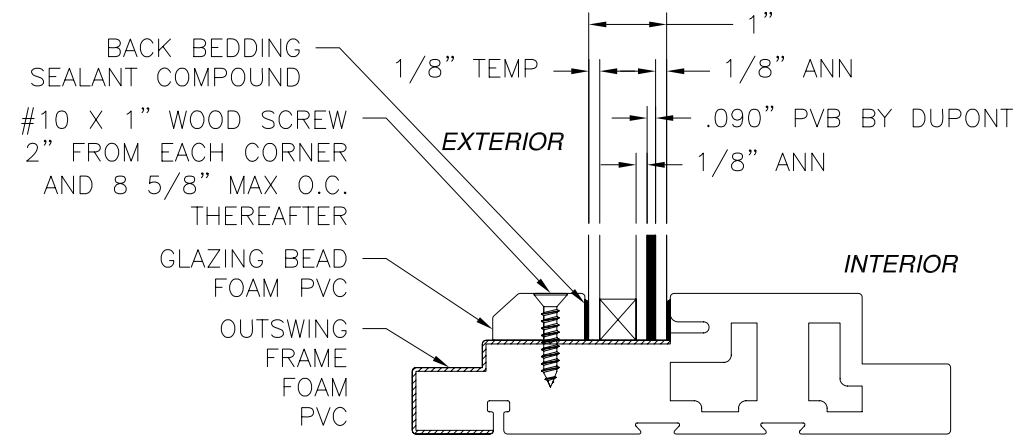
REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REMOVED TRIPLE UNIT	03/25/13	R.L.



GTO 6020 OUT-SWING TRANSOM - IMPACT
EXTERIOR VIEW

DESIGN PRESSURE RATING	IMPACT RATING
±80.0PSF	LARGE AND SMALL MISSILE IMPACT

MISSILE LEVEL D, WIND ZONE 4, AND HVHZ



GLAZING DETAIL

NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE FLORIDA BUILDING CODE INCLUDING THE HVHZ.
2. WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADS TO STRUCTURE. FRAMING AND MASONRY OPENING IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
3. 1X BUCK OVER MASONRY/CONCRETE IS OPTIONAL. WHERE 1X BUCK IS NOT USED DISSIMILAR MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE. SELECTION OF COATING OR MEMBRANE IS THE RESPONSIBILITY OF THE ARCHITECT OR ENGINEER OF RECORD.
4. ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR Cd=1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
5. FRAME MATERIAL: EXTRUDED RIGID FOAM PVC.
6. UNITS MUST BE GLAZED PER ASTM E1300-04, SEE SHEET 1 FOR GLASS OPTIONS.
7. APPROVED IMPACT PROTECTIVE SYSTEM IS NOT REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
8. SHIM AS REQUIRED AT EACH INSTALLATION ANCHOR WITH LOAD BEARING SHIM. SHIM WHERE SPACE OF 1/16" OR GREATER OCCURS. MAXIMUM ALLOWABLE SHIM STACK TO BE 1/4".
9. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 3/8" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
10. FOR ANCHORING INTO MASONRY/CONCRETE USE 3/16" TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE A 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 5/8" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
11. ALL FASTENERS TO BE CORROSION RESISTANT.
12. 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 BELOW:
 - A. WOOD – MINIMUM SPECIFIC GRAVITY OF G=0.42
 - B. CONCRETE – MINIMUM COMPRESSIVE STRENGTH OF 3,192 PSI.
 - C. MASONRY – STRENGTH CONFORMANCE TO ASTM C-90, GRADE N, TYPE 1 (OR GREATER).
13. TRANSOM UNITS MAY BE INSTALLED VERTICALLY OR HORIZONTALLY.

SIGNED: 03/25/2013

NAN YA PLASTICS CORP. USA 8989 NORTH LOOP EAST HOUSTON, TX 77029		
GTO 6020 OUT-SWING TRANSOM IMPACT ELEVATION AND NOTES		
DRAWN: V.L.	DWG NO. 08-01896	REV A
SCALE NTS	DATE 01/15/13	SHEET 1 OF 2

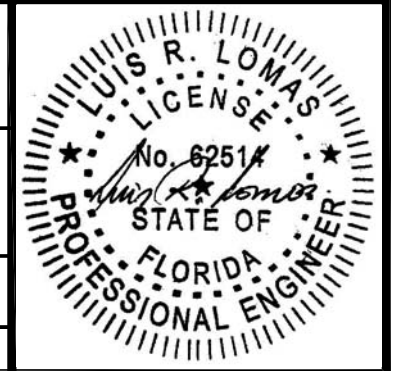
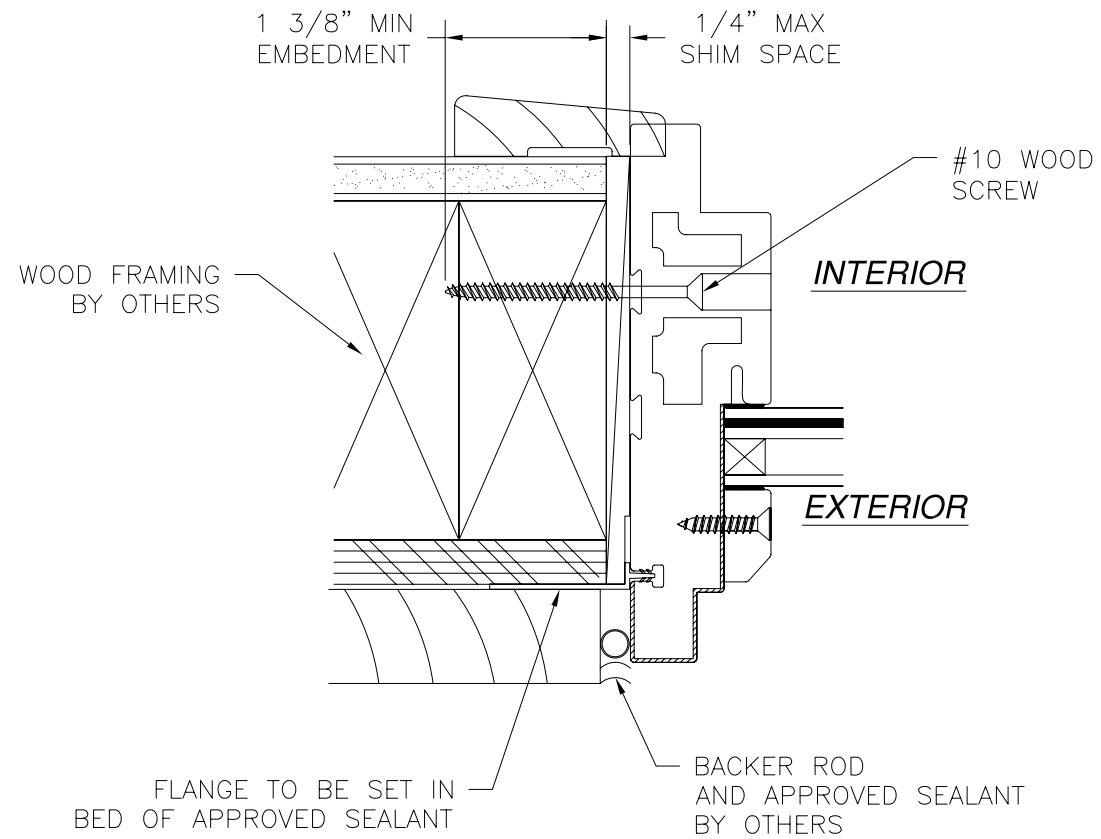
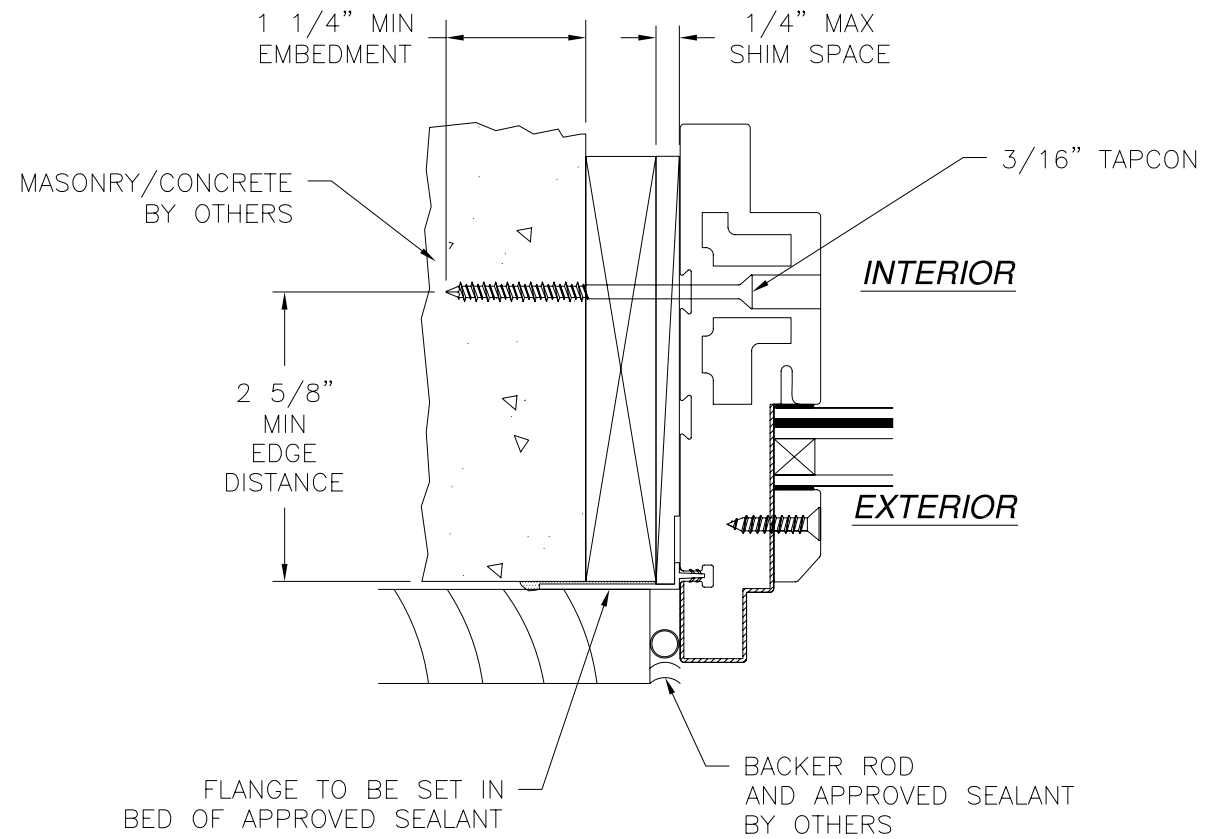


TABLE OF CONTENTS	
SHEET NO.	DESCRIPTION
1	ELEVATIONS AND NOTES
2	INSTALLATION DETAILS

REVISIONS			
REV	DESCRIPTION	DATE	APPROVED
A	REMOVED TRIPLE UNIT	03/25/13	R.L.



HORIZONTAL CROSS SECTION
2X BUCK/WOOD FRAMING INSTALLATION
JAMB SHOWN HEAD AND SILL SIMILAR



HORIZONTAL CROSS SECTION
MASONRY/CONCRETE INSTALLATION
JAMB SHOWN HEAD AND SILL SIMILAR

NAN YA PLASTICS CORP. USA 8989 NORTH LOOP EAST HOUSTON, TX 77029		
GTO 6020 OUT-SWING TRANSOM IMPACT INSTALLATION DETAILS		
DRAWN: V.L.	DWG NO. 08-01896	REV A
SCALE NTS	DATE 01/15/13	SHEET 2 OF 2

