PRODUCT EVALUATION
WIN-1923

Effective Date: August 1, 2014
Reevaluation Date: February 2016

The following product has been evaluated for compliance with the wind loads specified in the International Residential Code (IRC) and the International Building Code (IBC).

This product evaluation is not an endorsement of this product or a recommendation that this product be used. The Texas Department of Insurance has not authorized the use of any information contained in the product evaluation for advertising, or other commercial or promotional purpose.

This product evaluation is intended for use by those individuals who are following the design wind load criteria in Chapter 3 of the IRC and Section 1609 of the IBC. The design loads determined for the building or structure shall not exceed the design load rating specified for the products shown in the limitations section of this product evaluation. This product evaluation does not relieve a Texas licensed engineer of his responsibilities as outlined in the Texas Insurance Code, the Texas Administrative Code and the Texas Engineering Practice Act.

GTI and GTO Vinyl Inswing and Outswing Transoms, Non-Impact Resistant, manufactured by Nan Ya Plastics Corporation USA
8989 North Loop East
Houston, Texas 77029
Telephone: (713) 674-7822

General Description:

<table>
<thead>
<tr>
<th>System</th>
<th>Description</th>
<th>Label Rating</th>
<th>Design Pressure Rating</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>GTI 6020 Inswing Transom</td>
<td>TR-LC80 71 x 24</td>
<td>+80 / -80 psf</td>
</tr>
<tr>
<td>2</td>
<td>GTI 12020 Inswing Transom</td>
<td>TR-R75 145 x 24</td>
<td>+75 / -75 psf</td>
</tr>
<tr>
<td>3</td>
<td>GTO 6020 Outswing Transom</td>
<td>TR-LC80 71 x 24</td>
<td>+80 / -80 psf</td>
</tr>
<tr>
<td>4</td>
<td>GTO 12020 Outswing Transom</td>
<td>TR-R75 145 x 24</td>
<td>+75 / -75 psf</td>
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</tbody>
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Product Dimensions:

<table>
<thead>
<tr>
<th>System</th>
<th>Overall Size</th>
<th>Fixed Glass Daylight Opening Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>71.25” x 24.00”</td>
<td>68.31” x 21.13”</td>
</tr>
<tr>
<td>2</td>
<td>145.38” x 24.00”</td>
<td>Three (3): 46.40” x 21.13”</td>
</tr>
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<td>145.38” x 24.00”</td>
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Product Identification (Certification Agency Label on Door):

<table>
<thead>
<tr>
<th>System</th>
<th>Certification Agency</th>
<th>Manufacturer’s Name or Code Name</th>
<th>Product Name</th>
<th>Test Standards</th>
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<tbody>
<tr>
<td>1</td>
<td>NAMI</td>
<td>Nan Ya Plastics USA</td>
<td>GTI 6020 Vinyl Glazed Transom Fixed Window</td>
<td>AAMAWDMA/CSA 101/I.S.2/A440-05</td>
</tr>
<tr>
<td>2</td>
<td>NAMI</td>
<td>Nan Ya Plastics USA</td>
<td>GTI 12020 Vinyl Glazed Transom Fixed Window</td>
<td>AAMAWDMA/CSA 101/I.S.2/A440-05</td>
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Product Identification (Certification Agency Label on Door) - Continued:

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<td>4</td>
<td>NAMI</td>
<td>Nan Ya Plastics USA</td>
<td>GTO 12020 Vinyl Glazed Transom Fixed Window</td>
<td>AAMAWDMA/CSA 101/I.S.2/A440-05</td>
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Impact Resistance:

<table>
<thead>
<tr>
<th>Impact Resistant</th>
<th>Requirement</th>
</tr>
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<tbody>
<tr>
<td>Yes</td>
<td>These products satisfy the Texas Department of Insurance's criteria for protection from windborne debris in the Inland I and Seaward zone. The assemblies may be installed at any height on the structure as long as the design pressure rating for the assemblies is not exceeded.</td>
</tr>
</tbody>
</table>

Qualified Configurations (Systems 2 and 4): O / OO / OOO.

Installation:

Design Drawings:

**System 1**: The window shall be installed in accordance with Drawing No. 08-02132, titled “GTI 6020 Inswing Transom Non-Impact,” sheets 1 through 2 of 2, dated July 11, 2013, signed and sealed by Luis R. Lomas., P.E on July 11, 2013. The stated drawings will be referred to as the approved drawings in this evaluation report.

**System 2**: The window shall be installed in accordance with Drawing No. 08-02131, titled “GTI 12020 Inswing Transom Non-Impact,” sheets 1 through 3 of 3, dated July 15, 2013, signed and sealed by Luis R. Lomas., P.E on July 15, 2013. The stated drawings will be referred to as the approved drawings in this evaluation report.

**System 3**: The window shall be installed in accordance with Drawing No. 08-02134, titled “GTO 6020 Outswing Transom Non-Impact,” sheets 1 through 2 of 2, dated July 16, 2013, signed and sealed by Luis R. Lomas., P.E on July 16, 2013. The stated drawings will be referred to as the approved drawings in this evaluation report.

**System 4**: The window shall be installed in accordance with Drawing No. 08-02133, titled “GTO 12020 Outswing Transom Non-Impact,” sheets 1 through 3 of 3, dated July 11, 2013, signed and sealed by Luis R. Lomas., P.E on July 11, 2013. The stated drawings will be referred to as the approved drawings in this evaluation report.

Wall Framing Construction: The doors may be mounted to several types of wall framing construction. The types of wall framing construction allowed include:

- Concrete (minimum compressive strength: 3,192 psi)
- Hollow concrete block; ASTM C-90, Grade N, Type 1 (or greater)
- Wood dimension lumber (minimum Spruce-Pine-Fir)
Installation Details:
- Refer to the approved drawings for installation details.
- The approved drawings indicate the minimum embedment depths for the fasteners and the minimum edge distances (minimum distance fastener must be from the edge of the substrate material) for the fasteners.

Note: The manufacturer’s installation instructions shall be available on the job site during installation. All fasteners shall be corrosion resistant as specified in the International Residential Code (IRC), the International Building Code (IBC), and the Texas Revisions.
NOTES:
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE 2006 IBC AND 2006 IRC WITH STATE OF TEXAS MODIFICATIONS.
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 OF 1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
5. FRAME MATERIAL: EXTRUDED RHD FOAM PVC. UNITS MUST BE GLAZED PER ASTM E1300-04. SEE SHEET 1 FOR GLASS OPTIONS.
6. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DEBRIS REGIONS.
7. 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".
8. FOR ANCHORING INTO WOOD FRAMING OR 2X BUCK USE #10 WOOD SCREWS WITH SUFFICIENT LENGTH TO ACHIEVE 1 3/8" MINIMUM EMBEDMENT INTO SUBSTRATE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
9. FOR ANCHORING INTO MASONRY/CONCRETE USE 3/16" TAPCONS WITH SUFFICIENT LENGTH TO ACHIEVE 1 1/4" MINIMUM EMBEDMENT INTO SUBSTRATE WITH 2 5/8" MINIMUM EDGE DISTANCE. LOCATE ANCHORS AS SHOWN IN ELEVATIONS AND INSTALLATION DETAILS.
10. ALL FASTENERS TO BE CORROSION RESISTANT.
11. INSTALLATION ANCHORS SHALL BE INSTALLED IN ACCORDANCE WITH Anchor MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTH LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW:
   A. WOOD = MINIMUM SPECIFIC GRAVITY OF C=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).
12. TRANSOM UNITS MAY BE INSTALLED VERTICALLY OR HORIZONTALLY.
HORIZONTAL CROSS SECTION
2X BUCK/WOOD FRAMING INSTALLATION
JAMB SHOWN HEAD AND SILL SIMILAR

#10 WOOD SCREW

WOOD FRAMING BY OTHERS

1 3/8" MIN EMBEDMENT
1/4" MAX SHIM SPACE

FLANGE TO BE SET IN BED OF APPROVED SEALANT

BACKER ROD AND APPROVED SEALANT BY OTHERS

INTERIOR

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

3/16" TAPCON

INTERIOR

1 1/4" MIN EMBEDMENT
1/4" MAX SHIM SPACE

MASONRY/CONCRETE BY OTHERS

EXTERIOR

2 5/8" MIN EDGE DISTANCE

FLANGE TO BE SET IN BED OF APPROVED SEALANT

BACKER ROD AND APPROVED SEALANT BY OTHERS

EXTERIOR

SIGNED: 07/11/2013

NAN YA PLASTICS CORP. USA
8999 NORTH LOOP EAST
HOUSTON, TX 77029

GTI 6020 INSWING TRANSOM
NON-ImpACT
INSTALLATION DETAILS

ELEVATION

SWG NO. 08-02132

SCALE NTS 07/11/13 SHEET 2 OF 2
NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH 
REQUIREMENTS OF THE 2006 IRC AND 2006 IRC WITH STATE OF TEXAS MODIFICATIONS.
2. WOOD FRAME 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.
   DESIGN 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 CH3-1.6 WAS USED FOR WOOD ANCHOR 
   CALCULATIONS.
5. FRAME MATERIAL: EXTRUDED POLY FOAM PVC.
6. UNITS MUST BE GLAZED PER ASTM E300-04, SEE SHEET 2 FOR CLASS OPTIONS.
7. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THE 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 5/16" 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 0.40-42 
   B. CONCRETE - MINIMUM COMPRESSIVE STRENGTH OF 3,192 PSI.
   C. MASONRY - STRENGTH CONFORMANCE TO ASTM C-80, GRADE N, TYPE 1 (OR GREATER).
13. TRANSOM UNITS MAY BE INSTALLED VERTICALLY OR HORIZONTALLY.

SIGNED: 07/15/2013

NAN YA PLASTICS CORP. USA
8989 NORTH LOOP EAST
HOUSTON, TX 77029

GT12020 INSWING TRANSOM 
NON-IMPACT 
NOTES

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<tr>
<td>3</td>
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Luis R. Rivas P.E.
TX No: 101889

08-2131

07/15/13
### GTI 12020 INSWING TRANSOM

#### Exteriour View

<table>
<thead>
<tr>
<th>Design Pressure Rating</th>
<th>Impact Rating</th>
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<tbody>
<tr>
<td>±75.0PSF</td>
<td>NONE</td>
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#### Glazing Detail
- 1/8" TEMP
- 1/8" TEMP
- Interior
- Exterior
- Back Bedding Sealant Compound
- 16GA Brad Nail 1.3/16" Long Located 5" Max. O.C.
- Glazing Bead Foam PVC
- Inswing Frame Foam PVC

#### Mullion Detail
- Mullion Foam PVC
- Glazing Bead Foam PVC
- 16GA Brad Nail 1.3/16" Long Located 5" Max. O.C.
NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE 2006 IBC AND 2006 IRC WITH STATE OF TEXAS MODIFICATIONS.

2. WOOD FRAMING AND MASONRY OPENING TO BE DESIGNED AND ANCHORED TO PROPERLY TRANSFER ALL LOADING 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.

4. ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR CH-1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.

5. FRAME MATERIAL EXTRUDED HDU FOAM PVC.

6. UNITS MUST BE GLAZED PER ASTM E500-84. SEE SHEET 2 FOR GLASS OPTIONS.

7. APPROVED IMPACT PROTECTIVE SYSTEM IS REQUIRED FOR THIS PRODUCT IN WIND BORNE DESIRES 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 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" TAPCON WITH SUFFICIENT LENGTH TO ACHIEVE 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 MANUFACTURER'S INSTALLATION INSTRUCTIONS AND ANCHORS SHALL NOT BE USED IN SUBSTRATES WITH STRENGTH LESS THAN THE MINIMUM STRENGTH SPECIFIED BELOW:
   A. WOOD = MINIMUM SPECIFIC GRAVITY OF 0.40.
   B. CONCRETE = MINIMUM COMPRESSIVE STRENGTH OF 3,192 PSI.
   C. MASONRY = STRENGTH CONFORMING TO ASTM C-390, GRADE N, TYPE 1 (OR GREATER).

13. TRANSOM UNITS MAY BE INSTALLED VERTICALLY OR HORIZONTALLY.
GTO 6020 GLAZED TRANSOM
EXTERIOR VIEW

DESIGN PRESSURE RATING
IMPACT RATING
±80.0PSF
NONE

NOTES:
1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH REQUIREMENTS OF THE 2006 IBC AND 2006 IRC WITH STATE OF TEXAS MODIFICATIONS.
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 DISILLUSION MATERIALS MUST BE SEPARATED WITH APPROVED COATING OR MEMBRANE.
4. ALLOWABLE STRESS INCREASE OF 1/3 WAS NOT USED IN THE DESIGN OF THE PRODUCT SHOWN HEREIN. WIND LOAD DURATION FACTOR 0.5 = 1.6 WAS USED FOR WOOD ANCHOR CALCULATIONS.
5. FRAME MATERIAL: EXTRUDED RIND FOAM PVC.
6. UNITS MUST BE GLAZED PER ASTM E1300-04, SEE SHEET 1 FOR GLASS OPTIONS.
7. APPROVED IMPACT PROTECTIVE SYSTEM IS 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 1x 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 = 0.45
B. CONCRETE - MINIMUM COMPRRESSIVE 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.

GLAZING DETAIL

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SHEET NO. DESCRIPTION
1 ELEVATIONS AND NOTES
2 INSTALLATION DETAILS

SIGNED: 07/16/2013

NAN YA PLASTICS CORP. USA
8989 NORTH LOOP EAST
HOUSTON, TX 77029
GTO 6020 OUTSWING TRANSOM
NON-IMPACT ELEVATION AND NOTES

Luís R. Lemos P.E.
Texas No. 101889

08-02134
07/16/13
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