

143.191 CA - 008 - BILL OF MATERIALS (TRUTH HARDWARE)

| ITEM NO. | MAT'L TYPE | DESCRIPTION | QUANTITY | PART NO. | FAB DWG. NO | SOURCE |
|----------|------------|--|----------|--------------------------------------|--------------|--------|
| 1 | VINYL | HEAD ✓ | 1 | 10008052 (FIN) / 10008053 (FILESS) ✓ | 10815-2 | A |
| 2 | VINYL | SILL ✓ | 1 | 10008052 (FIN) / 10008053 (FILESS) ✓ | 10815-3 | A |
| 3 | VINYL | LOCK JAMB ✓ | 1 | 10008052 (FIN) / 10008053 (FILESS) ✓ | 10008052F-28 | A |
| 4 | VINYL | HINGE JAMB ✓ | 1 | 10008052 (FIN) / 10008053 (FILESS) ✓ | 10815-0 | A |
| 5 | VINYL | TOP RAIL ✓ | 1 | 10005491 | 10814-2 | A |
| 6 | VINYL | BOTTOM RAIL ✓ | 1 | 10005491 | 10814-3 | A |
| 7 | VINYL | KEEPER STILE ✓ | 1 | 10005491 | 10005491F-19 | A |
| 8 | VINYL | HINGE STILE ✓ | 1 | 10005491 | 10814-0 | A |
| 9 | VINYL | GLAZING BEAD ✓ | 4 | 10005470 | STRAIGHT CUT | A |
| 10 | VINYL | OPTIONAL "J" ACCESSORY ✓ | 4 | 10008287 | STRAIGHT CUT | A |
| 11 | MILL. ALUM | SASH REINFORCEMENT ✓ | 4 | 10500006 | STRAIGHT CUT | O |
| 12 | MILL. ALUM | SASH REINFORCEMENT ✓ | 2 | 10300091 | STRAIGHT CUT | DDDD |
| 13 | MILL. ALUM | FRAME REINFORCEMENT ✓ | 2 | 10300091 | STRAIGHT CUT | DDDD |
| 14 | | SASH SEAL | 4 | QWS-530 | | I |
| 15 | | | | | | |
| 16 | | | | | | |
| 17 | | 3/4" GLASS | 1 | REFER TO APPLICABLE TEST REPORT | | ANY |
| 18 | | GLAZING COMPOUND ✓ | AS REQD | REFER TO APPLICABLE TEST REPORT | | ANY |
| 19 | | SETTING BLOCKS (REFER TO IG SUPPLIER GUIDELINES) | AS REQD | REFER TO APPLICABLE TEST REPORT | | ANY |
| 20 | | | | | | |
| 21 | | SCREEN ASSEMBLY ✓ | 1 | TBD | | ANY |
| 22 | | | | | | |
| 23 | | SNUBBER - Frame ✓ | AS REQD | 10300095 | | A |
| 24 | | SNUBBER - Sash ✓ | AS REQD | 10300094 | | A |
| 25 | | SNUBBER SCREWS ✓ | AS REQD | #6 x 1/2" S.S. PFH | | Z |
| 26 | | | | | | |
| 27 | | INSTALLATION DETAILS - #8 X 1-1/4" PPH ✓ | AS REQD | REFER TO APPLICABLE TEST REPORT | | |
| 28 | | | | | | |
| 29 | | | | | | |

ELEMENT MATERIALS TECHNOLOGY

| REV | DATE | DESCRIPTION | BY |
|-----|------|-------------|----|
| | | | |

PAGE 1

ESP NO. 014394982
 Date Verified: 12-13-13
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NAME: _____

DWN BY: DJS

CHKD BY: _____

DWG NO: 143191CA-008.XIS

143.191 CA - 008 - BILL OF MATERIALS (TRUTH HARDWARE)

| ITEM NO. | DESCRIPTION | QUANTITY | PART NO. | FAB DWG. NO | SOURCE |
|----------|--|----------|--|-------------|--------|
| 30 | OPERATOR (Frames Widths : 24" To 40") | | | | |
| 31 | MAXIM DUAL ARM OPERATOR | 1 | 50.00.XX.XXX Left Hand or Right Hand | | G |
| 32 | #8 X 3/4 PFH (Operator) | 6 | 19218 | | |
| 33 | GASKET | 1 | 31882 | | |
| 34 | STUD BRACKET | 1 | 12510.92 Left Hand / 12511.92 Right Hand | | |
| 35 | #8 X 1 PFH (Stud Bracket) | 3 | 19240.92 | | |
| 36 | TRACK & SLIDER ASSEMBLY | 1 | 11576.92 | | |
| 37 | #8 X 3/4 PFH | 3 | 19218 | | |
| 38 | HANDLE KNOB S/A | 1 | 11454 | | |
| 39 | WASHABILITY HINGE (Lower Left / Upper Right) | 1 | 14.97.XX.XXX | | |
| 40 | WASHABILITY HINGE (Upper Left / Lower Right) | 1 | 14.97.XX.XXX | | |
| 41 | #7 X 5/8 PFH UNDERCUT (S.S.) (Hinge Track) | 8 | TBD | | |
| 42 | #8 X 1 PFH (Hinge Sash Arm) | 8 | TBD | | |
| 43 | SPLINE CAP | 1 | 21306 | | |
| 44 | | | | | |
| 45 | | | | | |
| 46 | | | | | |
| 47 | LOCK | | | | G |
| 48 | LOCK ASSEMBLY | 1 | 24-33 | | |
| 49 | SUPPORT PLATE | 1 | 21132 | | |
| 50 | #10-24 X 9/16 PPH SELF THREADING SCREW | 2 | 19545 | | |
| 51 | TIE BAR GUIDE | AS REQD | 11099P001 | | |
| 52 | #8 X 1.25 PPH (Tie Bar Guide) | AS REQD | TBD | | |
| 53 | KEEPER | AS REQD | 41129 Left Hand / 41130 Right Hand | | |
| 54 | #8 X 1/2 PFH (Keeper) | AS REQD | 19235 | | |
| 55 | TIE BAR ASSEMBLY | AS REQD | REFER TO FAB 10005491-F-19 | | |
| 56 | | | | | |
| 57 | | | | | |
| 58 | | | | | |
| 59 | | | | | |

ELEMENT MATERIALS TECHNOLOGY

| REV | DATE | DESCRIPTION | BY |
|-----|------|--------------------------------|----|
| | | ESP NO. <u>84994P/S2</u> | |
| | | Date Verified: <u>12-13-13</u> | |
| | | Verified By: <u>NOB</u> | |

PAGE 2

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NAME: 143.191 CA - 008

DWN BY: DJS

CHKD BY:

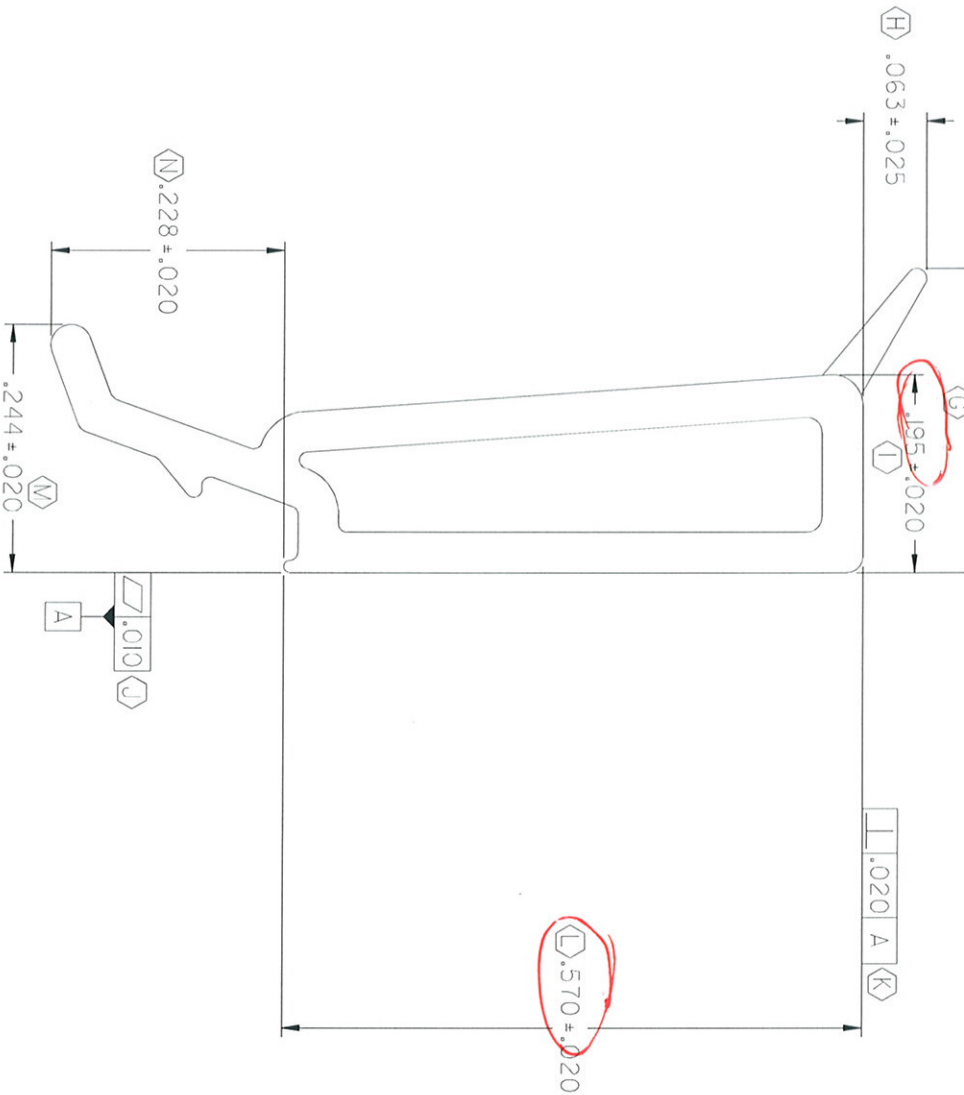
DWG NO: 143191CA-008.XIS



SCALE 1:1

CAD MAINTAINED, CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

| REVISION HISTORY | | |
|------------------|--------------------|----------|
| REV | DESCRIPTION | DATE |
| AD | CHANGED DIMENSIONS | 06/09/20 |
| | | APPROVED |
| | | 3MB |



WALL THICKNESS
 .040 -

- NOTES:
1. STD00013 STRAIGHTNESS CLASS E AND LENGTH TOLERANCES APPL Y(A)
 2. INTERPRET ALL TOLERANCE APPLICATIONS PER STD00013 (B)
 3. UNSPECIFIED EXTERNAL RADI = .XXX +.010 / -.005 (C)
 4. UNSPECIFIED INTERNAL RADI = .XXX +.020 / -.005 (D)
 5. UNSPECIFIED EXTERNAL WALL THICKNESS = .XXX +/- 10% (E)
 6. UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- 20% (F)

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 2 PLACES DIM ± .005 PER
 INTERPRET DIM AND PER
 ASME Y14.5M - 1994

THIRD ANGLE PROJECTION

| DESIGN BY: | DATE: | DATE: |
|------------|----------|----------|
| MITC | 93/05/01 | 93/05/01 |
| MITC | 93/05/01 | 93/05/01 |
| DATE: | DATE: | DATE: |
| DATE: | DATE: | DATE: |
| FILENAME: | 71062 | |

deceuninck 20 NORTH AMERICA
 NORTH AMERICA

NAME: GLAZING BEAD

SIZE DWG. NO: 10005470.SH

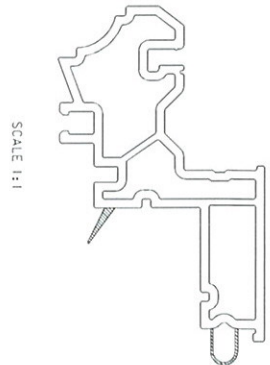
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ELEMENT MATERIALS TECHNOLOGY

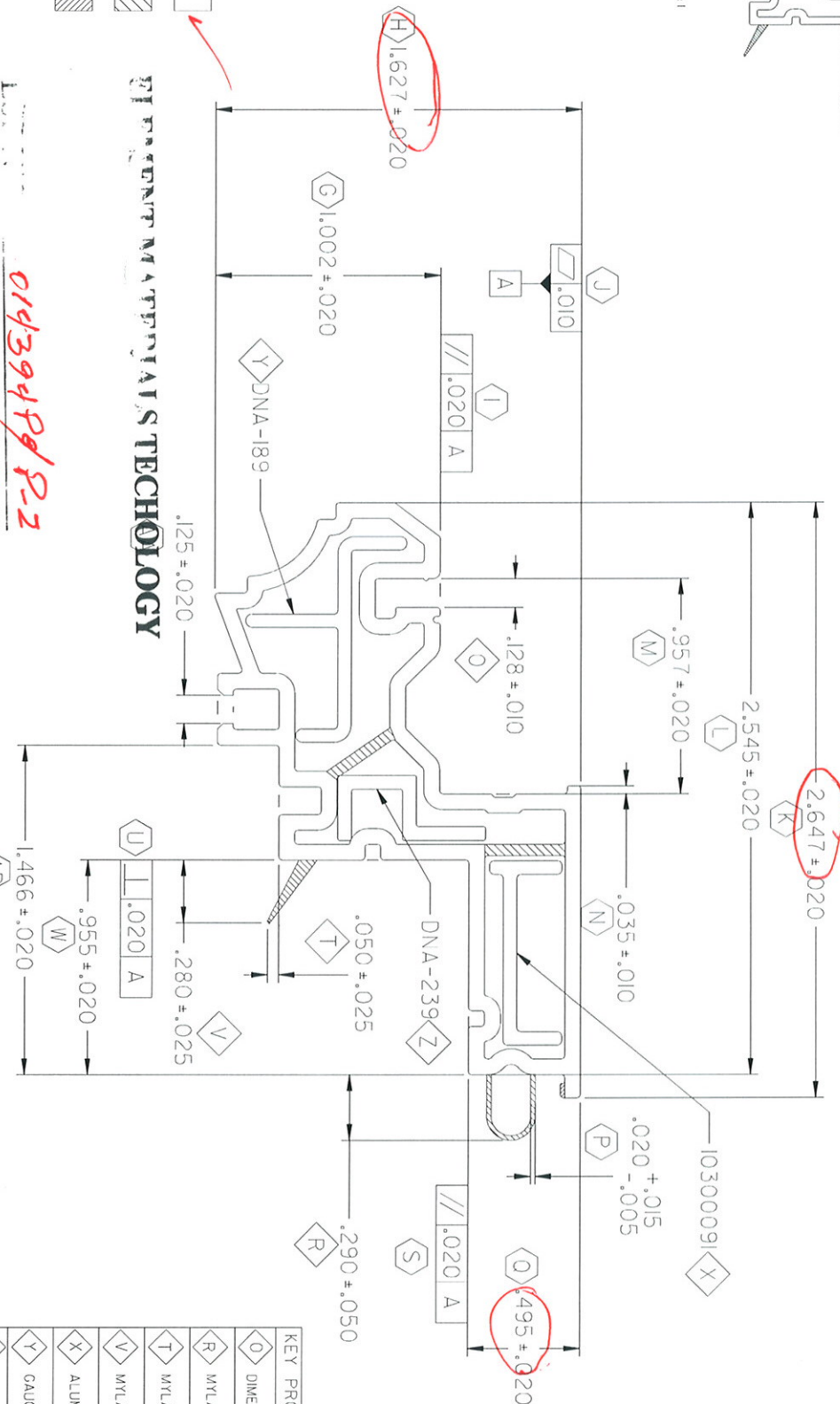
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 Date Verified: 12-13-13
 Verified By: [Signature]

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| REVISION HISTORY | | | |
|------------------|---------------|----------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| H | ADDED DNA-239 | 10/03/19 | 3WB |



SCALE 1:1



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Date Verified: 19-13-13
014394 Pd P-2

Verified By: *[Signature]*

- NOTES:
- STD00013 STRAIGHTNESS CLASS A AND LENGTH TOLERANCES APPLY
 - INTERPRET ALL TOLERANCE APPLICATIONS PER STD0013
 - UNSPECIFIED EXTERNAL RADI = .XXX +.010 / -.005
 - UNSPECIFIED INTERNAL RADI = .XXX +.020 / -.005
 - UNSPECIFIED EXTERNAL WALL THICKNESS = .XXX +/- .10%
 - UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- .20%

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2 PL. ON ANGLES * T
INTERPRET DIM AND TOL PER
ASME Y14.5M - 1994

THIRD ANGLE PROJECTION

| DESIGN BY: | | DATE: | |
|------------|--|----------|--|
| CRB | | 00/07/19 | |
| DRAWN BY: | | DATE: | |
| RED | | 08/04/17 | |
| AUTH: | | DATE: | |
| | | | |
| FILENAME: | | DATE: | |
| 9809 | | | |

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MAIN SASH - CA

SCALE: 2:1
SHEET: 10 of 1

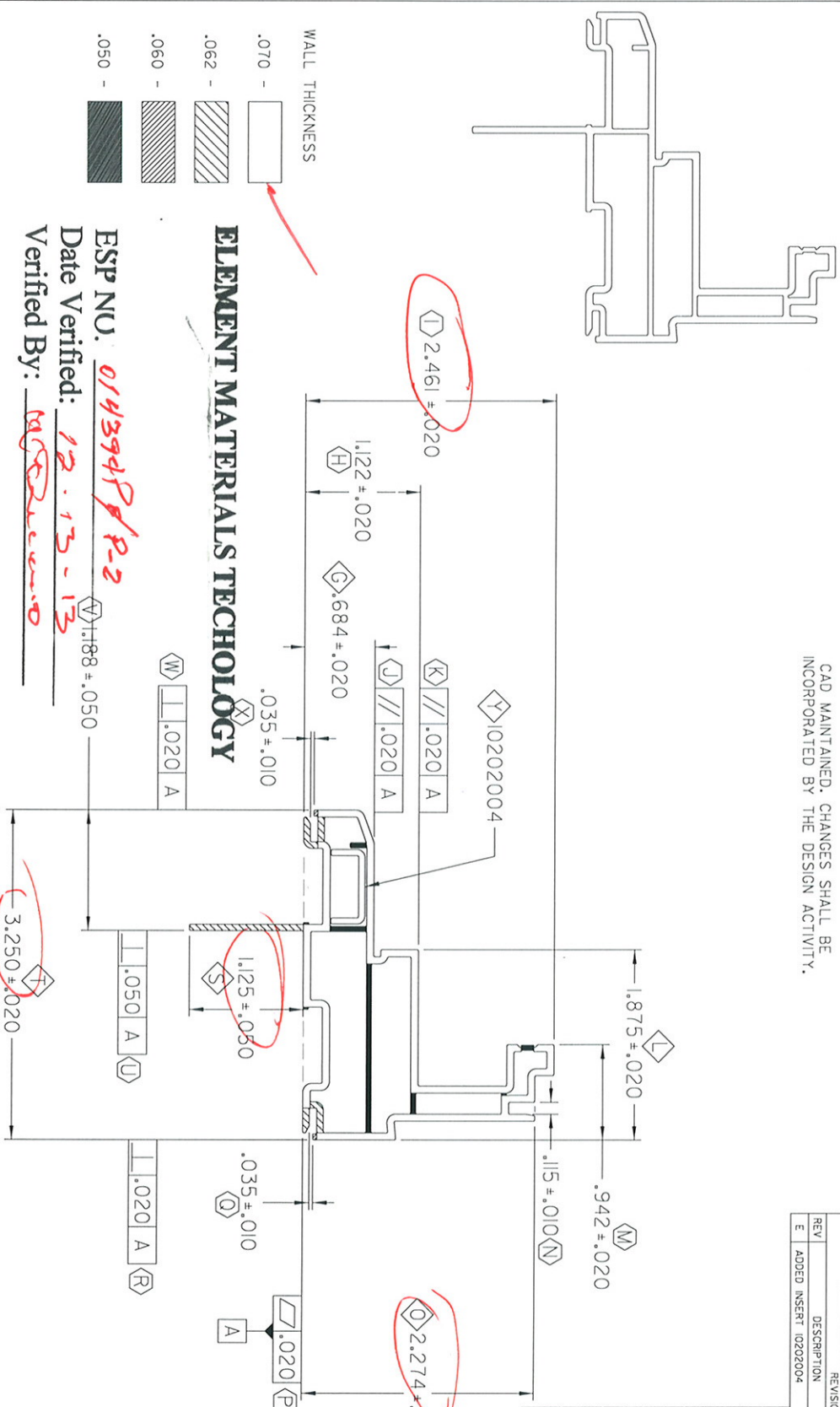
| KEY PRODUCT CHARACTERISTICS | |
|-----------------------------|-------------------------|
| Q | DIMENSION J18 - .138 |
| R | MTLAR 10005484.OP REV E |
| T | MTLAR 10005484.OP REV E |
| V | MTLAR 10005484.OP REV E |
| X | ALUM INSERT 10300091 |
| Y | GAUGE DNA-189 |
| Z | GAUGE DNA-239 |

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

| REV | DESCRIPTION | DATE | APPROVED |
|-----|-----------------------|----------|----------|
| E | ADDED INSERT 10202004 | 11/08/09 | BMB |

REVISION HISTORY

| KEY | PRODUCT CHARACTERISTICS |
|-----|-------------------------|
| G | DIMENSION .664 - .704 |
| L | DIMENSION 1.955 - 1.995 |
| O | DIMENSION 2.254 - 2.294 |
| S | DIMENSION 1.100 - 1.150 |
| T | DIMENSION 3.230 - 3.270 |
| Y | INSERT 10202004 |



ELEMENT MATERIALS TECHNOLOGY

- WALL THICKNESS
- .070 - [Hatched Pattern]
 - .062 - [Hatched Pattern]
 - .060 - [Hatched Pattern]
 - .050 - [Hatched Pattern]

ESP NU. *0143948/P-2*
 Date Verified: *12.13.13*
 Verified By: *M.R. [Signature]*

- NOTES:
1. STDD0013 STRAIGHTNESS CLASS A AND LENGTH TOLERANCES APPL Y(A)
 2. INTERPRET ALL TOLERANCE APPLICATIONS PER STDD0013(B)
 3. UNSPECIFIED EXTERNAL RADI = .XXX +.010 / -.005(D)
 4. UNSPECIFIED INTERNAL RADI = .XXX +.020 / -.005(D)
 5. UNSPECIFIED EXTERNAL WALL THICKNESS = .XXX +/- 10%(E)
 6. UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- 20%(E)

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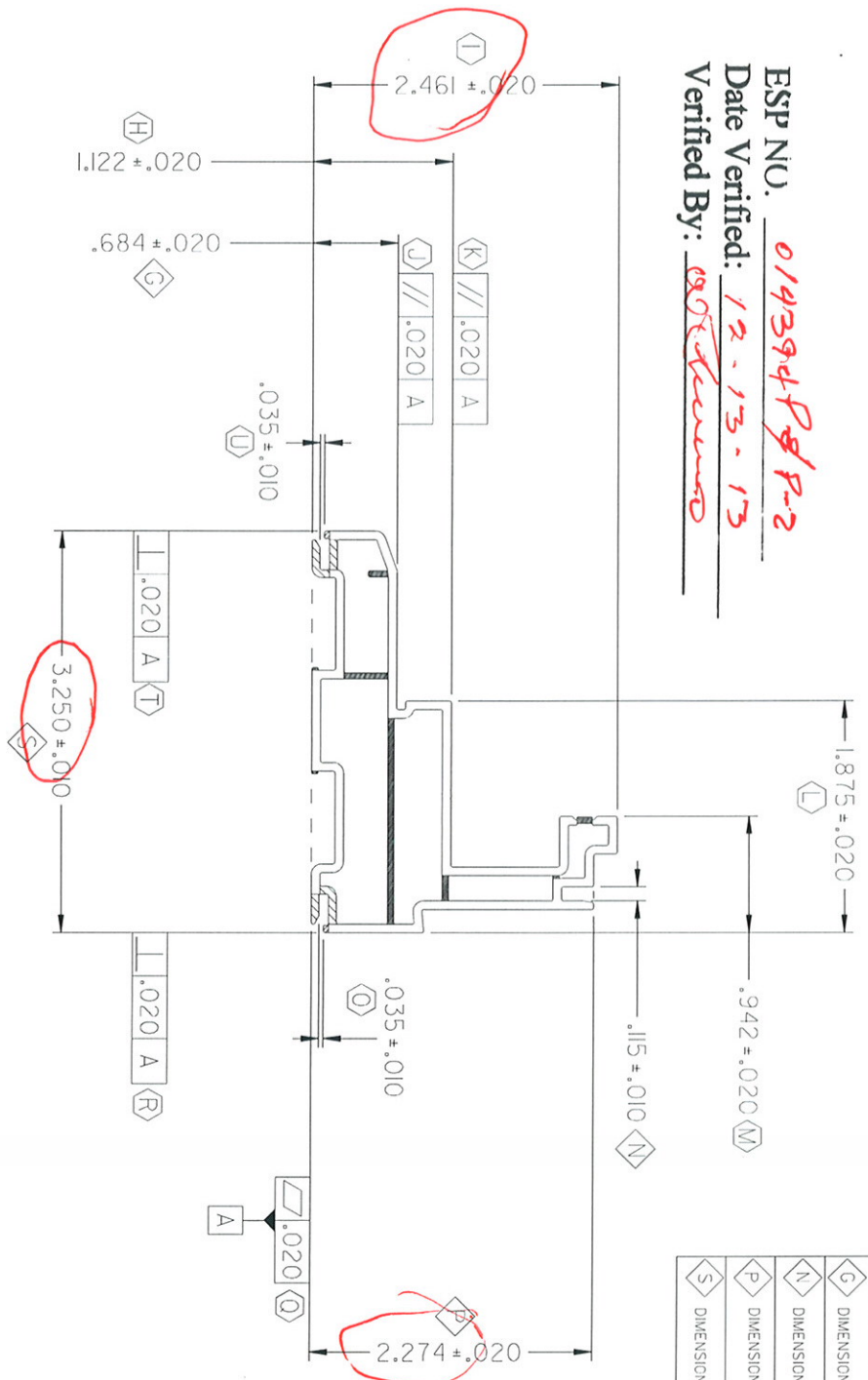
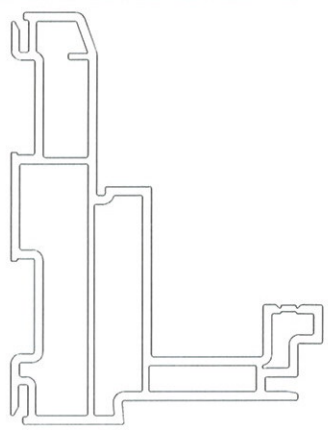
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| DATE: | 00/08/28 |
| DRAWN BY: | CRB |
| DATE: | 00/08/28 |
| AUTH: | |
| DATE: | |
| FILENAME: | 85094 |

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 231 NORTH CANTON ROAD
 MONROE, OHIO 45030

NAME: MAIN FRAME - CA
 SIZE DWG. NO: 10008952.SH
 SCALE: 1:1
 SHEET: 1 OF 1

CAD MAINTAINED. CHANGES SHALL BE
ELEMENT MATERIALS TECHNOLOGY

ESP NO. 014394 P-2
 Date Verified: 12-13-13
 Verified By: [Signature]



WALL THICKNESS

| | |
|--------|----------|
| .070 - | [Symbol] |
| .062 - | [Symbol] |
| .060 - | [Symbol] |
| .050 - | [Symbol] |

- NOTES:
- STANDARD STRAIGHTNESS CLASS A AND LENGTH TOLERANCES APPLY
 - INTERPRET ALL TOLERANCE APPLICATIONS PER STD0013
 - UNSPECIFIED EXTERNAL RADI = .XXX + .010 / -.005
 - UNSPECIFIED INTERNAL RADI = .XXX + .020 / -.005
 - UNSPECIFIED EXTERNAL WALL THICKNESS = .XXX +/- .10%
 - UNSPECIFIED INTERNAL WALL THICKNESS = .XXX +/- .20%

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 TOL ON ANGLES: 1°
 2 PL: .010° 3 PL: .005°
 INTERPRET DIM AND TOL PER
 ASME Y14.5M - 1994

THIRD ANGLE PROJECTION

| | |
|------------|----------|
| DESIGN BY: | MTC |
| DATE: | 10/04/26 |
| DRAWN BY: | MTC |
| DATE: | 10/04/26 |
| AUTH: | |
| DATE: | |
| AUTH: | |
| DATE: | |
| FILENAME: | 99011 |

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NAME: MAIN FRAME - CA

SIZE/DWG. NO.: 10008053.SH

SCALE: 1:1

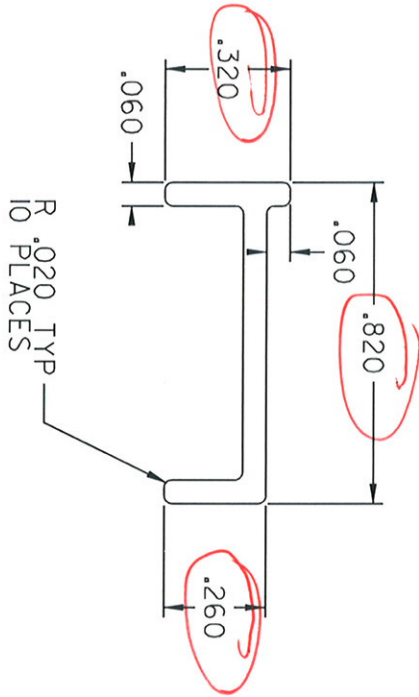
SHEET: 1 OF 1

REVISION HISTORY

| REV | DESCRIPTION | DATE | APPROVED |
|------|-------------|------|----------|
| ---- | ---- | --- | --- |

KEY PRODUCT CHARACTERISTICS

| | |
|---|-------------------------|
| G | DIMENSION .664 - .704 |
| N | DIMENSION .105 - .125 |
| P | DIMENSION 2.254 - 2.294 |
| S | DIMENSION 3.230 - 3.270 |



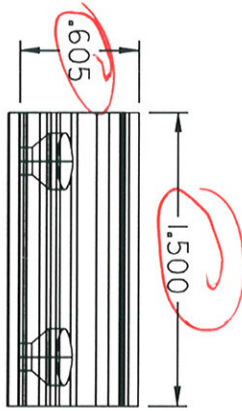
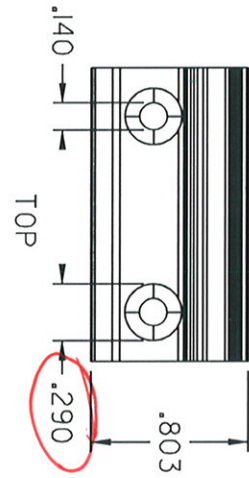
ELEMENT MATERIALS TECHNOLOGY

ESP NO. 019394 P8 R-2
 Date Verified: 12-13-13
 Verified By: MTI/Barrow

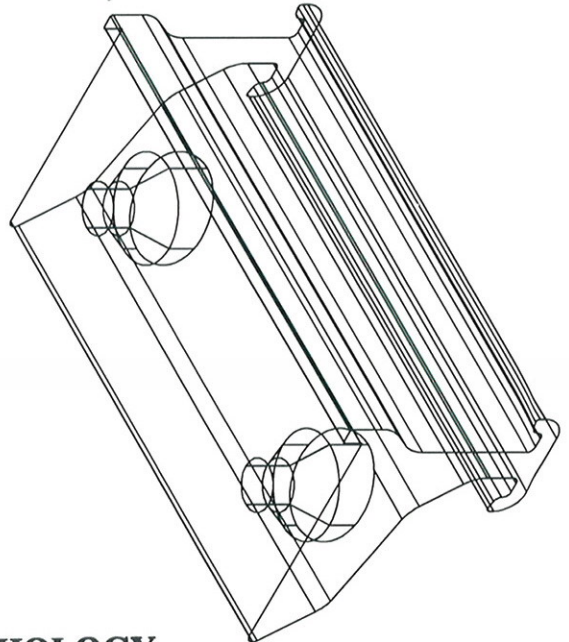
6005-T5 ALUMINUM

| | | | | | | | |
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| <p>⊕</p> | | <p>FILENAME: 10300091.dgn</p> | | <p>DATE: _____ DATE: _____</p> | | <p>REV. NEW</p> | |

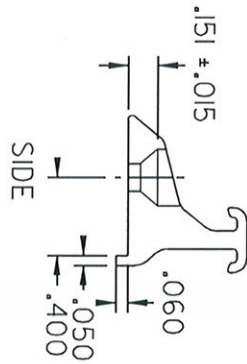
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FRONT



SCALE 4 : 1



SIDE

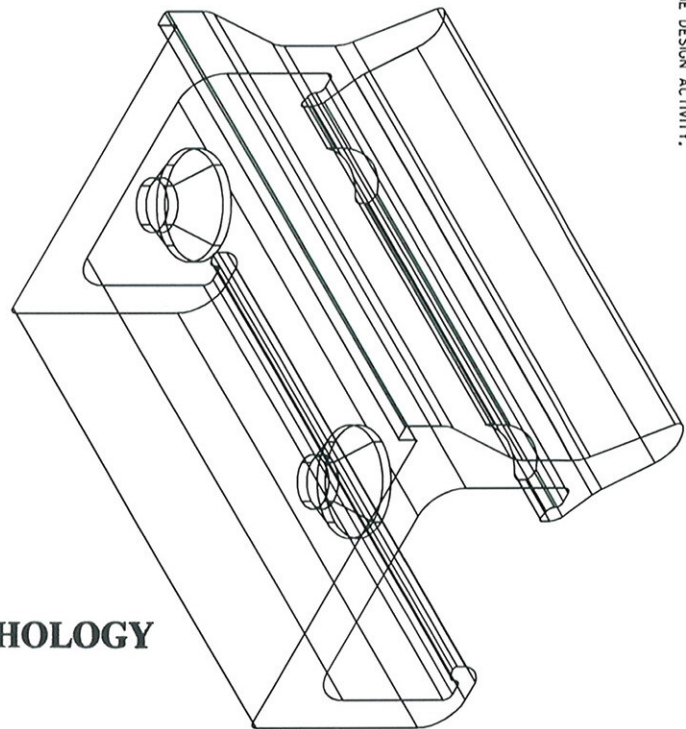
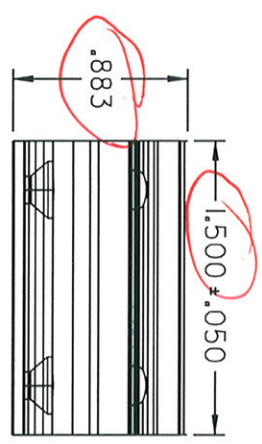
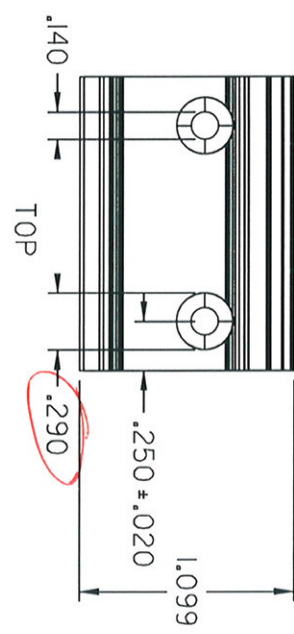
ELEMENT MATERIALS TECHNOLOGY

ESP NO. 0143948 of P-2
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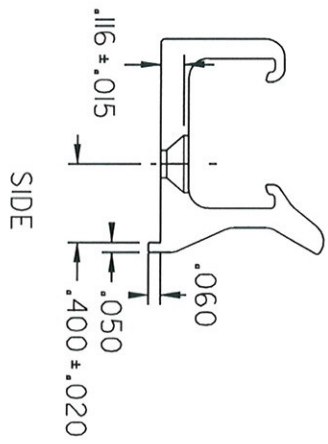
6005-T5 ALUMINIUM

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| DESIGN BY: JCM | DATE: 06/03/02 |
| DRAWN BY: JCM | DATE: 06/07/13 |
| AUTH: JCM | DATE: [] |
| FILENAME: 10300094.dgn | SCALE: 2 : 1 |
| | |
| CA SASH SNUBBER | |
| SIZE DWG: NO1 | REV: NEW |
| SCALE: 2 : 1 | SHEET: 1 OF 1 |

CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.



SCALE 4 : 1



ELEMENT MATERIALS TECHNOLOGY

6005-T5 ALUMINIUM

ESP NO. 0143947 P-2
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 TOL ON ANGLES ± 1°
 2 PL ± 0.010 3 PL ± 0.005
 INTERPRET DIM AND TOL PER
 ASME Y14.5M - 1994

THIRD ANGLE PROJECTION



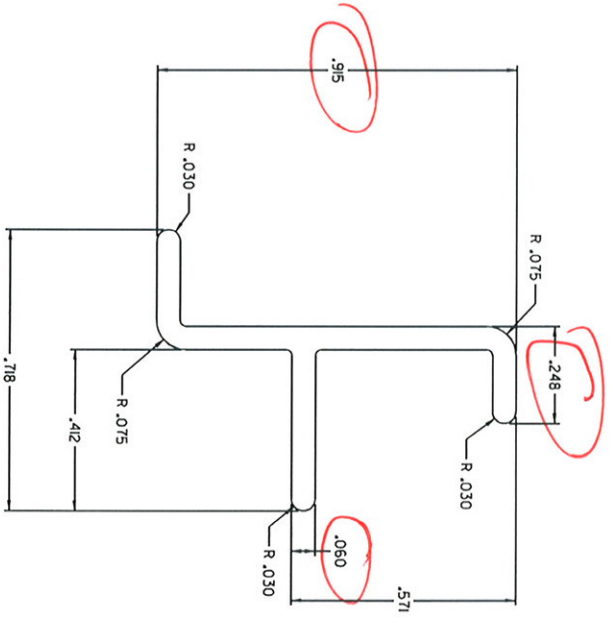
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| DATE: | 06/03/02 |
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| DATE: | 06/08/08 |
| AUTH: | DATE: |
| AUTH: | DATE: |
| FILENAME: | 10300095.dgn |

| | |
|---------------|------------------|
| NAME: | CA FRAME SNUBBER |
| SIZE/DWG. NO: | 10300095 |
| SCALE: | 2:1 (LBS/FT) |
| SHEET: | 1 OF 1 |
| REV.: | NEW |



CAD MAINTAINED. CHANGES SHALL BE INCORPORATED BY THE DESIGN ACTIVITY.

| REVISION HISTORY | | | |
|------------------|---------------------|----------|----------|
| REV | DESCRIPTION | DATE | APPROVED |
| B | UPDATED TITLE BLOCK | 06/12/04 | JGM |



ELEMENT MATERIALS TECHNOLOGY

ALL UNSPECIFIED RADII SHALL BE .015"

EST. NO.: 014394 P/S 8.2
 Date Verified: 12-13-13
 Verified By: 1902 R. J. ...

MATERIAL: 6063 - T5 ALUMINUM

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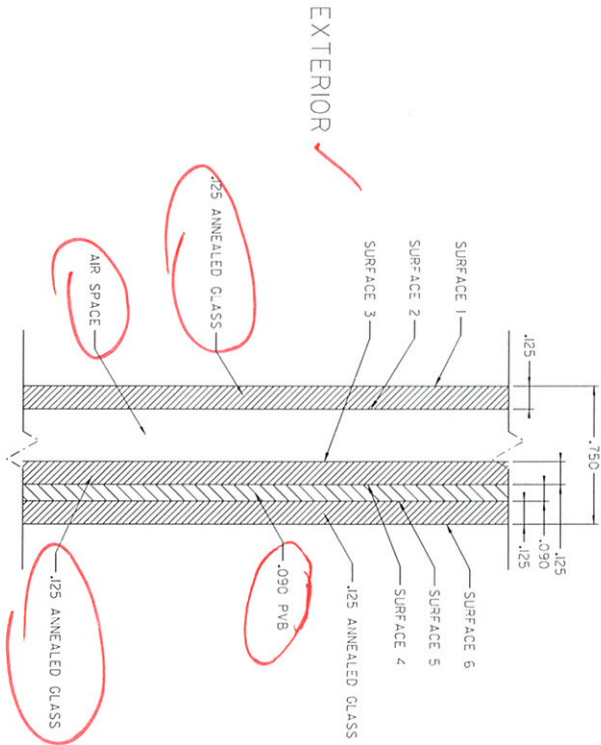
UNLESS OTHERWISE SPECIFIED
 DIM ARE IN INCHES
 TOL. ON ANGLES: 1°
 2 PL.: 0.010" 3 PL.: 0.005"
 INTERPRET DIM AND TOL PER
 ASME Y14.5M - 1994

DESIGN BY: RH
 DATE: 99/12/01
 DRAWN BY: JGM
 DATE: 06/12/04

deceuninck
 NORTH AMERICA
 281 NORTH GARDNER ROAD
 MONROE, OHIO 43002

CASEMENT REINFORCEMENT

SIZE DWG. NO: 10500006
 SCALE: 4:1 (TBS/FT) .J22 SHEET: 1 OF 1

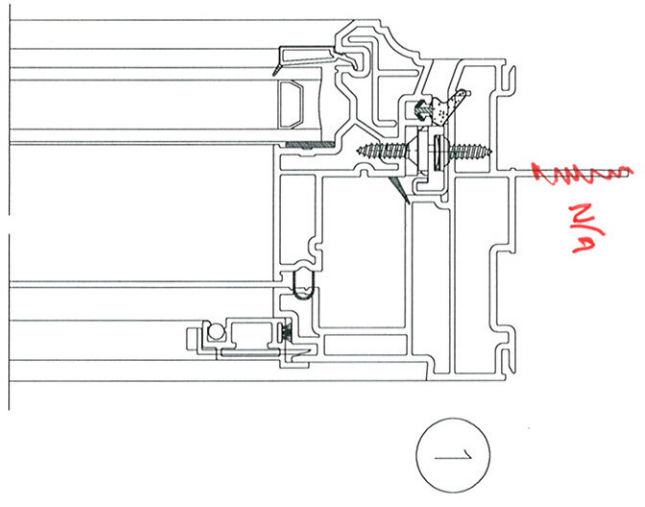


ELEMENT MATERIALS TECHNOLOGY

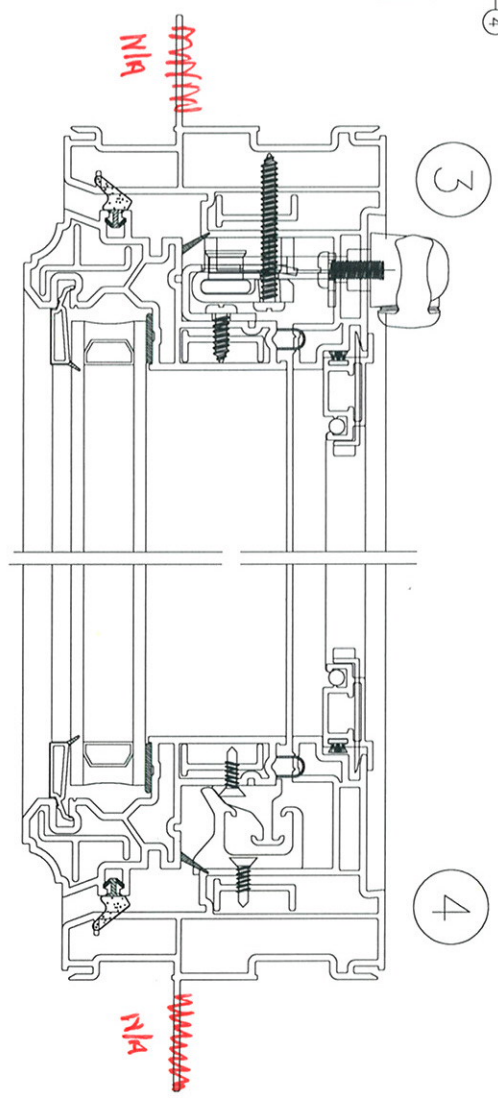
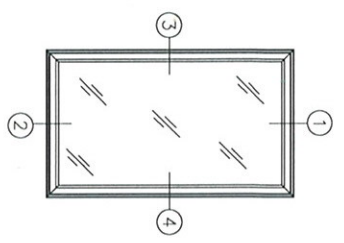
ESP NU. 014394 P.P.2
 Date Verified: 12.13.13
 Verified By: [Signature]

3/4" OVERALL LAMINATE IG
 1/8" ANNEALED PANELS WITH
 .090" PVB

| | | | |
|---|--|--|--|
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1

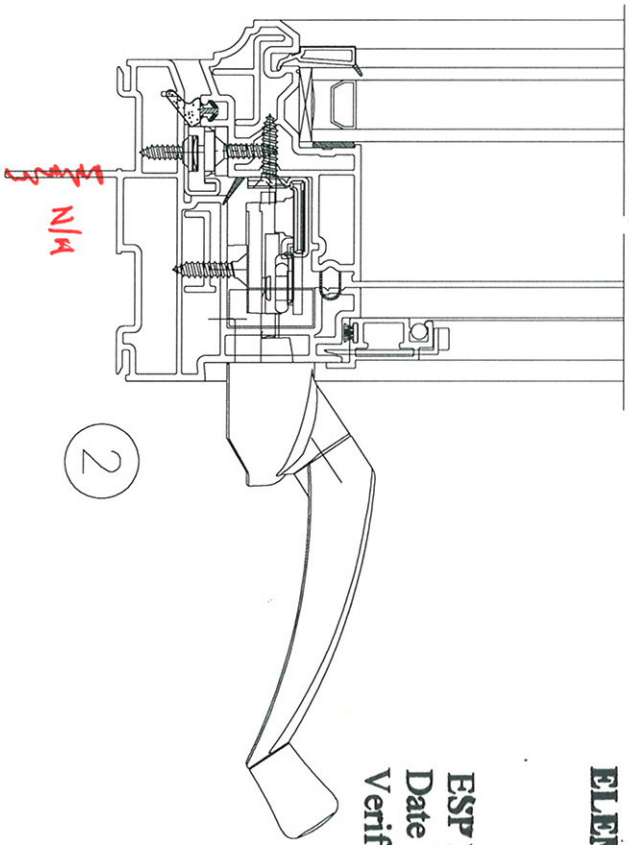


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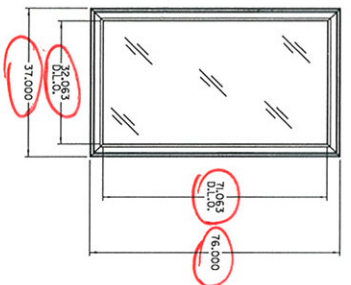
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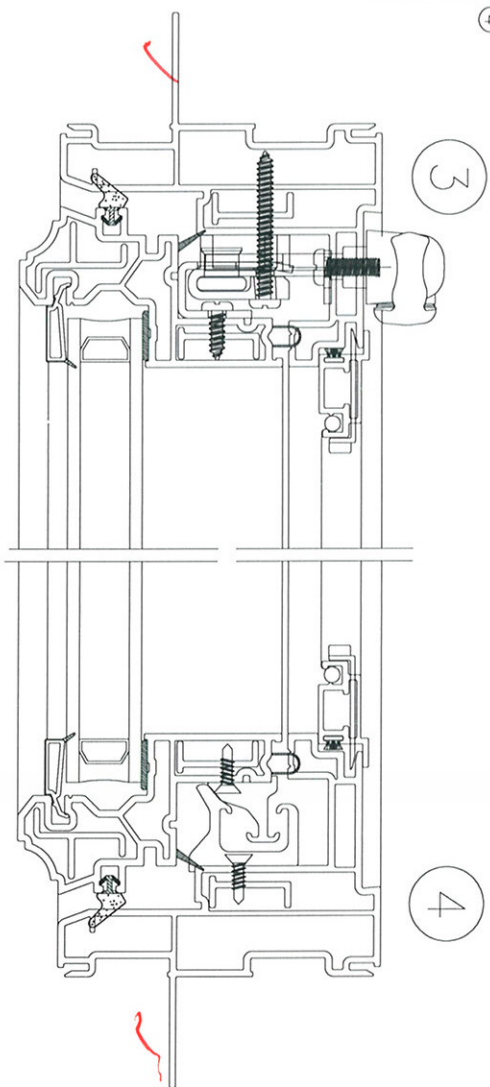
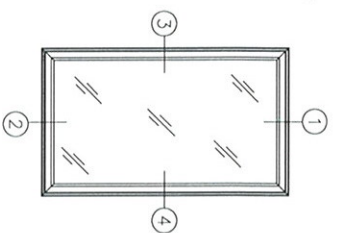
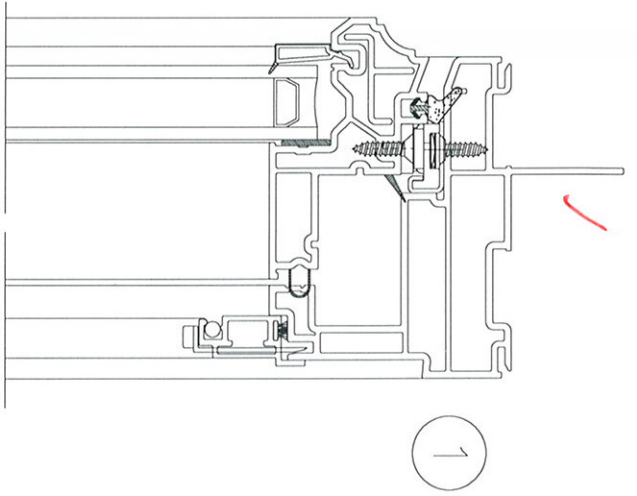


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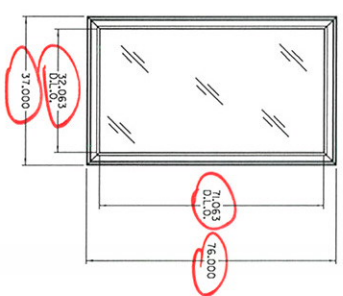
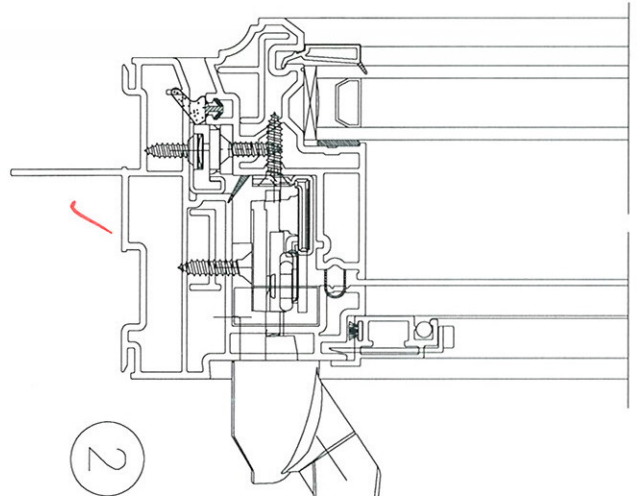
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| INTERPRET DIM AND TOL. PER ASME Y14.5M - 1994 | | THIRD ANGLE PROJECTION | |
| DESIGN BY: CRB | DATE: 02/08/28 | DRAWN BY: JGM | DATE: 11/09/12 |
| CHECKED BY: [Signature] | DATE: 12/13/13 | DATE: 12/13/13 | DATE: 12/13/13 |
| SCALE: 1:1 (ES/TT) | | SHEET: 1 OF 1 | |
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ELEMENT MATERIALS TECHNOLOGY

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2 P.L.T. 0.007 3 P.L.T. 0.005
INTERFERING FITS PER
ASME Y14.9M-1994
THIRD ANGLE PROJECTION

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| DESIGN BY: CR8 | |
| DATE: 02/08/28 | DATE: 02/08/28 |
| DRAWN BY: JOM | DRAWN BY: JOM |
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NORTH AMERICA
143.91 CA - 008
SCALE: 1:1
SHEET: 1 OF 1

Sikaflex®-552

High-Strength Structural Assembly Adhesive

Technical Product Data (typical values)

| | |
|--|---|
| Chemical base | One-part Silane Terminated Polymer |
| Color | White, Black |
| Cure mechanism | Moisture-curing |
| Density (uncured) | 12.1 lb/gal |
| VOC (EPA method 24) | 0.16 lb/gal |
| Non-sag properties | Good |
| Application temperature | 40-95°F (5-35°C) |
| Tack free time ¹ | 40 min. |
| Curing speed | (see diagram 1) |
| Shrinkage | <2% |
| Shore A-hardness (ASTM D 2240) | 50 |
| Tensile strength (ASTM D 412) | 435 psi |
| Tensile shear strength (ASTM D 1002) | 300 psi |
| Elongation at break (ASTM D 412) | 300 % |
| Tear propagation resistance (ASTM D 624) | 85 pli |
| Glass transition temperature | -76°F (-60°C) |
| Service temperature | Permanent -40°F to +190°F (-40°C to +90°C) |
| Short term | 4 hours 284°F (140°C) |
| Shelf life (storage below 80°F (25°C)) | 1 hour 302°F (150°C) |
| | Cartridge & Unipac |
| | 6 months |
| | 9 months |
| | 6 months |
| | Drum & Hobbock |

¹ 73°F (23°C) / 50% r.h.

Description

Sikaflex®-552 is a low VOC, high performance, elastic, gap-filling, one-part, silane-terminated polymer structural adhesive that cures on exposure to atmospheric moisture to form a durable elastomer. Sikaflex®-552 contains no isocyanate or solvent. Sikaflex®-552 is manufactured in accordance with the ISO 9001/ISO 14001 quality assurance system and the responsible care program.

Sikaflex®-552 is a low VOC, high performance, elastic, gap-filling, one-part, silane-terminated polymer structural adhesive that cures on exposure to atmospheric moisture to form a durable elastomer. Sikaflex®-552 contains no isocyanate or solvent. Sikaflex®-552 is manufactured in accordance with the ISO 9001/ISO 14001 quality assurance system and the responsible care program.

Product Benefits

- AAMA 805-2-94 certified
- Bonds well to a wide variety of substrates without the need for special pre-treatment
- Resistant to UV radiation
- Resistant to aging and weathering
- Capable of withstanding high dynamic stresses
- Very low VOC content
- Silicone and PVC-free
- Isocyanate-free
- High recovery
- Elastic
- Low odor
- One-part formulation

Areas of Application

Sikaflex®-552 is suitable for structural joints that will be subjected to dynamic stresses. Sikaflex®-552 bonds well to a wide variety of substrates and is suitable for making permanent high strength elastic adhesive seals. Suitable substrate materials include wood, metals, metal primers and paint coatings (two-part systems), ceramic materials, plastics and glass. Seek manufacturer's advice before using on transparent materials that are prone to stress cracking.

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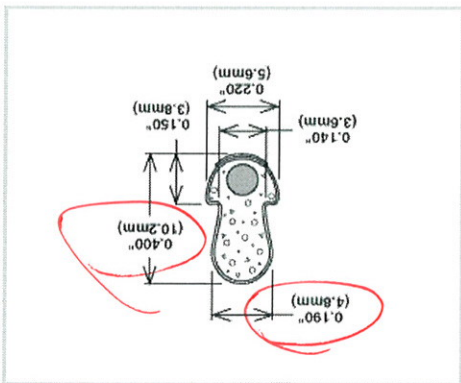


Industry

- [Weatherstrip](#)
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- [Kerf Mount Seals](#)
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Part # : QWS 530

[Find Sales Rep.](#)



Compression: Recommend 25% Minimum 10% Maximum 50%
 Standard Pack: 2,000 ft./carton (610m/carton)
 Special Features: Durable, UV resistant, polyethylene cladding is permanently bonded to resilient urethane foam which provides for outstanding sealing against air and water infiltration. The cord prevents stretching and helps with insertion. Compression seal with a reach of .250" (6.4mm) for mounting distances of .125" (3.2mm) to .200" (5.0mm); pocket opening of .125" (3.2mm).
 Other information: Superior appearance, easy operation, easy cleaning, outstanding durability, energy efficient.

| Available Colors | Black | White | Bronze | Beige | Grey | Desert Sand | Stone |
|------------------|-------------|----------|-----------|----------|-----------|-------------|-----------|
| | | | | | | | |
| Downloads | DXF Files | Download | DWG Files | Download | DWG Files | Download | PDF Files |
| DWG & DXF | Free viewer | | | | | | |

ELEMENT MATERIALS TECHNOLOGY

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Glazing Compatibility and Design Recommendations

In general, materials such as hot-applied sealants, silicone, glazing tapes and solvent acrylics are compatible. Refer to Technical Bulletin SG003 at www.Quanex.com for a list of approved glazing materials or inquire about compatibility testing. Fabricated units shall be glazed in accordance with IGMA (Insulating Glass Manufacturers Alliance) and GANA (Glass Association of North America) recommendations. Please check with your Quanex Representative for specific glazing recommendations.

Storage Conditions

Store in original airtight container. Expose to air only during application. Procedures for opening and resealing Duraseal containers should be followed as outlined in Technical Bulletin IG019 available at www.Quanex.com.

Health & Safety

For all Quanex products, and for other product used in conjunction with Quanex products, users must follow individual product labels and Material Safety Data Sheets for warnings and precautions prior to opening containers and during use and storage.

Environmental Conditions

Non-hazardous under normal use for handling and waste disposal.

Warranty

See Quanex warranty certificate.

Duraseal® is a registered trademark of Quanex Building Products. Quanex recommends you visit www.Quanex.com and register to ensure you have the most current updates to this data and all other Quanex sales and technical materials.

Key Features Summary

- Composite Laminating Technology
- A unique patented design
- Smooth surface appearance
- Black or gray sightline available
- Proven adhesive technology
- Superior argon gas retention
- Minimal compression required
- Optimized packaging
- Low conductivity warm-edge spacer
- Improved condensation resistance
- Warmer edge of glass temperature

Certification Standards

- EN 1279:2002 Part 2, 3, 4, Part 6 B & C
- CGSB 12.8
- ASTM E 2190 (HIGS)
- GOST 24866-99



Quanex warm-edge IG spacer systems are used by our customers to assemble ENERGY STAR® qualified windows and doors.



ISO 9001:2008 with design Certificate Registration 08.185.1

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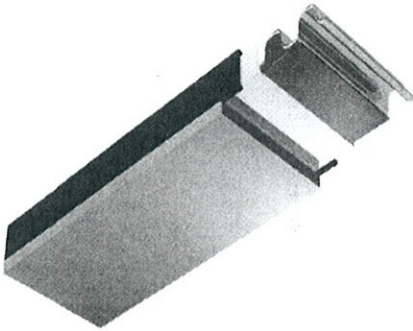
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Quanex IG Systems
800 Cochran Avenue
Cambridge, OH 43759
T 800-233-4383
F 740-439-0121
www.quanex.com

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Duraseal®



Duraseal is an insulating glass edge seal system constructed using a unique composite Laminating Technology. Duraseal is preassembled with proven components, sealant, spacer and desiccant to create a high performance durable single seal spacer system.

Basic Use

For use in high-volume production of dual and triple pane insulating glass units in a one-step process where units are sealed using heat and compression. Designed as a single seal system, Duraseal can also be used with a secondary sealant to create a dual seal unit.

Colors

Duraseal is available in gray and black.

Sizes

Airspaces of 1/4" (6mm) to 13/16" (21 mm).
 In increments of .021" (0.53 cm).

Packaging

Returnable/recyclable spools available in disposable packaging.

Shelf Life

One year in unopened containers at storage conditions below 77° F (25° C). Surface imprinted with manufacture date.

Technical Services

Your Quanex Building Products Representative, in conjunction with your Quanex Building Products Technical Services Representative, can provide in-depth technical

| | |
|---|---|
| Performance | Norm |
| Thermal Conductance (Klin) | 0.32 W/m ² C based on 1/2" (13mm) spacer |
| Moisture Vapor Transmission Rate | ASTM F 1249 0.09 g H ₂ O/m ² per 24 hrs. |
| Volatile Fogging | ASTM E 2189 CGSB 12.8 Passes |
| Argon Performance | ASTM D 1434 6-8 c.c./100 in. ² per 24 hrs. |
| Bondline Adhesive UV Resistance | Excellent |
| Dew Point Development | ASTM E 546 -20° F (-29° C) in 48 hrs |
| Tensile Strength | TST 389C |