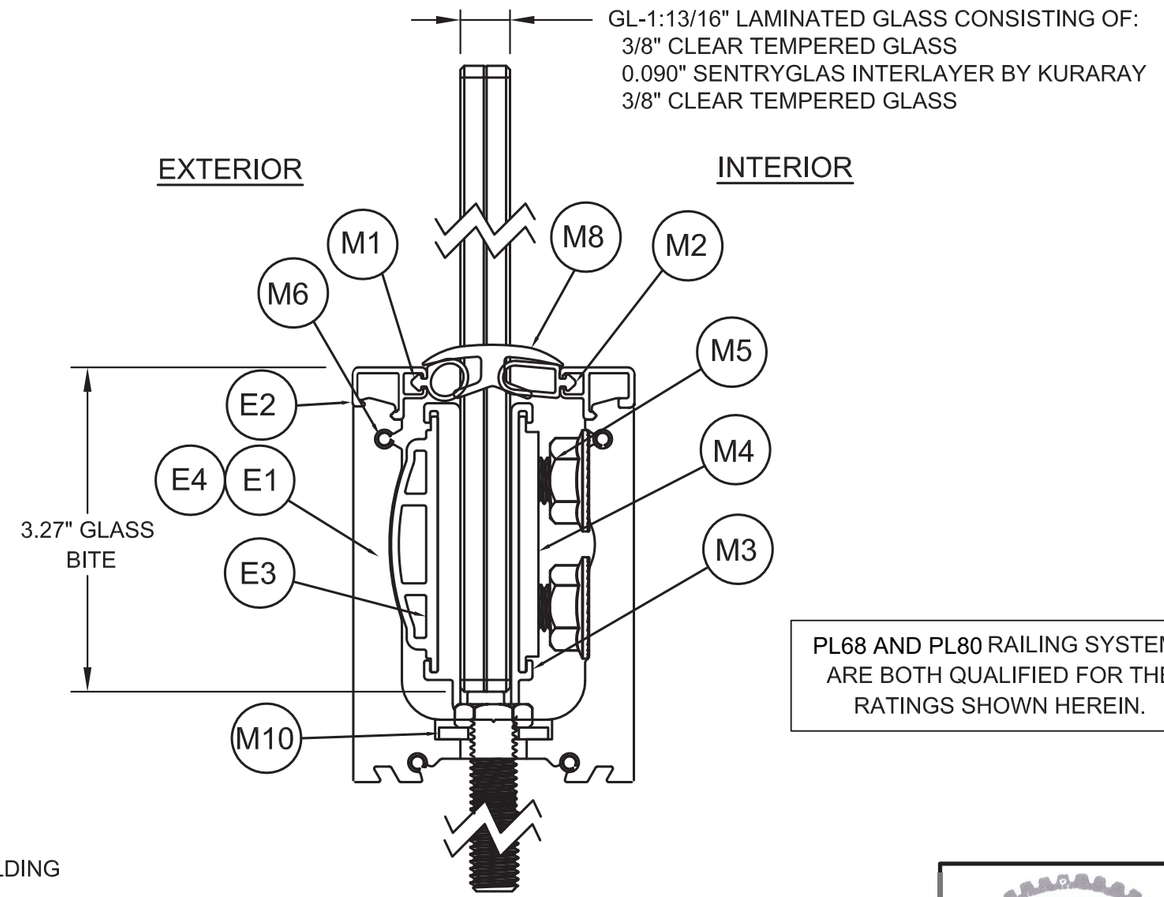
# PL68/PL80 RAILING SYSTEM WITH LAMINATED GLASS

## GENERAL NOTES:

1. THE PRODUCT SHOWN HEREIN IS DESIGNED AND MANUFACTURED TO COMPLY WITH THE 2003, 2012, 2015 AND 2018 EDITION OF THE INTERNATIONAL BUILDING CODE (IBC).
2. PRODUCT IS RATED FOR SMALL AND LARGE MISSILE IMPACT.
3. ANCHORS SHALL BE CORROSION RESISTANT, SPACED AS SHOWN ON THE DETAILS AND INSTALLED PER MANUFACTURER'S SPECIFICATIONS. SPECIFIED EMBEDMENT TO BASE MATERIALS SHALL BE BEYOND FLOOR DRESSING.
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. ADEQUACY OF THE EXISTING STRUCTURAL CONCRETE SUBSTRATE AS A MAIN WIND FORCE RESISTING SYSTEM CAPABLE OF WITHSTANDING AND TRANSFERRING APPLIED PRODUCT LOADS TO THE FOUNDATON IS THE RESPONSIBILITY OF THE ENGINEER OR ARCHITECT OF RECORD FOR THE PROJECT OF INSTALLATION.
6. THE DESIGN LOADS SHOWN IN THIS DOCUMENT ARE ALLOWABLE DESIGN LOADS.
7. GLASS MEETS THE REQUIREMENTS OF ASTM E 1300

## INSTRUCTIONS FOR USE:

1. DETERMINE DESIGN WIND LOAD REQUIREMENTS BASED ON WIND VELOCITY, BUILDING HEIGHT, WIND ZONE, USING APPLICABLE ASCE 7 STANDARD.
2. SEE CHARTS ON SHEETS 3 FOR DESIGN LOAD CAPACITY OF DESIRED GLASS SIZE AND THE MAXIMUM RAILING HEIGHT BASED ON THE CONCETRATED AND DISTRIBUTED LIVE LOADS.
3. SEE ANCHOR SPECIFICATIONS ON SHEET 3.




**GL-1 GLAZING DETAIL**

PL68 AND PL80 RAILING SYSTEMS ARE BOTH QUALIFIED FOR THE RATINGS SHOWN HEREIN.


**Channel Manufacturer**
Designed by Hardware and Glass.
Distributed by Morse Industries

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| | | | | | | |
|---|---|---|---|---|---|---|
| Drawing Spec. | A4 | WEIGHT(KG) | | Drawn by | Michael | Drawn NO. |
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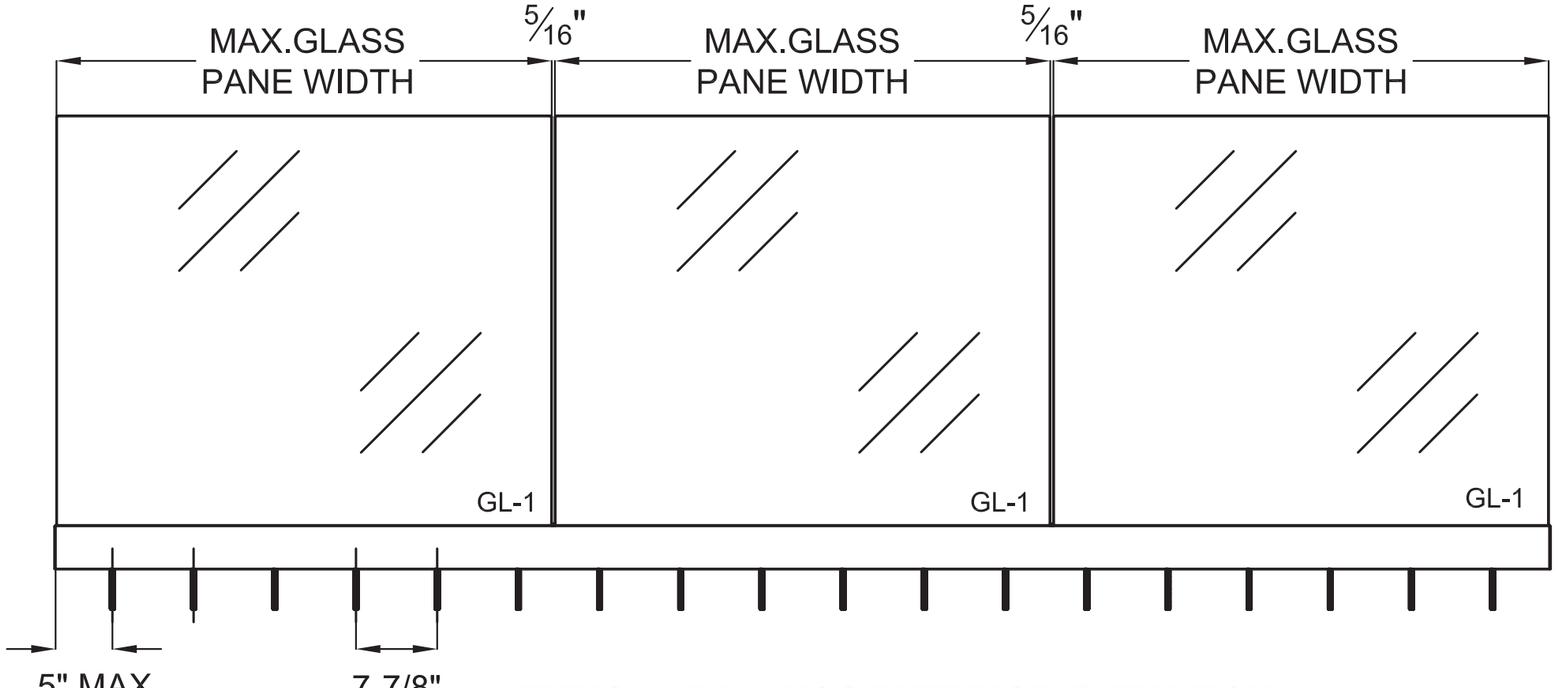
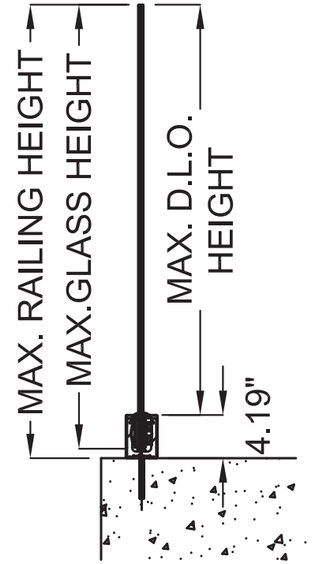



**TYPICAL RAILINGS EXTERIOR ELEVATION**




**TYPICAL RAILINGS SECTION**


**TYPICAL RAILINGS TOP VIEW**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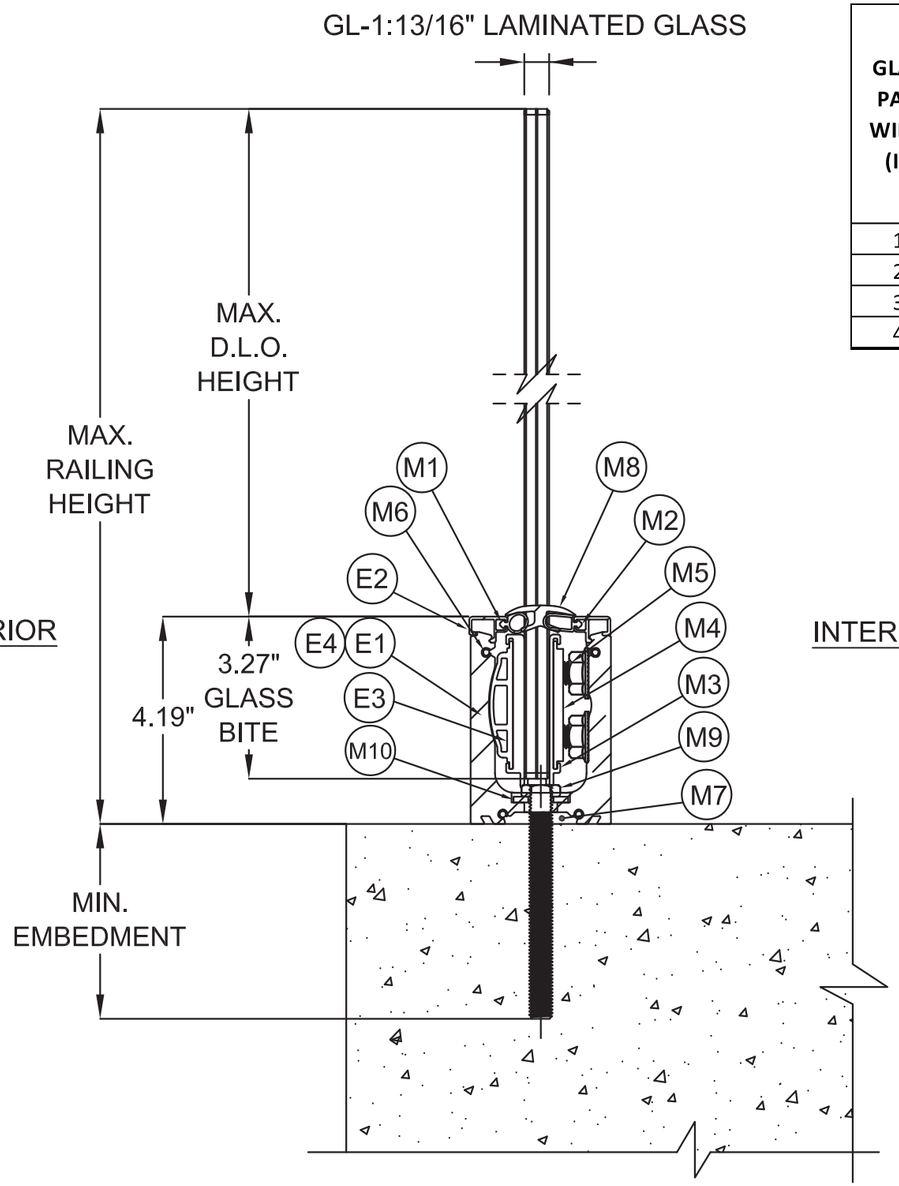
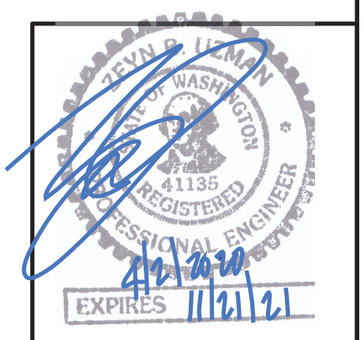



| GLASS PANE WIDTH (IN) | EFFECTIVE GLASS THICKNESS | | ALLOWABLE DESIGN PRESSURE (PSF) | | | | 200 LB LIVE LOAD | | 50 LB/FT LIVE LOAD | |
|---|---|---|---|---|---|---|---|---|---|---|
| | DEFLECTION (IN) | STRESS (IN) | MAX. D.L.O. HEIGHT (IN) | | | | MAX. UNSSUPORTED GLASS HEIGHT (IN) | | MAX. UNSSUPORTED GLASS HEIGHT (IN) | |
| | | | 36 | 39.81 | 42 | 48 | STRESS | DEFLECTION | STRESS | DEFLECTION |
| 12 | 0.5384 | 0.6023 | 66.7 | 66.7 | 59.9 | 45.9 | 21.8 | 53.4 | 87.1 | 46.0 |
| 24 | 0.6399 | 0.6901 | 66.7 | 66.7 | 59.9 | 45.9 | 57.1 | 76.6 | 114.3 | 54.7 |
| 36 | 0.6938 | 0.7272 | 66.7 | 66.7 | 59.9 | 45.9 | 95.2 | 92.3 | 126.9 | 59.3 |
| 48 | 0.7216 | 0.744 | 66.7 | 66.7 | - | - | 132.8 | 103.1 | 132.8 | 61.7 |

ANCHOR SPECIFICATIONS:

1. 1/2" SCREW-BOLT+, DEWALT
   4-1/4" MIN. EMBEDMENT
   4" MAX. EDGE DISTANCE
   7-7/8" MAX. SPACING
   3000 PSI MIN. CONCRETE F'c

2. 1/2" LDT ITW RED HEAD
   4-1/2" MIN. EMBEDMENT
   4" MIN. EDGE DISTANCE
   7-7/8" MAX. SPACING
   3000 PSI MIN. CONCRETE F'c

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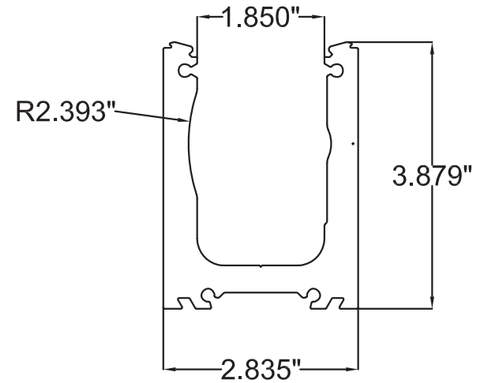
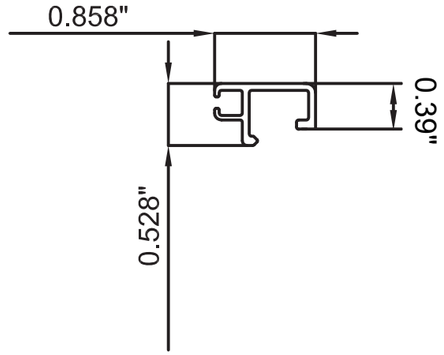
# BILL OF MATERIALS

| CODE | PART | DESCRIPTION | MATERIAL |
|---|---|---|---|
| E1 | A42-PL68 | CHANNEL | ALUMINIUM 6063-T6 |
| E2 | A16-PL68SOMF | SNAP ON EXTRUSION | ALUMINIUM 6063-T5/6463-T5 |
| E3 | MECHANISM | CURVE PLATE | ALUMINIUM 6063-T5 |
| E4 | A42-PL80 | CHANNEL | ALUMINIUM 6063-T6 |
| M1 | V11-PLG | RUBBER | EPDM (UVSTABLE) |
| M2 | V11-PLG | RUBBER | EPDM (UVSTABLE) |
| M3 | MECHANISM | U GASKET | TPV (UVSTABLE) |
| M4 | MECHANISM | STAINLESS STEEL PLATE | STAINLESS STEEL 2205 |
| M5 | MECHANISM | RECOMMENDED 26 LB-FT TORQUE | STAINLESS STEEL 316 |
| M6 | A42-PLSP-8 | ALIGNING PIN | STAINLESS STEEL 316 |
| M7 | A17-PL68 | END CAP | ALUMINIUM 6063-T5/6463-T5 |
| M8 | V50-PL | GLASS DIVIDER | EPDM (UVSTABLE) |
| M9 | F92-0073CA | ANCHOR BOLT | STAINLESS STEEL 316 |
| M10 | MECHANISM | STAINLESS STEEL PLATE | STAINLESS STEEL 2205 |

E1




E2

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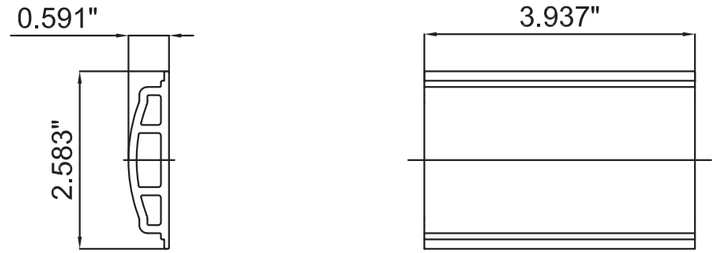



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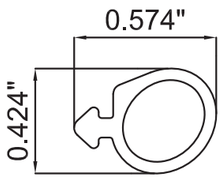
## M1

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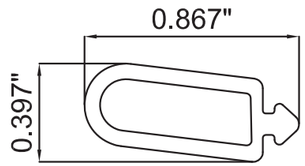


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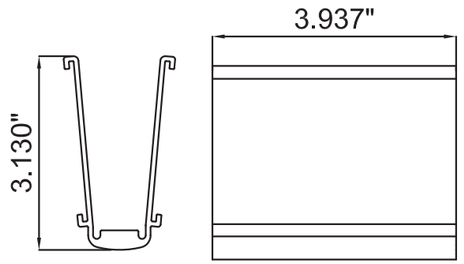


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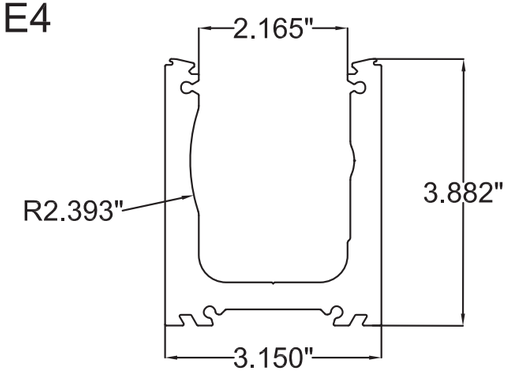


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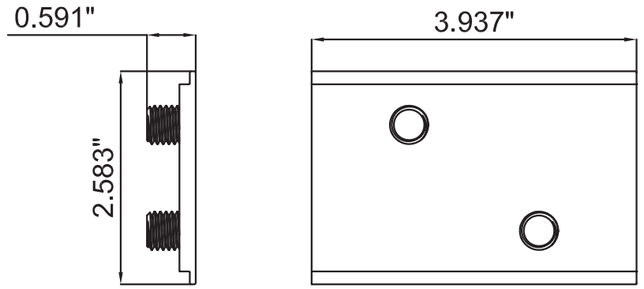


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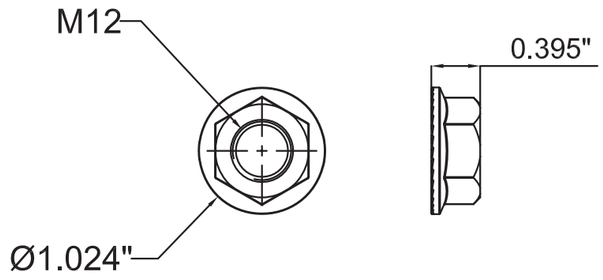
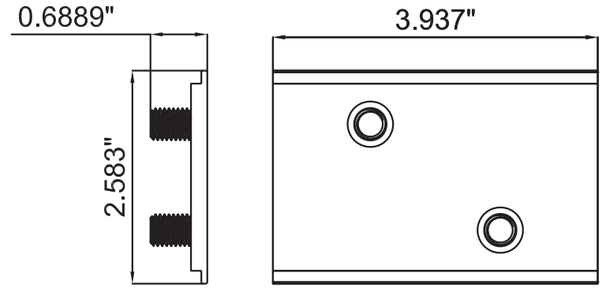
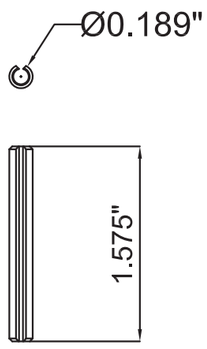



## M10




## M6

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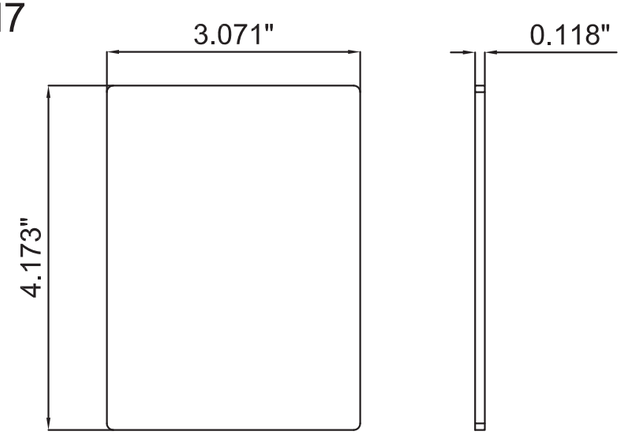


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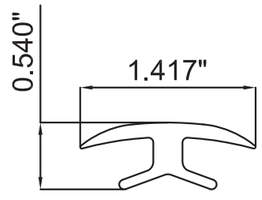


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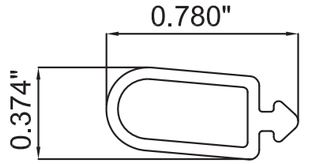



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