Infinity Direct Glaze Polygon and Rectangles

Unit Features.................................................................................................................................................. 1
Lite Options .......................................................................................................................................................... 2
Minimum and Maximum Guidelines .................................................................................................................. 3
Certified Sizes and Ratings ............................................................................................................................... 4
STC/OITC Glass Values ...................................................................................................................................... 5
Mulling Guidelines - Full Frame Rectangle Assemblies ..................................................................................... 6
1/2" Mull Reinforcement Guidelines - Polygons ................................................................................................. 7
Mulling Guidelines - Insert Rectangle Assemblies ............................................................................................ 8
Measurement Conversions - Direct Glaze Rectangle Units .................................................................................. 9
Section Details: Full Frame Polygon/Rectangle ................................................................................................. 10
Section Details: Insert Polygon/Rectangle ......................................................................................................... 11
Section Details: Casing Options ....................................................................................................................... 12
Section Details: Mullions .................................................................................................................................... 13
Section Details: Mullions .................................................................................................................................... 14
Section Details: 1/2" Mull Reinforcement ........................................................................................................... 15
Interior Frame Accessories ............................................................................................................................... 16
Unit Features

Infinity Direct Glaze Polygon: NPDG / NINPDG

Ultrex® Pultruded Fiberglass Frame:
- Frame thickness: 1 29/32” (48)
- Frame depth: 2 1/4” (57) from nailing fin, 3 1/4” (83) full width
- Exterior colors: Stone White, Sierra, Cashmere, Pebble Gray, Bahama Brown, Bronze, Ebony
- Interior colors: Stone White, Sierra, EverWood™

Glass:
- Glazing seal: silicone bedding on exterior and foam tape on interior
- Standard glass is insulating Low E2 Argon or air
- Optional glazing available: Low E1 Argon or air, Low E3 Argon or air, Low E3/ERS Argon or air, tempered, obscure
- Decorative glass options include Glue Chip, Rain, Reed, Narrow Reed, or Frost
- Decorative glass is not available with Low E1, Low E3/ERS, or STC/OITC
- Rain, Reed and Narrow Reed not available with SDL
- SDL available on Frost, annealed or tempered glass
- SDL available on Glue Chip, tempered glass required
- Insulating glass will be altitude adjusted with capillary tubes for higher elevations
- Argon gas is not available for elevations that require capillary tubes

Simulated Divided Lites (SDL):
- SDL Bar (interior and exterior): 7/8” (22) or 1 1/8” (29)
- Simulated rail (interior and exterior): 2 11/32” (30) (picture unit only)
- Exterior color: matched to unit exterior
- Interior color: matched to interior - ABS material
- Pattern: equal rectangular, cottage, prairie, check rail

Gilles-Between-the-Glass (GBG):
- 23/32” (18) or 1” (25) contoured aluminum bar
- Exterior: color matched to unit exterior
- The exterior GBG color is designed to best match the unit exterior color when used with Low E glass. The use of different types of glazing options may alter the exterior GBG color appearance.
- Interior color: White, Satin Taupe, Sierra, Bronze
- Pattern: equal rectangular, cottage, prairie, check rail
Lite Options

Insulating Glass

Insulating Glass
23/32” GBG

Insulating Glass
1” GBG

Insulating Glass
7/8” SDL w/ spacer bar

Insulating Glass
1 1/8” SDL w/ spacer bar

SDL Simulated Rail
w/ spacer bar
For Rectangular Polygons only
Minimum and Maximum Guidelines

### Minimum and Maximum Guidelines - Direct Glaze Polygon and Rectangle

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Frame Size</th>
<th>Glass Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min Width</td>
<td>Min Height</td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Polygon/Rectangle</td>
<td>7 (178)</td>
<td>7 (178)</td>
</tr>
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</table>

### Minimum and Maximum Guidelines - Direct Glaze Polygon and Rectangle

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Inside Opening</th>
<th>Glass Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Min Width</td>
<td>Min Height</td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Polygon/Rectangle</td>
<td>7 3/8 (187)</td>
<td>7 1/4 (184)</td>
</tr>
</tbody>
</table>

### Frame Size

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sq. Ft.</td>
<td>Sq. Meters</td>
</tr>
<tr>
<td>Polygon/Rectangle</td>
<td>13/32</td>
<td>0.037</td>
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</table>

### Inside Opening

<table>
<thead>
<tr>
<th>Unit Type</th>
<th>Min</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sq. Ft.</td>
<td>Sq. Meters</td>
</tr>
<tr>
<td>Polygon/Rectangle</td>
<td>55 1/8</td>
<td>5.121</td>
</tr>
</tbody>
</table>

### Note:

- For Obscure glass, maximum short frame width/height is 73 1/4”
- For Obscure glass, maximum long frame width/height is 85 1/4”
- For Glue Chip, Frost, and Rain, maximum short frame width/height is 61 1/4”
- For Glue Chip, Frost, and Rain, maximum long frame width/height is 85 1/4”
- For Reed and Narrow Reed, vertical pattern orientation maximum frame width size is 61 1/4", maximum frame height size is 85 1/4”
- For Reed and Narrow Reed, horizontal pattern orientation maximum frame width size is 85 1/4", maximum frame height size is 61 1/4”
## Certified Sizes and Ratings

<table>
<thead>
<tr>
<th>Product</th>
<th>Air Tested to PSF</th>
<th>Water Tested to psf</th>
<th>Design Pressure (DP)</th>
<th>Certification Rating</th>
<th>Max Overall Width</th>
<th>Max Overall Height</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infinity Polygon Direct Glaze</td>
<td>1.57</td>
<td>10.5</td>
<td>50</td>
<td>CW-PG50-FW</td>
<td>83 (2108)</td>
<td>83 1/2 (2121)</td>
</tr>
<tr>
<td>Insert</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Infinity Polygon Direct Glaze</td>
<td>1.57</td>
<td>10.5</td>
<td>50</td>
<td>CW-PG50-FW</td>
<td>83 (2108)</td>
<td>83 1/2 (2121)</td>
</tr>
<tr>
<td>Insert</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
STC/OITC Glass Values

STC/OITC ratings are shown in the chart below. Infinity’s STC/OITC values are provided by third party ASTM testing and reports. The STC/OITC Upgrade option incorporates variable glass thickness or laminate (L) to increase STC/OITC performance and improve sound abatement.

<table>
<thead>
<tr>
<th>Product Type</th>
<th>Exterior Glazing</th>
<th>Airspace</th>
<th>Interior Glazing</th>
<th>STC</th>
<th>OITC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Polygon Direct Glaze</td>
<td>1/8&quot; (3.1)</td>
<td>25/32&quot; (19.5)</td>
<td>1/8&quot; (3.1)</td>
<td>29</td>
<td>23</td>
</tr>
<tr>
<td></td>
<td>1/8&quot; (3.1)</td>
<td>11/16&quot; (17.5)</td>
<td>3/16&quot; (4.7)</td>
<td>33</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>1/8&quot; (3.1)</td>
<td>5/8&quot; (16.0)</td>
<td>1/4&quot; (6.0L)</td>
<td>34</td>
<td>27</td>
</tr>
</tbody>
</table>
Mulling Guidelines - Full Frame Rectangle Assemblies

Factory Mulled Polygon/Rectangle Assemblies:

- Assemblies up to 4 units wide by 1 unit high
  - MAXIMUM ROUGH OPENING not to exceed 144" (3658) x 72 1/2" (1842)
- Assemblies up to 1 unit wide by 2 units high
  - MAXIMUM ROUGH OPENING not to exceed 73" (1854) x 96" (2438)

NOTE: Factory mulling is available for rectangle units only. Full frame rectangles can be factory mulled to full frame rectangles, casements, and awnings.

Field mulling kits are available for polygon shapes and mulling to double hung products.

Field mulling beyond the above limitations is not recommended.

Rough Opening Assemblies:

- WIDTH:
  - Frame Width = Single unit Rough Opening width MINUS 1"
  - Total Rough Opening Width = ADD all frame widths PLUS 1"
- HEIGHT:
  - Frame Height = Single unit Rough Opening height MINUS 1/2"
  - Total Rough Opening Height = ADD all frame heights PLUS 1/2"
Infinity Direct Glaze Polygon and Rectangles

1/2" Mull Reinforcement Guidelines - Polygons

Factory Mulled 1/2" Mull Reinforcement Polygon/Rectangle Assemblies:

- Assemblies up to 4 units wide by 1 unit high
  - MAXIMUM ROUGH OPENING not to exceed 113" (2870) x 96 1/2" (2451)
- Assemblies up to 1 unit wide by 2 units high
  - MAXIMUM ROUGH OPENING not to exceed 73" (1854) x 96 1/2" (2451)
- Assemblies up to 2 units wide by 2 units high
  - MAXIMUM ROUGH OPENING not to exceed 97 1/2" (2477) x 96 1/2" (2451)
  - MAXIMUM ROUGH OPENING not to exceed 113" (2870) x 86 1/2" (2197)

NOTE: Field mulling beyond the above limitations is not recommended.

Rough Opening Assemblies:

- WIDTH:
  - Frame Width = Single unit Rough Opening width MINUS 1"
  - Total Rough Opening Width = ADD all frame widths PLUS 1/2" for each Vertical Mull Reinforcement PLUS 1"
- HEIGHT:
  - Frame Height = Single unit Rough Opening height MINUS 1/2"
  - Total Rough Opening Height = ADD all frame heights PLUS 1/2" for each Horizontal Mull Reinforcement PLUS 1/2"
Mulling Guidelines - Insert Rectangle Assemblies

Factory Mulled Insert Rectangle Assemblies:
• Assemblies up to 4 units wide by 1 unit high
  ◦ MAXIMUM ROUGH OPENING not to exceed 143 3/8” (3642) x 72 1/4” (1835)
• Assemblies up to 1 unit wide by 2 units high
  ◦ MAXIMUM ROUGH OPENING not to exceed 72 3/8” (1838) x 95 3/4” (2432)

NOTE: Factory mulling is available for rectangle units only. Insert rectangles can be factory mulled to insert rectangles, casements, and awnings.
Field mulling kits are available for polygon shapes.
Field mulling beyond the above limitations is not recommended.

Rough Opening Assemblies:
• WIDTH:
  ◦ Frame Width = Single unit Rough Opening width MINUS 3/8”
  ◦ Total Inside Opening Width = ADD all frame widths PLUS 3/8”
• HEIGHT:
  ◦ Frame Height = Single unit Rough Opening height MINUS 1/4”
  ◦ Total Inside Opening Height = ADD all frame heights PLUS 1/4”
## Measurement Conversions - Direct Glaze Rectangle Only

<table>
<thead>
<tr>
<th>Unit Measurements</th>
<th>Width</th>
<th>Height</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Rough Opening</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MO with BMC</td>
<td>-2 1/4</td>
<td>(57)</td>
</tr>
<tr>
<td></td>
<td>-1 11/16</td>
<td>(43)</td>
</tr>
<tr>
<td>Masonry Opening</td>
<td>+ 1/2</td>
<td>(13)</td>
</tr>
<tr>
<td></td>
<td>+ 1/4</td>
<td>(6)</td>
</tr>
<tr>
<td>OM of Frame</td>
<td>+ 1</td>
<td>(25)</td>
</tr>
<tr>
<td></td>
<td>+ 1/2</td>
<td>(13)</td>
</tr>
<tr>
<td>Daylight Opening</td>
<td>+ 4 25/32</td>
<td>(122)</td>
</tr>
<tr>
<td></td>
<td>+ 4 9/32</td>
<td>(109)</td>
</tr>
<tr>
<td>Frame</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Daylight Opening</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OM of Frame</td>
<td>+ 3 25/32</td>
<td>(96)</td>
</tr>
<tr>
<td></td>
<td>+ 3 25/32</td>
<td>(96)</td>
</tr>
<tr>
<td>Inside Opening</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Daylight Opening</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Inside Opening</td>
<td>+ 4 5/32</td>
<td>(106)</td>
</tr>
<tr>
<td></td>
<td>+ 4 1/32</td>
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<td>Inside Opening</td>
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<td>Glass</td>
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<tr>
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<td>in</td>
<td>mm</td>
</tr>
<tr>
<td></td>
<td>in</td>
<td>mm</td>
</tr>
<tr>
<td>Daylight Opening</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glass</td>
<td>+ 1 3/8</td>
<td>(35)</td>
</tr>
<tr>
<td></td>
<td>+ 1 3/8</td>
<td>(35)</td>
</tr>
</tbody>
</table>

**NOTE:** On all units, we maintain our clearance or conversion dimension perpendicular to the frame. For this reason standard rectangular conversions cannot be used for any unit involving a radius or angles. These must be calculated on an individual basis. If any dimension is critical (such as frame O.S.M. to match lower unit) then the order should be placed with that dimension and Infinity will calculate the accurate dimensions needed.
Section Details: Full Frame Polygon/Rectangle

Scale: 3" = 1' 0"

Head Jamb and Sill
Section Details: Insert Polygon/Rectangle

Scale: 3" = 1' 0"

Head Jamb and Sill
Section Details: Casing Options

Scale: 3" = 1' 0"

Brick Mould
Casing
Section Details: Mullions

Scale: 3" = 1' 0"

Vertical Mullion
NPDG/NPDG

Horizontal Mullion
NPDG/NPDG

Vertical Mullion
NPDG/NINCA

Horizontal Mullion
NPDG/NINCA
Section Details: Mullions

Scale: 3” = 1’ 0”
Section Details: 1/2" Mull Reinforcement

Scale: 3" = 1' 0"

1/2" Mull Reinforcement
NDGRT/NPDG

1/2" Mull Reinforcement
NPDG/NPDG

1/2" Mull Reinforcement
NDGRT, NPDG/NDHP

1/2" Mull Reinforcement
NPDG/NDHP

1/2" Mull Reinforcement
NDGRT, NPDG/NDH

1/2" Mull Reinforcement
NPDG/NDH
Infinity Direct Glaze Polygon and Rectangles

Interior Frame Accessories

Scale: 3" = 1' 0"

- V1982 Flush Fin Interior Trim
- V803 Connecting Barb
- Jamb Extension Material