

Product Sheet: IGU

This product sheet explains the requirements and rules for designing a SageGlass IGU and placing the pigtail. Consult SageGlass for any special requests. When designing an IGU, first take note of the information provided in this guide. Then determine what the appropriate information is for your design:

- IGU Design
- Tolerance Allowed
- Basic Dimension Needs
- Rules and Constraints

IGU Rules

- Any angle must be $\geq 30^\circ$ and $\leq 150^\circ$
- If the installed width is greater than 2286 mm (90"), the roller wave will be vertical as installed
- Edge finish will be standard seamed

Rectangle Rules:

- Maximum Length: 3048 mm (120"); other dimension must be:
 - ≤ 1828 mm (72") for Double Glazed Units
 - ≤ 1795 mm (70.7") for Triple Glazed Units
- Minimum Dimension: 350 mm (13.8")
- Triple IGUs - Both sides must be ≥ 840 mm (33.1")

Non-Rectangle Shapes Rules:

- Shape must be larger than a bounding box of 350 mm (13.8") x 350 mm (13.8")
- Shape must be smaller than a bounding box of 2975 mm (117.1") x 1498 mm (59")
- Minimum length of any side: ≥ 120 mm (4.72")
- Bounding box of all shapes defined by L x H

Tolerances

The standard IGU length and width tolerance is ± 2 mm (0.08"). The tolerance increases to ± 3 mm (0.12") if a side is ≥ 1981 mm (78"), if a lite or laminate thickness is ≥ 8 mm (0.31"), or if it is a triple IGU.

The thickness tolerance is ± 1 mm (0.04") for double IGU and ± 2 mm (0.08") for triple IGU.

Shapes

SageGlass IGUs are available in a wide variety of shapes to enhance your building designs. Determine which category your desired shape falls into by matching it to one of the diagrams in the tables below. Provide SageGlass with the requested dimensions. The measurements needed for each shape are indicated (e.g., L, L1, H, or H1). Reference the *Shapes: Dimensions & Pigtail Placement Section*.

Product Specific Rules:

Harmony®

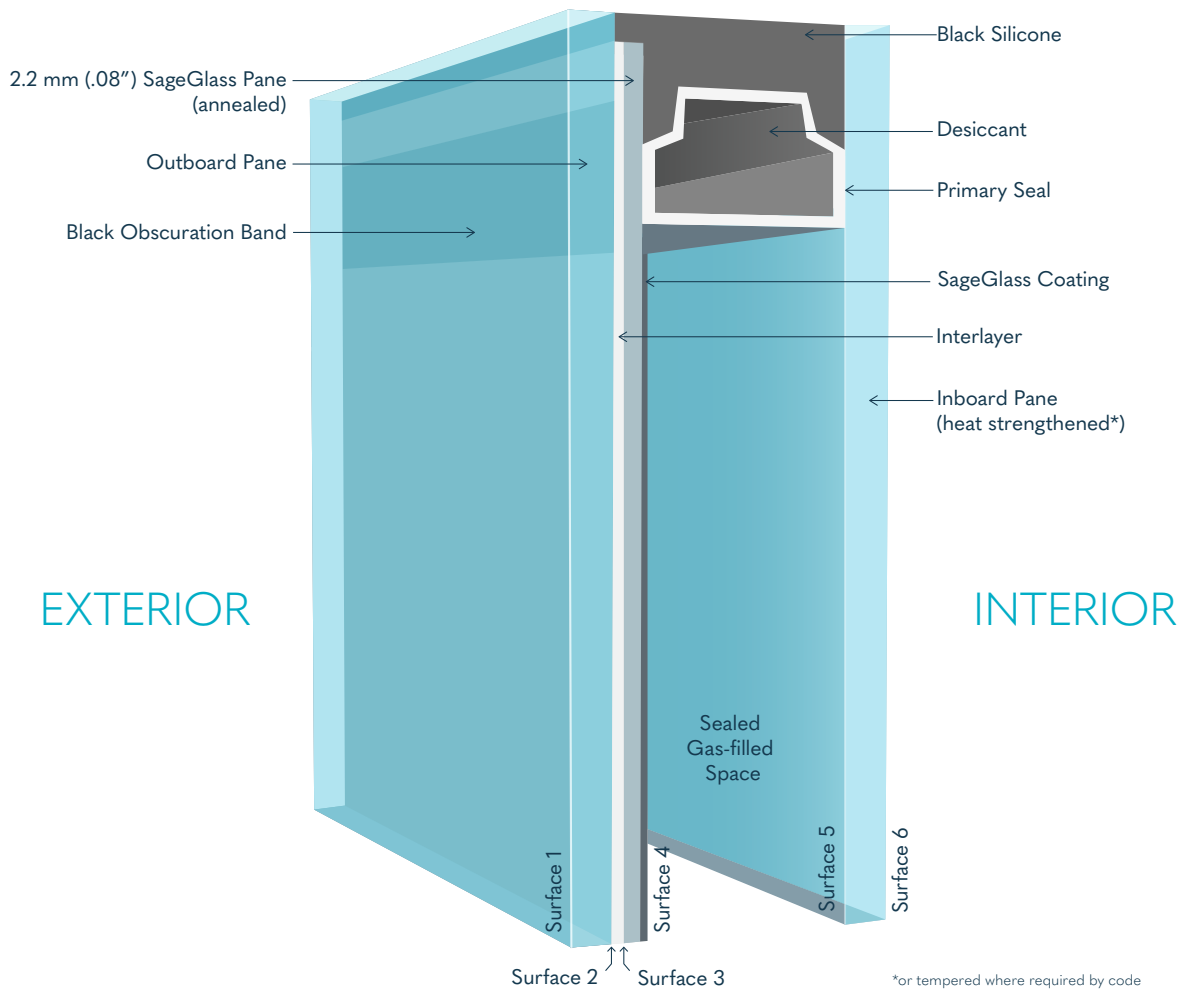
- Rectangles only
- Maximum Width: 1828 mm (72")
- Minimum Height :
 - 1200 mm (47.2") when width is ≤ 1600 mm (63")
 - 1400 mm (55.1") when width is between 1600 mm - 1828 mm (63"-72")

LightZone®

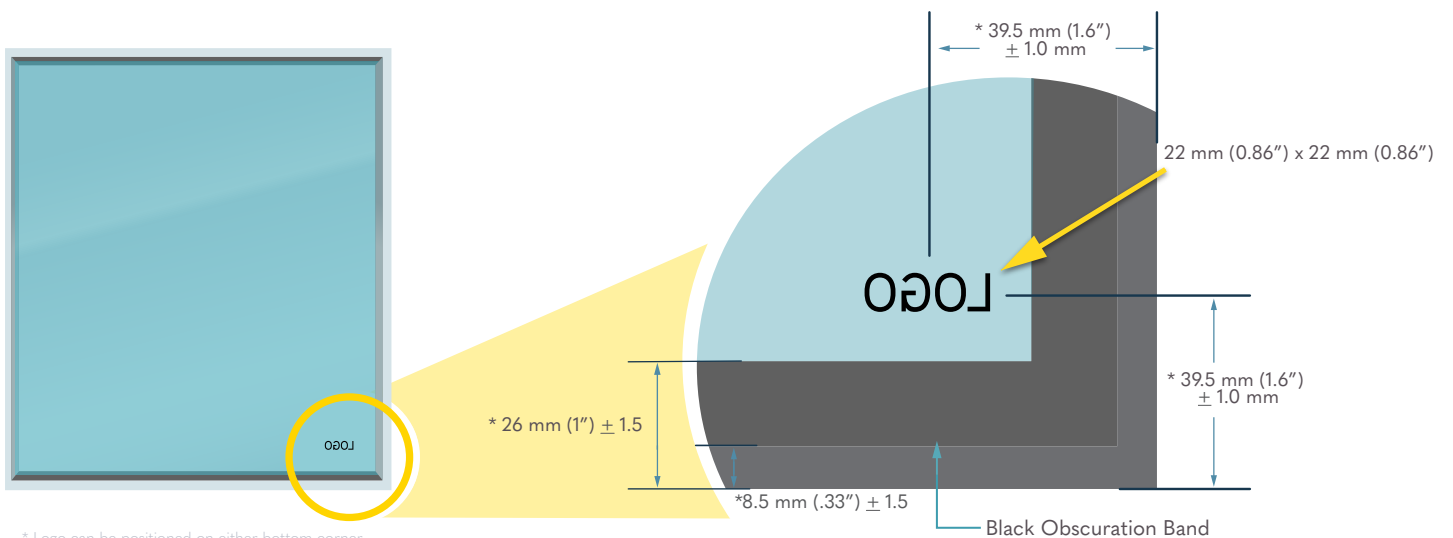
- Rectangles only
- Maximum width 1524 mm (60")
- Minimum Zone Area: 0.19 m² (2 ft²)



IGU Cross-Section: Double Pane



IGU Exterior: Double & Triple Pane

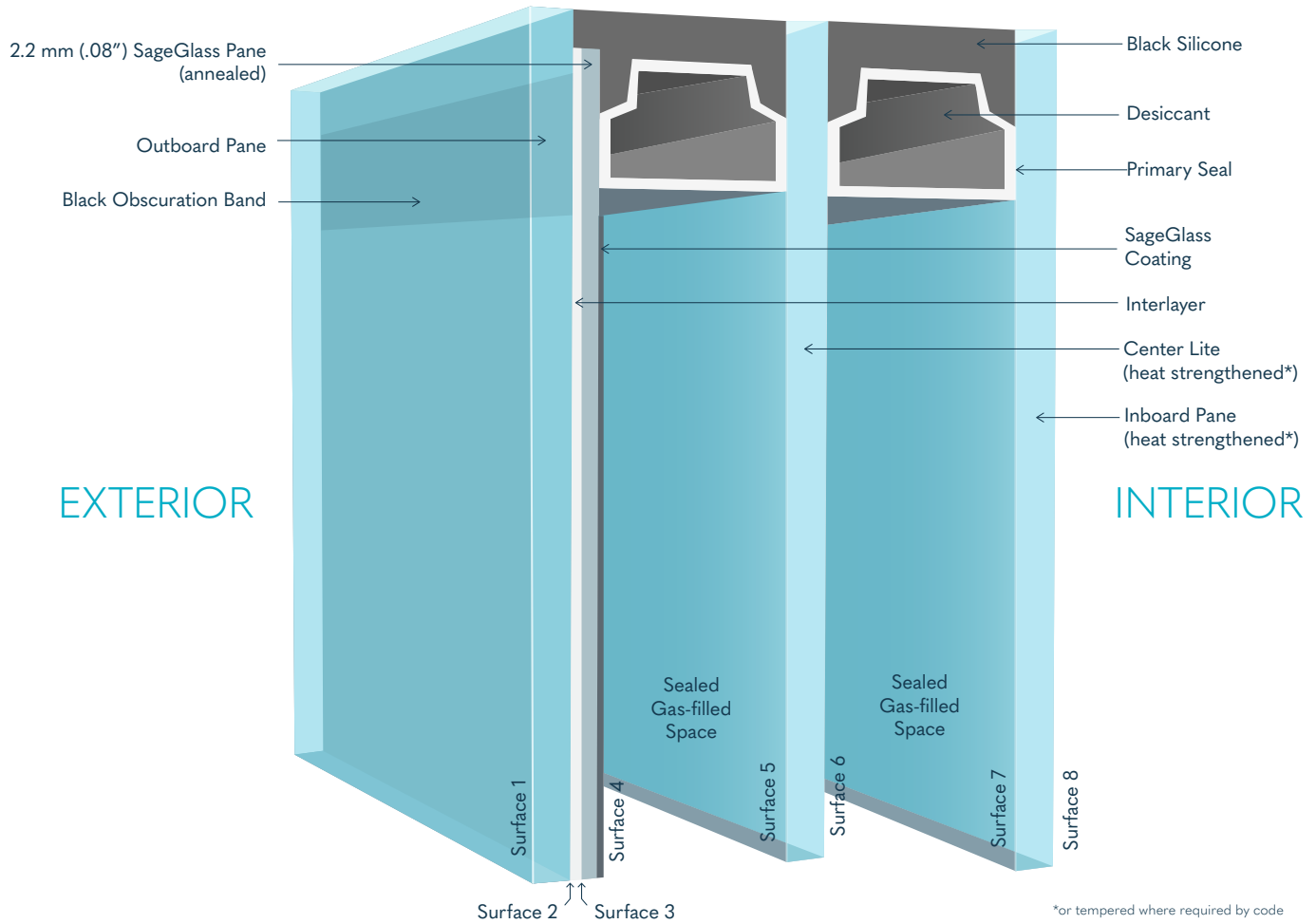


* Logo can be positioned on either bottom corner depending on the pigtail position.

* Dimension increases if spacer inset increases



IGU Cross-Section: Triple Pane

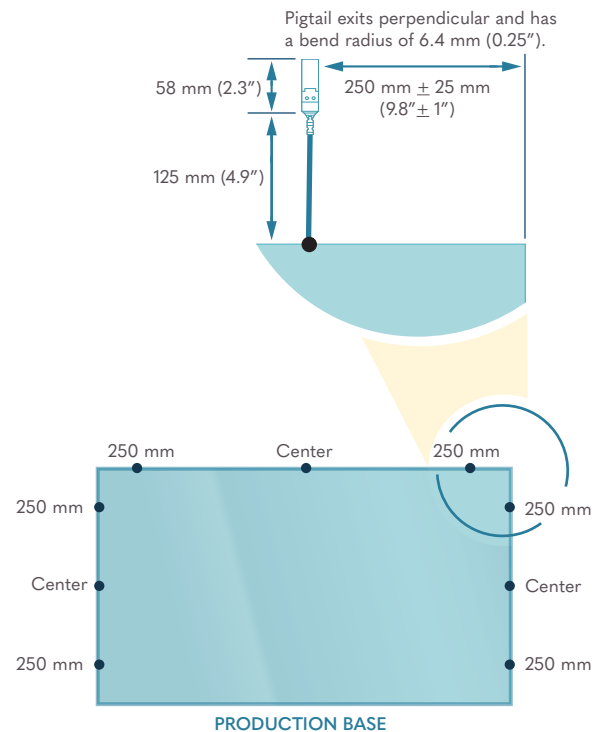


Pigtails

The available pigtail locations depend on the IGU shape and size. See the diagrams to the right for possible pigtail locations for each IGU shape.

Rules & Constraints:

- Pigtail cannot be on installed base.
- Pigtail cannot be on production base.
- If IGU side with pigtail is between 250 mm (9.8") and 500 mm (19.7"), then the pigtail must be centered on that side.
- Length of side with pigtail must be at least 250 mm (9.8")
- If the IGU is filled with krypton, the pigtail cannot be on a side that is < 400 mm
- Pigtail not allowed on step side

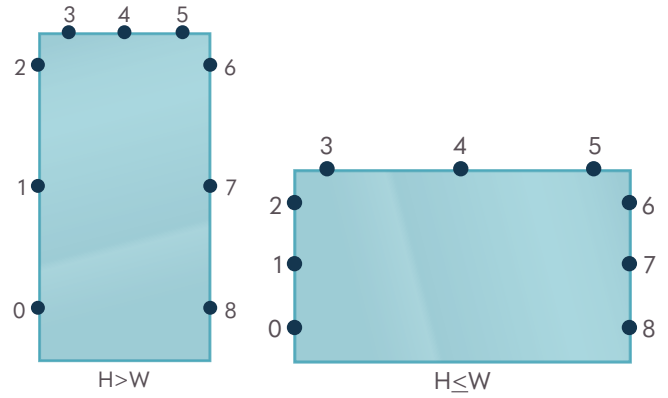
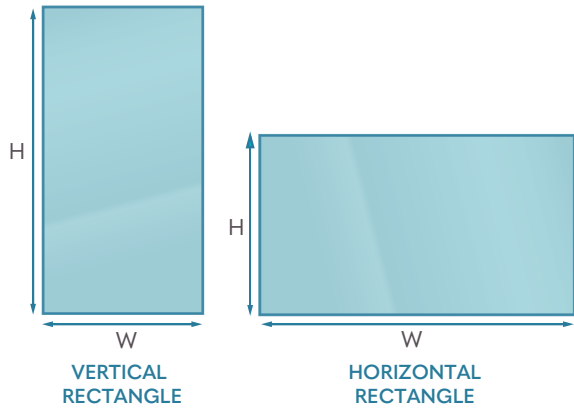


Shapes: Dimensions & Pigtail Placement

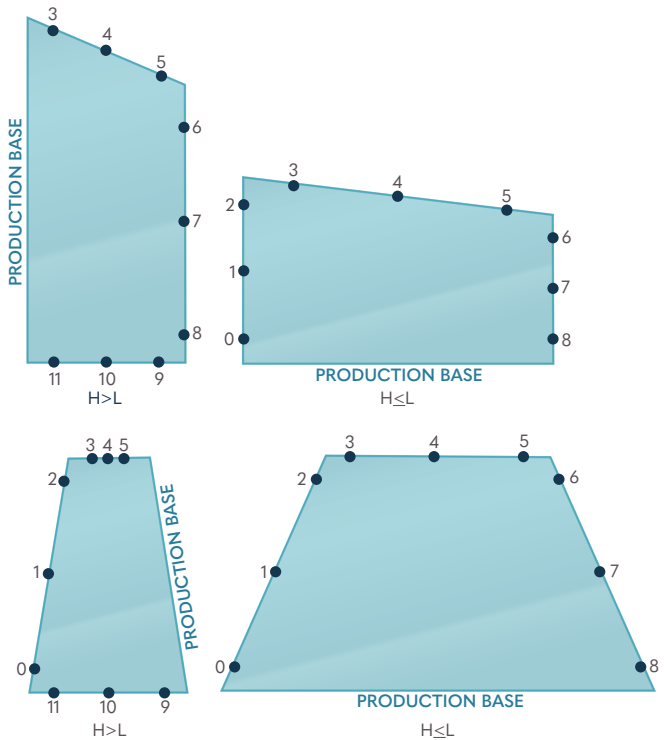
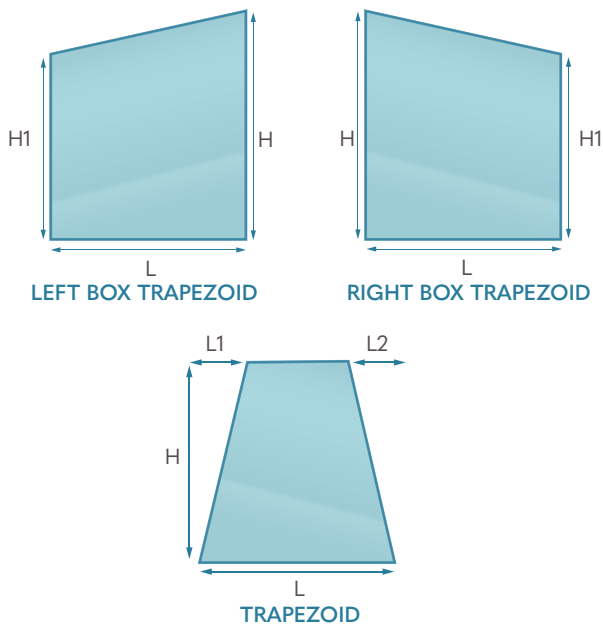
Note: Views from exterior.

- Allowed Pigtail Locations.

Rectangle Pigtail Locations

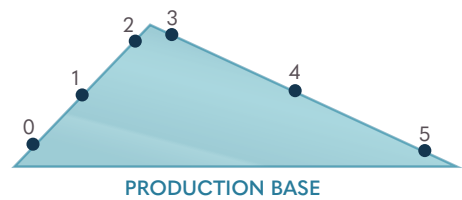
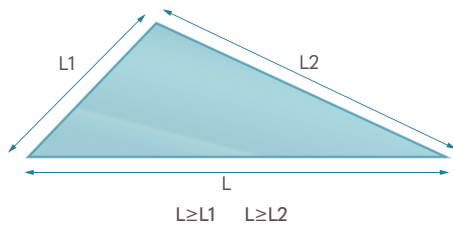


Trapezoid Pigtail Locations

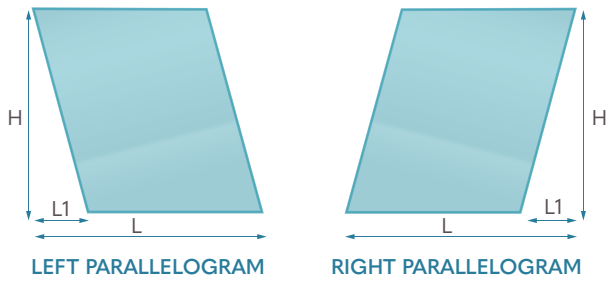


NOTE: If $H > 1524$ mm (60") a general quadrilateral shall be used

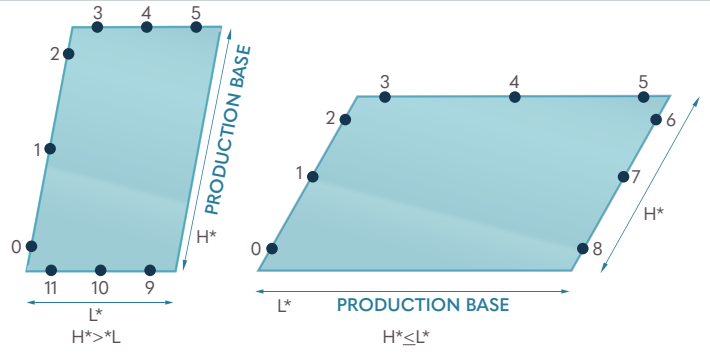
Triangle Pigtail Locations



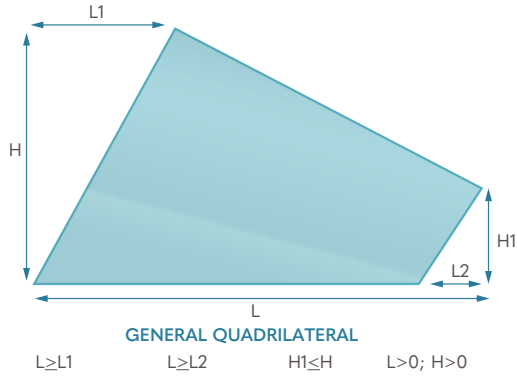
Parallelograms



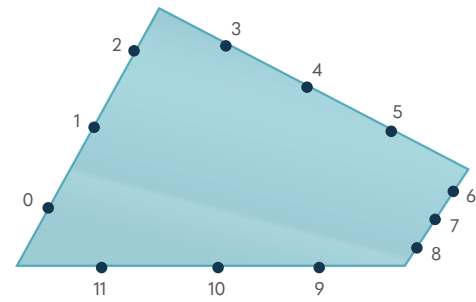
Pigtail Locations



Quadrilateral

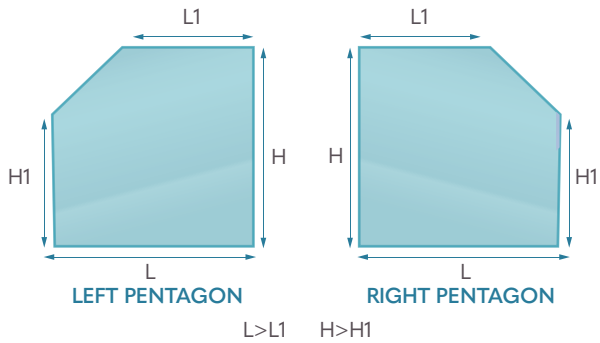


Pigtail Locations



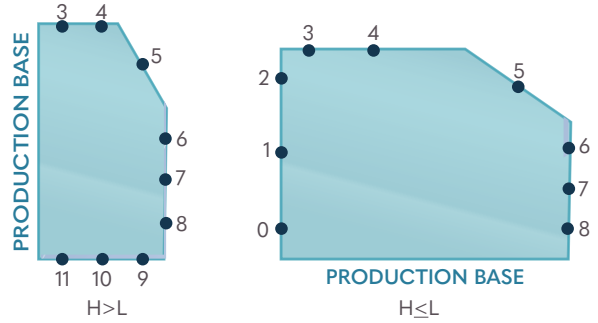
NOTE: Production base is the longest side.
Pigtail cannot be on the production base.

Pentagon



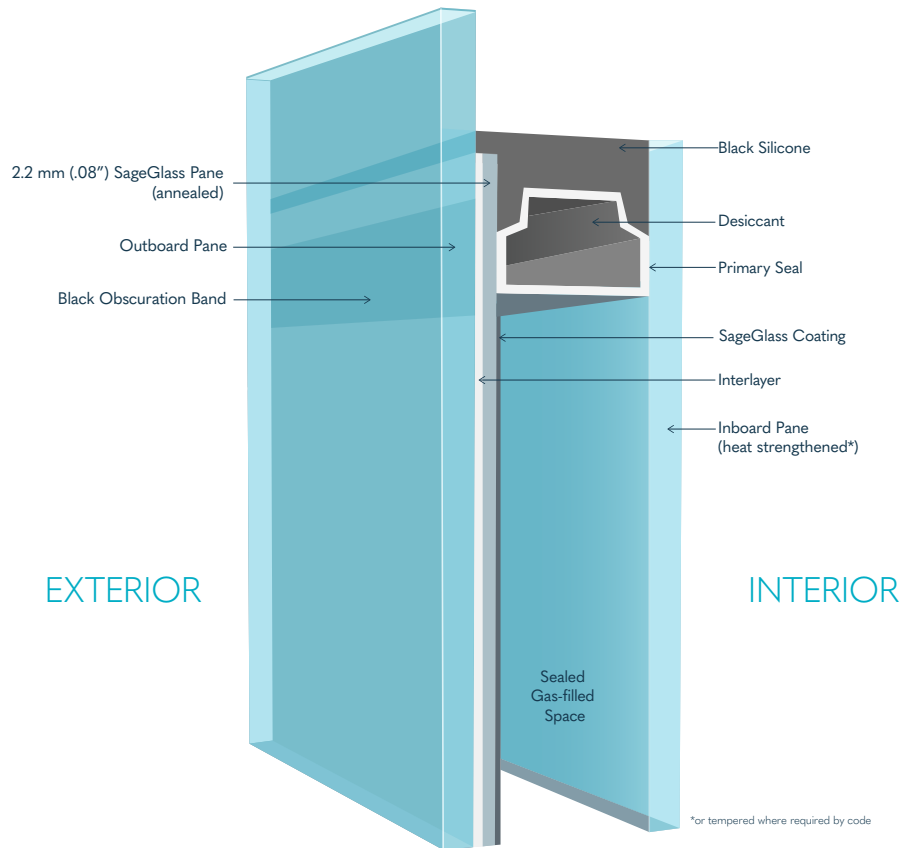
NOTE: Must include three 90° corners

Pigtail Locations



Steps

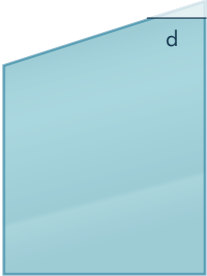
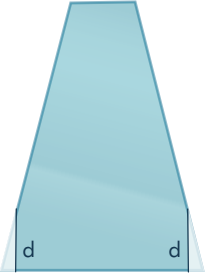
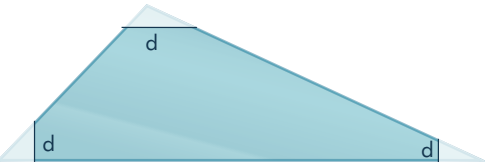
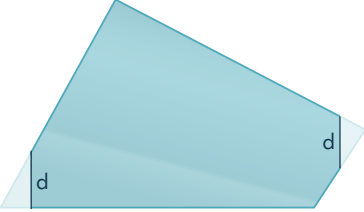
- Step(s) only allowed on rectangles
- Step(s) only allowed on outboard pane
- The maximum dimensions for IGUs with steps is 1795 mm (70.6") x 3048 mm (120")
- Step must be ≥ 14 mm (0.55") and ≤ 140 mm (5.51")
- Up to two sides of the rectangle may have a step
- Both long sides of the rectangle cannot have steps



Clipped Corners

Certain corners cannot be manufactured, and the points need to be "clipped" and replaced with a straight side. The guidelines for clipped corners are shown below.

NOTE: Dimensions to pre-clipped corners must be provided.

Shape	Rules & Constraints
 <p data-bbox="280 1570 459 1591">BOX TRAPEZOID</p>	<ul style="list-style-type: none"> • Angles 30 to $\leq 35^\circ$ will be clipped to a length (d) of 19.1 mm (0.75")
 <p data-bbox="673 1570 790 1591">TRAPEZOID</p>	
 <p data-bbox="261 1837 375 1858">TRIANGLE</p>	<ul style="list-style-type: none"> • Angles > 35 to $< 65^\circ$ will be clipped to a length (d) of 9.5 mm (0.37")
 <p data-bbox="704 1837 886 1858">QUADRILATERAL</p> <p data-bbox="743 1864 847 1885">H=H1 only</p>	





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