This Getting IG Certified Checklist serves as a step-by-step guide for program participants to complete the Certification Process of their IG to the CGSB 12.8 standard for the Canadian market. Contact Keystone Certifications Inspection Department for questions regarding this checklist!

- **Existing Keystone Licensees** can add participation in the IG Certification Program simply by forwarding a written request to do so via completing a new License Agreement. IG Program Policy and Fee Schedule are available after licensee login at our KCI Client Portal at https://portal.keystonecerts.com. Keystone will invoice for the additional IG Program testing fees.
- **IG Manufacturers new to Keystone** shall request a Keystone IG License Agreement Package by phone or email which includes, IG Certification Program Policy, License Agreement, Fee Schedule, and Licensee Profile Form. Return the completed Agreement and Licensee Profile Form with the initial fees (See Fee Schedule FRM B-08).
- **Keystone will respond with:**
  - The co-executed Licensee Agreement (new Licensees only)
  - The IG Quality Manual Template
  - The anticipated inspection/test specimen fabrication witness date

> *IG Test Sample Verification is performed electronically via webform submission unless specified otherwise during scheduling by Keystone. Your inspector will confirm and explain the process when scheduling your test unit fabrication.*

If the anticipated inspection date is unsatisfactory, contact Keystone Certifications Inspection Department to discuss "Expedited IG Test Sample Verification" Inspection" terms. (A $1250 expedited fee and expenses are incurred by the Licensee for this option.)

Section 1, Baseline Weathering Tests:

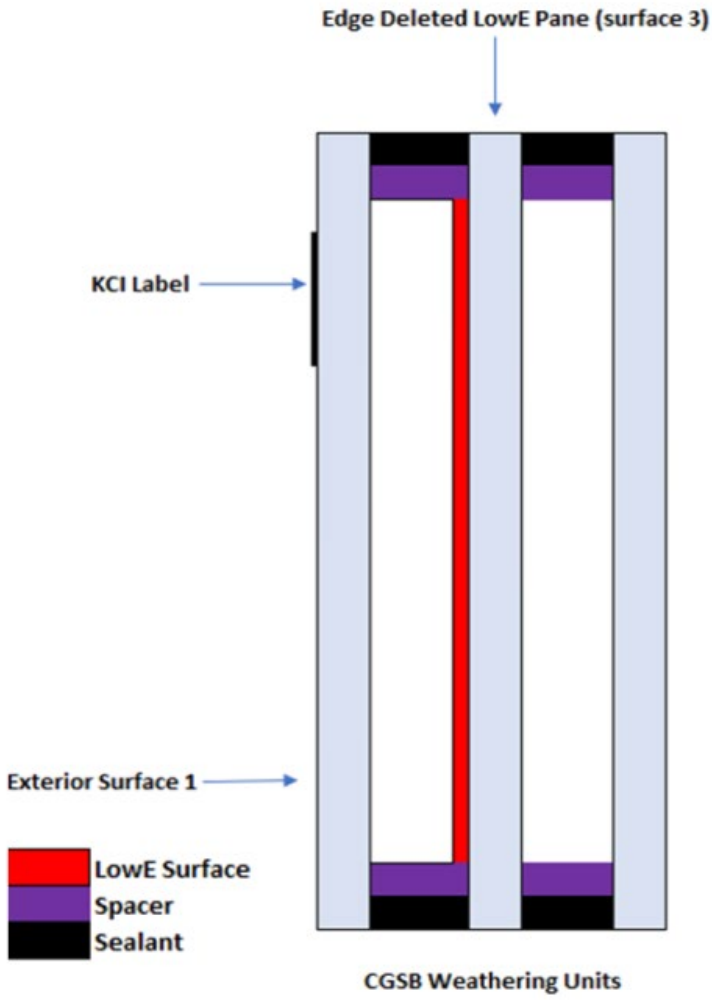
Review the Qualification Rules below for Baseline test units, and consider what IG Details need to be qualified (low E, air, gas fill,), then decide how the test specimens will be constructed based on the CGSB 12.8 standard requirements below:

Glazing Configuration (per spacer system)	Minimum Glass Thickness Option 1	Minimum Spacer Thickness Option 1
Dual Glazed	4mm (5/32")	12mm (1/2")
Triple Glazed (Qualifies Duals)	4mm (5/32")	6mm (1/4") / Per Airspace
CGSB 12.8 states that both the glass and spacer thickness can be **increased** from the minimums listed above, however these increases may **not result in an overall thickness of a test unit to exceed 40mm**. Please note that these component sizes **may not be** regularly available and may require contacting component suppliers **AT LEAST** 30 days prior to fabrication witness.		

After review of the Qualification Rules on page 3, be prepared to fabricate the following IGUs:

Item Description (Weathering, High Humidity)	Dual Glazed	Triple Glazed
Sample IG Unit Measurement Tolerance + / - 5 mm	350 mm x 500 mm	350 mm x 500 mm
Baseline IG units to be constructed per spacer system	20 Units	20 Units

Figure 1-Low E Surface for Triple Glazed Baseline Units



Only one Low E Coating may be employed in any configuration. See Figure 1 above.

Section 2, Volatile Fog Component Tests:

If you plan to qualify IG units with internal components (grids, blinds, caming, etc.), be prepared to fabricate an additional set of test units for each different component type. After initial internal component testing, future testing of internal components will occur once every four years.

Item Description for Volatile Fog testing	Dual Glazed	Triple Glazed
Sample IG Unit Measurements + / - 5mm	350mm x 500mm	350mm x 500mm
Volatile Fog IG units to be constructed per component	4 Units	4 Units

Fabrication of grid units should be made using two vertical and two horizontal grids creating a “Nine Lite” or 2x2 grid pattern as illustrated in Figure 2 below.

Figure 2 – Internal Grids

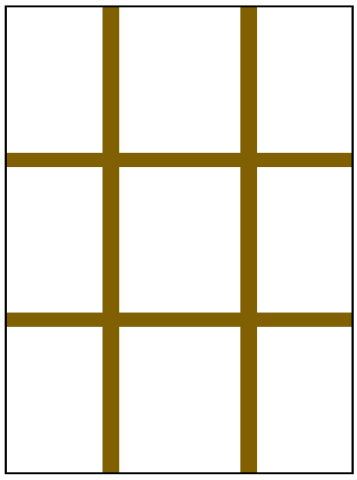
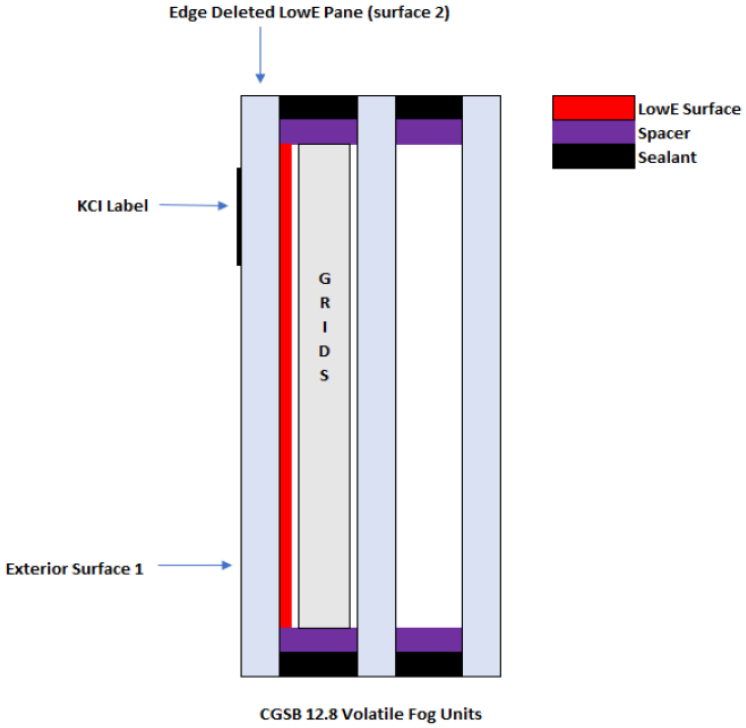


Figure 3 – Low E Surface for Triple Glazed Units



IG Qualification Rules

1. Tested glass **layer thickness** qualifies all variations of glass layer thickness.
2. Tested glass **tint** qualifies all variations of glass tint.
3. Tested glass **temper** (typically annealed) qualifies all variations of glass temper.
4. Tested IG **unit size** (width x height) qualifies all IG unit sizes.
5. Tested IG **unit shape** (rectangular) qualifies all IG unit shapes.
6. Testing specified glass from one **supplier** qualifies specified glass from any supplier.
7. Testing non-edge deleted **sputter coated low emissivity glass** qualifies any pyrolytic coated glass, any edge-deleted sputter coated glass, uncoated glass and may qualify other non-edge deleted sputter coated glass.
8. Testing of edge-deleted sputter coated glass qualifies any edge-deleted sputter coated glass, pyrolytic coated glass, and uncoated glass.
9. Testing of **pyrolytic coated glass** qualifies uncoated glass.
10. Testing an **airspace** dimension created by the spacer system qualifies all variation of air space dimensions that employ the same spacer system of varying thickness. Hollow spacers employing licensee-applied desiccants must employ the same or greater amount of desiccant per inch of perimeter edge.
11. Testing an airspace containing an inert gas (typically **argon**) content meeting NFRC 706 requirements (“gas-filled IG units”) qualifies IG units containing air-filled airspaces and gas-filled IG units containing another inert gas or mixture of inert gasses.
12. Testing **internal grids** (false muntins) of a single profile, pattern and spacer-mating component design qualifies IG units that do not contain internal grids, and IG units with different grid profile and patterns, provided the spacer-mating component design does not change.
13. Testing **triple glazed IG units** shall qualify both triple and dual glazed IG units, ongoing qualification of both triple and dual glazed IG units can be achieved by alternately testing IG units of each configuration during the time of the two-year retest cycle.
14. Where transportation of sealed units involves shipping through significantly different altitudes from that of manufacture, the unit cavities may at the manufacturer’s discretion be temporarily vented to allow for pressure equalization during transport. They shall be

resealed upon arrival at the test site by the manufacturer or authorized representative. Testing closed capillary tubes only qualifies IG units containing the same capillary tubes in the closed position.

15. Testing closed **breather tubes** qualifies IG units containing the same closed breather tubes and qualifies IG units without breather tubes.
16. Testing one **moisture vapor transmission path length** qualifies IG units using the same components with a greater moisture vapor transmission path length.
17. Testing one **spacer system material and componentry** does not qualify IG units with a different spacer system material and componentry, except as specified herein.
18. Testing one **spacer finish** does not qualify IG units containing a different spacer finish.
19. Testing a hollow spacer of one **wall thickness** qualifies the same spacer with a different wall thickness.
20. Testing a hollow spacer of one **seam design** qualifies the same hollow spacer with a different seam design.
21. Testing one supplier's hollow spacer design qualifies spacers of the same design from a different **supplier**.
22. Testing spacers with **cut corner construction** *does not* qualify IG units containing spacers with different cut corner construction, however, testing IG units containing plastic mechanical corner keys and joiners does qualify IG units containing different plastic mechanical corner keys and joiners.
23. Testing a licensee-applied **desiccant from one supplier** qualifies the use of the same generic type of desiccant from another supplier.
24. Testing licensee-applied **desiccant of one particle size** qualifies the use of the same generic type of desiccant of a different particle size.
25. Testing a licensee-applied **desiccant of one generic type** does not qualify IG units containing desiccants of a different generic type.
26. Testing a **single generic sealant type** does not qualify IG units containing any other generic sealant type. (Ex: single-sealed Hot Melt Butyl does not qualify single-sealed Polysulphide)
27. Testing **multiple generic sealant** types does not qualify IG units containing any single generic sealant type or other combination multiple generic sealant types.
28. Testing a generic sealant type from one manufacturer qualifies IG units containing the same generic sealant type from a different manufacturer.

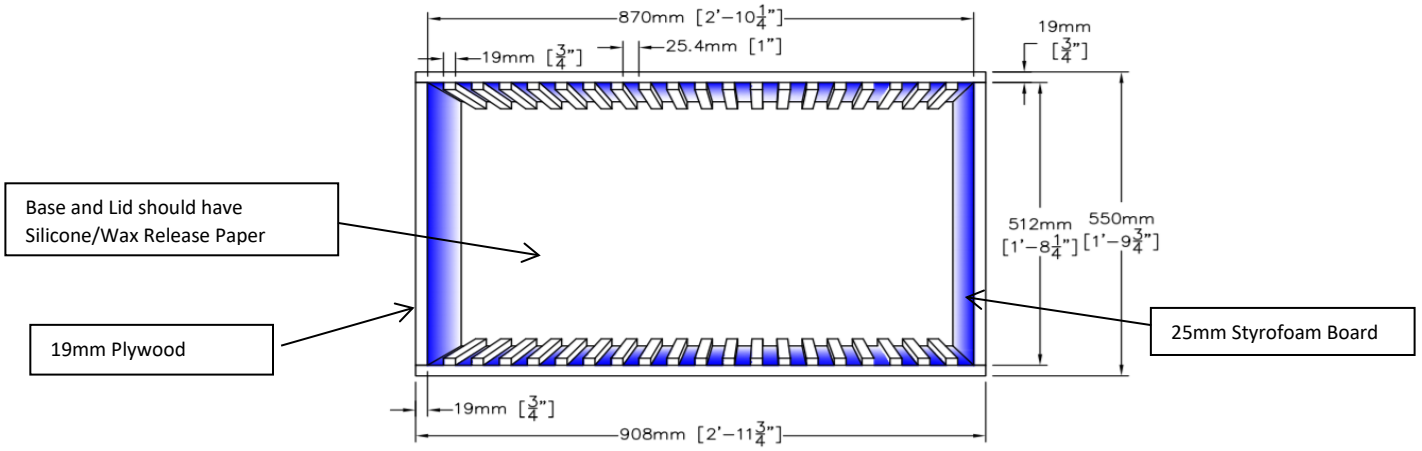
Test Units should cure for 30 days before shipping to the test lab.

Bill of Materials for Insulating Glass Shipping Crate

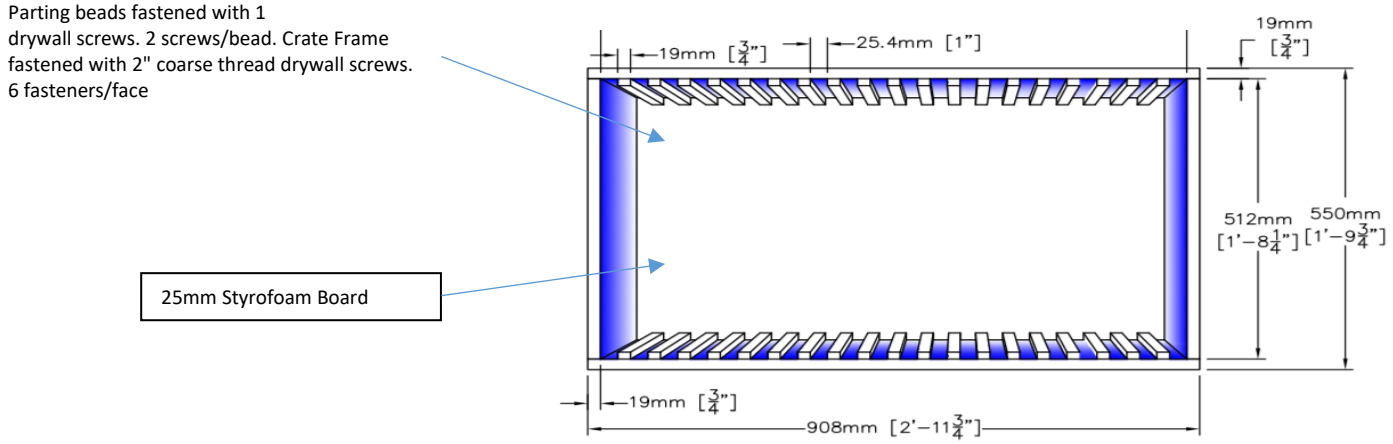
Item	Description	Location
1	12mm x 19mm Parting Bead (38 count)	Slats to separate IG Units in crate
2	19mm Plywood (2 sheets 4'x8')	Base / Frame / Lid
3	25mm Styrofoam Board (1 sheet 4'x8')	Top and bottom cushion
4	Silicone/Wax Release Paper	Top and bottom between Styrofoam and IG Units
5	#8 x 1" Coarse Drywall Screw	Fasteners for slats
6	#8 x 2" Coarse Drywall Screw	Fasteners for frame and lid

Crating Construction Details for Insulating Glass Specimens

Note: Crate Base and Lid Constructed in same manner. Base and Lid fastened with 2" coarse thread drywall fasteners. Not to scale. Keystone Certifications does not guarantee or assume any responsibility for unit damage.



Note: Drawing Not to Scale. Crate Construction based on 25mm Overall IG Units. Parting beads must be adjusted for smaller Overall IG Units. Crate length shown is based on fabrication of 20 Triple glazed IG Units



Insulating Glass Testing & Administrative Fees [1, 2, 5]

Laboratory	Location	Glazing Type	Baseline CGSB 12.8[3]	E2649 Gas Testing	Internal Component Submitted w/ Baseline Set	Internal Component Submitted Alone[4]
Can-Best	Brampton, ON	Dual/Air	$2425	$650	$550	$660
		Triple/Air	$2500	$850	$850	$960

Footnotes:

1. Keystone administers IG testing with the Licensee-designated test lab. The amounts shown shall be invoiced to the Licensee within 15 days of test unit fabrication.
2. The above testing fees are provided by Keystone as a convenience for IG Program Licensees. These fees are as quoted by the respective laboratories and are current as of January 1, 2024. Keystone assumes no responsibility should laboratories revise test fees, and any lab test fee increases will be billed to the Licensee.
3. All amounts are per test unit "set" as described in this checklist and include a $550 Keystone Test Administration Fee applied to each baseline set.
4. Internal Component test units submitted separately from a baseline CGSB 12.8 set will include a $110 Keystone Test Administration Fee for each Internal Component test set submitted.
5. All fees are in US Dollar (USD) unless stated otherwise.