



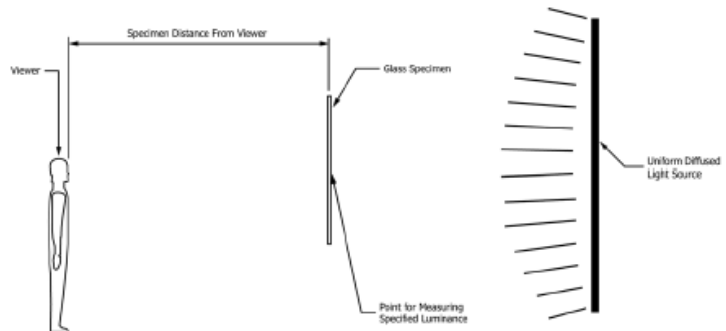
# Wisconsin Shower Door

Flat Glass Inspection Criteria per ASTM C 1036-16 (abridged)

Wisconsin Shower Door prides itself in delivering high-quality fabricated glass and mirror. The criteria listed below meet ASTM Quality 2 standards. WSD may apply alternate ASTM inspection criteria to oversized items, stock sheets or patterned glass.

## Inspection Criteria

- Visual inspection should be done with 20/20 vision (naked eye or corrected)
- The inspector shall place the glass in a vertical position
- View at the distance specified by defect type below
- Inspector shall be positioned perpendicular to the glass surface
- Lighting should be daylight level (without direct sunlight) or other uniform backlight that simulates daylight



## Point Blemishes

### Terminology

Point blemish – crush, knots, dirt, stones, gaseous inclusions, and other similar imperfections

- crush – lightly pitted condition with a dull gray appearance
- dirt – small particle of foreign matter embedded in the surface of flat glass
- gaseous inclusion – round or elongated bubble in the glass

### Allowable Point Blemish (viewing distance 39")

To determine point blemish size, measure height and width of blemish and average. Only the point blemish is to be measured, and not any distortion that may be present.

- Blemish size < 0.5mm (0.02") – allowed without restriction
- Blemish size ≥ 0.5 mm (0.02") to <0.8mm (0.03") – allowed with a minimum separation of 600 mm (24")
- Blemish size ≥ 0.8 mm (0.03") to <1.2mm (0.05") – allowed with a minimum separation of 1200 mm (48")
- Blemish size ≥ 1.2 mm (0.05") to <1.5mm (0.06") – allowed with a minimum separation of 1500 mm (60")
- Blemish size ≥ 1.5 mm (0.06") – none allowed

The values above are for 6.0 mm (1/4") and less. Glass thicker than 6.0 mm (1/4") may contain proportionally larger blemishes for the same minimum separation distances.

## Linear Blemishes

### Terminology

Linear blemish – digs, rubs scratches, and other similar imperfections

- dig – deep, short scratch
- rub – abrasion of a glass surface producing a frosted appearance
- scratch – damage on a glass surface in the form of a line caused by the movement of an object across and in contact with the glass surface

### Blemish Intensity (viewing distance starting at 132")

To determine linear blemish intensity, start at 132" and move closer until blemish becomes visible (refer to table below).

Detection Distance	Blemish Intensity
Over 3.3 m ( 132")	Heavy
3.3 to 1.01 m (132" to 40")	Medium
1 to 0.2 m (39" to 8")	Light
Less than 0.2 m (8")	Faint

### Allowable Linear Blemish

- Faint ≤ 75 mm (3") – allowed with a minimum separation of 1200 mm (48")
- Faint > 75 mm (3") – none allowed
- Light ≤ 75 mm (3") – allowed with a minimum separation of 1200 mm (48")
- Light > 75 mm (3"), medium or heavy linear blemishes – none allowed