GLASS INSPECTION

STANDARD AND QUALITY

FABELTA
systèmes de fenestration

GLASS STANDARD AND QUALITY INSPECTION

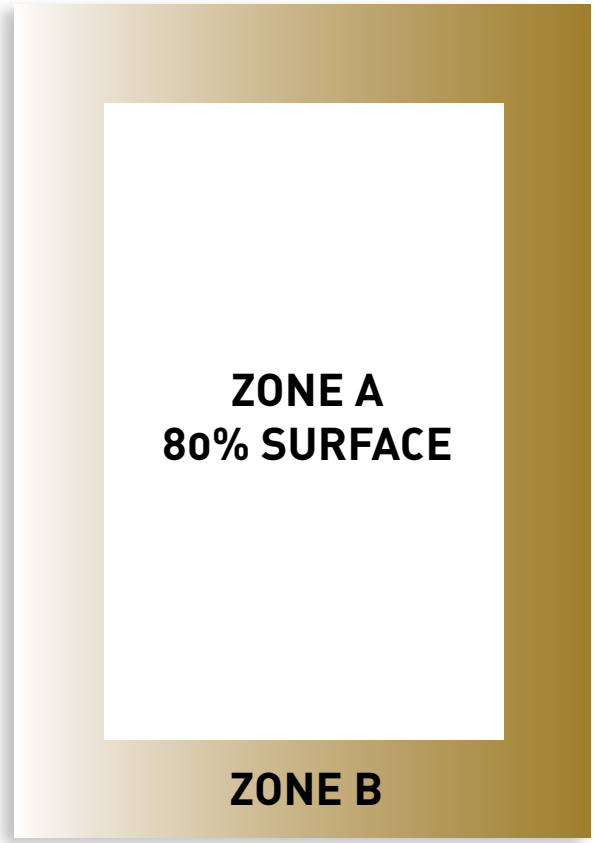
CAN/CGSB-*12.3-M91 : CLEAR, FLAT AND FLOAT GLASS

In order to determine the conformity of a sealed unit, our entire industry inspects the glass according to the CAN/CGSB-*12.3-M91 standard which includes different visual inspection criteria. Below is illustrated the inspection method on an average sized glass, i.e. a unit of 2.5m^2 to 7m^2.

this standard was developed under the auspices of the CANADIAN GENERAL STANDARDS BOARD, a federal agency within the Department of Supply and Services.

- **Before starting the inspection it is important to ensure the following conditions : you must inspect in daylight, making sure that the glass is not exposed to direct sunlight.**
- **Then make sure to position yourself 1 to 3 meters depending on the type of defect in your window.**
- **Only defects visible from the front at a 90-degree angle are considered non-compliant. So make sure you position yourself correctly in front of your window during the inspection.**

Inspection criteria are sometimes divided into two inspection zones; either central zone A or external zone B :



TYPE	DISTANCE	ZONE A	ZONE B	INSPECTION
GASEOUS INCLUSIONS	1 METER	Defect of more than 3 mm to are considered non-compliant.	Defect needs to be more than 5 mm to be considered non-compliant.	To obtain it's measurement, add it's width to it's height then divide by 2. If these defects are less than these parameters, but they are separated by a distance of less than 300 mm, the unit will be deemed non-compliant.
STONE AND KNOTS	1 METER	Have a minimum diameter of 1.5 mm.	Have a minimum diameter of 1.5 mm.	Transparent part, where the glass lacks homogeneity and has an irregular, nodular or cloudy appearance.
SCRATCHES AND RUBS	3 METERS	Defects visible from a distance of 3 m are considered non-compliant.	Defects visible from a distance of 3 m are considered non-compliant.	Mark, crack or fine scratch, abrasion of a glass surface.
CRUSH	3 METERS	This defect must be larger than 3 mm.	This defect must be larger than 5 mm.	Slightly corroded surface giving a greyish and dull appearance. If these defects are less than these parameters, but they are separated by a distance of less than 300 mm (central area) or 600 mm (outer area) the unit will be considered non-compliant.
DIGS	1 METER	This defect must be larger than 3 mm.	This defect must be larger than 5 mm.	Small deep scratch. If these defects are less than these parameters, but they are separated by a distance of less than 300 mm, the unit will be deemed non-compliant.
REAMS, STRINGS AND WAVE	1 METER	At approximately 1 m from a visual reference providing straight parallel lines, the observer should look through the unit at a distance of approximately 1 m in daylight without direct sunlight. Examine the glass facing the glazing at an angle of 90 degrees. A slight horizontal movement of the head, at an angle of two or three degrees is acceptable in order to detect the defect. If the defect is not visible within these parameters, the unit will be deemed compliant.	At approximately 1 m from a visual reference providing straight parallel lines, the observer should look through the unit at a distance of approximately 1 m in daylight without direct sunlight. Examine the glass facing the glazing at an angle of 90 degrees. A slight horizontal movement of the head, at an angle of two or three degrees is acceptable in order to detect the defect. If the defect is not visible within these parameters, the unit will be deemed compliant.	Ripple, wave and dip