



QUALITY REQUIREMENTS

QUALITY REQUIREMENTS FOR CUT-TO-SIZE AND PROCESSED FLOAT GLASS, TINTED GLASS AND PATTERNED GLASS

EN 572-8 is a European standard covering the visual inspection of glass to ensure glass quality and conformity with requirements. Visual inspection is an important part of the glass manufacturing process, as it helps detect glass defects that may arise from the raw material, processing operations or during transport.

VISUAL INSPECTION

In accordance with standard EN 572-8

Environment and lighting

Lighting: Visual inspection must be carried out in diffuse daylight or similar artificial light (~600 lumens); spot lighting is not permitted.

Viewing angle and distance: The glass to be inspected is placed in a vertical position, parallel to a matt background. The inspector stands 2 m from the glass and visually assesses the glass quality (the matt background is located on the other side of the glass).

Defects must not be marked on the glass before visual inspection.

Visual defects

Visual defects that can be seen during visual inspection: spots, bubbles, foreign bodies, scratches, stains.

Permitted defect sizes (per 1 m²)

0.2 to 0.5 mm - permitted without restriction

0.5 to 3 mm - no more than 1 pc

3 mm - not permitted

Scratches, provided they are not visible using the inspection method described above

NOMINAL THICKNESS AND THICKNESS TOLERANCES

In accordance with standard EN 12150

Nominal thickness	Tolerance
4	± 0,2
5	± 0,2
6	± 0,2
8	± 0,3
10	± 0,3
12	± 0,3
15	± 0,5
19	± 1



DIMENSIONAL TOLERANCES

In accordance with standard EN 12150

Glass edge dimension	Tolerance
Alla 500 mm	± 1
500-1000 mm	± 1,5
1000-1500 mm	± 2
1500-2500 mm	± 2,5
2500-3000mm	± 3
3000-3500 mm	± 4
Üle 3500 mm	± 5

FLATNESS OF TOUGHENED GLASS

In accordance with standard EN 12150

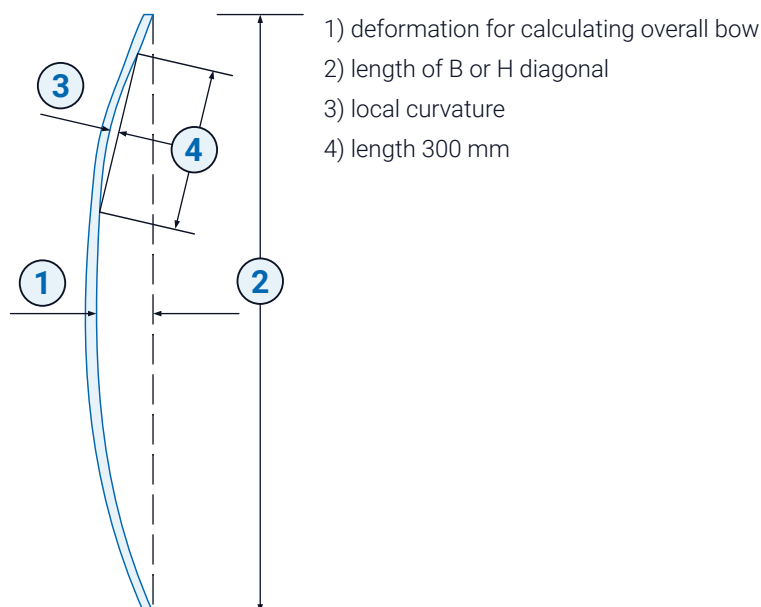
Due to the nature of the toughening process, it is not possible to obtain a product comparable to the flatness of non-toughened glass. The difference depends on the nominal thickness of the glass, its dimensions and the ratio between those dimensions. Distortions may therefore occur, which may be referred to as overall bow and local bow.

Overall bow deformation is expressed as a ratio in which the deflection h1 in millimetres is divided by the width B or height H of the glass pane, or by the diagonal length in millimetres.

Overall bow: deformation (1) / B or H

Local bow occurs in the edge region of the glass. Local bow deformation is expressed as an absolute value, where the size of the bow over a 300 mm wide area equals the piece with local bow.

Local bow: (4)



Glass edge dimension	Overall bow, mm/mm	Local bow, mm/300 mm
Float	0,003	0,5



DEFECTS ON EDGES TO BE FRAMED

Defects in the edge areas are permitted provided their diameter does not exceed 5 mm. For panes with an area < 5 m², the edge zone width is taken as 15 mm; for > 5 m², 20 mm.

If the defects are bubbles, the area containing the bubbles must not make up more than 5% of the edge zone.

QUALITY REQUIREMENTS FOR LAMINATED SAFETY GLASS

In accordance with standards EN 12543-5 and EN 12543-6

VISUAL INSPECTION

In accordance with standard EN 572-8

Environment and lighting

Lighting: Visual inspection must be carried out in diffuse daylight or similar artificial light (~600 lumens); spot lighting is not permitted.

Viewing angle and distance: The glass to be inspected is placed in a vertical position, parallel to a matt background. The inspector stands 2 m from the glass and visually assesses the glass quality (the matt background is located on the other side of the glass).

Defects must not be marked on the glass before visual inspection.

Visual defects

Visual defects that can be seen during visual inspection: spots, bubbles, foreign bodies, scratches, stains.

Permitted defect sizes (per 1 m²)

0.2 to 0.5 mm - permitted without restriction

0.5 to 3 mm - no more than 1 pc

3 mm – not permitted

Scratches, provided they are not visible using the inspection method described above

PERMITTED DEFECTS IN THE INTERLAYER

Point defects (spots, bubbles, foreign bodies)

Defect diameter	Number of layers in laminated glass	Permitted number of defects
< 0,5 mm	All constructions	Not taken into account
> 3 mm	All constructions	Not permitted
0,5-1mm	All constructions	Permitted without restriction*
1-3 mm	2	No more than 1 pc/m ²
1-3 mm	3	No more than 1.5 pcs/m ²
1-3 mm	4	No more than 2 pcs/m ²

* Permitted without restriction, but clustering is prohibited. Clustering of defects is a situation where 4 or more defects are less than 200 mm apart.



SCRATCHES

Pane area	Permitted number of defects > 30 mm in length
< 5 m ²	not permitted
5-8 m ²	1
> 8 m ²	2

Scratches under 30 mm in length are permitted.

DEFECTS ON EDGES NOT TO BE FRAMED

Bubbles and interlayer defects are permitted provided they cannot be detected by the test method.

CRACKS, WRINKLES, STREAKS

Sharp-ended cracks or fissures that start from the edge of the glass and run towards the centre of the glass are prohibited. Wrinkles and folds in the interlayer are also prohibited.

