

Visual quality standard for installed insulating glass units constructed from flat transparent glass

Lee Glass have been committed to crafting top quality glass products for over 50 years.

This document describes the visual quality standards we expect our flat transparent glass to meet, when installed as insulating glass units.



1: Rest assured that the quality of insulating glass will be identical to that used in standard single glass.

2: Glass should be viewed a distance of no less than 2 metres (no less than 3 metres for toughened, laminated or coated glass) and in natural daylight, rather than direct sunlight, and also with no visible moisture on the surface of the glass.

3: Transparent glass, regardless of whether it's laminated or toughened, is still deemed acceptable for use if blemishes are not obtrusive or concentrated in one area e.g. bubbles, blisters, enclosed seeds, hairlines, blobs, small scratches. The severity of these blemishes should be assessed by using the lighting conditions outlined in step two.

4: Sometimes thermally toughened glass may appear slightly distorted, or surface colouration or patterns may be visible - when viewed by reflection in certain lighting conditions. This is normal for glass that has undergone a toughening process.

5: Visible double reflections may be noticeable under certain lighting conditions, or when viewed at certain angles, and occurs from the presence of multiple surface reflections in sealed units.

6: During the manufacturing process of flat laminated glass, the visual quality is rarely affected when it's incorporated into insulating glass units. However, the faults described in point three could increase in number if several interlayers are used in production - under certain lighting conditions, this may result in a distortion effect, caused by the presence of multiple surfaces.

7: Recognisable as rainbow-like optical phenomena, Brewster's Fringes occur when flat glass surfaces are parallel to each other. They are not a defect, and are actually a sign of more high-quality glass. Usually the effect is seen only under certain conditions, and is determined by physics and light transmission properties rather than the glass itself.

Please note: Due to the technique used to product patterned glass, it is acceptable for bubbles and other blemishes to appear - therefore the above criteria do not apply.