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Glass and Glazing Federation

Quality of Vision

Insulating Glass Units
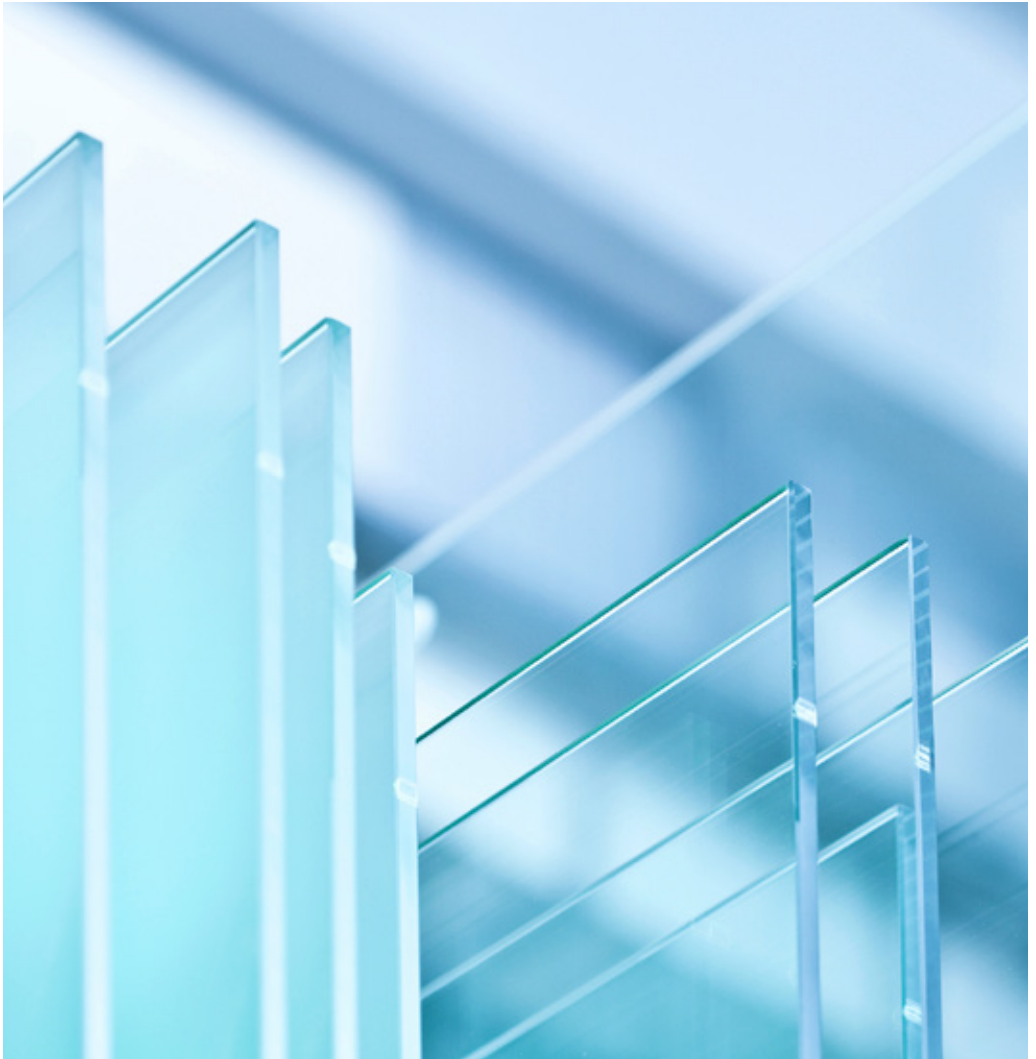
**Buying
the Best**

High standards of product and service are of paramount importance to Glass and Glazing Federation Members. They have a reputation for quality to maintain. All GGF Members are obliged to follow the GGF Code of Good Practice. This lays down the standards required, right through from advertising and selling to the workmanship, materials and after sales. By dealing with GGF Members, customers can have peace of mind. If there should be any misunderstanding that cannot readily be resolved, the GGF offers a conciliation service. All deposits paid by customers are protected by insurance.

Sealed Units

Sealed units provide a high standard of vision. The following is a guide to the quality that can be expected.

Glass used in the manufacture of sealed units is similar to that used traditionally for single glass and will, therefore, have a similar level of visual quality.

> Viewing sealed units for scratches on the outer faces of the panes must be carried out before any rendering, plastering or other works adjacent to the glazing takes place, and as early as reasonably practicable following installation.

How to do a Professional Inspection

Stand in the room no less than 2 metres away from the sealed unit and look directly through it.

- For toughened, laminated or coated glasses, stand no less than 3 metres away.

- Where it is not possible to stand at the right distance then stand as far away as you can from the sealed unit.

- Do so in natural daylight, but not directly towards the sun and with no visible moisture on the surface of the glass.

- Exclude 50mm wide band around edge of the glass from the check.

- Glass must be viewed at an angle of 90°.

## What to Expect when Carrying Out an Inspection

Flat transparent glass, including laminated, toughened or coated glass is acceptable if the following are neither obtrusive nor bunched:

- Bubbles or blisters
- Fine scratches not more than 25mm long
- Minute particles

The obtrusiveness of blemishes is judged by looking through the glass, not at it, under natural light. It must be understood that the glass used in sealed units is a processed glass, and as a consequence, blemishes are to be expected.

> Sealed units with optical defects such as smears, finger prints or other dirt on the cavity faces of the glass, or extraneous material in the cavity are unacceptable, if they are visually disturbing.

Special Glasses
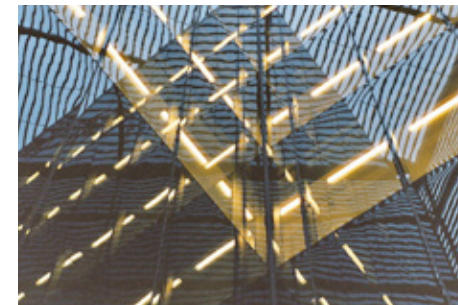
Toughened glass may show visual distortions which are accentuated by reflections in sealed units. This is a natural phenomenon and not a fault.

Laminated glass may have a few more blemishes due to it being made of several layers.

Some low emissivity coatings may produce transient visual effects.

In some lighting conditions the coating may look like a transparent film or produce a haze, i.e. a cloudy look to the surface.

When light coloured objects such as net curtains are placed close to the glazing they may look slightly darker.

See GGF Leaflet:
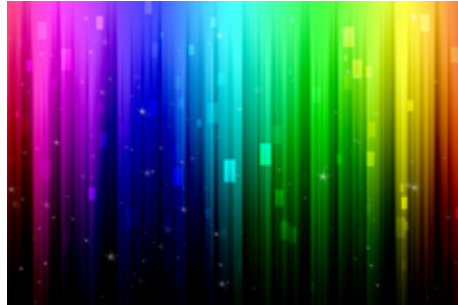*Low Emissivity Glass and its Visual Quality*

Condensation

Whilst sealed units will generally reduce the incidence of condensation, it may still occur under certain conditions.

See GGF Leaflet:
Condensation Some Causes, Some Advice

Brewster's Fringes – the Rainbow Effect

Small transitory rainbow effects are sometimes produced by the glass refraction of light. Their appearance is due to high quality flat glass sheets being placed parallel to each other.

Multiple Reflections

This occurs in certain light conditions and is caused by multiple surface reflections within sealed units which may vary from pane to pane.

Patterned Glass

This document does not apply to patterned glass as its manufacturing process is different.

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