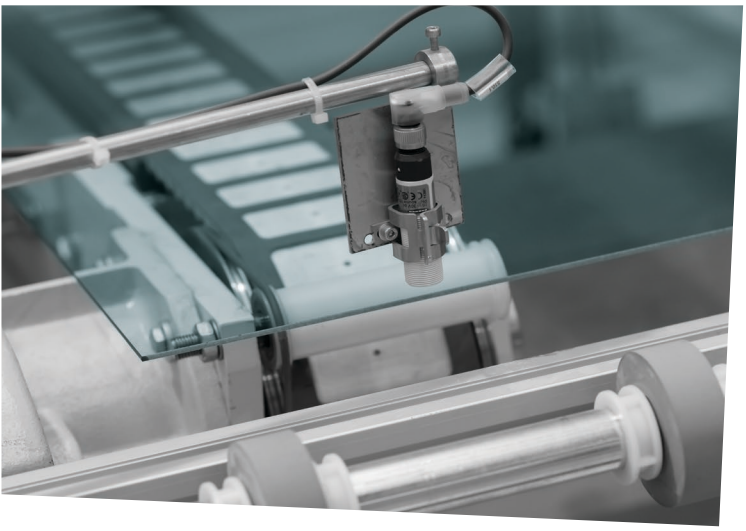
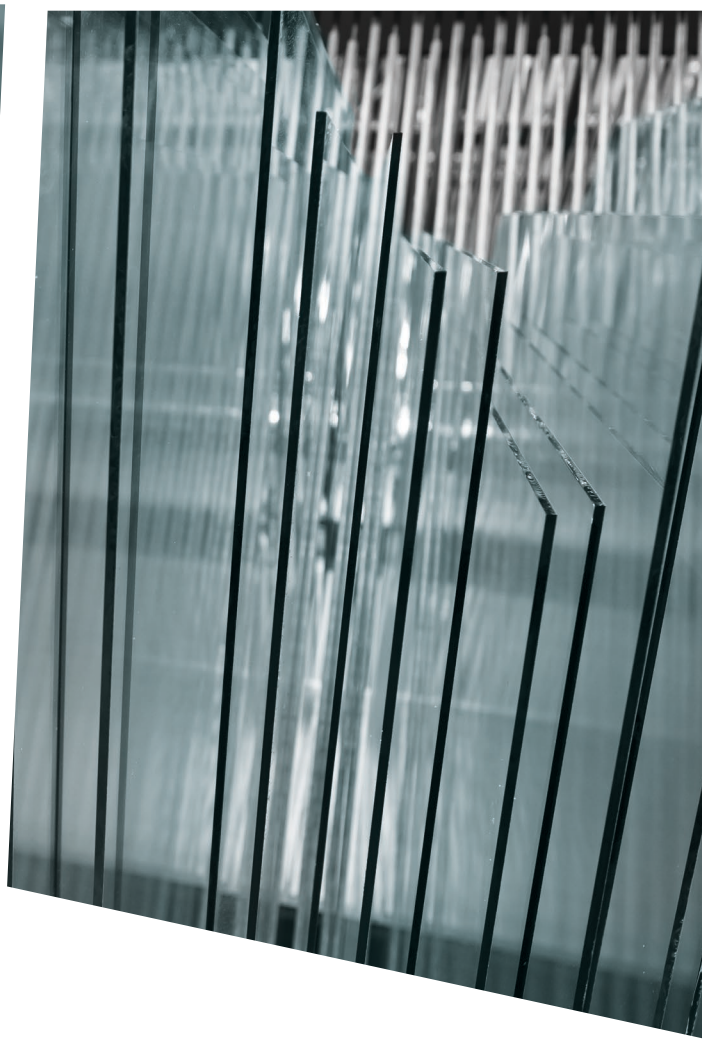




PRESSGLASS

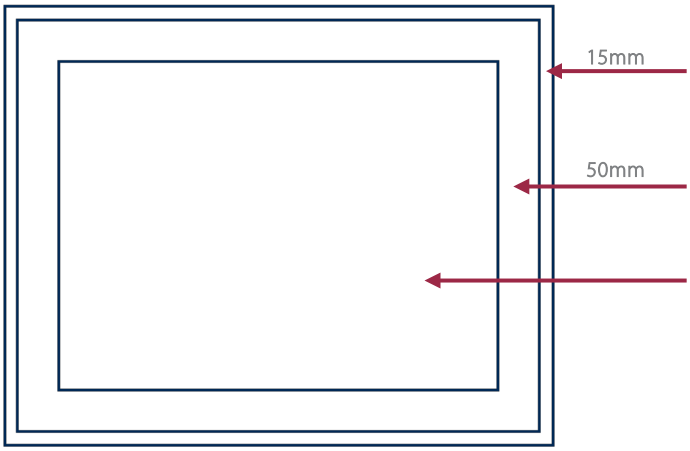
UK'S NUMBER ONE

QUALITY CRITERIA

FOR INSULATED GLASS UNITS

www.pressglass.co.uk

VIEWING AREA



Zone R - Represents the **15mm** perimeter around the glass, normally covered by the frame, or corresponding to the edge seal

Zone E - Is the area nearest to Zone R with a width of **50mm**

Zone M - is the main area of the IGU

Acceptable levels of defect vary from Zone to Zone with the most critical being Zone M

VIEWING CRITERIA

- View the glass from 3 metres away and at 90°, looking straight at it (not at an angle)
- Make sure the glass is clean. Do not mark possible issues before checking
- Do not inspect in direct sunlight
- Check at a rate of around 1 square metre per minute
- Inspections should be done by looking through the glass, not at the surface
- Any noticeable issues should become visible within 20 seconds
- If you can't see the defect at 3 metres within this time, it's not considered a problem

BUBBLES & SEEDS – Table 1

Zone	Size of fault (excluding halo) (in mm)	Size of the pane			
		Up to 1m²	1m² - 2m²	2m² - 3m²	Over 3m²
R	All sizes	No limitation			
E	Up to 1mm	Accepted if less than 3 in each area of 20cm²			
	1mm – 3mm	4 spots per m² (1mm – 3mm)	Larger than 3mm only 1 per m²		
	Over 3mm	Not Allowed			
M	Up to 1mm	Accepted if less than 3 in each area of 20cm²			
	1mm – 3mm	2	3	5	5 + 2/m²
	Over 3mm	Not Allowed			

SPOTS & STAINS– Table 2

Zone	Dimensions (in mm)	Size of the pane	
		Up to 1m²	Over 1m²
R	All	No limitation	
E	Spots up to 1mm	No limitation	
	Spots 1mm – 3mm	4 spots per m² (1mm – 3mm)	Spot larger than 3mm only 1 spot per m²
	Stain 1mm- 17mm	1 Stain	
	Spots up to 3mm stains up to 17mm	Maximum 1	
M	Spots up to 1mm	Maximum 3 spots within 20cm²	
	Spots 1mm – 3mm	Maximum 2 in each area of 20cm²	
	Spots over 3mm Stains over 17mm	Not Accepted	

LINEAR FAULTS OR SCRATCHES - Table 3

Zone	Individual lengths (mm)	Total of individual lengths (mm)
R	No limitation	
E	Less than 30mm	Less than 90mm
M	Less than 15mm	Less than 45mm

Note: IGUs other than those made of two monolithic glass panes. The allowable number of discrepancies defined in Table 3 is increased by 25% per additional glass component (in multiple glazing or in a laminated glass component). The number of allowable defects is always rounded up.

Example: -
Double glazed unit made of two laminated glasses with 2 glass components, the number of allowable faults of Table 3 is multiplied by 1.5.

PRESSGLASS

WHAT IS ACCEPTABLE IN AN IGU

Some minor marks are normal and expected in all processed IGU's. These are acceptable as long as they are not distracting and are not grouped closely together:

- Bubbles or Blisters
- Fine scratches
- Minute particles
- Small surface blemishes
- Hairline marks or blobs

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 double glazing is a processed glass, and so consequently, blemishes are to be expected.

Swarf

This is a normal part of production and can't be completely avoided. A small amount of swarf is considered acceptable - up to 5 pieces, each less than 4mm long, within any 100mm section.

See below for examples of what's acceptable and what's not.

Acceptable

Unacceptable

Special Glass

Toughened glass may show visual distortions which are accentuated by reflections in double glazing. Such surface colourations and patterns do not indicate a change in physical performance.

Patterned Glass

The above does not apply to patterned glass as its manufacturing process is different.

Laminated Glass

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

Safety Glass Marking

Individual panes of glass are certified as safety products, each carry the appropriate mark relevant to the product.

Press Glass do not guarantee that these marks will all be in the same corner of the unit or that they will align through the unit.

PRESSGLASS

Roller Pluck / Pickup (toughened glass only)

The toughening process involves heated glass being contact with rollers in the furnace, this may result in small imprints in the glass surface. This may be pronounced in thicker glass.

Roller Wave (toughened glass only)

The toughening furnace rollers may also cause a slight unevenness in the glass surface this is inherent to the process of toughening glass.

Thermal Fracture

Thermal stress breaks occur when there is a temperature variance in the body of the glass. The risk of the thermal fracture is increased in installations with deep partial shadows, blinds, applied films, heaters or air conditioners directed onto the glass.

Leaded Units

The lead on leaded units will oxidise (white powder) overtime, this is perfectly natural, and the temporary blemishes will eventually disappear as the patination process continues. The powder should be wiped off occasionally to prevent the residue affecting the face of the glass until the natural patination process is fully developed.

Haze

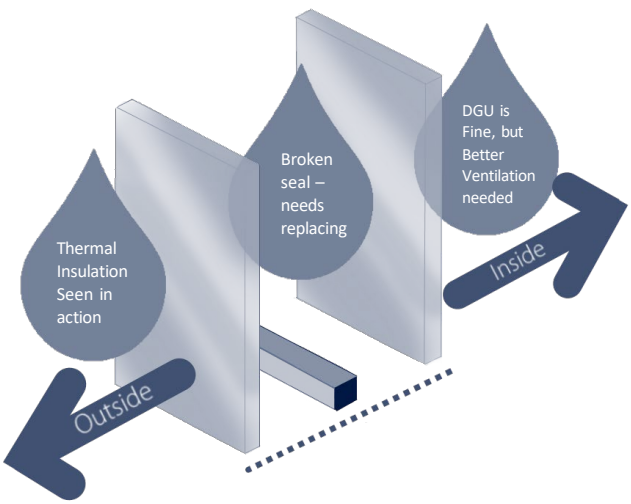
Under certain lighting conditions and viewing angles some coatings or laminated products may exhibit a phenomenon known as haze (a cloudy/dusty appearance). This is not a fault.

Condensation

Condensation forming on the glass surface facing the room is due to warm, moist air trapped in the building. This indicates a problem with the building itself suggesting that increased air ventilation is required - the condensation on the glass is a symptom not a fault.

Internal Condensation inside the cavity indicates the IGU seal has broken down; this is a failure of the IGU.

Condensation forming on the outdoor face is a positive indicator of the thermal efficiency of the glazing. This is not an IGU fault.



PRESSGLASS

Thank You

PRESSGLASS

Press Glass Ltd
Port Talbot
Baglan Industrial Park
Baglan Way
Port Talbot
SA12 7FB
T: 01792 773 752

Press Glass Ltd
Peterborough
1 Lysander Drive
Northfields Industrial Estate
Market Deeping
PE6 8FB
T: 01733 644 000

Press Glass North Ltd
Barnsley
Wentworth Business Park
Maple Road
Tankersley
Barnsley
S75 3DL
T: 01226 356 500

Press Glass North Ltd
Scotland
1 Dunnswood Road
Cumbernauld
Glasgow
Scotland
G67 3EN
T: 01236 728 298

www.pressglass.co.uk

Linkedin.com/company/pressglass