



www: c3ssecuriglass.com

Contact our sales office on: **tel: +44 (0) 1422 376181**

frequently asked questions

Q1. Interpretation of Regulations e.g. where do we need fire resistant glass? When should it be integrity only? When should it be integrity and insulation?

We never identify to the client where integrity and/or insulation glass is required, as this is totally in the hands of the Fire Officer and Building Inspector. Generally however, we can assume that insulated glass will be required in those areas around stairwells, where full glazed panels may be required to insulate down a fire escape or alternatively along a corridor where the bottom panels of glass may be insulating in order to protect people crawling below the smoke line.

Q2. Glazing details & frame construction e.g. can I exchange the tested gasket/sealant for another? What happens if I use a different species of timber?

It is very important that information is sought from the manufacturer of the gasket, seal or glass manufacturer before inter-changing. With regards to different species of timber, once again it is worth checking with Timber Research TRADA however do bear in mind that most hardwoods are suitable providing they have a minimum density of 560kg/m³. Some hardwoods however, with this density are not good fire resistant timbers such as Ash.

Q3. Maximum pane sizes & dimensions tested. Effect of aspect ratio (if any) e.g. can the maximum pane size can be increased beyond what was tested? Can I increase the height but reduce the width? The test report shows the product tested in 'portrait' can be changed to 'landscape'?

Providing that the overall area of the glass remains the same as that tested, then the height can be increased and the width reduced, however, care must be taken for 60 minutes locations where the height is reduced and the width increased to create a 'landscape' sized panel, here we recommend a ration of 2.5:1 width against height maximum.

Q4. Other properties of fire resistant glass e.g. what is the acoustic performance? U value?

Each glass has a different acoustic performance and these can be given by our sales office.

Q5. Insulating glass units - can it be assumed that a fire resistant glass successfully tested in single glazing will give the same performance in an insulating glass unit? Are there any limitations on the type of non-fire rated glass that can be used? Are there any special requirements for edge seal, spacer, etc?

It cannot be assumed that fire resistant glass tested as single glazing will also give the same performance in an insulating unit. With regards to the sacrificial glass, toughened or laminated may be used, however, in the case of laminated glass, the laminated (non-fire) panel should go to the assumed fire side. Most DGU's require steel spacer rather than the normal aluminium, edge seals however would remain similar.



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Q6. We have formed the glazing openings from plasterboard, wood or plastic. Can you install fire-rated glass in these openings?	This very much depends on the individual style of aperture and the type of wood used, NEVER plastic, we would respect a site inspection.
Q7. What do you mean by Integrity?	Integrity means the glass remains in the frame without pulling out from the top or sides.
Q8. What do you mean by insulation?	Insulation means that the glass on the non-fire side is cool to the touch and never exceeds 120°C
Q9. Is it a safety glass?	Most fire resistant lasses are safety glasses wither A, B or C category.
Q10. Will it have wires going through it?	No - non-wired fire resistant glasses are available in either insulated or non-insulated forms.
Q11. Does it have to be fire-rated?	Very mush depends on the location, the distance from the escape doors etc.
Q12. Can we have a sliding door with fire-rated glass, frameless if possible?	To date I am not aware of a sliding door system with fire-rated glass however, frameless (Clear Run or Promat Systemglas) are available.
Q13. We have not anticipated the cost of fire-rated glass into our budget, so will you supply only as our chippy's will install!	Yes providing that we can see details of the method of glazing proposed to ensure that it is commensurate with the type of glass being requested.
Q14. What is the biggest pane size I can have?	The panel size differs depending on the type of glass required and reference should be made to the technical data sheets. Pyrocet has some of the largest panels tested and for 30 minutes maintains its Class Safety Glass to BS6206.
Q15. What is the smallest timber bead I can have?	The smallest bead used depends on the type of glass to be installed. Small glazing beads 12mm high can be used with Pyrobel and Pyrobelite but in each instance reference must be sought from the sales office.
Q16. What size of frame do I need around the glass?	The size of frame differs considerably from one product to another and there is not standard formula, again, depending on whether an insulating or non-insulating glass is required, then details of the framing system can be given.

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Q17. What glazing materials do I need to use?	This depends on the type of glass, most non-insulating glasses will require some form of intumescent strip when glazed into timber, however, neither insulating nor non-insulating glasses need this material when glazed into steel, and simple fibrous or foam tape can be used.
Q18. Are you registered manufacturer?	Yes
Q19. Do you install?	Yes if required
Q20. Which system do you use?	Depends on the individual requirement
Q21. Are you stockists of fire glass?	Yes
Q22. Can you give me a fire certificate for the glass that you have supplied/installed?	Yes
Q23. Why can't we use a toughened glass that can withstand heat?	Conventional toughened glass will not stand the exposure to heat or the possible thermal shock. Super-toughened (sometimes called modified toughened) glasses should be used i.e. Pyrocer
Q24. Can I cut off the top of the Lorient gasket and silicon it?	No
Q25. How long does it take hardwood to burn up against softwood?	Hardwood burns at 1mm per 100°C (please note that depending on the type of wood, most char rather than totally burn away).
Q26. What thickness of glass do we need to meet the barrier load requirements?	An 'A' Class Safety glass will meet the barrier loading requirements however the size of panel in question has bearing on this, please always refer back to the sales office.
Q27. Can we have square timber beads with integrity only glass?	No, it is not recommended to use a square bead with integrity only glass, simply because the radiated heat through the glass will catch the square corner of the bead making it more likely to char a burn along that edge - square beads however can be used with insulating glass
Q28. What is the maximum glass size tested in a given time/frame construction (e.g. 60 minutes timber)?	This depends on the type of glass required, refer to our "data" sheet on the 'product data page'.

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<p>Q29. Can we provide fire resistant glass with full or partial obscuration?</p>	<p>Yes.</p>
<p>Q30. Can we provide fire resistant DGU's to meet a given U value, often in combinations with tinted or low E glass?</p>	<p>Yes.</p>
<p>Q31. Do the beads have to be that large?</p>	<p>Beads do not have to be large, smaller beads can be used with insulating glass and test evidence exists for Pyrobel and Pyrobelite.</p>
<p>Q32. Does the intumescent material go both sides of the glass?</p>	<p>With most of the fire resistant glasses that we supply the intumescent should not go at either side of the glass but below the glass between the glazing beads all the way around</p>
<p>Q33. Can we use a bigger piece of glass than mentioned on you test report?</p>	<p>No, unless an assessment exists, however, bear in mind that the overall areas of the glass is relevant and if that area falls within that tested then depending on whether the panel is 'portrait' or 'landscape' larger heights or, on occasions widths can be used.</p>
<p>Q34. Can fire glass be sand blasted and still comply with the regs?</p>	<p>Sandblasted glass will still meet the regulations however, sandblasting persé is not recommended on soda lime toughened glasses and a simulated acid etch finish is applied in lieu.</p>
<p>Q35. Can fire glass have Vinyl graphics or obscure film?</p>	<p>It is not recommend that Vinyl graphics or obscure film be applied to glass unless it is applied to the perceived fire side. Securiglass do not have any test evidence supporting the use of film and Vinyl's in a fire test and indications are that they could cause secondary burning if they were placed on the non-fire side. Advice should be sought from the vinyl graphics supplier.</p>
<p>Q36. What are the minimum rebate upstand and thickness required?</p>	<p>This depends on the type of glass, the rebate depth can vary depending on the size of bead desired however, insulating glasses should be glazed tight size less 0mm off height and width whereas non-insulated glasses should be sight size plus 24mm, this gives a 12mm edge cover giving plenty of room in a 20/25mm deep rebate for expansion.</p>

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Q37. Is the size of the glass requested covered by suitable test evidence?	Yes, all the glass we supply is covered by test and assessment evidence
Q38. What edge cover should we be working to when glazing?	Differs but rule of thumb Pyrocet 10-14mm in steel 12mm max timber - Pyrosec/Pyrobelite doesn't matter
Q39. What variations to the size/shape of timber beads are we allowed to use?	Refer to the sales office
Q40. What glazing materials should we use in steel or timber frames?	This depends on the type of glass chosen, both non-insulating and insulating glasses in steel can be glazed simply using ceramic fibre tape or foam tape, greater care has to be taken when glazing both into timber frames and information is available depending on the type of glass to be used.
Q41. We plan to use intumescent tape when glazing insulating and/or non-insulating glass into steel frames, is the actually required?	No, there is no necessity to use an intumescent tape with steel frame, as there is nothing to burn.
Q42. Which hardware can I have pull handles, friction spring?	Tested hardware is recommended and differs depending on the type of steel section used. Further information is available upon request on this.
Q43. Is it suitable for external applications?	All non-insulating glasses are suitable for both internal and external locations. Insulating glasses however, has to be designated internal or external grade.
Q44. What s the thinnest fire glass, clear non-wired?	5mm is the thinnest however the normal is 6mm.
Q45. What is the difference between internal and external grade products?	Insulating glasses are prone to attack by UV light therefore the normal internal grade must not be used in external locations. The difference between and external quality and an internal quality is the addition of an extra layer of glass bonded to the internal grade with PVB interlayer. This interlayer reduced the UV light therefore eliminating the problem of degradation. Great care however must be taken in areas of high humidity or high heat and it may be preferable to offer a DGU consisting of an internal grade glass to the inside with a 6.8 laminated glass to the exterior.

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Q46. What are the benefits of multi-laminate fire glasses compared with modified toughened fire glasses (and visa versa)?

The two types of glass have their own benefits and disadvantage, non-insulating glass is a direct replacement for wired glass and as a consequence any area where you would normally use a wired glass but prefer to use an un-wired material for aesthetic purposes then Pyrocel would be most suitable, it is also considerably cheaper than the insulating products which have many advantages such as eliminating radiated heat therefore eliminating the possibility of secondary burning on the non-fire side. It is not easy to make a simple comparison, as they are both fire resistant glasses but both perform and behave in quite different ways.

Q47. How can we be certain that the glass specified is the same as the glass that has been supplied and fitted?

All the fire resistant glass supplied by Securiglass comes with a sand blasted logo identifying the product, the fire specification and the safety standard.

Q48. Do fire glasses meet safety regulations?

Most fire resistant glasses meet the safety regulation however be careful of products such as Firelite which in its normal 5mm state does not meet even the lowest category ('C') of the safety standard, however, laminated versions are available.