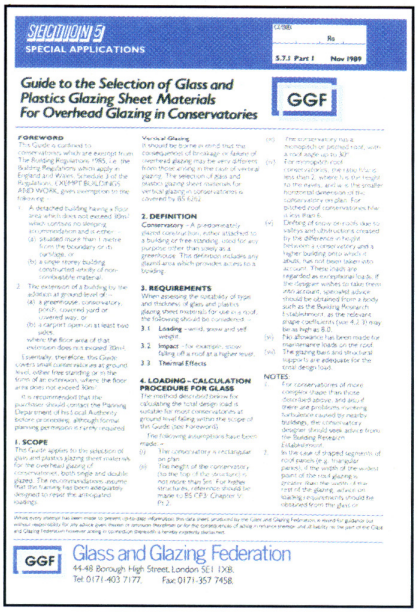
TO

In this Head 2 Head article, Ultraframe's technical support engineers, Bill Kenyon and Mick Rowley discuss the correct specification of glass sealed units in conservatory roofs.

One of the questions we are most frequently asked is "What type of glass should be used in conservatory roofs and are there any guidelines that we can refer to?" Currently, around 20% of the pre-fabricated roofs dispatched from Ultraframe feature glass roofs. This is part of an ongoing trends as more and more homeowners



SECTION 5
SPECIAL APPLICATIONS

5.7.1 Part 1 Nov 1989

Guide to the Selection of Glass and Plastics Glazing Sheet Materials For Overhead Glazing in Conservatories

GGF

FOREWORD

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2. DEFINITION

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request complex conservatory shapes and specifications and the selection of glazed units is just one aspect of this trend. Installation companies now have the confidence to build these more complex conservatories.

Regular contact by Ultraframe's Technical Support Engineers with Building Control Officers leads us to believe that the use of 4mm annealed glass would be "frowned upon".

So you can imagine a scenario where 4mm float glass double glazed units have been used in the roof. Following an accident, perhaps where a window cleaner, or the weight of snow breaks the unit and the shards of glass fall onto the occupants below. This is where a legal battle will begin.

When glazing conservatory roofs there are no mandatory regulations or British Standards that exist. In cases of this nature the courts will refer to the standards and papers produced by the industry's lead body or Trade Association. In our sector this is the Glass and Glazing Federation and its specialist division, the Conservatory Association.

The Conservatory Association's rules make it a requirement of membership that all glazing in a conservatory shall meet class C of BS 6206 as a minimum requirement. The GGF publish in its Glazing manual a number of data sheets covering the technical requirements that a conservatory needs to meet. One of these data sheets, No 5.7.1 part 1 gives a considerable amount of guidance about the glass that should be used in a conservatory roof.

Data sheet 5.7.1, titled "A Guide to the Selection of Glass and Plastics Glazing sheet material for Overhead Glazing in Conservatories" clearly states that glass in conservatory roofs should meet at least Class C of BS 6206. Therefore the glass used will need to be toughened, laminated or "Georgian wired safety glass." All these materials will meet this minimum requirement of BS 6206 and will either "not break" or "break safely".

- Toughened glass will break after the application of 4 times the load of standard float glass. But should it break it will break into small, relatively harmless crystals.
- Laminated glass will break under the same load as float glass of an equivalent thickness but the shards or splinters formed will be contained by the adhesive faced interlayer.
- Georgian wired safety glass will also react in a similar way, with the wire retaining shards of glass.

In the light of this information, the court would find in favour of the homeowner and against the installer.

The GGF's data sheet also goes into detail about the loads that various specifications of glass will support. It gives calculation procedures and worked examples which enable the user anywhere in the country to decide if wind or snow loads are what they most need to consider. Then they can decide what thickness and span unsuitable for single or double glazed units will support these loads.

The GGF also has members involved in the manufacture of specialist solar control and safety films which can be retro-fit applied, giving compliance with the British Standard.

The importance of the design of the roof and the exact specification that will enable it to support whatever glazing is decided upon, is covered in further GGF Data sheets and, of course, in the many Ultraframe technical design manuals.

Many conservatory installation companies are unaware of the technical standards that should be met - the Glass and Glazing Federation provides excellent technical support to its member companies.

This is a good reason to be a GGF member. Membership starts from as little as £300 per annum and the GGF can be contacted on 0270 403 7177.