

### **Fire Rating Information for Building Control Purposes**

The Quantal roof has not been subject to physical fire testing to establish specific Spread of Flame data. However the constituent elements are made of Aluminium, PVC, Polycarbonate and Glass, all of which are Fire Resistant as stated below:

#### **Aluminium**

The aluminium alloy profiles of the Roof System, namely the Ridge, Eaves Beam and Glazing Bars are defined in BS476 Part 4 as being 'non-combustible'. They are rated as Class 1 in relation to surface spread of flame as defined in BS 476 Part 5, and also rated AA (the highest possible rating) for the external fire exposure penetration rating defined in BS476 Part 3.

#### **PVC-U**

The BBA - British Board of Agrément Certificate for the Quantal Roof (Certificate No. 01/3793), states that the spread of flame across PVC-U is limited, and in a fire it will tend to char and fall away. As such the use of the material in the construction of a Conservatory Roof would not accelerate the development of a fire.

#### **Polycarbonate**

Multi-walled Polycarbonate roof sheeting has achieved a Class 1 rating when tested to BS476-7 and is classed as a TP(a) rigid thermoplastic. Approved Document B of the Building Regulations (England and Wales) Table 18 states that TP(a) rigid plastics are allowed for use in Conservatory Roofs.

#### **Glass**

Tempered Safety Glass can be regarded as a non combustible material, and therefore can be taken to have a Class 0 performance rating.

#### **Fire Egress**

The aluminium structure of the Quantal roof has been designed in accordance with BS 6399-3 Code of practice for imposed roof loads, which specifies that the roof must be capable of withstanding a live load of 0.6 KN/m<sup>2</sup> which is described as a 'maintenance load' and represents the effect of a persons weight when access is required for cleaning and maintenance, with the appropriate use of crawl broads to spread the load.

As such the roof is considered adequate as an emergency escape route, provided that the persons weight is gradually applied, by lowering onto the roof, and then by use of the aluminium members as much as is practically possible, as no testing has been completed to confirm the effect of an impact load, caused by jumping feet first onto a glazing panel.