

Glazing at Height

Guidance for sloped facades, glass roofs and canopies

Sloped façades, glass roofs and canopies are normally designed in accordance with the CWCT Standard for sloped glazing systems or specific standards for glazing systems, such as BS 5516 for patent glazing. Some forms of construction, such as structural sealant glazing, require additional guidance. Where no specific standards exist, the manufacturer's guidance, structural design guidance and/or independent technical literature are consulted.

Consideration may be given to using glazing that has safe post-breakage behaviour. Any requirement for safe post-breakage behaviour should be based on a risk assessment. The content and extent of any risk assessment will vary, as there is no clear industry guidance. CWCT Technical Update 10 Use of glass overhead provides advice, which is primarily aimed at sloping glazing.

Both CWCT Standard for slope glazing systems and BS 5516 limit the types of glazing infill materials that can be used in overhead glazing. In both cases the use of monolithic annealed glass and monolithic heat-strengthened glass is not generally permitted. The CWCT standard also limits the use of toughened glass depending on height above ground. Glass must be selected to resist anticipated loads and to have limited deflection under the specified loads. This will normally make use of the design charts for wind and snow load in BS 6262 or BS 5516. Where there is walk-on access, both static and impact loads must be considered. Guidance is provided in IStructE guide Structural use of glass in buildings and CWCT TN 42. Where the glazing is at or near floor level (low-level glazing), glass should be selected in accordance with Approved Document N and BS 6262-4. Glass for low-level glazing designed to act as a barrier protecting a fall from height is selected in accordance with Approved Document K and BS 6180.

Recommendations for the types of glass suitable for use in roof or canopy glazing in or around non-agricultural buildings is shown in the table below.

BS 5516-2 : 2004 8.3.2 Recommendations for the types of glass suitable for use in roof or canopy glazing in or around non-agricultural buildings	
Glazing Height – Building Type	Single Glazed
Up to 5m	Toughened glass Laminated glass Wired glass
Between 5m and 13m	Laminated glass Wired glass
Above 13m	Laminated glass