When considering glazing that is subjected to climatic loads only, consideration should be given to resistance to stress, deflection and consequences of failure.

This document will consider vertically installed glazing and overhead/sloped glazing separately, as requirements will differ.

VERTICAL GLAZING

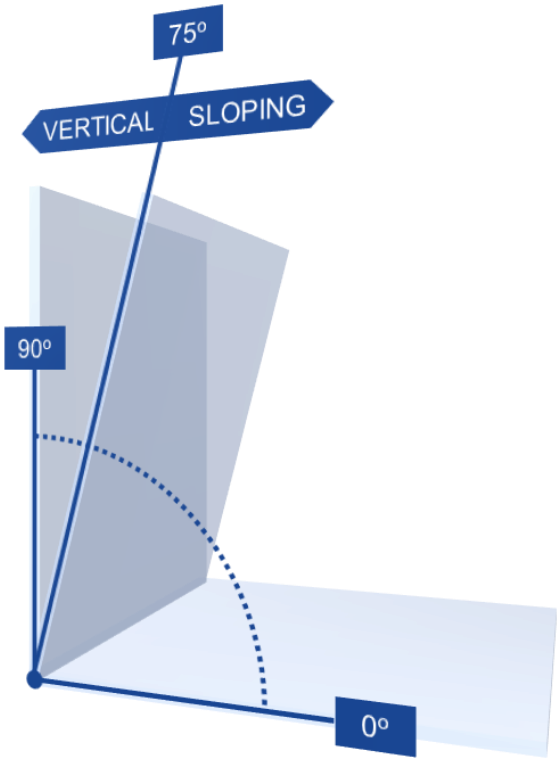

Figure 1 - Vertical/Sloping Glazing (Illustrative)

Vertical glazing is defined by BS 6262—3:2005 [1] as being within 15º of vertical, and is expected to be able to withstand applied climatic loads with regards stress and deflection

Unless glazing is within a critical location, no additional requirements for glass types are given. As such, annealed glass would be expected to be permissible in standard glazing situations.

However, consideration should be given to modes of failure, and it would be expected that risk assessments carried out would determine if monolithic annealed or heat strengthened (non-safety) glass types were suitable for the installation under consideration.

OVERHEAD/SLOPED GLAZING

BS 5516-2:2004 defines sloping glazing as having a slope of 75º or less from horizontal. As the angle of installation approaches horizontal, the effect of self-weight on the glazing will increase, as will the potential for glass to fall from the framing system, or other fixings, in the event of failure.

With consideration to this, BS 5516-2 provides additional guidance on permissible glass types for overhead glazing, in order to reduce the risk for persons and property beneath. This guidance is available in Section 8.3 of this Code of Practice, as follows;

Table 1 - Glass Type Restrictions for Overhead Glazing (BS 5516)

Height (H) Above Floor Level (m)	Single or Lower Pane		Upper Pane	
	Glass Type	Limitations	Glass Type	Limitations
H ≤ 5	Toughened	---	Toughened	---
	Laminated	---	Any	---
	Wired	---	Any	---
5 < H ≤ 13	Toughened	Thickness ≤ 6mm Area ≤ 3m^2	Toughened	Thickness ≤ 6mm Area ≤ 3m^2
	Laminated	---	Any	---
	Wired	---	Any	---
H > 13	Laminated	---	Any	---
	Wired	---	Any	---

INWARD SLOPING GLAZING

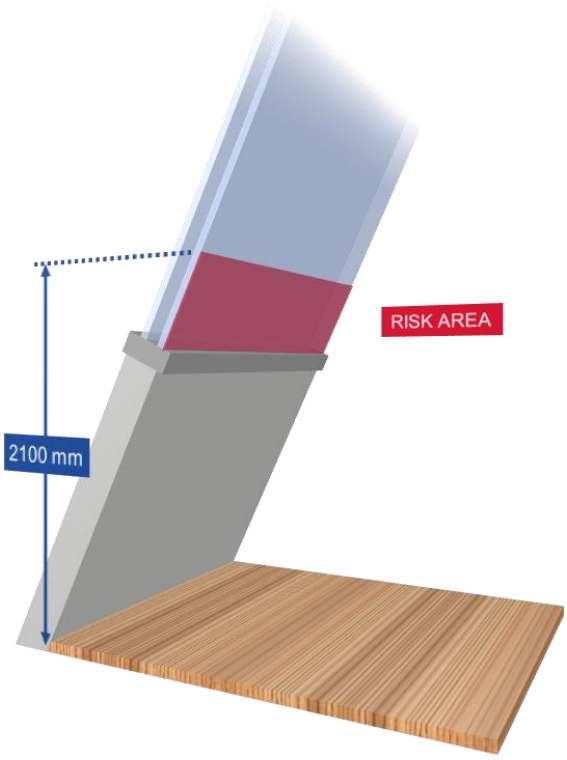

Figure 2 - Inward Sloping Glazing

Where glazing slopes inwards towards a floor, and is within 2100 mm of finished floor level, there is the potential for accidental head impact and as such, a safety glass should be used.

Suitable manifestation or other barriers can also assist in protecting against potential head impacts.

If inward sloping glazing is within a critical locations, as per Building Regulations Approved Document K, Requirement K4 [2], then requirements apply as per the regulations. See **GUARDS & BARRIERS 1A** for more information.

BATHING AREAS

BS 5516-2 also highlights the fact that additional consideration should be given to glazing over swimming pools and other bathing areas, where toughened glass fragments would be difficult to locate in water, or potentially damage any filters/pumps associated with the operation of the pool.

REFERENCES

[1] Deutsches Institut für Normung, DIN 18008-1:2010-12 - Glas im Bauwesen - Bemessungs- und Konstruktionsregeln - Teil 1: Begriffe und allgemeine Grundlagen, Beuth, 2012.

[2] Deutsches Institut für Bautechnik, Technische Regeln für die Verwendung von linienförmig gelagerten Verglasungen (TRLV), DIBt, 2006.

[3] European Committee for Standardization, prEN 16612:2013 - Glass in Building - Determination of the load resistance of glass panes by calculation and testing, CEN, 2013.

[4] European Committee for Standardization, prEN 13474-3:2009 - Glass in building - Determination of the strength of glass panes - Part 3: General method of calculation and determination of strength of glass by testing, CEN, 2009.