GLASS REGULATIONS

Within the industry there are a number of regulations and standards that determine what systems can be installed for each scenario. We've put together a brief summary of the regulations for your reference; please note that all the information contained here is intended for guidance only and will vary between countries.

Below is a guide to building regulations that relate to balustrades within England and Wales. More information can be found on the BSI website (http://www.bsigroup.com/);

- BS6180 2011 – Code of practice for barriers in and about building
- BS EN 12600 – Glass in building. Pendulum test. Impact test method and classification for flat glass
- BS6206 1982 – Code of practice for the glazing for buildings
- BS6399- Loading for buildings-all parts
- Building regulations part K: Stairs, ramps and guards

1. Firstly work out what height your barrier needs to be. For this example, taking a landing in a single family dwelling property, in which case the barrier will need to be 900mm high. This can be found on the table titled 'Minimum barrier heights'
2. Secondly different fitting scenarios require minimum loadings. For our example the table labelled 'Minimum horizontal' tells us we need a glass that meets a 0.36 kN loading
3. The final table labelled 'Glass thicknesses' shows us the strength of different glass types. Therefore for our example if we are going to have toughened glass then we require 12mm glass

Location	Minimum height of glass from finished floor level
Stairs, ramps & landings	900mm
Balcony	1100mm
Glass partition	Any height (a manifestation may be required on the glass)
Fixed seating up to 530mm from barrier	800mm
Any other situation	1100mm

We've set out the minimum horizontal load the glass needs to meet in specified locations in the table below:

Minimum horizontal load

Type of occupancy for part of the building structure	Examples of specific use	Horizontal uniformly distributed line load (kN/m)
Domestic and residential activities	All internal areas serving single family dwellings; stairs and landings	0.36
	External and residential situations with multiple occupants	0.74
Offices and work areas not included elsewhere, including storage areas	Light access stairs and gangways – not more than 600mm wide	0.22
	Light pedestrian traffic routes in industrial and storage buildings, except designated escape routes	0.36
	Areas not inline for overcrowding in office and institutional buildings	0.74
Areas where people might congregate	Areas having fixed seating within 530mm of the barrier, balustrade or parapet	1.5
Areas with tables or fixed seating	Restaurants and bars	1.5
Areas without obstacles for moving people and not susceptible to overcrowding	Stairs, landings, corridors, ramps. In addition external balconies and edges of roofs including areas adjacent to basement/sunken areas	0.74
Areas susceptible to overcrowding	Footways to pavements less than 3m wide adjacent to basement/sunken areas	1.5
	Theatres, cinemas, bars, shopping malls. Footways to pavements greater than 3m wide adjacent to basement/ sunken areas	3.0
Retail areas	All retail areas including public areas of banks/building societies or betting shops	1.5
Vehicular	Pedestrian areas in car parks, including stairs, landings, ramps, edges of internal floors. Internal loads imposed by vehicles	

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