



#### 2.17.4. Balustrades

**2.17.4.1.** A railing or fencing supported by balusters, especially one forming an ornamental parapet or barrier to a balcony, bridge or terrace. However, in the context of safety intent of this section, the terms “Balustrade”, “Guard”, “Barrier” and “Railing” shall all have the same meaning and intent, that being to prevent persons accidentally interacting with the hazard on the other side of the barrier or slipping through to a falling hazard.

**2.17.4.2.** Where balcony finishes are flush with the edge of the balcony, an up-stand feature of a minimum 20 mm height following the same line as the balustrade shall be provided to prevent items on the balcony rolling off the edge.

#### 2.17.5. Railing, Balustrade and Fence Toppings

**2.17.5.1.** Fence or Railing or Balustrade toppings shall be designed and constructed such that they do not constitute a potential danger of injury to persons. This includes but not limited to spikes, sharp or barbed wire or other jagged or similarly protruding features.

#### 2.17.6. Glass used in Railings and Guards

**2.17.6.1.** Glass used as structural balustrade panels in railings shall be constructed of one of the following.

- a.** Laminated fully tempered glass with a structural interlayer where structural capacity is calculated at 50 Deg Celsius.
- b.** Laminated heat-strengthened glass

**2.17.6.2.** Glazing in railing in-fill panels shall meet the requirements of **Section 5.4.2.**

**2.17.6.3.** Structural balustrade panels shall meet the following requirements.

- a.** The panels and their support system shall be designed to withstand the loads specified in ASCE (American Society of Civil Engineers).
- b.** A human impact load safety factor of 4 shall be used.

**2.17.6.4.** Each handrail or guard section shall be supported by a minimum of three glass balusters, or shall be otherwise supported to remain in place if one baluster panel fails, and one of the following criteria shall be met.

- a.** An attached handrail or guard shall be provided.
- b.** The glass balusters shall be laminated glass with two or more glass plies of equal thickness and the same glass type, and each of the piles of the panels shall be designed to withstand the loads specified in ASCE (American Society of Civil Engineers) and any other structural requirements for a top rail.

**2.17.6.5.** Glazing materials shall not be installed in railings in parking garages, except for pedestrian areas not exposed to impact from vehicles.