1.4.13. Modes of Breakage

Type A: Cracks appear forming separate fragments with sharp edges, some of **which are large. This is the mode of breakage typical of annealed glass. This is not co**nsistent with safety glass.

Type B: Cracks appear, but the fragments hold together and do not separate. This is the mode of breakage typical of laminated glass. This may be typical of safety glass but specific precautions should be taken when used overhead (**See section 5.4.4.).**

Type C: Disintegration occurs, leading to a large number of small particles that are relatively harmless. This is the mode of breakage typical of toughened (fully tempered) glass. This is consistent with safety glass.

1.4.14. Annealed glass

The basic glass (e.g. float, patterned) from which most other glasses referred to in this annex are processed. If annealed glass is broken and pieces are displaced, the resulting glass edges will be sharp. Annealed glass has a mode of breakage classification of Type A. Annealed glass is not recommended for external use in the UAE due to its propensity for thermal cracking.

1.4.15. Wired glass

Glass with steel wire cast into the body of the glass. If wired glass is broken and the pieces are held together by the wires, penetration is unlikely. However, if the wires are broken and the material is penetrated, the resulting glass edges will be sharp. Wired glass has a mode of breakage classification of Type B.

1.4.16. Laminated glass

A glass configuration using more than one layer of material bonded together. The brea*k*age characteristics will be similar to those of the types of glass used in its co*n*struction, but the pieces will remain substantially adhered to the interlayer. Depending on the type and thickness of the interlayer, the broken glass is unlikely to be penetrated. La*mi*nated glass has a mode of breakage classification of Type B.

1.4.17. Laminated glazing

The configuration designed such that the glass remains held in place in the frame if broken. Note: for glass consisting of only FT panels, this will require a specially designed retention system for the broken glass.

1.4.18. Toughened Glass (Fully Tempered) (FT)

Glass that has been heat treated to enhance its strength and resistance to impact, and its breakage characteristic. Thermally toughened soda-lime glass is difficult to break, but if broken, it fragments into small, relatively harmless pieces. Toughened (tempered) glass has a mode of breakage classification of Type C.

1.4.19. Heat Strengthened Glass (HS)

Glass that has been heat treated to enhance its strength and resistance to impact characteristics. If heat strengthened glass is broken the resulting edges will be sharp. Heat strengthened glass has a mode of breakage classification of Type A.