1.4.8. Fire-rated glazing systems

Fire rated Glazing Systems are usually composed of following three main components that must work together during an occurrence of fire:

a. Fire-rated frames–typically steel, timber or aluminium

b. Fire-rated glass – examples are:

i. Glass ceramics
ii. Borosilicate glass
iii. Soda-lime silicate glass (mostly unidirectional protection only)
iv. Resin or polyvinyl butyral laminated glass
v. Gel-filled laminated glass
f. Intumescent-filled laminated glass

1.4.9. Fire-rated accessories and hardware (or ironmongery).

These include (but are not limited to):

a. Fire-rated glazing seals and sealants
b. Types and profiles of fire-rated glazing beads and modes of fixing
c. Fire-rated fixings and anchoring
d. Fire-rated ceramic tapes
e. Fire-rated intumescent strips
f. Fire-rated infills for frames / doors
g. Fire-rated gaskets
h. Fire-rated setting blocks

1.4.10. Critical location

A location where breakage must be considered and safety glass or safety plastics must be used.

1.4.11. Safety glass

A glass configuration that provides the required level of Strength, protection and ensures less danger when breaks. **(See section 5.4.2.).** A safety glass is not a fire rated glass. Examples of safety glass types are:

a. Safety wired.
b. Thermally toughened safety glass
c. Laminated safety glass
d. Adhesive backed polymeric filmed safety glass
e. Safety backed mirrors
f. Safety backed painted glass

1.4.12. Safety plastic

A plastic glazing sheet material that provides the required level of protection when considering the criteria stated in **See section 5.4.2.).** The breakage characteristics of plastics glazing sheet materials vary because of differences in their chemical composition, or structure. Two or more different materials may be combined to provide composite products. The three types of plastics glazing sheet materials most commonly used for external and internal glazing are as follows:

a. Polycarbonate (PC).
b. Polymethyl methacrylate (PMMA).
c. Polyvinyl chloride (PVCu).