

1.4. Glazing

1.4.1. Glazing

A wall, floor, ceiling or roofing 'system' that contains glass as one of its components.

1.4.2. Fire resistant glazing

Glazing that provides a physical barrier to elements of fire including flame and hot gases, or flame and hot gases and heat and in addition the prevention of increase in temperature beyond a certain degree on the non-fireside of the glazing.

1.4.3. Fire resistance, integrity only (E)

A glazing that is required to resist the passage of flames and hot gasses and limit the size of openings developing, for a specified period of time, defined in minutes.

1.4.4. Fire resistance, integrity with radiation limitation (EW)

A glazing that meets the integrity criteria and is required to limit heat radiation below 15kW/m² from its non-fire side, for a specified period of time, defined in minutes.

1.4.5. Fire resistance, integrity with insulation (EI)

A glazing that meets the integrity criteria and is required to restrict the rise in average surface temperature of the non-fireside of the glazing beyond 140°C above the initial surface temperature or to a maximum surface temperature rise up to 180°C (whichever is lower), for a specified period of time, defined in minutes.

1.4.6. Fire rated Glazing systems defined as per American standards

As per American standards in areas where there are automated sprinkler system and in areas that will be exposed to fireman's hose must pass the hose stream test. This tests the ability of the glazing system to retain its integrity when a jet of water is blasted on the glazing surface (fire-side or non-fire side). The specimen should not develop openings that permit projection of water from the stream from one side to the other. The glazing assembly shall remain in the opening and shall not loosen or separate from fastenings, or develop any through openings. Since the test specimen is subjected to pressure of water from the exposed side the test result covers the unexposed side.

1.4.7.a Fire protection glazing as defined in NFPA 257

As per NFPA 252, NFPA 257, UL 10B, UL 10C and UL 9, only glazing system integrity performance is assessed. Glazing that is not designed to limit the temperature rise on the non-exposed surface but has to withstand the impact of the hose stream test; radiation on the non-fire side can be measured whenever required.

1.4.7.b. Fire resistance rated glazing as defined in NFPA 251

As per NFPA 251, UL 263, or ASTM E119, The conditions of acceptance of these standards include system integrity and temperature insulation on non-fire side.