

From

The Engineer-in-Chief, Haryana
PWD B&R Branch, Chandigarh

To

All the superintending Engineers
Haryana PWD (B&R)

Memo No. 5535-47 /WI/ Dated: 19.08.2011

Subject: Guidelines on use of Glass in Buildings: Human Safety

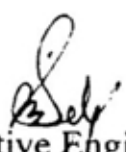
The use of glass in buildings has increased manifolds. The worldwide increase in use of glass has become a matter of concern from human safety point of view

Recognizing the gravity of the problem and uncertainty faced by the Engineers, Architects and users. "Guidelines on Use of Glass in Buildings: Human Safety" has been brought out by Confederation of Construction Products and Services.

These guidelines suggest how to regulate glass in relation to human safety by either, restricting use of glass or specifying use of Safety Glass at locations where chances of injury due to glass breakage is high. As per the Guidelines following are the conditions on uses of the glass in buildings:

1. Safety glazing material shall be used where
 - a. any glazing is within 1.5 metre above the floor level of building
 - b. there is danger of falling infill glass materials from overhead glazing and
 - c. there is danger of falling due to change in floor level
 - d. in case of balustrades, stairs and floors.
2. Any type of glass in locations having sill Height ≥ 0.75 m or with Residual Protection shall be used as vertical wall.
3. Safety glass in locations having no risk of fall (falling height $H_f \geq 1.5$ m) and sill height $H_s < 0.75$ m shall be used as a vertical wall.
4. Safety glass in locations having risk of fall (falling height $H_f \geq 1.5$ m) and sill Height $H_s < 0.75$ m shall be used as vertical wall.
5. Laminated Safety glass shall be used in horizontal or sloped glazing and as balustrade, parapet or a railing.
6. Toughened (tempered) or Laminated Safety Glass, subject to meeting the definitions and test standards as outlined in the IS:2553.
7. In case of external laminated glass facades, openable portion shall be left at regular distances as required for fire fighting and smoke exhaust.
8. Clear glass panels capable of being mistaken for an unimpeded path of travel should be marked to make them visible by incorporating manifestation.
9. However, if the smaller dimension of pan is 250 mm or less and its area is 0.50 sqm or less, glass not confirming to safety requirements can also be used.

It is therefore, enjoined upon all engineers of Haryana PW(B&R)Deptt, to ensure that these guidelines are followed in its true letter and spirit while planning, designing, executing and approving buildings to ensure safe use of glass.


Executive Engineer(Bldgs-I)
For Engineer - in - Chief
Haryana PWD(B&R), Chandigarh

CC:

1. PS to FCPW for information of FCPW please.
2. PS to EIC for information of EIC please.
3. PA's to all the Chief Engineers for information of Chief Engineers please.