

PERFORMANCE OF STRUCTURAL GLASS FACADES UNDER DIFFERENT LOADS

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Now a day's glass is a primary structural material extensively used for windows and facades in modern constructions. Structural glass facade creates aesthetic look for any building. Structural glass facade is a frameless glass assembly taking part of structural load. The various structural glass materials are annealed glass, toughened Glass, tempered Glass and laminated Safety Glass. Laminated safety glass will be taken into consideration for design because it contains many interlayers. The glass facades are most fragile and vulnerable components of building and failure happens without any warning. So, glass facades will be analysed under varying wind, fire and blast loads. The performance assessment of glass facades under varying loads will be analysed using ABAQUS finite element analysis tool. The failure behavior of glass is to be studied to improve performance efficiency and design of the structural glass facades using ABAQUS software.

