



Structural Glazing

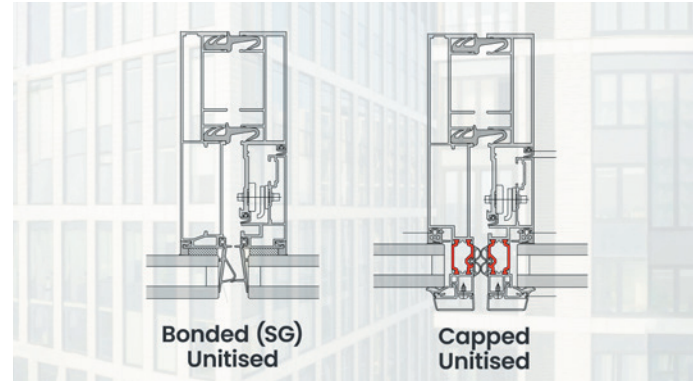
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Structural glazing refers to the glazed envelope or frameless glass façade that typically wraps around a building. It is available in many guises and is designed and engineered to be aesthetically pleasing, safe, functional, and weather tight.

There are several glazing system options available, the most common being:

1. Unitized Curtain Walling. This is a prefabricated, factory finished solution that is shipped out to site and hung off the side of the building structure using brackets and fixings. The bonded glazing solution creates a frameless, "all glass" look with gasket joints between each prefabricated unit, while the beaded solution will create a framed look.



2. Stick Curtain Walling. This is a more traditional on-site solution where the factory machined frame is assembled and fixed to structure on site using standard or custom brackets. The glazing element is then introduced and fitted onto the curtain wall frame using concealed toggles and a wet seal or gaskets to create a frameless "all glass" solution. For a tram-horizontal look where there are vertical pressure plates and cover caps and frameless horizontal joints, either a fully toggled and wet seal curtain wall can be adapted, or the glass units can be bonded to the transoms on the horizontal. For a framed look, pressure plates and cover caps are used.



3. Frameless glazing systems, as the name denotes, are typically specialist all glass systems used for large open spaces like airports and lobbies where large glass panels are used for minimum visual interference. They use a totally different fixing approach with the glass units tied to a steel frame or building structure behind the façade. Specialized spider brackets are generally used and vertical glass fins are used to strengthen the glass façade which is then bonded to the building structure using special brackets and UV resistant sealants.



Size, buildability, site access, cost and aesthetics of the structural glazed element on a project all weigh in on the suitability and desirability of the glazing solution to be selected. One size does not fit all.

As mentioned before, in general you cannot have a structurally glazed façade or give the illusion of a frameless glass envelope without using a curtain walling system, be it unitized or stick build or by using a specialist frameless glazing system at the other end of the spectrum.