

Technical Note No. 14
CURTAIN WALL TYPES

Introduction

Curtain walling is a form of vertical building enclosure which supports no load other than its own weight that of ancillary components and the environmental forces which act upon it.

Although the term is sometimes restricted to metal framed curtain walls, the above definition embraces many different construction methods and materials including non-loadbearing precast concrete.

This Technical Note describes the various forms of curtain walling and the materials employed.

Description of curtain walling types

The classification of types of curtain walling varies but the following terms are commonly used:

- Stick
- Unitised
- Panellised
- Spandrel panel ribbon glazing
- Structural sealant glazing
- Structural glazing

Stick system curtain walling

The general arrangement of a stick system curtain wall is shown in Figure 1. Horizontal and vertical framing members ('sticks') are normally extruded aluminium protected by anodising or powder coating, but may be cold-rolled steel (for greater fire resistance) or aluminium clad with PVC-U. Members are cut to length and machined in the factory prior to

assembly on site as a kit of parts: vertical mullions, which are fixed to the floor slab, are erected first followed by horizontal transoms, which are fixed in-between mullions. Mullions are typically spaced between 1.0 and 1.8m centres.

Into the framework are fitted infill units, which may comprise a mixture of fixed and opening glazing and insulated panels (which may have

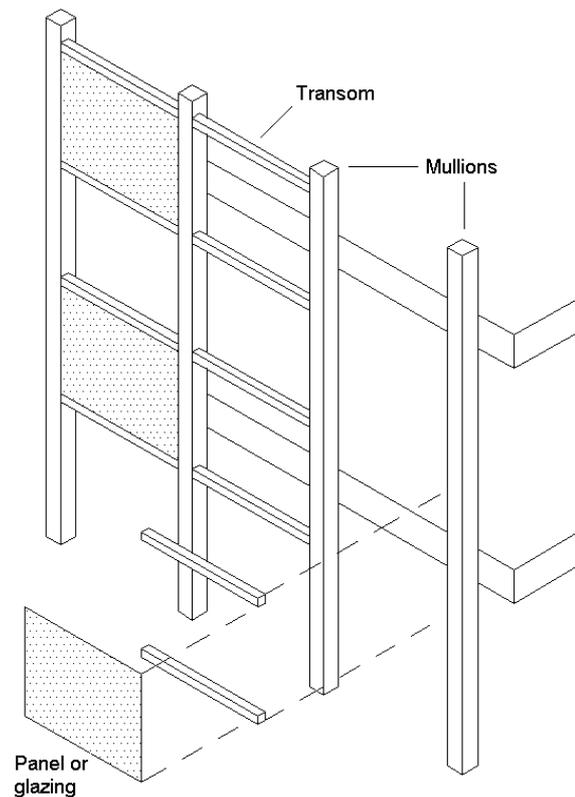


Figure 1 Stick system curtain walling

metal, glass or stone facings). These units are typically sealed with gaskets and retained with a