

# acoustic glazing



## Double and Triple Glazed Windows

**Intended for any internal application requiring high levels of sound transmission loss, including double or triple glazed designs for new projects, as well as secondary elements for upgrading existing glazing.**

### Construction

All units are custom designed to meet the acoustic requirements and the physical constraints presented by the application. Units are either double or triple glazed with acoustically lined reveals. The window frame is manufactured to fit within the builderswork opening and, where a raked central pane is employed, the frame secures and seals the pane in place. The frames, glazing, reveals and architraves are delivered ready for site assembly/installation. The frames are secured to suit and the architraves close minor gaps around the periphery, after these have been acoustically sealed.

### Reveals

Acoustic material, usually fabric covered resin bonded glassfibre board, is used to line the reveals to provide sound absorption between the panes.

### Acoustic Performance

Windows are generally designed to meet specific performance criteria up to a maximum of  $Rw50-55$ .

### Glazing

Laminated glass is generally used, as this provides better acoustic performance than monolithic glass and is inherently safer in the event of breakage. Most designs utilise dissimilar thickness panes of either 6.4mm, 8.8mm or 10.8mm thick glass. The panes, with the exception of centrally fitted raked elements, are pre-sealed into aluminium frames ready for face fixing into the MDF frame. Fixings are concealed by a plastic extrusion fitted into a peripheral recess. Care is taken with the specification of raked elements in triple glazed designs as, whilst these can reduce resonances in the air cavity, the benefits are only achievable where the separation between panes is significant. Toughened, Georgian Wired and Polycarbonate alternatives can be supplied if required.

