



Aliva -Tardis® Glass Rainscreen Systems

The Aliva-Tardis® glass rainscreen systems comprise the latest technology in fixing systems and high performance glass. The systems offer both visible and hidden fixing solutions.

Aliva Glass Tardis Laminated HST with SGP Interlayer

Aliva Glass Tardis Laminated HST with PVB Interlayer

Aliva Glass Tardis HST

Aliva Glass HST Dome Head

Laminated glass combines the durability of glass with the toughness of plastic and is made by bonding two layers of glass, using heat and pressure with one or more interlayers such as SGP or PVB resin. The Aliva glass laminated solutions are tempered and thermally toughened.

Glass Interlayers – an interlayer is found on impact glass, the energy absorbing polymer material between two glass panels that upon impact keeps the glass intact. Aliva offers two interlayer solutions;

SGP (SentryGlas) which extends the performance of laminated and tempered glass systems. Because of its strength, clarity and durability it is an excellent choice for the most demanding architectural applications and offers improved ballistic protection and thinner construction possibilities.

PVB (PolyVinyl Butyral) the most common interlayer used in the window industry.

Benefits

Safety – Laminated glass with a PVB or SGP interlayer resists penetration from impact and the glass adheres to the interlayer when broken and does not break into dangerous shards.

Sound Control – Laminated glass significantly improves sound absorption. The properties of the interlayer provide a damping effect.

Energy Control – Laminated glass with a tint can reduce heat gains and help reduce energy costs.

UV control – The interlayer provides control of damaging UV rays.

Stability – Laminated glass is durable, maintaining colour and strength.



Design Choices – Laminated glass systems are available from Aliva in a range of sizes up to 2000mmx1700mm and in standard RAL colours.

System Details

Substructure – Ali Glass

DESCRIPTION OF THE SYSTEM

- Special 'U' shaped brackets are fixed to the existing structure (e.g. blockwork or Metsec SFS) using fixings of appropriate size and suitability for the type of support. The bracket dimensions are dependent upon the desired cladding zone.
- A vertical tubular profile is placed into the 'U' brackets and secured by means of rivets with fixed and sliding points detailed according to the structural designs.
- A perforated horizontal profile is fixed with rivets to the vertical section and shaped in a way to ensure that stresses due to wind the result axial to the panel fasteners.
- Aluminum fasteners are secured to the rear of the panel by means of stainless steel 'Aliva-Tardis®' expansion plugs.
- The glass panels are subsequently placed on the perforated horizontal rail system.
- The horizontal joints can be regulated by means of millimetric regulation screws.
- The vertical and horizontal joints are defined at the design stage.

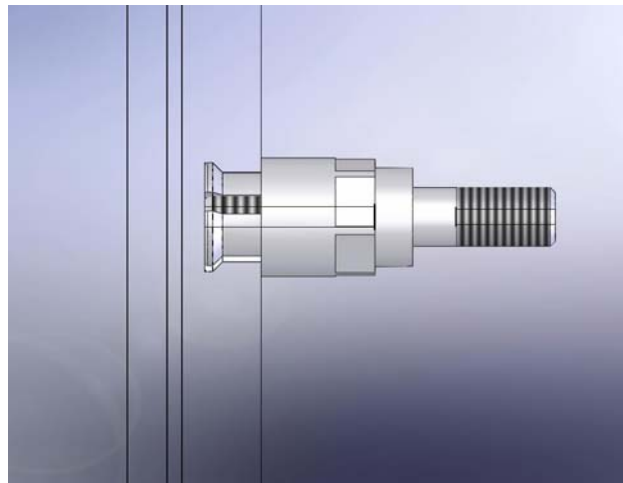
ALIVA-TARDIS® Anchor System

The Aliva-Tardis® system requires fixing holes in the glass panels to be formed using the Aliva-Tardis® methodology and the use of rear undercut anchor T-HAS with the following characteristics;

- A fixing hole is created in the factory prior to lamination using Tardis tooling, creating a hole of approximately 9mm in diameter, 6mm in depth and 11mm splay.
- The Aliva-Tardis® anchor 9/11 T-HAS, is a special patented anchor consisting of a threaded rod (M8) the end of which is a hexagonal and has a similar shaped bolt. The threaded rod is covered at the base with a special polyurethane plastic hood. The rod and bolt are both made from duplex stainless steel.
- It is important to underline that the fixing system does not place any tension on the glass panel during installation.



Drawing of the Aliva-Tardis® Fixing System showing the anchor placed in the rear section of the laminated glass – System Type SGP.



GLASS SYSTEMS

Hidden Fixing

Aliva Glass Tardis Laminated HST with SGP Interlayer

Laminated enameled glass 10mm+1.52mm+6mm comprising;

- Internal light coloured, tempered HST pane, 10mm thick with anchor holes created according to the Tardis specifications
- Interlayer SGP® 1.52mm
- External tempered HST pane 6mm thick
- The external pane is enameled on the inner face with a standard RAL colour
- The Aliva-Tardis fixing is secured entirely in the 10mm thick pane
- The enamel hides the fixing system



Semi Visible Fixing

Aliva Glass Tardis Laminated HST with PVB Interlayer

Laminated enameled glass 6mm+1.52mm+10mm comprising;

- Internal light coloured, tempered HST pane, 6mm thick with anchor holes created according to the Tardis specifications
- Interlayer PVB® 1.52mm
- External glass pane 10mm thick tempered HST
- The external pane is enameled on the inner face with a standard RAL colour
- The Aliva-Tardis® fixing is secured through both panes of glass
- The enamel does not entirely hide the fixing

Aliva Glass Tardis HST

Single laminated enameled glass pane comprising;

- Single glass pane, tempered HST, 10mm thick with anchor holes created according to the Tardis specifications
- The glass is enameled on the inner face with a standard RAL colour
- The Aliva-Tardis® fixing is secured in the single glass pane
- The enamel does not hide the fixing

Visible Fixing

ALIVA GLASS Dome Head

Single laminated enameled glass pane comprising;

- Single glass pane tempered HST, 10mm thick with fixing holes through the entire pane
- The glass is enameled on the inner face with a standard RAL colour
- The front dome shaped fixings are made of duplex stainless steel
- The fixings are visible and form part of the architectural design



Design and Engineering

Aliva will provide full project and working drawings on request for each project, inclusive of;

- Structural drawings and layout
- Individual Panel list and layout
- Structural Calculations