

CONTINUOUS GLASS BARRIER (without perimeter frame)

Supply and installation of an anti-noise, soundproofing barrier with laminated, tempered/hardened glass panels consisting of the following:

- support structure made from galvanised and painted steel or Corten steel, with minimum mechanical requirements as stated in S235JR specifications (formerly Fe 360 B) according to the *EN 10027-1* standard.

Immersion hot galvanising will be carried out in compliance with *UNI EN ISO 1461* to a thickness not below 85 µm (after SA 2112 sand blasting or chemical pickling). After galvanising, an additional protective paint finish treatment will be carried out, so that the minimum thickness of the local protective layer, including the galvanising thickness, is at least 200 µm which allows a pore-free surface to be obtained.

The supporting structural metalwork consists of type HE metal profiles welded to a suitable base plate pre-drilled to have 4 holes for anchoring to the reinforced concrete edge via anchor bolts/threaded bars, complete with a special galvanised painted steel system of middle and upper restraints designed to vertically support the glass sheets, consisting of sheet presser disks fixed to the HE profile, and of a lower cross-piece longitudinal restraint to provide horizontal support for the glass sheet, consisting of galvanised painted steel press-formed elements and sheet presser end plates.

- hardened/tempered sound insulating laminated glass sheets (category B3 according to the *UNI EN 1793-2: 1999* standard) without perimeter cut and with a total thickness of 21.52 mm, consisting of:

- Tempered float glass with thickness 10 mm, ground to a glossy finish;
- PVB film, thickness 1.52 mm;
- Hardened float glass with thickness 10 mm, ground to a glossy finish.

To reduce the risk of spontaneous breaks due to the presence of nickel sulphide inclusions, the tempered glass sheets must be submitted to *HST (Heat Soak Test)*.

The laminated glass sheeting used will be compliant with the following standards:

- UNI EN 572-1 and UNI EN 572-2, as well as UNI EN ISO 12543-6 applicable to basic material characteristics and optical and visual defect limitation;
- UNI EN ISO 12543, parts 1, 2, 3 and 4 applicable to physical and technical characteristics and quality, application suitability and degree of security, vandal-proof performance, high temperature resistance, moisture and simulated solar radiation resistance;
- UNI EN ISO 12543-5 applicable to dimensions, limit deviation and edge finishes;
- UNI 7697 applicable to safety criteria for glass applications;
- UNI 6028 applicable to glass sheet grinding;
- UNI EN 12150-1 applicable to silk screen printing.

The laminated glass sheets used will fulfil the photometric requirements prescribed by the UNI EN 410 and UNI EN 673 standards.

- Suitable gasket system to be interposed between the glass sheet and the vertical and horizontal restraint system and cross-piece vertical silicone seal interposed between sheets.

- assembly including 4 anchor bolts/threaded bars suitably dimensioned for base plate anchoring to the reinforced concrete edge made from hot galvanised steel, class 8.8.

The price includes and compensates all kinds of charges, material transport and handling, supply and installation of all supporting structures, panels, gaskets, nuts and bolts, metal fixings and whatever else is necessary to ensure perfect workmanship in compliance with tender specifications. Foundation works are not included.