

## BARRIER WITH DIFRACTA PANELS

Supply and installation of an anti-noise, soundproofing barrier made up of Difracta sawtooth-shaped sheet steel panels:

- support structure made from galvanised and painted 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 and complete with any required stiffeners/gusset plates

- box-section, sawtooth-shaped sound insulating metal (category B3 according to the *UNI EN 1793-2: 1999* standard) and sound absorbing panels (category A2 according to the *UNI EN 1793-1:1999* standard) made from steel sheeting with a minimum thickness of 10/10 mm, galvanised using the continuous industrial Sendzimir process (at least Z140) and post-painted via a powder-coating cycle, consisting of solid sheeting coupled to horizontally placed holed or expanded mesh sheets, with a perforation percentage not below 35%. The panel is specially conformed so as to ensure the following advantages with respect to the traditional smooth/fretted metal panels:

- *higher durability of sound-absorbing performance;*
- *less maintenance requirements;*
- *less affected by vandalism with special reference to defacement by means of graffiti thanks to the special shape of the panel.*

The internal sound-absorbing blanket is made of polyester fibres at least 60 mm thick with a density of at least 40 kg/m<sup>3</sup>.

*Rated dimensions of a standard panel 3.00 x 0.25 m.*

- 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