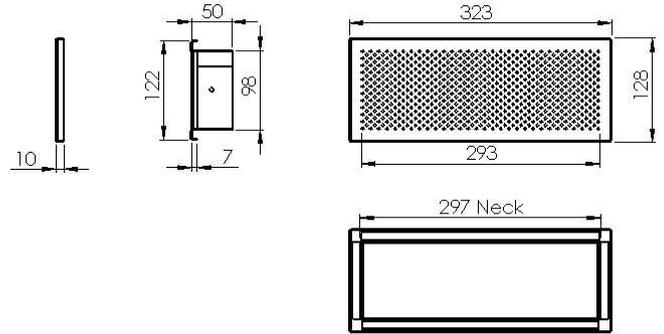


Step Mounted Displacement Diffuser

Type: DTST



APPLICATION:

The DTST type Step mounted Displacement Diffuser are commonly used in Auditorium, Cinemas, Theatres and many open plan raked seating areas such as conference and educational facilities etc. They have been specifically designed to introduce comfort conditioned air into the space at floor level very efficiently.

FUNCTION

This is usually done by low velocity horizontal discharge below the seats. The even air distribution flow pattern is absorbed by the convective plume generated by the person sitting above. With the supply air temperature set to 2-4 degrees below the room design temperature it ensures a draft free conditioned envelope in the occupied space by way of displacement ventilation. It is possible to introduce warm air prior to occupancy however it is unlikely that the small fresh air design volume will satisfy the required load for the space. Again, due to the reduced air volume of a displacement system the DTST unit generates little noise.

SPECIALS:

Due to the flexible manufacturing process it is possible to provide alternative shapes such as square and circular for example.

STANDARD:

Our standard construction is of Mild steel with a polyester powder coated finish on the Face Plate. The main Plenum body and equalising Baffle are manufactured from Galvanised mild steel.

MATERIALS:

Zintec or Galvanised Mild steel with a minimum thickness of 1.2mm for the Face plate and 0.9mm depending on the plenum dimensions.

CONSTRUCTION:

Pressed formed Face plate, Baffle and plenum. Alternative materials and thicknesses are available.

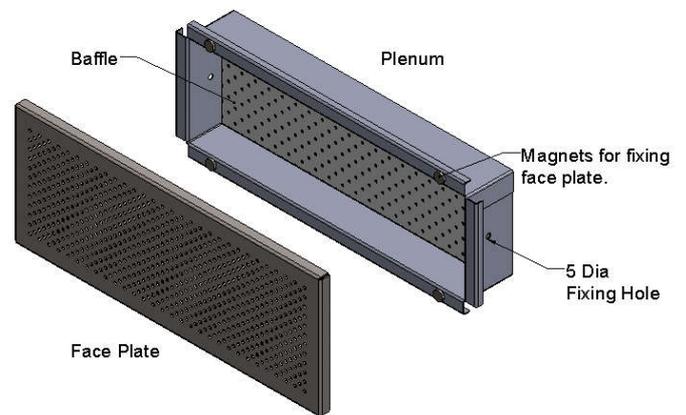
ALTERNATIVE FINISH:

Dull Polished Stainless steel (DP1)
Mirror Polished Stainless Steel.
Polished Brass or Bronze
Various Ionbond colour treatments for stainless steel face plates.

OPTIONS:

Volume control & Fire dampers.
Fire rated & standard plenums.
Removable Equalising Baffle.

INSTALLATION



PERFORMANCE

Size	Vol (l/s)	Noise Level dB(A)	Pressure Pa	Face Velocity (m/s)
300	8	30	20	0.26
400	11	30	20	0.27
500	14	30	20	0.28

DIMENSIONS

Size	Width O/All	Height O/All	Opening Dimension	Plenum Depth	Faceplate (Depth)
300	323	128	300 x 100	50	10
400	423	128	400 x 100	50	10
500	523	128	500 x 100	50	10

SPECIFICATION:

The Face Plate is to be manufactured from 1.2mm thick Zintec Mild Steel sheet punched & press formed from a single section of material to give a complete jointless edge to the face. The main body shall incorporate an integral Equalising Baffle and is to be manufactured from Galvised mild steel and be polyester powder coated matt black if required. The plenum is to be securely fixed to the step using the screw holes provided in the ends. The Face plate is to be magnetically fixed to the plenum flange for ease of installation and removal. There must be no screw fixings on show. The finish shall be as specified by the client.