

With the ever increasing need for higher air change rates in computer rooms, clean areas, hospitals and laboratories, it has become necessary to develop a sophisticated air distribution system. Based on the laminar flow principle, the main constituent is the LF perforated laminar diffuser and plenum.

We are able to supply these units purpose designed and built to suit every application, integrating where necessary with light fittings, and ceiling support systems. Up to and including the design and supply of complete ceilings, incorporating all the normal features.

Specification & Construction:

Aluminium laminar panels with integral plenum box with square or circular spigots, mounting frame neoprene face seals and face or duct operated dampers.

Sizes:

Minimum 300mm² with no total limit on a modular construction.

Laminar Panel Surface Frame//
Type LFPSV



Finish:

Standard finish polyester powder coatings and Syntha Pulvin powder coatings in standard colours.

Fixing:

Dependant on the frame style selection varying from lay-in to concealed mounting frames.



Laminar Panel Recessed Frame//
Type LFPRV

Accessories:

Opposed and parallel damper controls - air turning deflectors - non-standard frames - non-standard cores - non-standard sizes - plenum boxes - assemblies incorporating light fittings - removable cores.

Alternative Designs:

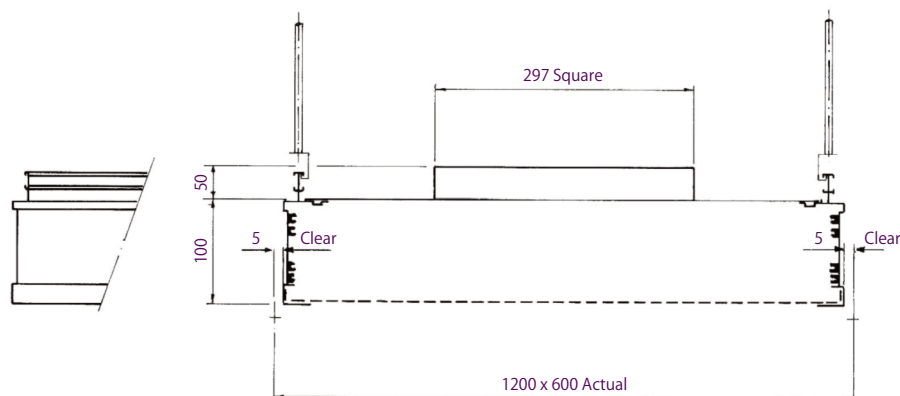
We are able to offer a range of special units incorporating circular, linear and triangular shapes.

General Notes:

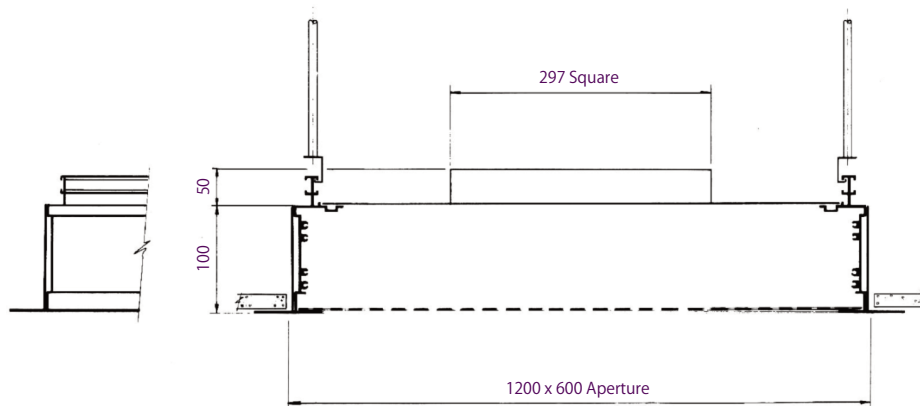
Data based on 3M ceiling height and vertical throw. Cooling differential 10°C on a flat ceiling with no downstands. Sound ratings given are based on a room absorption figure of 9DB RE⁻¹² taken at 30° angle 1.5 metres from the grille with a damper in the fully open position. Pressure drops measured in M/M2 are given without the effect of the terminal damper.

Selection Data

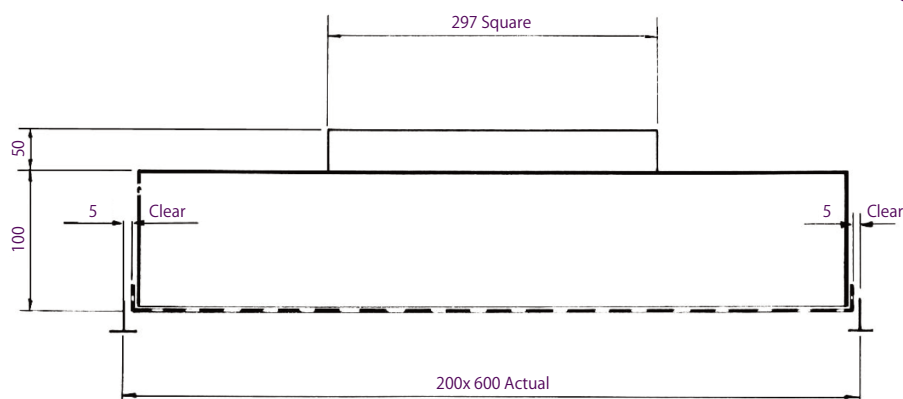
| Air Volume m ³ /sec | Spigot Velocity m ² | Pressure Drop N/m ² | Sound Rating NC |
|-----------------------------------|-----------------------------------|-----------------------------------|--------------------|
| 0.05 | 0.066 | 1 | - |
| 0.075 | 1.00 | 2 | - |
| 0.100 | 1.33 | 5 | - |
| 0.125 | 1.66 | 7 | 15 |
| 0.150 | 2.00 | 10 | 18 |



Type LFPTV//Frame Detail Recessed



Type LFPSV//Frame Detail Recessed



Type LFPRV//Joint Detail between Two Panels