

Laminar Flow Diffusers

Description

For supply of clean, filtered, chilled air without turbulence or entrainment essential for Operating Theatres, Laboratories and Clean Rooms. Suitable for ceiling mounting.

Construction

1.6mm thick extruded aluminium frame with hairline mitres mechanically held. Perforated face plate with special low free area, manufactured from sheet steel. The rear top entry plenum box is of galvanised sheet steel and all joints fully sealed.

Size and Weight

Single panel construction 600 x 600, 900 x 600 & 1200 x 600.
Weight approximately 12kg.
Free area 10%.

How to Specify

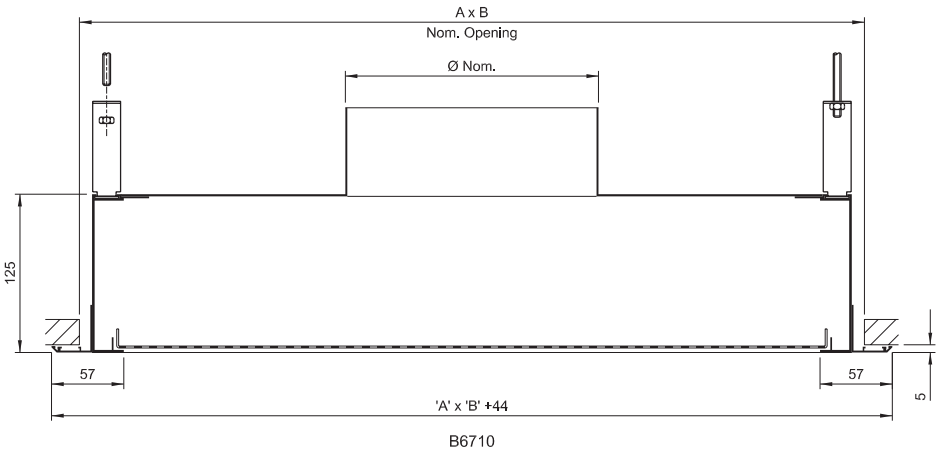
STATE QUANTITY, THE PRODUCT CODING AND THE SIZE WIDTH X HEIGHT
e.g. 10 Qty. B671R+6C 1200 x 600.



| Frame Style | Core | Options | Accessories |
|-----------------------------|---|---------------------------|----------------------------|
| B Bevel Edged Flange | 67 Perforated Removable Face Plate | 0 None | 0 None |
| | | 1 Top Inlet Plenum | R Twin Blade Damper |
| | | | F Flat Plate Damper |



| Fixings | Finish |
|-------------------------------|------------------------------|
| 2 Neck Fixings | C PPC BS / RAL Colour |
| 1 Flange Holes | D Mill Finish |
| 6 Lay-in Tile Replacer | |



Laminar Flow Diffusers

Description

For supply of clean, filtered, chilled air without turbulence or entrainment essential for Operating Theatres, Laboratories and Clean Rooms. Suitable for ceiling mounting in multiple units.

Construction

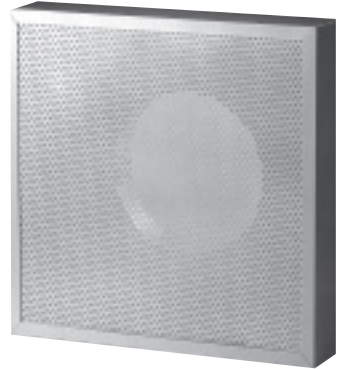
1.6mm thick extruded aluminium frame with hairline mitres mechanically held. Perforated face plate with special low free area, manufactured from sheet steel. The rear top entry plenum box is of galvanised sheet steel and all joints fully sealed.

Size and Weight

Suitable for multi-panel construction, from 600 x 600 to 5400 x 2400.

Weight approximately 17kg/m².

Free area 10%.



How to Specify

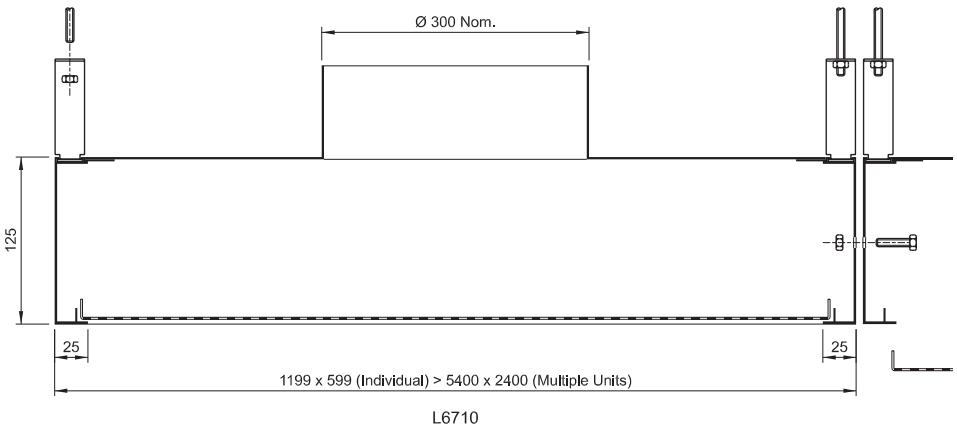
STATE QUANTITY, THE PRODUCT CODING AND THE SIZE WIDTH X HEIGHT

e.g. 10 Qty. L671R+6C 2400 x 1800.

| Frame Style | Core | Options | Accessories |
|---|---|---------------------------|----------------------------|
| L Single / Multi Assembly Module | 67 Perforated Removable Face Plate | 0 None | 0 None |
| | | 1 Top Inlet Plenum | R Twin Blade Damper |
| | | | F Flat Plate Damper |
| | | | |

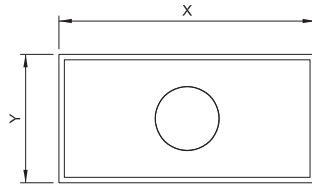
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| Fixings | Finish |
|-------------------------------|------------------------------|
| 2 Neck Fixings | C PPC BS / RAL Colour |
| 4 Drop Rod Fixings | D Mill Finish |
| 6 Lay-in Tile Replacer | |
| | |



Technical Data Laminar Flow Diffusers

| X x Y = 1200 x 600 (Nominal) | | | |
|------------------------------|-------|--------------|----|
| q (l/s) | Vf | Ps (Pascals) | NC |
| 70 | 0.111 | 2 | - |
| 85 | 0.135 | 3 | - |
| 100 | 0.159 | 5 | 15 |
| 115 | 0.182 | 6 | 18 |
| 130 | 0.206 | 8 | 22 |
| 145 | 0.230 | 10 | 26 |
| 160 | 0.254 | 12 | 32 |
| 175 | 0.277 | 15 | 33 |
| 190 | 0.301 | 18 | 36 |
| 205 | 0.325 | 20 | 39 |



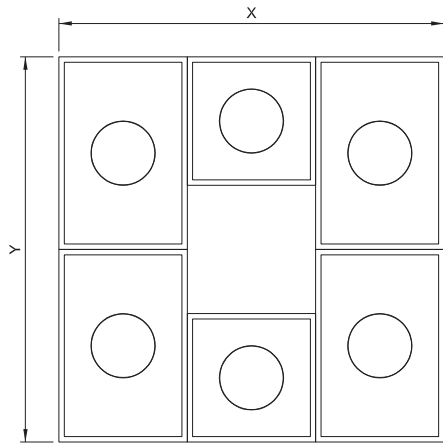
L6710 / B6710
(Individual Unit)

Description

Laminar flow diffusers gently supply clean filtered chilled air into the occupied zone vertically without turbulence or entrainment which is an essential requirement for hospital operating theatres, laboratories and industrial clean rooms. They can be installed as 'individual' 1200 x 600 panels or in 'multiple-units', from 1.8M x 2.4M to 5.4M x 2.4M and can be produced to incorporate 'operating-lighting' fittings or other equipment. The low free area perforated face plates are fully removable for cleaning or sterilising and for ease of installation.

Performance

Tabulated data is based upon room height of 2.7M and supply air at 5°C below room temperature. NC values are based on 8dB room absorption and a face velocity of 0.12M/s. Pressure drops are as measured at the 300 diameter inlet spigot. Desired selection conditions are with 0.1M/s face velocity (Vf) at a cooling differential of between 5°C and 9°C. Units will perform satisfactorily with average face velocities between 0.07M/s and 0.13M/s. Laminar flow diffusers are not recommended for heating or isothermal conditions.



L6710
(Multiple Unit)

| X x Y | 1800 x 2400 | | | | 3000 x 2400 | | | 4200 x 2400 | | | 5400 x 2400 | | |
|-------|-------------|----|----|------|-------------|----|------|-------------|----|------|-------------|----|----|
| | Vf | Ps | NC | | Vf | Ps | NC | Vf | Ps | NC | Vf | Ps | NC |
| 300 | .08 | 3 | - | - | 0 | - | - | - | - | - | - | - | - |
| 400 | .10 | 5 | 20 | .06 | 2 | - | - | - | - | - | - | - | - |
| 500 | .135 | 7 | 26 | .08 | 3 | - | - | - | - | - | - | - | - |
| 600 | - | - | - | .095 | 4 | 19 | .065 | 2 | - | - | - | - | - |
| 700 | - | - | - | .11 | 6 | 22 | .08 | 3 | 19 | .06 | 2 | 19 | - |
| 800 | - | - | - | .125 | 7 | 28 | .09 | 4 | 21 | .07 | 2 | 21 | - |
| 900 | - | - | - | - | - | - | .10 | 5 | 25 | .075 | 3 | 23 | - |
| 1000 | - | - | - | - | - | - | .11 | 6 | 29 | .085 | 4 | 26 | - |
| 1200 | - | - | - | - | - | - | .13 | 7 | 32 | .10 | 5 | 30 | - |
| 1400 | - | - | - | - | - | - | - | - | - | .12 | 7 | 33 | - |