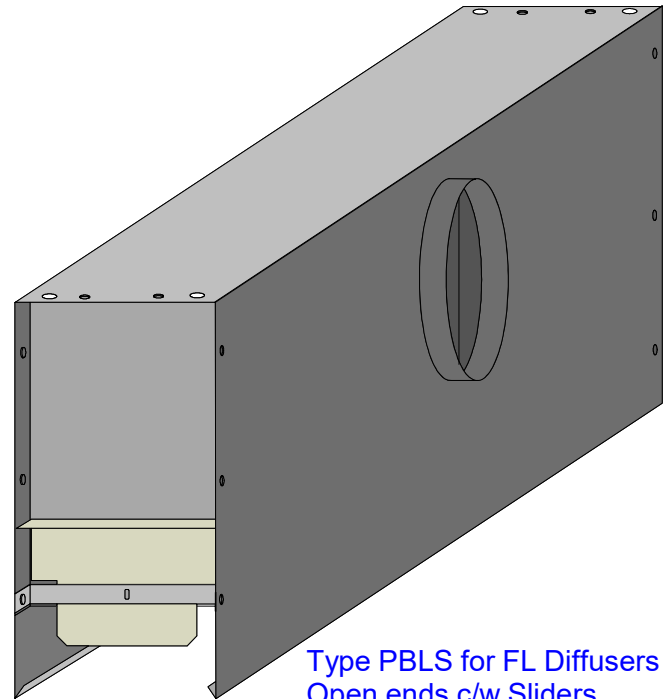


# Linear Plenum Boxes

## Type: PBLS & PBLT



The Specialist Ventilation Services range of Linear plenum boxes are specifically designed to provide a more snug fit to reduce leakage around the perimeter of the grille or diffuser and particularly the ends where it is known to be problematic on continuous lengths of Linear Slot Diffuser or Linear Bar Grilles.

This is done using our unique "End Cap Sliders" which are manually adjustable on site to close the gap at the end of the plenum to the back of the diffuser blades. In doing so the air leakage is greatly reduced at the ends as it is forced through the blades into the room.

Furthermore an internal gasket if required can be fitted along the length of the plenum to close the gap often created when using concealed fixings such as goal post brackets.

This gasket is not required if the plenums are fitted with insulation.

### APPLICATION

The PBL- range of Linear plenum boxes are suitable for all Linear Slot Diffusers and Linear Bar Grilles with or without concealed fixings.

This product by nature of the manufacturing process remains robust and can be installed in any orientation to suit the application such as ceiling, wall, bulkhead and vertical air knife installations. Each plenum is provided with M8-M6 clearance holes in the corners to facilitate hanging from above or secure fixing to walls, steelwork brackets or ceilings etc.

### SPECIALS:

Due to the flexible manufacturing process it is possible to provide many different configurations so suit all types of layouts and restricted spaces / voids. This can often be achieved with the "Joggle" type plenums PBT-DJ or PBT-SJ

### STANDARD:

The side entry type PBLS is our standard base product incorporating the unique "End Cap Sliders" and hemmed edge for concealed fixing of LSD and FL Slot Diffusers.

Linear bar grilles type LBG will not have the hemmed edge as standard unless requested at the time of order. (no cost option) All spigots will be circular unless requested otherwise.

Plenum heights will be 100mm higher than the spigot size.

Dampers, Insulation or lining are not included as standard.

Our standard construction is of Galvanised Mild Steel sheet however 304 or 316 marine grade Stainless Steel options are available for industrial or off shore applications at additional cost.

### OPTIONS:

Thermal Insulation (internal)

Acoustic Insulation (internal)

Internal Perforated baffles

Alternative body types & Concealed fixings are available.

Access Constant Volume damper type ACVD

Access Single Blade Volume control damper type ASBV

Cord operated volume control dampers type COD

Fire dampers.

Fire rated plenums.

Flanged spigots

Rectangular or oval spigots

Pressure Measurement nipples for commissioning

### VARIATIONS:

For different types such as PBLT, PBLT-DJ and PBLT-SJ which include Top entry and Joggle boxes please see the following page.

### MATERIALS:

Galvanised mild Steel 0.6, 0.9 or 1.2mm thick depending on size.

Alternative materials and thicknesses are available.

Thermal Insulation:

5 or 10mm Expanded Crossed Linked Closed Cell Polyethylene

Acoustic Insulation:

10mm Black Acoustic Foam Average density 90kg/m<sup>3</sup> Class "O"

### CONSTRUCTION:

Pressed formed body and end caps using a clinched assembly method ensuring an energy efficient and rust free construction.

### ALTERNATIVE FINISH:

Polyester Powder Coated finish for exposed applications.

### DIMENSIONS:

Minimum length for Linear Bar grilles is 100mm

Minimum length for Linear Slot Diffusers is 600mm

Maximum length in a single section is 3000mm

Larger sizes can be manufactured however they

may need to be in sections or have strengthened

frames or mullions.

### SPECIFICATION:

The PBL- Plenum Boxes shall be manufactured from 0.6 to 1.2 mm Galvanised Mild Steel sheet press formed from single section of material to give a complete jointless body other than with the end caps.

The End Caps shall be provided with matching sliders to suit the grille or diffuser core and manufactured from the same material as the body.

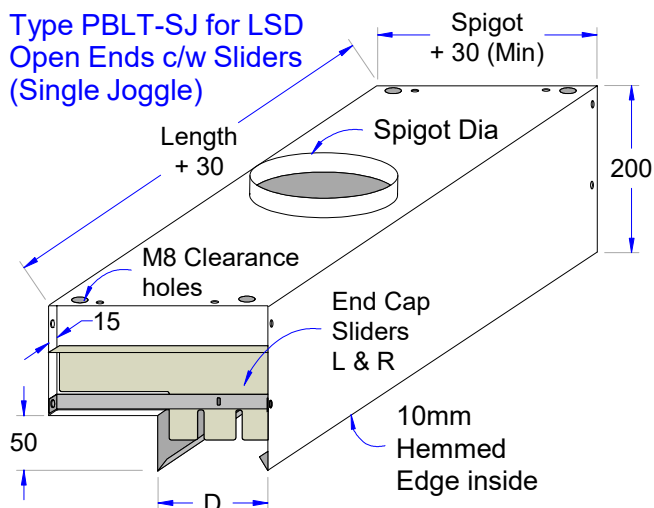
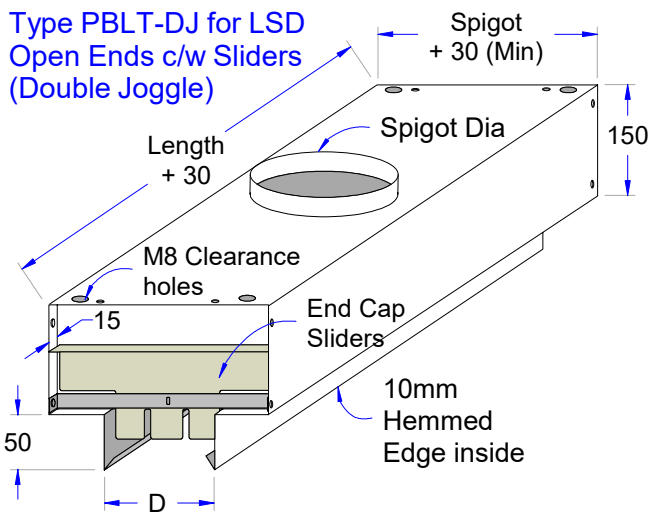
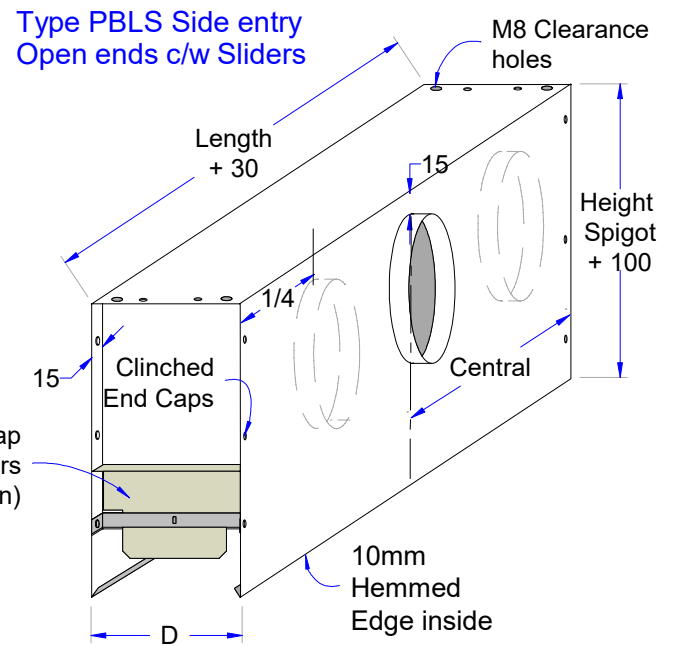
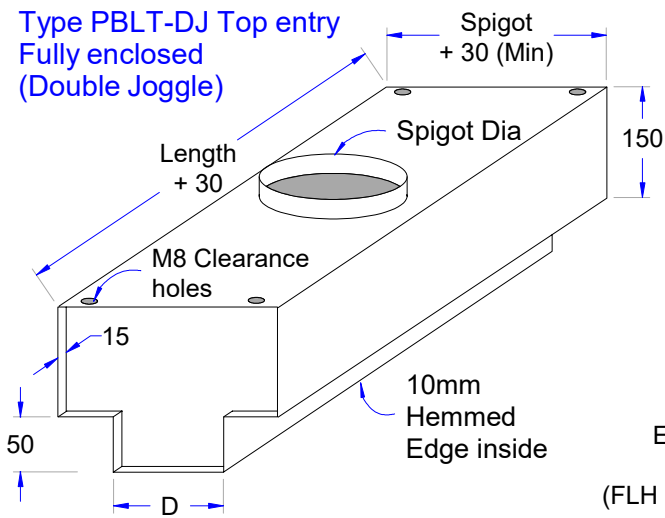
Fixing / hanging holes M8-M6 shall be provided at the end of each corner. Acoustic or Thermal insulation shall be factory fitted during construction to ensure long term bonding of the foam to the inside of the plenum.

Cord operated dampers type COD shall be installed as an integral part of the construction in each spigot.

# Linear Plenum Boxes

## Type:PBS & PBLT

To suit LBG, FL & LSD Grilles & Diffusers

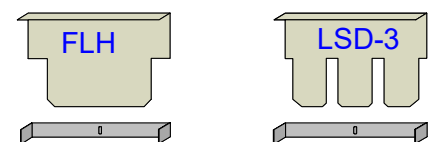


### PLENUM "D" DIMENSIONS

MODEL	SLOTS	"D" (Std)
LSD-19	1	54
LSD-25	1	61
LSD-19	2	92
LSD-25	2	105
LSD-19	3	130
LSD-25	3	149
LSD-19	4	168
LSD-25	4	194
LSD-19	5	207
LSD-25	5	239
LSD-19	6	245
LSD-25	6	283
LSD-19	7	283
LSD-25	7	328
LSD-19	8	321
LSD-25	8	372

MODEL	"D" 1 Slot	"D" 2 Slot
FL-25	89	152
FL-38	114	203
FL-50	140	254
FL-64	165	305
FL-76	191	356



Slider Options