



CVE Shop Slot Diffusers can be used for extract or supply systems. Suitable for large open office areas as perimeter grilles or boardrooms. Optional deflectors allow the adjustment and direction of airflow from the diffusers. Available from 1 slot to 8 slot diffusers module.

Manufactured from Extruded Aluminium. Made to any length in clip together sections. Maximum section length 2000mm. Standard flange 28mm width. Plastered in flange version 36mm width.

The standard finish for this product is RAL 9010 White. Other finishes are available to suit the interior and architectural design requirements.

Goalpost brackets and concealed fixing screws enable the diffusers to be retro fitted on site once plenums have been installed and there are no face fixings.

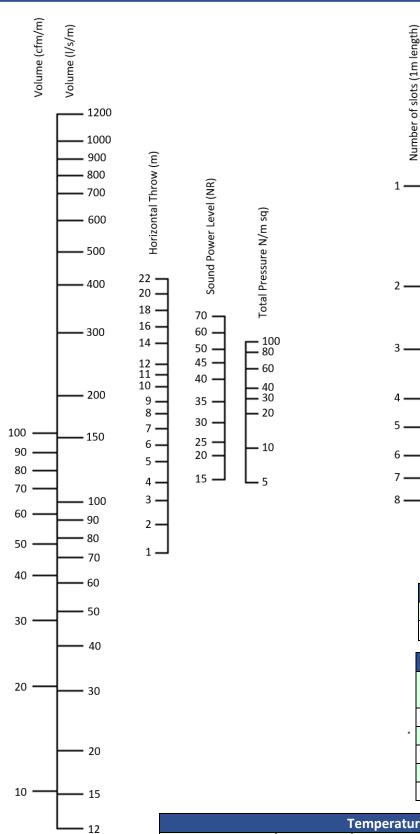
## **Options and Accessories**

- Plenum boxes can be manufactured to suit your requirements
- Internal deflectors
- End caps

Quick Selection Chart							
L/s per mtr	Number of slots	Pa (N/m²)	NC				
20	1	5					
30	1	9	18				
40	1 or 2	20, 6	22, 14				
50	1, 2 or 3	27, 10, 5	24, 17				
60	1, 2, 3 or 4	38, 11, 6, 3	29, 17				
70	1, 3, 4 or 5	42, 13, 5, 3	34, 18				
80	3, 5 or 6	15, 6, 3	20, 14				
90	2, 3 or 5	20, 11, 6	24, 15				
100	2, 3, 5 or 6	29, 13, 6, 4	28, 19, 14				
125	2, 3, 4, 5 or 7	38, 18, 11, 8, 5	34, 25, 17				
150	3, 4, 5, 6 or 7	27, 16, 13, 10, 7	29, 20, 17, 15				
175	4, 5, 5, 6, 7 or 8	33, 20, 16, 12, 10, 7	34, 26, 19, 17, 15, 14				
200	3, 4, 5, 6, 7, or 8	38, 26, 19, 12, 9, 7	41, 30, 26, 21, 18, 16				
250	250 4, 5, 6, 7 or 8		38, 31, 26, 22, 19				
300	5, 6, 7 or 8	39, 26, 19, 14	36, 32, 25, 21				
350	6, 7 or 8	35, 25, 20	38, 33, 29				
400	6, 7 or 8	6, 7 or 8 44, 31, 26 43, 39, 32					







## CVSD SLOT DIFFUSER

Throw values based on a 10°C cooling application, to a terminal velocity of 0.5 m/s, to give an average room velocity of 0.18 m/s with a room height of 2.7m when mounted flush with an unobstructed ceiling.

Exhaust Correction Factors				
NR	-10			
Pressure Loss	0.8			

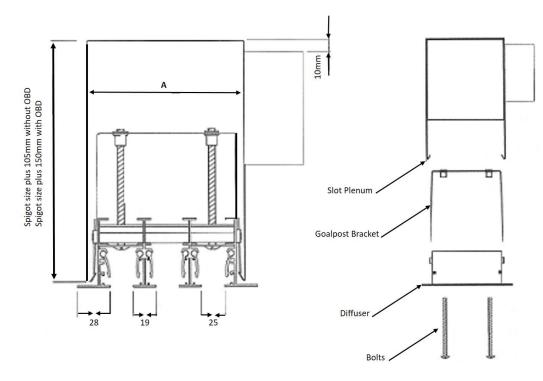
1	Correction Factors							
	Diffuser Active	Horizontal Flow	Sound Level					
	Length (m)	Multiplier	Correction					
	0.5	0.7	-3dB					
	1	1	As nomogram					
	1.5	1.1	+2dB					
	2	1.2	+3dB					
	3	1.3	+5dB					

Temperature Correction Factors							
	-10°C	0°C	+5°C	+10°C	+15°C	+20°C	
Throw Factor	1	1.1	1.15	1.2			
<b>Projection Factor</b>	1.6	1.25	1.15	1	0.73	0.62	

## Combi-Vent Engineering Ltd

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If the above slot widths do not match an existing diffuser, please confirm actual slot centres as the widths can be modified in production.

Slot Diffuser Plenum Side Entry								
Number of Slots	1	2	3 as above drawing	4	5	6	7	8
Dimension A Slot Box Inside Width	55mm	94mm	133mm	172mm	211mm	250mm	289mm	328mm

## General Installation arrangement of a slot diffuser and plenum

For surface mounting the standard 28mm flange can be used or there is a plaster-in frame flanged version available. All slot blades are 19mm and slot gaps are normally 25mm. Slot widths are adjustable if you are trying to match an existing slot diffuser.

Slot diffusers can also be supplied flangeless if required. On show slots and flanges are powder coated white. Internal vanes are black. OBD dampers can be fitted on request.

Slot Diffuser plenum box and concealed goalpost fixing options available on request.

Galvanised slot plenum boxes are manufactured to order. They have side entry spigots for ducting. Duct size to be confirmed prior to manufacture. Available uninsulated (as above) or insulted with 6mm thick Class O foam.

Plenum boxes are first fitted into position flush to the plasterboard ceiling. They have integral turned in gutter edges ready for goalpost bracket to sit it. The diffuser and locating bolts are offered up to the 2-No inserts already fitted in each of the goalpost brackets. These brackets slide along in the gutter to the required bracket position. They can then be tightened up to allow the diffuser to be wound up along its length and eventually finish flush to the ceiling.