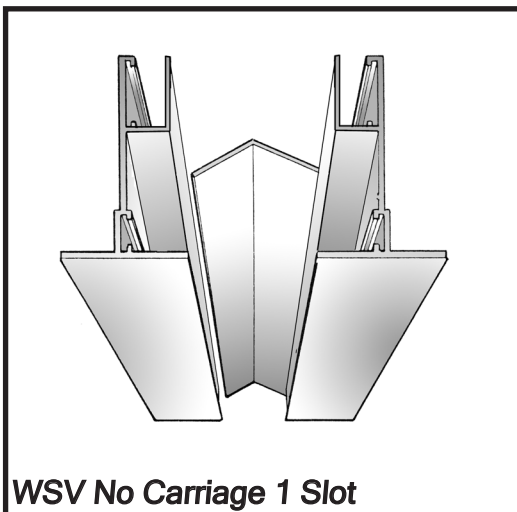
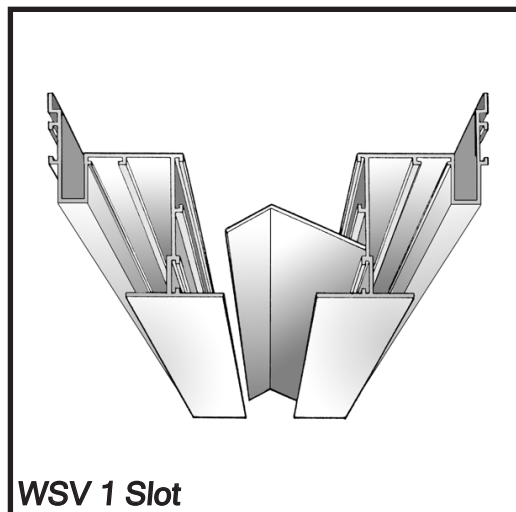
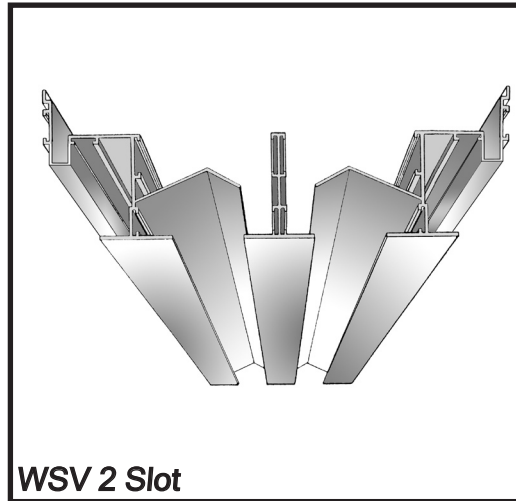


1 & 2 Way High Capacity Slot Diffuser for Supply & Extract Type WSV

A high capacity fixed pattern blade low pressure slot diffuser suitable for variable and constant column systems. The diffuser is available in either one or two way air discharge patterns and has been designed to integrate with current ceiling trends. Its sophisticated design allows a low turn down facility for variable volume systems where energy saving is paramount. It is particularly well suited for integration into large office blocks, lecture theatres, libraries and auditoriums. TEK's slot diffuser can be easily installed and aligned in continuous lengths, incorporating live and dummy sections as required, or with modular sections being used for supply and return air.

Specification and Construction:

WSV slot diffuser constructed from HE9TF aluminium extrusions with an integral air pattern control blade. Diffusers supplied in 3.66 metres, intermediate lengths or less to be aligned via keyways for continuous appearance. A fixed plenum support carriage is incorporated within the slot diffuser system, having sliding hanger brackets for suspension to ceiling slab. Plenum boxes and blanking strips to be positioned as required and clipped to the support carriage to achieve an air seal. Diffusers from 150mm long are available in either one or two slot configurations with no limit on the maximum length available. Internal and external mitre corners are produced to suit the building line.



Finish:

Full range of Epoxy Powder Coatings suitable for external mounting is available. These are applied as an Aluchrome pre-treatment to give a guaranteed life expectancy of 10 years for semi-gloss applications and 12 years for gloss. A full written guarantee is available on request. Other PVF2 Syntha Pulvin and anodised treatments are also available at varying costs.

Accessories:

Plenum inlet to be circular or rectangular with opposed blade damper with operation from diffuser face. Please specify your requirements.

Installation Arrangement

WSV 1 Slot High Capacity Diffuser

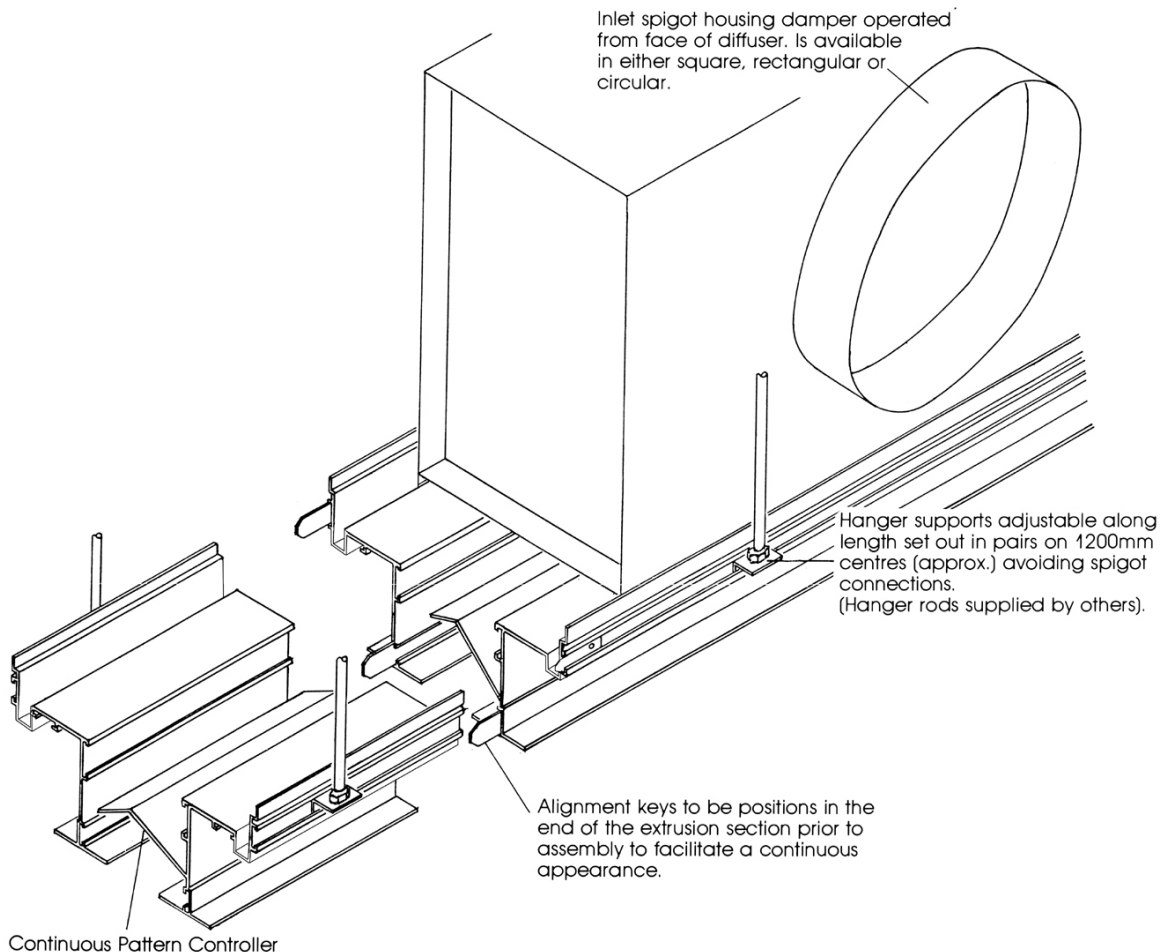
Lift up diffuser assembly and locate the hanger rods through the support brackets. Screw on the bottom nuts until the weight of the diffuser is taken up by rods, repeat the operation up to the end of the run.

Adjust levels on hanger rods until the diffuser is level and at the required height.

Position plenum boxes as per ductwork drawing, by

feeding between hanger rods. Drop in blanking plate ensuring at least 12mm is trapped under end of each plenum box.

WSV1 Typical Installation



Type WSV 1 Slot/2 Slot Linear Diffuser for Supply and Extract

General Notes:

Data based on 2.7M ceiling height and horizontal throw. Cooling differential up to 10°C on a flat ceiling with no downstands. The throw figure is determined as the distance from the edge of the diffuser to the wall, or as halfway between two diffusers discharging towards each other.

Sound ratings given are based on a room absorption figure of 9DB RE10⁻¹² taken at 30° angle 1.5 metres from the grille without a damper. Terminal velocities at 1.5 metres high are 0.37 metre per second on minimum throw. Reducing throw 0.25 metres per second on the maximum throw listed. Where diffusers have no ceiling effect, throws are reduced to 70%. Consult Sales Office regarding comfort conditions.

Pressure Drops measured in N/M² are given without the effect of the terminal damper. For two slot applications divide air volume by half and use one slot data. Throws should be restricted on the following ceiling heights:

Ceiling Height: 2.4M 2.7M 3M 3.3M
Maximum Throw: 2.7M 3M 4M 5M
Please consult Sales Office for other throws.

Recommended selections:

For 2.7 metre ceiling Fan Coil Applications 3 - 3.5 mtr throw 65 litres/linear metre.

For applications where there is a requirement for active section longer than 1200mm please use the following table:

Recommended VAV:

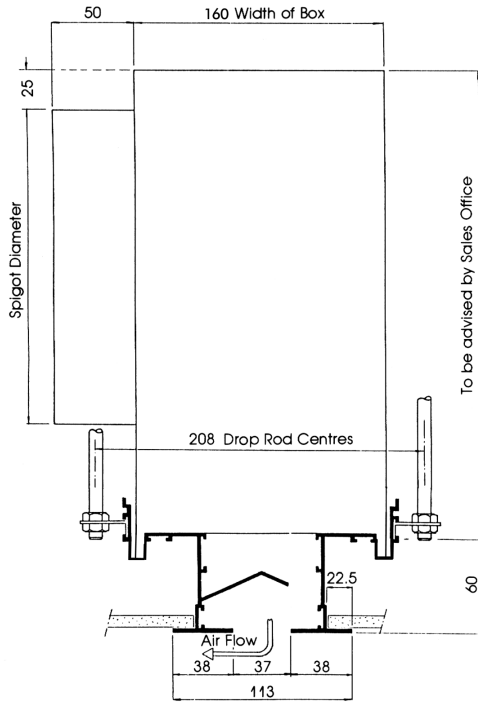
Range 40-80Ltrs/Linear Metre

Length mm	Air Volume M ³ /sec	Pressure Drop N/M ²	Throw M	Sound Rating NR
300	.02	10	1.5-2.2	-
	.03	23	2.2-3.4	17
	.04	43	3.3-4.5	28
600	.04	10	1.5-2.4	-
	.05	15	2.1-3.0	15
	.06	23	2.4-3.6	20
900	.07	33	3.0-4.3	26
	.05	8	1.5-2.2	-
		10	1.7-2.4	-
15		2.1-3.0	-	
1200	.08	20	2.4-3.6	17
		23	2.6-4.5	20
		33	3.2-5.2	25
	.06	5	2.0-2.4	-
		8	2.2-2.7	-
		10	2.3-2.9	-
	.09	15	2.4-3.0	15
		20	2.5-3.1	18
		24	2.7-3.6	19
	.10	28	2.9-3.9	21
		33	3.0-4.2	24

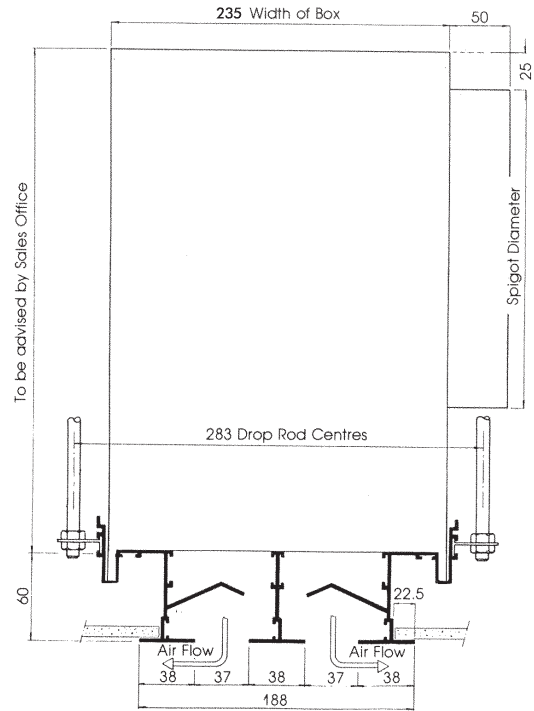
Air Volume M ³ /sec	Pressure Drop Pascals	Throw M	Sound Rating NR
.065	10	2.6-3.3	25
.080	16	3.0-3.7	30
.100	24	3.3-4.5	37

WSV 1-Slot/2-Slot Fixing

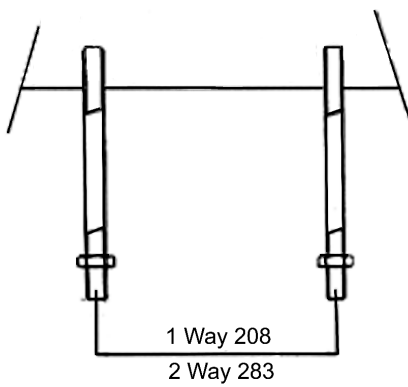
1-Slot WSV



2-Slot WSV



Fixing Centres



End Cap Detail

