



Linear Slot Diffusers

5000 Series

Linear Slot Diffusers 5000 Series

The Series 5000 Linear Slot Ceiling Diffuser has been specially designed to provide both the unobtrusive appearance required for architectural excellence, and the full 180° pattern controller adjustment at minimum NC levels required for high engineering performance.

The Series 5000 Diffuser provides stable diffusion under large amounts of air with both constant and changing load conditions. This is particularly suitable for variable air volume systems.

The Series 5000 Diffusers are available to suit many applications with several choices of mounting frames. Standard finish is a high quality, powder coated finish for long life and easy cleaning.

The diffusers are available with mitred corner end caps and feature die-formed components to provide consistent quality and performance.

- **Aluminium Construction**
- **'Ice Tong' Pattern Controllers**

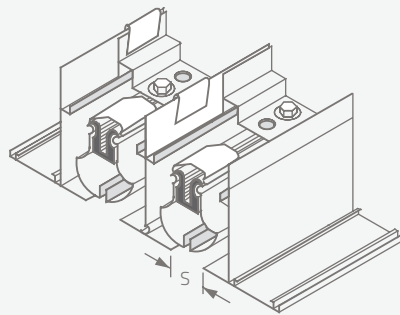
Supply Models:

5050	13mm Slot
5075	19mm Slot
5010	25mm Slot



Linear Slot Diffusers 5000 Series

- Features:**
- The volume and direction of the discharge air can be adjusted by moving the pattern controllers.
 - Available with 1 to 8 slots.
 - Choice of three slot widths to suit capacity requirements.
 - The maximum length of the pattern controller is 900mm. Diffusers longer than 900mm are provided with multiple pattern controller sections.
 - Diffusers are supplied in lengths of up to 1800mm in a single section.
 - Ideal for continuous length applications.
 - Multiple-sections are supplied with alignment strips on the frames and sub-frames to provide superior, positive on-site alignment.
 - Model 5000R returns and the Model 5000 supply diffusers are identical except for the omission of pattern controllers.
 - Mounting sub-frames are cut to length for assembly on-site.
 - Material: Extruded aluminium frame with corrosion-resistant steel pattern controllers.
 - Finish: AW Appliance White polyester powder finish RAL 9010 semi-gloss with black pattern controllers as standard. Other finishes are available.



Supply Model

5050	S	=	13mm slot
5075	S	=	19mm slot
5010	S	=	25mm slot

Frame Types and Mounting

Sub-Frame Combinations for Hard Ceilings

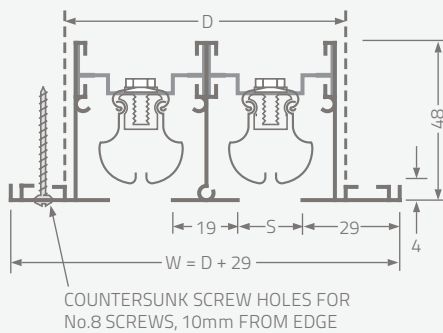
Standard Frame

Type A

- Flange Frame
- Screw Mounting

Type B

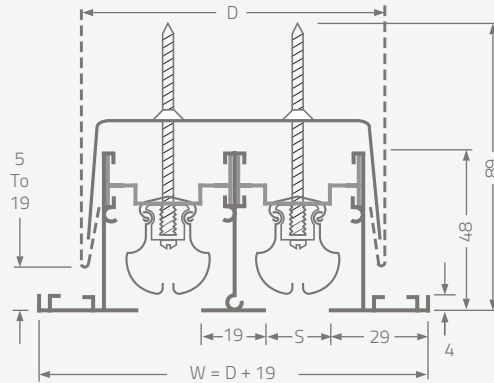
- Flange Frame
- Duct Mounting, less screw holes



Standard Frame

Type C

- Flange Frame
- Concealed Mounting



Duct Width

D Dimension for Available Frames

Units: mm

Frame Type	No. of Slots	5050 5050R S=13	5075 5075R S=19	5010 5010R S=25
A B	1	41	48	54
	2	73	86	98
	3	105	124	143
	4	137	162	187
	5	168	200	232
	6	200	238	276
	7	232	276	321
	8	264	314	365



Overall Length Dimensions and End Cap Position

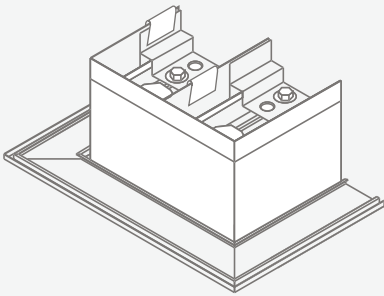
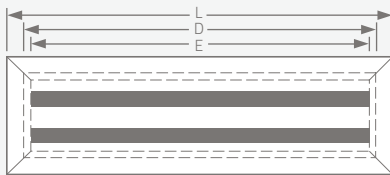
Frame Type	M		F		M		M		O		O		C	
	E	L	E	L	E	L†	E	L	E	L	E	L	E	L
A, B	D-13	D+25	D-13	D+38	D-6	D+13	D-5	D+14	D	D	D-2	D-2	D-3	D-3
C	D-13	D+25	D-13	D+38	D-6	D+13	D-5	D+14	D	D	D-2	D-2	D-3	D-3
D	D-13	D+13	D-13	D+25	D-6	D+6	D-5	D+11	D	D	D-2	D-2	D-3	D-3
E	D-22	D	-	-	D-11	D	D-10	D+2	D	D	D-2	D-2	D-3	D-3
F, H	D-19	D+19	D-19	D+19	D-10	D+10	D-8	D+11	D	D	D-2	D-2	D-3	D-3
G	D-3	D	D-3	D	D-14	D	D-13	D+2	D	D	D-2	D-2	D-3	D-3
M*, N*	D-2	D-2	-	-	D-1	D-1	D-2	D-2	D	D	D-2	D-2	D-3	D-3

= Configurations FO and FC: Add 6mm for frame types A, B, C, D, F, G and H. Not available on frame types E, M and N.

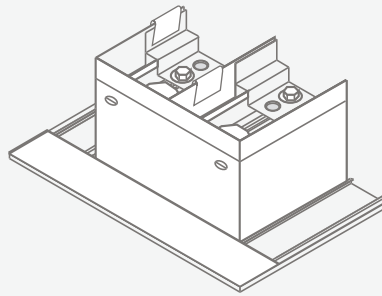
D = Duct length E = End Cap Position L = Overall Length

* These types have a flangeless mitred end cap which is the same extrusion profile as the frame.

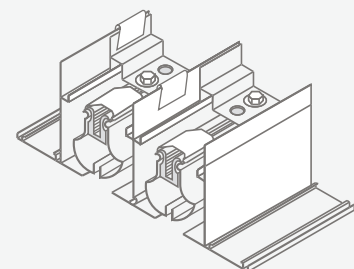
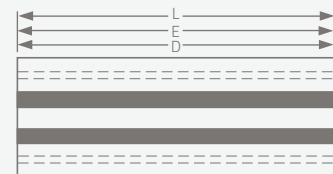
M - Mitred End Cap (Standard)



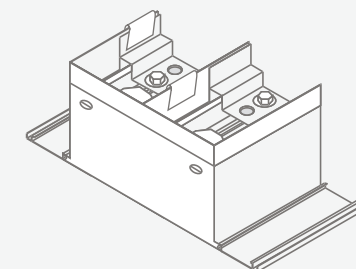
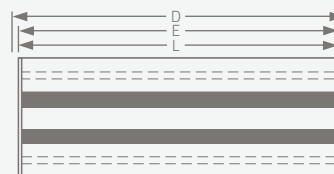
F - Flanged End cap



O - Open End

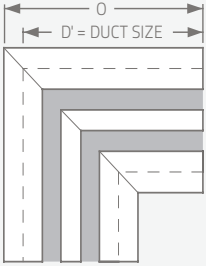


C - Flat End cap





Options and Accessories



D' = Duct Size	
No. of Slots	D'
1 to 4	300
5 to 8	600

The standard mitred corner is 90°. Units are factory welded with precision to match and align with the associated straight leg. Units are supplied with factory installed blank-offs in the slot (painted black) and are inactive. For compound angles, contact the sales office.

90° Mitred Corners

5050MC	▪ 13mm Slot
5075MC	▪ 19mm Slot
5010MC	▪ 25mm Slot

90° Mitred Corner Dimension 'O'

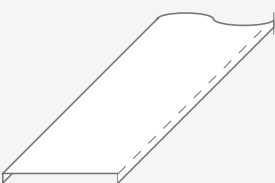
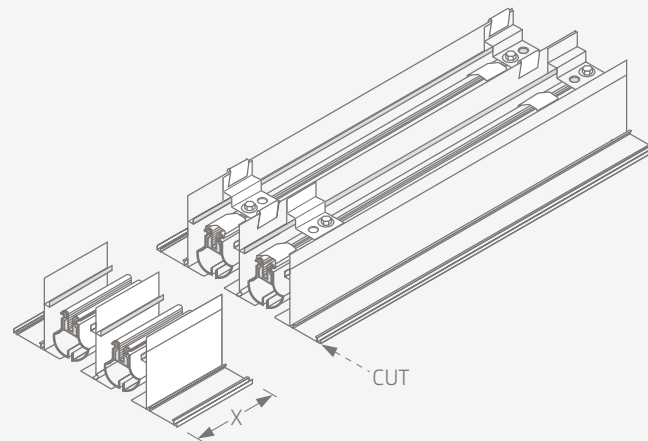
No. of Slots	Frame Type				
	A, B	C, F, H	D	E, G, J	M, N
1 - 4	313	308	302	296	299
5 - 8	613	608	602	596	599

Dimensions are in mm.

On Site Trimming of Diffusers

If "X" is less than 75mm at either end (150mm total), standard Model 5000 or 5000R can be site-cut.

- Factory-Cut Diffusers Model 5000 or 5000R are ordered for a specific length from the factory, but can be trimmed as much as 150mm in length, (75mm from each end) with a fine tooth, high speed carbon steel metal cutting blade.



Shipped in 1800mm lengths to be site-cut.

BO Blanking Plates

- Cold-Rolled Steel
- Fits over Neck
- Black Finish



Typical installation with mitred corners

Continuous Run Dimensions

The example on the right illustrates a typical 3 slot installation with two 90° mitred corner sections.

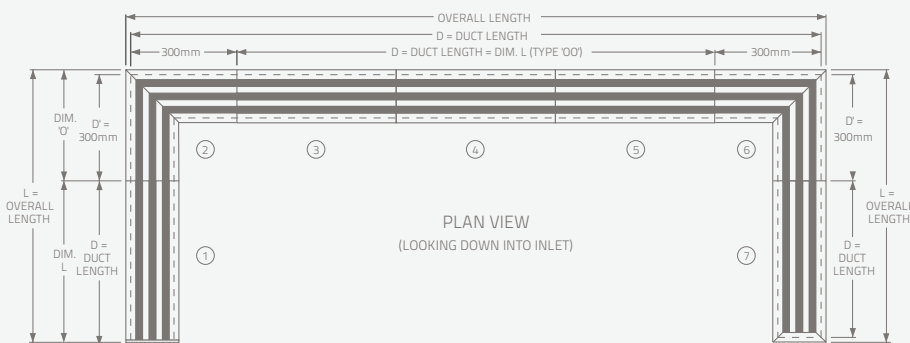
- 1 Type 'CO' End Cap configuration.
- 2, 6 'MC' Mitred Corner Section.
- 3, 4, 5 Type 'OO' End Cap configuration.
- 7 Type 'MO' End Cap configuration.

Each straight section, regardless of total duct length may be ordered as a single section.

Example:

- 1, 7 Each section may be ordered as a single item, regardless of total length.
- 3, 4, 5 One section may be ordered, regardless of total length.

Multiple-sections are sub-divided by the factory into equal length sections at the factories' discretion.



Note:

It is extremely difficult to achieve a perfect installation where compound mitres are involved such as above when all sections are ordered from the factory fabricated to suit finished duct dimensions. This is due to on-site tolerance variations which may prevent proper alignment and butting together of individual sections due to insufficient material.

It is recommended that section AE , Ø or f is ordered oversize by 75mm and cut to suit site conditions. 'OO' configuration lengths can be trimmed by up to 150mm. 75mm from each end.

How To Specify or To Order

Extruded Aluminium Linear Slot Diffuser ■ Model Series 5000

5075 – 900 x 2 Slot - C - AW - MM - BO

Model

- Linear Slot Diffuser 50

Slot Width / Fabrication

- Supply
 - 13mm 50
 - 19mm 75
 - 25mm 10
- Return
 - 13mm 50R
 - 19mm 75R
 - 25mm 10R
- Mitred Corner
 - 13mm 50MC
 - 19mm 75MC
 - 25mm 10MC
- Blank-offs
 - 13mm 50BO
 - 19mm 75BO
 - 25mm 10BO

Nom. Length (mm)

- No. Of Slots
- 1 to 8

Accessories

- Angle Cut One End AC1
- Angle Cut Both Ends AC2

End Cap Configuration

- Mitred Mitred (default) MM
- Mitred Open MO
- Mitred Flat MC
- Open Open OO
- Open Flat OC
- Flat Flat CC
- Flanged Flanged FF
- Flanged Open FO
- Flanged Flat FC

Finish

- Appliance White (default) AW
- Aluminium AL
- Mill MI
- Special SP

Frame or Frame/Sub-Frame Combination

- Flange Frame, Screw Holes A
- Flange Frame, No Screw Holes B
- Flange Frame, Concealed Mounting C
- Flange Frame, Concealed Mounting D
- Flush Frame/Sub-frame E
- Flange Frame/Sub-frame F
- Flush Frame/Plaster Sub-frame G
- Flange Frame/Plaster Sub-frame H
- Flangeless Frame M
- Spline Frame, Concealed Mounting N
- Flange Frame, T-Bar Lay-in T
- Threadline/Fineline® Frame FL

(Show complete Model Number and Size, unless "Default" is desired)

Notes:

1. Flanged end caps (FF) may be shipped loose upon request for on-site attachment and are intended for use with site cut sections or for use by stocking representatives.
2. It is helpful to include a sketch for multiple units with mitred corners and angle cuts. Specify exact outside length of duct run and angles.
3. For lay-in T-Bar installations, specify nominal T-Bar opening length.