



PSLO

- > Linear Slot Diffuser
- > Supply/Return
- > Continuous Lengths

DESCRIPTION

The PSLO 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 unit has been designed to provide an unobtrusive appearance and a full 180° pattern controller adjustment with minimum noise levels.

CONSTRUCTION

Extruded aluminium frame, corrosion-resistant steel pattern controllers.

Finish:

AW Appliance White polyester powder finish RAL 9010 semi-gloss with black pattern controllers as standard.

Options:

- Flange Frame
- Spline Frame
- T-Bar Frame
- Flush Frame
- Mitred Corners
- End Caps

MODELS

PSLO-S: Supply (C frame)
 - 13 mm Slot
 - 19 mm Slot
 - 25 mm Slot

PSLO-R: Return (C frame)
(Also available)
 - 13 mm Slot
 - 19 mm Slot
 - 25 mm Slot

DUCT DIMENSIONS (mm)

Slots	A, B Frame			C, D Frame			E Frame			F, N, H Frame			G Frame			M Frame		
	13	19	25	13	19	25	13	19	25	13	19	25	13	19	25	13	19	25
1	41	48	54	51	57	64	57	64	70	51	57	64	64	70	76	35	41	48
2	73	86	98	83	95	108	89	102	115	83	95	108	95	108	121	67	79	92
3	105	124	143	114	133	152	121	140	159	115	133	152	127	146	165	98	117	137
4	137	162	187	146	171	197	152	178	203	146	171	197	159	184	210	130	156	181
5	168	200	232	178	210	241	184	216	248	178	210	241	191	222	254	162	194	225
6	200	238	276	210	248	286	216	254	292	210	248	286	222	260	298	194	232	270
7	232	276	321	241	286	330	248	292	337	241	286	330	254	298	343	225	270	314
8	264	314	365	273	324	375	279	330	381	273	324	375	286	337	387	257	308	359

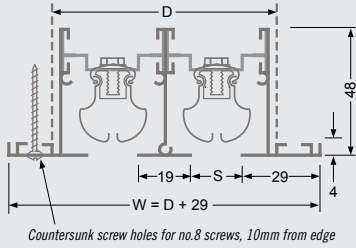
PSLO – FAME TYPES/MITRED CORNERS

FRAME A

Flange, Screw mounting

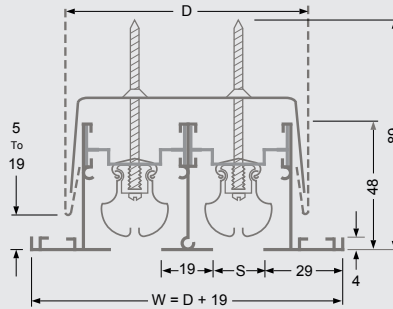
FRAME B

Flange, Duct mounting – less screw holes



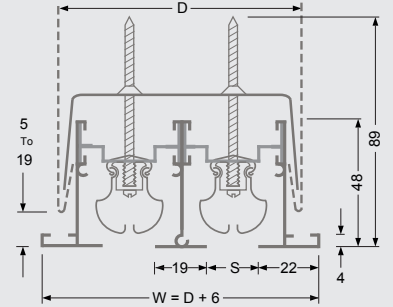
FRAME C

Flange, Concealed mounting



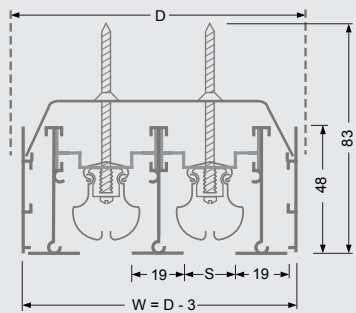
FRAME D

Flange, Narrow margin, Concealed mounting



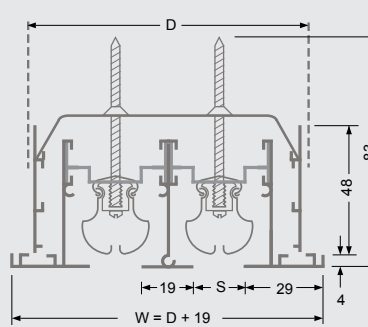
FRAME E

Flush and Sub-frame, Concealed mounting



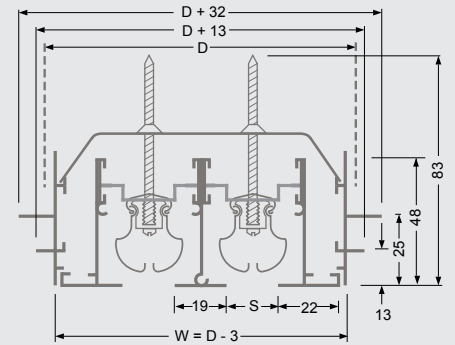
FRAME F

Flange & Sub-frame, Concealed mounting



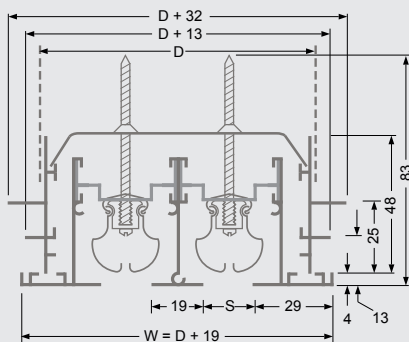
FRAME G

Flush with Plaster & Tile Sub-Frame, Concealed mounting



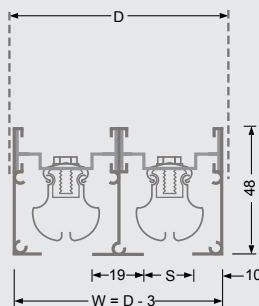
FRAME H

Flange with Plaster & Tile Sub-Frame, Concealed mounting



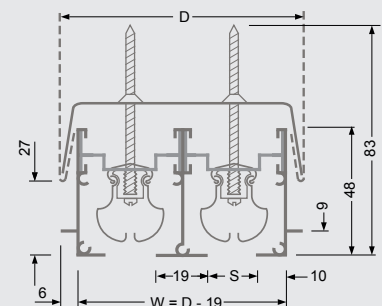
FRAME M

Flush, Duct mounting, Flangeless

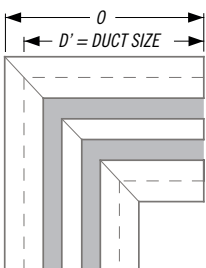


FRAME N

Spline ceiling, Concealed mounting



90° MITRED CORNERS – (13 mm, 19 mm & 25 mm)



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.

90° MITRED CORNER DIMENSION 'O'

Slots	D' Duct Size	Frame Type				
		A, B	C, F, H	D	E, G, J	M, N
1 – 4	300	313	308	302	296	299
5 – 8	600	613	608	602	596	599

NOTES

All dimensions are given in mm.

D = Duct Size

S = Slot Width

W = Overall Face Width

Standard Frames are the most commonly specified and readily available from stock.

PSLO - OPTIONS & ACCESSORIES

Overall Length Dimensions & End Cap Position

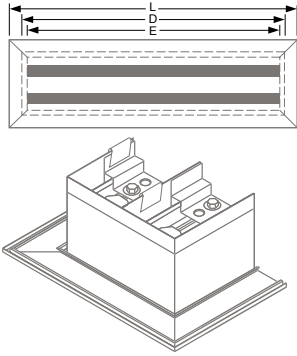
Frame type	Mitred		Flange		Mitred Open		Mitred Flat		Open		Open		Flat		Flat	
	E	L	E	L	E	L†	E	L	E	L	E	L	E	L	E	L
	A, B	D-13	D+25	D-13	D+38	D-6	D+13	D-5	D+14	D	D	D-2	D-2	D-3	D-3	
C	D-13	D+25	D-13	D+38	D-6	D+13	D-5	D+14	D	D	D-2	D-2	D-3	D-3		
D	D-13	D+13	D-13	D+25	D-6	D+6	D-5	D+11	D	D	D-2	D-2	D-3	D-3		
E	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 D = Duct length E = End Cap Position L = Overall Length and H. Not available on frame types E, M and N.

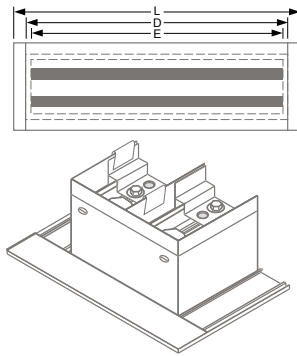
* These types have a flangeless mitred end cap which is the same extrusion profile as the frame

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

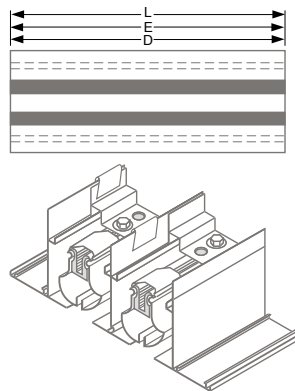
MITRED END CAP



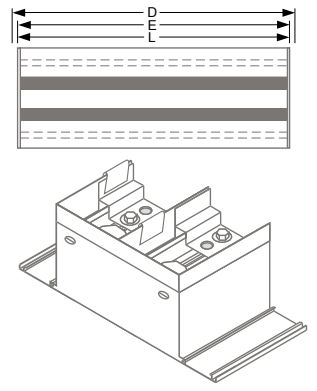
FLANGED END CAP



OPEN END

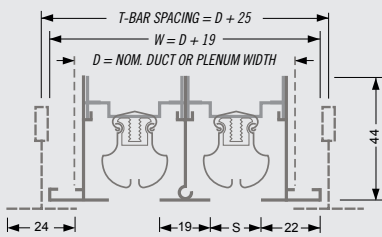


FLAT END CAP

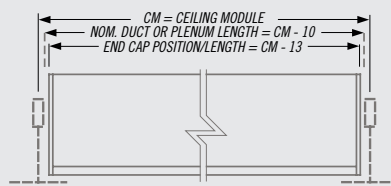


Lay-In T-Bar Application

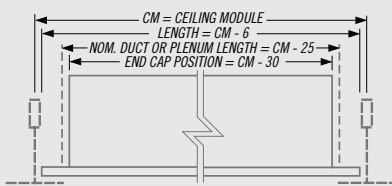
FRAME T For standard 24 mm or 14 mm



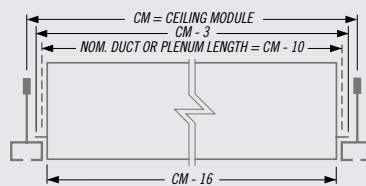
FLAT END CAPS



MITRED END CAPS (standard)



END CAP CONFIGURATION



Designed and fabricated specifically to integrate with standard exposed grid T-Bar Ceiling Systems.

Available in nominal lengths to suit metric ceiling grid modules.

Metric module lengths: 500, 600, 1200 and 1500 mm.

Also available in custom lengths for special applications and in multiple-section assemblies for continuous paired T-Bar ceilings.

Slots	DUCT (mm)		
	13	19	25
1	38	44	51
2	70	83	95
3	102	121	140
4	133	159	184
5	165	197	229
6	197	235	273
7	229	273	318
8	260	311	362

For T Frame & End Cap

PLENUM CORRECTION		
Entry	NR	Δ(PPa)
Top	+5 dBA	x1.5
Side	+10 dBA	x2

NC CORRECTION FACTORS FOR VARIOUS LENGTHS											
Length (m)	0.6	1.2	1.8	2.4	2.7	3.0	4.6	6.1	7.6	9.1	
Supply	-3	0	+2	+3	+4	+5	+8	+10	+11	+13	
Return	0	+3	+4	+6	+7	+8	+10	+11	+12	+13	

GUIDANCE SIZING FOR SPIGOTS					
Spigot Velocity m/s	2	2.5	3.0	3.5	4.0
Guide NR Level	20	25	30	35	40

PSLO – SELECTION DATA

SUPPLY SELECTION DATA									
SLOTS	PRESSURE DROP	H	1	3	12	19	26	36	47
		V	1	3	8	15	17	25	32
1	Flowrate per length (l/s/m)		8	15	31	39	46	54	62
	Throw (m)	H	0.3 - 0.6	0.6 - 1.8	1.2 - 2.1	1.8 - 2.7	2.1 - 3.0	2.1 - 3.0	2.4 - 3.4
		V	0.6	1.8	3.0	3.7	4.0	4.3	4.6
	NC Level		—	—	16	21	26	30	33
2	Flowrate per length (l/s/m)		15	31	62	77	93	108	124
	Throw (m)	H	0.3 - 0.9	0.9 - 2.7	2.1 - 3.0	2.7 - 3.7	3.0 - 4.3	3.0 - 4.6	3.4 - 5.8
		V	0.9	2.4	3.4	4.6	5.5	6.1	6.4
	NC Level		—	—	19	24	29	33	36
3	Flowrate per length (l/s/m)		23	46	93	116	139	163	186
	Throw (m)	H	0.3 - 1.5	1.5 - 3.0	2.4 - 4.0	3.0 - 4.6	3.7 - 6.1	4.0 - 6.4	4.3 - 7.0
		V	1.8	3.0	4.6	5.8	6.1	7.3	7.6
	NC Level		—	11	21	26	31	35	38
4	Flowrate per length (l/s/m)		31	62	124	155	186	217	248
	Throw (m)	H	0.3 - 2.1	2.1 - 3.7	3.0 - 4.6	3.7 - 6.1	4.3 - 7.0	4.6 - 7.3	5.8 - 7.9
		V	1.5	3.4	5.5	6.4	7.6	8.2	9.1
	NC Level		—	12	22	27	32	36	39

NOTES

- Horizontal throws are based on the same direction of all slots.
- Horizontal throws are given at 0.5 and 0.25m/s terminal velocities.
- Vertical throws are given at 0.25 m/s terminal velocity.
- Throw values are based on a 1.2m section.
For other lengths, use the correction factor table above.
- NC values are based on a 1.2m section, horizontal throw.
For other lengths, use the correction factor table above.
For vertical throw, deduct 10 dB.
- Data derived from tests conducted in accordance with ANSI/ ASHRAE Standard 70 – 1991.

H = Horizontal Installation

V = Vertical Installation

5-8 Slot data over the page.

NC CORRECTION FACTORS FOR VARIOUS LENGTHS										
Length (m)	0.6	1.2	1.8	2.4	2.7	3.0	4.6	6.1	7.6	9.1
Supply	-3	0	+2	+3	+4	+5	+8	+10	+11	+13
Return	0	+3	+4	+6	+7	+8	+10	+11	+12	+13

THROW CORRECTION FACTORS FOR VARIOUS LENGTHS						
Length (m)	0.6	1.2	1.8	2.4	3.0	3.7
Multiplier	0.70	1.0	1.25	1.40	1.55	1.70

PLENUM CORRECTION		
	NR	Δ (PPa)
Top Entry	+5dBA	x1.5
Side Entry	+10dBA	x2

GUIDANCE SIZING FOR SPIGOTS					
Spigot Velocity m/s	2	2.5	3.0	3.5	4.0
Guide NR Level	20	25	30	35	40

PSLO – SELECTION DATA

SUPPLY SELECTION DATA									
SLOTS	PRESSURE DROP	H	1	3	12	19	26	36	47
		V	1	3	8	15	17	25	32
5	Flowrate per length (l/s/m)		39	77	155	194	232	271	310
	Throw (m)	H	0.6 - 2.1	2.1 - 4.3	3.0 - 6.1	4.3 - 7.0	4.9 - 7.6	6.1 - 8.2	6.4 - 8.8
		V	1.8	3.7	5.5	7.6	8.5	9.1	10.4
	NC Level		—	13	23	28	33	37	40
6	Flowrate per length (l/s/m)		46	93	186	232	279	325	372
	Throw (m)	H	0.9 - 2.4	2.4 - 4.6	3.7 - 6.4	4.6 - 7.3	6.1 - 8.2	6.4 - 9.1	7.0 - 9.8
		V	2.1	4.0	6.4	7.6	9.1	9.8	11.0
	NC Level		—	14	24	29	34	38	41
7	Flowrate per length (l/s/m)		54	108	217	271	325	379	434
	Throw (m)	H	1.2 - 2.4	2.7 - 5.8	4.0 - 7.0	5.8 - 7.9	6.4 - 8.8	7.0 - 9.8	7.6 - 10.7
		V	2.4	4.9	6.7	8.8	10.1	10.7	12.2
	NC Level		—	14	24	29	34	38	41
8	Flowrate per length (l/s/m)		62	124	248	310	372	434	495
	Throw (m)	H	1.5 - 2.7	2.7 - 6.1	4.3 - 7.3	6.1 - 8.5	7.0 - 9.8	7.6 - 10.4	7.9 - 11.3
		V	2.4	5.2	6.4	9.1	10.7	12.2	12.8
	NC Level		—	15	25	30	35	39	42

NOTES

- Horizontal throws are based on the same direction of all slots.
- Horizontal throws are given at 0.5 and 0.25m/s terminal velocities.
- Vertical throws are given at 0.25 m/s terminal velocity.
- Throw values are based on a 1.2m section.
For other lengths, use the correction factor table above.
- NC values are based on a 1.2m section, horizontal throw.
For other lengths, use the correction factor table above.
For vertical throw, deduct 10 dB.
- Data derived from tests conducted in accordance with ANSI/ ASHRAE Standard 70 – 1991.

H = Horizontal Installation

V = Vertical Installation

NC CORRECTION FACTORS FOR VARIOUS LENGTHS										
Length (m)	0.6	1.2	1.8	2.4	2.7	3.0	4.6	6.1	7.6	9.1
Supply	-3	0	+2	+3	+4	+5	+8	+10	+11	+13
Return	0	+3	+4	+6	+7	+8	+10	+11	+12	+13

THROW CORRECTION FACTORS FOR VARIOUS LENGTHS						
Length (m)	0.6	1.2	1.8	2.4	3.0	3.7
Multiplier	0.70	1.0	1.25	1.40	1.55	1.70

PLENUM CORRECTION		
	NR	Δ (PPa)
Top Entry	+5dBA	x1.5
Side Entry	+10dBA	x2

GUIDANCE SIZING FOR SPIGOTS					
Spigot Velocity m/s	2	2.5	3.0	3.5	4.0
Guide NR Level	20	25	30	35	40

PPSL



- > Slot Diffuser Plenum
- > PSLO Compatible

DESCRIPTION

Designed for flexible duct connection with a model to suit each of the various frame/sub-frame PSLO series combinations available.

Fixing:

The plenum is intended to be installed during the drywall installation (Most applications of this type utilise concealed "Goal Post" brackets). For T-Bar applications, the plenums are directly attached to the linear section.

CONSTRUCTION

Galvanised Mild Steel.

Options:

- Optional internal insulation
- ID Inlet dampers are available

Standard Duct Diameters:

- 100, 125, 150, 175, 200, 225, 250 mm

MODELS

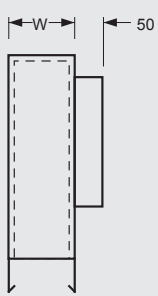
- PPSL 13:** 13 mm Slot
PPSL 19: 19 mm Slot
PPSL 25: 25 mm Slot

PPSL – PLENUM

Size	Width		
	No. of Slots	Frame types (mm)	
		A,B,FL,M,T	C,D,F,H,N
13 mm	1	38	51
19 mm		44	57
25 mm		51	64
13 mm	2	70	83
19 mm		83	95
25 mm		95	108
13 mm	3	102	114
19 mm		121	133
25 mm		140	152
13 mm	4	133	146
19 mm		159	171
25 mm		184	197
13 mm	5	165	178
19 mm		197	210
25 mm		229	242
13 mm	6	197	210
19 mm		235	248
25 mm		273	286
13 mm	7	229	242
19 mm		273	286
25 mm		318	331
13 mm	8	260	273
19 mm		311	324
25 mm		362	375

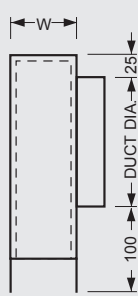
PPSL

Hemmed Edge

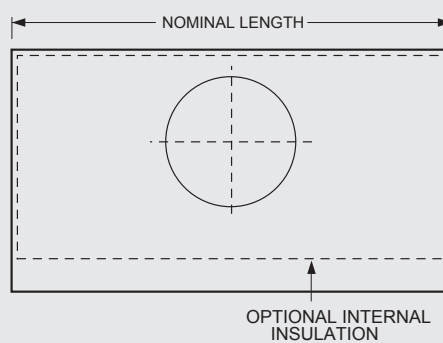


Frame Types:
C, D, N

Straight Edge



Frame Types:
A, B, E, F, FL, G, H, M and T



PPSL SIZES

- Standard nominal lengths are 600, 900, 1000, 1200, 1500 and 1800.
- Widths available to fit PSLO with 1, 2, 3, 4, 5, 6, 7 or 8 slots.

NOTES

All dimensions are given in mm.