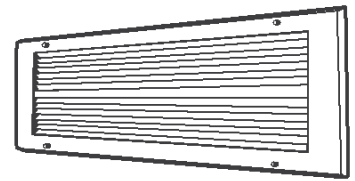


LINEAR CEILING DIFFUSER - LCD

DESCRIPTION & FEATURES

LCD Diffusers are manufactured from extruded aluminium and can be supplied as continuous linear diffusers or in ceiling tile replacement sizes. They can be specified as one or two-way throw and the proportion in each direction can be varied by having the division between blade direction offset from the centre. The LCD has high capacity with low pressure and noise levels compared to other linear diffuser types.



LCD Diffusers have a removable core option available with 'U' brackets which makes them easy to fit without visible screws and enables access for cleaning.

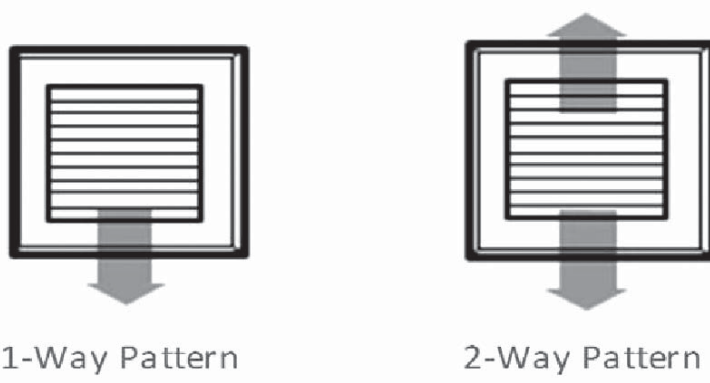
Standard finish is RAL9010 or polyester powder coated to the customers colour requirement.

PLENUM BOXES

Plenum boxes are accessories for use with Grilles and Diffusers. They are designed to equalise the pressure profile within the box and hence provide an even velocity at the face of the Grille or Diffuser without the use of Equalising Grids.

LCD ORDERING CODE (DIFFUSER)	
Series	LCD
Frame	19 - 19mm Frame
	32 - 32mm Frame
	P - Panel
	PF - Plaster Frame
Pattern	T - Tegular
	1 - 1- Way
	2 - 2- Way
Damper	OB - Opposed Blade Damper, 0 - Not applicable
Fixing	F0 - No fixings, F1 - CSK Flange Fixing Holes
Finish	1 - (Mill Finish)
	2 - RAL9006 (Silver/Grey)
	3 - RAL9010 (White)
	4 - RAL9005 (Black)
	5 - RAL9003 (White)
	6 - RAL9016 (White),
	7 - Other RAL/BS Code (additional costs may apply)
	8 - Chrome Finish - Powder Coated
Example: LCD/32/2/OB/F0/3/Nominal Size	

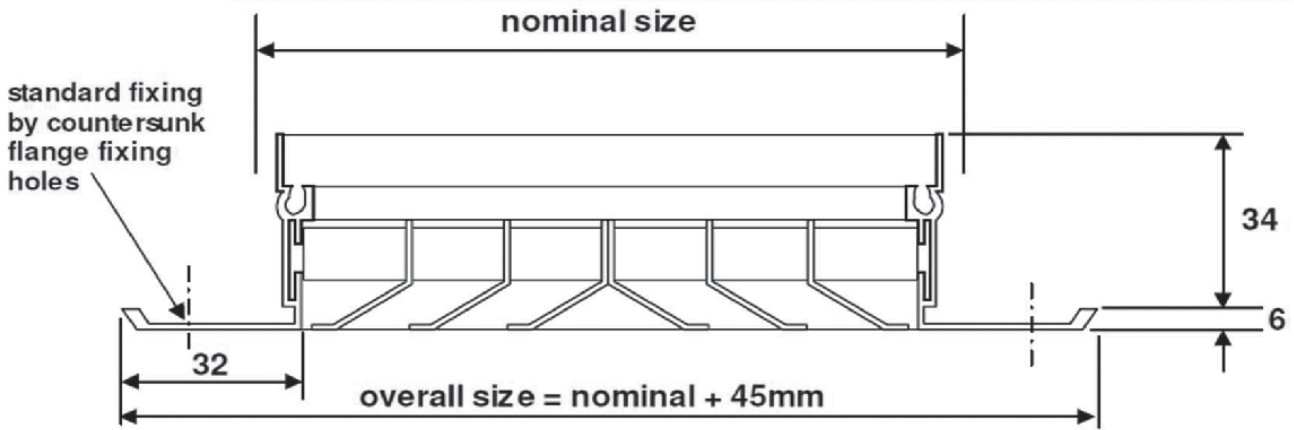
LCD ORDERING CODE (PLENUM)	
Type	PBU - Un-Lined Side
	PBL - Lined Side
	PBA - Adaptor Top
Series	LCD
Mesh	P - Perforated Equalising Mesh
	0 - No Equalising Mesh
Damper	LS - Lever Spigot Damper
	CS - Cord Spigot Damper
	0 - No Damper
Spigot	OP - 2 Opposite Spigots
	AD - 2 Adjacent Spigots
	FL - Flat Oval Spigot
Finish	IN - Black Internal
	EX - Black External
	IE - Black Internal & External
Example: PBL/LCD/0/CS/Model Size/Spigot Size	



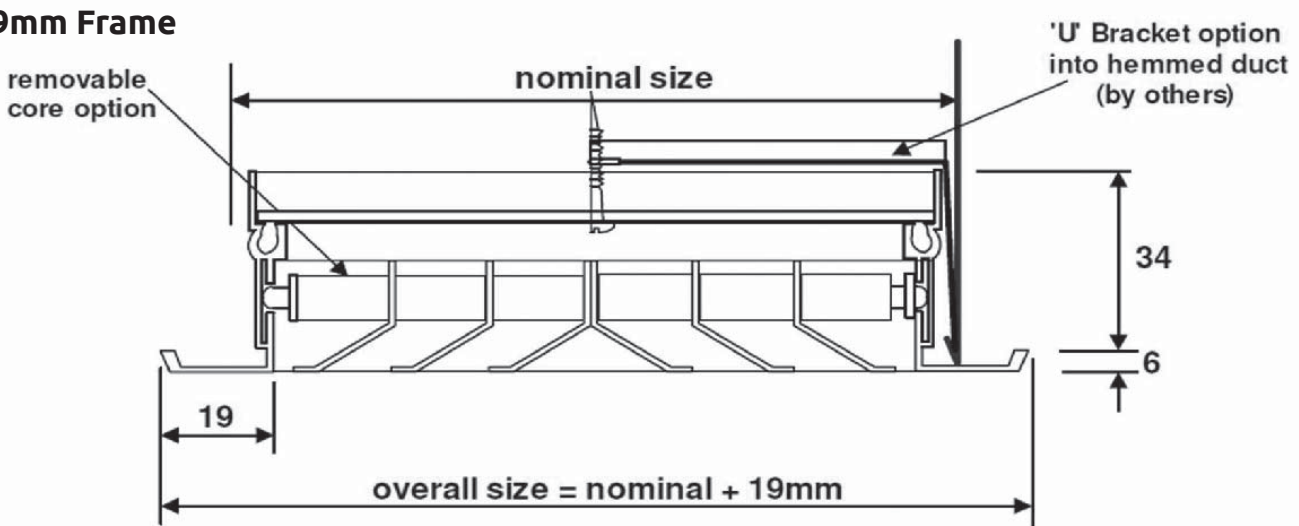
LINEAR CEILING DIFFUSER - LCD

LCD DIMENSIONS (DIFFUSER)

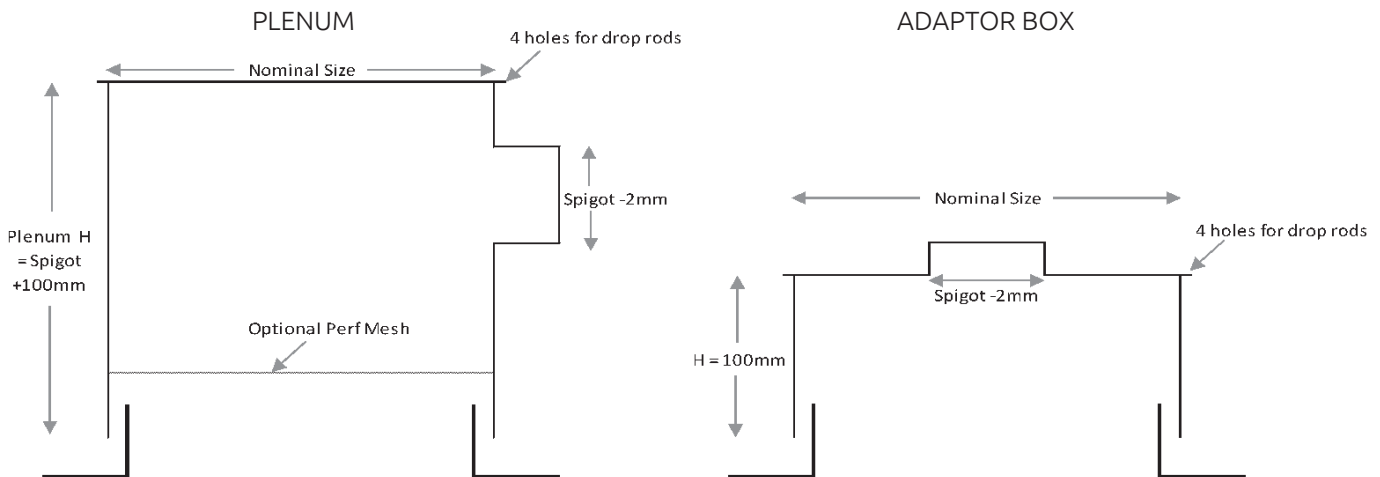
32mm Frame



19mm Frame



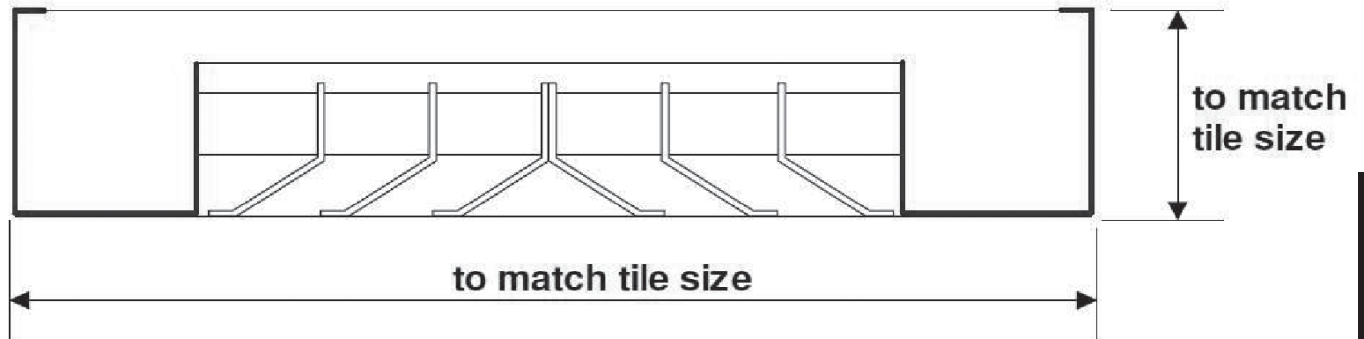
PLENUM BOX DIMENSIONS



Side entry as drawn. Top entry 250 high.

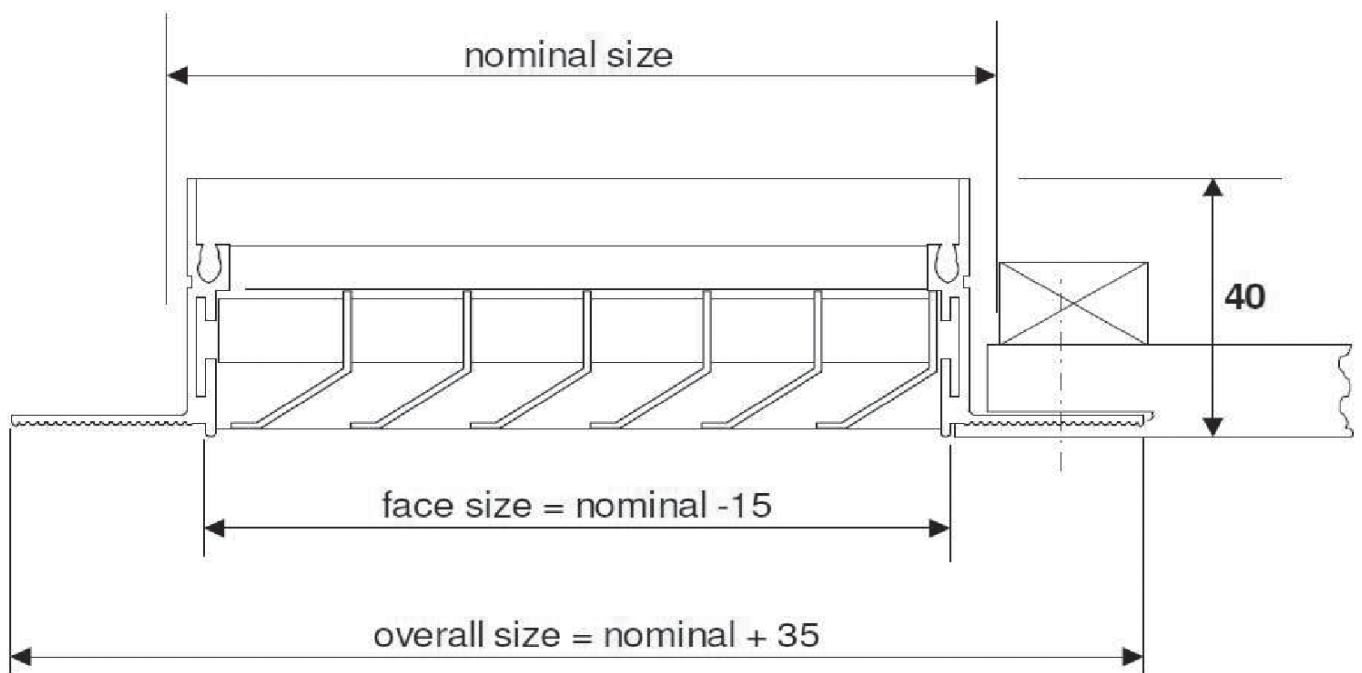
LINEAR CEILING DIFFUSER - LCD

LCD PANEL CEILING DIFFUSER



LCD

LCD PLASTER FRAME CEILING DIFFUSER



LINEAR CEILING DIFFUSER - LCD

LCD PERFORMANCE DATA

LCD 1-WAY PATTERN

HEIGHT	PARAMETER	AIR VOL (l/s/m - l/sec per metre)								
		75	100	125	150	175	200	225	250	275
150	THROW (m)	3.0	4.1	5.2	6.4	7.8	9.0			
	P.DROP (Pa)	2	4	6	8	10	14			
	NOISE (NR)			20	25	30	35			
200	THROW (m)		3.2	4.3	5.2	6.3	7.3			
	P.DROP (Pa)			3	4	6	8			
	NOISE (NR)				20	24	28			
250	THROW (m)			3.5	4.5	5.5	6.2	7.2	7.9	9.0
	P.DROP (Pa)			2	3	4	5	6	7	9
	NOISE (NR)				20	23	25	28	31	33
300	THROW (m)				4.1	4.7	5.3	6.1	7.1	7.8
	P.DROP (Pa)				2	3	3	4	6	7
	NOISE (NR)					20	23	26	29	31

LCD 2-WAY PATTERN

HEIGHT	PARAMETER	AIR VOL (l/s/m - l/sec per metre)								
		75	100	125	150	175	200	225	250	275
150	THROW (m)	2.0	3.0	4.2	5.4	6.7	7.6			
	P.DROP (Pa)	2	4	6	8	10	14			
	NOISE (NR)			20	25	30	35			
200	THROW (m)		2.3	3.1	4.0	4.9	6.0			
	P.DROP (Pa)			3	4	6	8			
	NOISE (NR)				20	24	28			
250	THROW (m)			2.6	2.8	3.9	4.6	5.4	6.3	7.1
	P.DROP (Pa)			2	3	4	5	6	7	9
	NOISE (NR)				20	23	25	28	31	33
300	THROW (m)				2.7	3.3	3.8	4.5	5.3	6.1
	P.DROP (Pa)				2	3	3	4	6	7
	NOISE (NR)					20	23	26	29	31

Throws based on a terminal velocity of 0.5m/sec with a Δt of -10°C.

NB. For isothermal/+10°C conditions please factor throws by 0.85.

Correct factors (to be applied to the table above)

Active Length (m)	0.5	1	2	2.5	3
NR Correction	-4		2	3	5
Throw Correction	0.7	0.8	1.1	1.3	1.5