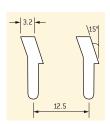
## Selection Data - LD-SD

## Model: **LD-1215SD**

- 15° deflection front blades
- 0° 45° deflection rear blades
- 12.5mm spacing
- 3.2mm louver

#### **Dimensions**





17 mm Style No. 5 Fixed Core Flanged Frame shown. Also available in other Styles on page 51B and 68B.

Adjustable Blade

D - 5

4.5

50

ldeal for apartment and hotel rooms this Linear Bar Grille has angled 15° fixed blades at the front and adjustable blades behind allowing the supply air to be directed horizontally.

The narrow frame and fixed front blades (3.2mm x 16mm) on 12.5mm centres make this an attractive and versatile diffuser.

The LDSD is available in any desired length and can also be supplied with alternative frame types including the PMF system.

When used with the PMF System, see notes on page 68B.

### Not suitable for floor applications.

itot Suitabic	ioi ilooi applice	400110.					'				'
	Total Pressure	0°	3	5	9	15	20	28	36	46	57
Size	Pa	22.5°	5	8	12	18	25	36	45	57	71
		45°	8	12	20	29	40	56	69	87	107
	Flow m <sup>3</sup> /	/s/m	0.034	0.053	0.070	0.087	0.104	0.121	0.140	0.157	0.174
50 mm	NC		-	-	19	25	30	35	39	43	46
	Throw,	Throw, m		1.5-3.7	2.1-4.9	2.7-6.1	3.4-7.0	3.7-7.6	4.3-8.2	4.6-9.0	5.5-10.4
	Flow m <sup>3</sup> /	/s/m	0.082	0.126	0.164	0.206	0.248	0.288	0.329	0.370	0.412
100 mm	NC		-	-	18	24	29	34	38	42	45
	Throw,	, m	1.8-3.4	2.7-4.9	4.0-6.4	4.6-7.3	5.8-8.8	6.7-10.1	7.3-11.0	7.9-12.2	9.2-13.4
150 mm	Flow m³/s/m		0.132	0.197	0.264	0.329	0.394	0.459	0.525	0.592	0.657
	NC		-	-	18	24	29	34	38	42	45
	Throw, m		2.7-4.3	4.0-6.1	4.9-7.3	6.1-8.5	7.1-9.8	7.6-11.0	8.5-11.9	9.5-13.1	10.7-14.3
	Flow m <sup>3</sup> /s/m		0.164	0.252	0.328	0.412	0.496	0.576	0.658	0.740	0.824
200 mm	NC		-	-	19	25	30	36	39	43	46
	Throw, m		3.3-4.9	5.2-7.3	5.5-7.9	7.9-9.7	8.2-10.4	9.1-11.6	9.5-12.5	10.9-13.7	12.5-14.9
	Flow m³/s/m		0.214	0.323	0.428	0.535	0.642	0.747	0.854	0.962	1.069
250 mm	NC		-	-	20	26	31	37	39	43	46
	Throw, m		3.9-5.5	6.1-7.8	6.4-8.5	8.8-10.9	9.7-11.8	10.5-12.2	11-13.1	12.3-14.3	14.3-15.5
	Flow m³/s/m		0.264	0.394	0.528	0.658	0.788	0.918	1.050	1.184	1.314
300 mm	NC		-	19	22	27	32	38	40	43	47
	Throw, m		4.5-6.1	6.7-9.1	7.6-9.7	9.4-11.5	10.6-12.1	11.5-12.8	12.2-13.7	13.7-14.9	14.8-16.1
350 mm	Flow m³/s/m		0.360	0.559	0.720	0.907	1.094	1.296	1.449	1.628	1.815
	NC		-	19	22	27	33	39	41	44	47
	Throw, m		5.1-6.7	7.3-9.7	8.8-10.9	9.7-11.8	11.1-12.2	11.9-13.4	12.5-14.3	14.1-15.5	15.2-17.9

Guide Product Weights							
Model	Approximate Weight in Kg per metre x 150mm						
LD1215SD	2.21						

#### Note

- 1. For deflection settings of 22.5 and 45 degrees, increase the stated sound levels by 1 and 7 NC respectively.
- 2. For deflection settings of 22.5 and 45 degrees, decrease the stated throws to 80% and 50% respectively. Refer to page 202E.



## **Fineline Diffusers**

SERIES LD linear bar grilles are designed for supply and return air distribution in heating, cooling and ventilating applications which call for diffusers having long or continuous slender appearance, fixed air discharge angles of zero or 15 degrees, and installed in walls, floors, sills or ceilings.

CONSTRUCTION is of extruded aluminium face, bars and frame of alloy 6063-T5, notched mullions, mechanically compressed together to form a powerfully bonded core, which is welded at mullion ends to the frame. 'F' models for floor use, have double mullions and  $30 \times 30 \times 15 \times 3$  Solid 'Z' frames.

Model	Bar							
Model	Width mm	Spacing mm	Deflection					
LD-600	3.25	6.35	0°					
LD-615	3.25	6.35	15°					
LD-1200	3.25	12.5	0°					
LD-1215	3.25	12.5	15°					
LDH-1200	5.6	12.5	0°					
LDHF-1200+	5.6	12.5	O°					
LDH-1215	5.6	12.5	15°					
LDHF-1215+	5.6	12.5	15°					
LDH-2500*	5.6	25	0°					
LDH-2515*	5.6	25	15°					

<sup>\*</sup> Return/Exhaust Diffuser

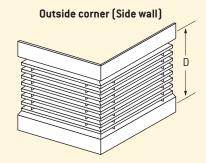
WIDTH maximum for 'F' models is:

Continuous traffic: 200mm, Occasional traffic: 300mm. All models can be furnished with mitred 90° corners, or other angles where templates are furnished to the factory. Refer illustrations on this sheet for corner descriptions. The minimum length is 200mm. The maximum length for a single section is 2.8m.

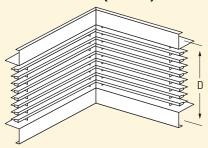
## **Accessory Damper**

Available with opposed blade dampers, screwdriver operated through the face. Specify OBD#1.

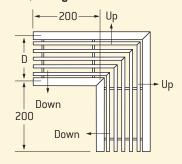
## **Mitred Corners**



Inside corner (Side wall)



Floor, Ceiling or Sill



Note: When specifying corners ensure to nominate the blade orientation (up or down) if using the 15° blade.

### **Notes**

General Notes to be read in conjunction with performance tables on the following pages.

This data is reliable information for cooling, ventilating and heating applications.

- 1. All pressures are Pa (N/m2).
- Minimum throw values refer to a terminal velocity of 0.75 m/s and maximum to 0.25 m/s, for a 1200mm active section with a cooling temperature differential of 12°C.

The multiplier factors listed in the table below are applicable for other lengths.

	Terminal Velocity					
Active Length	0.75 m/s	0.25 m/s				
300mm	0.5	0.7				
3000mm Or Continuous	1.6	1.2				

3. The NC values are based on a room absorption of 10dB, re  $10^{-12}$  watts and a 3000mm active section.

Use the following multipliers for other active lengths.

NC CORRECTION FOR LENGTH											
Active Length. 300 600 1000 1200 1800 2400 3000 4500 6000 7500 9000									9000		
	-10	-7	-5	-4	-2	-1	0	+2	+3	+4	+5

4. Return Intake - When used as a return intake the NC value given will be increased by 4 and the negative static pressure will be 0.8 times the total pressure shown.

<sup>+</sup> Suitable for floor applications

# LD, LDH, LDHF, LDSD & PMF

## Diffuser Description Code Examples and Suggested Specifications

LD .	- 600 615	<b>- 1 -</b>	2100 x 100	- (	OBD	-	RC	-	FINISH
LDHF LDSD	1200 1215 2500*								
	2515* Floor								
Series	Grilles Blade	Frame	Duct	0	lptional	ı	Removeabl	0	Holyoake White
361165	Configuration (Spacing/ deflection)	Style	Size	0	pposed Blade Samper		Core Frame		Mill Aluminium or Powder Coat

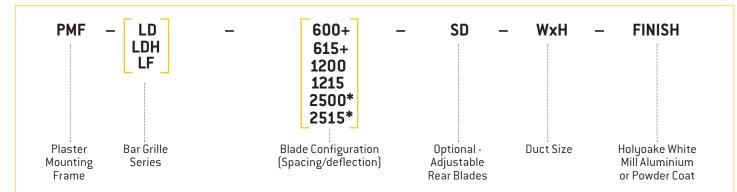
<sup>\*</sup> Return/Exhaust Grilles, not suitable for floor applications.

The Holyoake LD Range of linear diffusers shall be of extruded aluminium construction. Blades shall be mechanically expanded into notched mullions spaced at nominal centres. Diffusers shall be fitted with accessory dampers and have optional frame styles and finish where indicated.

All shall be as manufactured by Holyoake.

Holyoake LDH-CF Computer Floor supply grilles shall be of extruded aluminium, welded construction, with blades mechanically expanded into double, notched mullions spaced at nominal centres. They shall be designed to withstand a concentrated load of 500 kg over an area of 645mm² (1 square inch) at the centre, with no permanent distortion and maximum deflection under load of 0.66mm. Accessory volume control dampers, adjustable through the face, shall be furnished where indicated.

The whole assembly shall be as manufactured by Holyoake.



<sup>\*</sup> Return/Exhaust Grilles, not suitable for floor applications. +See Notes on Page 68B.

Holyoake Series PMF – Plaster Mounting Frame shall be of extruded aluminium construction.

PMF Grilles shall have a flange width no greater than 6mm.

The Plaster Mounting Frame shall be fixed into a wall opening and plaster stopped before fitting of the Flangeless Grille. The Grille shall have blades notched into mullions spaced at nominal centres and may have a second row of adjustable 'SD' blades if specified.

All shall be as manufactured by Holyoake.

Note

When LD Variants are ceiling mounted, seismic restraints are required, but not supplied.