LDH - Selection Data

Model: **LDH-1200/LDHF-1200**

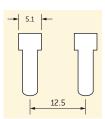
0° deflection

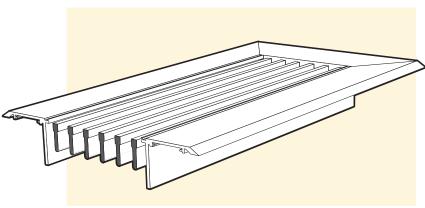
12.5mm spacing

5.1mm louver

Dimensions

D	A	Number of
Listed Size	Opening	Bars
50.0	21.0	2
62.5	33.5	3
75.0	46.0	4
87.5	58.5	5
100.0	71.0	6
125.0	96.0	8
150.0	121.0	10





The same basic design as Model LD-1200 Linear Diffusers except that the Standard fixed, bar-type louvers are heavier $5.1 \, \text{mm} \times 16 \, \text{mm}$ as compared to $3.2 \, \text{mm} \times 16 \, \text{mm}$.

Floor Application

Where required for floor use, specify LDHF-1200 to signify heavier construction.

LDHF-1200 grilles have double mullions and frame style 4 solid surround. Continuous traffic maximum width 200mm.

Occasional traffic maximum width 300mm.

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Size & Area	T		•	

Size & Area m²/m	Total F	Pressure	3	6	10	16	23	31	40	51	63
	Flow	m³/s/m	0.028	0.042	0.056	0.070	0.084	0.098	0.111	0.126	0.140
50mm		NC	-	-	-	18	23	28	32	35	38
0.015	Throw,	Sill or Floor	0.3-0.3	1.2-1.2	2.1-2.1	2.7-3.0	3.0-4.0	4.0-4.9	4.3-5.5	4.6-6.1	5.2-6.4
0.015	m	Side Wall	0.9-2.1	1.5-3.7	2.1-4.9	2.7-6.1	3.0-7.0	3.9-7.9	4.3-8.5	4.6-9.2	5.2-10.0
00 F	Flow m³/s/m		0.040	0.062	0.082	0.102	0.122	0.143	0.164	0.184	0.205
62.5mm		NC	-	-	-	20	25	30	34	37	40
0.021	Throw,	Sill or Floor	0.6-0.6	1.8-1.8	2.4-2.7	3.4-4.0	4.0-4.9	4.6-5.8	5.5-6.7	6.4-7.0	6.7-7.3
0.021	m	Side Wall	1.2-2.7	1.8-3.7	2.4-5.2	3.4-6.7	4.0-7.6	4.6-8.5	5.5-9.8	6.4-11.0	6.7-11.9
75	Flow	m³/s/m	0.054	0.082	0.109	0.136	0.164	0.191	0.219	0.245	0.273
75mm		NC	-	-	-	21	26	31	35	38	41
0.029	Throw,	Sill or Floor	0.6-0.6	2.1-2.1	3.0-3.4	3.7-4.6	4.6-5.5	5.5-6.4	6.1-7.3	7.3-7.6	7.9-8.2
0.023	m	Side Wall	1.5-3.0	2.1-4.6	3.0-5.8	3.7-7.0	4.6-8.2	5.5-9.5	6.1-10.4	7.3-11.9	7.9-12.8
	Flow m ³ /s/m		0.068	0.102	0.136	0.171	0.205	0.239	0.273	0.307	0.341
87.5mm	NC		-	-	16	22	27	32	36	39	42
0.035	Throw,	Sill or Floor	0.9-0.9	2.4-2.4	3.7-3.7	4.6-4.9	5.5-6.1	6.1-6.7	7.0-7.6	7.6-8.2	8.8-8.8
0.033	m	Side Wall	1.5-3.0	2.7-4.9	3.7-6.1	4.6-7.6	5.5-8.5	6.1-9.8	7.0-11.0	7.6-12.2	8.8-13.4
100mm	Flow m ³ /s/m		0.082	0.124	0.164	0.206	0.248	0.288	0.330	0.370	0.403
100mm		NC	-	-	17	23	28	33	37	40	43
0.041	Throw,	Sill or Floor	0.9-0.9	2.7-2.7	4.0-4.0	4.9-5.2	6.1-6.4	6.7-7.3	7.3-7.9	8.5-8.5	9.5-9.5
0.041	m	Side Wall	1.8-3.4	3.0-5.2	4.0-6.4	4.9-7.9	6.1-9.2	6.7-10.4	7.3-11.3	8.5-12.8	9.5-14.0
425	Flow	m³/s/m	0.110	0.164	0.220	0.274	0.329	0.384	0.439	0.493	0.549
125mm		NC	-	-	18	24	29	34	38	41	44
0.055	Throw,	Sill or Floor	1.2-1.2	3.0-3.0	4.6-4.6	5.5-5.5	6.7-7.0	7.6-7.6	8.2-8.5	9.2-9.2	10.4-10.4
0.033	m	Side Wall	2.4-4.0	3.4-5.5	4.6-7.0	5.5-8.2	6.7-9.8	7.6-11.3	8.2-12.2	9.2-13.4	10.4-14.6
1E0mm	Flow	m³/s/m	0.138	0.206	0.276	0.344	0.412	0.481	0.550	0.629	0.689
150mm		NC	-	-	19	25	30	35	39	42	45
0.069	Throw,	Sill or Floor	1.5-1.5	3.0-3.0	4.6-4.6	5.8-5.8	7.0-7.0	7.6-7.6	8.8-8.8	9.5-9.5	11.0-11.0
0.009	m	Side Wall	2.7-4.3	4.0-6.1	4.9 -7 .3	6.1-8.8	7.3-10.4	8.5-11.9	9.2-12.5	10.4-14.0	11.6-15.3

Guide Product Weights							
Model	Approximate Weight in Kg per metre x 150mm						
LDH-1200	2.6						
LDHF-1200	3.4						

Note: Refer page 51B, Frame Style 4, for LDHF Surround.



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	O°					
LD-1215	3.25	12.5	15°					
LDH-1200	5.6	12.5	O°					
LDHF-1200+	5.6	12.5	0°					
LDH-1215	5.6	12.5	15°					
LDHF-1215+	5.6	12.5	15°					
LDH-2500*	LDH-2500* 5.6		0°					
LDH-2515*	5.6	25	15°					

^{*} Return/Exhaust Diffuser

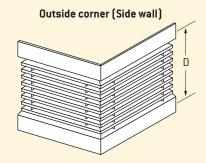
WIDTH maximum for 'F' models is:

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.

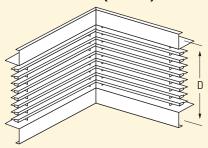
Accessory Damper

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

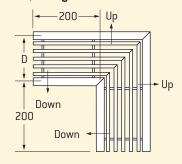
Mitred Corners



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. mm	300 600 1000 1200 1800 2400 3000 4500 6000 7500 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.

⁺ Suitable for floor applications

LD, LDH, LDHF, LDSD & PMF

Diffuser Description Code Examples and Suggested Specifications

LD .	- 600 615	- 1 -	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

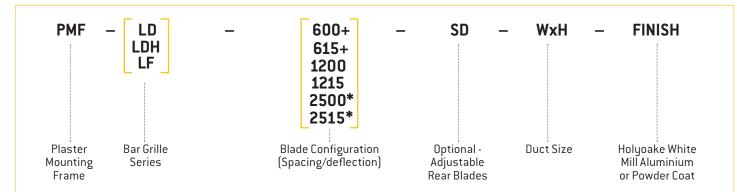
^{*} Return/Exhaust Grilles, not suitable for floor applications.

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.



^{*} 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.