# LDH – Selection Data

5.1

12.5

# Model: LDH-1215/LDHF-1215

15° deflection 12.5mm spacing 5.1mm louver

## Dimensions

D	Α	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





Same basic design as Model LDH-1200 except that louvers are fixed at 15° deflection. Louvers are spaced on 12.5 centres. Furnished in all standard widths as shown below.

#### **Floor Application**

Where required for floor use, specify LDHF-1215 to signify heavier construction.

LDHF-1215 grilles have double mullions and frame style 4 solid surround.

Continuous traffic maximum width 200mm.

Occasional traffic maximum width 300mm.

Size & Area m²/m	Total	Pressure	3	7	12	19	27	37	48	61	75
50	Flow	m³/s/m	0.029	0.045	0.059	0.074	0.090	0.104	0.119	0.133	0.149
50mm	NC		-	-	19	26	31	36	40	43	46
0.015	Throw, m	Sill or Floor Side Wall	0.3-0.3 0.9-2.1	1.2-1.2 1.5-3.7	2.1-2.1 2.1-4.9	2.7-3.0 2.7-6.1	3.4-4.0 3.4-7.0	3.7-4.6 3.7-7.6	4.3-5.5 4.3-8.5	4.9-6.1 4.9-9.5	5.2-6.7 5.2-10.0
		m <sup>3</sup> /s/m	0.042	0.062	0.084	0.104	0.124	0.146	0.166	0.186	0.208
62.5mm		NC	-	- U.UUL	19	26	31	36	40	43	46
0.020	Throw,	Sill or Floor	0.3-0.3	1.5-1.5	2.7-2.7	3.4-3.7	4.0-4.6	4.6-5.5	5.2-6.4	6.1-6.7	6.7-7.0
0.020	m	Side Wall	1.2-2.4	1.8-4.0	2.7-5.2	3.4-6.4	4.0-7.3	4.6-8.2	5.2-9.5	6.1-10.4	6.7-11.6
	Flow	m³/s/m	0.053	0.085	0.107	0.133	0.160	0.186	0.214	0.240	0.267
75mm	NC		-	-	19	26	31	36	40	43	46
0.026	Throw,	Sill or Floor	0.6-0.6	1.8-1.8	3.0-3.4	3.7-4.3	4.6-5.5	5.5-6.1	6.1-7.0	7.0-7.6	7.6-7.6
0.020	m	Side Wall	1.2-2.7	2.1-4.3	3.0-5.5	3.7-6.7	4.6-7.9	5.5-9.2	6.1-10.1	7.0-11.3	7.6-12.2
87.5mm	Flow m <sup>3</sup> /s/m		0.065	0.098	0.130	0.163	0.195	0.228	0.260	0.293	0.326
	NC		-	-	20	27	32	37	41	44	47
0.032	Throw,	Sill or Floor	0.6-0.6	2.4-2.4	3.4-3.7	4.6-4.6	5.2-5.8	6.4-6.7	6.7-7.6	7.6-7.9	8.5-8.8
0.032	m	Side Wall	1.5-3.0	2.4-4.6	3.4-6.1	4.6-7.3	5.2-8.5	6.4-10.0	6.7-10.7	7.6-11.9	8.5-13.1
400	Omm Flow m <sup>3</sup> /s/m		0.079	0.118	0.158	0.197	0.236	0.276	0.315	0.353	0.394
TOOWW			-	-	21	28	33	38	42	45	48
0.038	Throw,	Sill or Floor	0.9-0.9	2.7-2.7	4.0-4.0	4.9-5.2	5.8-6.4	6.7-7.0	7.3-7.9	8.2-8.2	9.2-9.2
0.030	m	Side Wall	1.8-3.4	3.0-5.2	4.0-6.4	4.9-7.6	5.8-8.8	6.7-10.1	7.3-11.3	8.2-12.5	9.2-13.4
405	Flow m <sup>3</sup> /s/m		0.104	0.155	0.208	0.259	0.310	0.363	0.414	0.467	0.518
125mm	NC		-	-	21	28	33	38	42	45	48
0.050	Throw,	Sill or Floor	1.2-1.2	3.0-3.0	4.3-4.3	5.5-5.5	6.4-6.7	7.3-7.6	7.9-8.5	9.2-9.2	9.8-9.8
0.030	m	Side Wall	2.4-4.0	3.4-5.5	4.3-7.0	5.5-8.2	6.4-9.5	7.3-10.7	7.9-11.9	9.2-13.1	9.8-14.0
	Flow m <sup>3</sup> /s/m		0.130	0.195	0.260	0.326	0.391	0.456	0.521	0.586	0.651
150mm	NC		-	-	23	30	35	40	44	47	50
0.064	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	8.5-8.8	9.5-9.5	10.7-10.7
0.004	m	Side Wall	2.7-4.6	4.0-6.1	5.2-7.6	6.1-8.8	7.0-10.0	7.9-11.3	8.5-12.2	9.2-13.4	10.7-14.3

Guide Product Weights					
	Approximate Weight in Kg per metre x 150mm				
LDH-1215	2.3				
LDHF-1215	3.0				

## Note

Refer to 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.

near Diffuser

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.

Madal	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	0°					
LDH-1215	5.6	12.5	15°					
LDHF-1215+	5.6	12.5	15°					
LDH-2500*	5.6	25	٥٥					
LDH-2515*	5.6	25	15°					

\* Return/Exhaust Diffuser

+ Suitable for floor applications

#### 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.



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).

2. 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				





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

3. The NC values are based on a room absorption of 10dB, re 10<sup>-12</sup> 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.

# LD, LDH, LDHF, LDSD & PMF

# Diffuser Description Code Examples and Suggested Specifications

