

LBP/LBPH/LBM/LBMH

Linear Bar Grille

PERFORMANCE DATA

Linear Bar Grille (LBP/LBPH) – Core 15A, Metric Units

Size	Static Pressure (Pa)		3	6	11	17	24	33	44	55
38 mm	L/S/m		19	29	39	48	57	67	77	87
	NC		-	-	-	19	24	28	32	35
	Throw (m)	Side Wall	0.6-1.2-1.8	1.2-2.1-3.0	1.8-2.7-4.0	2.1-3.4-4.9	2.4-4.0-5.8	2.7-4.6-6.4	3.0-4.9-7.0	3.7-5.5-7.6
51 mm	L/S/m		29	43	57	73	87	102	116	130
	NC		-	-	-	18	23	28	31	35
	Throw (m)	Side Wall	0.9-1.5-2.1	1.5-2.4-3.4	2.1-3.4-4.6	2.7-4.3-5.8	3.4-4.9-6.7	3.7-5.5-7.6	4.3-6.1-8.2	4.6-6.7-8.8
63 mm	L/S/m		40	60	81	101	121	141	161	181
	NC		-	-	-	19	24	29	33	36
	Throw (m)	Side Wall	1.2-1.8-2.4	1.8-2.7-3.7	2.4-3.7-4.9	3.0-4.6-6.1	4.0-5.5-7.3	4.6-6.4-8.2	4.9-6.7-9.1	6.1-8.2-10.4
76 mm	L/S/m		51	77	102	129	155	180	206	231
	NC		-	-	-	20	25	30	34	35
	Throw (m)	Side Wall	1.2-1.8-2.7	2.1-3.0-4.3	2.7-4.0-5.5	3.7-5.2-6.7	4.6-6.1-7.6	5.5-7.0-8.8	6.1-7.9-10.1	7.0-9.1-11.3
89 mm	L/S/m		64	94	127	158	189	222	252	285
	NC		-	-	-	21	26	31	35	38
	Throw (m)	Side Wall	1.5-2.1-3.0	2.4-3.4-4.6	3.0-4.6-6.1	4.6-5.8-7.3	5.2-6.7-8.2	6.1-7.6-9.4	6.7-8.5-10.7	7.6-9.8-11.9
100 mm	L/S/m		76	113	152	189	226	265	302	341
	NC		-	-	16	22	28	32	36	39
	Throw (m)	Side Wall	1.8-2.4-3.4	2.7-3.7-4.9	3.7-4.9-6.1	4.6-6.1-7.6	5.8-7.3-8.8	6.4-7.9-9.8	7.3-9.1-11.0	7.9-10.1-12.2
125 mm	L/S/m		98	146	194	243	291	341	389	437
	NC		-	-	16	22	27	32	36	39
	Throw (m)	Side Wall	2.1-2.7-3.7	3.4-4.3-5.5	4.3-5.5-6.7	5.2-6.4-7.9	6.4-7.9-9.4	7.3-8.8-10.7	8.2-10.1-11.9	9.1-11.0-13.1
150 mm	L/S/m		121	180	240	301	361	421	480	541
	NC		-	-	18	24	29	34	37	41
	Throw (m)	Side Wall	2.4-3.0-4.0	3.7-4.6-5.8	4.6-5.8-7.0	6.1-7.3-8.5	7.0-8.2-9.8	7.9-9.4-11.3	8.8-10.4-12.2	10.1-11.9-13.7

For Performance Notes and Correction Factors, see end of section.

Linear Bar Grille (LBP/LBPH) – Core 16A, Metric Units

Size	Static Pressure (Pa)		3	7	12	20	28	38	50	63
38 mm	L/S/m		22	31	42	53	64	74	84	94
	NC		-	-	22	29	34	38	42	45
	Throw (m)	Side Wall	0.6-1.2-1.8	1.2-2.1-3.0	1.8-3.0-4.3	2.1-3.7-5.2	2.7-4.3-6.1	3.0-4.9-6.7	3.7-5.5-7.6	4.0-6.1-8.2
51 mm	L/S/m		31	45	60	76	91	107	121	136
	NC		-	-	20	26	31	36	40	43
	Throw (m)	Side Wall	0.9-1.5-2.1	1.5-2.4-3.4	2.1-3.4-4.6	2.7-4.3-5.8	3.4-4.9-6.7	3.7-5.5-7.6	4.3-6.1-8.2	4.6-6.7-9.1
63 mm	L/S/m		40	60	81	101	121	141	161	181
	NC		-	-	20	26	31	36	40	43
	Throw (m)	Side Wall	1.2-1.8-2.4	1.8-2.7-3.7	2.4-3.7-4.9	3.0-4.6-6.1	4.0-5.8-7.3	4.3-6.1-7.9	5.2-7.0-9.1	5.8-7.9-10.1
76 mm	L/S/m		51	76	102	127	152	178	203	229
	NC		-	-	20	26	31	36	40	43
	Throw (m)	Side Wall	1.2-1.8-2.7	2.1-3.0-4.0	2.7-4.0-5.2	3.7-4.9-6.4	4.6-6.1-7.6	5.2-6.7-8.5	6.1-7.9-9.8	6.4-8.5-10.7
89 mm	L/S/m		62	91	122	153	184	214	245	276
	NC		-	-	20	27	32	36	40	43
	Throw (m)	Side Wall	1.5-2.1-2.7	2.4-3.4-4.3	3.4-4.6-5.8	4.0-5.2-6.7	4.9-6.4-7.9	5.8-7.3-9.1	6.7-8.5-10.4	7.0-9.1-11.3
100 mm	L/S/m		73	108	146	181	217	254	290	341
	NC		-	-	21	27	33	37	41	44
	Throw (m)	Side Wall	1.5-2.1-3.0	2.7-3.7-4.6	3.7-4.9-6.1	4.6-5.8-7.3	5.8-7.0-8.5	6.4-7.9-9.8	7.0-8.8-10.7	7.6-9.8-11.9
125 mm	L/S/m		94	141	187	235	282	328	376	424
	NC		-	-	22	28	33	38	42	45
	Throw (m)	Side Wall	2.1-2.7-3.7	3.0-4.0-5.2	4.3-5.5-6.7	4.9-6.4-7.9	6.1-7.6-9.1	7.0-8.5-10.4	7.6-9.4-11.3	8.5-10.4-12.5
150 mm	L/S/m		115	172	231	288	345	403	462	519
	NC		-	-	22	29	34	39	42	46
	Throw (m)	Side Wall	2.4-3.0-4.0	3.4-4.3-5.5	4.6-5.8-7.0	5.8-7.0-8.2	7.0-8.2-9.4	7.6-9.1-10.7	8.5-10.1-11.9	9.4-11.3-13.1

For Performance Notes and Correction Factors, see end of section.

LBP/LBPH/LBM/LBMH

Linear Bar Grille

PERFORMANCE DATA

Linear Bar Grille (LBP/LBPH) – Core 15B, Metric Units

Size	Static Pressure (Pa)		2	5	9	14	20	27	36	45
38 mm	L/S/m		22	33	43	54	65	76	87	98
	NC		-	-	16	22	27	31	35	38
	Throw (m)	Side Wall	0.6-1.2-1.8	1.2-2.1-3.0	1.8-2.1-4.0	2.1-3.7-5.2	2.4-4.0-5.8	3.0-4.9-6.7	3.4-5.2-7.3	3.7-5.8-7.9
51 mm	L/S/m		34	51	68	85	102	119	136	153
	NC		-	-	-	18	23	27	31	34
	Throw (m)	Side Wall	0.9-1.5-2.1	1.5-2.4-3.7	2.1-3.4-4.9	2.7-4.3-6.1	3.4-5.2-7.0	4.0-5.8-7.9	4.3-6.4-8.5	4.6-6.7-9.1
63 mm	L/S/m		46	68	91	115	138	161	183	206
	NC		-	-	-	17	22	26	30	33
	Throw (m)	Side Wall	1.2-1.8-2.4	1.8-2.7-4.0	2.7-4.0-5.2	3.4-4.9-6.4	4.0-5.5-7.3	4.6-6.4-8.5	5.2-7.3-9.4	6.1-8.2-10.7
76 mm	L/S/m		59	90	119	149	178	208	239	268
	NC		-	-	-	17	22	26	30	33
	Throw (m)	Side Wall	1.5-2.1-3.0	2.1-3.0-4.3	3.0-4.3-5.8	3.7-5.2-7.0	4.6-6.1-7.9	5.5-7.3-9.1	6.1-8.2-10.4	7.0-9.1-11.6
89 mm	L/S/m		71	107	144	180	215	251	288	324
	NC		-	-	-	17	22	26	30	33
	Throw (m)	Side Wall	1.5-2.1-3.0	2.7-3.7-4.9	3.7-4.9-6.1	4.6-6.1-7.6	5.5-7.0-8.5	6.1-7.9-9.8	7.0-8.8-11.0	7.6-9.8-12.2
100 mm	L/S/m		87	129	172	215	259	302	344	387
	NC		-	-	-	18	23	27	31	34
	Throw (m)	Side Wall	1.8-2.4-3.4	3.0-4.0-5.2	4.0-5.2-6.4	4.9-6.1-7.6	6.1-7.6-9.1	6.7-8.5-10.4	7.3-9.1-11.3	8.5-10.7-12.8
125 mm	L/S/m		112	166	222	277	333	387	443	499
	NC		-	-	-	18	23	27	31	34
	Throw (m)	Side Wall	2.4-3.0-4.0	3.4-4.3-5.5	4.6-5.8-7.0	5.5-6.7-8.2	6.7-8.2-9.8	7.3-9.1-11.0	8.2-10.1-12.2	9.1-11.3-13.4
150 mm	L/S/m		136	206	274	342	410	480	548	617
	NC		-	-	-	19	24	28	32	35
	Throw (m)	Side Wall	2.7-3.7-4.6	4.0-4.9-6.1	4.9-6.1-7.3	6.1-7.3-8.8	7.3-8.8-10.4	8.5-10.1-11.9	9.1-10.7-12.5	10.4-12.2-14.0

For Performance Notes and Correction Factors, see end of section.

Linear Bar Grille (LBP/LBPH) – Core 16B, Metric Units

Size	Static Pressure (Pa)		2	5	9	14	20	27	36	45
38 mm	L/S/m		25	36	48	60	73	85	96	108
	NC		-	17	26	32	37	42	46	49
	Throw (m)	Side Wall	0.6-1.2-1.8	1.2-2.1-3.0	1.8-3.0-4.3	2.4-4.0-5.5	2.7-4.3-6.1	3.0-4.9-7.0	3.7-5.5-7.6	4.0-6.1-8.2
51 mm	L/S/m		34	53	70	87	104	121	139	156
	NC		-	-	19	25	30	35	39	43
	Throw (m)	Side Wall	0.9-1.5-2.1	1.5-2.4-3.7	2.1-3.4-4.9	2.7-4.3-6.1	3.4-5.2-7.0	3.7-5.5-7.6	4.3-6.1-8.2	4.6-6.7-9.1
63 mm	L/S/m		46	70	93	116	139	163	186	209
	NC		-	-	18	24	29	34	38	42
	Throw (m)	Side Wall	1.2-1.8-2.4	1.8-2.7-4.0	2.4-3.7-5.2	3.4-4.9-6.4	4.0-5.8-7.6	4.6-6.4-8.2	5.2-7.3-9.4	6.1-8.2-10.7
76 mm	L/S/m		57	87	115	144	173	201	231	259
	NC		-	-	17	23	28	33	37	41
	Throw (m)	Side Wall	1.2-1.8-2.7	2.1-3.0-4.3	3.0-4.0-5.5	3.7-5.2-6.7	4.6-6.1-7.9	5.5-7.3-9.1	6.1-7.9-10.1	7.0-9.1-11.3
89 mm	L/S/m		70	105	139	175	211	245	280	314
	NC		-	-	17	23	28	33	37	41
	Throw (m)	Side Wall	1.5-2.1-3.0	2.4-3.4-4.6	3.7-4.9-6.1	4.3-5.5-7.0	5.2-6.7-8.2	6.1-7.6-9.4	6.7-8.5-10.7	7.6-9.8-11.9
100 mm	L/S/m		82	124	164	206	248	288	328	370
	NC		-	-	18	24	29	34	38	42
	Throw (m)	Side Wall	1.8-2.4-3.4	2.7-3.7-4.9	4.0-5.2-6.4	4.6-5.8-7.3	5.8-7.3-8.8	6.7-8.2-10.1	7.3-9.1-11.0	7.6-10.1-12.2
125 mm	L/S/m		107	161	214	268	322	375	429	483
	NC		-	-	18	24	29	34	38	42
	Throw (m)	Side Wall	2.4-3.0-4.0	3.4-4.3-5.5	4.6-5.8-7.0	5.2-6.4-7.9	6.1-7.6-9.4	7.3-8.8-10.7	7.9-10.1-11.6	8.8-10.7-12.8
150 mm	L/S/m		132	197	263	328	393	459	525	592
	NC		-	-	18	24	29	34	38	42
	Throw (m)	Side Wall	2.7-3.4-4.3	4.0-4.9-6.1	4.9-6.1-7.3	6.1-7.3-8.5	7.0-8.2-9.8	7.6-9.1-11.0	8.5-10.1-11.9	9.4-11.3-13.1

For Performance Notes and Correction Factors, see end of section.

PERFORMANCE DATA

Linear Bar Grille (LBP/LBPH) – Core 25B/25C, Metric Units

Size	Static Pressure (Pa)		2	5	10	16	22	30	40	50
38 mm	L/S/m		15	25	33	40	48	56	65	73
	NC		-	-	-	19	24	29	33	36
	Throw (m)	Side Wall	0.6-1.2-1.8	1.2-2.1-3.0	1.5-2.7-4.0	2.1-3.7-5.2	2.4-4.0-5.8	3.0-4.9-6.7	3.4-5.2-7.3	3.7-5.8-7.9
51 mm	L/S/m		28	42	56	70	84	98	112	125
	NC		-	-	-	18	23	28	32	35
	Throw (m)	Side Wall	0.9-1.5-2.1	1.5-2.7-3.7	2.1-3.4-4.9	2.7-4.3-6.1	3.0-4.9-7.0	4.0-5.8-7.9	4.3-6.4-8.5	4.6-6.7-9.1
63 mm	L/S/m		40	62	82	102	122	143	164	184
	NC		-	-	-	20	25	30	34	37
	Throw (m)	Side Wall	1.2-1.8-2.7	1.8-2.7-3.7	2.4-3.7-5.2	3.4-4.9-6.7	4.0-5.8-7.6	4.6-6.4-8.5	5.5-7.6-9.8	6.4-8.5-11.0
76 mm	L/S/m		54	82	108	136	164	191	218	245
	NC		-	-	-	21	26	31	35	38
	Throw (m)	Side Wall	1.5-2.1-3.0	2.1-3.4-4.6	3.0-4.3-5.8	3.7-5.2-7.0	4.6-6.4-8.2	5.5-7.3-9.4	6.1-8.2-10.4	7.3-9.4-11.9
89 mm	L/S/m		68	102	136	170	204	239	273	307
	NC		-	-	16	22	27	32	36	39
	Throw (m)	Side Wall	1.5-2.1-3.0	2.7-3.7-4.9	3.7-4.9-6.1	4.6-6.1-7.6	5.5-7.0-8.5	6.1-7.9-9.8	7.0-8.8-11.0	7.6-9.8-12.2
100 mm	L/S/m		82	124	164	206	248	288	330	370
	NC		-	-	17	23	28	33	37	40
	Throw (m)	Side Wall	1.8-2.4-3.4	3.0-4.0-5.2	4.0-5.2-6.4	4.9-6.4-7.9	6.1-7.6-9.1	6.7-8.5-10.4	7.3-9.1-11.3	8.5-10.7-12.8
125 mm	L/S/m		110	164	220	274	328	384	438	493
	NC		-	-	18	24	29	34	38	41
	Throw (m)	Side Wall	2.4-3.0-4.0	3.4-4.3-5.5	4.6-5.8-7.0	5.5-6.7-8.2	6.7-8.2-9.8	7.6-9.4-11.3	8.2-10.1-12.2	9.1-11.3-13.4
150 mm	L/S/m		138	206	276	344	412	480	550	620
	NC		-	-	19	25	30	35	39	42
	Throw (m)	Side Wall	2.7-3.4-4.3	4.0-4.9-6.1	4.9-6.1-7.3	6.1-7.3-8.8	7.3-8.8-10.4	8.5-10.1-11.9	9.1-10.7-12.5	10.4-12.2-14.0

For Performance Notes and Correction Factors, see end of section.

Linear Bar Grille (LBP/LBPH) – Core 26B/26C, Metric Units

Size	Static Pressure (Pa)		3	6	12	19	27	36	48	60
38 mm	L/S/m		19	29	39	48	57	67	77	87
	NC		-	16	24	31	36	41	45	48
	Throw (m)	Side Wall	0.6-1.2-1.8	1.2-2.1-3.0	1.8-3.0-4.3	2.1-3.7-5.2	2.7-4.3-6.1	3.0-4.9-7.0	3.7-5.5-7.6	4.0-6.1-8.2
51 mm	L/S/m		29	45	59	74	90	104	119	133
	NC		-	-	19	26	31	36	40	43
	Throw (m)	Side Wall	0.9-1.5-2.1	1.5-2.4-3.7	2.1-3.4-4.9	2.7-4.3-6.1	3.4-5.2-7.3	4.0-5.8-7.9	4.6-6.7-8.8	4.9-7.0-9.4
63 mm	L/S/m		42	62	84	104	124	146	166	186
	NC		-	-	19	26	31	36	40	43
	Throw (m)	Side Wall	1.2-1.8-2.4	1.8-2.7-4.0	2.7-4.0-5.2	3.4-4.9-6.4	4.3-5.8-7.6	4.6-6.4-8.2	5.2-7.3-9.4	6.1-8.2-10.7
76 mm	L/S/m		53	81	107	133	160	186	214	240
	NC		-	-	19	26	31	36	40	43
	Throw (m)	Side Wall	1.2-1.8-2.7	2.4-3.4-4.6	3.0-4.3-5.8	4.0-5.5-7.0	4.9-6.4-8.2	5.5-7.3-9.4	6.4-8.5-10.7	7.0-9.1-11.6
89 mm	L/S/m		65	98	130	163	195	228	260	293
	NC		-	-	20	27	32	37	41	44
	Throw (m)	Side Wall	1.8-2.4-3.4	2.7-3.7-4.9	3.7-4.9-6.4	4.3-5.8-7.3	5.5-7.0-8.8	6.4-8.2-10.1	7.0-8.8-11.0	7.6-9.8-12.2
100 mm	L/S/m		79	118	158	197	235	276	314	353
	NC		-	-	21	28	33	38	42	45
	Throw (m)	Side Wall	1.8-2.7-3.7	3.0-4.0-5.2	4.0-5.2-6.7	4.6-6.1-7.6	5.8-7.3-9.1	6.7-8.5-10.4	7.6-9.4-11.6	8.5-11.0-12.8
125 mm	L/S/m		104	155	208	259	310	362	414	466
	NC		-	-	21	28	33	38	42	45
	Throw (m)	Side Wall	2.4-3.4-4.3	3.4-4.6-5.8	4.6-5.8-7.3	5.8-7.0-8.5	6.4-7.9-9.8	7.3-9.1-11.0	7.9-9.8-11.9	8.8-11.0-13.1
150 mm	L/S/m		130	195	260	325	390	455	520	586
	NC		-	-	23	30	35	40	44	47
	Throw (m)	Side Wall	2.7-3.7-4.6	4.3-5.2-6.4	5.2-6.4-7.6	6.1-7.3-8.8	7.3-8.8-10.4	8.2-9.8-11.6	8.8-10.7-12.5	9.8-11.6-13.4

For Performance Notes and Correction Factors, see end of section.

PERFORMANCE DATA

Linear Bar Grille (LBP/LBPH) – Core 27B/27C, Metric Units

Size	Static Pressure (Pa)		3	6	12	19	27	36	48	60
38 mm	L/S/m		20	29	40	50	59	70	79	90
	NC		-	16	24	31	36	41	45	48
	Throw (m)	Side Wall	0.6-1.2-1.8	1.2-2.1-3.0	1.8-2.7-4.0	2.1-3.4-4.9	2.4-4.0-5.8	2.7-4.6-6.4	3.0-4.9-7.0	3.7-5.5-7.6
51 mm	L/S/m		29	45	59	74	90	104	119	133
	NC		-	-	20	26	31	36	40	43
	Throw (m)	Side Wall	0.9-1.5-2.1	1.5-2.4-3.4	2.1-3.4-4.6	2.7-4.3-5.8	3.4-4.9-6.7	3.7-5.5-7.6	4.3-6.1-8.2	4.6-6.7-9.1
63 mm	L/S/m		40	60	81	101	119	141	161	181
	NC		-	-	20	26	31	36	40	43
	Throw (m)	Side Wall	1.2-1.8-2.4	1.8-2.7-3.7	2.4-3.7-4.9	3.0-4.6-6.1	4.0-5.8-7.3	4.3-6.1-7.9	5.2-7.0-9.1	5.8-7.9-10.1
76 mm	L/S/m		51	77	102	129	155	180	206	231
	NC		-	-	20	26	31	36	40	43
	Throw (m)	Side Wall	1.2-1.8-2.7	2.1-3.0-4.0	2.7-4.0-5.2	3.7-4.9-6.4	4.6-6.1-7.6	5.2-6.7-8.5	6.1-7.9-9.8	6.4-8.5-10.7
89 mm	L/S/m		62	93	124	155	186	217	248	279
	NC		-	-	20	27	32	36	40	43
	Throw (m)	Side Wall	1.5-2.1-2.7	2.4-3.4-4.3	3.4-4.6-5.8	4.0-5.2-6.7	4.9-6.4-7.9	5.8-7.3-9.1	6.7-8.5-10.4	7.0-9.1-11.3
100 mm	L/S/m		76	113	150	189	226	265	302	339
	NC		-	-	21	27	33	37	41	44
	Throw (m)	Side Wall	1.8-2.4-3.4	2.7-3.7-4.9	3.7-4.9-6.1	4.6-6.1-7.6	5.8-7.3-8.8	6.4-7.9-9.8	7.3-9.1-11.0	7.9-10.1-12.2
125 mm	L/S/m		98	147	195	245	294	342	392	440
	NC		-	-	22	28	33	38	42	45
	Throw (m)	Side Wall	2.1-2.7-3.7	3.4-4.3-5.8	4.3-5.5-6.7	5.2-6.4-7.9	6.4-7.9-9.4	7.3-8.8-10.7	8.2-10.1-11.9	9.1-11.0-13.1
150 mm	L/S/m		118	177	235	294	353	412	471	530
	NC		-	-	22	29	34	39	42	46
	Throw (m)	Side Wall	2.4-3.0-4.0	3.7-4.6-5.5	4.6-5.8-7.0	6.1-7.3-8.5	7.0-8.2-9.8	7.9-9.4-11.3	8.8-10.4-12.2	10.1-11.9-13.7

Performance Notes

1. Tested in accordance with ASHRAE Standard 70-2006 "Method of Testing for Rating the Performance of Air Outlets and Inlets"
2. All pressures are in Pascals.
3. Maximum throws are to a terminal velocity of 0.25 m/s, middle throws are to a terminal velocity of 0.5 m/s and minimum throws are to a terminal velocity of 0.75 m/s.
4. Throw values are based on a 1.2 m active section of grille with a cooling temperature differential of 11°C. The multiplier factors listed in the table below are applicable for other lengths.
5. The NC values are based on a room absorption of 10 dB re 10-12 watts.
6. Return air applications, when used as a return air intake, add 4 to NC value shown and multiply Static Pressure by 0.8.
7. Blank (-) spaces indicate an NC level below 15.

Throw Correction for Length (multiply)

Active Length	Terminal Velocity (m/s)		
	0.75	0.5	0.25
0.3 m	0.5	0.6	0.7
3 m or continuous	1.6	1.4	1.2

NC / NR Correction for Various Diffuser Lengths

Length, meters	0.3	0.6	1.2	2.4	2.7	3	4.6	6.1	7.6	9.1
Supply	-16	-11	-6	-3	-2	0	+3	+5	+6	+8
Return	-10	-7	-4	-2	-1	0	+2	+3	+4	+5