



Products of WB Air



WB Air

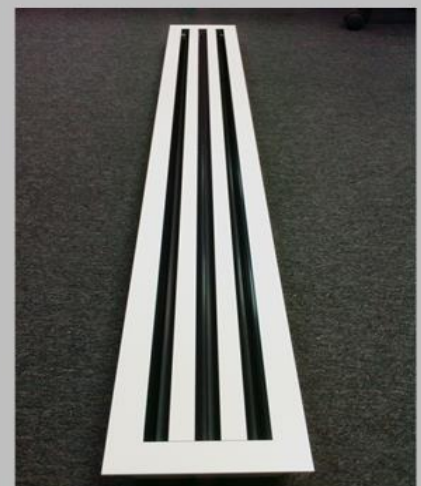
air distribution products

form function reliability



Linear Diffusers

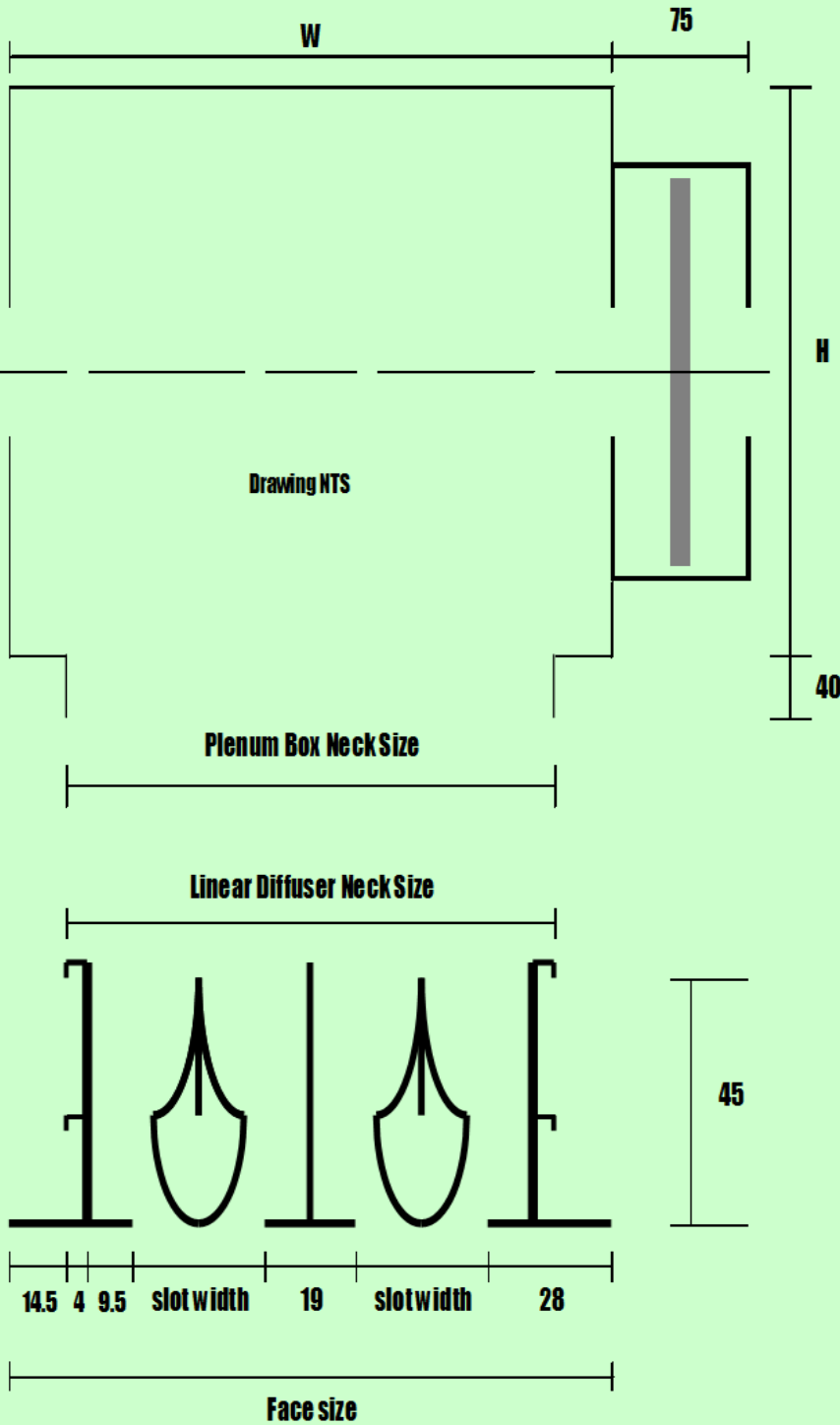
Slot Type WB-LC-2



Linear Slot Diffusers

Model : WB - LC - 2 (20mm Slot) & (25mm Slot)

Dimensional Data



Plenum Box model WB-LB

Electro galvanised or GI construction, internally insulated with elastomeric PE foam. (glass wool is optional, if glass wool is used, W=neck+40mm). Comes optional with wingnut controlled single bladed damper at collar. Standard unless specified otherwise

Dimensions

20mmSlot	1	2	3	4	5	6
W	77	117	157	197	237	277
Neck	52	92	132	172	212	252
Neck*	62	102	142	182	222	262

Neck* - c/w 5mm foam on each side

25mmSlot	1	2	3	4	5	6
W	82	127	173	217	262	307
Neck	57	102	148	192	237	282
Neck*	67	112	158	202	247	292

Neck* - c/w 5mm foam on each side

Collar Size	150	200	250	300	350	400
H (round collar)	180	230	280	330	380	430
H (oval collar)	150	200	250	300	350	400

CMH Range

Collar Dia	150	200	250	300	350	400
from	100	201	401	601	851	1101
To	200	400	600	850	1100	1500

Linear Diffuser Model WB-LC2

Constructed of extruded aluminum coated in an epoxy/polyester powder coat finish. Comes in 1 to 6 slots as a standard. Maximum 1 piece constructed length is 3600mm

Dimensions

20mmSlot	1	2	3	4	5	6
Face	75	115	155	195	235	275
Neck	47	87	127	167	207	247

25mmSlot	1	2	3	4	5	6
Face	80	125	171	215	260	305
Neck	52	97	143	187	232	277

Notes

Recommended ceiling opening size are ;
 >with plenum box - Neck add 10-12mm
 >without plenum box - Neck add 8mm
 Dimensional tolerances is about 1.5mm

Linear Slot Diffuser



PERFORMANCE DATA

Model: WB-LG/2 (20mm Slot)

air distribution products

Horizontal Throw Characteristics

1200 x 1 slot	Vel (m/s)	0.63	1.26	1.89	2.52	3.15	3.78	4.40	5.03
Q (L/s)		15.04	30.08	45.12	60.16	75.20	90.24	105.28	120.32
Q (cmh)		54.37	108.74	163.10	217.47	271.84	326.21	380.58	434.94
Q (cfm)		32.00	64.00	96.00	128.00	160.00	192.00	224.00	256.00
SP(pa)		4.00	6.67	13.33	21.33	33.33	46.67	66.67	86.67
NC		na	na	18.75	27.50	36.25	42.50	48.75	53.75
Ceiling mount	T (Horizontal)	0.53	1.24	3.00	4.06	4.41	4.76	5.47	6.00
	Drop	0.19	0.43	1.05	1.42	1.54	1.67	1.91	2.10
1200 x 2 slots	Vel (m/s)	0.63	1.26	1.89	2.52	3.15	3.78	4.40	5.03
Q (L/s)		30.08	60.16	90.24	120.32	150.40	180.48	210.56	240.64
Q (cmh)		108.74	217.47	326.21	434.94	543.68	652.42	761.15	869.89
Q (cfm)		64.00	128.00	192.00	256.00	320.00	384.00	448.00	512.00
SP(pa)		4.00	6.67	13.33	21.33	33.33	46.67	66.67	86.67
NC		na	na	22.50	33.75	42.50	48.75	55.00	60.00
Ceiling mount	T (Horizontal)	0.88	2.29	4.41	5.47	6.18	6.88	9.00	9.71
	Drop	0.31	0.80	1.54	1.91	2.16	2.41	3.15	3.40
1200 x 3 slots	Vel (m/s)	0.63	1.26	1.89	2.52	3.15	3.78	4.40	5.03
Q (L/s)		45.12	90.24	135.36	180.48	225.60	270.72	315.84	360.96
Q (cmh)		163.10	326.21	489.31	652.42	815.52	978.62	1141.73	1304.83
Q (cfm)		96.00	192.00	288.00	384.00	480.00	576.00	672.00	768.00
SP(pa)		4.00	6.67	13.33	21.33	33.33	46.67	66.67	86.67
NC		na	na	26.25	37.50	46.25	52.50	58.75	63.75
Ceiling mount	T (Horizontal)	1.24	3.71	5.82	6.88	7.59	8.29	9.18	9.88
	Drop	0.44	1.30	2.04	2.41	2.66	2.90	3.21	3.46
1200 x 4 slots	Vel (m/s)	0.63	1.26	1.89	2.52	3.15	3.78	4.40	5.03
Q (L/s)		60.16	120.32	180.48	240.64	300.80	360.96	421.12	481.28
Q (cmh)		217.47	434.94	652.42	869.89	1087.36	1304.83	1522.30	1739.78
Q (cfm)		128.00	256.00	384.00	512.00	640.00	768.00	896.00	1024.00
SP(pa)		4.00	6.67	13.33	21.33	33.33	46.67	66.67	86.67
NC		na	12.50	28.75	40.00	48.75	55.00	61.25	66.25
Ceiling mount	T (Horizontal)	1.41	4.24	6.35	8.29	9.18	10.24	10.94	11.65
	Drop	0.49	1.48	2.22	2.90	3.21	3.58	3.83	4.08

Vertical Throw Characteristics

1200 x 1 slot	Vel (m/s)	0.79	1.42	2.05	2.67	3.30	3.93	4.56	5.19
Q (L/s)		18.80	33.84	48.88	63.92	78.96	94.00	109.04	124.08
Q (cmh)		67.96	122.33	176.70	231.06	285.43	339.80	394.17	448.54
Q (cfm)		40.00	72.00	104.00	136.00	168.00	200.00	232.00	264.00
SP(pa)		4.00	6.67	13.33	21.33	33.33	46.67	66.67	86.67
NC		na	na	18.75	27.50	35.00	42.50	47.50	51.25
Ceiling mount	T (vertical)	0.71	2.82	4.24	4.94	5.29	6.00	6.35	6.71
	Spread	0.25	0.99	1.48	1.73	1.85	2.10	2.22	2.35
1200 x 2 slots	Vel (m/s)	0.71	1.30	1.97	2.60	3.26	3.81	4.48	5.11
Q (L/s)		33.84	62.04	94.00	124.08	156.04	182.36	214.32	244.40
Q (cmh)		122.33	224.27	339.80	448.54	564.07	659.21	774.74	883.48
Q (cfm)		72.00	132.00	200.00	264.00	332.00	388.00	456.00	520.00
SP(pa)		4.00	6.67	13.33	21.33	33.33	46.67	66.67	86.67
NC		na	na	22.50	31.25	41.25	47.50	52.50	57.50
Ceiling mount	T (vertical)	1.76	3.88	5.65	6.71	7.76	8.47	9.18	9.88
	Spread	0.62	1.36	1.98	2.35	2.72	2.96	3.21	3.46
1200 x 3 slots	Vel (m/s)	0.68	1.31	1.94	2.57	3.20	3.83	4.46	5.09
Q (L/s)		48.88	94.00	139.12	184.24	229.36	274.48	319.60	364.72
Q (cmh)		176.70	339.80	502.90	666.01	829.11	992.22	1155.32	1318.42
Q (cfm)		104.00	200.00	296.00	392.00	488.00	584.00	680.00	776.00
SP(pa)		4.00	6.67	13.33	21.33	33.33	46.67	66.67	86.67
NC		na	na	23.75	35.00	43.75	51.25	56.25	61.25
Ceiling mount	T (vertical)	2.47	4.59	7.06	8.47	9.53	10.24	11.29	12.00
	Spread	0.86	1.61	2.47	2.96	3.34	3.58	3.95	4.20
1200 x 4 slots	Vel (m/s)	0.67	1.30	1.93	2.56	3.19	3.81	4.44	5.07
Q (L/s)		63.92	124.08	184.24	244.40	304.56	364.72	424.88	485.04
Q (cmh)		231.06	448.54	666.01	883.48	1100.95	1318.42	1535.90	1753.37
Q (cfm)		136.00	264.00	392.00	520.00	648.00	776.00	904.00	1032.00
SP(pa)		4.00	6.67	13.33	21.33	33.33	46.67	66.67	86.67
NC		na	na	26.25	36.25	46.25	52.50	58.75	62.50
Ceiling mount	T (vertical)	2.82	5.29	8.12	9.88	10.94	12.00	12.71	13.76
	Spread	0.99	1.85	2.84	3.46	3.83	4.20	4.45	4.82

Notes

Units are tested with air plenum boxes in accordance to Air Diffusion Council ADC Code 1062: GRD-84 and ASHRAE 70-72.

Throw in meters with a cooling temperature differential of 20 deg F at a terminal velocity of 100fpm, 0.5 m/s. With Deflectors fully opened in one direction. Pressures in Pascal. NC values based on room absorption of 10dB re10 to power 12 watts.

Linear Slot Diffuser



PERFORMANCE DATA

Model: WB-LC/2 (25mm Slot)

air distribution products

Horizontal Throw Characteristics

1200 x 1 slot	Vel (m/s)	0.50	1.01	1.51	2.01	2.52	3.02	3.52	4.03
Q (L/s)		15.04	30.08	45.12	60.16	75.20	90.24	105.28	120.32
Q (cmh)		54.37	108.74	163.10	217.47	271.84	326.21	380.58	434.94
Q (cfm)		32.00	64.00	96.00	128.00	160.00	192.00	224.00	256.00
SP(pa)		3.00	5.00	10.00	16.00	25.00	35.00	50.00	65.00
NC		na	na	15.00	22.00	29.00	34.00	39.00	43.00
Ceiling mount	T (Horizontal)	0.45	1.05	2.55	3.45	3.75	4.05	4.65	5.10
	Drop	0.16	0.37	0.89	1.21	1.31	1.42	1.63	1.79

1200 x 2 slots	Vel (m/s)	0.50	1.01	1.51	2.01	2.52	3.02	3.52	4.03
Q (L/s)		30.08	60.16	90.24	120.32	150.40	180.48	210.56	240.64
Q (cmh)		108.74	217.47	326.21	434.94	543.68	652.42	761.15	869.89
Q (cfm)		64.00	128.00	192.00	256.00	320.00	384.00	448.00	512.00
SP(pa)		3.00	5.00	10.00	16.00	25.00	35.00	50.00	65.00
NC		na	na	18.00	27.00	34.00	39.00	44.00	48.00
Ceiling mount	T (Horizontal)	0.75	1.95	3.75	4.65	5.25	5.85	7.65	8.25
	Drop	0.26	0.68	1.31	1.63	1.84	2.05	2.68	2.89

1200 x 3 slots	Vel (m/s)	0.50	1.01	1.51	2.01	2.52	3.02	3.52	4.03
Q (L/s)		45.12	90.24	135.36	180.48	225.60	270.72	315.84	360.96
Q (cmh)		163.10	326.21	489.31	652.42	815.52	978.62	1141.73	1304.83
Q (cfm)		96.00	192.00	288.00	384.00	480.00	576.00	672.00	768.00
SP(pa)		3.00	5.00	10.00	16.00	25.00	35.00	50.00	65.00
NC		na	na	21.00	30.00	37.00	42.00	47.00	51.00
Ceiling mount	T (Horizontal)	1.05	3.15	4.95	5.85	6.45	7.05	7.80	8.40
	Drop	0.37	1.10	1.73	2.05	2.26	2.47	2.73	2.94

1200 x 4 slots	Vel (m/s)	0.55	1.10	1.65	2.20	2.75	3.30	3.84	4.39
Q (L/s)		60.16	120.32	180.48	240.64	300.80	360.96	421.12	481.28
Q (cmh)		217.47	434.94	652.42	869.89	1087.36	1304.83	1522.30	1739.78
Q (cfm)		128.00	256.00	384.00	512.00	640.00	768.00	896.00	1024.00
SP(pa)		3.00	5.00	10.00	16.00	25.00	35.00	50.00	65.00
NC			10.00	23.00	32.00	39.00	44.00	49.00	53.00
Ceiling mount	T (Horizontal)	1.20	3.60	5.40	7.05	7.80	8.70	9.30	9.90
	Drop	0.42	1.26	1.89	2.47	2.73	3.05	3.26	3.47

Vertical Throw Characteristics

1200 x 1 slot	Vel (m/s)	0.63	1.13	1.64	2.14	2.64	3.15	3.65	4.15
Q (L/s)		18.80	33.84	48.88	63.92	78.96	94.00	109.04	124.08
Q (cmh)		67.96	122.33	176.70	231.06	285.43	339.80	394.17	448.54
Q (cfm)		40.00	72.00	104.00	136.00	168.00	200.00	232.00	264.00
SP(pa)		3.00	5.00	10.00	16.00	25.00	35.00	50.00	65.00
NC		na	na	15.00	22.00	28.00	34.00	38.00	41.00
Ceiling mount	T (vertical)	0.60	2.40	3.60	4.20	4.50	5.10	5.40	5.70
	Spread	0.21	0.84	1.26	1.47	1.58	1.79	1.89	2.00

1200 x 2 slots	Vel (m/s)	0.57	1.04	1.57	2.08	2.61	3.05	3.59	4.09
Q (L/s)		33.84	62.04	94.00	124.08	156.04	182.36	214.32	244.40
Q (cmh)		122.33	224.27	339.80	448.54	564.07	659.21	774.74	883.48
Q (cfm)		72.00	132.00	200.00	264.00	332.00	388.00	456.00	520.00
SP(pa)		3.00	5.00	10.00	16.00	25.00	35.00	50.00	65.00
NC		na	na	18.00	25.00	33.00	38.00	42.00	46.00
Ceiling mount	T (vertical)	1.50	3.30	4.80	5.70	6.60	7.20	7.80	8.40
	Spread	0.53	1.16	1.68	2.00	2.31	2.52	2.73	2.94

1200 x 3 slots	Vel (m/s)	0.55	1.05	1.55	2.06	2.56	3.06	3.57	4.07
Q (L/s)		48.88	94.00	139.12	184.24	229.36	274.48	319.60	364.72
Q (cmh)		176.70	339.80	502.90	666.01	829.11	992.22	1155.32	1318.42
Q (cfm)		104.00	200.00	296.00	392.00	488.00	584.00	680.00	776.00
SP(pa)		3.00	5.00	10.00	16.00	25.00	35.00	50.00	65.00
NC		na	na	19.00	28.00	35.00	41.00	45.00	49.00
Ceiling mount	T (vertical)	2.10	3.90	6.00	7.20	8.10	8.70	9.60	10.20
	Spread	0.74	1.37	2.10	2.52	2.84	3.05	3.36	3.57

1200 x 4 slots	Vel (m/s)	0.58	1.13	1.68	2.23	2.78	3.33	3.88	4.43
Q (L/s)		63.92	124.08	184.24	244.40	304.56	364.72	424.88	485.04
Q (cmh)		231.06	448.54	666.01	883.48	1100.95	1318.42	1535.90	1753.37
Q (cfm)		136.00	264.00	392.00	520.00	648.00	776.00	904.00	1032.00
SP(pa)		3.00	5.00	10.00	16.00	25.00	35.00	50.00	65.00
NC		na	na	21.00	29.00	37.00	42.00	47.00	50.00
Ceiling mount	T (vertical)	2.40	4.50	6.90	8.40	9.30	10.20	10.80	11.70
	Spread	0.84	1.58	2.42	2.94	3.26	3.57	3.78	4.10

Notes

NC corrections

Length	1500	1800	2100	2400	3000
Correction	+1	+2	+3	+4	+5

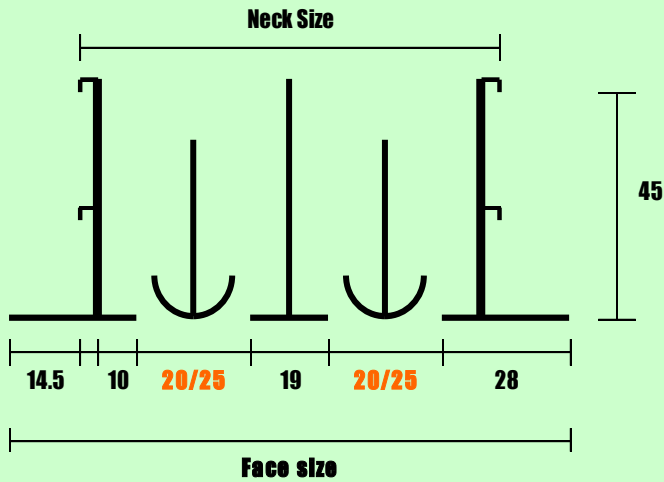
For return applications, add 4 to NC and multiply 0.8 for negative static pressure.

Linear Slot Diffusers

Model: WB - LA - 1 (20 / 25 mm Slot)

For return purpose

Dimensional Data



20mmSlot	1 slot	2 slots	3 slots	4 slots
Face	76	116	155	195
Neck	48	88	129	169

25mmSlot	1 slot	2 slots	3 slots	4 slots
Face	81	125	171	216
Neck	52	97	143	187

Notes

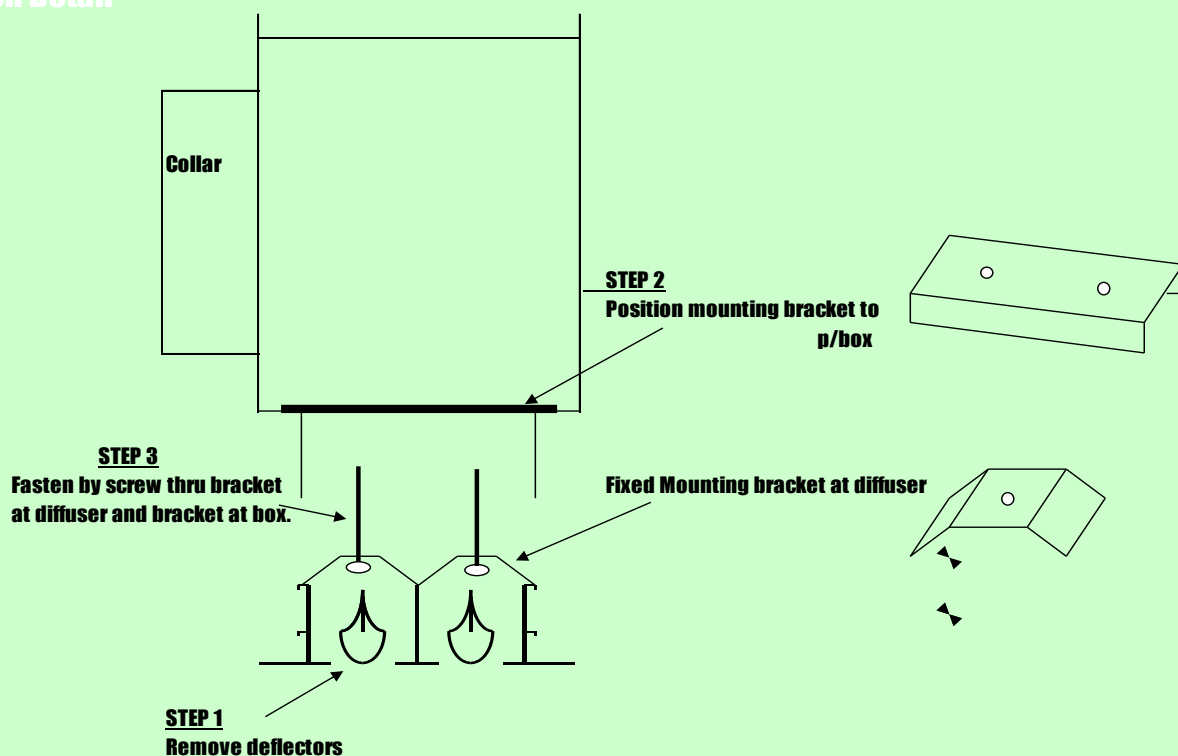
Recommended opening size are;
 with plenum box - Neck add 12-15mm
 without plenum box - Neck add 8-12mm
 Dimensional tolerances is about 1.5mm
 All dimensions to the nearest mm

rev Dec 03

Linear Slot Diffuser

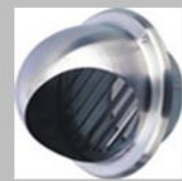
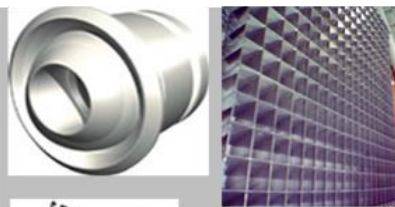
Model: WB - LC - 2

Installation Detail



N.T.S

rev Dec 03



WB Air

air distribution products

since 1965

diffusers

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it's not just about superficial aesthetics, it's about a perfect unison of form, function and reliability



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