



Products of WB Air



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air distribution products

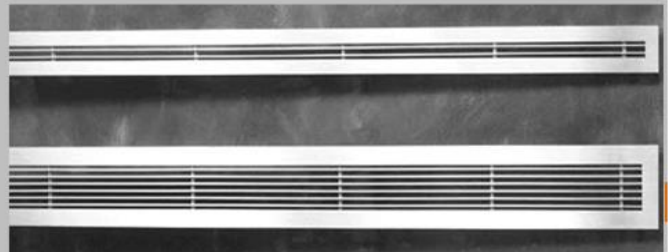
form function reliability



Linear Bar Grilles

Air distribution & Architectural

Model WBL-BGA



THE CRISP LOOK

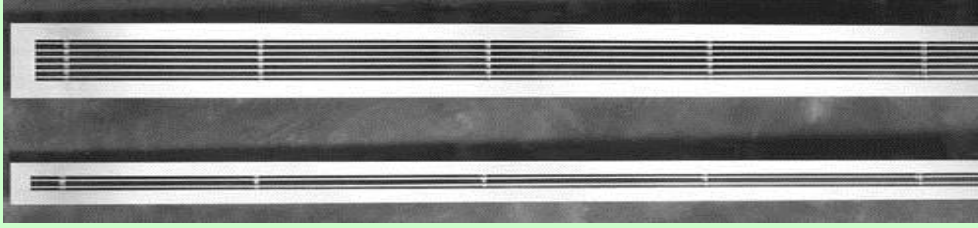
Architectural Bar Grilles



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Form Function Reliability



Model : WBL-BGA 6 (6° blade angle)

Straight Through Air Pattern

WBL-BGA 19 (19° blade angle)

True Angled Air Pattern



Description

The WBL-BGA linear bar grilles are specially designed for supply and return air for various HVAC design applications. It is also ideal for air displacement through floors, steps and most occupied zone air distribution. Its versatile design meets all type of requirements: with different air throw angles, to different materials to different frame styles, there is a WBL-BGA model for your application

Material Options

Aluminum Extruded Profile

The aluminum extruded profile is the most common material choice for bar grille. It is light, sturdy and highly corrosion resistant.

Besides that, our aluminum extruded bar grille can come in our custom blended "anti condensation" finish as an option.

With this layer of coating, it helps to reduce/eliminate the chance of condensation on the surface of the bar grilles.

Wood-Plastic Composite (WPC)

WPC is a revolutionary choice for treating condensation on our WBL-BGA bar grille. It is extruded by fusing wood composites and thermoplastics together and hence forming a rigid and light weight material which drastically reduces the chances of condensation because of its low thermal conductivity. Besides that, WPC is environmental friendly and anti-corrosive.

Wood

For the classic look with its low thermal conductivity properties, our WBL-BGA bar grill can be constructed of raw wood finish which can then be painted to most standard non gloss paints or left unfinished.

Construction

Size : Width : Maximum up to 200 mm (others width please discuss with our WB Air sales)

Length : Maximum one piece construction up to 3600 mm

Frame Style : 28 mm, 20 mm, 15 mm, 8 mm and 5 mm flat bar design

Custom panel frame is available upon request

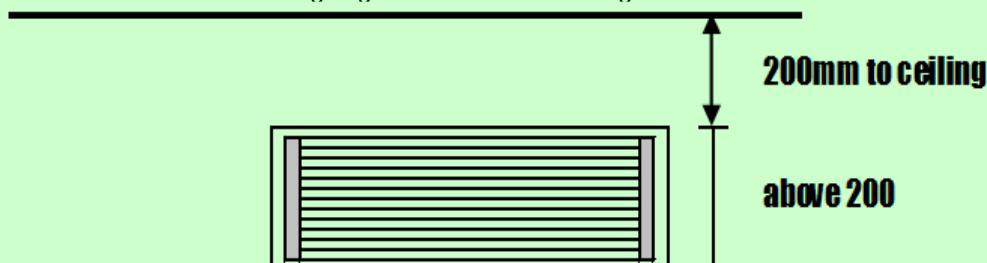
Finishes : Standard powder coated white finish. Other finishes are also available upon request

Additional Accessories : Pattern Controller (Model: WBL-BGA / PC)

OBD Opposed Blade Damper (Model :WBL-BGA / D)

Notes

- For sidewall installations, it is recommended to have a space of 200 mm from ceiling to top of grille
- Width above 200 mm shall have retaining angles at both ends of the grilles



THE CRISP LOOK

Architectural Bar Grilles



WB Air

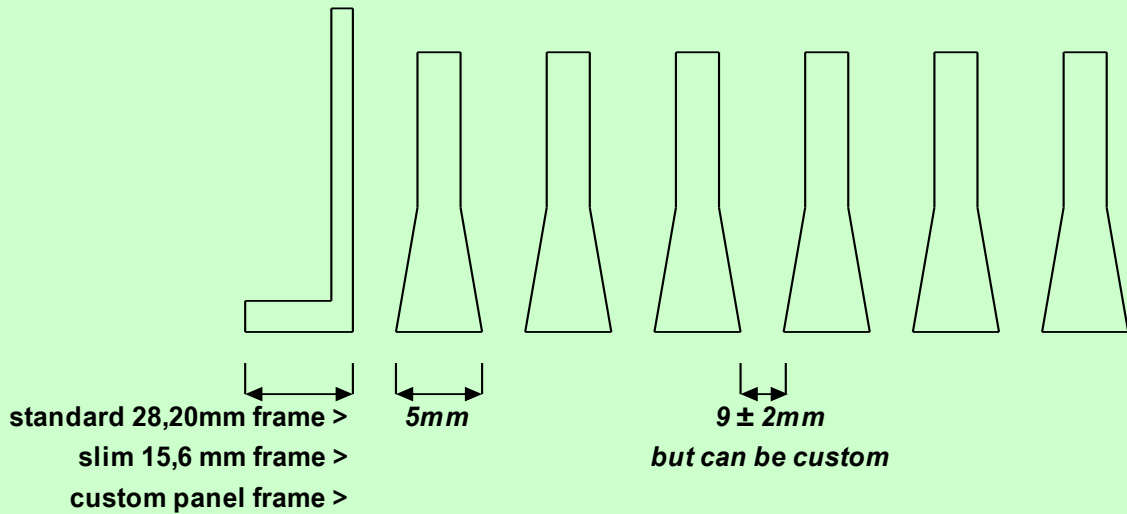
air distribution products

Form Function Reliability

Dimensional Details

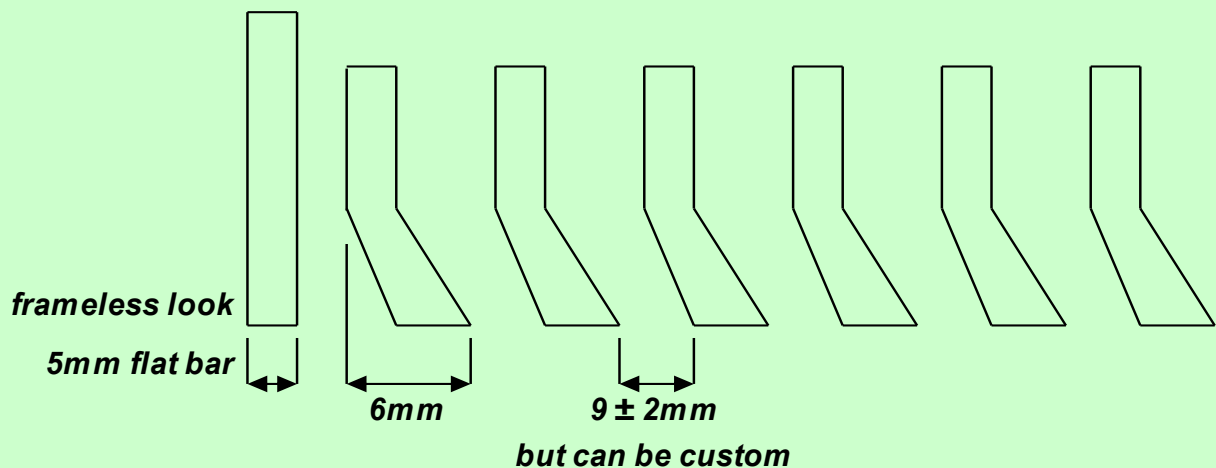
Model : WBL-BGA 6

Straight Through Air Pattern



Model : WBL-BGA 19

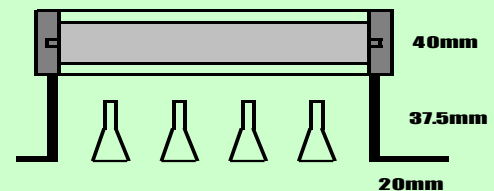
True Angled Air Pattern



MODEL : WBL - BGA / PC

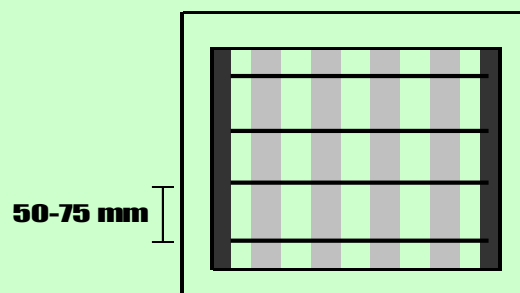
Incorporate Pattern Controller

Matt Black EG Pattern
 Controller attachment



Section View

Model WBL-BGA / PC enables the user to direct air to the left or right while still maintaining the clean crisp look of the bar grille. Long nose pliers shall be used for adjusting the individually adjustable pattern blades. Ganged operated by lever (half left half right) can be an option.



Back View



Architectural Bar Grilles

MODEL : WBL - BGA6 Straight Through Air Pattern

PERFORMANCE DATA

1200 x 50	m/s	1.38	2.08	2.77	3.46	4.15	4.85	5.54	6.23
Q (L/s)		41.36	62.04	82.72	103.40	124.08	144.76	165.44	186.12
Q (cmh)		149.51	224.27	299.02	373.78	448.54	523.29	598.05	672.80
Q (cfm)		88.00	132.00	176.00	220.00	264.00	308.00	352.00	396.00
SP(pa)		5.00	8.00	10.00	15.00	20.00	28.00	35.58	45.29
NC		18.00	21.00	23.00	26.00	29.00	31.00	33.00	37.00
Side Wall	T (horizontal)	1.81	2.90	3.99	5.07	6.16	6.88	7.61	7.97
	Drop	0.69	1.04	1.36	1.62	1.91	2.07	2.28	2.39
Ceiling	T (vertical)	2.20	3.52	4.85	6.17	7.49	8.37	9.25	9.69
	Spread	0.71	1.13	1.55	1.98	2.40	2.68	2.97	3.11

1200 x 100	m/s	1.76	2.61	3.49	4.37	5.25	6.14	6.98	7.87
Q (L/s)		105.28	156.04	208.68	261.32	313.96	366.60	417.36	470.00
Q (cmh)		380.58	564.07	754.36	944.64	1134.93	1325.22	1508.71	1699.00
Q (cfm)		224.00	332.00	444.00	556.00	668.00	780.00	888.00	1000.00
SP(pa)		5.00	8.00	10.00	15.00	20.00	28.00	35.58	45.29
NC		18.00	21.00	23.00	26.00	29.00	31.00	33.00	37.00
Side Wall	T (horizontal)	2.90	4.71	6.16	7.25	9.06	10.14	10.87	12.68
	Drop	1.10	1.70	2.09	2.32	2.81	3.04	3.26	3.80
Ceiling	T (vertical)	3.52	5.73	7.49	8.81	11.01	12.33	13.21	15.42
	Spread	1.13	1.84	2.40	2.83	3.53	3.96	4.24	4.95

1200 x 150	m/s	1.85	2.79	3.71	4.64	5.56	6.50	7.43	8.35
Q (L/s)		165.44	250.04	332.76	415.48	498.20	582.80	665.52	748.24
Q (cmh)		598.05	903.87	1202.89	1501.92	1800.94	2106.76	2405.78	2704.81
Q (cfm)		352.00	532.00	708.00	884.00	1060.00	1240.00	1416.00	1592.00
SP(pa)		5.00	8.00	10.00	15.00	20.00	28.00	35.58	45.29
NC		19.00	22.00	24.00	27.00	30.00	32.00	34.00	38.00
Side Wall	T (horizontal)	4.35	5.80	7.25	8.70	10.51	11.96	12.68	14.49
	Drop	1.65	2.09	2.46	2.78	3.26	3.59	3.80	4.35
Ceiling	T (vertical)	5.29	7.05	8.81	10.57	12.77	14.54	15.42	17.62
	Spread	1.70	2.26	2.83	3.39	4.10	4.66	4.95	5.65

1200 x 200	m/s	1.54	2.32	3.10	3.86	4.63	5.42	6.19	6.96
Q (L/s)		183.77	277.77	369.89	461.54	553.66	647.66	739.31	831.43
Q (cmh)		664.31	1004.11	1337.11	1668.42	2001.42	2341.22	2672.53	3005.53
Q (cfm)		391.00	591.00	787.00	982.00	1178.00	1378.00	1573.00	1769.00
SP(pa)		5.00	8.00	10.00	15.00	20.00	28.00	35.58	45.29
NC		20.00	23.00	25.00	28.00	31.00	33.00	35.00	39.00
Side Wall	T (horizontal)	4.59	6.12	7.65	9.18	11.09	12.62	13.39	15.30
	Drop	1.74	2.20	2.60	2.94	3.44	3.79	4.02	4.59
Ceiling	T (vertical)	5.58	7.44	9.30	11.16	13.49	15.35	16.28	18.60
	Spread	1.79	2.39	2.98	3.58	4.33	4.92	5.22	5.97

Note: for sidewall diffusion of BGA6, take 25% of drop as upward spread of air above grille centreline.

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

Architectural Bar Grilles

MODEL : WBL - BGA19 True Angled Air Pattern

PERFORMANCE DATA

1200 x 50	m/s	1.38	2.08	2.77	3.46	4.15	4.85	5.54	6.23
Q (L/s)		41.36	62.04	82.72	103.40	124.08	144.76	165.44	186.12
Q (cmh)		149.51	224.27	299.02	373.78	448.54	523.29	598.05	672.80
Q (cfm)		88.00	132.00	176.00	220.00	264.00	308.00	352.00	396.00
SP(pa)		8.60	12.20	15.40	20.70	24.50	32.20	43.40	49.20
NC		19.60	22.80	25.60	28.90	33.00	35.20	37.50	42.00
Side Wall	T (horizontal)	1.49	2.38	3.27	4.16	5.05	5.64	6.24	6.54
	Drop	1.15	1.63	1.99	2.39	2.65	2.87	3.08	3.23
Ceiling	T (vertical)	1.78	2.84	3.91	4.97	6.04	6.75	7.46	7.82
	Spread	0.68	1.08	1.49	1.90	2.30	2.57	2.84	2.98

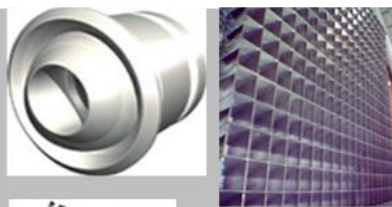
1200 x 100	m/s	1.76	2.61	3.49	4.37	5.25	6.14	6.98	7.87
Q (L/s)		105.28	156.04	208.68	261.32	313.96	366.60	417.36	470.00
Q (cmh)		380.58	564.07	754.36	944.64	1134.93	1325.22	1508.71	1699.00
Q (cfm)		224.00	332.00	444.00	556.00	668.00	780.00	888.00	1000.00
SP(pa)		8.60	12.20	15.40	20.70	24.50	32.20	43.40	49.20
NC		20.20	23.10	25.90	29.20	33.30	35.50	37.70	42.00
Side Wall	T (horizontal)	2.38	3.86	5.05	5.94	7.43	8.32	8.91	10.40
	Drop	1.84	2.65	3.08	3.41	3.90	4.23	4.41	5.14
Ceiling	T (vertical)	2.84	4.62	6.04	7.10	8.88	9.95	10.66	12.43
	Spread	1.08	1.76	2.30	2.71	3.38	3.79	4.06	4.74

1200 x 150	m/s	1.85	2.79	3.71	4.64	5.56	6.50	7.43	8.35
Q (L/s)		165.44	250.04	332.76	415.48	498.20	582.80	665.52	748.24
Q (cmh)		598.05	903.87	1202.89	1501.92	1800.94	2106.76	2405.78	2704.81
Q (cfm)		352.00	532.00	708.00	884.00	1060.00	1240.00	1416.00	1592.00
SP(pa)		8.60	12.20	15.40	20.70	24.50	32.20	43.40	49.20
NC		20.70	23.90	26.70	30.00	34.10	36.40	38.60	43.20
Side Wall	T (horizontal)	3.57	4.75	5.94	7.13	8.62	9.80	10.40	11.88
	Drop	2.75	3.26	3.62	4.09	4.52	4.98	5.14	5.88
Ceiling	T (vertical)	4.26	5.68	7.10	8.53	10.30	11.72	12.43	14.21
	Spread	1.62	2.17	2.71	3.25	3.93	4.47	4.74	5.41

1200 x 200	m/s	1.54	2.32	3.10	3.86	4.63	5.42	6.19	6.96
Q (L/s)		183.77	277.77	369.89	461.54	553.66	647.66	739.31	831.43
Q (cmh)		664.31	1004.11	1337.11	1668.42	2001.42	2341.22	2672.53	3005.53
Q (cfm)		391.00	591.00	787.00	982.00	1178.00	1378.00	1573.00	1769.00
SP(pa)		8.60	12.20	15.40	20.70	24.50	32.20	43.40	49.20
NC		21.70	25.00	27.80	31.10	35.20	37.50	39.80	44.30
Side Wall	T (horizontal)	3.76	5.02	6.27	7.53	9.10	10.35	10.98	12.55
	Drop	2.91	3.44	3.83	4.32	4.78	5.26	5.43	6.20
Ceiling	T (vertical)	4.50	6.00	7.50	9.00	10.88	12.38	13.13	15.00
	Spread	1.72	2.29	2.86	3.43	4.14	4.72	5.00	5.72

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 , 0.5m/s . Pressures in Pascal .
 NC values based on room absorption of 10dB re10 to power 12 watts.
 For return applications, add 4 to NC and multiply 0.8 for negative static pressure.



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WB Air Techniques Pte Ltd

7 Toa Payoh Industrial Park

#01-1245

Singapore 319059

tel : 65 6252-6707

fax : 65 6253-4435

email wbsales@singnet.com.sg

www.wbair.sg

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