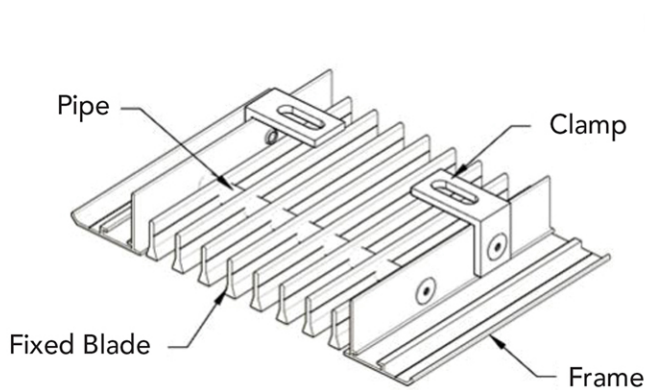


Linear Bar Grill (LBG)

مصنع نظام التبريد للصناعة

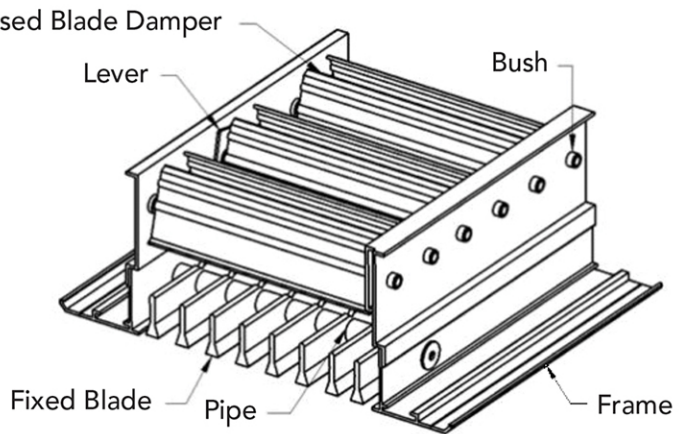


Construction And Dimensional



LINEAR BAR GRILLES RETURN LBGR

Is a linear bar grille composed of a set of fixed horizontal bars in the front face, used as a return grille.



LINEAR BAR GRILLES SUPPLY LBGS

Is a linear bar grille composed of a set of fixed horizontal bars in the front face, with opposed blade damper (OBD) supplied to achieve air flow control, lever operated through the face of the unit., used as a supply grille.

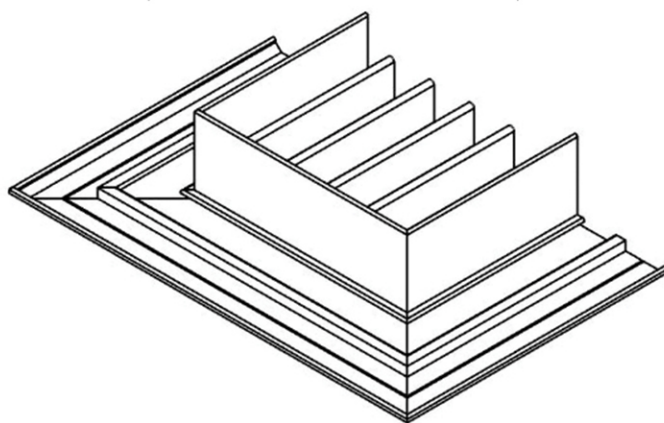
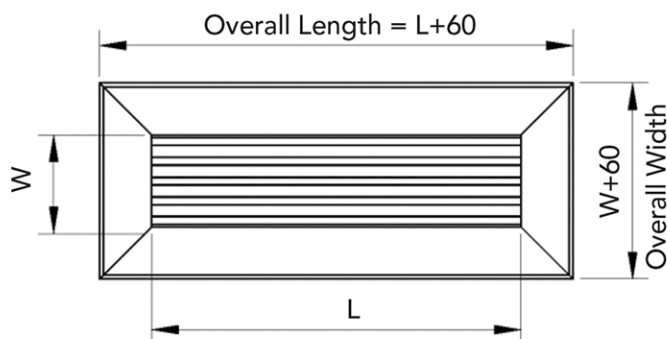
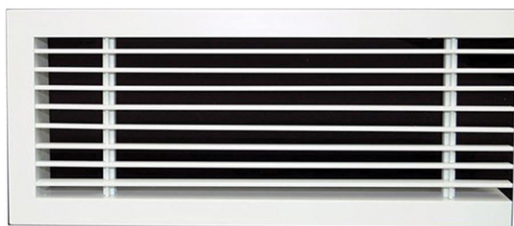
Linear Bar Grill (LBG)

مصنع نظام التبريد للصناعة



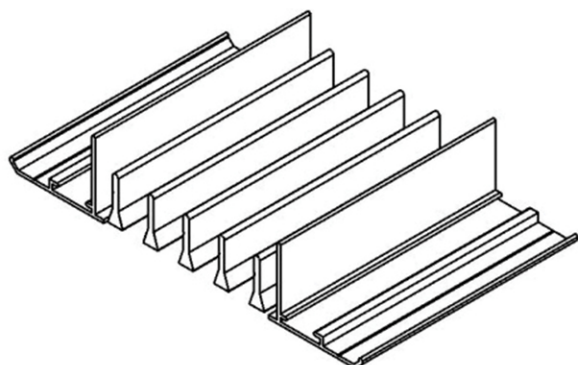
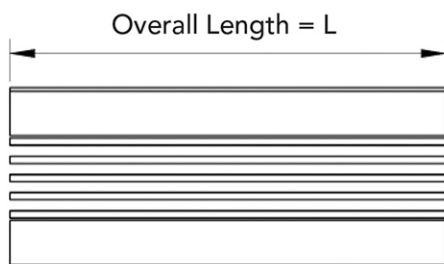
Mitered End Cap (STANDARD)

Option M



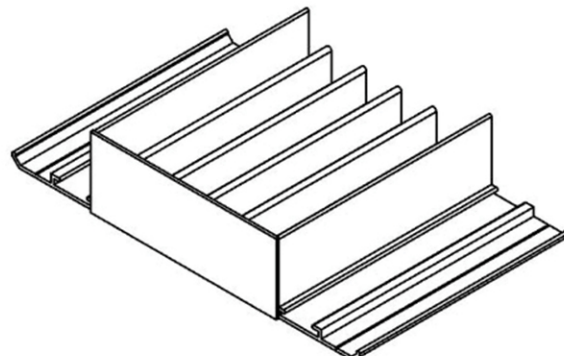
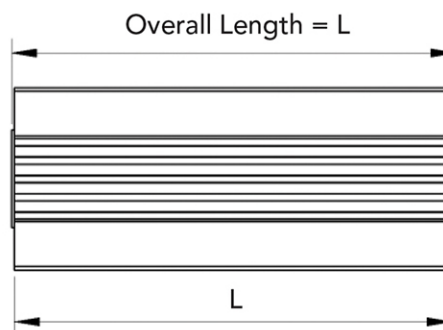
Without End Cap

Option W



Flat End Cap

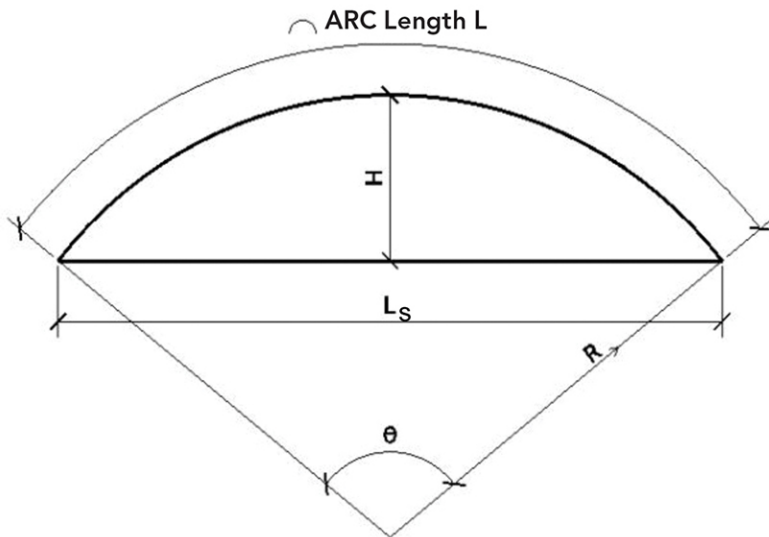
Option C





Dimensional Data - Curves

GRILL SEGMENTS



θ = Angle.

R = Radius.

H = Segment height.

$= R \times (1 - \cos(\theta / 2))$

L_s = Segment Length.

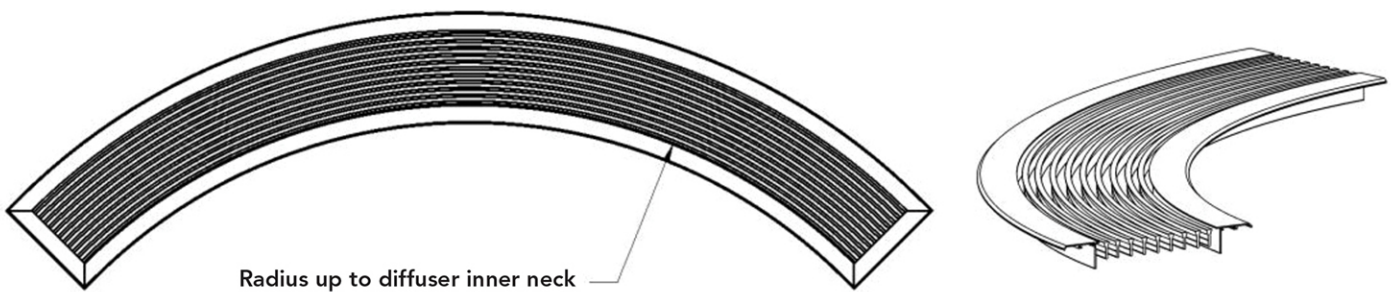
$= 2 \times R \times (\sin(\theta / 2))$

L = Arc length

$= \theta \times (\pi / 180) \times R$

LBG-V

CURVED LINEAR BAR GRILL FOR CEILING



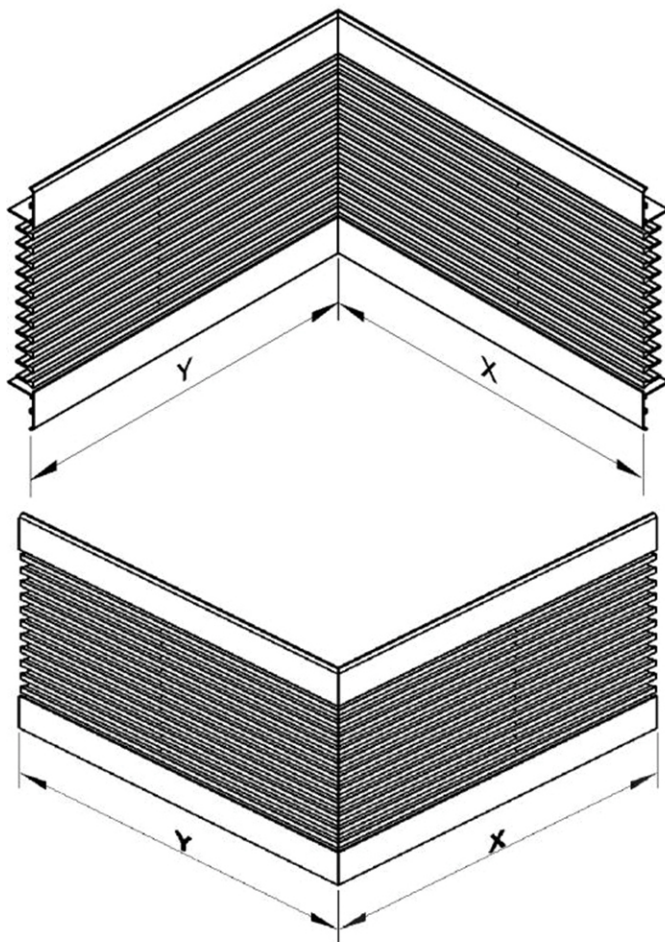
- Minimum radius for any curve or circular 1 meter. Otherwise, consult Rabie representative
- Curved section are supplied without OBD
- Minimum two dimensions are required for curves e.g. L & R . Otherwise, please bring frma (a cut to actual carton)

Linear Bar Grill (LBG)

مصنع نظام التبريد للصناعة

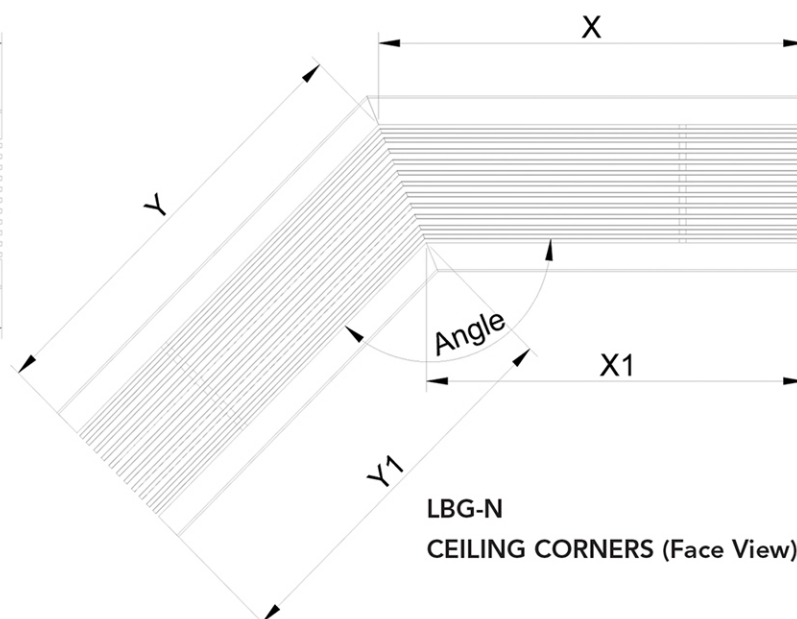
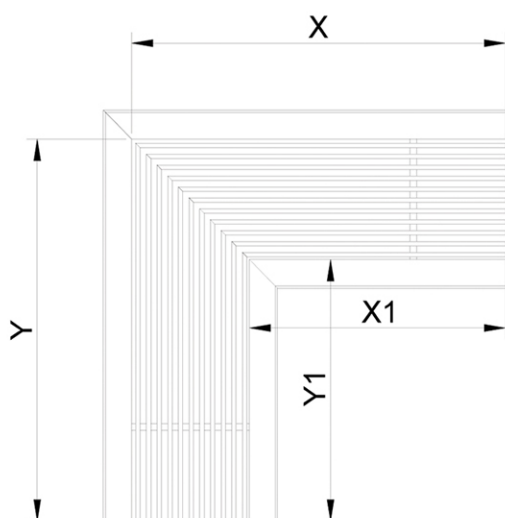


Corner Pieces



LBG-NI
SIDE WALL - INSIDE CORNER

LBG-NO
SIDE WALL - OUTSIDE CORNER



LBG-N
CEILING CORNERS (Face View)

CORNER PIECES

- X & Y = 16" (Minimum) Face to face.
- Available standard angles 90° and 135°.

Linear Bar Grill (LBG)

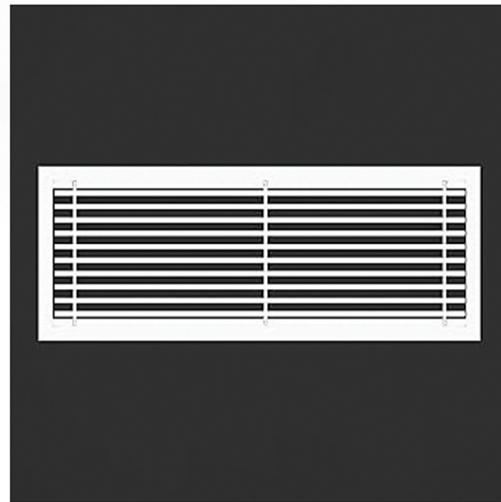
مصنع نظام التبريد للصناعة



Performance Data

Quick Selection Table

Nomimal Width	Cfm/ Foot
2"	00 - 20
3"	30 - 175
4"	50 - 225
5"	70 - 300
6"	90 - 350
8"	110 - 400
10"	130 - 450



Selection Procedure

Determine air volume flow rate per outlet.

Calculate flow rate per foot.

For supply air grille application, establish required throw.

Establish required maximum noise and pressure values.

From the following performance tables select the most suitable width that meets the

required throw (or more) at the calculated flow rate per foot, and meet required (or better)

NC, and pressure values.



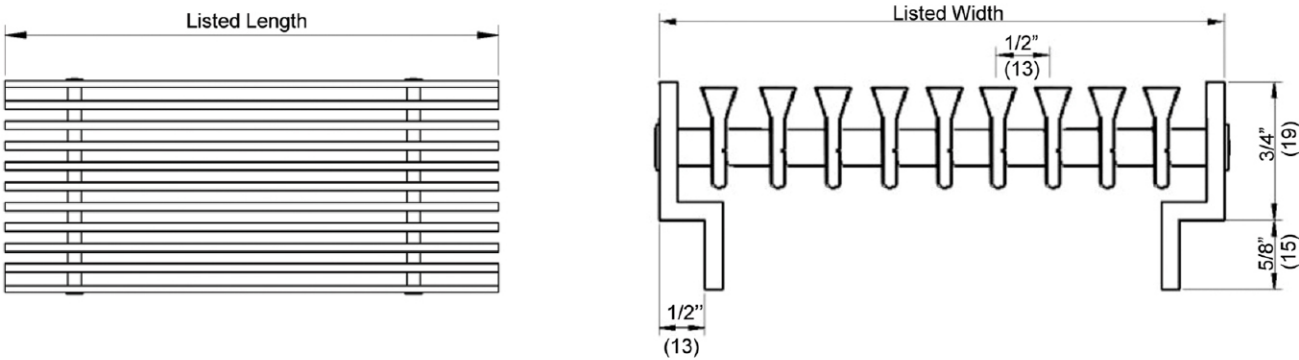
Linear Bar Grill (LBG)

مصنع نظام التبريد للصناعة



Nominal Width Inches	Area Sq. ft. (Effective free area/Lineal foot)	veloci FPM)	400	600	800	1000	1200	1400	1600	1800	2000
		Total Pressure (in W.G)	0.010	0.022	0.040	0.063	0.089	0.121	0.159	0.202	0.250
2	.045	Flow, CFW/Foot	18	27	36	45	54	63	72	81	90
		Throw, Feet	Sill or floor	1-1	4-4	7-7	9-10	11-13	14-16	16-18	17-20
			Sidewall		9-12	11-16	14-20	16-23	19-26	21-28	22-30
		NC					23	28	32	35	38
2 1/2	.066	Flow, CFW/Foot	26	40	53	66	79	92	106	119	132
		Throw, Feet	Sill or floor			12-13	14-16	17-19	20-22	22-23	23-24
			Sidewall		9-12	12-17	16-22	19-25	21-28	25-32	28-36
		NC				20	25	30	34	37	40
3	.088	Flow, CFM/Foot	35	53	70	88	106	123		158	176
		Throw, Feet	Sill or floor	2-2	7-7	10-11	13-15	16-18	19-21	22-24	24-25
			Sidewall	7-10	11-15	14-19	17-23	21-27	24-31	27-34	31-39
		NC				21	26	31	35	38	41
3 1/2	.110	Flow, CFM/Foot	44	66	88	110	132	154	176	198	220
		Throw, Feet	Sill or floor	3-3	8-8	12-12	15-16	19-20	21-22	24-25	26-27
			Sidewall	7-10	12-16	16-20	20-25	23-28	26-32	29-36	32-40
		NC				22	27	32	36	39	42
4	.133	Flow CFW/Foot	53	80	106	133	160	186	213	239	266
		Throw, Feet	Sill or floor		13-13	16-17	20-21	23-24	25-26	28-28	31-31
			Sidewall		13-17	17-21	21-26	25-30	28-34	30-37	35-42
		NC				23	28	33	37	40	43
5	.177	Flow, CFM/Foot	71	106	142	177	212	248	283	318	354
		Throw, Feet	Sill or floor	4-4	10-10	15-15	18-18	22-23	25-25	27-28	30-30
			Sidewall	10-13	14-18	19-23	22-27	27-32	31-37	33-40	37-44
		NC				24	29	34	38	41	44
6		Flow, CFW/Foot	89	133	178	222	266	310	355	400	444
		Throw, Feet	Sill or floor	5-5	10-10	15-15	19-19	23-23	25-25	29-29	31-31
			Sidewall	11-14	16-20	20-24	24-29	29-34	33-39	35-41	40-46
		NC				25	30	35	39	42	45
8	274	Flow, CFM/Foot	110	164	219	274	329	384	438	493	548
		Throw, Feet	Sill or floor		16-16	20-20	24-24	26-26	30-30	32-32	37-37
			Sidewall	12-15	17-21	21-25	25-30	30-35	34-40	41-47	45-51
		NC			20	26	31	36	40	43	46
10	.338	Flow, CFM/Foot	135	203	270	338	406	473	541	608	676
		Throw, Feet	Sill or floor	6-6	11-11	16-16	21-21	25-25	26-26	32-32	33-33
			Sidewall	13-16	19-23	22-26	27-32	32-37	36-42	38-43	43-49
		NC			21	27	32	37	41	44	47

4 mm Thick Aluminum



Floor Linear Bar Grille
LBGF

Blade Types

