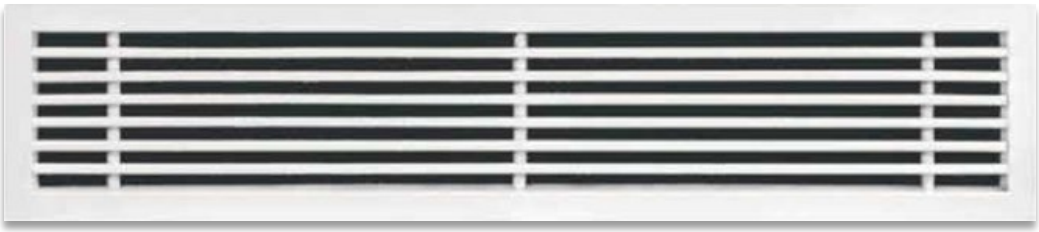
شركة مصنع عالم الناصريه المحدودة

AL NASSERIAH WORLD FACTORY COMPANY LTD

LINEAR BAR GRILLES

ANA Linear Bar Grilles

Is designed for supplying or returning air, commonly used in wall air distribution applications. Basically constructed with horizontally fixed blades at 0° deflection per standard.



ANA LBG Construction

Frame :

Constructed from extruded Aluminum alloy **6063** Profiles, with a thickness of **(1.2 mm)** and a flange width of **(30 mm)**.

Blades :

Constructed from extruded Aluminum alloy **6063** Profiles, fixed horizontally to the frame using mullion bars and arranged with **(11 mm)** distances between each two blades centers and other options are also available upon the request. Blades are available in **0°, 15°** and **30°** deflection.

Dampers:

Can be added if required. Opposed blade damper (OBD) type easily attached to the top side of the grille by locking clips, constructed from extruded Aluminum alloy **6063**.

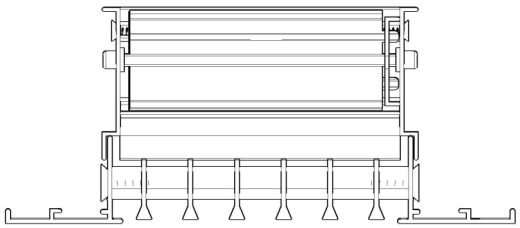
Finish :

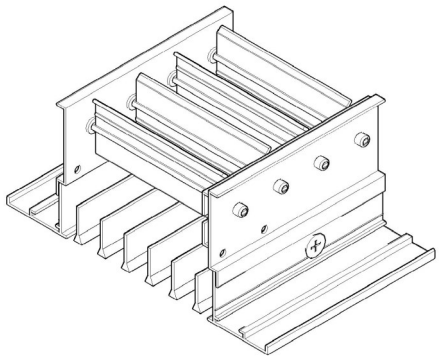
Electrostatic powder coating is used for LBG with standard white color for the Frame and the blades **(RAL 9016)** and black color for the damper **(RAL 9005)**. Other colors are available upon the request from the customer.

ANA Technicians are available to take the actual measurements from site upon the request

ANA Supply Linear Bar Grille

Model :NLBGS - X

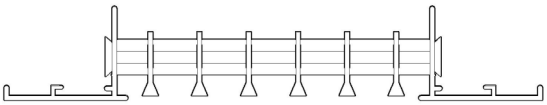


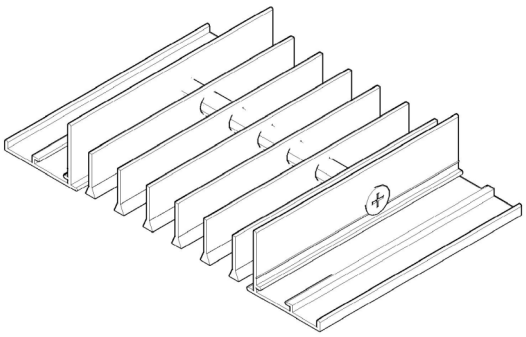


- Horizontally attached blades with **(11mm)** distance between the blades centers can be changed upon customer's request.
- Blades deflection **0°, 15°** and **30°** are available.
- Opposed Blade damper (OBD) is attached to the neck with locking clips and lever operated. Screw operated damper upon request

ANA Return Linear Bar Grille

Model : NLBGR - X



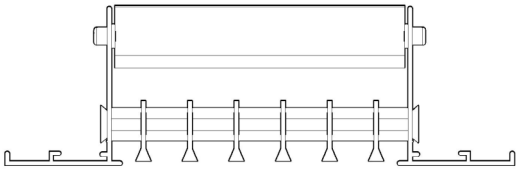


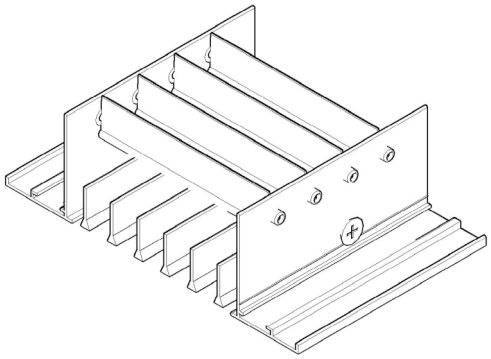
- Horizontally attached blades with **(11mm)** distance between the blades centers can be changed upon customer's request.
- Blades deflection **0°, 15°** and **30°** are available.

*X - 0° or 15° or 30° Blades

ANA Linear Bar With Blades Grille

Model : NLBBG - X

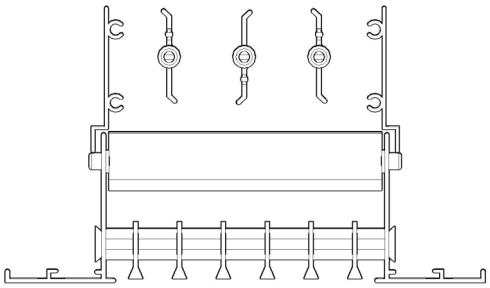


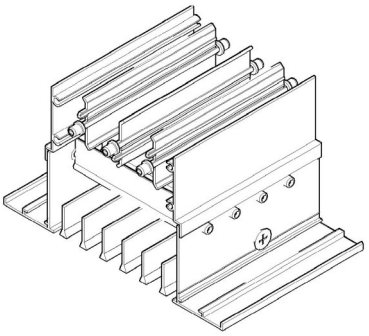


- Horizontally attached blades with **(11mm)** distance between the blades centers can be changed upon customer's request.
- Blades deflection **0°, 15°** and **30°** are available.
- Back side with movable vertical blades.

ANA Linear Bar With Blades Register

Model : NLBBR - X



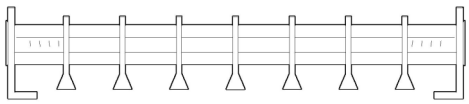


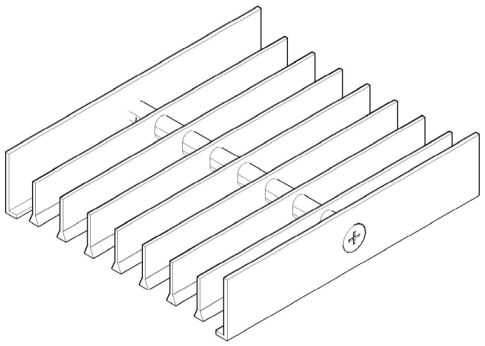
- Horizontally attached blades with **(11mm)** distance between the blades centers can be changed upon customer's request.
- Blades deflection **0°, 15°** and **30°** are available.
- Back side movable vertical blades and an attached screw operated damper (OBD).

*X - 0° or 15° or 30° Blades

ANA Flangeless Linear Bar Grille

Model : NLBGL - X

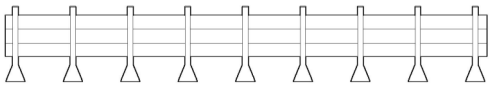


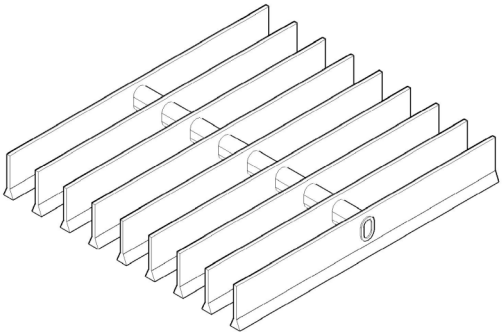


- Horizontally attached blades with **(11mm)** distance between the blades centers can be changed upon customer's request.
- Blades deflection **0°, 15°** and **30°** are available.
- Frame is made without a Flange to provide a unique, architectural appearance.

ANA Frameless Linear Bar Grille (Core Only)

Model : NLBGC - X



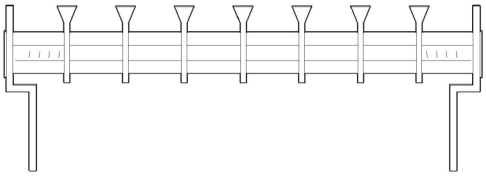


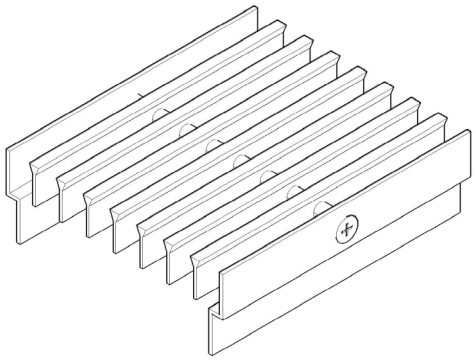
- Horizontally attached blades with **(11mm)** distance between the blades centers can be changed upon customer's request.
- Blades deflection **0°, 15°** and **30°** are available.
- Manufactured without a frame.

*X - 0° or 15° or 30° Blades

ANA Floor Linear Bar Grille

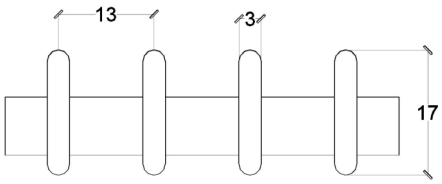
Model : NLBGF - 0°



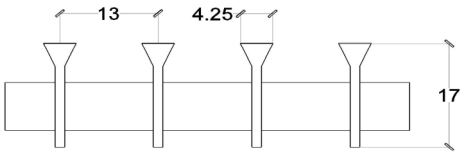


- Horizontally attached blades with **(11mm)** distance between the blades centers can be changed upon customer's request.
- Blades deflection **0°** only is available.
- Manufactured to handle foot traffic in floor applications.

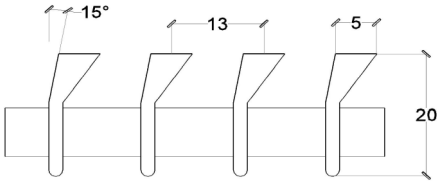
ANA LBG blades deflections



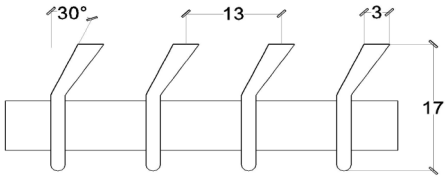
O° DEFLECTION FLAT



O° DEFLECTION T Blade



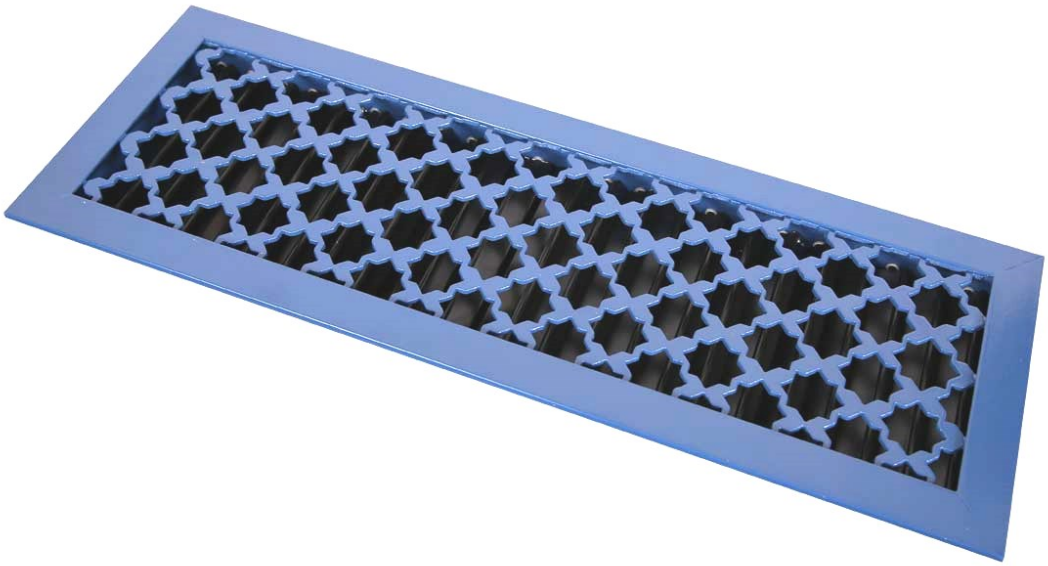
15° DEFLECTION



30° DEFLECTION

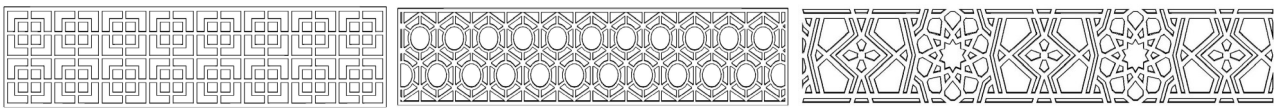
ANA Decorative Grille

Model : NDLG



- Variety of architectural designs of grilles, Frame is Constructed from extruded Aluminum alloy **6063** Profiles, with a thickness of **(1.2 mm),** Decorative face is from **(4 mm)** aluminum alloy sheet **6063** .
- Rear deflection Blades can be added upon request.
- Volume control dampers (OBD) can be added upon request.
- All colors are available upon request

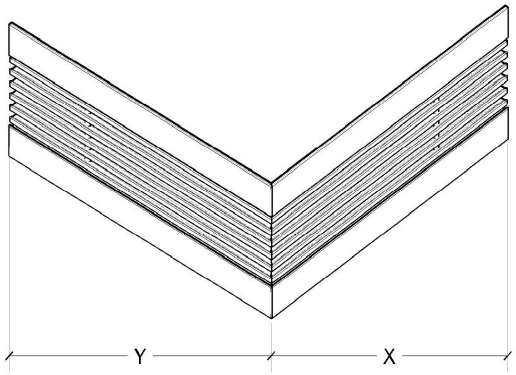
Patterns



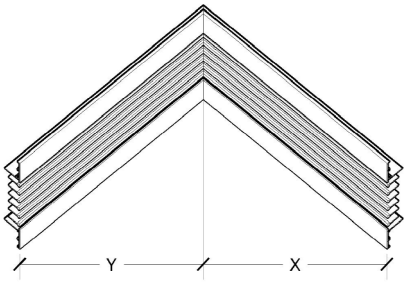
Ordering a decorative air grille :

1. Select the pattern from above with the desired color and other grille's specifications.
2. Other shapes and patterns can be ordered upon request by sending the design.
3. Specify if it is a grille or a register.
4. Select the size.

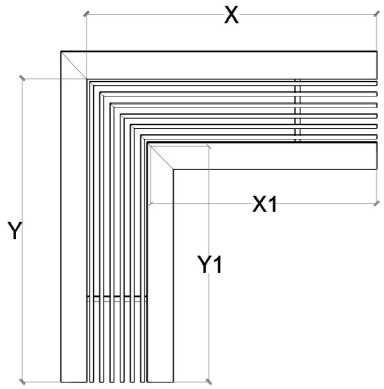
ANA Corner Linear Bar Grille

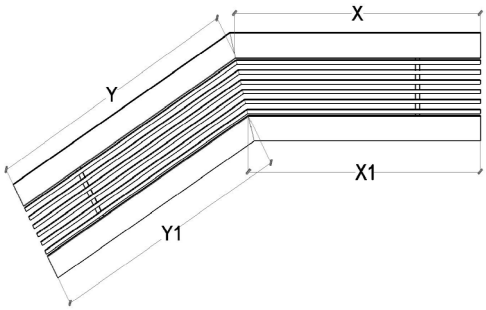


SIDE WALL OUTSIDE



SIDE WALL INSIDE

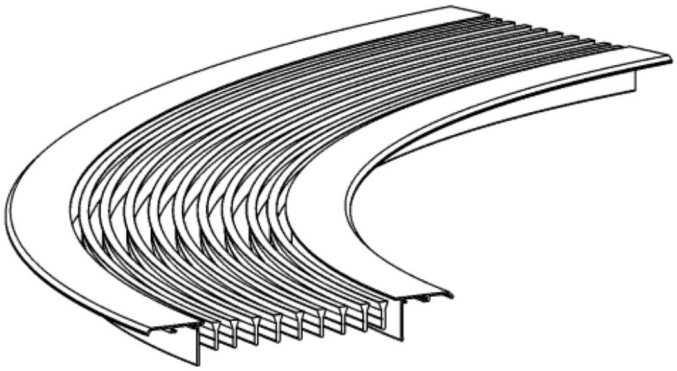




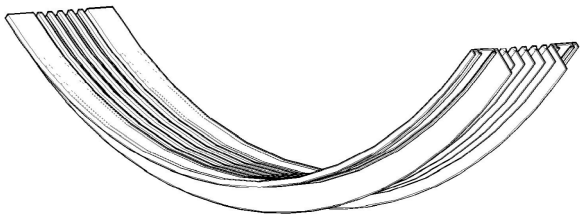
CEILING CORNERS (FACE VIEW)

- Models : Side Wall Inside, Side Wall Outside, Ceiling Corner
- Horizontally attached blades with **(11mm)** distance between the blades centers can be changed upon customer's request.
- Blades deflection **0°, 15°** and **30°** are available.
- Suitable for wall applications outside and inside with mitered corner shaped

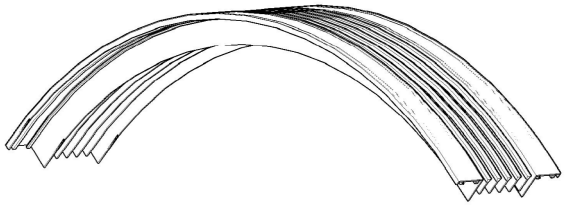
ANA Curve Linear Bar Grille



LINEAR BAR GRILLE CURVE CEILING



LINEAR BAR GRILLE CURVE INSIDE WALL

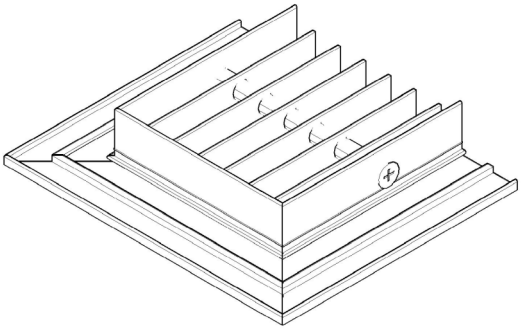


LINEAR BAR GRILLE CURVE OUTSIDE WALL

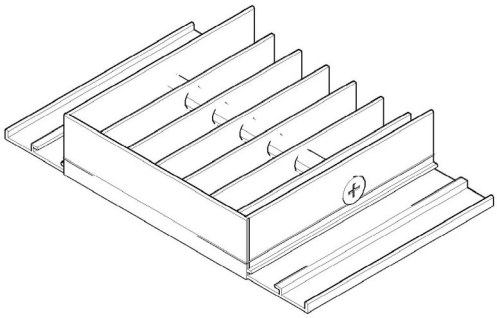
- Horizontally attached blades with **(11mm)** distance between the blades centers can be changed upon customer's request.
- Blades deflection **0°, 15°** and **30°** are available.
- For wall inside or outside curved design applications.

* When ordering curve LBG, please provide us with minimum of two dimensions of either radius of curvature (Specify if it's neck or face radius) , the angle of curvature, segment height, segment length or arc length, and specify if the dimensions are for the inner or outer radius. If not possible please bring a forma (e.g. gypsum or carton cut).
* Back side cutting is available, only provide us with rectangular dimensions.

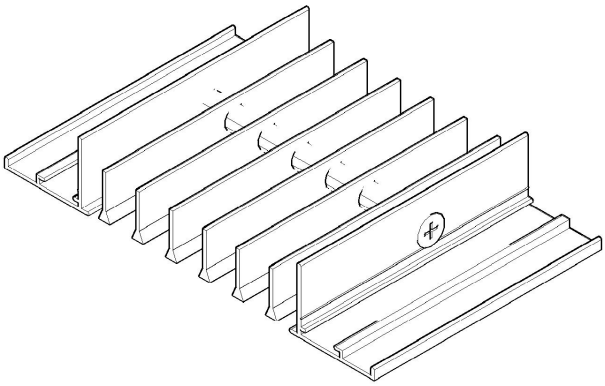
ANA LBG End cap options



MITERED END CAP



FLAT END CAP

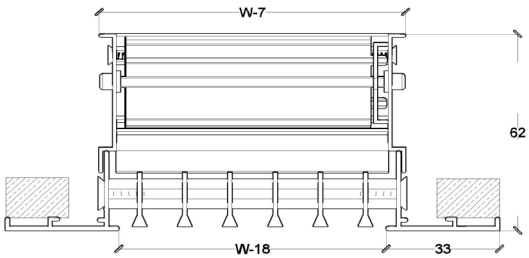


WITHOUT END CAP

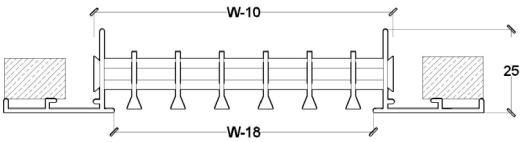
*Standard Endcap - Mitered Endcap
*Face Size - Neck Size + 60mm

ANA LBG Dimensional Data

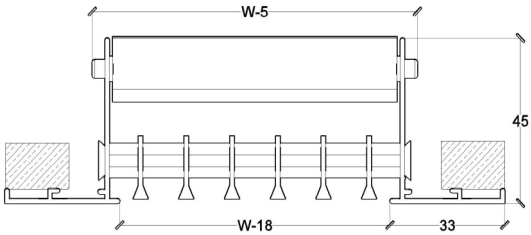
W = Ceiling or Wall Opening width



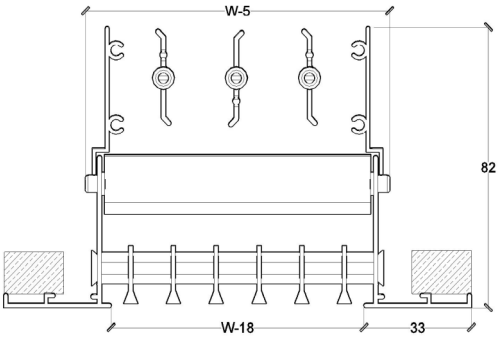
LINEAR BAR GRILLE SUPPLY



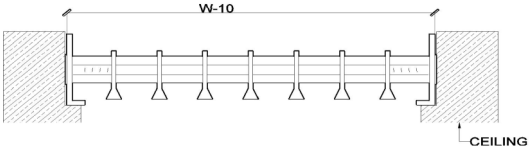
LINEAR BAR GRILLE RETURN



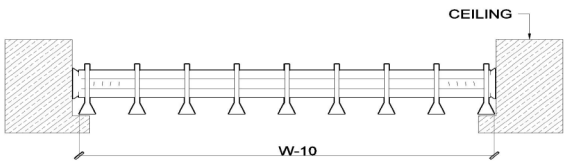
LINEAR BAR BLADE GRILLE (LBBG)



LINEAR BAR BLADE REGISTER (LBBR)



FLANGELESS GRILLE (LBGF)



FRAMELESS GRILLE (LBGC)

ANA LBG Technical Data

Quick Selection Procedure and Table :

For selections please use technical data table or use the quick selection table to determine the suitable LBG size :

1. Calculate the value of the air flow per unit length of the required LBG .
2. Use the Data sheet to determine the suitable width size according to the required throw and NC.
3. Face size = Neck size + **60 mm**

Width (In)	Air flow (CFM)/(ft.)
2	0-20
3	30-180
4	55-230
5	70-305
6	90-350
8	110-395
10	125-450

ANA Supply Linear Bar Grille 0° Deflection Technical Data

NLBGS - 0°

Width (Inches)	Air Flow (CFM)/(ft.)	Velocity (FPM)	Throw (ft.)	Pressure (in.w.g)	NC	Width (Inches)	Air Flow (CFM)/(ft.)	Face Velocity (FPM)	Throw (ft.)	Pressure (in.w.g)	NC
2 A_f = 0.045	18	400	5-7	0.010	<20	5 A_f = 0.177	71	400	10-13	0.010	<20
	27	600	9-12	0.020	<20		106	600	14-18	0.020	<20
	36	800	11-16	0.040	<20		142	800	19-23	0.040	<20
	45	1000	14-20	0.060	<20		177	1000	22-27	0.060	24
	54	1200	16-23	0.090	23		212	1200	27-32	0.090	29
	63	1400	19-26	0.120	28		248	1400	31-37	0.120	34
	72	1600	21-28	0.160	32		283	1600	33-40	0.160	38
	81	1800	22-30	0.200	35		318	1800	37-44	0.200	41
	90	2000	25-33	0.250	38		354	2000	41-48	0.250	44
2.5 A_f = 0.066	26	400	6-9	0.010	<20	6 A_f = 0.222	89	400	11-14	0.010	<20
	40	600	9-12	0.020	<20		133	600	16-20	0.020	<20
	53	800	12-17	0.040	<20		178	800	20-24	0.040	<20
	66	1000	16-22	0.060	<20		222	1000	24-29	0.060	25
	79	1200	19-25	0.090	25		266	1200	29-34	0.090	30
	92	1400	21-28	0.120	30		310	1400	33-39	0.120	35
	106	1600	25-32	0.160	34		355	1600	35-41	0.160	39
	119	1800	28-36	0.200	37		400	1800	40-46	0.200	42
	132	2000	30-39	0.250	40		444	2000	44-50	0.250	45
3 A_f = 0.088	35	400	7-10	0.010	<20	8 A_f = 0.274	110	400	12-15	0.010	<20
	53	600	11-15	0.020	<20		164	600	17-21	0.020	<20
	70	800	14-19	0.040	<20		219	800	21-25	0.040	20
	88	1000	17-23	0.060	21		274	1000	25-30	0.060	26
	106	1200	21-27	0.090	26		329	1200	30-35	0.090	31
	123	1400	24-31	0.120	31		384	1400	34-40	0.120	36
	141	1600	27-34	0.160	35		438	1600	36-42	0.160	40
	158	1800	31-39	0.200	38		493	1800	41-47	0.200	43
	176	2000	34-42	0.250	41		548	2000	45-51	0.250	46
3.5 A_f = 0.110	44	400	7-10	0.010	<20	10 A_f = 0.338	135	400	13-16	0.010	<20
	66	600	12-16	0.020	<20		203	600	19-23	0.020	<20
	88	800	16-20	0.040	<20		270	800	22-26	0.040	21
	110	1000	20-25	0.060	22		338	1000	27-32	0.060	27
	132	1200	23-28	0.090	27		406	1200	32-37	0.090	32
	154	1400	26-32	0.120	32		473	1400	36-42	0.120	37
	176	1600	29-36	0.160	36		541	1600	38	0.160	41
	198	1800	32-40	0.200	39		608	1800	43-49	0.200	44
	220	2000	36-44	0.250	42		676	2000	48-53	0.250	47
4 A_f = 0.133	53	400	8-11	0.010	<20						
	80	600	13-17	0.020	<20						
	106	800	17-21	0.040	<20						
	133	1000	21-26	0.060	23						
	160	1200	25-30	0.090	28						
	186	1400	28-34	0.120	33						
	213	1600	30-37	0.160	37						
	239	1800	35-42	0.200	40						
	266	2000	38-46	0.250	43						

Data Key :

- Air Flow : (CFM)/(ft.)
- Velocity : Feet per Minute (FPM)
- Throw : Feet (ft.)
- Pressure drop : Inch Water Gauge (in.w.g)
- CFM : Cubic Feet per Minute (CFM)
- NC : Noise Criteria at 10db attenuation.
- A_f : Area Factor (Square Feet).

ANA Supply Linear Bar Grille 15° Deflection Technical Data

NLBGS - 15°

Width (Inches)	Air Flow (CFM/ft)	Velocity (FPM)	Throw (ft)	Pressure (In.w.g)	NC	Width (Inches)	Air Flow (CFM/ft)	Face Velocity (FPM)	Throw (ft)	Pressure (in.w.g)	NC
2 A_f = 0.045	22	400	5-7	0.009	<20	5 A_f = 0.177	67	400	10-13	0.009	<20
	34	600	8-12	0.02	<20		101	600	14-18	0.02	<20
	45	800	11-16	0.036	<20		134	800	19-23	0.036	<20
	56	1000	14-20	0.057	25		168	1000	21-26	0.057	24
	67	1200	17-23	0.08	30		202	1200	25-31	0.08	29
	78	1400	18-25	0.109	35		235	1400	29-35	0.109	34
	90	1600	20-27	0.143	39		269	1600	33-38	0.143	38
	101	1800	22-30	0.182	43		302	1800	35-42	0.182	42
	112	2000	26-34	0.225	46		336	2000	39-46	0.225	45
2.5 A_f = 0.066	29	400	6-8	0.009	<20	6 A_f = 0.222	79	400	11-14	0.009	<20
	44	600	9-13	0.02	<20		118	600	16-20	0.02	<20
	58	800	12-17	0.036	<20		158	800	20-24	0.036	<20
	73	1000	16-21	0.057	24		197	1000	24-28	0.057	24
	88	1200	19-25	0.08	29		236	1200	27-32	0.08	29
	102	1400	21-27	0.109	34		276	1400	30-36	0.109	34
	117	1600	24-31	0.143	38		315	1600	33-39	0.143	38
	131	1800	27-35	0.182	42		355	1800	37-43	0.182	42
	146	2000	30-38	0.225	45		394	2000	41-47	0.225	45
3 A_f = 0.088	36	400	6-9	0.009	<20	8 A_f = 0.274	96	400	12-15	0.009	<20
	54	600	10-14	0.02	<20		144	600	18-22	0.02	<20
	72	800	13-18	0.036	<20		192	800	21-25	0.036	<20
	90	1000	17-22	0.057	23		240	1000	27-30	0.057	25
	108	1200	20-26	0.08	28		288	1200	29-33	0.08	30
	126	1400	24-30	0.109	33		336	1400	31-37	0.109	35
	144	1600	26-33	0.143	37		384	1600	34-40	0.143	39
	162	1800	30-37	0.182	41		432	1800	39-44	0.182	43
	180	2000	32-40	0.225	44		480	2000	44-48	0.225	46
3.5 A_f = 0.110	44	400	7-10	0.009	<20	10 A_f = 0.338	118	400	13-16	0.009	<20
	66	600	11-15	0.02	<20		178	600	20-24	0.02	<20
	88	800	16-20	0.036	<20		237	800	21-25	0.036	20
	110	1000	18-23	0.057	23		296	1000	30-32	0.057	26
	132	1200	22-27	0.08	28		355	1200	31-34	0.08	30
	154	1400	25-31	0.109	33		414	1400	32-38	0.109	36
	176	1600	26-35	0.143	37		474	1600	34-40	0.143	40
	198	1800	32-39	0.182	41		533	1800	40-45	0.182	44
	220	2000	34-42	0.225	44		592	2000	45-50	0.225	47
4 A_f = 0.133	51	400	8-11	0.009	<20						
	n	600	12-16	0.02	<20						
	102	800	17-21	0.036	<20						
	128	1000	19-24	0.057	24						
	154	1200	24-29	0.08	29						
	179	1400	27-33	0.109	34						
	205	1600	30-36	0.143	38						
	230	1800	33-40	0.182	42						
	256	2000	37-44	0.225	45						

Data Key :

- Air Flow : (CFM)/(ft.)
- Velocity : Feet per Minute (FPM)
- Throw : Feet (ft.)
- Pressure drop : Inch Water Gauge (in.w.g)
- CFM : Cubic Feet per Minute (CFM)
- NC : Noise Criteria at 10db attenuation.
- A_f : Area Factor (Square Feet).

ANA Supply Linear Bar Grille 30° Deflection Technical Data

NLBGS - 30°

Width (Inches)	Air Flow (CFM/ft)	Velocity (FPM)	Throw (ft)	Pressure (In.w.g)	NC	Width (Inches)	Air Flow (CFM/ft)	Face Velocity (FPM)	Throw (ft)	Pressure (in.w.g)	NC
2 A_f = 0.056	22	400	5-7	0.009	<20	5 A_f = 0.168	67	400	10-13	0.009	<20
	34	600	8-12	0.020	<20		101	600	14-18	0.020	<20
	45	800	11-16	0.036	<20		134	800	19-23	0.036	<20
	56	1000	14-20	0.057	25		168	1000	21-26	0.057	24
	67	1200	17-23	0.080	30		202	1200	25-31	0.080	29
	78	1400	18-25	0.109	35		235	1400	29-35	0.109	34
	90	1600	20-27	0.143	39		269	1600	33-38	0.143	28
	101	1800	22-30	0.182	43		302	1800	35-42	0.182	42
	112	2000	26-34	0.225	46		336	2000	39-46	0.225	45
2.5 A_f = 0.073	29	400	6-8	0.009	<20	6 A_f = 0.197	79	400	11-14	0.009	<20
	44	600	9-13	0.020	<20		118	600	16-20	0.020	<20
	58	800	12-17	0.036	<20		158	800	20-24	0.036	<20
	73	1000	16-21	0.057	24		197	1000	24-28	0.057	24
	88	1200	19-25	0.080	29		236	1200	27-32	0.080	29
	102	1400	21-27	0.109	34		276	1400	30-36	0.109	34
	117	1600	24-31	0.143	38		315	1600	33-39	0.143	38
	131	1800	27-35	0.182	42		355	1800	37-43	0.182	42
	146	2000	30-38	0.225	45		394	2000	41-47	0.225	45
3 A_f = 0.090	36	400	6-9	0.009	<20	8 A_f = 0.240	96	400	12-15	0.009	<20
	54	600	10-14	0.020	<20		144	600	18-22	0.020	<20
	72	800	13-18	0.036	<20		192	800	21-25	0.036	<20
	90	1000	17-22	0.057	23		240	1000	27-30	0.057	25
	108	1200	20-26	0.080	28		288	1200	29-33	0.080	30
	126	1400	24-30	0.109	33		336	1400	31-37	0.109	35
	144	1600	26-33	0.143	37		384	1600	34-40	0.143	39
	162	1800	30-37	0.182	41		432	1800	39-44	0.182	43
	180	2000	32-40	0.225	44		480	2000	44-48	0.225	46
3.5 A_f = 0.110	44	400	7-10	0.009	<20	10 A_f = 0.296	118	400	13-16	0.009	<20
	66	600	11-15	0.020	<20		178	600	20-24	0.020	<20
	88	800	16-20	0.036	<20		237	800	21-25	0.036	20
	110	1000	18-23	0.057	23		296	1000	30-32	0.057	26
	132	1200	22-27	0.080	28		355	1200	31-34	0.080	30
	154	1400	25-31	0.109	33		414	1400	32-38	0.109	36
	176	1600	26-35	0.143	37		474	1600	34-40	0.143	40
	198	1800	32-39	0.182	41		533	1800	40-45	0.182	44
	220	2000	34-42	0.225	44		592	2000	45-50	0.225	47
4 A_f = 0.128	51	400	8-11	0.009	<20						
	n	600	12-16	0.020	<20						
	102	800	17-21	0.036	<20						
	128	1000	19-24	0.057	24						
	154	1200	24-29	0.080	29						
	179	1400	27-33	0.109	34						
	205	1600	30-36	0.143	38						
	230	1800	33-40	0.182	42						
	256	2000	37-44	0.225	45						

Data Key :

- Air Flow : (CFM)/(ft.)
- Velocity : Feet per Minute (FPM)
- Throw : Feet (ft.)
- Pressure drop : Inch Water Gauge (in.w.g)
- CFM : Cubic Feet per Minute (CFM)
- NC : Noise Criteria at 10db attenuation.
- A_f : Area Factor (Square Feet).

ANA Return Linear Bar Grille 0° Deflection Technical Data

NLBGR - 0°

Width (Inches)	Air Flow (CFM/ft)	Velocity (FPM)	Pressure (In.Wg)	NC	Width (Inches)	Air Flow (CFM/ft)	Face Velocity (FPM)	Pressure (in.w.g)	NC
2 Af = 0.045	18	400	0.030	<20	5 Af = 0.177	71	400	0.030	<20
	27	600	0.060	<20		106	600	0.060	<20
	36	800	0.120	<20		142	800	0.120	<20
	45	1000	0.180	<20		177	1000	0.180	23
	54	1200	0.270	22		212	1200	0.270	28
	63	1400	0.360	27		248	1400	0.360	33
	72	1600	0.480	30		283	1600	0.480	37
	81	1800	0.600	33		318	1800	0.600	40
	90	2000	0.750	37		354	2000	0.750	43
2.5 Af = 0.066	26	400	0.030	<20	6 Af = 0.222	89	400	0.030	<20
	40	600	0.060	<20		133	600	0.060	<20
	53	800	0.120	<20		178	800	0.120	<20
	66	1000	0.180	<20		222	1000	0.180	24
	79	1200	0.270	22		266	1200	0.270	29
	92	1400	0.360	29		310	1400	0.360	34
	106	1600	0.480	33		355	1600	0.480	38
	119	1800	0.600	36		400	1800	0.600	41
	132	2000	0.750	39		444	2000	0.750	44
3 Af = 0.088	35	400	0.030	<20	8 Af = 0.274	110	400	0.030	<20
	53	600	0.060	<20		164	600	0.060	<20
	70	800	0.120	<20		219	800	0.120	<20
	88	1000	0.180	20		274	1000	0.180	25
	106	1200	0.270	25		329	1200	0.270	30
	123	1400	0.360	30		384	1400	0.360	35
	141	1600	0.480	33		438	1600	0.480	39
	158	1800	0.600	37		493	1800	0.600	42
	176	2000	0.750	40		548	2000	0.750	45
3.5 Af = 0.110	44	400	0.030	<20	10 Af = 0.338	135	400	0.030	<20
	66	600	0.060	<20		203	600	0.060	<20
	88	800	0.120	<20		270	800	0.120	20
	110	1000	0.180	21		338	1000	0.180	26
	132	1200	0.270	26		406	1200	0.270	31
	154	1400	0.360	31		473	1400	0.360	36
	176	1600	0.480	35		541	1600	0.480	40
	198	1800	0.600	37		608	1800	0.600	43
	220	2000	0.750	41		676	2000	0.750	46
4 Af = 0.133	53	400	0.030	<20					
	80	600	0.060	<20					
	106	800	0.120	<20					
	133	1000	0.180	22					
	160	1200	0.270	27					
	186	1400	0.360	32					
	213	1600	0.480	36					
	239	1800	0.600	39					
	266	2000	0.750	42					

Data Key :

- Air Flow : (CFM)/(ft.)
- Velocity : Feet per Minute (FPM)
- Throw : Feet (ft.)
- Pressure drop : Inch Water Gauge (in.w.g)
- CFM : Cubic Feet per Minute (CFM)
- NC : Noise Criteria at 10db attenuation.
- A_f : Area Factor (Square Feet).

ANA Return Linear Bar Grille 15° Deflection Technical Data

NLBGR - 15°

Width (Inches)	Air Flow (CFM/ft)	Velocity (FPM)	Pressure (in.w.g)	NC	Width (Inches)	Air Flow (CFM/ft)	Face Velocity (FPM)	Pressure (in.wg)	NC
2 Af = 0.056	22	400	0.027	<20	5 Af = 0.168	67	400	0.027	<20
	34	600	0.060	<20		101	600	0.060	<20
	45	800	0.108	<20		134	800	0.108	<20
	56	1000	0.171	24		168	1000	0.171	24
	67	1200	0.240	29		202	1200	0.240	29
	78	1400	0.327	34		235	1400	0.327	34
	90	1600	0.429	38		269	1600	0.429	38
	101	1800	0.546	42		302	1800	0.546	41
	112	2000	0.675	45		336	2000	0.675	44
2.5 Af = 0.073	29	400	0.027	<20	6 Af = 0.197	79	400	0.027	<20
	44	600	0.060	<20		118	600	0.060	<20
	58	800	0.108	<20		158	800	0.108	<20
	73	1000	0.171	23		197	1000	0.171	24
	88	1200	0.240	28		236	1200	0.240	29
	102	1400	0.327	33		276	1400	0.327	34
	117	1600	0.429	37		315	1600	0.429	38
	131	1800	0.546	41		355	1800	0.546	41
	146	2000	0.675	44		394	2000	0.675	44
3 Af = 0.090	36	400	0.027	<20	8 Af = 0.240	96	400	0.027	<20
	54	600	0.060	<20		144	600	0.060	<20
	72	800	0.108	<20		192	800	0.108	<20
	90	1000	0.171	22		240	1000	0.171	24
	108	1200	0.240	27		288	1200	0.240	29
	126	1400	0.327	32		336	1400	0.327	34
	144	1600	0.429	36		384	1600	0.429	38
	162	1800	0.546	40		432	1800	0.546	42
	180	2000	0.675	43		480	2000	0.675	45
3.5 Af = 0.110	44	400	0.027	<20	10 Af = 0.296	118	400	0.027	<20
	66	600	0.060	<20		178	600	0.060	<20
	88	800	0.108	<20		237	800	0.108	20
	110	1000	0.171	22		296	1000	0.171	26
	132	1200	0.240	27		355	1200	0.240	31
	154	1400	0.327	32		414	1400	0.327	36
	176	1600	0.429	36		474	1600	0.429	40
	198	1800	0.546	40		533	1800	0.546	43
	220	2000	0.675	43		592	2000	0.675	46
4 Af = 0.128	51	400	0.027	<20					
	82	600	0.060	<20					
	102	800	0.108	<20					
	128	1000	0.171	23					
	154	1200	0.240	28					
	179	1400	0.327	33					
	205	1600	0.429	37					
	230	1800	0.546	40					
	256	2000	0.675	43					

Data Key :

- Air Flow : (CFM)/(ft.)
- Velocity : Feet per Minute (FPM)
- Throw : Feet (ft.)
- Pressure drop : Inch Water Gauge (in.w.g)
- CFM : Cubic Feet per Minute (CFM)
- NC : Noise Criteria at 10db attenuation.
- A_f : Area Factor (Square Feet).

ANA Return Linear Bar Grille 30° Deflection Technical Data

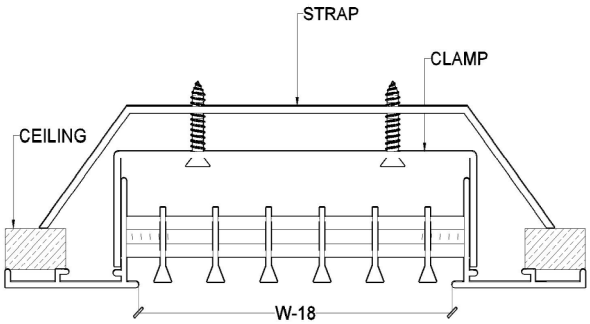
NLBGR - 30°

Width (Inches)	Air Flow (CFM/ft)	Velocity (FPM)	Pressure (in.w.g)	NC	Width (Inches)	Air Flow (CFM/ft)	Face Velocity (FPM)	Pressure (in.wg)	NC
2 Af = 0.056	22	400	0.027	<20	5 Af = 0.168	67	400	0.027	<20
	34	600	0.060	<20		101	600	0.060	<20
	45	800	0.108	<20		134	800	0.108	<20
	56	1000	0.171	24		168	1000	0.171	24
	67	1200	0.240	29		202	1200	0.240	29
	78	1400	0.327	34		235	1400	0.327	34
	90	1600	0.429	38		269	1600	0.429	38
	101	1800	0.546	42		302	1800	0.546	41
	112	2000	0.675	45		336	2000	0.675	44
2.5 Af = 0.073	29	400	0.027	<20	6 Af = 0.197	79	400	0.027	<20
	44	600	0.060	<20		118	600	0.060	<20
	58	800	0.108	<20		158	800	0.108	<20
	73	1000	0.171	23		197	1000	0.171	24
	88	1200	0.240	28		236	1200	0.240	29
	102	1400	0.327	33		276	1400	0.327	34
	117	1600	0.429	37		315	1600	0.429	38
	131	1800	0.546	41		355	1800	0.546	41
	146	2000	0.675	44		394	2000	0.675	44
3 Af = 0.090	36	400	0.027	<20	8 Af = 0.240	96	400	0.027	<20
	54	600	0.060	<20		144	600	0.060	<20
	72	800	0.108	<20		192	800	0.108	<20
	90	1000	0.171	22		240	1000	0.171	24
	108	1200	0.240	27		288	1200	0.240	29
	126	1400	0.327	32		336	1400	0.327	34
	144	1600	0.429	36		384	1600	0.429	38
	162	1800	0.546	40		432	1800	0.546	42
	180	2000	0.675	43		480	2000	0.675	45
3.5 Af = 0.110	44	400	0.027	<20	10 Af = 0.296	118	400	0.027	<20
	66	600	0.060	<20		178	600	0.060	<20
	88	800	0.108	<20		237	800	0.108	20
	110	1000	0.171	22		296	1000	0.171	26
	132	1200	0.240	27		355	1200	0.240	31
	154	1400	0.327	32		414	1400	0.327	36
	176	1600	0.429	36		474	1600	0.429	40
	198	1800	0.546	40		533	1800	0.546	43
	220	2000	0.675	43		592	2000	0.675	46
4 Af = 0.128	51	400	0.027	<20					
	82	600	0.060	<20					
	102	800	0.108	<20					
	128	1000	0.171	23					
	154	1200	0.240	28					
	179	1400	0.327	33					
	205	1600	0.429	37					
	230	1800	0.546	40					
	256	2000	0.675	43					

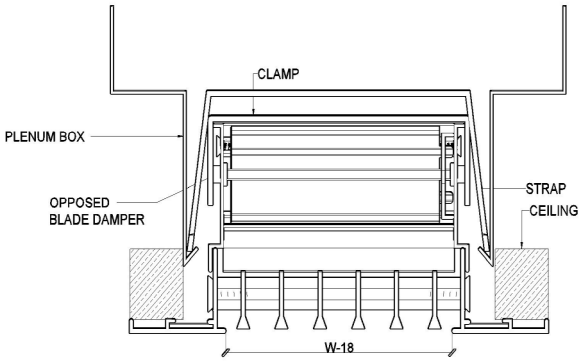
Data Key :

- Air Flow : (CFM)/(ft.)
- Velocity : Feet per Minute (FPM)
- Throw : Feet (ft.)
- Pressure drop : Inch Water Gauge (in.w.g)
- CFM : Cubic Feet per Minute (CFM)
- NC : Noise Criteria at 10db attenuation.
- A_f : Area Factor (Square Feet).

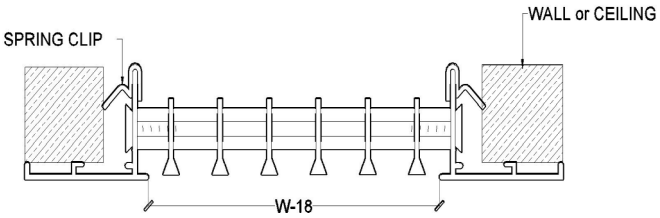
ANA LBG Installation :



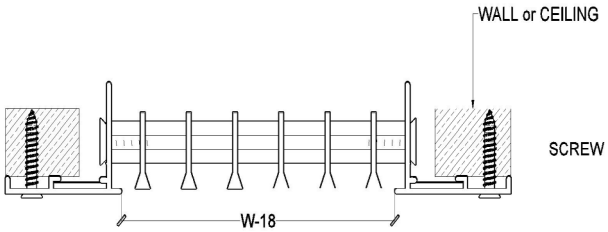
Clamp and Strap



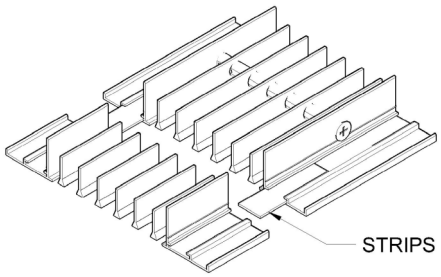
Clamp and Strap with Plenum



Spring Clip



Screw



Alignment Strip

ANA Long LBG Alignment

- Linear Bar Grilles at ANA factory are manufactured in a maximum length of **5** meters per single piece (Powder coated) and 6 meter as Mill Finish .
- For Longer LBGs (more than **5** meters) fixing strips are used to fix each **2** pieces.

NOTES:

NOTES: