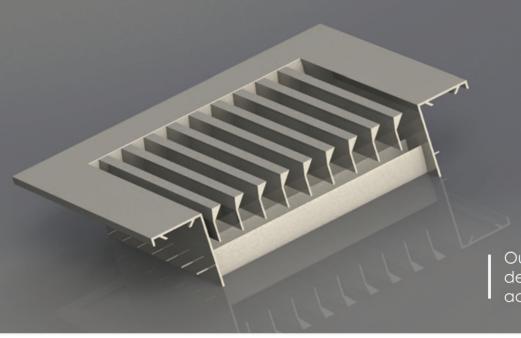




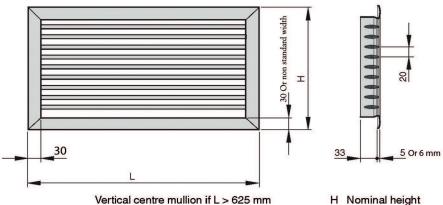
# LINEAR BAR GRILL



Out standing technique for highest demands Unique in comfort, acousrics and design



### Construction



L Nominal length

Vertical centre mullion if L > 625 mm

#### 1- Frame

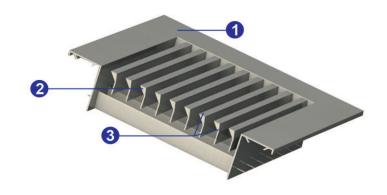
Made from High quality extruded aluminum profile with 30 mm flange width as standard and nonstandard widths are available as option.

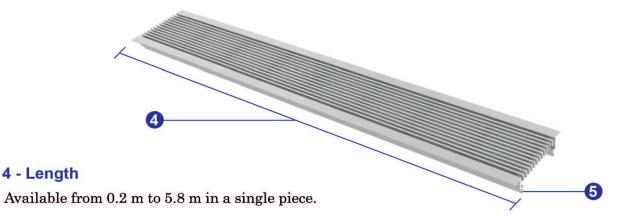
#### 2 - Blades

Made from High quality aluminum profiles 0° and 15° deflection - I way throw and 2 ways Throw.



12 mm as standard. 6 mm as option by 6 mm pipes as standard and 8 mm as option.



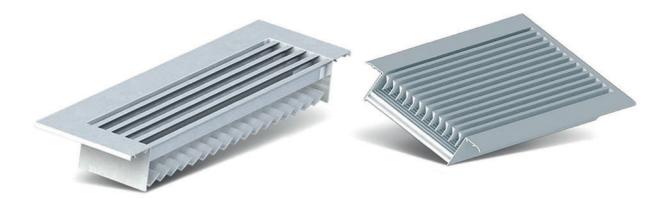


#### 5 - Damper frame and blades

Made from High quality extruded aluminum profiles.



#### Description

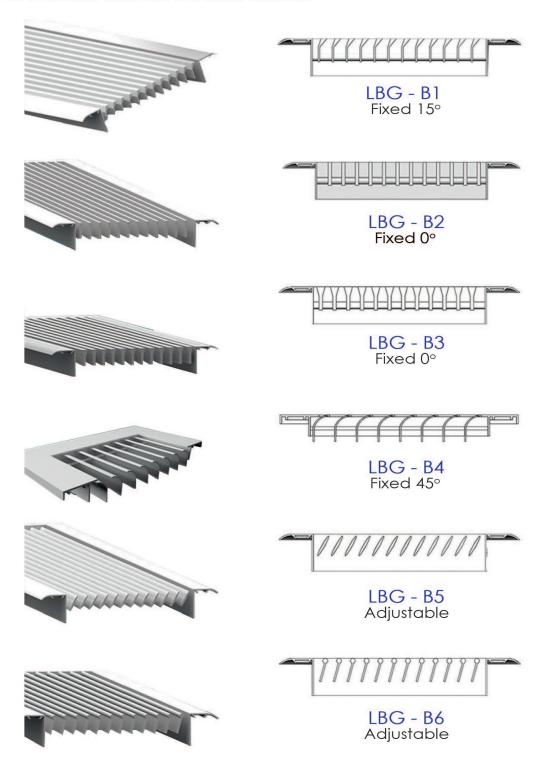


- Frame and Blades mode from of high quality extruded aluminum profiled with Powder coated color finish
- Three Different Frames as Options and six Different blades with different angles as option with flexibility of manufacturing and finish
- Horizontal face bars with 0° and 15° deflection 1 way throw and 2 ways throw Fixed rigidly to the frame with 6 mm pipes
- Supplied single deflection or double deflection and with volume control damper or without volume control damper
- Total structure is manufactured by mechanical assembly, assuring rigidity and to maintain straight line appearance
- Curved linear bar grilles are available from 3 m length with a minimum radius of curvature of 1 m
- Foam gasket is sealed around the back of the frame as option to avoid air leakage
- Supplied with C clamps for concealed fixing as option and another multiple fixing Option are available



### Types Of Blades

Six types of standard and non standard blades.





## Types Of Frames

















### Mitred Corners

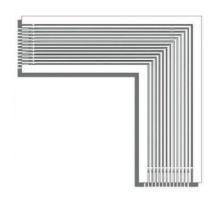
Vertical outside mitered corners with 90° as standard and non standard angles are available.



Vertical inside mitered corners with 90° as standard and non standard angles are available.



Standard 90<sup>o</sup> horizontal mitered corners.



Non standard angle horizontal mitered corners (angle greater than 90° and less than 180°)





## Curved Linear Bar Grills

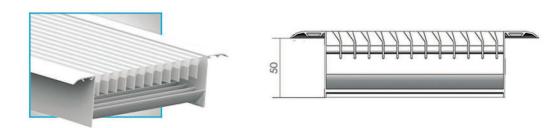




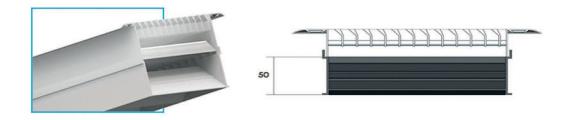
- Curved linear bar grilles are available from 3 m length with a minimum radius of Curvature of 1 m.
- Curved linear bar grilles are available as double deflection.
- Curved linear bar grilles are available with volume control damper.



## Double Deflection & Damber



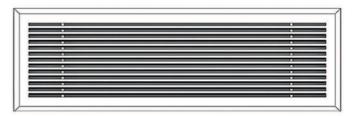
Vertical aluminum blades are fixed at the rear side of the frame by nylon bushings. These blades can be adjustable manually and individually in the vertical plane to obtain optimum air distribution.



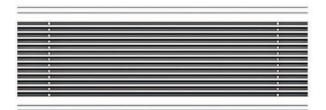
Grilles are fixed rigidly with an opposed blade damper by grippers to ensure positive control the air stream. Damper blades can be screw operated from the face opening of the grill.



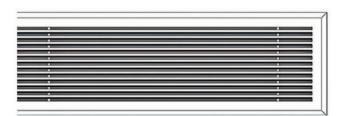
## End Cap



With both side end cap



■ With open ends



■ With one side end cap





#### Technical Data

The new linear bar grill basic ventilation grilles with Their gently sloped border combine function With an attractive design; they can be installed In walls, sills or rectangular ducts.

- Nominal sizes 50 × 2 m 300 × 5 m.
- Minimum Volume flow rate range 165 CFM Or 0.078 m³/sec.
- Energy-efficient and acoustically optimised air discharge.
- Symmetric blade profile for two-way entry
- Uniform look and easy adjustment due to concealed blade linkage.
- Gently sloped border construction, almost completely flush with the installation surface.
- Linear look, ideal for continuous horizontal runs.
- Use of existing rear assemblies.
- Easy replacement of existing grilles due to standard installation dimensions.
   Optional equipment and accessories.
- Installation sub frame.
- Attachments for volume flow rate balancing and air direction control.
- Concealed screw fixing.
- Spring clip fixing.



- Ventilation grille of Type X-GRILLE Basic as supply air or extract air variant for comfort zones and industrial zones.
- Attractive design element for building owners and architects with demanding aesthetic requirements.
- Directed supply air discharge for mixed flow ventilation.
- Blades are adjustable to meet different local requirements.
- For variable and constant volume flows.
- For supply air to room air temperature differences from -12 to +4 K.
- For installation in walls, sills and rectangular Ducts.

#### Fixing:

- Concealed screw fixing.
- Spring clip fixing.
  only with installation sub frame.

#### Accessories:

 Installation sub frame: for the fast and simple installation of ventilation grilles.

#### Standards and guidelines:

 Sound power level of the air-regenerated noise measured according to EN ISO 5135.

#### Technical data:

Nominal sizes	50 × 2m to 300 × 5 m
Horizontal run section	H: 50 ,100, 150 , 200300 mm
Minimum volume flow rate	165 CFM Or 0.078 m³/sec
Supply air to room air temperature difference	-12 to +4 K



### Supply Linear Bar Grill

15° deflection – 2 way – 12 mm spacing.

Width in mm	Face Velocity in m/sec	2	2.5	3	3.5	4	4.5	5
50	Cfm	165	207	248	290	330	373	413
	M³/sec.	.078	.098	.117	.137	.156	.176	.195
	Ps in mm H <sub>2</sub> (	.15	.21	.21	.25	.32	.4	.51
	Throw in m	2.7-4.0-5.5	3.4-4.3-6.0	4.0-4.9-6.7	4.3-5.2-7.3	4.6-5.5-7.6	4.9-5.8-8.2	4.9-6.0-8.5
	NC	<15	<15	<15	16	22	25	30
100	Cfm	250	313	375	438	500	563	625
	M³/sec.	.118	.148	.177	.207	.236	.266	.295
	Ps in mm H <sub>2</sub> (	.15	.21	.21	.3	.39	.51	.61
	Throw in m	3.4-4.6-7.0	4.0-5.2-7.6	4.6-5.8-8	5.2-6.0-8.5	5.5-6.7-9.1	5.8-7.3-10	6-7.6-10.7
	NC	<15	<15	<15	17	22	27	31
150	Cfm	330	413	495	578	660	743	825
	M³/sec.	.156	.195	.234	.273	.312	.351	.39
	Ps in mm H <sub>2</sub> (	.15	.21	.25	.36	.46	.58	.71
	Throw in m	4.0-5.5-8.0	4.6-6.0-8.8	5.2-6.7-9.5	5.8-7.3-10	6.4-8-10.7	6.7-8.5-11.6	7-8.8-12.2
	NC	<15	<15	<15	17	23	28	32
200	Cfm	410	515	616	718	821	925	1027
	M³/sec.	.194	.243	.291	.339	.388	.437	.485
	Ps in mm H <sub>2</sub> (	.2	.23	.31	.39	.53	.66	.91
	Throw in m	4.5-6.1-8.8	5.2-6.7-9.8	6.0-7.6-10.7	6.7-8.0-11.3	7.3-8.8-11.9	7.6-9.5-12.8	8.0-9.8-13.7
	NC	<15	<15	16	21	26	31	35
250	Cfm	491	614	736	860	982	1105	1228
	M³/sec.	.232	.29	.348	.406	.464	.522	.58
	Ps in mm H <sub>2</sub> (	.2	.25	.33	.43	.58	.76	.94
	Throw in m	4.9-6.7-9.8	5.5-7.6-10.7	6.4-8.2-11.3	7.3-8.8-12.2	8.0-9.5-13.1	8.2-10-14	8.5-10.7-15
	NC	<15	<15	20	25	31	34	37
300	Cfm	576	720	864	1008	1152	1295	1440
	M³/sec.	.272	.34	.408	.476	.544	.612	.68
	Ps in mm H <sub>2</sub> C	.2	.31	.36	.47	.64	.85	1.02
	Throw in m	5.2-7.3-10.7	6.1-8.2-11.6	7-9.1-12.2	7.9-9.8-13.1	8.5-10.4-14	8.8-11-15	9.1-11.6-16.2
	NC	<15	18	24	28	32	35	40

- Face velocity is measured in m/sec.
- Data based on one meter unit length of the grill with damper in full open position.
- Throw (meters) is measured for a terminal velocities of 0.25, 0.5 & 0.75 m/sec.
- Ps: static pressure loss is in mm of H<sub>2</sub>O.
- NC based on a room attenuation of 10 db.



### How To Order

