



**Linear Floor Grilles  
LFG**

**DESCRIPTION:**

The GMCAIR LFG is a premium quality linear floor grille, designed for raised floor applications and ideal for perimeter ventilation. Extruded aluminum bars provide crisp styling and exceptional strength.

**MATERIAL:**

Extruded Aluminum Frame and Blades.

Optional; Wooden blades production in desired thickness and color

**APPLICATION :**

Floor grille type is suitable for the supply of cooled and heated air with a slight temperature difference or collecting of return air

The grille can be mounted on a wall, floor or window cill. a wide range of frames or core are available.

**FINISHING :**

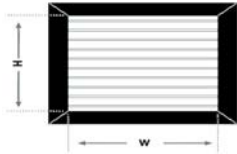
- Standard finishing is natural anodized. Electrostatic powder coating is optional..

**INSTALLATION :**

- If the grille is framed with screws is standard.
- System with clips and plate spring is used if no hole is requested on the frame.

**ACCESSORIES:**

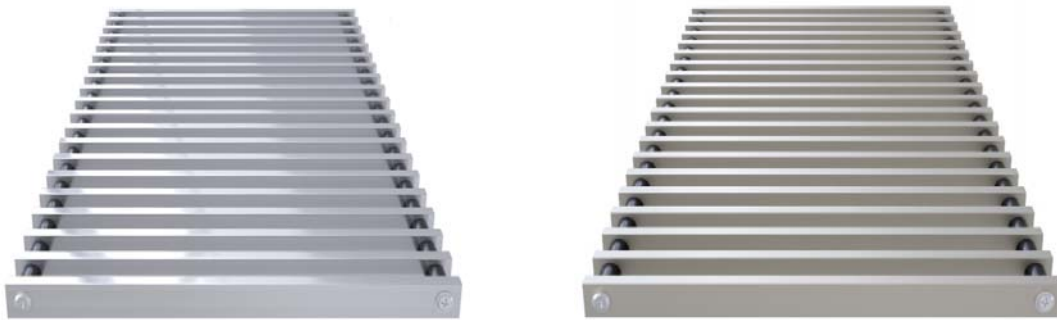
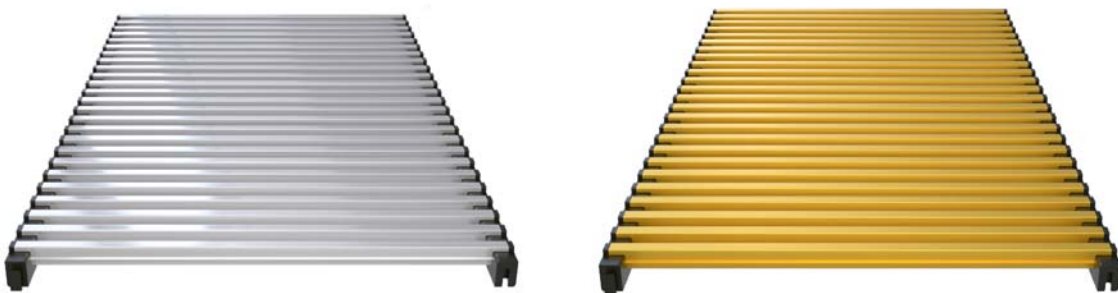
- If desired, it is possible to add a damper to adjust the amount of air to be collected.  
PKD: Parallel Blade Damper  
ZKD: Opposite Blade Damper
- PK: Plenum Box
- KK: Subframe
- EU2, EU3, EU4, EU5 type synthetic filter on back of grille

**STANDARD SIZES (mm) :**

W : 250-300-350-400-450-500-550-600-650-700-750-800-900-1000-1100-1200-1300-1400-1500

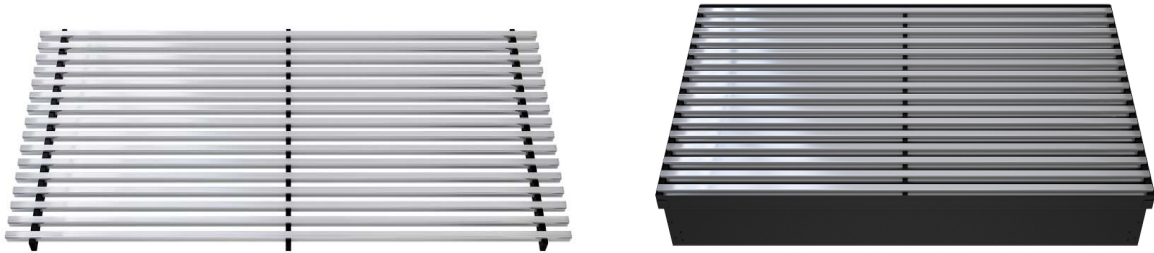
H : 50-75-100-125-150-175-200-225-250-300-400-500-600

\* Any combination of these sizes

**FLOOR GRILLE TYPES:****Type 1 - Aluminum, without Frame, Roll-up Floor Grilles****Type 2 - Aluminum, Modular, without Frame, Floor Grille**



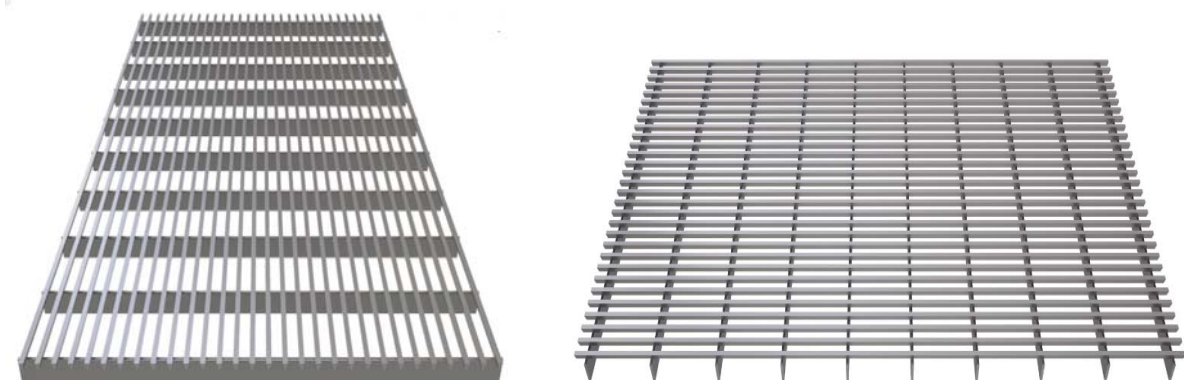
**Type 3 - Aluminum Fixed Blade, Without Frame, Floor Linear Grille**



**Type 4 - Aluminum Fixed Blade, With Frame, Floor Linear Grille**



**Type 5 - Stainless Steel Fixed Blade, Floor Linear Grille**

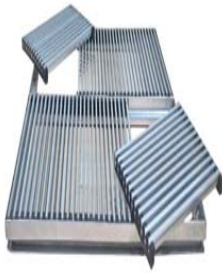




**Type 6 - Wooden, without frame, Roll-up Floor Grilles**



**Type 7 - Raised Floor Modular Aluminum Grille**

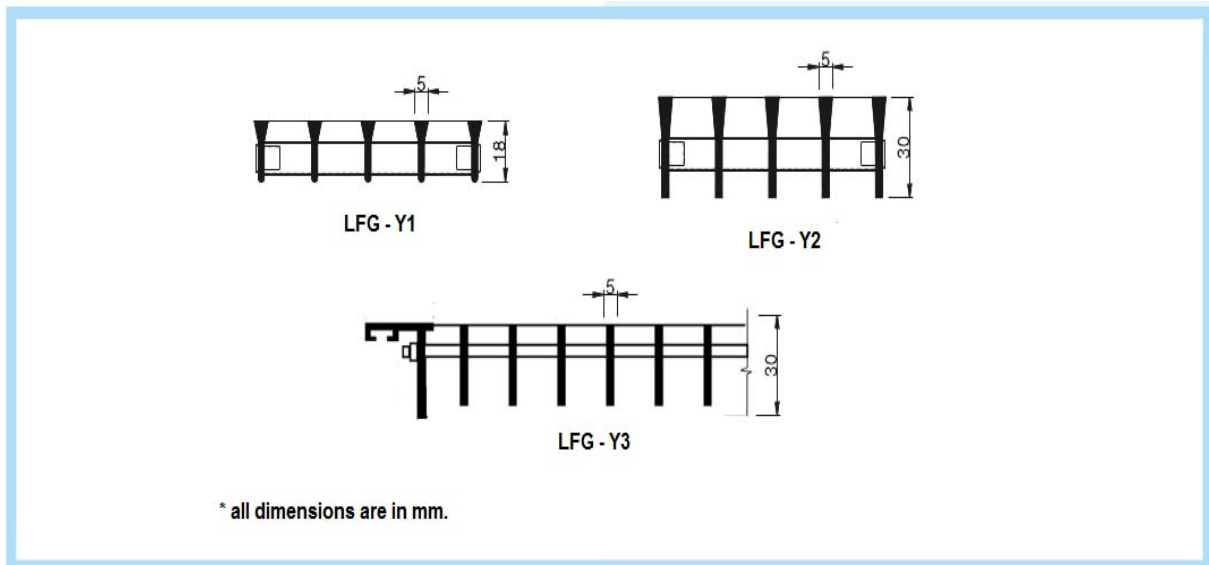


**Type 8 - Raised Floor, Fixed Blade, Aluminum Grille**

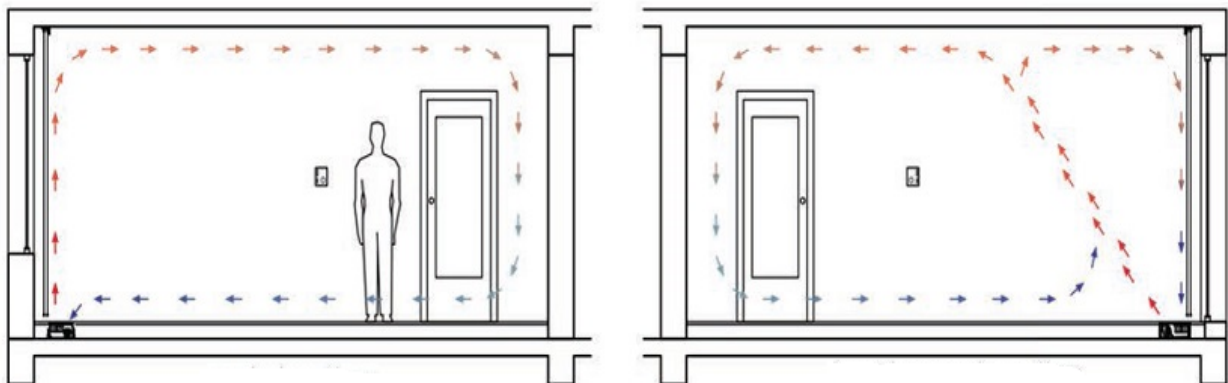




## BLADE TYPE



## GENERAL AIR FLOW OF THE FLOOR GRILLE





## SELECTION TABLE

Neck Size WxH mm x mm	Effective Area m <sup>2</sup>	AIR VELOCITY m/s															
		1,5 m/s		2,0 m/s		2,5 m/s		3,0 m/s		4,0 m/s		5,0 m/s		6,0 m/s		7,0 m/s	
200x75	0,010	54,00	m <sup>3</sup> /h	72,00	m <sup>3</sup> /h	90,00	m <sup>3</sup> /h	108,00	m <sup>3</sup> /h	144,00	m <sup>3</sup> /h	180,00	m <sup>3</sup> /h	216,00	m <sup>3</sup> /h	252,00	m <sup>3</sup> /h
250x75	0,013	70,20	m <sup>3</sup> /h	93,60	m <sup>3</sup> /h	117,00	m <sup>3</sup> /h	140,40	m <sup>3</sup> /h	187,20	m <sup>3</sup> /h	234,00	m <sup>3</sup> /h	280,80	m <sup>3</sup> /h	327,60	m <sup>3</sup> /h
300x75	0,015	81,00	m <sup>3</sup> /h	108,00	m <sup>3</sup> /h	135,00	m <sup>3</sup> /h	162,00	m <sup>3</sup> /h	216,00	m <sup>3</sup> /h	270,00	m <sup>3</sup> /h	324,00	m <sup>3</sup> /h	378,00	m <sup>3</sup> /h
400x75	0,020	108,00	m <sup>3</sup> /h	144,00	m <sup>3</sup> /h	180,00	m <sup>3</sup> /h	216,00	m <sup>3</sup> /h	288,00	m <sup>3</sup> /h	360,00	m <sup>3</sup> /h	432,00	m <sup>3</sup> /h	504,00	m <sup>3</sup> /h
450x75	0,023	124,20	m <sup>3</sup> /h	165,60	m <sup>3</sup> /h	207,00	m <sup>3</sup> /h	248,40	m <sup>3</sup> /h	331,20	m <sup>3</sup> /h	414,00	m <sup>3</sup> /h	496,80	m <sup>3</sup> /h	579,60	m <sup>3</sup> /h
500x75	0,025	135,00	m <sup>3</sup> /h	180,00	m <sup>3</sup> /h	225,00	m <sup>3</sup> /h	270,00	m <sup>3</sup> /h	360,00	m <sup>3</sup> /h	450,00	m <sup>3</sup> /h	540,00	m <sup>3</sup> /h	630,00	m <sup>3</sup> /h
600x75	0,030	162,00	m <sup>3</sup> /h	216,00	m <sup>3</sup> /h	270,00	m <sup>3</sup> /h	324,00	m <sup>3</sup> /h	432,00	m <sup>3</sup> /h	540,00	m <sup>3</sup> /h	648,00	m <sup>3</sup> /h	756,00	m <sup>3</sup> /h
700x75	0,035	189,00	m <sup>3</sup> /h	252,00	m <sup>3</sup> /h	315,00	m <sup>3</sup> /h	378,00	m <sup>3</sup> /h	504,00	m <sup>3</sup> /h	630,00	m <sup>3</sup> /h	756,00	m <sup>3</sup> /h	882,00	m <sup>3</sup> /h
800x75	0,040	216,00	m <sup>3</sup> /h	288,00	m <sup>3</sup> /h	360,00	m <sup>3</sup> /h	432,00	m <sup>3</sup> /h	576,00	m <sup>3</sup> /h	720,00	m <sup>3</sup> /h	864,00	m <sup>3</sup> /h	1008,00	m <sup>3</sup> /h
1000x75	0,050	270,00	m <sup>3</sup> /h	360,00	m <sup>3</sup> /h	450,00	m <sup>3</sup> /h	540,00	m <sup>3</sup> /h	720,00	m <sup>3</sup> /h	900,00	m <sup>3</sup> /h	1080,00	m <sup>3</sup> /h	1260,00	m <sup>3</sup> /h
200x100	0,013	70,20	m <sup>3</sup> /h	93,60	m <sup>3</sup> /h	117,00	m <sup>3</sup> /h	140,40	m <sup>3</sup> /h	187,20	m <sup>3</sup> /h	234,00	m <sup>3</sup> /h	280,80	m <sup>3</sup> /h	327,60	m <sup>3</sup> /h
250x100	0,017	91,80	m <sup>3</sup> /h	122,40	m <sup>3</sup> /h	153,00	m <sup>3</sup> /h	183,60	m <sup>3</sup> /h	244,80	m <sup>3</sup> /h	306,00	m <sup>3</sup> /h	367,20	m <sup>3</sup> /h	428,40	m <sup>3</sup> /h
300x100	0,020	108,00	m <sup>3</sup> /h	144,00	m <sup>3</sup> /h	180,00	m <sup>3</sup> /h	216,00	m <sup>3</sup> /h	288,00	m <sup>3</sup> /h	360,00	m <sup>3</sup> /h	432,00	m <sup>3</sup> /h	504,00	m <sup>3</sup> /h
400x100	0,027	145,80	m <sup>3</sup> /h	194,40	m <sup>3</sup> /h	243,00	m <sup>3</sup> /h	291,60	m <sup>3</sup> /h	388,80	m <sup>3</sup> /h	486,00	m <sup>3</sup> /h	583,20	m <sup>3</sup> /h	680,40	m <sup>3</sup> /h
450x100	0,030	162,00	m <sup>3</sup> /h	216,00	m <sup>3</sup> /h	270,00	m <sup>3</sup> /h	324,00	m <sup>3</sup> /h	432,00	m <sup>3</sup> /h	540,00	m <sup>3</sup> /h	648,00	m <sup>3</sup> /h	756,00	m <sup>3</sup> /h
500x100	0,033	178,20	m <sup>3</sup> /h	237,60	m <sup>3</sup> /h	297,00	m <sup>3</sup> /h	356,40	m <sup>3</sup> /h	475,20	m <sup>3</sup> /h	594,00	m <sup>3</sup> /h	712,80	m <sup>3</sup> /h	831,60	m <sup>3</sup> /h
600x100	0,040	216,00	m <sup>3</sup> /h	288,00	m <sup>3</sup> /h	360,00	m <sup>3</sup> /h	432,00	m <sup>3</sup> /h	576,00	m <sup>3</sup> /h	720,00	m <sup>3</sup> /h	864,00	m <sup>3</sup> /h	1008,00	m <sup>3</sup> /h
700x100	0,047	253,80	m <sup>3</sup> /h	338,40	m <sup>3</sup> /h	423,00	m <sup>3</sup> /h	507,60	m <sup>3</sup> /h	676,80	m <sup>3</sup> /h	846,00	m <sup>3</sup> /h	1015,20	m <sup>3</sup> /h	1184,40	m <sup>3</sup> /h
800x100	0,053	286,20	m <sup>3</sup> /h	381,60	m <sup>3</sup> /h	477,00	m <sup>3</sup> /h	572,40	m <sup>3</sup> /h	763,20	m <sup>3</sup> /h	954,00	m <sup>3</sup> /h	1144,80	m <sup>3</sup> /h	1335,60	m <sup>3</sup> /h
1000x100	0,067	361,80	m <sup>3</sup> /h	482,40	m <sup>3</sup> /h	603,00	m <sup>3</sup> /h	723,60	m <sup>3</sup> /h	964,80	m <sup>3</sup> /h	1206,00	m <sup>3</sup> /h	1447,20	m <sup>3</sup> /h	1688,40	m <sup>3</sup> /h
200x150	0,020	108,00	m <sup>3</sup> /h	144,00	m <sup>3</sup> /h	180,00	m <sup>3</sup> /h	216,00	m <sup>3</sup> /h	288,00	m <sup>3</sup> /h	360,00	m <sup>3</sup> /h	432,00	m <sup>3</sup> /h	504,00	m <sup>3</sup> /h
250x150	0,025	135,00	m <sup>3</sup> /h	180,00	m <sup>3</sup> /h	225,00	m <sup>3</sup> /h	270,00	m <sup>3</sup> /h	360,00	m <sup>3</sup> /h	450,00	m <sup>3</sup> /h	540,00	m <sup>3</sup> /h	630,00	m <sup>3</sup> /h
300x150	0,030	162,00	m <sup>3</sup> /h	216,00	m <sup>3</sup> /h	270,00	m <sup>3</sup> /h	324,00	m <sup>3</sup> /h	432,00	m <sup>3</sup> /h	540,00	m <sup>3</sup> /h	648,00	m <sup>3</sup> /h	756,00	m <sup>3</sup> /h
400x150	0,040	216,00	m <sup>3</sup> /h	288,00	m <sup>3</sup> /h	360,00	m <sup>3</sup> /h	432,00	m <sup>3</sup> /h	576,00	m <sup>3</sup> /h	720,00	m <sup>3</sup> /h	864,00	m <sup>3</sup> /h	1008,00	m <sup>3</sup> /h
450x150	0,045	243,00	m <sup>3</sup> /h	324,00	m <sup>3</sup> /h	405,00	m <sup>3</sup> /h	486,00	m <sup>3</sup> /h	648,00	m <sup>3</sup> /h	810,00	m <sup>3</sup> /h	972,00	m <sup>3</sup> /h	1134,00	m <sup>3</sup> /h
500x150	0,050	270,00	m <sup>3</sup> /h	360,00	m <sup>3</sup> /h	450,00	m <sup>3</sup> /h	540,00	m <sup>3</sup> /h	720,00	m <sup>3</sup> /h	900,00	m <sup>3</sup> /h	1080,00	m <sup>3</sup> /h	1260,00	m <sup>3</sup> /h
600x150	0,060	324,00	m <sup>3</sup> /h	432,00	m <sup>3</sup> /h	540,00	m <sup>3</sup> /h	648,00	m <sup>3</sup> /h	864,00	m <sup>3</sup> /h	1080,00	m <sup>3</sup> /h	1296,00	m <sup>3</sup> /h	1512,00	m <sup>3</sup> /h
700x150	0,070	378,00	m <sup>3</sup> /h	504,00	m <sup>3</sup> /h	630,00	m <sup>3</sup> /h	756,00	m <sup>3</sup> /h	1008,00	m <sup>3</sup> /h	1260,00	m <sup>3</sup> /h	1512,00	m <sup>3</sup> /h	1764,00	m <sup>3</sup> /h
800x150	0,080	432,00	m <sup>3</sup> /h	576,00	m <sup>3</sup> /h	720,00	m <sup>3</sup> /h	864,00	m <sup>3</sup> /h	1152,00	m <sup>3</sup> /h	1440,00	m <sup>3</sup> /h	1728,00	m <sup>3</sup> /h	2016,00	m <sup>3</sup> /h
1000x150	0,100	540,00	m <sup>3</sup> /h	720,00	m <sup>3</sup> /h	900,00	m <sup>3</sup> /h	1080,00	m <sup>3</sup> /h	1440,00	m <sup>3</sup> /h	1800,00	m <sup>3</sup> /h	2160,00	m <sup>3</sup> /h	2520,00	m <sup>3</sup> /h
200x200	0,027	145,80	m <sup>3</sup> /h	194,40	m <sup>3</sup> /h	243,00	m <sup>3</sup> /h	291,60	m <sup>3</sup> /h	388,80	m <sup>3</sup> /h	486,00	m <sup>3</sup> /h	583,20	m <sup>3</sup> /h	680,40	m <sup>3</sup> /h
250x200	0,033	178,20	m <sup>3</sup> /h	237,60	m <sup>3</sup> /h	297,00	m <sup>3</sup> /h	356,40	m <sup>3</sup> /h	475,20	m <sup>3</sup> /h	594,00	m <sup>3</sup> /h	712,80	m <sup>3</sup> /h	831,60	m <sup>3</sup> /h
300x200	0,040	216,00	m <sup>3</sup> /h	288,00	m <sup>3</sup> /h	360,00	m <sup>3</sup> /h	432,00	m <sup>3</sup> /h	576,00	m <sup>3</sup> /h	720,00	m <sup>3</sup> /h	864,00	m <sup>3</sup> /h	1008,00	m <sup>3</sup> /h
400x200	0,053	286,20	m <sup>3</sup> /h	381,60	m <sup>3</sup> /h	477,00	m <sup>3</sup> /h	572,40	m <sup>3</sup> /h	763,20	m <sup>3</sup> /h	954,00	m <sup>3</sup> /h	1144,80	m <sup>3</sup> /h	1335,60	m <sup>3</sup> /h
450x200	0,060	324,00	m <sup>3</sup> /h	432,00	m <sup>3</sup> /h	540,00	m <sup>3</sup> /h	648,00	m <sup>3</sup> /h	864,00	m <sup>3</sup> /h	1080,00	m <sup>3</sup> /h	1296,00	m <sup>3</sup> /h	1512,00	m <sup>3</sup> /h
500x200	0,067	361,80	m <sup>3</sup> /h	482,40	m <sup>3</sup> /h	603,00	m <sup>3</sup> /h	723,60	m <sup>3</sup> /h	964,80	m <sup>3</sup> /h	1206,00	m <sup>3</sup> /h	1447,20	m <sup>3</sup> /h	1688,40	m <sup>3</sup> /h
600x200	0,080	432,00	m <sup>3</sup> /h	576,00	m <sup>3</sup> /h	720,00	m <sup>3</sup> /h	864,00	m <sup>3</sup> /h	1152,00	m <sup>3</sup> /h	1440,00	m <sup>3</sup> /h	1728,00	m <sup>3</sup> /h	2016,00	m <sup>3</sup> /h
700x200	0,093	502,20	m <sup>3</sup> /h	669,60	m <sup>3</sup> /h	837,00	m <sup>3</sup> /h	1004,40	m <sup>3</sup> /h	1339,20	m <sup>3</sup> /h	1674,00	m <sup>3</sup> /h	2008,80	m <sup>3</sup> /h	2343,60	m <sup>3</sup> /h
800x200	0,107	577,80	m <sup>3</sup> /h	770,40	m <sup>3</sup> /h	963,00	m <sup>3</sup> /h	1155,60	m <sup>3</sup> /h	1540,80	m <sup>3</sup> /h	1926,00	m <sup>3</sup> /h	2311,20	m <sup>3</sup> /h	2696,40	m <sup>3</sup> /h
1000x200	0,133	718,20	m <sup>3</sup> /h	957,60	m <sup>3</sup> /h	1197,00	m <sup>3</sup> /h	1436,40	m <sup>3</sup> /h	1915,20	m <sup>3</sup> /h	2394,00	m <sup>3</sup> /h	2872,80	m <sup>3</sup> /h	3351,60	m <sup>3</sup> /h
1000x250	0,167	901,80	m <sup>3</sup> /h	1202,40	m <sup>3</sup> /h	1503,00	m <sup>3</sup> /h	1803,60	m <sup>3</sup> /h	2404,80	m <sup>3</sup> /h	3006,00	m <sup>3</sup> /h	3607,20	m <sup>3</sup> /h	4208,40	m <sup>3</sup> /h
1000x300	0,200	1080,00	m <sup>3</sup> /h	1440,00	m <sup>3</sup> /h	1800,00	m <sup>3</sup> /h	2160,00	m <sup>3</sup> /h	2880,00	m <sup>3</sup> /h	3600,00	m <sup>3</sup> /h	4320,00	m <sup>3</sup> /h	5040,00	m <sup>3</sup> /h
1000x400	0,267	1441,80	m <sup>3</sup> /h	1922,40	m <sup>3</sup> /h	2403,00	m <sup>3</sup> /h	2883,60	m <sup>3</sup> /h	3844,80	m <sup>3</sup> /h	4806,00	m <sup>3</sup> /h	5767,20	m <sup>3</sup> /h	6728,40	m <sup>3</sup> /h

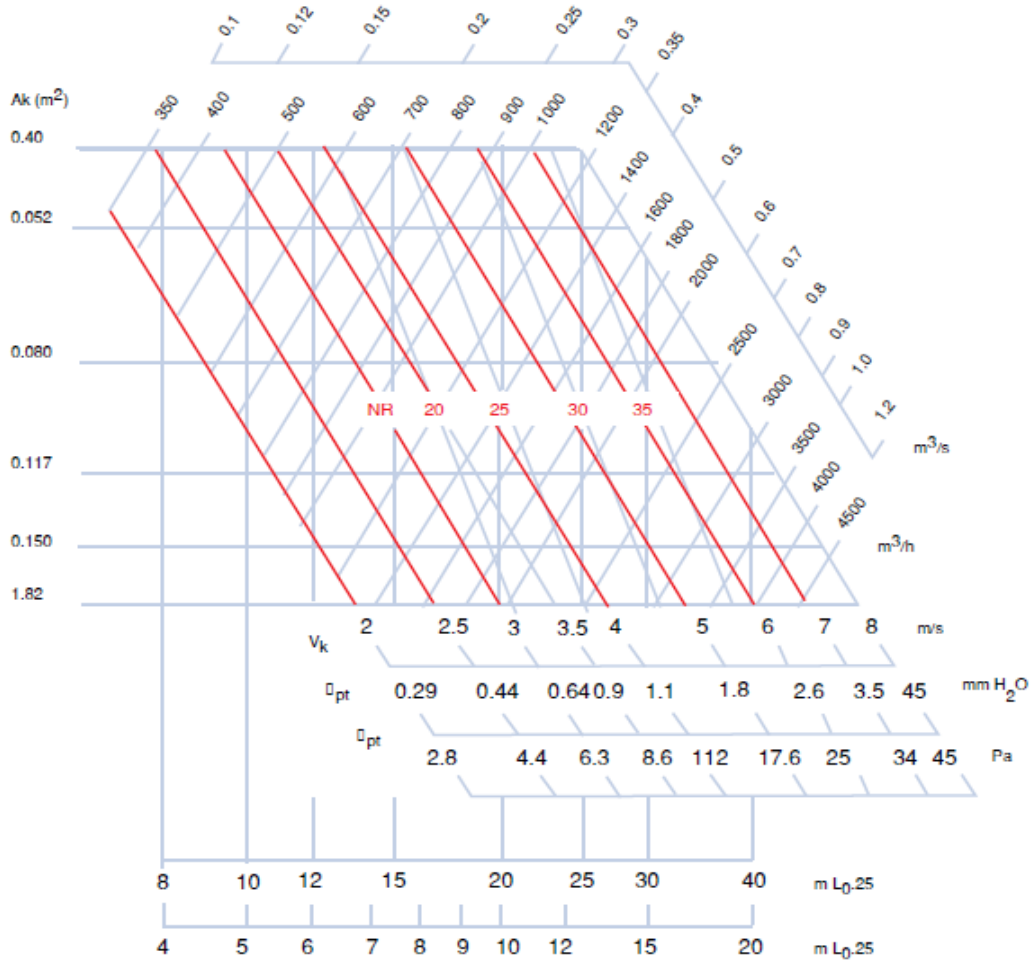


Effective Area Ak(m2)

H / W	200	250	300	400	450	500	600	700	800	1000	1200	1500
75	0,010	0,013	0,015	0,020	0,023	0,025	0,030	0,035	0,040	0,050	0,060	0,075
100	0,013	0,017	0,020	0,027	0,030	0,033	0,040	0,047	0,053	0,067	0,080	0,100
150	0,020	0,025	0,030	0,040	0,045	0,050	0,060	0,070	0,080	0,100	0,120	0,150
200	0,027	0,033	0,040	0,053	0,060	0,067	0,080	0,093	0,107	0,133	0,160	0,200
250	0,033	0,042	0,050	0,067	0,075	0,083	0,100	0,117	0,133	0,167	0,200	0,250
300	0,040	0,050	0,060	0,080	0,090	0,100	0,120	0,140	0,160	0,200	0,240	0,300
400	0,053	0,067	0,080	0,107	0,120	0,133	0,160	0,187	0,213	0,267	0,320	0,400
450	0,060	0,075	0,090	0,120	0,135	0,150	0,180	0,210	0,240	0,300	0,360	0,450
500	0,067	0,083	0,100	0,133	0,150	0,167	0,200	0,233	0,267	0,333	0,400	0,500
600	0,080	0,100	0,120	0,160	0,180	0,200	0,240	0,280	0,320	0,400	0,480	0,600

Table-1

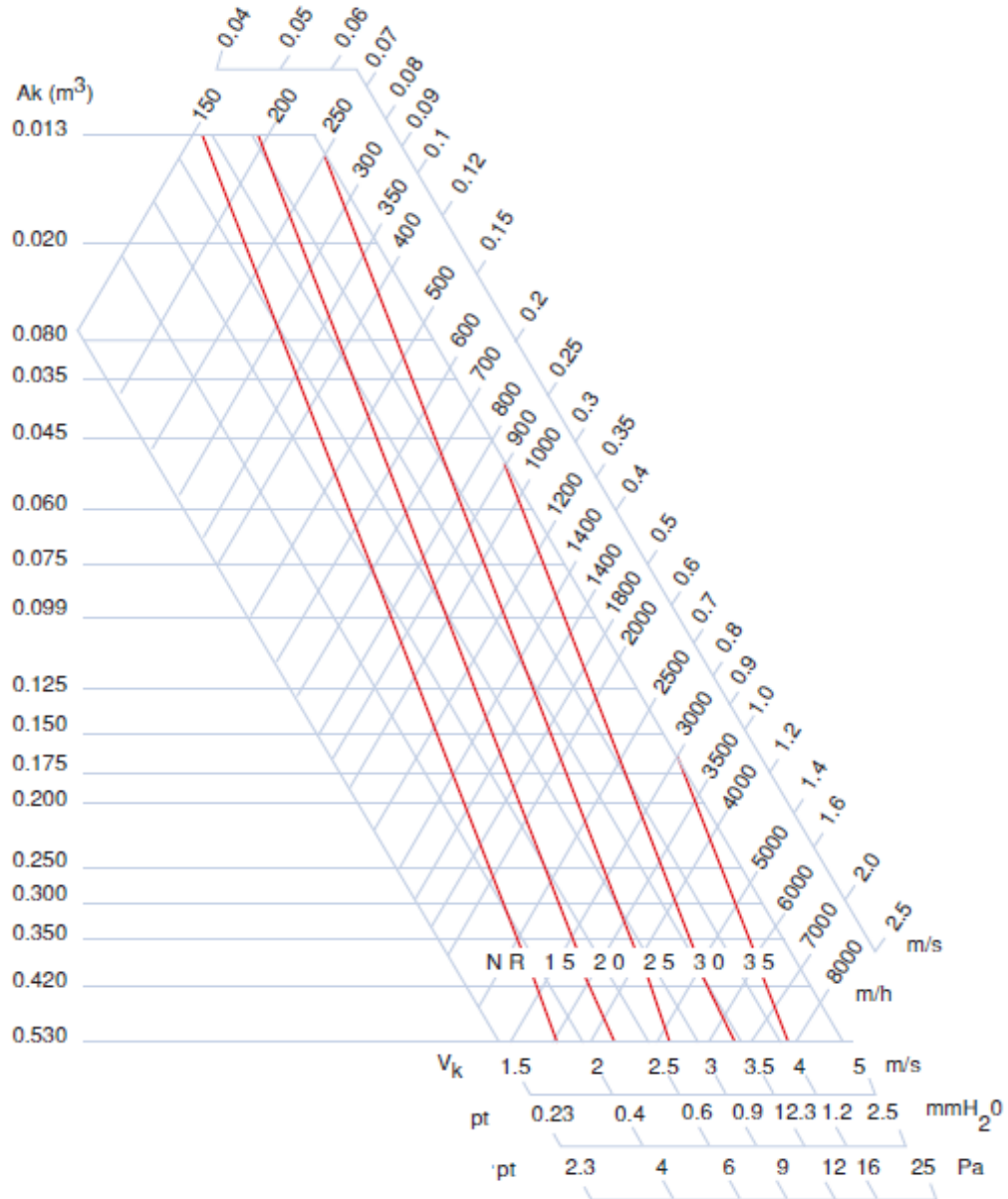
SUPPLY - SELECTION DIAGRAM







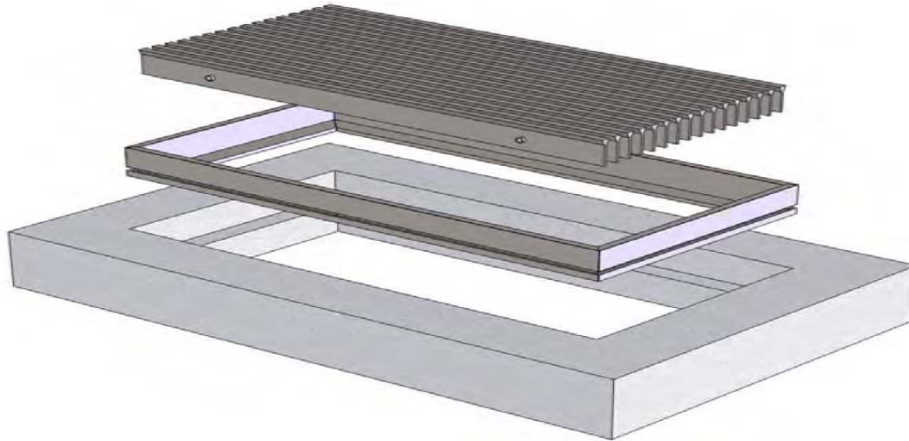
RETURN SELECTION DIAGRAM



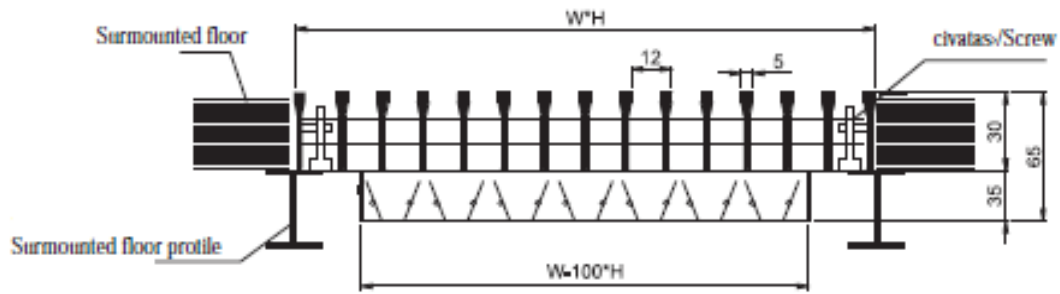


**MOUNTING DETAILS**

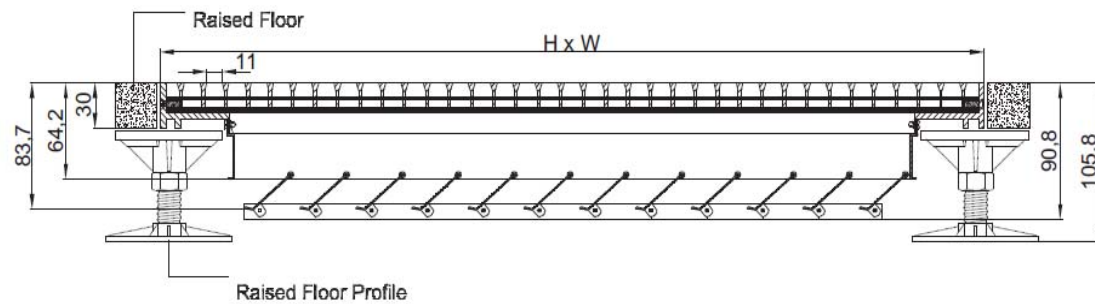
**1 - Subframe Mounting Detail**



**2 - Raised Floor Mounting Detail**



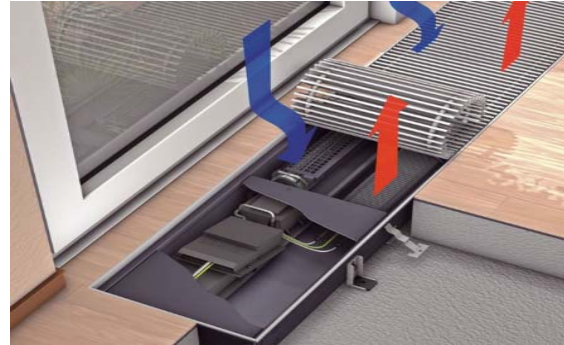
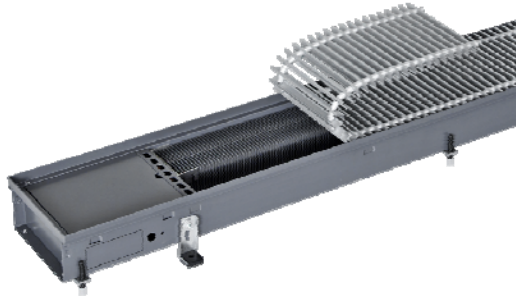
**Example-1**



**Example-2**

### 3 - Floor Type Convactor for Floor Linear Grille Mounting Details

#### Spring Type Linear Blade Convactor Mounting



#### Fixed Type Linear Blade Convactor Mounting



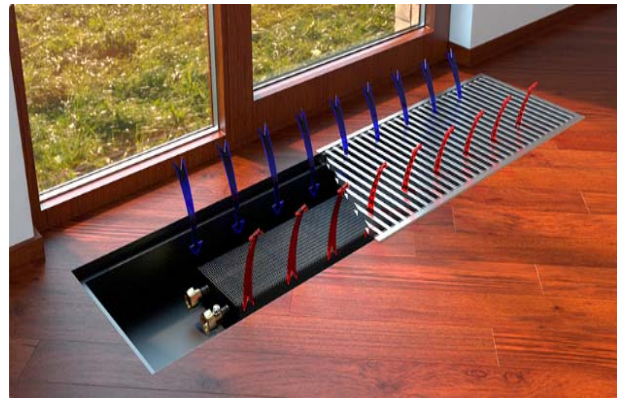
#### Spring Type Wooden Linear Blade Convactor Mounting





## FLOOR LINEAR GRILLE INSTALLATIONS

### 1- Aluminum Fixed Blade, With Frame, Floor Linear Grille



### 2- Aluminum, Without Frame, Roll-up Grilles









ORDER CODE

LFG	1	Y1	PKD	RAL9010	VD	N 300X200
<div style="display: flex; justify-content: space-between;"> <div style="width: 30%; background-color: #e6f2ff; padding: 5px;"> <p>LFG : Type 1 LFG : Type 2 LFG : Type 3 LFG : Type 4 LFG : Type 5 LFG : Type 6 LFG : Type 7 LFG : Type 8</p> <p>Blade Type Y1 Y2 Y3 Special</p> <p>000: without Damper ZKD: Opposite Blade Damper PKD: Parallel Blade Damper F28 : With 28mm Frame</p> </div> <div style="width: 30%; background-color: #e6f2ff; padding: 5px;"> <p>00: without Mounting VD: Screw Mounting KL: Clips Mounting ST: Spring Mounting</p> </div> <div style="width: 30%; background-color: #e6f2ff; padding: 5px;"> <p>N : Neck Size F: Frame Size</p> <p>00: unpainted EL: Anodic Aluminium</p> <p>RAL----: Powder Coated RAL</p> </div> </div>						