

NEF ———
TEKNİK



Linear Grilles

Glea

nefteknik.com.tr

"Nef Teknik Ventilation Construction Ltd. Co."

We are a leading company in the production of modern ventilation systems. Since our establishment, we have been committed to delivering products that meet the highest standards in the industry. Thanks to our dedication to technology and quality, we provide our customers with reliable and innovative solutions. At Nef Teknik, our team of experts develops products that deliver excellent performance even under the most challenging conditions



Linear Grilles

Glea

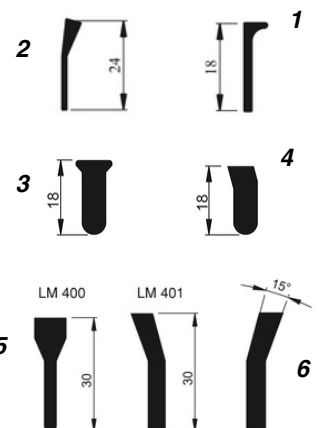


Glea Linear grilles are mostly preferred products that are used in heating, cooling and ventilation systems because of their aesthetic appearance. They can be used as supply or exhaust grilles on air ducts in large spaces for heating and cooling. Besides, they are the mostly preferred products on and next to fan coils and radiators. The distance between the blades and the thickness of the profile that is used on blades provides a durable structure and the aesthetic appearance ensures ideal ventilation equipment. For the spaces when linear appearance is required, many grilles can be combined and long grilles can be formed as needed.

Properties

- **They are used as supply and exhaust grilles on air ducts. *They can be manufactured with large and narrow cases. *Can be manufactured with or without frames.**
- **Extruded aluminum profile is used.**
- **Blades are produced as 0° or 15° angle according to product type.**
- **They can be manufactured as anodized or with electrostatic powder coating (colors from RAL catalogue can be chosen).**
- **To adjust the blowing air damper can be added. Also, dampers can be manufactured with parallel or opposite blades.**

* No	Model	Application
1	Glea S100	0° Angle Blade Standard Linear Grille For Wall and Ceiling
2	Glea S115	15° Angle Blade Standard Linear Grille For Wall and Ceiling
3	Glea S300	0° Angle Blade Standard Linear Grille For Floor, Wall and Ceiling
4	Glea S315	15° Angle Blade Standard Linear Grille For Floor, Wall and Ceiling
5	Glea S400	0° Angle Blade Special Floor Type Linear Grille for Data and System Room
6	Glea S415	15° Angle Blade Special Floor Type Linear Grille for Data and System Room



* **Specially designed blades according to product type**

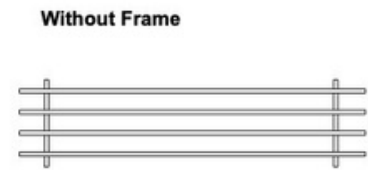
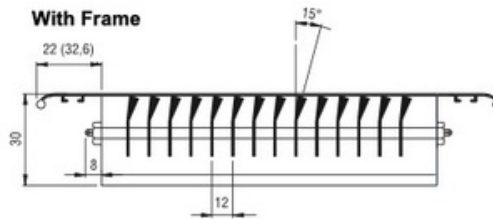
Linear Grilles

Glea

Standard Sizes

Each grille is named by W*H

W	300	500	500	750	750	1000	1000	1000	1000
H	75	75	150	150	250	150	250	300	500



Installation

Mounting Types

Nef Teknik grilles and louvers can be installed using different mounting options depending on the application area. While the screw system is the standard method, clip and plate spring systems are also available for various installation needs.

Screw Mounting (Standard System)

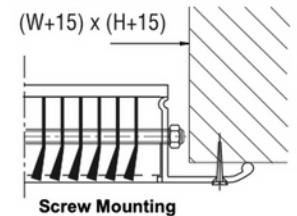
The screw system is the standard mounting type and can be easily applied using the $\text{\O}4$ mm holes located on the frame. This method also allows installation without screws, especially for radiator applications.

Plate Spring System

This solution is ideal for deep surface installations. The mounting is done with steel plate springs fixed on the side surfaces of the grille casing. It can be used with or without a frame, providing a secure and easy-to-remove setup.

Clip Mounting System

The clip system is applied with a blind mounting case. First, the blind case is attached through the mounting holes. Then, the grille—equipped with clips—is inserted and secured into the case with the help of a screwdriver. This method ensures a clean, aesthetic, and tool-assisted installation process.



Screw Mounting

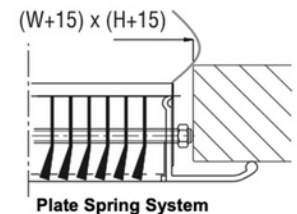
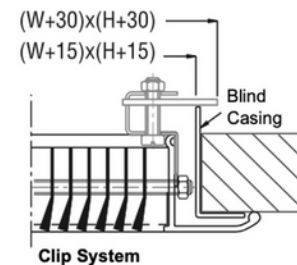


Plate Spring System



Clip System

Plaster-in Linear Grilles

Glea S100 / S300 (+ZC)

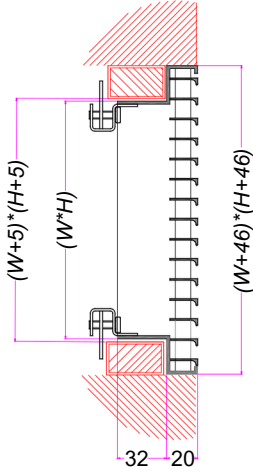


Framless Linear Grilles

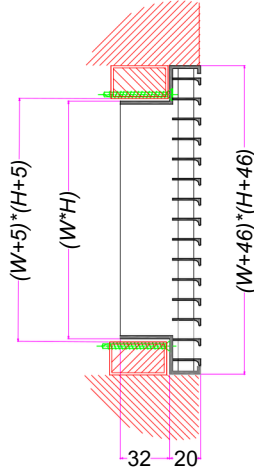
Glea S100 / S300 (+ZC)

Glea S100+ZC

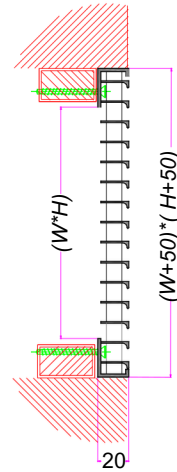
Clips (Plate Spring Fixing)



Screw Fixing

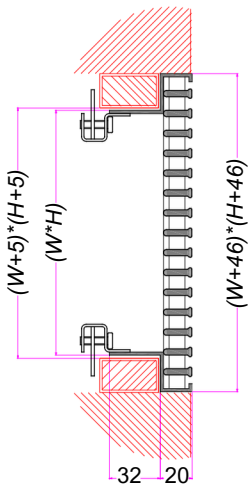


Without Neck

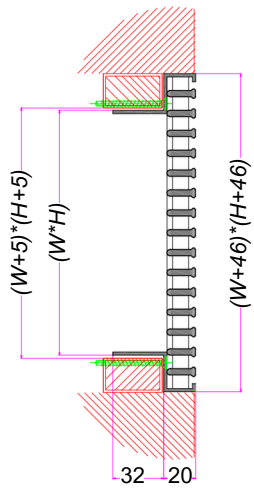


Glea S300+ZC

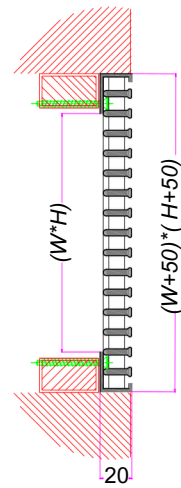
Clips (Plate Spring Fixing)



Screw Fixing

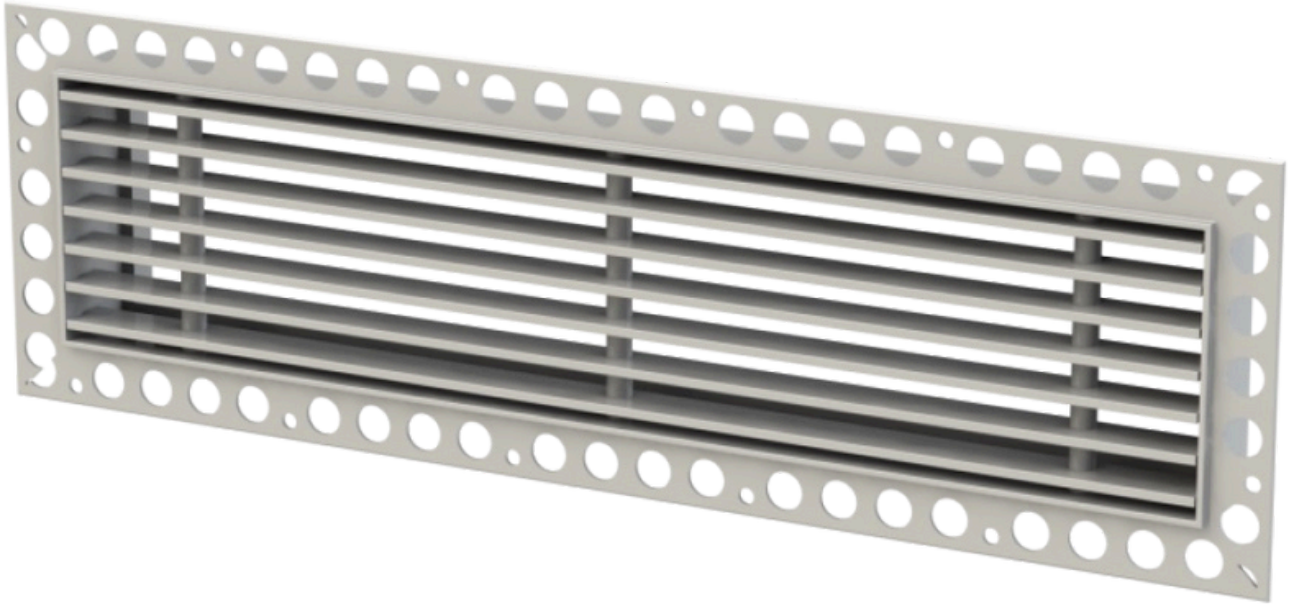


Without Neck



Plaster-in Linear Grilles

Glea (+PG)

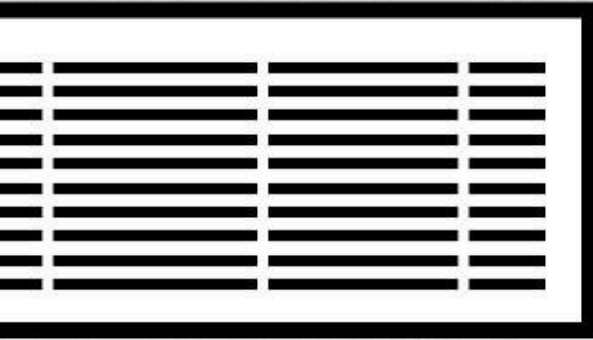


General Information

Glea (+PG)

Linear Grilles

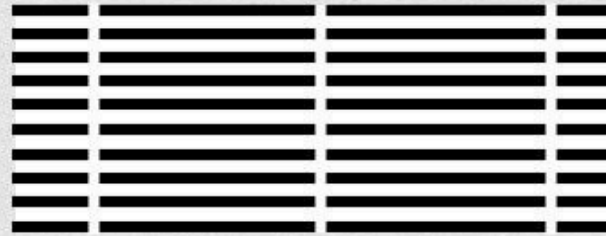
Glea



X

Plaster-in Linear Grilles

Glea (+PG)



Looking for a cleaner, more streamlined grille construction in your project?

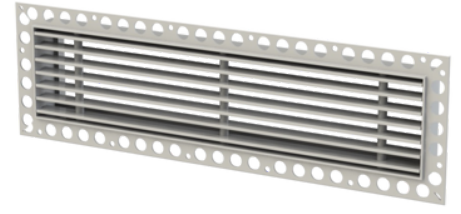
Glea PG grilles might be the ideal solution for you. The flush finish provided by this design keeps your walls looking pristine while ensuring exceptional airflow and efficiency.

It transforms your linear bar grilles from a standard, low-cost appearance into a timeless and seamless integration with the rest of the space.

Some of the great features that put our +PG grilles above the rest:

- Borderless installation, even on curved surfaces.**
 - Achieve a Level 5 plaster finish.**
 - Pre-punched holes for quick mounting.**
- Add plaster and smooth it out!**
- Aluminum, bronze or stainless steel options.**

Plaster-in Linear Grilles



Glea (+PG)

Glea+PG grilles feature a newly designed plaster-in frame that ensures a completely seamless finish once installed. This modern frame, identified with the additional code '+PG', is engineered to combine aesthetic minimalism with high-performance air distribution.

With its slim plaster-in border, Glea+PG provides a smooth transition between wall or ceiling surfaces, perfectly aligning with contemporary architectural designs. It can be installed in both modular and continuous layouts, suitable for sidewall, sill, or bulkhead applications.

Available in various configurations and customizable options, Glea+PG offers an elegant yet functional solution for projects that demand both precision and visual harmony.

Description

The Glea+PG series introduces a newly developed frame for linear bar grilles, designed to be plastered into the surface for a perfectly seamless appearance after installation.

Its front edge is engineered to blend smoothly within plasterboard openings, featuring a concealed screw-fix system that ensures a clean and elegant finish.

The blades are available at 0° or 15° angles, depending on the selected model, providing flexibility for various air distribution needs.

Grilles can be anodized or powder-coated in any RAL color, offering both durability and design versatility.

For optimal airflow control, adjustable dampers can be integrated, available in parallel or opposed blade configurations to suit different application requirements.

* No	Model	Application
1	Linea+PG S100	0° Angle Blade Standard Linear Grille For Wall and Ceiling
2	Linea+PG S115	15° Angle Blade Standard Linear Grille For Wall and Ceiling

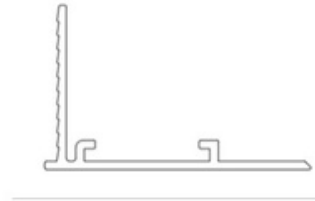


* Specially designed blades according to product type

General Information

Glea (+PG)

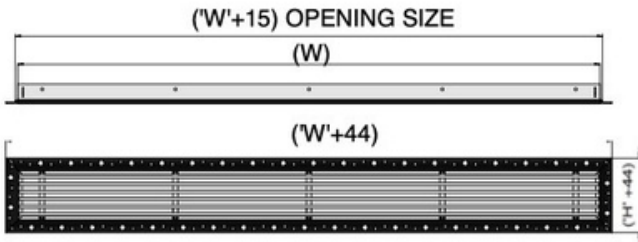
Front Border Frame



Sizes

Single Module

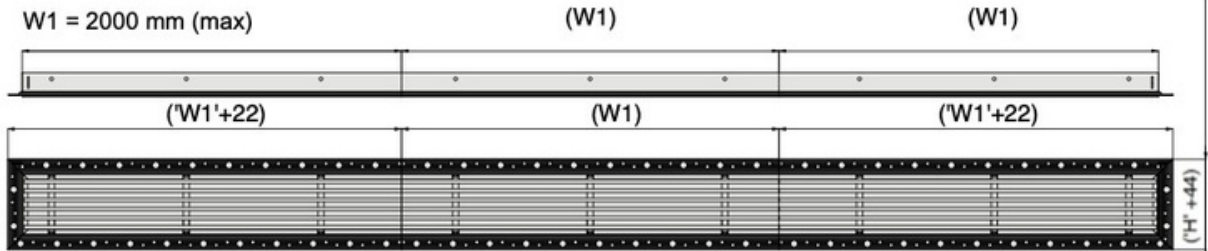
W = 150 - 2400 mm



Nominal Height For Single and Multi Module

H Min= 50 mm H Max = 800 mm

Multi Module



W	300	500	500	750	750	1000	1000	1000	1000
H	75	75	150	150	250	150	250	300	500

Linear Grilles

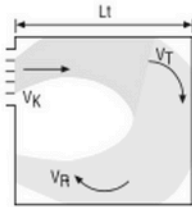
Glea



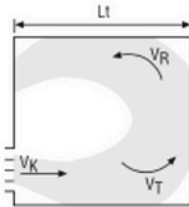
Selection Graph

Glea / Glea+PG S115

15° Angle Blade Standard Linear Grille For Wall and Ceiling

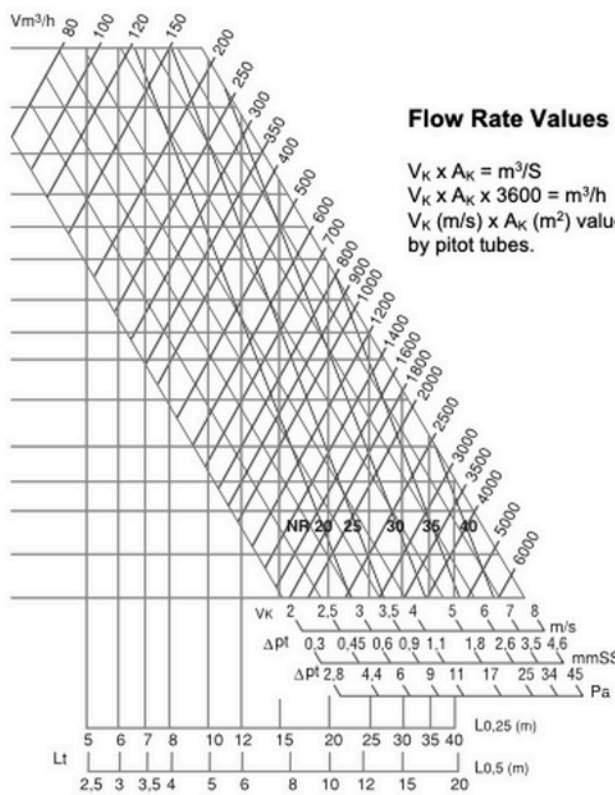


A-Top of the side wall



B-Bottom of the side wall

W	H				Ak(m ²)
	75	100	150	200	
200					0,0064
300	200				0,0095
400	300	200			0,013
500					0,017
600	400	300			0,021
800	500				0,026
1000	600	400	300		0,034
1200	800	500	400		0,042
	1000	600	500	300	0,051
	1200	800	600	400	0,067
		1000	800	500	0,090
		1200	1000	600	0,114
			1200	800	0,138
				1000	0,181
				1200	0,242



Correction Factor V_r

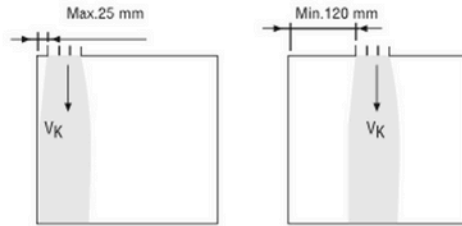
V _r (m/s)	0,25	0,375	0,5	0,625	
Lt	A	x1	x0,67	x0,5	x0,4
	B	x0,7	x0,47	x0,35	x0,28

S115

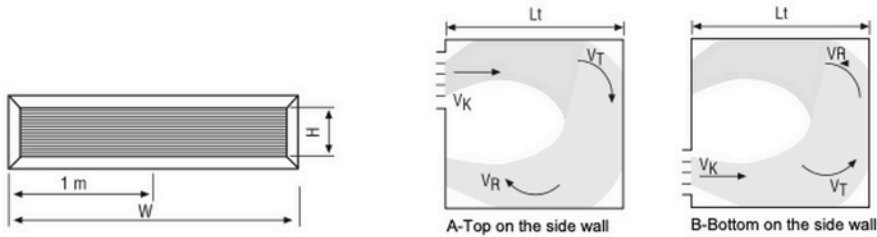
Selection Graph

Glea / Linea+PG S100

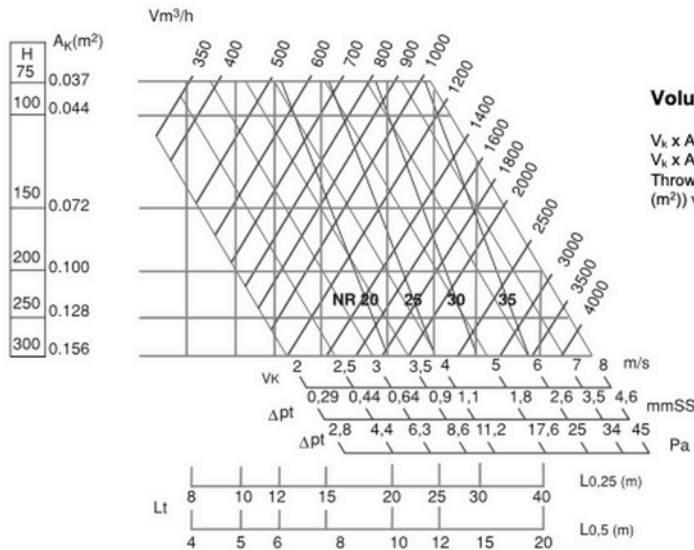
0° Angle Blade Standard Linear Grille For Wall and Ceiling



All datas in the selection graph had given for 1m length



S100



Volume Flow Rate Calculation

$V_k \times A_k = m^3/s$
 $V_k \times A_k \times 3600 = m^3/h$
 Throwing velocity (V_k) and A_k (Effective Area (m^2)) values are measured with pitot tubes.

For Correction Factor W

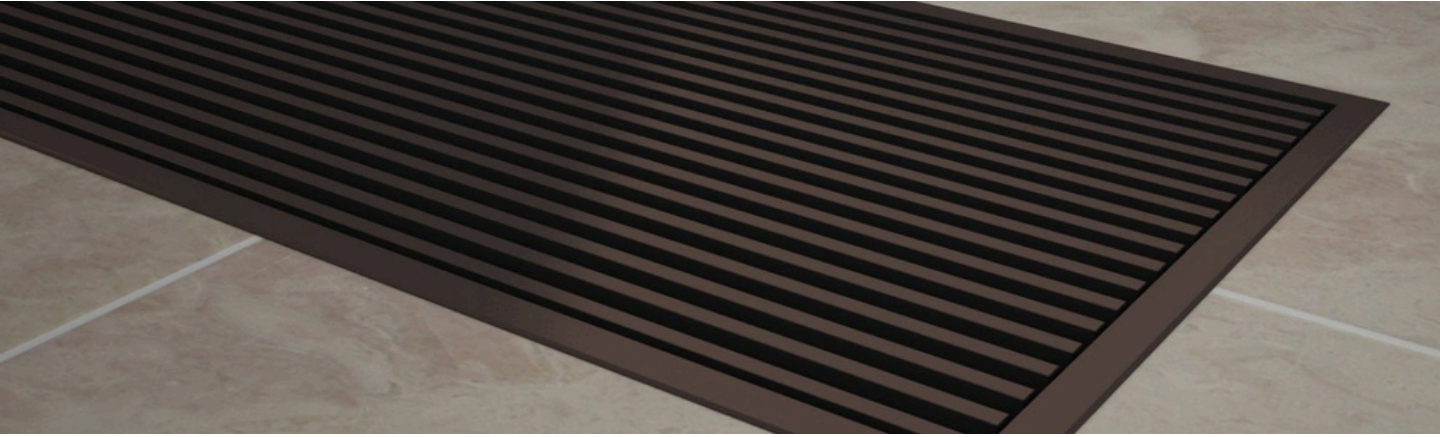
W (m)	1	1,5	2	2,5	3	4	5	6	8	10
Lt (m)	x1	x1,05			x1,1				x1,15	
NR	0	+2	+3	+4	+5	+6	+7	+8	+9	+10

Correction Factor V_T

V _T (m/s)	0,25	0,375	0,5	0,625	
Lt	A	x1	x0,67	x0,5	x0,4
	B	x0,7	x0,47	x0,35	x0,28

Floor Linear Grilles

Glea S300, S315, S400, S415

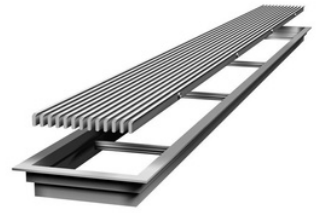


Floor Linear Grilles

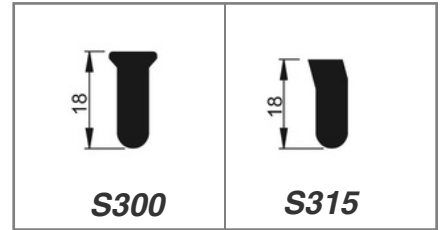
Glea S300, S315

These types of grilles are used for every purposes which needs decorative conditions. S300 and S315 type linear grilles, are also named as floor grilles. S300 type linear grilles, have the same properties with S315. The only difference is they have 15° blade angle.

They can be also used for walls and ceilings.



Blade Types

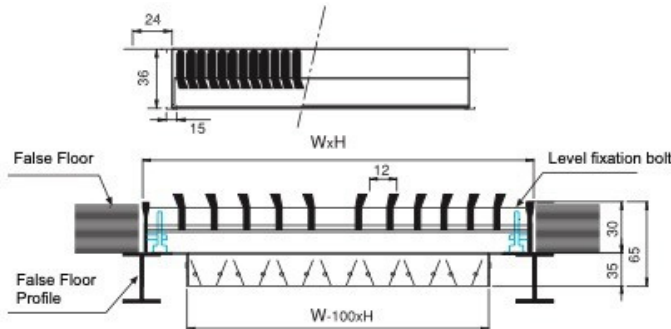


Standard Sizes

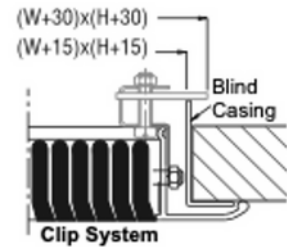
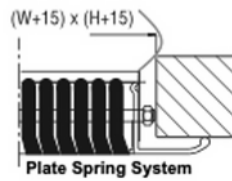
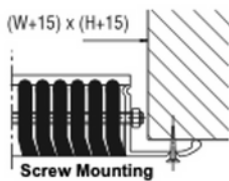
Each grille is named by W*H

W	300	500	500	750	750	1000	1000	1000	1000
H	75	75	150	150	250	150	250	300	500

Floor Installation



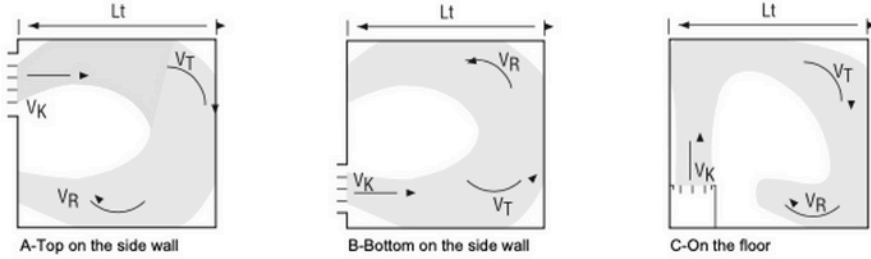
Wall, Ceiling Installation



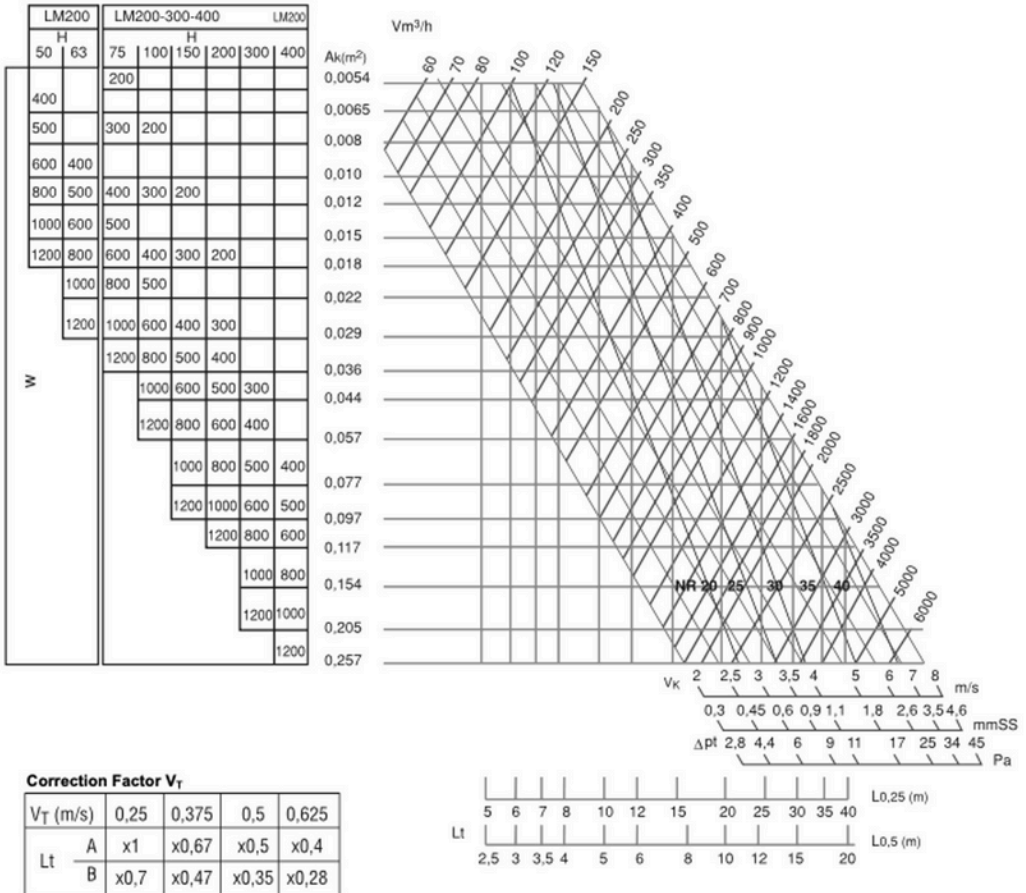
Selection Graph

Glea S300

0° Angle Blade Standard Linear Grille For Wall and Ceiling



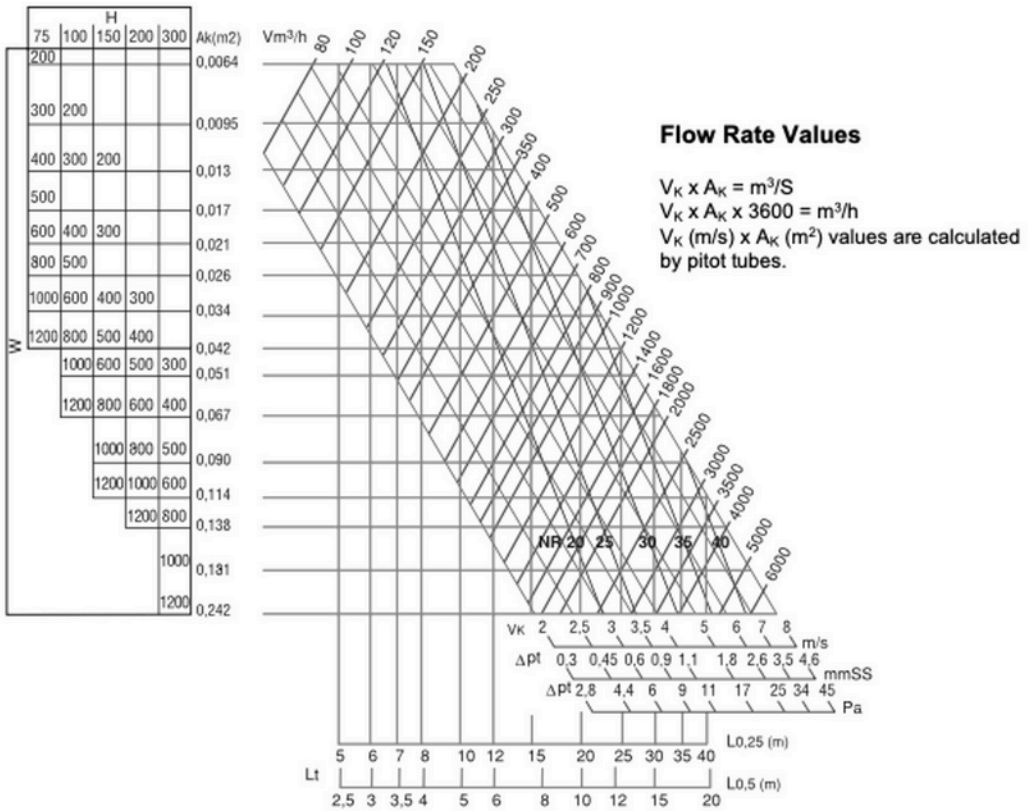
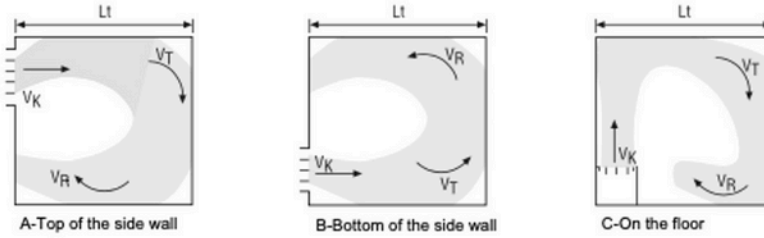
S300



Selection Graph

Glea S315

15° Angle Blade Standard Linear Grille For Wall and Ceiling

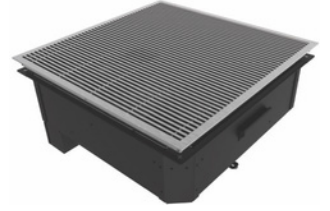


Correction Factor V_T

$V_T(\text{m/s})$	0,25	0,375	0,5	0,625
A	x1	x0,67	x0,5	x0,4
B	x0,7	x0,47	x0,35	x0,28

S315

Floor Linear Grilles



Glea S400 S415

FOR DATA AND SYSTEM ROOMS. They are used in places with acclimatization's from floor. This type of mounting is done by steel plates on the side surfaces of the grilles case. The damper that is used to adjust air flow can be controlled easily from the top. According to the order, dampers can be parallel with the long or the short corner. If requested, dust holding filter can be added.

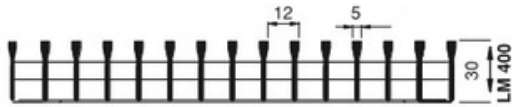
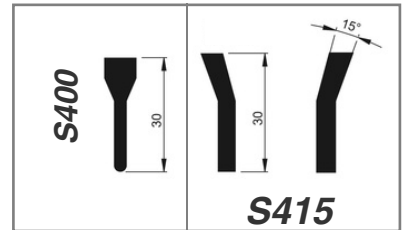
S400 type linear grilles; they are also named as floor grilles. S415 type linear grilles; has the same properties with S400. The only difference is they have 15° blade angle.

Standard Sizes

Each grille is named by W*H

W	600	600	600
H	100	150	200

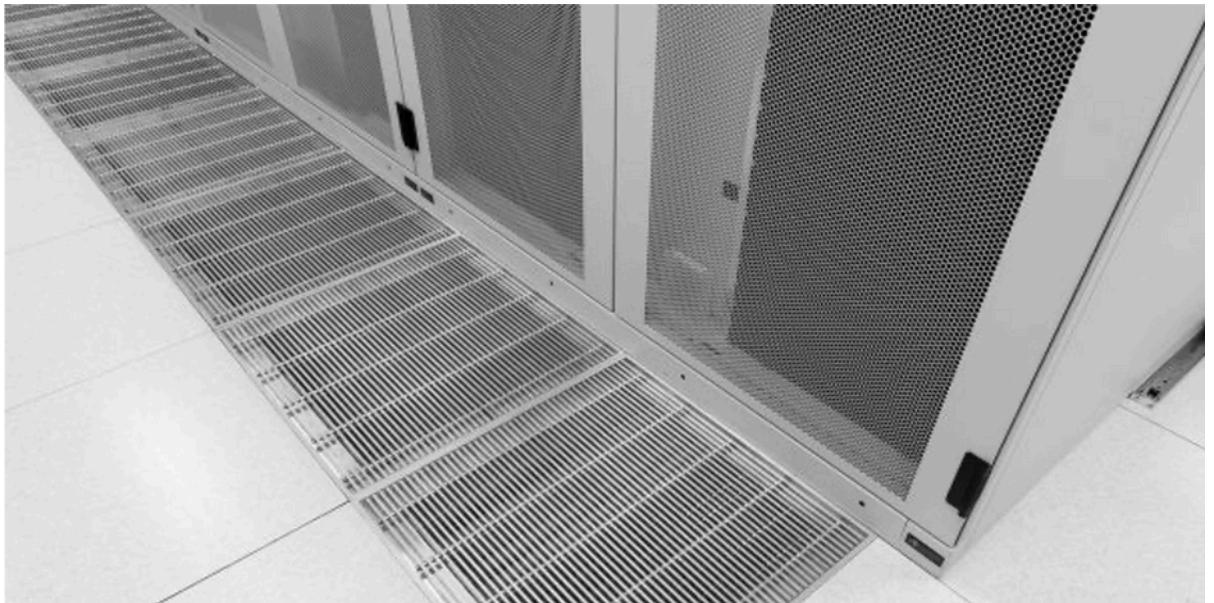
Blade Types



S400



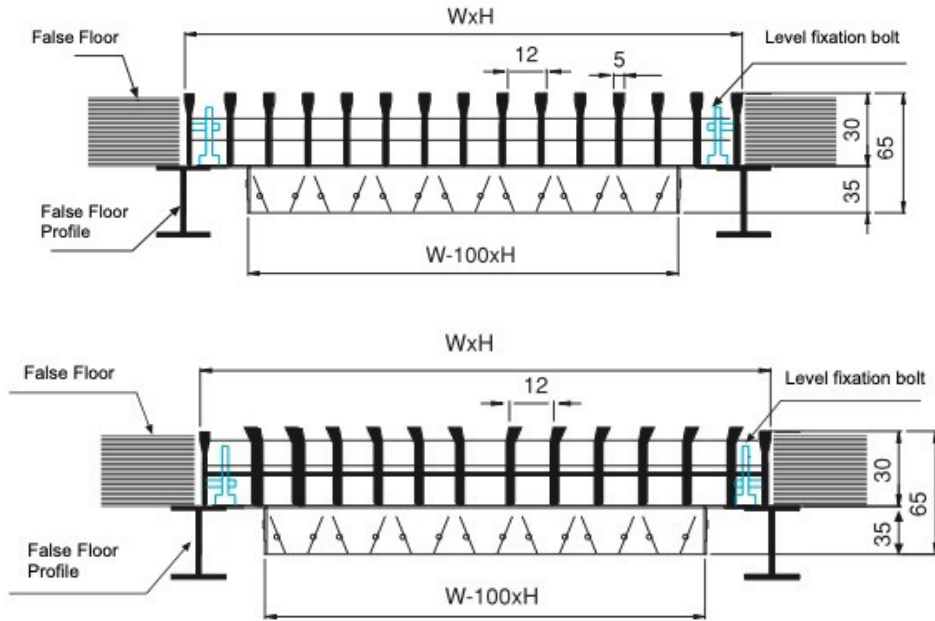
S415



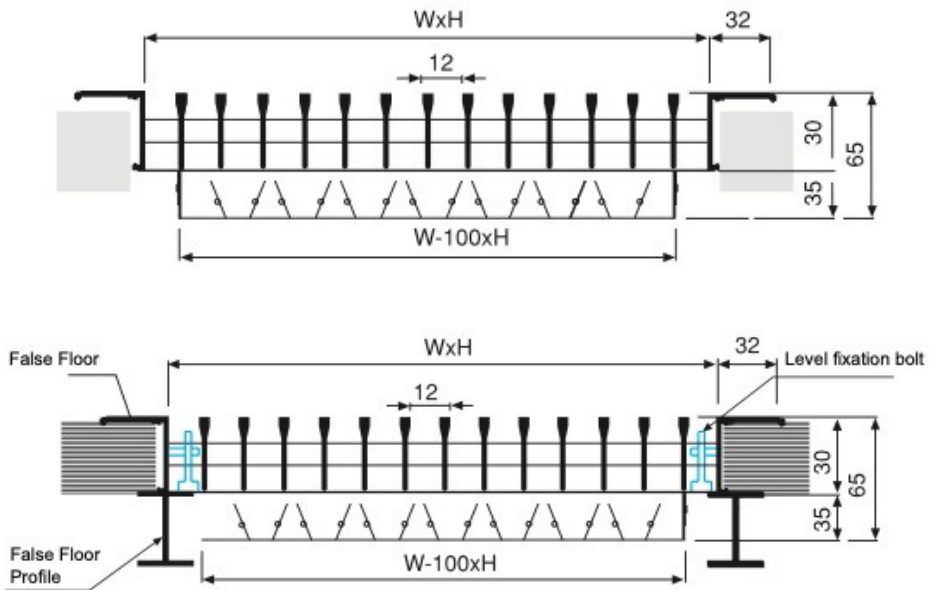
Installation

Glea S400 S415

False Floor Frameless Type Linear Grille With Damper

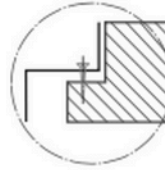
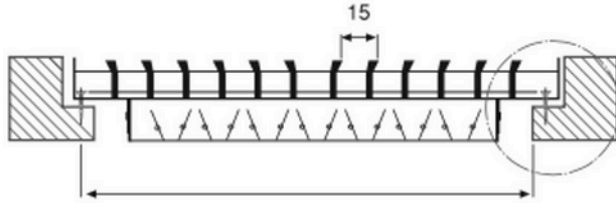


False Floor Framed Type Linear Grille With Damper



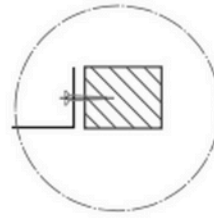
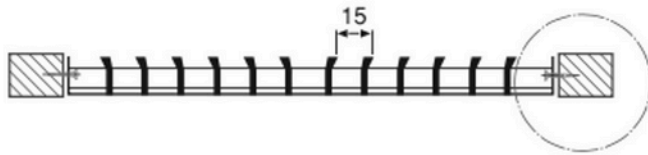
Installation

Glea S400, S415

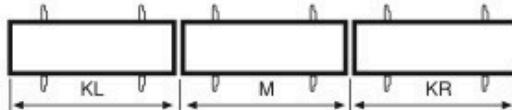
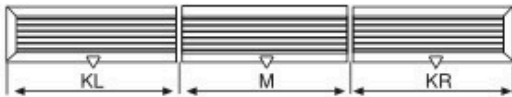


Frameless Type Mounting

Linear grilles that are manufactured without frames are fit into special blind cases. After that blind cases are fixed with screws.



Linear Grille with Access Door



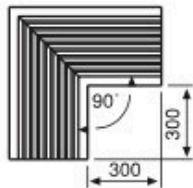
Serial Mounting

For the linear grilles that are added together are mounted serially. The images in the connections are reduced to minimum level and a good appearance is obtained. Also, 90° and 135° angled corner linear grilles are used for connection.

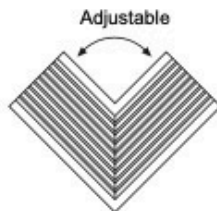
KL- Left Corner

M - Middle

KR- Right Corner



Corner Grille



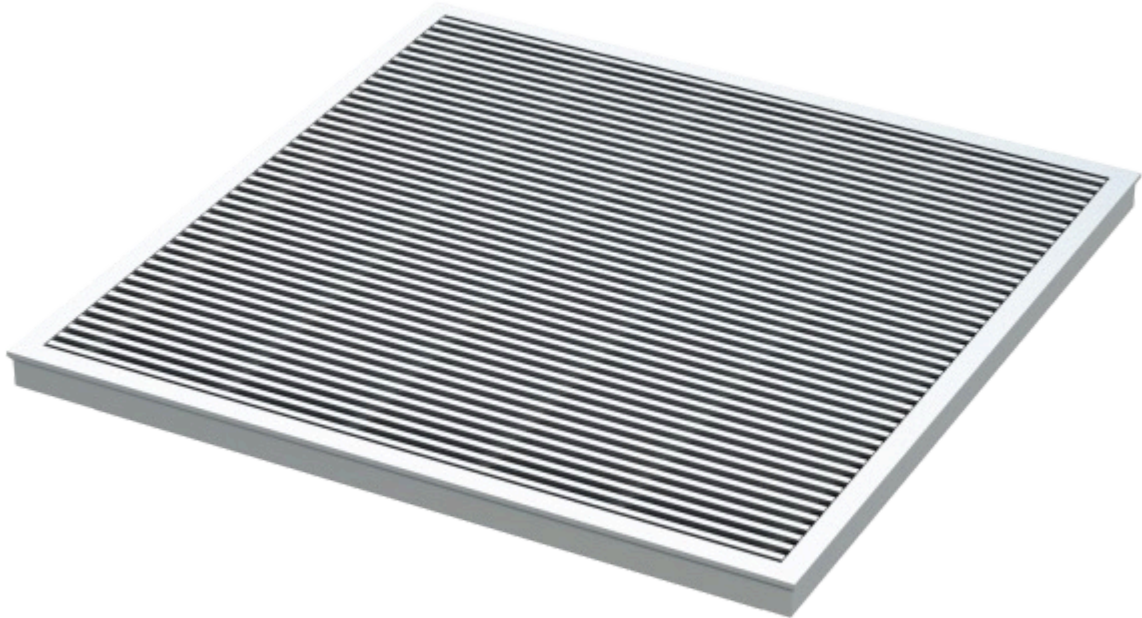
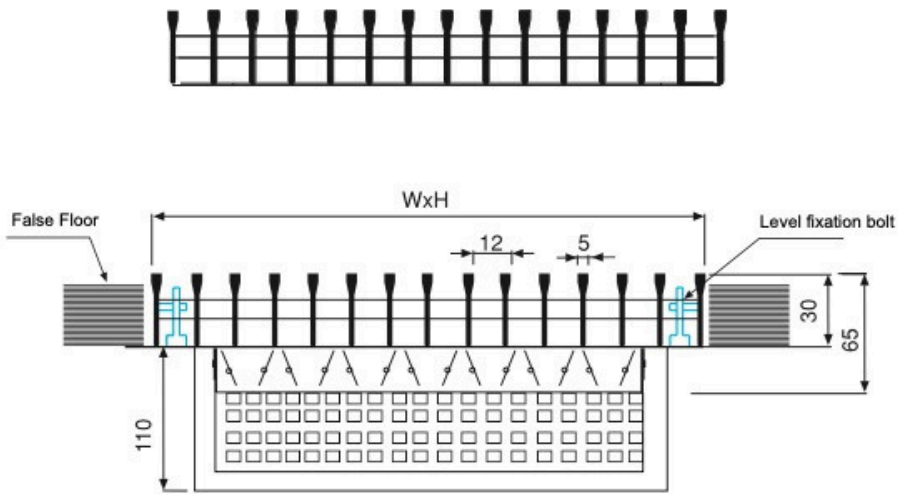
Corner Grille

They are used for connections at ceilings, floor applications and wall joints. There are no dampers at corners and they can be manufactured with the requested angles.

Accessories

Glea S400, S415

False Floor Linear Grille With Damper and Dust Collecting Casing

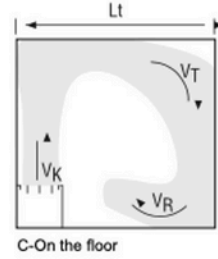


Selection Graph

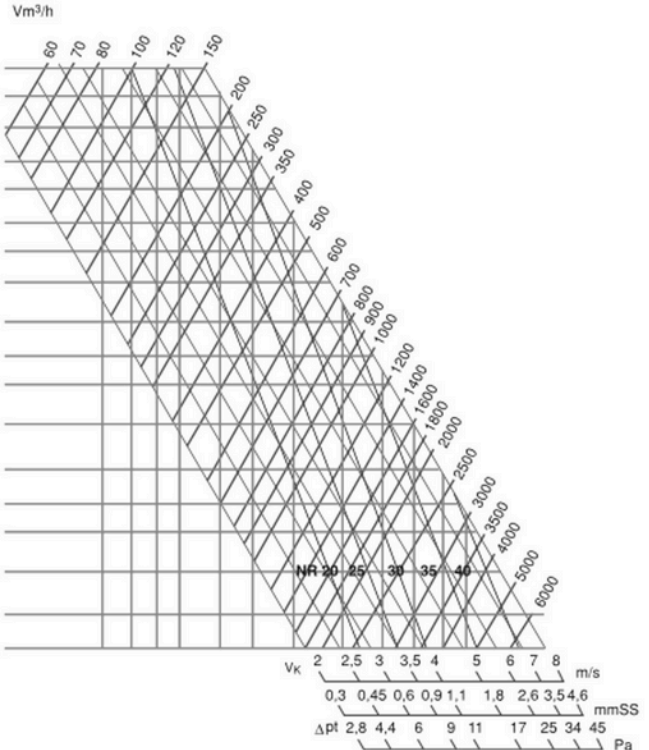
Glea S400

0° Angle Blade Standard Linear Grille For Wall and Ceiling

S400

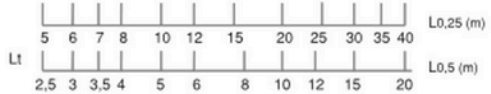


W	LM200		LM200-300-400					LM200	
	H	H	H	H	H	H	H	H	
50	63	75	100	150	200	300	400		
400		200							
500		300	200						
600	400								
800	500	400	300	200					
1000	600	500							
1200	800	600	400	300	200				
1000		800	500						
1200		1000	600	400	300				
		1200	800	500	400				
			1000	600	500	300			
			1200	800	600	400			
				1000	800	500	400		
				1200	1000	600	500		
					1200	800	600		
						1000	800		
						1200	1000		
								1200	



Correction Factor V_r

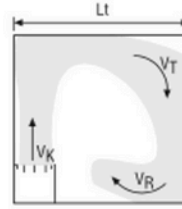
$V_t (m/s)$	0,25	0,375	0,5	0,625
L_t	A	x1	x0,67	x0,5
	B	x0,7	x0,47	x0,35



Selection Graph

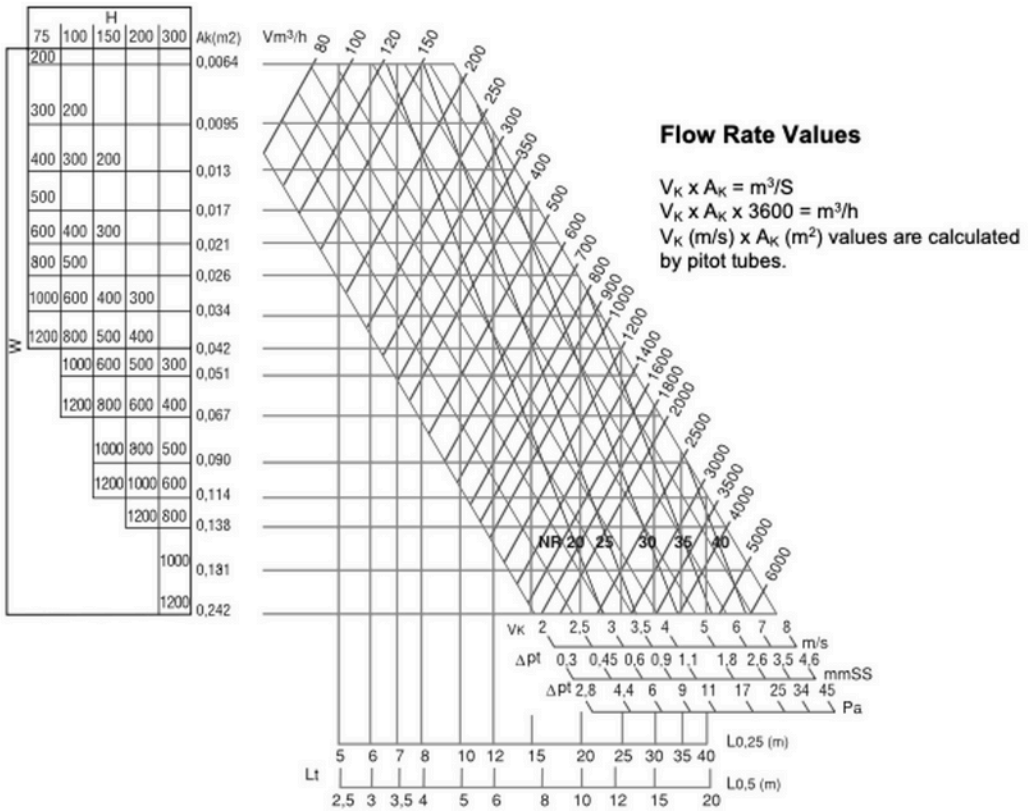
Glea S415

15° Angle Blade Standard Linear Grille For Wall and Ceiling



C-On the floor

S415



Correction Factor V_T

V_T (m/s)	0,25	0,375	0,5	0,625
A	x1	x0,67	x0,5	x0,4
B	x0,7	x0,47	x0,35	x0,28

Accessories

Glea

OD calibration damper
 OD calibration damper with fins with opposing movement

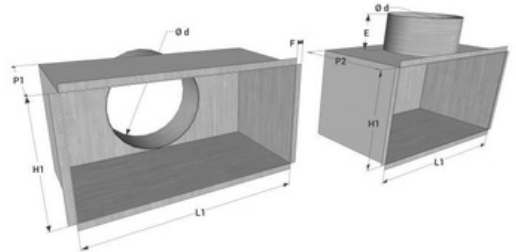


Installation sub frame



Plenum box

- Can be used for both supply and extract air
- Easy-to-detach the grilles for access to the plenum
- Same box used for several type of grilles
- Special lip bend allow an easy clips mounting of all grilles model



All dimensions are expressed in mm.

model L1 x H1	upper air connection			side air connection			E	F	model L1 x H1	upper air connection			side air connection			E	F
	P1	n° connection	Ø d	P2	n° connection	Ø d				P1	n° connection	Ø d	P2	n° connection	Ø d		
200x100	200	1	98	200	1	98	80	12	1000x200	200	2	198	300	2	198	80	12
300x100	200	1	98	200	1	98	80	12	300x300	200	1	248	350	1	248	80	12
400x100	200	2	98	200	2	98	80	12	400x300	200	1	248	350	1	248	80	12
500x100	200	2	98	200	2	98	80	12	500x300	200	1	248	350	1	248	80	12
600x100	200	2	98	200	2	98	80	12	600x300	200	2	198	350	2	248	80	12
800x100	200	2	98	200	2	98	80	12	800x300	200	2	248	350	2	248	80	12
200x200	200	1	198	300	1	198	80	12	1000x300	200	2	248	350	2	248	80	12
300x200	200	1	198	300	1	198	80	12	400x400	200	1	298	350	1	298	80	12
400x200	200	1	198	300	1	198	80	12	500x400	200	1	298	350	1	298	80	12
500x200	200	1	198	300	1	198	80	12	600x400	200	2	198	350	2	248	80	12
600x200	200	2	198	300	2	198	80	12	800x400	200	2	298	350	2	298	80	12
800x200	200	2	198	300	2	198	80	12	1000x400	200	2	298	400	2	298	80	12
560x560	-	-	-	300	1	248	80	12									

SELECTION GUIDE

Spigot Velocity (m/s)	1,5	2	2,5	3	3,5	4	4,5	5	6		
Pressure Drop (Pa)	2	4	6	8	12	16	20	28	36		

*The pressure drop given is for supply diffuser with damper fully open.
 When the diffuser is installed with plenum box the pressure loss of the box has to be added to the diffuser.

NEF ———
TEKNİK



Linear Grilles

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