



EXTERNAL WEATHER LOUVRE PITCH 50 mm.

GI
SERIES

OVERVIEW, CHARACTERISTICS, AND MOUNTING SYSTEM

OVERVIEW :

GI series external weather louvre are grilles with fixed horizontal blades inclined 49°. These components are designed for mounting in outside walls and they are suitable for both fresh air supply and exhaust. For outside applications is suggested the mounting of bird net.

CHARACTERISTICS :

Frame

Extruded aluminium, width 40 mm, rounded corners.

Blades

Extruded aluminium with pitch 50 mm. fixed to the frame by 4 union points.

Transversal reinforcement

It's mounted only on grilles with dimension B upper than 1200 mm.

Calibrating gate

Galvanized sheet steel, contrast moving blades.

Mounting frame

Galvanized sheet steel for mounting on wall or on light structures; extruded aluminium as spacer.

Finishing

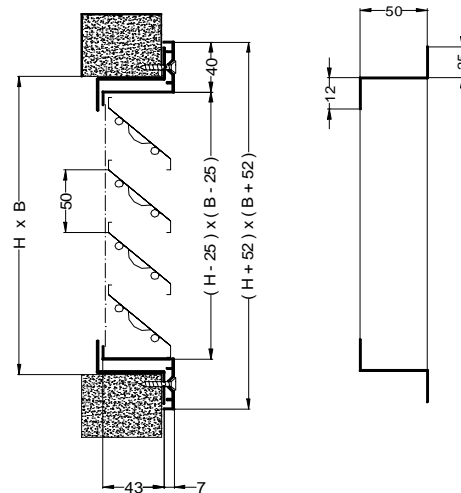
Anodized aluminium or painted aluminium colour white RAL 9010 (epoxy powder treatment)

MOUNTING SYSTEMS:

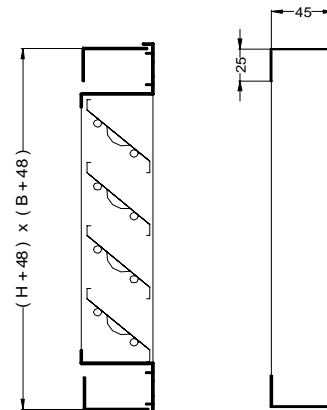
Figure n° 1 : External weather louvre (mod. GI) is positioned on steel mounting frame (mod. TC GI) and both are fixed on the wall by self-threading screws.

Figure n° 2 : External weather louvre (mod. GI) is positioned on aluminium mounting frame (mod. TC4 GI), designed for

GI + TC Figure no. 1



GI + TC4 Figure no. 2





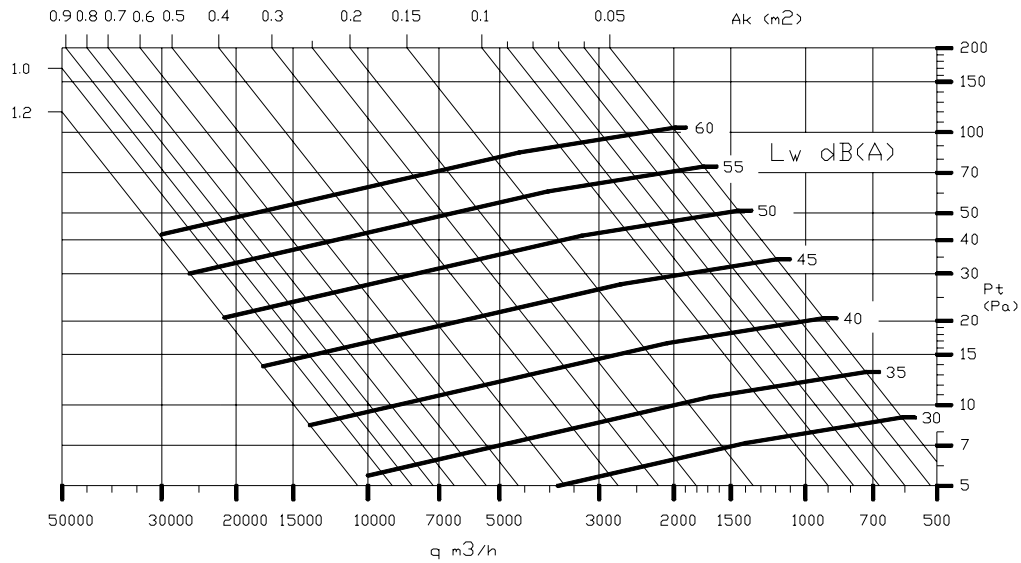
**EXTERNAL WEATHER LOUVRE
PITCH 50 mm.**

**GI
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PERFORMANCE

The below diagram shows the total pressure and acoustic level as a function of air flow rate

Q = Extract air flow rate (m³/h) Pt = Total pressure (Pa)
Ak = Area factor UTR (m²) L_A = Acoustic level (dB(A))






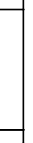


Ak values (m ²)									
H (mm)	L (mm)								
	400	600	800	1000	1200	1400	1600	1800	2000
290	0,038	0,058	0,078	0,098	0,118	0,138	0,158	0,178	0,198
390	0,056	0,086	0,116	0,146	0,176	0,206	0,236	0,266	0,296
490	0,075	0,115	0,155	0,195	0,235	0,275	0,315	0,355	0,395
590	0,094	0,144	0,194	0,244	0,294	0,344	0,394	0,444	0,494
690	0,113	0,173	0,233	0,293	0,353	0,413	0,473	0,533	0,593
790	0,131	0,201	0,271	0,341	0,411	0,481	0,551	0,621	0,691
890	0,150	0,230	0,310	0,390	0,470	0,550	0,630	0,710	0,790
990	0,169	0,259	0,349	0,439	0,529	0,619	0,709	0,799	0,889
1190	0,206	0,316	0,426	0,536	0,646	0,756	0,866	0,976	1,086
1390	0,253	0,388	0,523	0,658	0,793	0,928	1,063	1,198	1,333
1590	0,281	0,431	0,581	0,731	0,881	1,031	1,181	1,331	1,481
1790	0,319	0,489	0,659	0,829	0,999	1,169	1,339	1,509	1,679
1990	0,356	0,546	0,736	0,926	1,116	1,306	1,496	1,686	1,876

ACOUSTIC POWER (L _A) AT THE DISTANCE x (m). (L _A) = L _w - K (dB)									
Distance (m)	1	2	3	4	5	7	10	15	20
K (dB)	5	12	15	16	18	22	25	28	30



TC GI EXTERNAL WEATHER LOUVRE
MOUNTINGFRAMES
RE GI METALNETS




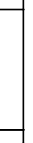


TC GI
SERIES

NOMINAL SIZES				NOMINAL SIZES			
B x H	TC GI steel mounting frame	TC4 GI aluminiu m mounting frame box	RE GI net	B x H	TC GI steel mounting frame	TC4 GI aluminiu m mounting frame box	RE GI net
400	X	X	X	400	X	X	X
600	X	X	X	600	X	X	X
800	X	X	X	800	X	X	X
1000	X	X	X	1000	X	X	X
1200 390	X	X	X	1200 690	X	X	X
1400	X	X	X	1400	X	X	X
1600	X	X	X	1600	X	X	X
1800	X	X	X	1800	X	X	X
2000	X	X	X	2000	X	X	X
400	X	X	X	400	X	X	X
600	X	X	X	600	X	X	X
800	X	X	X	800	X	X	X
1000	X	X	X	1000	X	X	X
1200 490	X	X	X	1200 790	X	X	X
1400	X	X	X	1400	X	X	X
1600	X	X	X	1600	X	X	X
1800	X	X	X	1800	X	X	X
2000	X	X	X	2000	X	X	X
400	X	X	X	400	X	X	X
600	X	X	X	600	X	X	X
800	X	X	X	800	X	X	X
1000	X	X	X	1000	X	X	X
1200 590	X	X	X	1200 890	X	X	X
1400	X	X	X	1400	X	X	X
1600	X	X	X	1600	X	X	X
1800	X	X	X	1800	X	X	X
2000	X	X	X	2000	X	X	X



**TC GI EXTERNAL WEATHER LOUVRE
MOUNTINGFRAMES
RE GI METALNETS**

**TC GI
SERIES**

NOMINAL SIZES				NOMINAL SIZES			
B x H	TC GI steel mounting frame	TC4 GI aluminium mounting frame box	RE GI net	B x H	TC GI steel mounting frame	TC4 GI aluminium mounting frame box	RE GI net
400	X	X	X	400	X	X	X
600	X	X	X	600	X	X	X
800	X	X	X	800	X	X	X
1000	X	X	X	1000	X	X	X
1200	X	X	X	1200	X	X	X
1400	X	X	X	1400	X	X	X
1600	X	X	X	1600	X	X	X
1800	X	X	X	1800	X	X	X
2000	X	X	X	2000	X	X	X
400	X	X	X	400	X	X	X
600	X	X	X	600	X	X	X
800	X	X	X	800	X	X	X
1000	X	X	X	1000	X	X	X
1200	X	X	X	1200	X	X	X
1400	X	X	X	1400	X	X	X
1600	X	X	X	1600	X	X	X
1800	X	X	X	1800	X	X	X
2000	X	X	X	2000	X	X	X
400	X	X	X	400	X	X	X
600	X	X	X	600	X	X	X
800	X	X	X	800	X	X	X
1000	X	X	X	1000	X	X	X
1200	X	X	X	1200	X	X	X
1400	X	X	X	1400	X	X	X
1600	X	X	X	1600	X	X	X
1800	X	X	X	1800	X	X	X
2000	X	X	X	2000	X	X	X

TC GI Steel mounting frame for GI
 TC4 GI Aluminium mounting frame for GI
 RE GI Net for GI

Example: TC GI 1000x690
 Steel mounting frame for grille pitch 50 mm. Nominal sizes 1000x690.



EXTERNAL GRILLES WITH SOUND REDUCING

GA
SERIES

OVERVIEW CHARACTERISTICS

OVERVIEW :

The GA series represents a range of aspiration and grilles for external installations with fixed angled blades. They are used for the induction of external air, for the expulsion of the unwanted air in the closed environment, where the reduction in noise levels is required. It is recommended that for these grilles, a mesh be used to prevent from birds entering the grilles.

CHARACTERISTICS :

Frame

in galvanised steel sheet 15/10 (GAZ), or in natural aluminium (GAL), 1,5mm thick. Blades: 150mm pitch with a particular profile for the inclusion of the noise attenuation material, in galvanised steel sheet 15/10 (GAZ), or in natural aluminium (GAL), 1,5mm thick. Blades: 150mm pitch.

Sound absorbing material

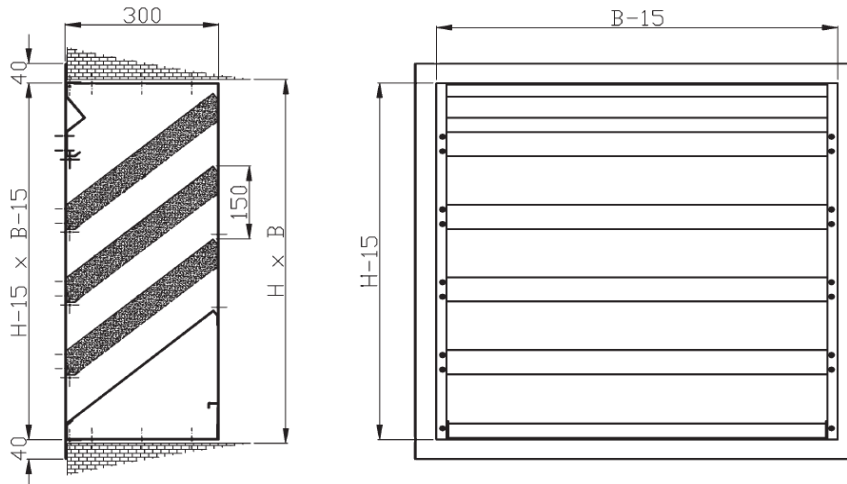
Glass wool with a 55kg/m³ density with a micro stretched protection mesh.

Flange

40 mm in in galvanised steel sheet 15/10 (GAZ), or in natural aluminium (GAL), 1,5mm thick. Blades: 150mm pitch.

Accessories

Anti bird protection mesh.



DIMENSIONS :

The nominal values for "B" vary from 300 [mm] to 1950 [mm] with intervals of 150 [mm].
The nominal values for "H" vary from 450 [mm] to 1950 [mm] with intervals of 150 [mm].



EXTERNAL GRILLES
WITH SOUND REDUCING

PERFORMANCE

GA
SERIES

DAMPING :

FrequenCY [Hz]	125	250	500	1000	2000	4000	8000
Simple execution [dB]	6	8	10	14	18	16	15
Double execution [dB]	8	14	16	26	33	28	27

PRESSURE LOSSES :

Speed* [m/s]	1	1,5	2	2,5	3
Tot pressure loss [Pa]	7	16	28	46	66

*Speed [m/s] referred to section (B - 35) x (H - 215)

Pressure loss tested in according to UNI CTI 8728 - Test report Istituto Giordano N. 136363

Acoustic data tested in according to EN ISO 11691 - Test report Istituto Giordano N. 149876

ATTENTION :

The 3 m/s limit is in conjunction with the dragging of the water droplets. The laboratory tests have highlighted how up to this speed, the water droplets fall along the frame by gravity but for speeds between 3,2 and 3,5 m/s, the drops tend to rise along the frame and pass throw the grille. This is accentuated with speeds above 3,7 m/s.



EXTERNAL GRILLES
WITH SOUND REDUCING

GA
SERIES

PERFORMANCE

B	H	GAZ	GAL
300	450	X	X
400		X	X
450		X	X
500		X	X
600		X	X
700		X	X
750		X	X
800		X	X
900		X	X
1000		X	X
1050		X	X
1100		X	X
1200		X	X
1300		X	X
1350		X	X
1400		X	X
1500		X	X
1600		X	X
1650		X	X
1700	X	X	
1800	X	X	
1900	X	X	
1950	X	X	
300	600	X	X
400		X	X
450		X	X
500		X	X
600		X	X
700		X	X
750		X	X
800		X	X
900		X	X
1000		X	X
1050		X	X
1100		X	X
1200		X	X
1300		X	X
1350		X	X
1400		X	X
1500		X	X
1600		X	X
1650		X	X
1700	X	X	
1800	X	X	
1900	X	X	
1950	X	X	

B	H	GAZ	GAL
300	750	X	X
400		X	X
450		X	X
500		X	X
600		X	X
700		X	X
750		X	X
800		X	X
900		X	X
1000		X	X
1050		X	X
1100		X	X
1200		X	X
1300		X	X
1350		X	X
1400		X	X
1500		X	X
1600		X	X
1650		X	X
1700	X	X	
1800	X	X	
1900	X	X	
1950	X	X	
300	900	X	X
400		X	X
450		X	X
500		X	X
600		X	X
700		X	X
750		X	X
800		X	X
900		X	X
1000		X	X
1050		X	X
1100		X	X
1200		X	X
1300		X	X
1350		X	X
1400		X	X
1500		X	X
1600		X	X
1650		X	X
1700	X	X	
1800	X	X	
1900	X	X	
1950	X	X	

B	H	GAZ	GAL
300	1050	X	X
400		X	X
450		X	X
500		X	X
600		X	X
700		X	X
750		X	X
800		X	X
900		X	X
1000		X	X
1050		X	X
1100		X	X
1200		X	X
1300		X	X
1350		X	X
1400		X	X
1500		X	X
1600		X	X
1650		X	X
1700	X	X	
1800	X	X	
1900	X	X	
1950	X	X	
300	1200	X	X
400		X	X
450		X	X
500		X	X
600		X	X
700		X	X
750		X	X
800		X	X
900		X	X
1000		X	X
1050		X	X
1100		X	X
1200		X	X
1300		X	X
1350		X	X
1400		X	X
1500		X	X
1600		X	X
1650		X	X
1700	X	X	
1800	X	X	
1900	X	X	
1950	X	X	



EXTERNAL GRILLES WITH SOUND REDUCING

GA SERIES

SUPPLIABLE MEASURES

B	H	GAZ	GAL
300		X	X
400		X	X
450		X	X
500		X	X
600		X	X
700		X	X
750		X	X
800		X	X
900		X	X
1000		X	X
1050		X	X
1100	1350	X	X
1200		X	X
1300		X	X
1350		X	X
1400		X	X
1500		X	X
1600		X	X
1650		X	X
1700		X	X
1800		X	X
1900		X	X
1950		X	X
300		X	X
400		X	X
450		X	X
500		X	X
600		X	X
700		X	X
750		X	X
800		X	X
900		X	X
1000		X	X
1050		X	X
1100	1500	X	X
1200		X	X
1300		X	X
1350		X	X
1400		X	X
1500		X	X
1600		X	X
1650		X	X
1700		X	X
1800		X	X
1900		X	X
1950		X	X

B	H	GAZ	GAL
300		X	X
400		X	X
450		X	X
500		X	X
600		X	X
700		X	X
750		X	X
800		X	X
900		X	X
1000		X	X
1050		X	X
1100	1650	X	X
1200		X	X
1300		X	X
1350		X	X
1400		X	X
1500		X	X
1600		X	X
1650		X	X
1700		X	X
1800		X	X
1900		X	X
1950		X	X
300		X	X
400		X	X
450		X	X
500		X	X
600		X	X
700		X	X
750		X	X
800		X	X
900		X	X
1000		X	X
1050		X	X
1100	1800	X	X
1200		X	X
1300		X	X
1350		X	X
1400		X	X
1500		X	X
1600		X	X
1650		X	X
1700		X	X
1800		X	X
1900		X	X
1950		X	X

B	H	GAZ	GAL
300		X	X
400		X	X
450		X	X
500		X	X
600		X	X
700		X	X
750		X	X
800		X	X
900		X	X
1000		X	X
1050		X	X
1100	1950	X	X
1200		X	X
1300		X	X
1350		X	X
1400		X	X
1500		X	X
1600		X	X
1650		X	X
1700		X	X
1800		X	X
1900		X	X
1950		X	X

GAZ External grille in galvanised steel with flange

GAL External grille in aluminium with flange

??? x ??? Base times height BxH in mm

Example: GAZ 1200x900
External grille in galvanised steel sheet 300mm thick, 150 mm pitch complete with 40mm flange. Nominal dimensions 1200x900.