



GFL
Leaf Filter Unit

- ☞ GFL – Leaf Filter Unit is an extract grille designed for sterile environments.
- ☞ It is used to prevent fibers and particles in the exhausted air from entering the ventilation system.



MATERIAL

- ☞ Made of AISI 304 quality stainless steel
- ☞ Porous chrome mesh filter

SURFACE COATING

- ☞ It is produced from stainless steel as standard.
- ☞ Optional
 - Different RAL color codes

MOUNTING OPTIONS

- ☞ Internally screwed

STANDARD DIMENSIONS

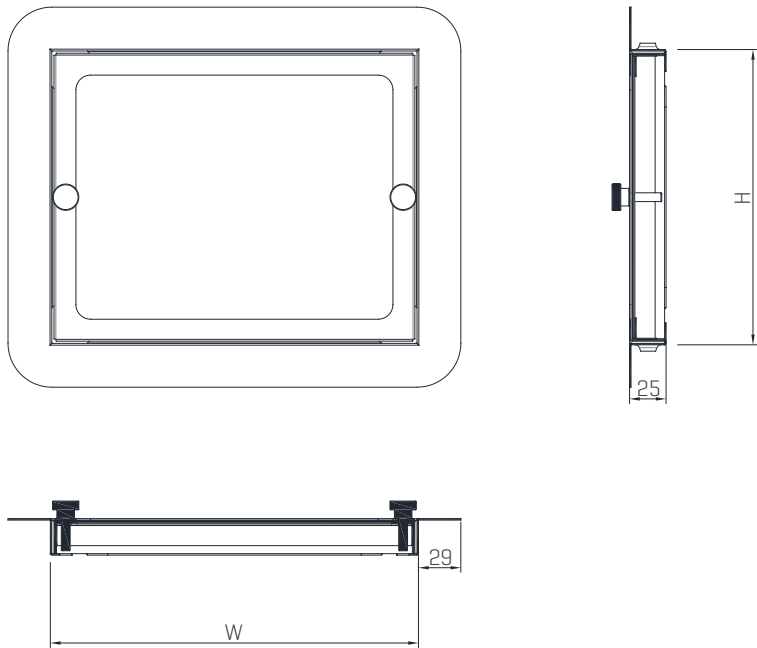


Table 1. Standard Dimensions

W (mm) {Width}	100 - 150 - 200 - 250 - 300 - 350 - 400 - 450 - 500 - 550 - 600 - 650 - 700
H (mm) {Height}	100 - 150 - 200 - 250 - 300 - 350 - 400 - 450 - 500

PERFORMANCE DATA

EFFECTIVE AREA TABLE

Table 2. Effective Area

Effective Area (mm²)		H (Height) (mm)									
		100	150	200	250	300	350	400	450	500	
W (Width) (mm)	100	0.006	0.010	0.015	0.020	0.025	0.030	0.035	0.039	0.044	
	150	0.010	0.018	0.025	0.032	0.039	0.047	0.054	0.061	0.068	
	200	0.015	0.025	0.035	0.044	0.054	0.064	0.073	0.083	0.092	
	250	0.020	0.032	0.044	0.056	0.068	0.080	0.092	0.105	0.117	
	300	0.025	0.039	0.054	0.068	0.083	0.097	0.112	0.126	0.141	
	350	0.030	0.047	0.064	0.080	0.097	0.114	0.131	0.148	0.165	
	400	0.035	0.054	0.073	0.092	0.112	0.131	0.150	0.170	0.189	
	450	0.039	0.061	0.083	0.105	0.126	0.148	0.170	0.192	0.213	
	500	0.044	0.068	0.092	0.117	0.141	0.165	0.189	0.213	0.237	
	550	0.049	0.076	0.102	0.129	0.155	0.182	0.208	0.235	0.262	
	600	0.054	0.083	0.112	0.141	0.170	0.199	0.228	0.257	0.286	
	650	0.059	0.090	0.121	0.153	0.184	0.216	0.247	0.279	0.310	
	700	0.064	0.097	0.131	0.165	0.199	0.233	0.266	0.300	0.334	

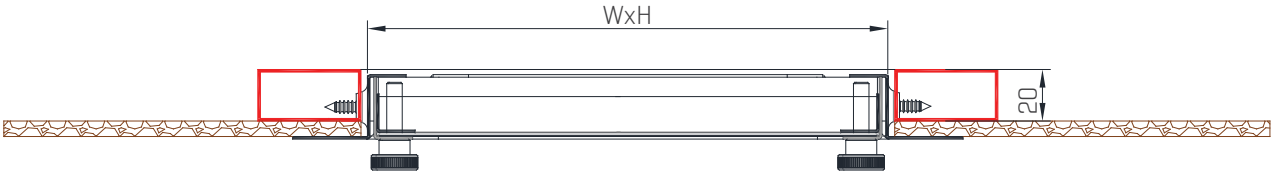
EXTRACT AIR DATA TABLE

Table 3. Extract Air Data

Flow Rate [m ³ / h]		Effective Speed [m/s]					
		0.5	1.0	1.5	2.0	2.5	3.0
50	Effective Area [m ²]	0.028	0.0139	0.0093	0.0069	0.006	
	Pressure Drop [Pa]	18	50	90	136	188	
	Sound Pressure Level [db(A)]	<15	21	29	35	39	
100	Effective Area [m ²]	0.0556	0.0278	0.019	0.014	0.011	
	Pressure Drop [Pa]	17	46	84	127	176	
	Sound Pressure Level [db(A)]	<15	23	31	37	41	
200	Effective Area [m ²]	0.111	0.056	0.037	0.028	0.022	
	Pressure Drop [Pa]	16	43	78	119	164	
	Sound Pressure Level [db(A)]	<15	25	33	39	44	
300	Effective Area [m ²]	0.167	0.083	0.056	0.042	0.033	
	Pressure Drop [Pa]	15	42	75	114	158	
	Sound Pressure Level [db(A)]	<15	27	35	41	45	
400	Effective Area [m ²]	0.222	0.111	0.074	0.056	0.044	0.037
	Pressure Drop [Pa]	15	41	73	111	153	200
	Sound Pressure Level [db(A)]	<15	28	36	42	46	50
500	Effective Area [m ²]	0.278	0.139	0.093	0.069	0.056	0.046
	Pressure Drop [Pa]	15	40	71	108	150	195
	Sound Pressure Level [db(A)]	<15	28	36	42	47	50
600	Effective Area [m ²]	0.333	0.167	0.111	0.083	0.067	0.056
	Pressure Drop [Pa]	14	39	70	107	147	192
	Sound Pressure Level [db(A)]	<15	29	37	43	47	51
700	Effective Area [m ²]		0.194	0.130	0.097	0.078	0.065
	Pressure Drop [Pa]		38	69	105	145	189
	Sound Pressure Level [db(A)]		29	38	43	48	52
800	Effective Area [m ²]		0.222	0.148	0.111	0.089	0.074
	Pressure Drop [Pa]		38	68	104	143	187
	Sound Pressure Level [db(A)]		30	38	44	48	52
900	Effective Area [m ²]		0.250	0.167	0.125	0.100	0.083
	Pressure Drop [Pa]		37	67	102	142	184
	Sound Pressure Level [db(A)]		30	38	44	49	52
1000	Effective Area [m ²]		0.278	0.185	0.139	0.111	0.093
	Pressure Drop [Pa]		37	67	101	140	183
	Sound Pressure Level [db(A)]		31	39	45	49	53
1250	Effective Area [m ²]			0.231	0.174	0.139	0.116
	Pressure Drop [Pa]			65	99	137	179
	Sound Pressure Level [db(A)]			39	45	50	53
1500	Effective Area [m ²]			0.278	0.208	0.167	0.139
	Pressure Drop [Pa]			64	97	135	175
	Sound Pressure Level [db(A)]			40	46	50	54
1750	Effective Area [m ²]			0.324	0.243	0.194	0.162
	Pressure Drop [Pa]			63	96	133	173
	Sound Pressure Level [db(A)]			41	46	51	55
2000	Effective Area [m ²]				0.278	0.222	0.185
	Pressure Drop [Pa]				95	131	171
	Sound Pressure Level [db(A)]				47	51	55
2500	Effective Area [m ²]					0.278	0.231
	Pressure Drop [Pa]					128	167
	Sound Pressure Level [db(A)]					52	56
3000	Effective Area [m ²]					0.333	0.278
	Pressure Drop [Pa]					126	164
	Sound Pressure Level [db(A)]					53	56

INSTALLATION

1. INTERNALLY SCREWED



PRODUCT SELECTION

Example: The total exhaust flow rate in the operating room has been determined as 2000 m³/h. 4 Leaf Filter Unit will be used. Make your product selection.

Solution: There is an air flow of $2000/4=500$ m³/h for one grille.
For 500 m³/h air flow, effective areas corresponding to appropriate pressure loss and flow rate values are selected from the extract air data table.

For example, in an effective area of 0.139 m², the effective speed is 1 m/s, pressure loss is 40 Pa and sound pressure is 28 dB(A). The appropriate grille size is selected from the effective area table [Table 2] as 600 mm x 250 mm corresponding to the value of 0.139 m².

PRODUCT ORDER CODES

You can place your orders according to the following coding format.

GFL.< A > . DZ . < B > . < C > . < D > . < E >

A	Raw Material Type	
	PAS	Stainless-Steel
B	Installation Method	
	IC	Internally Screwed
C	Width [W] [mm]	
	0000	You can look at the standard sizes.
D	Height [H] [mm]	
	0000	You can look at the standard sizes.
E	Paint	
	00	Unpainted

Sample Coding: GFL.PAS.DZ.VD.0400.0400.00

NOTES