



Fire resistant grilles type GE120

Rectangular fire resistant ventilation grilles **GE120** are applicable for fire compartmentation within buildings. The grille is made of blades, which swell at a temperature of approximately 100°C, thereby closing the opening. The fire resistant grilles are only applicable in systems without pressure (natural ventilation).

Application

- In fire resistant walls
- Fire resistant up to 2 hours
- Vertical installation only with blades in horizontal position
- Not suitable for outdoor use
- Maintenance-free

Material

- PVC lamellas and frame with intumescent material inside

Colour

- Grey PVC

Composition

- Grey PVC blades and frame with intumescent material inside

Mounting

- To be mounted in fire resistant walls by means of standard mortar, silicone **BMS** or plaster **BP**

Certification

- GE120 grilles are tested and approved according to European standard EN 1364-1
- Classified EI120 (ve i<->o) according EN 13501-3 in rigid wall (aerated concrete ≥ 100 mm)

Accessories

- Fire resistant silicone, type **BMS**
- Fire resistant plaster, type **BP**
- Fire resistant PU foam, type **BAP**

Fire resistant grilles

Text for tender

- The fire resistant grilles will be of the type for rectangular openings in fireproof compartmentation walls. The grilles have a fire resistance of 2 hours and a free air passage of +/- 70%. The grilles can only be used in systems where in case of fire no pressure is being applied upon the grille.
- **SIG type GE120**

Order example

- **GE120, 500, 200**

Explanation

GE120 = Type of fire resistant grill **500**= Length of grill

200 = Height of grill

Quick selection table

H/L [mm]	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
100	22.7	30.8	38.9	47	55.1	63.3	71.4	79.5	87.6	95.7	103.9	112	120.1	128.2	Q(Δp=2Pa)
	92.8	111.2	129.6	148	166.4	184.8	203.1	221.5	239.9	258.3	276.7	295	313.4	331.8	Q(Δp=10Pa)
150	38.3	53.9	69.4	84.9	100.5	116	131.6	147.1	162.6	178.2	193.7	209.3	224.8	240.4	Q(Δp=2Pa)
	128.3	163.5	198.7	233.8	269	304.2	339.4	374.6	409.8	445	480.2	515.4	550.6	585.8	Q(Δp=10Pa)
200	54	76.9	99.9	122.9	145.8	168.8	191.8	214.7	237.7	260.6	283.6	306.6	329.5	352.5	Q(Δp=2Pa)
	163.7	215.7	267.7	319.7	371.7	423.7	475.7	527.7	579.7	631.7	683.7	735.7	787.7	839.7	Q(Δp=10Pa)
250	69.6	100	130.4	160.8	191.2	221.6	251.9	282.3	312.7	343.1	373.5	403.9	434.3	464.7	Q(Δp=2Pa)
	199.2	268	336.8	405.6	474.4	543.2	612	680.8	749.6	818.4	887.2	956	1024.8	1093.6	Q(Δp=10Pa)
300	88.2	127.4	166.6	205.8	245	284.2	323.4	362.6	401.8	441	480.2	519.4	558.6	597.8	Q(Δp=2Pa)
	241.2	330	418.8	507.5	596.3	685.1	773.8	862.6	951.4	1040.1	1128.9	1217.6	1306.4	1395.2	Q(Δp=10Pa)
350	103.9	150.5	197.1	243.7	290.4	337	383.6	430.2	476.9	523.5	570.1	616.7	663.3	710	Q(Δp=2Pa)
	276.7	382.3	487.8	593.4	699	804.5	910.1	1015.7	1121.3	1226.8	1332.4	1438	1543.5	1649.1	Q(Δp=10Pa)
400	119.5	173.6	227.6	281.7	335.7	389.7	443.8	497.8	551.9	605.9	660	714	768.1	822.1	Q(Δp=2Pa)
	312.1	434.5	556.9	679.3	801.6	924	1046.4	1168.8	1291.2	1413.5	1535.9	1658.3	1780.7	1903	Q(Δp=10Pa)

Symbols and specifications

- H/L [mm] = Height and Width of grille in mm
- Q[m³/h] = Air volume in m³/h
- Δp2Pa = Pressure loss of 2 Pa over the grille
- Δp10Pa = Pressure loss of 10 Pa over the grille

Free air passage

H/L [mm]	150	200	250	300	350	400	450	500	550	600	650	700	750	800	
100	0.0035	0.005	0.0066	0.0082	0.0098	0.0114	0.0131	0.0147	0.0163	0.0179	0.0195	0.0211	0.0227	0.0243	Sn [m²]
	22.63	25.03	26.46	27.42	28.1	28.61	29.01	29.33	29.59	29.81	29.99	30.15	30.29	30.41	Sn [%]
150	0.0065	0.0096	0.0127	0.0157	0.0188	0.0219	0.025	0.0281	0.0312	0.0342	0.0373	0.0404	0.0435	0.0466	Sn [m²]
	28.88	31.94	33.77	34.99	35.86	36.52	37.02	37.43	37.76	38.04	38.28	38.48	38.65	38.8	Sn [%]
200	0.0096	0.0142	0.0187	0.0233	0.0278	0.0324	0.0369	0.0415	0.046	0.0506	0.0551	0.0597	0.0643	0.0688	Sn [m²]
	32.01	35.39	37.42	38.78	39.74	40.47	41.03	41.48	41.85	42.16	42.42	42.64	42.83	43	Sn [%]
250	0.0127	0.0187	0.0248	0.0308	0.0368	0.0428	0.0489	0.0549	0.0609	0.0669	0.073	0.079	0.085	0.091	Sn [m²]
	33.89	37.47	39.61	41.05	42.07	42.84	43.43	43.91	44.3	44.63	44.9	45.14	45.34	45.52	Sn [%]
300	0.0164	0.0242	0.0319	0.0397	0.0475	0.0553	0.063	0.0708	0.0786	0.0864	0.0941	0.1019	0.1097	0.1175	Sn [m²]
	36.43	40.28	42.59	44.13	45.23	46.05	46.69	47.21	47.63	47.98	48.27	48.53	48.75	48.94	Sn [%]
350	0.0195	0.0287	0.038	0.0472	0.0565	0.0657	0.075	0.0842	0.0935	0.1027	0.112	0.1212	0.1304	0.1397	Sn [m²]
	37.14	41.06	43.42	44.99	46.11	46.95	47.6	48.13	48.55	48.91	49.21	49.47	49.69	49.89	Sn [%]
400	0.0226	0.0333	0.044	0.0548	0.0655	0.0762	0.0869	0.0976	0.1083	0.1191	0.1298	0.1405	0.1512	0.1619	Sn [m²]
	37.67	41.65	44.04	45.63	46.77	47.62	48.28	48.81	49.25	49.61	49.92	50.18	50.41	50.6	Sn [%]

Symbols and specifications

- H/L [mm] = Height and Width of grille in mm
- Sn [m²] = Free area given in m²
- Sn [%] = Free area given in %

