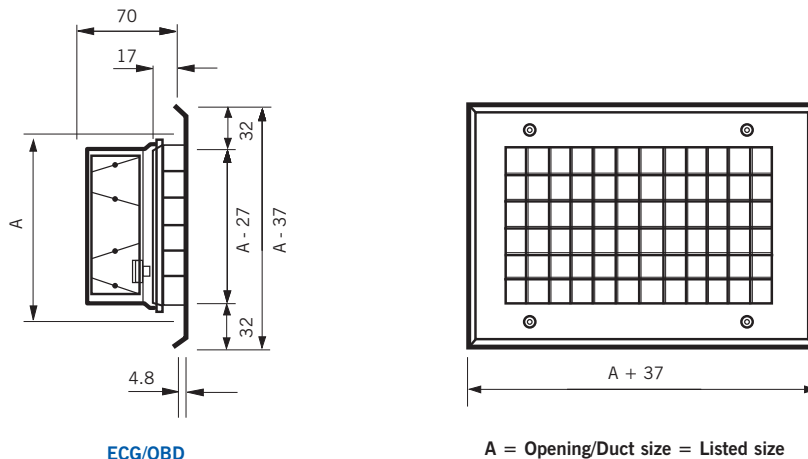


Egg crate grilles (ECG)

Egg crate grilles (ECG) are suitable for extract air in either sidewall or ceiling application where a high percentage free area (approx 90%) is required. The aluminium eggcrate core is 12mm x 12mm with a standard flange configuration of 32mm. Available options are Opposed Blade Damper (OBD), Removable Core (RC) and core Only (CO).

ECG grilles frames are manufactured from extruded aluminium sections, the mitred corners being fully welded and finished. Finally they are stove enamelled RAL 9010 white as standard. Other finishes are available.

Dimensions



Grilles are available to fit duct sizes from 100mm x 100mm up to maximum 1200mm x 750mm as a single unit.

Fixing methods

FMA: Screw fixing (standard)

FMB: Subframe with concealed screw fixings. Not available on Removable Core (RC)



Performance data

Egg crate grilles (ECG)

Selection Procedure

1. Using the required Volume (m3/Sec) select from Table 1 a core area which will provide a satisfactory noise level and pressure drop.

2. Using this chosen core area refer to Table 2 to select a grille of suitable size.

Note:

Performance data includes for opposed blade dampers in the fully open position. For grilles without dampers, multiply the pressure drop by 0.88 and deduct 4NC for noise level.

Table 1. Core area selection chart (m2)

Vol (m3/Sec)	Core Area	N.C.	Core Area	N.C.	Core Area	N.C.	Core Area	N.C.	Core Area	N.C.	Core Area	N.C.
.04	.02	-	.016	-	.013	-	.01	-	-	-	-	-
.06	.03	-	.024	-	.02	15	.017	21	.015	23	-	-
.08	.04	-	.03	-	.026	15	.023	23	.02	24	.16	30
.10	.05	-	.04	-	.033	16	.029	24	.025	25	.020	32
.12	.06	-	.048	-	.048	17	.034	25	.03	26	.024	32
.14	.07	-	.056	-	.047	17	.04	25	.035	27	.028	23
.16	.08	-	.064	-	.053	18	.046	26	.04	28	.032	34
.18	.09	-	.072	-	.060	19	.051	26	.045	28	.036	35
.20	.10	-	.08	15	.067	20	.057	26	.05	28	.04	36
.25	.125	-	.10	16	.083	21	.071	27	.063	29	.05	37
.30	.15	-	.12	17	.100	22	.086	27	.075	30	.06	37
.35	.175	-	.14	18	.112	22	.100	28	.088	31	.07	38
.40	.20	-	.16	19	.133	23	.114	29	.10	32	.08	38
.45	.225	-	.18	19	.15	24	.128	30	.113	32	.09	40
.50	.25	-	.20	20	.16	24	.143	30	.125	33	.10	40
.55	.275	-	.22	20	.18	25	.157	30	.138	33	.11	40
.60	.30	-	.24	20	.20	25	.171	31	.15	33	.12	42
.65	.325	-	.26	20	.217	25	.186	32	.163	34	.13	42
.70	.35	-	.28	21	.233	26	.20	32	.175	34	.14	44
.75	.375	-	.30	21	.25	26	.21	32	.188	35	.15	44
.80	.40	-	.32	22	.266	26	.23	33	.20	35	.16	44
.90	.45	-	.376	22	.30	27	.26	33	.225	35	.18	45
1.00	.50	-	.40	23	.333	27	.29	34	.25	36	.20	45
1.20	.60	15	.48	23	.40	28	.34	35	.30	37	.24	45
1.40	.70	16	.56	24	.467	28	.40	35	.35	37	.28	45
1.60	.80	16	.64	24	.533	29	.457	35	.40	38	.32	46
1.80	.90	17	.72	25	.60	29	.514	36	.45	39	.36	46
2.00	1.00	18	.8	25	.667	30	.571	37	.50	40	.40	48
Face Vol (m/s)	2.0		2.5		3.0		3.5		4.0		5.0	
Ps (Pa)	6		10		14		18		26		38	

G02 Egg crate grilles (ECG)

Performance data

Egg crate grilles (ECG)

Table 2: Return air selection chart

WIDTH (mm)	HEIGHT (mm)																			
	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	850	900	950	1000	1200
100	.006																			
150	.010	.017																		
200	.014	.023	.032																	
250	.018	.032	.041	.053																
300	.022	.036	.05	.064	.078															
350	.026	.043	.06	.076	.092	.109														
400	.030	.049	.068	.087	.106	.125	.144													
450	.034	.056	.077	.100	.120	.142	.163	.185												
500	.038	.062	.086	.110	.130	.158	.180	.206	.230											
550	.042	.069	.095	.122	.148	.175	.200	.228	.254	.281										
600	.046	.075	.104	.133	.162	.191	.220	.250	.278	.307	.336									
650	.050	.082	.113	.145	.176	.208	.240	.270	.302	.334	.365	.397								
700	.054	.088	.122	.156	.190	.224	.260	.290	.326	.360	.394	.428	.462							
750	.058	.095	.131	.158	.204	.240	.280	.314	.350	.387	.425	.460	.500	.530						
800	.062	.100	.140	.180	.220	.258	.296	.335	.374	.413	.452	.490	.530	.570	.608					
850	.066	.108	.150	.190	.230	.270	.315	.357	.398	.440	.480	.523	.560	.606	.647	.689				
900	.070	.115	.158	.200	.246	.290	.334	.378	.422	.466	.510	.554	.600	.642	.686	.730	.774			
950	.074	.121	.167	.210	.260	.307	.356	.400	.446	.493	.540	.586	.632	.680	.725	.770	.820	.865		
1000	.078	.127	.176	.225	.274	.323	.372	.420	.470	.520	.568	.620	.666	.715	.764	.810	.862	.910	.94	1.13
1100	.086	.140	.195	.250	.302	.356	.400	.464	.520	.570	.626	.680	.734	.788	.842	.896	.950	1.00	1.01	1.24
1200	.094	.151	.212	.270	.330	.390	.448	.507	.565	.625	.682	.743	.802	.860	.920	.979	1.04	1.10	1.16	1.35
	SELECTED CORE AREA (m2) (FROM TABLE 1)																			