

## EGG CRATE GRILLE



### INTRODUCTION

Egg Crate Grilles have long been the industry standard extract grille. Their high free area is able to handle huge air volumes with minimal pressure drops and noise generation.

The COSMOS Egg crate Grilles are high capacity return or exhaust outlets with the highest free area available. They therefore have the lowest pressure drop and sound levels available for a return air inlet. They are most suitable for use as ceiling returns.

The aluminum cube cores are constructed of thin, interlocked aluminum strips assembled in a square grid fashion and match in appearance the grid louvers on parabolic light fixtures.

COSMOS model ECG egg crate grilles are ideal for areas requiring high changeover rates like restaurant kitchens, painting booths etc.

As the egg crate louver is made by aluminum, we can have desired powder coated colour which gives further rigidity to the construction.

## DESCRIPTION

Egg crate grilles are having two main parts which is extruded aluminum frame and 12.5mm X 12.5mm X 12.5 mm cube aluminum egg crate cores.

Core is rigidly fixed into the special type of exclusive frame and then the corners of the frames are crimped with flat keys ensures the strength of assembly.

Apart from the return and exhaust purposes, egg crate grilles can be used for supply air purpose with opposed blades dampers fixed to it. Also it can control the exhaust air flow.

Dampers can be operated from the face side of the grille by a screw driver, damper blades are fixed to the frame by nylon bushings to give rattle free operation.

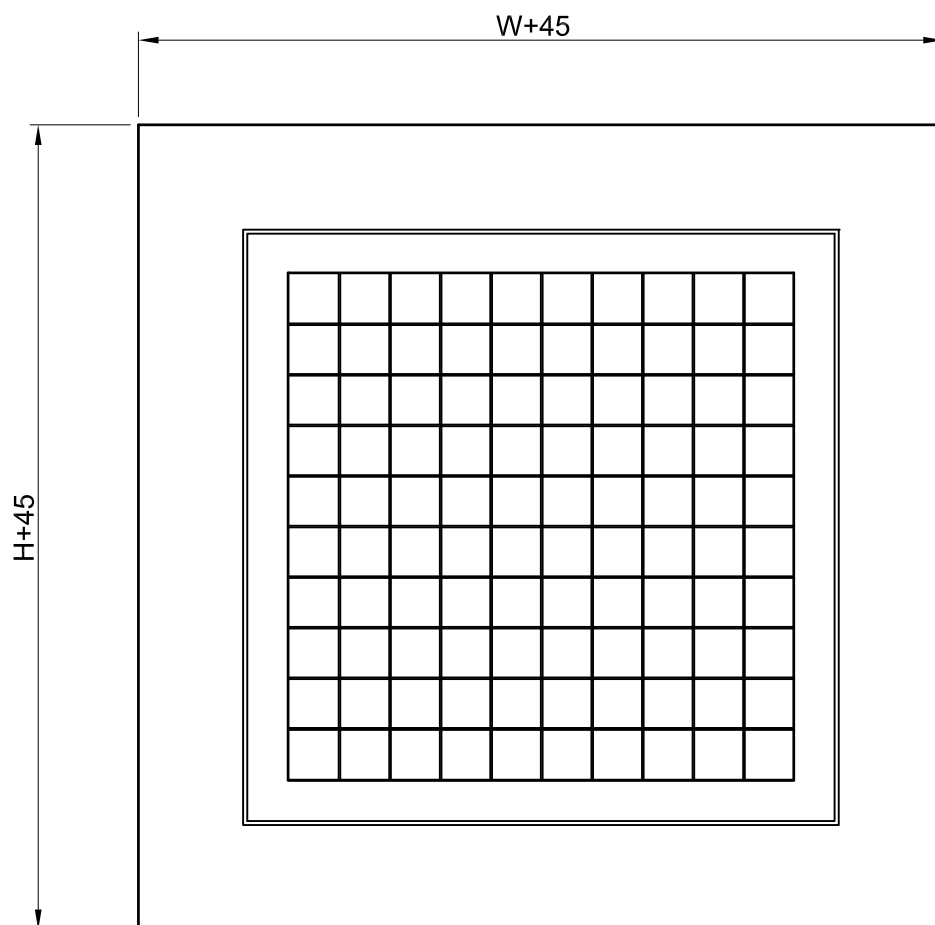
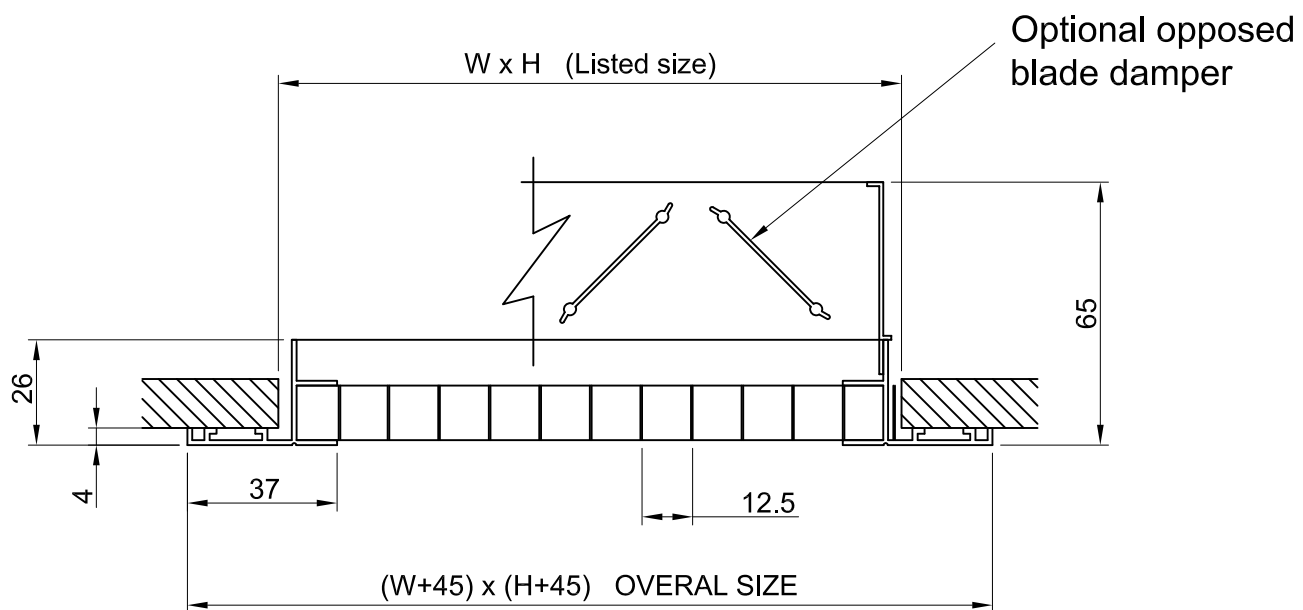
## FEATURES

- High quality aluminum Extruded profiles with 37mm flange width frame as standard.
- 12.5mm X 12.5mm X 12.5mm aluminum louver as inner egg crate core.
- High free area core.
- Minimized pressure drop.
- High quality extruded aluminum profile damper with black matt finish.

## FINISH

- Powder coated color finish, RAL 9016.
- Other finish is available as option.

Dimensional data  
EGG CRATE GRILLE



## Performance Data

Eggcrate Grille : **Model : ECG**

Listed Duct Size ( mm )	Alternative Size ( mm )	Core area ( m <sup>2</sup> )	Core velocity ( m/s )	1.5	2.0	2.5	3.0	3.5	4.0	4.5	5.0	6.0
			Pressure Drop ( Pa )	5	8	12	17	23	30	38	46	66
150 X 150	200 X 100	0.20	Airflow rate ( l/s )	28	38	47	57	66	76	85	94	113
	250 X 100		NC level	-	-	-	13	18	22	27	30	36
200 X 150	250 X 125	0.27	Airflow rate ( l/s )	38	51	64	76	89	102	115	127	153
	300 X 100		NC level	-	-	-	14	19	24	28	31	37
250 X 150	300 X 125	0.35	Airflow rate ( l/s )	50	66	83	99	116	132	149	185	198
	400 X 100		NC level	-	-	-	15	21	25	29	32	38
200 X 200	350 X 125	0.38	Airflow rate ( l/s )	54	72	90	108	126	143	161	179	215
			NC level	-	-	-	16	22	25	30	33	39
300 X 150	450 X 100	0.42	Airflow rate ( l/s )	59	79	89	119	139	159	178	198	238
			NC level	-	-	10	16	22	26	30	33	39
300 X 200	400 X 150	0.58	Airflow rate ( l/s )	82	109	137	164	192	219	246	274	328
	600 X 100		NC level	-	-	11	18	24	27	31	34	40
250 X 250	350 X 175	0.61	Airflow rate ( l/s )	86	115	144	173	202	230	259	288	345
	650 X 100		NC level	-	-	12	18	24	27	32	35	41
450 X 150	350 X 200	0.65	Airflow rate ( l/s )	92	123	153	184	215	245	276	307	368
	700 X 100		NC level	-	-	12	18	24	28	32	35	41
300 X 250	400 X 200	0.74	Airflow rate ( l/s )	105	140	175	210	244	279	314	349	419
	600 X 125		NC level	-	-	13	19	25	28	32	36	42
300 X 300	350 X 250	0.90	Airflow rate ( l/s )	127	170	212	255	297	340	382	425	510
	450 X 200		NC level	-	-	14	20	25	29	33	37	43
350 X 350	400 X 300	1.24	Airflow rate ( l/s )	176	234	293	351	410	468	527	585	702
	500 X 250		NC level	-	-	15	21	26	30	34	38	44
450 X 300	400 X 350	1.37	Airflow rate ( l/s )	194	259	323	388	453	517	582	647	776
	550 X 250		NC level	-	-	16	21	27	31	35	39	45
600 X 250	500 X 300	1.52	Airflow rate ( l/s )	215	287	359	430	502	574	646	717	861
	750 X 200		NC level	-	-	16	22	27	31	35	39	45
400 X 400	450 X 350	1.64	Airflow rate ( l/s )	232	310	387	464	542	619	697	774	929
	550 X 300		NC level	-	-	16	22	27	31	35	39	45
600 X 300	450 X 400	1.85	Airflow rate ( l/s )	262	349	437	524	611	698	786	873	1048
	500 X 350		NC level	-	-	16	22	27	31	35	39	45
450 X 450	500 X 400	2.10	Airflow rate ( l/s )	297	396	495	595	694	793	892	991	1189
	600 X 350		NC level	-	-	16	22	27	32	35	39	45
750 X 300	500 X 450	2.32	Airflow rate ( l/s )	328	438	547	657	766	876	985	1095	1314
	550 X 400		NC level	-	-	16	23	27	33	36	40	46
500 X 500	600 X 450	2.61	Airflow rate ( l/s )	369	493	616	739	862	985	1108	1232	1478
	650 X 400		NC level	-	-	17	23	27	33	36	40	46
550 X 550	600 X 500	3.17	Airflow rate ( l/s )	449	598	748	898	1047	1197	1346	1496	1795
	650 X 450		NC level	-	-	17	24	28	33	37	41	47
750 X 450	600 X 550	3.54	Airflow rate ( l/s )	501	668	835	1002	1169	1336	1503	1671	2005
	850 X 400		NC level	-	-	18	24	29	33	37	41	47
600 X 600	650 X 550	3.79	Airflow rate ( l/s )	537	715	894	1073	1252	1431	1610	1789	2146
	700 X 500		NC level	-	11	18	25	30	34	38	42	48
900 X 450	800 X 500	4.29	Airflow rate ( l/s )	607	810	1012	1215	1417	1620	1822	2024	2429
	850 X 400		NC level	-	11	18	25	30	34	38	42	48
650 X 650	700 X 600	4.47	Airflow rate ( l/s )	633	844	1055	1266	1477	1688	1898	2109	2531
	1200 X 350		NC level	-	12	19	26	31	35	39	43	49
750 X 600	700 X 650	4.77	Airflow rate ( l/s )	675	900	1125	1351	1576	1801	2206	2251	2701
	800 X 550		NC level	-	12	20	26	31	35	39	43	49
700 X 700	750 X 650	5.20	Airflow rate ( l/s )	736	982	1227	1472	1718	1963	2208	2454	2945
	650 X 550		NC level	-	13	20	26	31	36	39	43	49
900 X 600	750 X 700	5.74	Airflow rate ( l/s )	813	1083	1354	1625	1896	2167	2438	2709	3250
	1000 X 550		NC level	-	13	21	27	32	36	40	43	50
750 X 750	850 X 650	5.99	Airflow rate ( l/s )	848	1131	1413	1696	1979	2261	2544	2827	3392
	950 X 600		NC level	-	14	21	27	32	36	40	44	50

### Performance Note :

Grille tested without damper. Apply the following corrections for addition of opposed blade damper to grille:

Pressure Drop: Listed value X 1.25

NC : Add +6 to listed value