



Return Grilles & Registers

دریچه‌های برگشت و اکزاست (دیواری، سقفی)

Type : RG , RR





RETURN GRILLES

All of the return grilles are smartly styled to match the registers and grilles in the supply section of the line . The stream lined bars are extruded aluminium or steel , permanently locked into heavy aluminium or steel frames.

RETURN REGISTERS

These registers feature dampers , allowing installer to balance system to precise specifications . Volume is quickly and easily adjusted by key operator through the face . Damper blades are aluminium extrusions or galvanized steel .

MODELS OF RETURN GRILLES & REGISTERS

RG 1 GRILLE : horizontal face bars set straight with .AF. blade.

RR 1 REGISTER : horizontal face bars set straight with .AF. blade and damper.



RR 1



RG 1



RG 2 GRILLE : horizontal face bars set at 40 angle with .AF. blade.

RR 2 REGISTER : horizontal face bars set at 40 angle with .AF. blade and damper.



RR 2

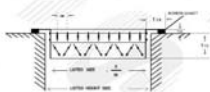


RG 2



RG 3 GRILLE : horizontal face bars set straight with .L. blade.

RR 3 REGISTER : horizontal face bars set straight with .L. blade and damper.



RR 3



RG 3



RG 4 GRILLE : horizontal face bars set at 40 angle with .L. blade.

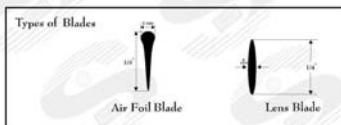
RR 4 REGISTER : horizontal face bars set at 40 angle with .L. blade and damper.



RR 4



RG 4





SIZE SELECTION TABLE

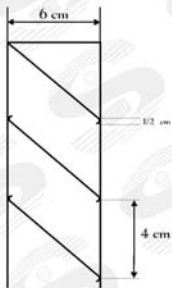
Return grilles and registers are usually selected on the basis of anemometer velocities, generally through a range of 300 to 800 fpm for quiet operation. The table below gives the capacity in CFM for various size and anemometer velocities. The table at the bottom of the page relates negative static pressure requirements to anemometer velocity.

SIZE Sq Inches	Anem. Effective Area In Sq.Ft.	AIR CAPACITIES IN CFM							
		300 FPM	400 FPM	500 FPM	600 FPM	700 FPM	800 FPM	900 FPM	1000 FPM
10 x 6	.246	74	99	123	148	172	197	222	246
12 x 6	.30	90	120	150	180	210	240	270	300
10 x 8	.336	101	135	168	202	235	269	302	336
12 x 8	.418	126	168	209	251	293	335	376	418
18 x 6	.464	139	186	232	279	325	371	418	464
12 x 12	.655	196	262	327	393	458	523	590	655
18 x 12	.991	298	396	495	594	694	793	892	991
24 x 12	1.36	408	544	680	815	952	1090	1225	1360
18 x 18	1.56	468	625	780	935	1092	1250	1403	1560
30 x 12	1.70	510	680	850	1020	1190	1360	1530	1700
24 x 18	2.08	624	832	1040	1248	1457	1665	1872	2080
30 x 18	2.62	786	1050	1310	1573	1834	2098	2357	2620
24 x 24	2.81	843	1125	1405	1685	1970	2245	2530	2810
36 x 18	3.18	954	1272	1590	1910	2230	2542	2860	3180
30 x 24	3.54	1062	1417	1770	2125	2480	2830	3185	3540
36 x 24	4.28	1285	1715	2142	2570	3000	3430	3860	4280
36 x 30	5.42	1625	2170	2710	3250	3790	4330	4870	5420
48 x 24	5.72	1715	2290	2860	3430	4000	4570	5150	5720
48 x 30	7.34	2200	2935	3670	4400	5140	5870	6610	7340
48 x 36	8.71	2610	3485	4360	5220	6090	6970	7840	8710
NEGATIVE STATIC PRESSURE (IN . H ₂ O)									
.75" Bar Spacing	.022	.039	.059	.084	.112	.148	.187	.225	



RETURN GRILLES WITH "Z" BLADE

- The return grilles with "z" blades are generally used for return and fresh air ,also this grilles can be used for transfer air between side by side spaces .
- The useful area of return grilles with "z" blade is 80%.
- This kind of return grilles especially use over 30" length in dimension because of the strong bars .



MODEL : RGZ



TYPES OF DAMPERS USE FOR RETURN REGISTERS :

The volume control dampers are two kinds of opposed - blade and parallel - blade . Volume - control units designed for installation in rectangular neck diffusers . The blades are rigid , rolled forms , set in a frame formed for strength and stiffness.

The blades overlap when in the closed position. The volume control unit should be installed before the duct ring is in place. The blades of the volume control unit are adjusted by means of a screw driver after the center section of the diffuser is removed .

The PD type dampers use for where the air stream in the main duct flow parallel with the straight side.

The OD type dampers use for where the air flow in the main duct is perpendicular to the straight side.



Model : PD1



Model : PD2



Model : OD

