

Return Grille CFM Chart

Return grille and supply register airflow by nominal size, at three face velocities.

- Return grilles: 65% free area. Supply registers: 60%. Typical values, NOT your specific model.
- CFM = free area x face velocity. Free area is printed so you can substitute the figure from a manufacturer sheet.
- Sizes are nominal, width x height, the way they are ordered.
- Returns: 300 fpm beside a bedroom, 400 fpm as the default, 500 fpm only where nobody sits.
- No filter behind the grille. A loaded filter is a separate pressure drop and is not in these numbers.

Size (W x H)	Type	Free area (sq. in.)	Low fpm	Design fpm	High fpm
10 x 6	Return @ 300/400/500	39	81	108	135
12 x 6	Return @ 300/400/500	47	97	130	162
14 x 6	Return @ 300/400/500	55	113	151	189
12 x 12	Return @ 300/400/500	94	195	260	325
14 x 14	Return @ 300/400/500	127	265	353	442
16 x 16	Return @ 300/400/500	166	346	462	577
20 x 12	Return @ 300/400/500	156	325	433	541
20 x 14	Return @ 300/400/500	182	379	505	631
20 x 20	Return @ 300/400/500	260	541	722	902
24 x 12	Return @ 300/400/500	187	390	520	650
24 x 18	Return @ 300/400/500	281	585	780	975
24 x 24	Return @ 300/400/500	374	780	1040	1300
25 x 20	Return @ 300/400/500	325	677	902	1128
30 x 20	Return @ 300/400/500	390	812	1083	1354
30 x 24	Return @ 300/400/500	468	975	1300	1625
36 x 24	Return @ 300/400/500	562	1170	1560	1950
4 x 10	Supply @ 400/500/600	24	66	83	100
4 x 12	Supply @ 400/500/600	29	80	99	119
4 x 14	Supply @ 400/500/600	34	93	116	140
6 x 10	Supply @ 400/500/600	36	100	125	150
6 x 12	Supply @ 400/500/600	43	120	150	180
6 x 14	Supply @ 400/500/600	50	140	175	210
8 x 14	Supply @ 400/500/600	67	186	233	280
10 x 6	Supply @ 400/500/600	36	100	125	150
10 x 8	Supply @ 400/500/600	48	133	166	200
12 x 6	Supply @ 400/500/600	43	120	150	180
12 x 8	Supply @ 400/500/600	58	160	199	239
14 x 6	Supply @ 400/500/600	50	140	175	210

Reference data for everyday sizing, not an engineering design. Final duct sizing should be checked by a licensed professional against ACCA Manual D for the specific system.