



ENGINEERING DATA

915 FG Series

SIZE	Effective Area	Velocity	400	500	600	700	800	900
		Duct Ps	.038	.048	.070	.092	.120	.140
8x8, 12x6	.51 ft ²	CFM	186	235	273	333	357	421
10x10, 14x8	.74 ft ²	CFM	294	348	430	489	578	656
12x12, 22x6	.94 ft ²	CFM	362	460	548	637	724	822
14x14, 24x8	1.21 ft ²	CFM	469	587	705	822	940	1056
16x16, 30x8	1.49 ft ²	CFM	578	724	871	1017	1154	1302
18x18, 20x16	1.97 ft ²	CFM	763	959	1145	1340	1527	1713
20x20, 25x16	2.44 ft ²	CFM	940	1184	1419	1654	1898	2113
24x20, 30x16	2.87 ft ²	CFM	1115	1400	1673	1957	2231	2515
24x24, 36x16	3.42 ft ²	CFM	1331	1663	1996	2284	2662	2994
25x20, 36x14	2.84 ft ²	CFM	1137	1427	1706	1995	2274	2564
30x24	4.21 ft ²	CFM	1634	2045	2456	2865	3268	3679
36x24	5.04 ft ²	CFM	1957	2446	2936	3425	3914	4403
30x30	5.19 ft ²	CFM	2016	2524	3024	3532	4032	4540
36x36	7.35 ft ²	CFM	2858	3572	4245	4951	5659	6366
48x48	12.59 ft ²	CFM	4845	6056	7268	8230	9696	11009

ENGINEERING FOOTNOTES

ENGINEERING FOOTNOTES FOR SHOEMAKER DIFFUSERS & GRILLES:

SIZE: Nominal size or the duct opening / neck size.

EFFECTIVE AREA: The space between the blades actually utilized by the air.

VELOCITY: The actual velocity of the air through the blades measured with a velometer in at least 4 places.

FILTERVELOCITY: Some velocities higher than 500 FPM will decrease filter effectiveness and possibly blow off agglomerates.

Special Note: The 920FG table gives the air flow for different filter grilles at 2 CFM per square inch of filter with allowance for the blockage caused by the grille.

DUCT PT: The total pressure behind the diffuser in the duct forcing that air through the diffuser.

DUCT PS: The static pressure in the duct directly behind the grille or neck of the T-Bar grille. The static load on the fan chargeable against that grille. Velometer readings are taken between grille vanes giving actual velocity.

THROW: The throws noted in the tables are the distances from the diffuser to where the air stream velocity has dropped to not under 100/75/50 F.P.M.

NOISE CRITERIA:

NC "A" scale.

- (1) Below NC25 extremely quiet.
- (2) Below NC30 Quiet Office.
- (3) Below NC35 Conference Rooms; normal voice 10-30 ft.
- (4) Below NC40 Conference Rooms; 6-12 ft. normal voice.
- (5) NC45 Conference Rooms; 3-6 ft. normal voice.

NOISE CRITERIA addition for RD series:

The NC values are based on a room absorption of 18 db, re 10-13 watts.

NOISE CRITERIA addition for OBR – Damper Throttling:

- ¼ Closed – 5
- ⅓ Closed – 10
- ½ Closed – 15