



700 600P Series											
SIZE	VELOCITY		300	400	500	600	700	800	900	1000	1200
	DUCT PT.		0.018	0.032	0.048	0.07	0.092	0.12	0.14	0.16	0.23
6X6	Eff. Area .11 ft ²	CFM	54	73	91	105	125	144	162	180	216
		NC	25	25-30	30	30-35	30-35	30-35	35	35-40	35-40
8X8	Eff. Area .23 ft ²	CFM	115	151	193	234	270	310	350	388	465
		NC	20-25	25-30	25-30	30-35	30-35	30-35	30-35	35	35-40
10X10	Eff. Area .36 ft ²	CFM	178	325	398	357	415	478	536	597	718
		NC	20-25	25	25-30	25-30	30-35	30-35	30-35	30-35	35-40
12X12	Eff. Area .49 ft ²	CFM	268	355	447	538	626	715	808	897	1076
		NC	20-25	20-25	25-30	25-30	30	30-35	30-35	30-35	35
14X14	Eff. Area .71 ft ²	CFM	350	470	585	705	824	940	1060	1175	1414
		NC	20-25	20-25	25-30	25-30	25-30	30	30-35	30-35	30-35
16X16	Eff. Area .96 ft ²	CFM	475	638	797	957	1115	1277	1438	1596	1917
		NC	20	20-25	25	25-30	25-30	30	30-35	30-35	30-35
18X18	Eff. Area 1.25 ft ²	CFM	622	830	1035	1245	1453	1662	1868	2075	2494
		NC	20	20-25	25	25-30	25-30	25-30	30	30-35	30-35
20X20	Eff. Area 1.67 ft ²	CFM	782	1058	1335	1615	1890	2170	2447	2725	3281
		NC	<20	20-25	20-25	25-30	25-30	25-30	30	30-35	30-35

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