



AL Series										
SIZE	VELOCITY		300	400	500	600	700	800	900	1000
	DUCT PT.		0.018	0.032	0.048	0.07	0.092	0.12	0.14	0.16
1X2	Eff. Area 1.26 ft ²	CFM	375	505	635	755	880	1010	1140	1275
		NC	<20	<20	<20	<20	<20	<20	20	25
2X2	Eff. Area 2.52 ft ²	CFM	750	1015	1275	1515	1775	2015	2280	2525
		NC	<20	<20	<20	<20	<20	<20	20	25
2X4	Eff. Area 5.04 ft ²	CFM	1500	2030	2545	3080	3575	4110	4600	5125
		NC	<20	<20	<20	<20	<20	<20	20	25-30

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
- ½ Closed – 10
- ¾ Closed – 15