907, 908, 937, 938 Series

SIZE	EFFECTIVE AREA (ft^2)	VELOCITY	400		500		600		700		800		900		1000	
		DUCT Ps	0.032		0.048		0.07		0.092		0.12		0.14		0.16	
10x6	0.45	CFM | NC	179	<20	500	<20	269	20	314	20-25	358	25-30	403	30	448	30-35
10x10	0.68	CFM | NC	274	<20	342	<20	409	20-25	479	25-30	549	25-30	616	30-35	683	30-35
12x6	0.55	CFM | NC	224	<20	274	<20	330	20-25	386	<25	437	25-30	493	30-35	549	30-35
12x12	0.9	CFM | NC	426	<20	532	<20	638	20-25	745	25-30	851	30-35	958	35	1064	>35
14x6	0.82	CFM | NC	252	<20	314	<20	381	20-25	504	25	437	30	566	30-35	627	35
14x8	0.88	CFM | NC	327	<20	409	<20	493	20-25	571	25-30	655	30-35	734	30-35	818	>35
14x14	1.39	CFM | NC	560	<20	694	20-25	834	25	974	25-30	1108	30-35	1249	35	1389	35-40
16x16	1.8	CFM | NC	722	<20	902	20-25	1081	25-30	1260	30	1445	35	1624	35-40	1803	35-40
18x12	1.49	CFM | NC	594	<20	745	20-25	896	25-30	1042	30	1193	30-35	1344	35-40	1490	40
18x18	2.17	CFM | NC	868	<20	1086	20-25	1305	25-30	1523	30-35	1736	35	1954	35-40	2173	>40
20x10	1.43	CFM | NC	571	<20	717	20-25	862	25-30	1002	30	1148	35	1288	35-40	1434	40
20x20	2.72	CFM | NC	1086	<20	1361	20-25	1630	25-30	1904	30-35	2178	35-40	2447	40	2722	>40
22x22	3.24	CFM | NC	1294	<20	1618	25	1943	30	2262	30-35	2593	35-40	2912	40	3237	>40
24x12	1.96	CFM | NC	784	<20	980	20-25	1176	25-30	1372	30-35	1568	30-35	1764	35-40	1960	>40
24x20	3.19	CFM | NC	1277	<20	1596	25	1915	30	2234	30-35	2554	35-40	2975	35-40	3192	>40
24x24	3.18	CFM | NC	1523	20	1904	25-30	2285	30	2666	35	3046	35-40	3427	40	3808	>40
30x12	2.41	CFM | NC	963	<20	1204	<25	1445	25-30	1686	30-35	1926	35	2167	35-40	2408	>40
30x18	3.64	CFM | NC	1456	20	1820	25	2184	30	2548	35	2912	35-40	3276	40	3640	>40
30x20	4.48	CFM | NC	1792	20	2240	25-30	2688	30-35	3136	35	3584	35-40	4032	40	4480	>40
30x24	4.7	CFM | NC	1882	20-25	2352	25-30	2822	30-35	3293	35	3763	35-40	4234	40	4704	>40
30x30	5.77	CFM | NC	2307	20-25	2884	25-30	3461	30-35	4088	35	4614	35	5191	40-45	5768	>45
36x18	4.26	CFM | NC	1702	20	2128	25-30	2554	30-35	2979	35	3405	35	3830	40-45	4256	40-45
36x24	5.6	CFM | NC	2240	20-25	2800	25-30	2240	30-35	2800	35-40	4480	35-40	5040	40-45	5600	45
36x30	6.94	CFM | NC	2778	20-25	3472	25-30	4166	30-35	4861	35-40	5555	40	6250	40-45	6944	>45
36x36	8.18	CFM | NC	3270	25	4088	30	4906	35	5723	35-40	6541	40-45	7358	45	8176	>45
48x24	7.28	CFM | NC	2912	20-25	3640	25-30	4368	30-35	5096	35-40	5824	40-45	6552	45	7280	>45
48x36	10.86	CFM | NC	4346	30-35	5432	35-40	6518	40-45	7605	45-50	8691	>50	9778	50-55	10,864	>55
48x48	14	CFM | NC	5600	35-40	7000	40-45	8400	50	9800	50-55	11,200	>55	12,600	>55	14,000	>55

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.

FILTER VELOCITY: 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