905, 906, 935, 936 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	0.4	CFM | NC	160	<20	200	20-25	240	30	360	25-30	400	35	700	35-40	800	40
10x10	0.42	CFM | NC	245	<20	305	25	365	25-30	425	30-35	490	35-40	550	35-40	610	>40
12x6	0.49	CFM | NC	200	<20	245	20-25	295	30	345	25-30	390	35	440	35-40	490	40
12x12	0.85	CFM | NC	380	20-25	475	25-30	570	30-35	665	35	760	35-40	855	40-45	950	45
14x6	0.74	CFM | NC	225	<20	280	25-30	340	30	450	30-35	390	35-40	505	40	560	40-45
14x8	0.78	CFM | NC	292	20-25	365	25-30	440	30-35	510	35	585	40	655	40-45	730	45
14x14	1.25	CFM | NC	500	20-25	620	30	745	30-35	870	35-40	990	40-45	1115	40-45	1240	>45
16x16	1.62	CFM | NC	645	20-25	805	30	965	30-35	1125	35-40	1290	40-45	1450	40-45	1610	>45
18x12	1.34	CFM | NC	530	20-25	665	30-35	800	35	930	35-40	1065	40-45	1200	40-45	1330	>45
18x18	1.95	CFM | NC	775	25	970	30-35	1165	35-40	1360	35-40	1550	40-45	1745	45	1940	>45
20x10	1.29	CFM | NC	510	20-25	640	30-35	770	35	895	35-40	1025	40-45	1150	40-45	1280	>45
20x20	2.45	CFM | NC	970	25-30	1215	30-35	1455	35-40	1700	40	1945	40-45	2185	45-50	2430	<50
22x22	2.92	CFM | NC	1155	25-30	1445	35	1735	35-40	2020	40-45	2315	45	2600	45-50	2890	50
24x12	1.76	CFM | NC	700	25	875	30-35	1050	35	1225	35-40	1400	40-45	1575	40-45	1750	<50
24x20	2.88	CFM | NC	1140	25-30	1425	30-35	1710	35-40	1995	40-45	2280	45	2656	45-50	2850	50
24x24	3.43	CFM | NC	1360	25-30	1700	35	2040	35-40	2380	40-50	2720	45-50	3060	45-50	3400	50
30x12	2.17	CFM | NC	860	25	1075	30-35	1290	35-40	1505	40	1720	40-45	1935	45-50	2150	50
30x18	3.28	CFM | NC	1300	25-30	1625	30-35	1950	35-40	2275	40-45	2600	45	2925	45-50	3250	>50
30x20	4.03	CFM | NC	1600	25-30	2000	30-35	2400	35-40	2800	40-45	3200	45-50	3600	45-50	4000	>50
30x24	4.23	CFM | NC	1680	25-30	2100	35	2520	35-40	2940	40-45	3360	45-50	3780	50	4200	>50
30x30	5.19	CFM | NC	2060	25-30	2575	35-40	3090	40	3650	40-45	4120	45-50	4635	>50	5150	>50
36x18	3.83	CFM | NC	1520	25-30	1900	35-40	2280	40	2660	40-45	3040	45-50	3420	45-50	3800	>50
36x24	5.04	CFM | NC	2000	25-30	2500	35-40	2000	40	2500	40-45	4000	45-50	4500	50	5000	50-55
36x30	6.25	CFM | NC	2480	30	3100	35-40	3720	40-45	4340	45	4960	50	5580	>50	6200	>50
36x36	7.36	CFM | NC	2920	30-35	3650	35-40	4380	40-45	5110	45	5840	50-55	6570	50-55	7300	55
48x24	6.55	CFM | NC	2600	30	3250	35-40	3900	40-45	4550	45	5200	50	5850	50-55	6500	50-55
48x36	9.77	CFM | NC	3880	30-35	4850	35-40	5820	40-45	6790	45-50	7760	50-55	8730	50-55	9700	>55
48x48	12.61	CFM | NC	5000	35	6250	35-40	7500	40-45	8750	45-50	10000	50-55	11250	55	12500	>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