

A 12 x 12 • 360° HORIZONTAL PATTERN - 9" PLAQUE - 1/8" DROP FACE

NECK SIZE	NECK VEL FPM	400	500	600	700	800	900	1000	1200	1400	1600
4" ϕ DIA	CFM	35	45	50	60	70	80	85	105	120	140
	Ps	.02	.03	.03	.05	.06	.08	.09	.14	.18	.25
	NC	<20	<20	<20	21	26	30	32	38	41	46
	THROW, FT	1-1-2	1-1-4	1-1-4	1-2-5	1-2-6	1-3-7	2-3-7	2-4-8	3-5-9	4-6-10
5" ϕ DIA	CFM	55	70	80	95	110	125	135	165	190	
	Ps	.02	.04	.05	.07	.10	.12	.15	.22	.29	
	NC	<20	<20	<20	23	28	31	34	39	43	
	THROW, FT	1-2-4	1-2-6	1-3-7	2-4-8	3-4-8	3-5-9	4-5-9	4-7-10	5-8-11	
6" ϕ DIA	CFM	80	100	120	135	155	175	195	235		
	Ps	.03	.05	.08	.10	.13	.17	.21	.30		
	NC	<20	<20	21	24	28	32	35	40		
	THROW, FT	1-3-7	2-4-8	3-5-9	4-5-9	4-6-10	5-7-11	5-8-11	6-9-12		
7" ϕ DIA	CFM	105	135	160	185	215	240	265	320		
	Ps	.04	.07	.10	.13	.18	.23	.28	.40		
	NC	<20	<20	22	26	30	33	36	42		
	THROW, FT	2-4-8	4-5-9	4-7-10	5-8-11	6-8-12	7-9-12	7-9-13	8-10-12		
8" ϕ DIA	CFM	140	175	210	245	280	315	350	420		
	Ps	.06	.09	.13	.18	.23	.29	.36	.52		
	NC	<20	<20	23	27	31	34	37	43		
	THROW, FT	4-6-10	5-7-11	6-8-12	7-9-13	8-10-13	8-10-14	9-11-15	9-11-15		

C 12 x 12 • 360° HORIZONTAL PATTERN - 9" PLAQUE - 1/2" DROP FACE

NECK SIZE	NECK VEL FPM	400	500	600	700	800	900	1000	1200	1400	1600
4" ϕ DIA	CFM	35	45	50	60	70	80	85	105	120	140
	Ps	.01	.01	.02	.02	.03	.04	.05	.08	.10	.14
	NC	<20	<20	<20	<20	20	24	26	32	36	40
	THROW, FT	1-1-1	1-1-2	1-1-3	1-1-4	1-1-4	1-2-5	1-2-5	1-3-6	2-4-7	2-4-9
5" ϕ DIA	CFM	55	70	80	95	110	125	135	165	190	220
	Ps	.01	.02	.03	.04	.05	.06	.07	.11	.14	.19
	NC	<20	<20	<20	<20	22	26	28	34	38	42
	THROW, FT	1-1-3	1-1-4	1-2-5	1-2-5	1-2-6	2-4-8	2-4-8	3-5-10	4-6-12	5-7-13
6" ϕ DIA	CFM	80	100	120	135	155	175	195	235	275	315
	Ps	.02	.03	.04	.05	.06	.08	.10	.14	.19	.25
	NC	<20	<20	<20	<20	22	26	29	34	39	43
	THROW, FT	1-2-5	1-3-6	2-4-7	2-4-8	3-5-10	4-5-11	4-6-12	5-7-14	6-8-15	6-10-16
7" ϕ DIA	CFM	105	135	160	185	215	240	265	320	375	430
	Ps	.02	.03	.04	.06	.08	.10	.12	.18	.24	.32
	NC	<20	<20	<20	<20	24	27	30	35	40	44
	THROW, FT	1-3-6	2-4-8	3-5-10	4-6-11	4-7-13	5-7-14	5-8-15	7-10-16	8-12-17	9-13-18
8" ϕ DIA	CFM	140	175	210	245	280	315	350	420	490	560
	Ps	.02	.04	.05	.07	.10	.12	.15	.22	.30	.39
	NC	<20	<20	<20	21	24	28	31	36	41	44
	THROW, FT	2-4-9	4-5-11	4-6-13	5-8-14	6-9-15	6-10-16	7-11-17	9-13-18	10-14-20	12-15-21

- Ps..... Static Pressure, Inches of water
- CFM..... Volumetric Air Flow Rate, Cubic Feet Per Minute
- NC Noise Criteria Based on Sound Pressure Levels with 10 dB Room Absorption RE: 10⁻¹² Watts
- THROW..... Distance, in feet, to terminal velocities of 150-100-50 FPM respectively

For Return Use: • NC = +3 NC to the supply data.
 • Negative Ps = 1.2 times the Ps for supply
 Tests conducted in accordance with ASHRAE STD 70, ADC 1062, ISO 5219, & ISO 3741

A 24 x 24 • 360° HORIZONTAL PATTERN - 18" PLAQUE - 1/8" DROP FACE

NECK SIZE	NECK VEL FPM	400	500	600	700	800	900	1000	1200	1400	1600
6" φ DIA	CFM	80	100	120	135	155	175	195	235	275	315
	Ps	.01	.01	.01	.01	.01	.01	.02	.02	.03	.04
	NC	<20	<20	<20	<20	<20	<20	22	28	32	36
	THROW, FT	1-1-2	1-1-2	1-1-3	1-1-4	1-1-4	1-2-5	1-2-5	1-3-6	2-4-7	3-4-6
8" φ DIA	CFM	140	175	210	245	280	315	350	420	490	560
	Ps	.01	.01	.01	.02	.02	.03	.04	.05	.07	.09
	NC	<20	<20	<20	<20	<20	23	26	31	36	40
	THROW, FT	1-1-4	1-2-5	1-3-6	2-3-7	2-4-7	3-4-8	3-5-9	4-6-11	4-7-13	5-7-15
10" φ DIA	CFM	220	275	325	380	435	490	545	655	765	875
	Ps	.01	.02	.02	.03	.04	.05	.06	.09	.12	.16
	NC	<20	<20	<20	<20	22	26	29	34	39	43
	THROW, FT	1-3-6	2-4-7	3-4-9	3-5-10	4-6-12	4-7-13	5-7-15	6-9-17	7-10-20	8-12-23
12" φ DIA	CFM	315	395	470	550	630	705	785	940	1100	1255
	Ps	.02	.02	.03	.05	.06	.08	.10	.14	.19	.25
	NC	<20	<20	<20	21	25	28	31	36	41	45
	THROW, FT	3-4-8	4-5-11	4-6-13	5-7-15	6-8-17	6-9-19	7-10-21	8-13-25	10-15-29	11-17-33
14" φ DIA	CFM	430	535	640	750	855	960	1070	1285	1495	
	Ps	.02	.04	.05	.07	.09	.11	.14	.20	.28	
	NC	<20	<20	<20	23	27	30	33	38	43	
	THROW, FT	4-6-11	5-7-14	6-9-17	7-10-20	8-11-23	9-13-26	10-14-29	11-17-34	13-20-40	
15" φ DIA	CFM	490	615	735	860	980	1105	1225	1475	1720	
	Ps	.03	.04	.06	.08	.11	.14	.24	.24	.33	
	NC	<20	<20	<20	24	28	31	39	39	44	
	THROW, FT	4-7-13	5-8-16	7-10-20	8-11-23	9-13-26	10-15-29	13-20-39	13-20-39	15-23-46	

- Ps..... Static Pressure, Inches of water
- CFM..... Volumetric Air Flow Rate, Cubic Feet Per Minute
- NC Noise Criteria Based on Sound Pressure Levels with 10 dB Room Absorption RE: 10⁻¹² Watts
- THROW..... Distance, in feet, to terminal velocities of 150-100-50 FPM respectively

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