

13/16" SQUARE HOLES on 1" CENTERS

Nom Neck Size		Nom Neck ft2	Duct Velocity	300	400	500	600	700	800	900	1000	1100
W	H			Pt	0.03	0.06	0.10	0.14	0.19	0.25	0.31	0.39
6	6	0.25	CFM	80	100	130	150	180	200	230	250	280
			NC	<20	<20	22	27	31	34	37	40	42
			1 Core throw	2 4 7 3 4 8	4 6 9 4 7 10	5 8 11 6 8 11	6 8 11 5 8 11	7 9 12 6 8 11	8 11 15 8 11 16	9 12 17 10 13 18	10 13 18 11 13 19	11 13 19 8 10 13
			2 Core throw	3 5 10 4 6 11	6 8 13 6 10 14	8 12 17 9 13 19	10 14 8 11 15	12 17 9 13 19	14 20 10 14 20	16 21 12 15 21	18 21 13 16 22	19 13 16 23
			3 Core throw	4 6 12 5 8 14	7 10 16 8 12 17	9 13 21 10 15 22	12 17 25 14 18 26	16 20 28 17 21 29	18 22 15 21 31	20 28 17 21 29	22 31 18 22 31	23 16 23
			4 Core throw	5 7 14 6 9 16	8 12 18 9 13 20	11 15 22 12 16 23	14 17 24 15 18 25	16 23 14 17 24	18 25 16 19 27	20 25 16 19 27	22 31 18 22 31	23 16 23
8	8	0.44	CFM	130	180	220	260	310	350	400	440	490
			NC	<20	<20	24	29	33	37	40	42	45
			1 Core throw	3 4 9 4 6 11	5 7 12 6 9 13	7 10 14 8 11 15	9 13 17 10 14	11 15 9 11 15	13 16 10 12 17	15 18 11 13 18	17 10 13 18	19 10 13 18
			2 Core throw	4 6 12 6 9 15	7 11 17 8 12 18	10 14 20 11 15 21	13 18 10 14 20	15 21 13 16 23	17 21 13 16 23	19 24 14 17 24	21 25 15 18 25	23 14 17 24
			3 Core throw	5 8 15 7 11 19	9 13 21 10 15 22	12 17 25 14 18 26	16 20 28 17 21 29	18 22 15 21 31	20 28 17 21 29	22 31 18 22 31	23 16 23	25 15 18 25
			4 Core throw	6 9 18 8 12 22	10 15 24 12 18 26	14 20 28 16 21 30	18 25 14 18 26	22 31 17 23 33	26 30 18 23 32	29 40 25 30 43	32 19 24 34	36 21 25 36
10	10	0.69	CFM	210	280	350	420	490	560	630	700	770
			NC	<20	21	26	31	35	39	42	44	47
			1 Core throw	4 6 11 5 8 13	6 9 15 8 11 16	9 13 18 10 13 19	11 16 23 12 18 25	14 19 27 16 20 29	17 21 30 18 22 32	20 25 35 21 26 37	22 31 18 22 31	23 16 23
			2 Core throw	5 8 16 7 11 19	9 13 21 11 16 23	12 17 25 14 18 26	16 20 28 17 21 29	18 22 15 21 31	20 28 17 21 29	22 31 18 22 31	23 16 23	25 15 18 25
			3 Core throw	7 10 20 9 13 23	11 16 26 13 20 29	15 22 31 17 23 33	20 25 35 21 26 37	22 31 18 22 31	23 16 23	25 15 18 25	27 32 19 24 34	31 21 25 36
			4 Core throw	8 11 23 10 15 27	13 19 30 15 23 33	18 25 14 18 26	22 31 17 23 33	26 30 18 23 32	29 40 25 30 43	32 19 24 34	36 21 25 36	40 21 25 36
12	12	1.00	CFM	300	400	500	600	700	800	900	1000	1100
			NC	<20	22	28	33	37	40	43	46	48
			1 Core throw	5 7 14 6 9 16	8 11 18 9 14 20	11 15 21 12 16 23	14 17 24 15 18 25	17 24 15 18 25	19 27 16 20 29	22 31 18 22 31	23 16 23	25 15 18 25
			2 Core throw	6 10 19 9 13 23	11 16 25 13 19 28	15 21 30 17 23 32	19 24 34 21 25 36	22 31 18 22 31	23 16 23	25 15 18 25	27 32 19 24 34	31 21 25 36
			3 Core throw	8 12 23 10 16 28	13 20 31 16 23 34	18 26 37 21 28 39	23 30 42 25 31 44	27 34 48 29 36 51	31 38 54 33 40 57	35 42 60 36 45 63	39 49 70 42 52 73	45 55 77
			4 Core throw	9 14 27 12 18 32	15 23 36 18 27 39	21 30 43 24 32 46	27 34 48 29 36 51	31 38 54 33 40 57	35 42 60 36 45 63	39 49 70 42 52 73	45 55 77	51 63 89
14	14	1.36	CFM	410	540	680	820	950	1090	1220	1360	1490
			NC	<20	24	29	34	38	42	45	47	50
			1 Core throw	5 8 16 7 10 19	9 13 21 11 16 23	12 18 25 14 19 27	16 20 28 17 21 29	20 28 16 20 28	24 32 46 27 34 48	29 36 51 31 38 54	33 40 57 35 42 60	36 45 63 39 49 70
			2 Core throw	7 11 22 10 15 26	12 19 30 15 22 33	17 25 35 20 27 38	22 28 40 24 30 42	25 31 44 27 34 48	30 36 51 31 38 54	33 40 57 35 42 60	36 45 63 39 49 70	
			3 Core throw	9 14 28 12 18 32	15 23 36 18 27 39	21 30 43 24 32 46	27 34 48 29 36 51	31 38 54 33 40 57	35 42 60 36 45 63	39 49 70 42 52 73	45 55 77 51 63 89	
			4 Core throw	11 16 32 14 21 37	18 26 42 21 32 46	25 35 50 28 38 53	32 40 56 34 42 59	36 44 62 39 49 70	42 52 73 45 55 77	48 56 84 41 51 72	54 76 46 57 80	
16	16	1.78	CFM	530	710	890	1070	1250	1430	1600	1780	1960
			NC	<20	25	31	35	39	43	46	49	51
			1 Core throw	6 9 18 8 12 21	10 15 24 12 18 26	14 20 28 16 22 30	18 23 32 14 17 24	22 32 46 28 34 48	29 36 51 31 38 54	33 40 57 35 42 60	36 45 63 39 49 70	
			2 Core throw	8 13 25 11 17 30	14 21 34 17 26 42	21 31 46 24 35 49	28 37 53 31 39 56	34 42 59 34 42 59	36 44 62 39 49 70	42 52 73 45 55 77	48 56 84 41 51 72	
			3 Core throw	10 16 31 14 21 37	17 26 42 21 32 46	25 35 50 28 38 53	32 40 56 34 42 59	36 44 62 39 49 70	42 52 73 45 55 77	48 56 84 41 51 72	54 76 46 57 80	
			4 Core throw	12 18 36 16 24 43	20 30 48 24 36 53	28 40 57 32 43 61	36 46 64 39 48 68	41 51 72 44 54 76	46 57 80 49 60 85	51 63 89 51 63 89		
18	18	2.25	CFM	670	900	1120	1340	1570	1790	2020	2240	2470
			NC	<20	26	32	36	40	44	47	50	52
			1 Core throw	7 10 20 9 14 24	11 17 27 13 20 29	16 23 32 18 24 34	20 26 36 22 27 38	25 34 48 29 36 51	31 38 54 33 40 57	35 42 60 36 45 63	39 49 70 42 52 73	
			2 Core throw	10 14 29 13 19 34	16 24 38 19 29 42	22 32 45 25 34 48	29 36 51 31 38 54	33 40 57 35 42 60	36 45 63 39 49 70	42 52 73 45 55 77	48 56 84 41 51 72	
			3 Core throw	12 18 35 16 24 42	20 29 47 23 35 51	27 39 55 31 42 59	35 44 63 38 47 66	40 49 69 40 49 69	46 57 80 49 60 85	51 63 89 51 63 89		
			4 Core throw	13 20 40 18 27 48	23 34 54 27 40 59	32 45 64 36 48 68	41 51 72 44 54 76	46 57 80 49 60 85	51 63 89 51 63 89			
20	20	2.78	CFM	830	1110	1390	1670	1950	2220	2500	2780	3060
			NC	<20	27	32	37	41	45	48	50	53
			1 Core throw	7 11 22 10 15 27	13 19 30 15 23 33	18 25 36 20 27 38	23 32 40 24 30 42	28 36 40 24 30 42	35 42 60 36 45 63	39 49 70 42 52 73	45 55 77 51 63 89	
			2 Core throw	11 16 32 14 21 38	18 27 42 21 32 46	25 36 50 28 38 54	32 40 56 34 42 59	36 44 62 39 49 70	42 52 73 45 55 77	48 56 84 41 51 72	54 76 46 57 80	
			3 Core throw	13 19 39 17 26 46	22 33 52 26 39 57	30 44 62 35 46 66	39 49 70 42 52 73	45 55 77 51 63 89				
			4 Core throw	15 22 45 20 30 54	25 38 60 30 45 66	35 50 71 40 54 76	45 57 80 49 60 85	51 63 89 51 63 89				
22	22	3.36	CFM	1010	1340	1680	2010	2350	2690	3020	3360	3690
			NC	20	27	33	38	42	45	49	51	54
			1 Core throw	8 12 25 11 17 29	14 21 33 17 25 36	19 28 39 22 30 42	25 31 44 27 33 47	28 35 49 28 35 49	33 40 57 35 42 60	36 45 63 39 49 70	42 52 73 45 55 77	
			2 Core throw	12 18 35 16 23 42	20 29 47 23 35 51	27 39 55 31 42 59	35 44 63 38 47 66	40 49 69 40 49 69	46 57 80 49 60 85	51 63 89 51 63 89		
			3 Core throw	14 22 43 19 29 51	24 36 57 29 43 62	33 48 68 38 51 72	43 54 77 47 57 81	49 60 85 51 63 89				
			4 Core throw	17 25 50 22 33 59	28 41 66 33 50 72	39 55 78 44 59 83	50 63 88 54 66 93	56 69 98				
24	24	4.00	CFM	1200	1600	2000	2400	2800	3200	3600	4000	4400
			NC	21	28	34	39	43	46	49	52	54
			1 Core throw	9 14 27 12 18 32	15 23 36 18 27 39	21 30 43 24 32 46	27 34 48 29 36 51	31 38 54 33 40 57	35 42 60 36 45 63	39 49 70 42 52 73	45 55 77 51 63 89	
			2 Core throw	13 19 38 17 26 46	21 32 51 26 38 56	30 43 60 34 46 64	38 48 68 42 51 72	44 54 74 47 57 81	49 60 85 51 63 89	54 76 46 57 80		
			3 Core throw	16 23 47 21 31 56	26 39 62 31 47 68	37 52 74 42 56 79	47 59 84 51 62 88	53 65 92				
			4 Core throw	18 27 54 24 36 64	30 45 72 36 54 79	42 60 85 48 64 91	54 68 97 59 72 102	62 75 107				

Test Standard
• ANSI / ASHRAE standard 70

Sound Levels
• NC is noise criteria curve that will not be exceeded at the operating point. This is determined by assuming a 10dB (ref: 10⁻¹² watts) room attenuation that is subtracted from the power levels in each of the 2nd thru 7th octave bands

Throw
• The numbers shown are throw distances, in feet, measured along the jet trajectory axis relating to terminal velocities of 150, 100, & 50 fpm, with the jet attached to a surface.
• Terminal velocity is the air speed, in feet per minute, measured in the supply air stream.
• Velocity: Feet per minute

Pressure
• P_t represents Total Pressure, inches of water

IMPORTANT It is the specifier's responsibility to properly configure the HVAC system to meet the appropriate level of comfort, safety, security and detention



Minimum Security

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