

Recommended NC Criteria

NC	APPLICATION
Below NC 25	Extremely quiet. Suitable for pickup of all sounds.
NC 30	Very quiet. For residences, theaters, libraries, executive offices.
NC 35	Quiet. For schools, courtrooms, churches, private offices.
NC 40	For general offices, labs, dining rooms. Telephone use satisfactory.
NC 45	For retail stores, cafeterias, lobby areas, reception areas, telephone use occasionally difficult.
NC 50	For steno pools, machine rooms, telephone use slightly difficult.

RECOMMENDED AIR INLET SIZES	
UP TO 100 CFM - 5" ROUND INLET	350 to 450 CFM - 9" ROUND INLET
100 TO 150 CFM - 6" ROUND INLET	450 TO 600 CFM - 10" ROUND INLET
150 TO 250 CFM - 7" ROUND INLET	600 TO 1000 CFM - 12" OVAL INLET
250 TO 350 CFM - 8" ROUND INLET	OVER 1000 CFM - 14" OVAL INLET

- P_T - Total pressure readings in inches H₂O with horizontal throw.
- Throw - Horizontal distance in feet to reach terminal velocity V_T of 50 FPM.
- NC - A one number evaluation of sound generation derived from sound power levels (re: 10¹² watts) less 10 db room absorption.

1 SLOT

24" NOMINAL LENGTH							48" NOMINAL LENGTH							60" NOMINAL LENGTH									
¾" Slot A _K .05 6" Inlet	CFM	15	25	35	50	75	100	¾" Slot A _K .10 6" Inlet	CFM	25	50	75	100	125	175	¾" Slot A _K .12 8" Inlet	CFM	50	75	100	125	150	200
	P _T	.01	.02	.04	.09	.20	.35		P _T	.01	.03	.06	.10	.16	.32		P _T	.02	.03	.06	.09	.13	.23
	Throw NC	5 (20)	7 (20)	9 (20)	15 (20)	31 (20)	39		Throw NC	4 (20)	10 (20)	16 (20)	22 (20)	28 (20)	38		Throw NC	8 (20)	12 (20)	17 (20)	23 (20)	28 (20)	37
1" Slot A _K .06 6" Inlet	CFM	20	35	50	75	100	125	1" Slot A _K .11 8" Inlet	CFM	50	75	100	150	200	250	1" Slot A _K .14 10" Inlet	CFM	75	100	150	200	250	300
	P _T	.01	.03	.06	.14	.25	.39		P _T	.02	.04	.06	.14	.26	.40		P _T	.02	.04	.09	.16	.25	.36
	Throw NC	5 (20)	8 (20)	13 (20)	15 (20)	17 (20)	19 (20)		37	Throw NC	8 (20)	13 (20)	18 (20)	21 (20)	23 (20)		27 (20)	34 (20)	Throw NC	9 (20)	14 (20)	20 (20)	24 (20)
1½" Slot A _K .11 8" Inlet	CFM	25	50	85	100	125	175	1½" Slot A _K .22 8" Inlet	CFM	50	100	150	200	250	300	1½" Slot A _K .28 10" Inlet	CFM	75	125	200	250	300	350
	P _T	.01	.02	.05	.08	.13	.26		P _T	.01	.02	.05	.09	.14	.20		P _T	.01	.02	.05	.08	.12	.16
	Throw NC	3 (20)	9 (20)	13 (20)	17 (20)	19 (20)	24 (20)		35	Throw NC	4 (20)	11 (20)	17 (20)	22 (20)	25 (20)		28 (20)	34 (20)	Throw NC	7 (20)	13 (20)	20 (20)	26 (20)

2 SLOT

24" NOMINAL LENGTH							48" NOMINAL LENGTH							60" NOMINAL LENGTH									
¾" Slot A _K .10 6" Inlet	CFM	25	50	75	100	125	150	¾" Slot A _K .19 8" Inlet	CFM	50	100	150	200	250	300	¾" Slot A _K .24 10" Inlet	CFM	75	125	200	250	300	375
	P _T	.01	.03	.06	.10	.16	.22		P _T	.01	.03	.06	.10	.16	.23		P _T	.01	.02	.06	.10	.14	.22
	Throw NC	4 (20)	10 (20)	14 (20)	17 (20)	20 (20)	24 (20)		34	Throw NC	6 (20)	13 (20)	19 (20)	24 (20)	27 (20)		30 (20)	37 (20)	Throw NC	7 (20)	13 (20)	20 (20)	26 (20)
1" Slot A _K .11 6" Inlet	CFM	50	75	100	125	150	200	1" Slot A _K .22 8" Inlet	CFM	100	150	200	250	300	400	1" Slot A _K .28 10" Inlet	CFM	150	200	250	300	400	500
	P _T	.02	.04	.08	.12	.17	.30		P _T	.02	.05	.08	.12	.18	.32		P _T	.03	.05	.07	.10	.18	.29
	Throw NC	9 (20)	13 (20)	18 (20)	22 (20)	25 (20)	27 (20)		34	Throw NC	11 (20)	16 (20)	21 (20)	26 (20)	28 (20)		33 (20)	37 (20)	Throw NC	14 (20)	20 (20)	27 (20)	29 (20)
1½" Slot A _K .22 8" Inlet	CFM	50	100	150	200	250	300	1½" Slot A _K .44 12" Inlet	CFM	100	200	300	400	500	600	1½" Slot A _K .55 12" Inlet	CFM	125	250	375	500	600	750
	P _T	.01	.02	.05	.09	.14	.20		P _T	.01	.02	.05	.08	.13	.19		P _T	.01	.02	.05	.09	.13	.21
	Throw NC	6 (20)	12 (20)	19 (20)	23 (20)	27 (20)	30 (20)		34	Throw NC	6 (20)	16 (20)	25 (20)	29 (20)	35 (20)		40 (20)	37 (20)	Throw NC	7 (20)	18 (20)	28 (20)	35 (20)

3 SLOT

24" NOMINAL LENGTH							48" NOMINAL LENGTH							60" NOMINAL LENGTH									
¾" Slot A _K .14 8" Inlet	CFM	50	75	125	175	225	250	¾" Slot A _K .29 10" Inlet	CFM	75	150	225	300	375	450	¾" Slot A _K .36 12" Inlet	CFM	100	200	300	400	500	600
	P _T	.01	.02	.07	.13	.21	.26		P _T	.01	.03	.06	.10	.16	.23		P _T	.01	.03	.06	.11	.17	.25
	Throw NC	7 (20)	11 (20)	19 (20)	22 (20)	26 (20)	28 (20)		39	Throw NC	6 (20)	17 (20)	26 (20)	30 (20)	33 (20)		37 (20)	38 (20)	Throw NC	8 (20)	20 (20)	30 (20)	34 (20)
1" Slot A _K .17 8" Inlet	CFM	75	100	150	175	225	300	1" Slot A _K .34 10" Inlet	CFM	150	225	300	400	500	600	1" Slot A _K .42 12" Inlet	CFM	200	300	400	500	600	700
	P _T	.02	.03	.07	.10	.16	.28		P _T	.02	.04	.08	.14	.22	.31		P _T	.02	.05	.09	.13	.19	.25
	Throw NC	10 (20)	15 (20)	22 (20)	23 (20)	26 (20)	30 (20)		36	Throw NC	16 (20)	23 (20)	31 (20)	34 (20)	39 (20)		43 (20)	39 (20)	Throw NC	18 (20)	28 (20)	34 (20)	38 (20)
1½" Slot A _K .33 10" Inlet	CFM	75	125	200	250	300	375	1½" Slot A _K .66 12" Inlet	CFM	125	250	375	500	600	700	1½" Slot A _K .83 12" Inlet	CFM	150	300	500	600	700	800
	P _T	.01	.02	.04	.06	.09	.14		P _T	.01	.02	.04	.07	.10	.14		P _T	.01	.02	.06	.08	.11	.14
	Throw NC	5 (20)	12 (20)	20 (20)	26 (20)	29 (20)	32 (20)		31	Throw NC	5 (20)	17 (20)	27 (20)	36 (20)	42 (20)		45 (20)	28 (20)	Throw NC	5 (20)	19 (20)	32 (20)	39 (20)

4 SLOT

24" NOMINAL LENGTH							48" NOMINAL LENGTH							60" NOMINAL LENGTH									
¾" Slot A _K .19 8" Inlet	CFM	50	100	150	200	250	300	¾" Slot A _K .39 10" Inlet	CFM	100	200	300	400	500	600	¾" Slot A _K .48 12" Inlet	CFM	150	250	400	500	600	750
	P _T	.01	.03	.06	.10	.16	.24		P _T	.01	.03	.06	.10	.16	.22		P _T	.01	.03	.07	.11	.16	.25
	Throw NC	5 (20)	14 (20)	20 (20)	24 (20)	28 (20)	30 (20)		37	Throw NC	7 (20)	19 (20)	29 (20)	34 (20)	39 (20)		43 (20)	40 (20)	Throw NC	12 (20)	21 (20)	34 (20)	38 (20)
1" Slot A _K .22 8" Inlet	CFM	100	150	200	250	300	400	1" Slot A _K .45 12" Inlet	CFM	200	300	400	500	600	700	1" Slot A _K .56 12" Inlet	CFM	300	400	500	600	700	800
	P _T	.02	.05	.08	.12	.18	.32		P _T	.02	.04	.08	.12	.17	.23		P _T	.03	.05	.09	.12	.17	.22
	Throw NC	13 (20)	19 (20)	26 (20)	28 (20)	30 (20)	34 (20)		37	Throw NC	18 (20)	27 (20)	38 (20)	43 (20)	46 (20)		33 (20)	Throw NC	24 (20)	32 (20)	40 (20)	43 (20)	46 (20)
1½" Slot A _K .44 10" Inlet	CFM	75	150	225	300	375	450	1½" Slot A _K .88 12" Inlet	CFM	150	300	450	600	750	900	1½" Slot A _K .110 12" Inlet	CFM	175	375	575	750	900	1000
	P _T	.01	.02	.03	.06	.09	.13		P _T	.01	.02	.04	.07	.12	.17		P _T	.01	.02	.06	.10	.14	.17
	Throw NC	3 (20)	13 (20)	19 (20)	27 (20)	33 (20)	35 (20)		30	Throw NC	5 (20)	18 (20)	28 (20)	37 (20)	47 (20)		50 (20)	28 (20)	Throw NC	5 (20)	20 (20)	32 (20)	42 (20)