9/16" SQUARE HOLES ON 11/16" CENTERS

SIZE	VEL	600	700	800	900	1000	1100	1200	1400	1600	1800
	Ps	.03	.05	.06	.08	.10	.12	.14	.19	.25	.31
6 x 6	CFM	85	100	110	125	140	155	170	195	225	255
	NC	<20	<20	<20	<20	<20	<20	<20	21	25	28
8 x 8	CFM	160	185	210	240	265	290	320	370	425	480
	NC	<20	<20	<20	<20	<20	<20	20	24	28	31
10 x 10	CFM	260	300	345	385	430	475	515	605	690	775
	NC	<20	<20	<20	<20	<20	20	22	26	30	33
12 x 12	CFM	380	445	510	570	635	700	760	890	1015	1145
	NC	<20	<20	<20	<20	<20	21	23	27	31	34
14 x 14	CFM	525	615	705	790	880	965	1055	1230	1405	1580
	NC	<20	<20	<20	<20	20	23	25	29	33	36
16 x 1 6	CFM	670	815	930	1045	1160	1280	1395	1625	1860	2090
	NC	<20	<20	<20	<20	21	24	26	30	34	37

Test Standard
- ANSI / ASHRAE standard 70

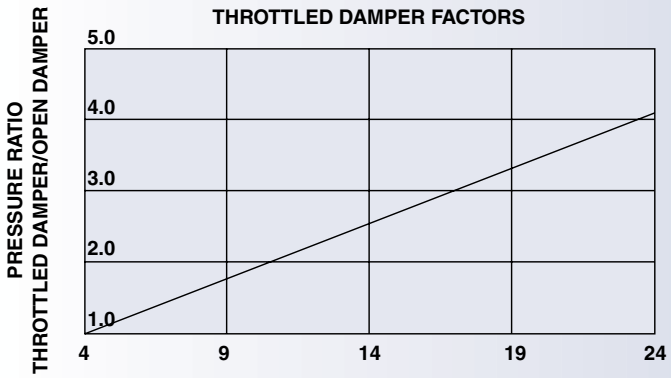
Sound Levels
- NC is noise criteria curve that will not be exceeded at the operating point. This is determined by assuming a 10dB (ref: 10^{-12} watts) room attenuation that is subtracted from the power levels in each of the 2nd thru 7th octave bands
- When an opposed blade damper is used, add NC adjustment as shown below

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: Velocity through face plate, feet per minute

Pressure
- P_S represents Static Pressure, inches of water

OPPOSED BLADE DAMPER (OBD) NC INCREASE ADJUSTMENTS

Closing the damper of a register accomplishes two objectives. It restricts the flow of air, thereby increasing the pressure drop and decreasing the cfm. In doing this, the damper also generates sound – increases the NC level. Figure at the right shows the db addition of throttled and unthrottled dampers.
For example a damper closed sufficiently to double the pressure loss of a register (pressure ratio of 2) causes an NC increase of about 7 db. (As a rule of thumb – and for general reference only – it can be assumed that closing an opposed blade damper to an effective opening ratio of 70 percent doubles the pressure loss of the damper outlet combination. Closing the damper to an effective opening ratio of fifty percent increases the pressure loss to 4 times the grille-open damper loss.)



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