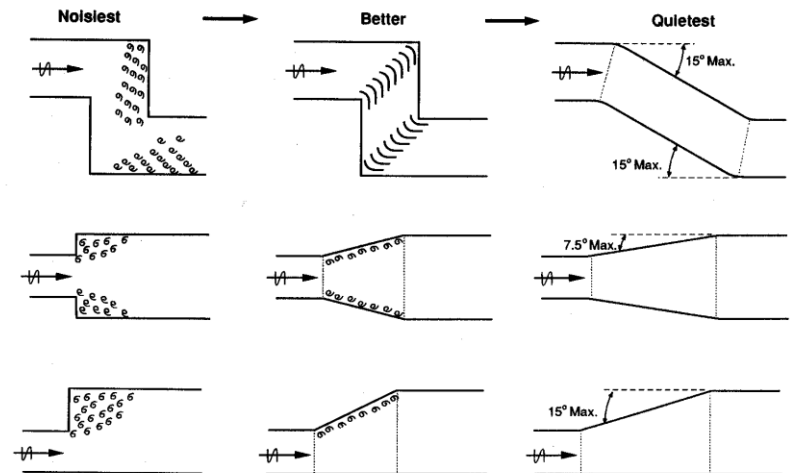


Duct Design

- Follow ASHRAE & SMACNA duct design guidelines
- Select duct shapes and system velocities consistent with target NC goals (see table at bottom right)
- Avoid large ductwork aspect ratios
- Specify turning vanes in hard 90° elbows and “T”s
- Increase gauge and stiffening for increased “oil canning” and breakout resistivity in duct runs near units

Duct Location	RC or NC Rating In Adjacent Occupancy	Max. Airflow Velocity In Feet Per Minute	
		Rectangular	Circular
In shaft or above solid drywall ceiling	45	3500	5000
	35	2500	4500
	25	1700	3000
Above suspended acoustical ceiling	45	2500	4500
	35	1800	3000
	25	1200	2000



Guidelines for transitions/offsets