D- Recommended outlets velocity, and Recommended Criteria for Indoor Design RC or NC Range

RECOMMENDED OUTLET VELOCITIES

APPLICATION	TERMINAL VELOCITY (FPM)
Broadcast studios	300-500
Residences	500-750
Apartments	500-750
Churches	500-750
Hotel bedrooms	500-750
Legitimate theaters	500-750
Private offices, acoustically treated	500-750
Private offices, not treated	500-800
Motion picture theaters	1000
General offices	1000-1250
Dept. stores, upper floors	1500
Dept. stores, main floor	2000

Type of area	Recommended criteria for RC or NC range
Private residence	25–30
Apartments	25–30
Hotels/motels	
Individual rooms or suites	30–35
Meeting/banquet rooms	25–30
Halls, corridors, lobbies	35–40
Service/support areas	40–45
Offices	
Executive	25–30
Conference	25–30
Private	30–35
Open-plan	30–35
Computer equipment rooms	40–45
Public circulation	40–45
Hospitals and clinics	
Private rooms	25–30
Wards	30–35
Operating rooms	35–40
Corridors	35–40
Public areas	35–40
Churches	25–30
Schools	
Lecture and classrooms	25–30
Open-plan classrooms	30–35
Libraries	35–40
Concert halls	†
Legitimate theaters	†
Recording studios	†
Movie theaters	30–35

3- Supply and return air system layout

- When designing ventilation systems it must be remembered that since most of the ductwork is installed within ceiling spaces, it is a good idea to liaise closely with the Architect at the early stages of design so that space requirements are met.

- Figures below shows a typical air conditioning system layout. One method, which can be adopted, is to run main supply and return ductwork in the ceiling space above corridors and the branches into adjoining rooms. Ceiling heights in corridors may be lowered to accommodate larger ductwork. Or supply duct work run in the ceiling space and air return to air conditioning equipment from return air outlets into ceiling space into the equipment without using return air duct.