



CI-0702

TAB 7: TECHNICAL DISCIPLINES
Mechanical

- > Auto restart after power failure
- > Hot start.

FANS

- > In public area and occupied spaces, low noise centrifugal fans shall be used.
- > Public area fan systems shall be provided with suitable attenuating silencers capable of maintaining space noise level no greater than NC40.
- > Airfoil or backward inclined design is preferred. Forward curved wheels may be used for low pressure applications.
- > Variable pitch axial fans should be considered for fan wheel diameters greater than 610mm and where system air volumes vary, due to control characteristics of summer/winter operation.
- > Propeller fans may be used where they serve non-public or unoccupied areas.
- > Additional ventilation with emergency power back-up may be required in large facilities, such as Willowbrook or Steeprock.

ENERGY RECOVERY

Energy Recovery Ventilators (ERV) shall be specified for energy conservation in all GO facilities, where practical and cost effective. In station buildings they shall be above the public washrooms or the janitor room, in the attic space, where applicable. Access by ceiling hatch.

FILTERS

Filters used in supply air systems shall be 50mm (2") thick throw-away type, with minimum efficiency of 30%.

HEATERS

Electric fan forced heaters shall be considered in the waiting area and entrances. Heaters can be wall or ceiling mounted. Heaters should be controlled by wall mounted space sensors. **No built-in thermostats should be allowed.**

Supplemental electric fan forced heater should be considered in the ticket sales area.

Electric resistance duct heaters shall have Silicon Control Rectifiers (SCR), minimum airflow switch, and two high-temperature limit sensors.

Gas fired unit heaters and infrared heaters shall be considered in large facilities.