



CI-0702

TAB 7: TECHNICAL DISCIPLINES

Mechanical

In all shelters, CSA compliant electric infrared radiant heaters c/w factory installed protective wire cage and stainless steel or nickel chromium tubular heating element shall be suspended by chains or threaded rods at 2440 mm (8 ft.) above finish floor level and controlled by a push button and timer.

DIFFUSERS

Diffusers shall be aluminum. For perforated metal ceilings; diffusers to be perforated type to match the ceiling profile and colour. For high-traffic door locations, or where drafts are a problem with station attendants, linear diffuser air-curtains shall be provided at the doors.

DUCTS

Air ducts shall be galvanized sheet metal conforming to ASHRAE, SMACNA Duct Construction Standards, and NFPA 90A. Diffuser branch-ducts and air terminal ducts may be circular metal flex-ducts where concealed. Exposed ducts in public areas shall be aluminium spiral ducts. Hangers and fasteners should also be protected from the detergents and moisture or be fabricated of materials that are not subject to corrosion.

FIRE DAMPERS

Fire dampers shall be fusible link type conforming to ULC-S505. An access door shall be installed for inspection and resetting.

CONNECTORS

Flexible connectors shall be provided between vibrating equipment and connecting ducts.

INSULATION

Acoustical and thermal duct insulation shall be in accordance with the O.B.C. and ASHRAE 90.1. Acoustical insulation shall be provided to maintain a maximum room sound rating of 40dBA. Piping insulation shall be in accordance with ASHRAE 90.1, with PVC jackets.

SYSTEM CONTROL

HVAC systems shall be controlled using programmable thermostats to achieve night setbacks. Interlocks for fire protection to be as per OBC and NFPA. **If a room has 2 HVAC systems, both systems shall be controlled by a single programmable automatic heating/cooling changeover controller.**