1.1 RELATED WORK

Upgrade Air Conditioning Systems

Exercise Room - 909 Concordia Avenue

Bid Opportunity 596-2010

1.	Basic Electrical Materials & Methods	Section 16050
2.	Conduit	Section 16111
3.	Wire and Cable	Section 16120

2.1 SUPPORT CHANNELS

1. U-shape galvanized steel uni-strut, size 1.6" x 1.6" (40 x 40mm), 0.1" (2.5mm) thick, surface-mounted, suspended or set in poured concrete walls and ceilings as required.

2.3 MANUFACTURERS

1. Acceptable manufacturers: Burndy, Electrovert, Unistrut, Pilgrim, Pursley.

3.1 INSTALLATION

- 1. Secure equipment to solid masonry, tile and plaster surfaces with lead anchors or nylon shields.
- 2. Secure equipment to poured concrete with cast-in or expandable inserts.
- 3. Secure equipment to hollow masonry walls or suspended ceilings with toggle bolts.
- 4. Secure surface-mounted equipment with twist clip fasteners to inverted T-bar ceilings. Ensure that T-bars are adequately supported to carry weight of equipment specified before installation. Provide additional support where required.
- 5. Support equipment, conduit or cables on support channels using clips, spring-loaded bolts, cable clamps designed as accessories to basic channel members.
- 6. Fasten exposed conduit or cables to building construction or support system using straps.
 - .1 One-hole steel straps to secure surface conduits and cables 1 ¼" (32mm) and smaller.
 - .2 Two-hole steel straps for conduits and cables larger than 1 ¹/₄" (32mm).
 - .3 Beam clamps to secure conduit to exposed steel work.
- 7. Suspended support systems.
 - .1 Support individual cable or conduit runs with $\frac{1}{4}$ " (6mm) dia. Threaded rods and spring clips.
 - .2 Support 2 or more cables or conduits on channels supported by 3/8" (10mm) diameter threaded rod hangers where direct fastenings to building construction is impractical.
- 8. For surface-mounting of two or more conduits use channels at 60" (1.52m) o.c.
- 9. Provide metal brackets, frames, hangers, clamps and related types of support structures where indicated or as required to support conduit and cable runs.

- 10. Ensure adequate support for raceways and cables dripped vertically to equipment where there is no wall support.
- 11. Do not use wire lashing or perforated pipe straps to support or secure raceways or cables.
- 12. Do not use supports or equipment installed for other trades for conduit or cable support except when otherwise approved by the Consultant.
- 13. Install fastenings and supports as required for each type of equipment cables and conduits, in accordance with manufacturer's installation recommendations.
- 14. Where conduit and cable runs are installed on support systems, they shall be run so as to be as inconspicuous as possible. Coordinate support system path with equipment, of other trades, to ensure proper installation of electrical equipment. Run support system path perpendicular or parallel to building lines.

END OF SECTION