

USask Master Specification Directions: The master specifications are intended to be incorporated into the Consultant's final, project specific specification package. The project specific specifications are expected to include any and all sections or portions of sections (Part 1, Part 2, Part 3) that are required to create a fully executable project specification. USask Master Specs only provide information that USask **requires** be a part of the final specification package. Components or sections not included in the Master USask Specifications may still be required for a complete, well-designed project. **It is the consultant's responsibility to ensure all specifications match USask requirements. Any deviations or revisions to any section included in the master specifications requires written consent from the USask Engineering department. The consultant is liable for any omissions, errors, or incorrect equipment or components supplied to site.**

The Master Specifications shall be used in conjunction with USask's Design Guidelines. Any conflicts shall be brought to the attention of USask Engineering staff for clarification.

Part 1 General

Part 2 Products

.1 Materials

- .1 Cable trays and fittings to CSA C22.2 No. 126.
- .2 Ladder type, CSA Class C.
- .3 Aluminum tray 150, 300, 450, 600 mm wide as per drawings with a depth of 100,150 mm as per drawings. Rung spacing to be 150 mm for data/security trays and 300 mm for power trays. Steel tray to be used when installing fire rated cables.
- .4 Horizontal elbows, end plates, drop outs, vertical risers and drops, tees, wyes, expansion joints and reducers where required. Fittings shall be manufactured accessories for the cable tray supplied. Radii on fittings: 300mm minimum.
- .5 Barriers where different voltage systems are in the same cable tray.
- .6 Wire basket tray is acceptable only in certain circumstances on a case-by-case basis. Obtain approval from USask Engineering Group prior to design implementation.

Part 3 Execution

.1 Installation

- .1 Install complete cable tray system.
- .2 Remove sharp burrs or projections to prevent damage to cables or injury to personnel.
- .3 Install tray so as to be fully accessible at all locations. Provide a minimum of 300 mm clearance above tray.
- .4 Support tray from hangers from building structural members.
- .5 Install a continuous #6 AWG green insulated copper bonding conductor the entire length of the cable tray system. Bond the conductor to each section of the cable tray. Terminate conductor at the main building ground grid.

.2 Cables in Tray

- .1 Install cables individually.

- .2 Secure cables with nylon ties in cable tray: every meter for cables larger than 25 mm diameter otherwise every two (2) meters.
- .3 Securing of fire rated cables onto the tray shall be as per manufacturers recommendations.
- .4 When data and security cables are installed in the same tray, cables for security shall be neatly installed on one side of the tray, while cables for network shall be neatly installed on the opposite side of the tray.
- .5 For power cables, maintain minimum air space of 100% of the largest cable diameter between cables
- .6 Use rollers when necessary to pull cables.
- .7 Identify cables in accordance with Section 26 05 21 – Wires and Cables 0-1000 V.

.3 Fire Barriers

- .1 Arrange for opening in fire rated walls and floors for width and depth of cable tray to run tray through. Make good fire rating after cables have been installed.

END OF SECTION