

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 Boxes - General

- .1 Gang boxes where wiring devices of the same system are grouped.
 - .1 Gang boxes shall only be used if wall plates for system are intended for installation.
- .2 Blank cover plates for boxes without wiring devices.
- .3 Separate boxes where devices for more than one system are grouped.
- .4 Sectional or handy boxes not permitted.
- .5 Extension and plaster rings are not permitted.
- .6 347 V outlet boxes for 347 V switching devices.

.2 Sheet Steel Outlet Boxes

- .1 Electro-galvanized square or octagonal steel device boxes, 102 mm or larger as required, with square cut (Raco) rings for flush installations.
- .2 Octagonal box No. 54151, square boxes No. 52151 (4" x 1-1/2"), No. 52171 (4" x 2-1/8") and No. 72171 (4-11/16" x 2-1/8").

.3 Masonry Boxes

- .1 Electro-galvanized steel masonry boxes for devices flush mounted in exposed block walls.

.4 Concrete Boxes

- .1 Electro-galvanized sheet steel concrete type boxes for flush mount in concrete.

.5 Cast Boxes

- .1 Cast FS or FD, aluminum or feraloy, boxes with factory-threaded hubs and mounting feet for surface mount wiring devices.
- .2 Cast boxes for mounting enclosed and gasketed light fixtures in unfinished areas.

.6 Fittings - General

- .1 Bushing and connectors with nylon insulated throats.
- .2 Knock-out fillers to prevent entry of foreign materials.
- .3 Conduit outlet bodies for conduit up to [1-1/4 (32) trade size] and pull boxes for larger conduits.
- .4 Double locknuts and insulated bushings on sheet metal boxes.

.7 Identification

- .1 Colour code boxes.
- .2 Colours: 25 mm wide prime colour and 20 mm wide auxiliary colour.

	Prime	Auxiliary
up to 250V	yellow	
up to 600 V	yellow	green
up to 5 kV	yellow	blue
up to 15 kV	yellow	red
Emergency Power	orange	red
Life Safety	red/white (equal)	
Telephone	green	
Computer	blue	
Other communications	green	blue
CCMS	orange	
Fire alarm	red	
Emergency voice	red	blue
Other security systems	red	yellow

Part 3 Execution

.1 Installation

- .1 Support boxes independently of connecting conduits.
- .2 Fill boxes with paper, sponges or foam or similar approved material to prevent entry of construction material.
- .3 Use octagonal boxes on unfinished ceilings only.
- .4 For flush installations mount outlets flush with finished wall using Raco rings to permit wall finish to come within 6 mm of opening.
- .5 Provide correct size of openings in boxes for conduit and cable connections. Reducing washers not allowed.
- .6 Provide minimum one stud spacing between boxes in acoustically rated walls.

END OF SECTION