

**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                Switches**

- .1        15 A, 120 V, single pole, double pole, three-way, four-way switches as indicated.
- .2        Manually-operated general purpose ac switches with following features:
  - .1        Terminal holes approved for #10 AWG wire.
  - .2        Silver alloy contacts.
  - .3        Urea or melamine molding for parts subject to carbon tracking.
  - .4        Suitable for back and side wiring.
  - .5        Ivory toggle.
- .3        Toggle operated fully rated up to 80% of rated capacity of motor loads.
- .4        Switches of one manufacturer throughout project.
- .5        Acceptable materials: Arrow Hart No. 1891, Bryant No. 4801, Canadian General Electric No. 5931, Leviton No. 53501, Hubbell No. 1201.

### **.2                Dimming Switches**

- .1        15 A, 120 V, ----- as indicated.

### **.3                Extra-Low Voltage Switches**

- .1        15 A, 120 V, ----- as indicated.

### **.4                Receptacles**

- .1        Duplex receptacles, CSA type 5-15R (15 A) and 5-20R (20 A), 125 V, U ground, with the following features:
  - .1        Ivory urea molded housing for normal power circuits, red housing for emergency power circuits, blue for circuits with surge suppression.
  - .2        Suitable for No. 10 AWG for back and side wiring.
  - .3        Break-off links for use as split receptacles.
  - .4        Eight back wired entrances, four side wiring screws and clamp type terminals.
  - .5        Double wipe contacts and rivetted grounding contacts.

- .2 Acceptable materials: Arrow Hart No. 5252, Bryant No. 5252, Leviton No. 5096/001, 5262 or 5362, Hubbell No. 5252. Premium specification grade.
- .3 Acceptable materials (combination receptacle and USB charging ports): Arrow Hart No. TR7745V, Bryant No. USBB151, Hubbell No. USB15X2I. Device to include a decora receptacle (CSA type 5-15R) as well as two USB charging ports. Premium specification
- .4 Acceptable materials for patient care area application: Arrow Hart No. XXXX, Bryant No. XXXX, Leviton No. 5096/001, 5262 or 5362, Hubbell No. XXXX. Hospital grade.
- .5 Receptacles of one manufacturer throughout project.
- .6 Pendant receptacles shall be double duplex in outlet box of Neotex rubber (Woodhead 3050). Provide wire mesh grip at box. Suspend on 3C #12 type SOW heavy duty service cord.
- .7 Ground fault interrupting receptacles as indicated and features as above.
- .8 Other receptacles, including twist lock, with ampacity and voltage as indicated and features as above.
- .9 Identification: Identify receptacle circuits with panel and circuit number on coverplate with clear self-adhesive mylar tape with black lettering.

## **.5 Special Wiring Devices**

- .1 Pilot lights as indicated, with neon type 0.04 W, 125 V lamp and red plastic Jewel flush type.
- .2 Explosion-proof devices where required.
- .3 Emergency lighting zone sensing relays.

## **.6 Cover Plates**

- .1 Cover plates from one manufacturer throughout project.
- .2 Stainless steel, vertically brushed, 1 mm thick cover plates for wiring devices mounted in flush-mounted outlet box.
- .3 Cast cover plates for wiring devices mounted in surface-mounted FS or FD type conduit boxes.
- .4 Weather-resistant, rain tight while-in-use covers for receptacles exposed to water. Impact resistant thermoplastic construction with pre-installed gasket and a self-closing lid made of power-coated cast zinc. Suitable for vertical or horizontal mounting as required. Acceptable materials: Leviton 5976 or 5996 or approved equivalent.

## **Part 3 Execution**

### **.1 Installation**

- .1 Switches:
  - .1 Install single throw switches with handle in "UP" position when switch closed.
  - .2 Install switches in gang type outlet box when more than one switch is required in one location.
  - .3 Mount toggle switches at height specified in Section 26 03 09 General Electrical Provisions (Refer to item 1.14).

- .4 Locate light switches on latch side of doors.
- .5 Do not switch emergency lighting circuits in public areas except rooms with multimedia equipment. All other emergency switches should have a red lamacoid indicating "Emergency Lighting".
- .6 Rooms with emergency lighting shall have a zone sensing relay to turn lights on in the event of a power failure.
- .2 Receptacles:
  - .1 Install receptacles in gang type outlet box when more than one receptacle is required in one location.
  - .2 Mount receptacles at height specified in Section 26 03 09 General Electrical Provisions (Refer to item 1.14).
  - .3 Where split receptacle has one portion switched, mount vertically and switch upper portion.
  - .4 Do not install receptacles back-to-back in wall; allow minimum 150 mm horizontal clearance between boxes except in acoustically rated walls provide one stud spacing.
  - .5 Change location of receptacles at no extra cost or credit, providing distance does not exceed 3000 mm, and information is given before installation.
  - .6 Install separate conduits from each receptacle to ceiling space. Receptacles shall not be loop fed horizontally in walls.
  - .7 Secure wire mesh grip of pendant receptacles from structural steel of roof [located above T-bar ceiling].
  - .8 Install ground fault interrupting receptacles in washrooms, shower rooms and as indicated.
  - .9 GFI receptacles shall not feed through to other receptacles except on common counters.
  - .10 Install 5-20R receptacles in hallways and corridors for janitorial equipment and adjacent to rooftop equipment.
  - .11 Install tamper resistant receptacles in daycares, family residences or other areas where children are or could normally be present.
  - .12 Install each twist lock receptacle in a single gang box.
- .3 Cover plates:
  - .1 Protect stainless steel cover plate finish with paper or plastic film until painting and other work is finished.
  - .2 Install suitable common cover plates where wiring devices are grouped.
  - .3 Do not use cover plates meant for flush outlet boxes on surface-mounted boxes.

END OF SECTION