

Part 1 General

1.1 SECTION INCLUDES

- .1 Electrical connections to equipment specified under other sections.

1.2 RELATED SECTIONS

- .1 Section 26 05 00 - Common Work Results for Electrical.
- .2 Section 22 47 00 - Plumbing Equipment.
- .3 Section 26 05 33 - Conduit.
- .4 Section 26 05 19 - Building Wire And Cable.
- .5 Section 26 05 34 - Boxes.

1.3 REFERENCES

- .1 CSA-C22.1-18 - Canadian Electrical Code, Part I (24th Edition), Safety Standard for Electrical Installations.
- .2 CSA C22.2 No. 127-18 - Equipment and Lead Wires.
- .3 ANSI/NEMA WD 6-2016 Wiring Devices—Dimensional Specifications.
- .4 NEMA WD 1-1999 (R2015) - General Colour Requirements for Wiring Devices.
- .5 CSA (Canadian Standards Association).
- .6 ULC (Underwriters' Laboratories of Canada).

1.4 ADMINISTRATIVE REQUIREMENTS

- .1 Refer to 26 05 00 Common Work Results for Electrical.
- .2 Coordination:
 - .1 Coordinate with other work having a direct bearing on work of this section.
 - .2 Obtain and review shop drawings, product data, and manufacturer's instructions for equipment provided under other sections.
 - .3 Determine connection locations and requirements.
- .3 Sequencing:
 - .1 Sequence rough-in of electrical connections to coordinate with installation schedule for equipment.
 - .2 Sequence electrical connections to coordinate with start-up schedule for equipment.

1.5 SUBMITTALS FOR REVIEW

- .1 Refer to 26 05 00 Common Work Results for Electrical.
- .2 Product Data: Provide wiring device manufacturer's catalogue information showing dimensions, configurations, and construction.

1.6 SUBMITTALS FOR INFORMATION

- .1 Refer to 26 05 00 Common Work Results for Electrical.

- .2 Installation Data: Indicate application conditions and limitations of use stipulated by Product testing agency specified under Regulatory Requirements. Include instructions for storage, handling, protection, examination, preparation, installation, and starting of Product.

1.7 REGULATORY REQUIREMENTS

- .1 Products: Listed and classified by CSA or ULC, and as suitable for the purpose specified and indicated.

Part 2 Products

2.1 MECHANICAL CONNECTIONS

- .1 Include motor starters, disconnects, conduit, wire, fittings, interlocks, outlet boxes, junction boxes, and all associated equipment required to provide power wiring for mechanical equipment, unless otherwise indicated.
- .2 Include pushbutton stations, motor protective switches, interlocks, conduit, wire, devices, and fittings required to provide control wiring for mechanical equipment, except for temperature/humidity control systems.
- .3 Unless otherwise noted, motors and control devices shall be supplied by Division 21, 22, and 23. Motor horsepower ratings shall be as shown in the Division 21, 22, and 23 specifications.
- .4 Provide the Mechanical Contractor with a copy of the Motor Schedule and ensure conformance with voltage shown.
- .5 All equipment, mounted on the exterior of the building, shall be weatherproof.

2.2 CORDS AND CAPS

- .1 Attachment Plug Construction: Conform to NEMA WD 1.
- .2 Configuration: NEMA WD 6; match receptacle configuration at outlet provided for equipment.
- .3 Cord Construction: NFPA 70, Type SJO, multi-conductor flexible cord with identified equipment grounding conductor, suitable for use in damp locations.
- .4 Size: Suitable for connected load of equipment, length of cord, and rating of branch circuit over-current protection.

Part 3 Execution

3.1 EXAMINATION

- .1 Refer to 26 05 00 Common Work Results for Electrical.
- .2 Verify that equipment is ready for electrical connection, wiring, and energization.

3.2 ELECTRICAL CONNECTIONS

- .1 Make electrical connections to equipment manufacturer's written instructions.
- .2 Make conduit connections to equipment using flexible conduit. Use liquid-tight flexible conduit with watertight connectors in damp or wet locations.

- .3 Make wiring connections using wire and cable with insulation suitable for temperatures encountered in heat producing equipment.
- .4 Provide receptacle outlet where connection with attachment plug is indicated or as required. Provide cord and cap where field-supplied attachment plug is indicated or as required.
- .5 Provide suitable strain-relief clamps and fittings for cord connections at outlet boxes and equipment connection boxes.
- .6 Install disconnect switches, controllers, control stations, and control devices as indicated or as required by the manufacturer of the associated equipment.
- .7 Modify equipment control wiring with terminal block jumpers as indicated or as required.
- .8 Provide interconnecting conduit and wiring between devices and equipment where indicated or as required.
- .9 Provide ground fault circuit interrupter type circuit breakers for circuits supplying hot tubs, whirlpool tubs, tub lifts etc. Wire and connect associated controls as required by the equipment shop drawings.
- .10 Mechanical Equipment:
 - .1 Power Wiring
 - .1 Install power feeders, starters, disconnects, and associated equipment and make connections to all mechanical equipment.
 - .2 Wire and connect all loose line and load side reactors to associated drives as required. Coordinate locations and quantities with mechanical contractor.
 - .3 Install branch circuit wiring for mechanical system control panels, time clocks, and control transformers.
 - .4 Install main power feeders to starter/control panels furnished by Division 21, 22, and 23. Install branch wiring from starter/control panels to controlled equipment such as motors, electric coils, etc.
 - .5 Flexible connections to motors shall not exceed 6 feet (1.83 m), unless approved by Consultant.
 - .2 Controls
 - .1 Install all electrical controls as indicated on the drawing schedules.
 - .2 Wire and connect line voltage remote thermostats and P/E switches for furnaces, condensing units, force flows, gas-fired unit heaters, electric heaters and rooftop units.
 - .3 Wire and connect float switches, pressure switches, alternators, alarms, etc. for sump pumps, sewage pumps, domestic hot water recirculating pumps, booster pumps, jockey pumps and compressors.
 - .4 Wire and connect electrical interlocks for starters supplied by Division 21, 22, and 23.
 - .5 Wire and connect hi-limit cutouts for remotely mounted electric heating coils provided by Division 21, 22, and 23.
 - .3 Disconnects
 - .1 Disconnects shall be mounted independently from the equipment that it's serving.

END OF SECTION