

2021 TRADE SCOPES INDEX

ELECTRICAL SCOPE

Page 1 of 6
Revised 2011

The electrical contract will not be limited to items listed below, but will include all electrical wiring, systems and equipment except mechanical control wiring and other miscellaneous items, specifically noted as falling under other sections of scope. Generally, any item that is to be installed by the electrical trade shall also be supplied by the electrical trade.

Where equipment is not supplied by the electrical trade, electrical services are to be roughed in as shown on tender documents. Suppliers of specialty items, cabinets or equipment, if other than the electrical trade, will be responsible for any alterations of services required, if these differ from the tender documents.

The electrical contractor shall include the following items regardless of where they may appear in the tender document unless specifically noted otherwise in this Scope.

INCLUDED:

1. Access panels for walls, ceilings and floors, where required for electrical requirements – to be supplied to respective trade for installation (e.g. to ceiling contractor, etc.).
2. Alarm and detection systems – for systems under the Electrical Scope.
3. Appliances, electrical – requiring a permanent electrical connection only.
4. Balancing – for systems under the Electrical Scope.
5. Batteries – for systems under the Electrical Scope.
6. Battery chargers – for systems under the Electrical Scope.
7. Burglar alarm systems.
8. Buss Duct.
9. Cables, electrical and heating.
10. Cable trays.
11. Free standing car heater posts (trade name requiring C.S.A. approval).
12. Circuit breakers – for systems under the Electrical Scope.
13. Clock systems.
14. Contactors.
15. Control consoles – except for automatic temperature controls and pre-wired factory-packaged equipment.
16. Control devices – for equipment under Mechanical Scope which:
 - a) constitute protective control required by the Canadian Electrical Code part 1, or
 - b) manually control the equipment (push buttons, isolating switches, etc.) unless forming part of the control panels for automatic temperature controls, or unless forming part of pre-wired factory-packaged equipment.
17. Control panels – except for automatic temperature controls and pre-wired factory-packaged equipment.
18. Control power supply outlets- provided at locations shown on the electrical drawings and terminated in terminal cabinets outlet boxes. The wiring beyond control power supply shall fall under the scope of control wiring.
19. Control wiring – for equipment under the Mechanical Scope, except pre-wired factory - packaged equipment and automatic temperature controls that do not directly switch the power lines to the equipment. Control wiring shall include all necessary materials and connections, and the installations of controls that do not require mechanical connections.
NOTE: Solenoids shall be considered controls – see Included Item 57.
20. Core drilling – for electrical, except if provided for under precast and post-tensioned slabs specifications.
21. Demolition of existing electrical installations when not covered by demolition section.

2021 TRADE SCOPES INDEX

ELECTRICAL SCOPE

Page 2 of 6

22. Detectors – for systems under the Electrical Scope.
23. Dimming systems.
24. Distribution equipment, electrical.
25. Door surveillance systems (see also Included Item 79).
26. Doors – overhead movable wall operators complete with associated protection and control devices - electrical hook up only.
27. Drainage connections for conduit systems (excluding drain lines).
28. Ductless range hoods.
29. Electrical thermostats – except for equipment supplied under Mechanical Scope. (Thermostats supplied under Mechanical Scope, if to be installed by electrical contractor, must be complete with adapter plates or sub base to mount on standard one gang electrical outlet box.)
30. Process Instrumentation – PLC, Controllers, I/O Cabinets, and Field instruments (excluding any direct mounted in-line instruments and sensor wells). This shall include calibration, wiring, supports and installation (excluding in-line instruments, sensor wells, mechanical piping, pneumatic tubing and associated equipment). Refer to Section 1 – General Mechanical Included Item 28.
31. Emergency power and lighting systems – electrical.
32. Excavation – the electrical contractor shall be responsible for all excavating to facilitate the installation of their work unless concrete is to be cast in place. This shall include all pumping, backfilling, tamping, sand and planking where specified for the protection of the electrical installation, as well as disposal of surplus material. Repair surface conditions of excavated areas to pre-excavation standard.
33. Fastenings – (screws, bolts, hangers, straps, etc.) for electrical equipment and systems.
34. Fire alarm systems – including fire phone systems, wiring to smoke dampers and fire alarm fan-shut-down relays and wiring.
35. Floor duct systems.
36. Generators – electrical.
37. Grounding systems.
38. Hand and hair dryers, electric.
39. Heating
 - a) Electric base board heating
 - b) Heating cables and heating tape
 - c) Electric unit heaters
 - d) Electric force flow heaters (requiring only electrical connections and no ductwork or pipe connections)
 - e) Any other self-contained electric heating device requiring only electrical connections and no ductwork or pipe connections
 - f) Controls for above items unless forming part of automatic temperature controls under Mechanical Scope
40. Holes to be cut into floor duct systems. (Refer to Included Item 20).
41. Horns and sirens – for systems under the Electrical Scope.
42. Instrument panels – for systems under the Electrical Scope.
43. Disconnect switches.
44. Electrical outlet in laboratory casework (excluding opening) except those items included in a factory assembled casework product.

2021 TRADE SCOPES INDEX

ELECTRICAL SCOPE

Page 3 of 6

45. Lighting fixtures:
 - a) Supply and installation of all luminous elements consisting of a light source (and ballast's if required) mounted separately or as components of an overall ceiling system including fixtures, lamps and lenses for coffered ceilings.
 - b) Air troffers and indoor outdoor flood lighting, to include lamps for same, lenses, globes, guards and diffusers that are part of the lighting fixtures (also support for above if detailed on electrical drawings only).
46. Lightning protection systems.
47. Luminous ceilings and light valances – supply and installation of lighting fixtures and lamps only – (ceiling complete with suspension system, luminous panels and reflective materials by others).
48. Plenum lighting – to mechanical systems other than package units, which will require a connection only.
49. Meters – for systems under the Electrical Scope.
50. Motor control centres.
51. Motor starters – all motor starters, variable frequency drives and protection switches other than those which form an integral part of a packaged air handler unit requiring an Electrical connection only. (See Note #1 - Electrical Scope page 5 of 5.)
52. Multi-speed switches – for systems under the Electrical Scope.
53. Nurse call systems and equipment, complete.
54. Operating room lights.
55. Power plant equipment (excluding fuel tanks, unless they are an integral part of the generator assembly), complete with prime mover, flex connections, valving and muffler when the major function is to drive electric generators. Enough fuel for testing purposes only. (Mechanical connections to same supplied as outlined in Section 1 – General Mechanical Included Item 4.)
56. Power supplies – for systems under the Electrical Scope.
57. Power wiring – for equipment under the Mechanical Scope, shall be included, without limiting the Scope, all necessary wiring materials and connections for motors requiring protective control by the Canadian Electrical Code (Part 1), heaters, lamps, electrostatic filters and controls that directly switch the power lines to such equipment. Wiring to solenoids shall fall in the category of control wiring – see Included Item 19.
58. Primary distribution centres.
59. Raceways – for systems under the Electrical Scope.
60. Rectifiers - for systems under the Electrical Scope.
61. Regulators – for systems under the Electrical Scope.
62. Relays – for systems under the Electrical Scope.
63. Resistors – for systems under the Electrical Scope.
64. Sauna, electrical.
65. Secondary distribution systems.
66. Send/receiving devices – for systems under the Electrical Scope.
67. Service, permanent electric.
68. Services, aerial (other than utility).
69. Signaling systems – for items under the Electrical Scope.
70. Electrical directional illuminated signs.
71. Sirens, for systems under the Electrical Scope.
72. Electric signs (signs requiring a direct electrical connection) e.g. neon, fluorescent and incandescent.

2021 TRADE SCOPES INDEX

ELECTRICAL SCOPE

Page 4 of 6

73. Sleeves, through poured-in-place concrete and masonry where required for electrical conduit, wire or equipment.
74. Smoke detection systems, electrical, not forming part of the door control system as described in Architectural Hardware Included Item 9.
75. Snow melting cables.
76. Sprinkler Annunicator Systems, electrical.
77. Substations (electrical portion).
78. Supports – where detailed on Electrical Drawings only.
79. Surveillance systems. See also Included Item 98.
80. Switch boards.
81. Switches – all types of electrical switches for systems under the Electrical Scope except where part of the pre-wired factory packaged equipment supplied by others.
82. Telephone systems, private automatic (see also Included Item 95).
83. Temperature control system and devices for electric heating supplied by the electrical trade.
84. Thermocouple wiring and thermocouple sensor wiring except for automatic temperature controls.
85. Time recording systems, time clocks and scoreboards (electric only).
86. Timers – for systems under the Electrical Scope.
87. Transformers – for systems under the Electrical Scope.
88. Watchman's clocking equipment – for systems under the Electrical Scope.
89. Wiring devices and plates.
90. Wiring and equipment for transformer vaults.
91. Wire-branch circuits, feeders – for systems under the Electrical Scope.
92. X-ray viewers.
93. School Sound/Intercommunication systems – complete.
– Sound, paging and music distribution systems.
94. Sound distribution systems (including masking speech privacy – systems) – complete.
95. Intercommunication systems (including private automatic telephone systems, computer cabling and data networks) – complete.
96. Electronic learning laboratories – complete.
– Electronic learning laboratories of all types incorporating audio communications.
97. Wireless, paging and intercommunication systems – complete.
– Pocket paging, two-way radio and intercommunication via wireless transmission.
98. Television antenna and closed-circuit distribution systems (including surveillance systems) – complete.
– Internal type.
99. Audio and video recording systems – complete.
100. Wind generators for the purpose of conversion to electrical energy (including towers and supports).
101. The electrical contractor shall include contingency funds specifically called for in the electrical specifications.
102. Firestopping of all kinds for electrical systems only.
103. Solar systems for the purpose of conversion to electrical energy.
104. Low or line voltage wiring only, for the following: central vacuum systems, dust collection systems and electrically powered plumbing fixtures.
105. The supply and installation of electric blinds and controls.

2021 TRADE SCOPES INDEX

ELECTRICAL SCOPE

Page 5 of 6

GENERAL ITEMS:

106. Hoisting for materials and equipment.
107. Inspection, permits required for electrical work only.
108. Licenses.
109. Manufacturers warranty only – other than the normal one-year maintenance guarantee.
110. *Number not used.*
111. Protection of other trades work from damage by this trade.
112. Scaffolding.
113. Installation charge for permanent power and telephone service as levied by the Utilities when identified in Division 16 as a cost figure or P.C. sum.
114. Shop drawings – where required.
115. Trade clean-up.
116. Temporary light and power when specified in Division 16 as a completely detailed system.
117. Cutting of openings 12-inch diameter and smaller when pertaining to renovations or alterations.
118. Line voltage hook-up of overhead door and moveable wall operators and controllers.
119. Poly and/or plastic vapour hats.
120. Halon and Medical Gas Wiring.
121. Supply and install data (LAN) and voice 'premise wiring'.

EXCLUDED:

Temporary heat, light, power (up to a maximum of 120/280 volts and an adequate amperage for temporary lighting, heating and convenience outlets, sanitation) or as specified.

1. All cast-in-place, concrete rebar and forming including required excavating.
2. Control wiring for equipment under Mechanical Scope intended for automatic temperature controls.
3. Final cleaning.
4. Food service and laundry equipment unless specified in the Electrical specifications.
5. Hoarding.
6. Painting (on site).
7. Supports and guards where detailed on architectural or structural drawings.
8. Temporary heat, sanitation.
 - a) Temporary light and power when not specified as per Included Item.
9. Water.
10. Wiring for electric elevators, hydraulic elevators, parking garage hoists, escalators, dumbwaiters, moving walkways, speed ramps, except as noted under Elevators and Escalators Scope.
11. Cutting and patching when pertaining to renovations, alterations, or additions except (cut only) openings 12-inch diameter and smaller.
12. Luminous ceilings, light valances and coves.
13. Car posts when part of railing, wheel stops and bumper rails.

2021 TRADE SCOPES INDEX

ELECTRICAL SCOPE

Page 6 of 6

NOTES:

1. Pre-wired factory-packaged equipment, so specified under the mechanical Scope, shall mean equipment in a completely electrically operable state after one final connection of power wiring, and remote-control connections if specified. (See related item – Electrical Scope - Inclusion #51.)
2. Automatic temperature controls shall mean controls which must:
 - a) be intended for equipment whose main purpose is to affect the temperatures humidity and pressures within a building, and
 - b) produce these changes automatically, and
 - c) include all items in the Automatic Temperature Control Scope.Provided however, that the controls do not directly switch the power lines to the equipment; the wiring of such controls to remain the responsibility of the electrical contractor.