

PART 1 General

1.1 SCOPE OF WORK

- .1 The requirements herein are applicable to electrical division 26.
- .2 The electrical contractor shall furnish all labour, materials, tools, appliances and equipment necessary to entirely complete and provide for the operation of the electrical systems indicated in these specifications and as shown on drawings.

1.2 DEFINITIONS

- .1 Refer to TIA/EIA-598, Annex A for definitions of terms: optical-fiber interconnects distribution and breakout cables.
- .2 Electrical and electronic terms: unless otherwise specified or indicated, terms used in these specifications, and on drawings, are those defined by IEEE SP1122.

1.3 WORK INCLUDED IN DIV. 26.

- .1 The overall intention is to provide a finished piece of work complete in all aspects, and all items reasonably inferable as called for by the plans and specifications, and by normally accepted good practice, notwithstanding that every item necessarily required may not be specifically mentioned. This contractor shall fulfill his obligation and not take advantage of any unintentional errors or omissions should such exist, to the detriment of the Departmental Representative's interest. Generally the work includes, but is not limited to the following:
 - .1 Electrical:
 - .1 Electrical demolition of contaminated materials as indicated on drawings and has described in Section 01 74 21 - Construction/Demolition Waste Management and Disposal and Appendix A;
 - .2 Supply and installation of new luminaires, lamps and their controls;
 - .3 Supply and installation of new electrical wiring devices;
 - .4 Supply and installation of wiring devices;
 - .5 Supply and installation of emergency lights;
 - .6 Supply and installation of conduit and wiring;
 - .7 Supply and installation of electric heating and associated controls;
 - .8 Testing of electrical systems;
 - .9 Supply of temporary lighting and power as required;
 - .10 Mark-up "Records Drawings" in red on print provide to Departmental Representative.
 - .11 Provide Maintenance Manuals.

1.4 WORK NOT INCLUDED IN DIV. 26.

- .1 Supply and installation of mechanical equipment shall be the responsibility of Div. 23.

- .2 All architectural finishes, core drilling, cutting, and patching shall be the responsibility
- .3 Any required trenching of floors or removal of existing T-bar ceilings for the running of conduit or cables shall be the responsibility of the General Contractor.
- .4 Firestopping of penetrations through walls and floors shall be the responsibility of the general contractor in accordance with Section 26 00 10 – Electrical Installations General Requirements.

PART 2 Products

2.1 NOT USED

PART 3 Execution

3.1 NOT USED

END OF SECTION

Part 1 General

1.1 RELATED REQUIREMENTS

- .1 This Contractor shall be responsible to coordinate the enclosed applicable sections of these specifications with the following:

.2 Division 01

- .1 Section 01 10 10 – General Instructions
- .2 Section 01 31 19 – Project Meeting
- .3 Section 01 32 16.07 – Construction Progress Schedule – Bar (GRANTT) Chart
- .4 Section 01 33 00 – Submittal Procedures
- .5 Section 01 35 25 – Special Procedures on Lockout Procedures
- .6 Section 01 35 29.06 – Health and Safety Requirements
- .7 Section 01 35 35 – Fire Safety Requirements
- .8 Section 01 35 43 – Environmental Procedures
- .9 Section 01 45 00 – Quality Control
- .10 Section 01 52 00 – Construction Facilities
- .11 Section 01 61 00 – Common Product Requirements
- .12 Section 01 74 11 – Cleaning
- .13 Section 01 74 21 – Construction/Demolition Waste Management and Disposal
- .14 Section 01 78 00 – Closeout Submittals

.3 Division 02

- .1 Section 02 41 99 – Demolition for Minor Works
- .2 Section 02 81 01 – Hazardous Material

.4 Division 07

- Section 07 84 00 – Fire Stopping

1.2 REFERENCES

- .1 Canadian Standards Association (CSA International)
- .1 CSA C22.1, latest revision, Canadian Electrical Code, Part 1, Safety Standard for Electrical Installations.
 - .2 CAN3-C235, latest revision, Preferred Voltage Levels for AC Systems, 0 to 50,000 V.

1.3 DEFINITIONS

- .1 Electrical and electronic terms: unless otherwise specified or indicated, terms used in these specifications, and on drawings, are those defined by IEEE SP1122.

1.4 GENERAL REQUIREMENTS

- .1 This Section covers items common to Sections of Division 26. This section supplements the requirements of Division 1 and Division 23.
- .2 All wiring and conduit are shown in diagrammatic form only. See architectural drawings for exact location of all walls and openings.
- .3 Contractor shall be familiar with building ceiling spaces. Most conduit runs shown as straight runs will consist of several offsets due to service equipment. Contractor may propose alternate paths to achieve similar aims after detailed review of site conditions.
- .4 Schedule all electrical work with general contractor and user. All work shall be performed in such a manner as to affect minimal disruption to the occupants. Any disruptive work shall be scheduled during the night or on weekends.
- .5 Coordinate any power shut down with owner/user 72 hours in advance.
- .6 Contractor shall coordinate inspection date with Departmental Representative and shall provide labour for access to all equipment for inspection to confirm work method. Such access shall include removal of panel covers and opening of disconnect switches, junction/pull boxes, starters and luminaries.

1.5 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submittals: in accordance with Section 01 33 00 - Submittal Procedures. All inquiries, shop drawings, request for substitutions and similar items shall be submitted to the Departmental Representative.
- .2 Product Data: submit WHMIS MSDS in accordance with Section 01 35 29 – Health and Safety Management Requirements.
- .3 Shop drawings:
 - .1 Submit shop drawings and product data in accordance with Section 01 33 00 - Submittal Procedures
 - .2 Indicate details of construction, dimensions, capacities, and electrical performance characteristics of equipment or material.
 - .3 Where applicable, include wiring, single line and schematic diagrams.
 - .4 Include wiring drawings or diagrams showing interconnection with work of other Sections.
 - .5 Faxes are not acceptable for shop drawings. If sent by fax, they will not be reviewed.
 - .6 Shop drawings electronic PDF shall be sent as per Section 01 33 00 – Submittal Procedures.
 - .7 Do not begin fabrication until shop drawings have been reviewed by Departmental Representative. Allow ten (10) working days for Departmental Representative review.

- .8 Departmental Representative review of shop drawings does not relieve the contractor of the responsibility for co-ordination of field measurements required to complete the work.
- .9 Div. 26 Contractor and General Contractor shall approve all shop drawings by signing and dating them prior to submitting to Departmental Representative. Failure to comply will result in automatic rejection of shop drawings. When non-compliance results in extra costs due to construction delays, the contractor shall bear these costs.
- .10 Indicate of drawings clearances for operation, maintenance, and replacement of operating equipment devices.
- .4 Permits, fees and inspections
 - .1 Submit to Electrical Inspection Department and Supply Authority necessary number of drawings and specifications for examination and approval prior to commencement of work.
 - .2 Pay associated fees.
 - .3 Departmental Representative will provide drawings and specifications required by Electrical Inspection Department and Supply Authority at no cost.
 - .4 Notify Departmental Representative of changes required by Electrical Inspection Department prior to making changes.
 - .5 Obtain wiring permit prior to commencing work.
 - .6 Advise Departmental Representative 72 hours in advance for all inspections required as per Section.

1.6 GUARANTEE

- .1 Provide, in supplement of other system guarantee, in writing, a guarantee covering all labor and material for a period of one year from final acceptance of work, and agree to repair and make good all defects during that time.

1.7 CODES AND STANDARDS

- .1 Do complete installation in accordance with CSA C22.1, latest revision, except where specified otherwise.
- .2 Abbreviations for electrical terms: to CSA Z85-1983, latest revision.
- .3 Electrical system to conform to latest revision of Model National Energy Code of Canada for Buildings.

1.8 CARE, OPERATION AND START-UP

- .1 Instruct Departmental Representative and operating personnel in the operation, care and maintenance of system equipment and components.
- .2 Arrange and pay for services of manufacturer's factory service representative to supervise start-up of installation, check, adjust, balance and calibrate components and instruct operating personnel.

- .3 Provide these services for such period, and for as many visits as necessary to put equipment in operation, and ensure that operating personnel are conversant with all aspects of its care and operation.

1.9 VOLTAGE RATINGS

- .1 Operating voltages: to CAN3-C235-83, latest revision.
- .2 Motors, electric heating, control and distribution devices and equipment to operate satisfactorily at 60 Hz within normal operating limits established by above standard. Equipment to operate in extreme operating conditions established in above standard without damage to equipment.

1.10 ADDENDA AND REVISIONS

- .1 All addenda, instructions and revisions issued during the tendering period shall become part of the Contract Documents and shall be included in the Tender, and shall take precedence over previous instructions.
- .2 The Departmental Representative reserves the right to make revisions to the drawings during the period of construction and these revisions shall take precedence over previously issued drawings. All revisions to work shall be executed by duly authorized change orders, with the amount of addition or deduction to the contract amount approved by the Departmental Representative before the execution of any work entailed in the revisions.

1.11 EXAMINATION OF DRAWINGS AND EXISTING CONDITIONS

- .1 The Electrical Contractor shall become completely familiar with drawings and specifications, as well as construction methods of other trades related to the work, in order to avoid possible conflicts on the project. Should drastic changes be necessary to resolve such conflicts, the Contractor shall notify the Departmental Representative and secure written approval and agreement on necessary adjustments before the installation is started.
- .2 Prior to close of tender, the Contractor shall visit the site and become familiar with site conditions, availability of storage space and all other factors that might influence the tender. No allowance shall be made for problems arising due to lack of knowledge of existing conditions that could reasonably have been ascertained by a careful inspection.

1.12 DISCREPANCIES

- .1 If, during the preparing their tender, Bidders find any errors, omissions, or discrepancies in the plans, specifications or other documents or having any doubt regarding the intent or meaning of any part thereof, shall immediately notify the Departmental Representative, who will send written instructions or clarification to all bidders. Where such discrepancies exist and it is evident that the Contractor could not have properly tendered without clarification, and where such clarification was not requested, no changes to the contract shall be considered in order to have the installation completed correctly. The Departmental Representative shall not be responsible for oral instructions.

1.13 SUBSTITUTIONS

- .1 It is the intent of these specifications to establish the required quality of materials. Where manufacturer's name and catalogue reference data are used, it is done in order to establish the required quality, style, size or function. The decision as to suitability shall rest with the Departmental Representative.
- .2 Refer to Section 00 61 00 – Common Product Requirements.
- .3 All materials not meeting the standards as set down by these specifications shall not be allowed on the job site.
- .4 Substitutions affecting the design will not be permitted. Additional costs to any other trade or to Departmental Representative as a result of a change or substitution by this Contractor shall be borne by this Contractor.
- .5 The listing of a manufacturer as acceptable does not imply acceptance of all products of that manufacturer or only products of that manufacturer. Only products meeting the standards as set out in the specifications will be accepted.
- .6 All requests for alternates shall be submitted after award of contract.
- .7 Faxes are not acceptable for request for alternates. If sent by fax, they will not be reviewed.

1.14 OPERATION AND MAINTENANCE MANUALS

- .1 The Electrical Contractor shall provide three (3) copies of Operation and Maintenance Manuals in accordance with Section 01 78 00- Closeout Submittals. The manuals shall consist of a hard cover three ring binder with removable pages, indexed and tabbed as to content. A copy of all electronic files shall be included on a CD (compact disk).
- .2 Include in Operation and Maintenance Manuals:
 - .1 Copy of all approved shop drawings.
 - .2 Details of design elements, construction features, component function and maintenance requirements to permit the effective start-up, operation, maintenance, repair, modification, extension and expansion of any portion or feature of the installation.
 - .3 Technical data, product data, supplemented by bulletins, component illustrations, exploded views, technical descriptions of items, and parts lists. Advertising or sales literature unacceptable.
 - .4 Wiring and schematic diagrams and performance curves.
 - .5 Name and addresses of electrical contractor.
 - .6 Names and addresses of local suppliers.
 - .7 Copy of all final panelboard schedules including existing where modified by this contract.
 - .8 Copy of signed transmittal verifying all maintenance materials turned over to the owner/user.

- .9 Copy of divisions 26.
- .10 Copy of electrical permit associated with the project.
- .11 A letter of guarantee.
- .12 Other documents as specified within various sections of these specifications.

1.15 RECORD DRAWINGS

- .1 Provide "Record Drawings" in accordance with Section 01 78 00 - Closeout Submittals.
- .2 After award of Contract, Departmental Representative will provide 2 sets of white print drawings for purpose of maintaining record drawings. Using Red Ink, accurately and neatly record deviations from Contract Documents caused by site conditions and changes ordered by Departmental Representative. Electronic (CAD) files shall be acceptable for record drawings. When using electronic files, Contractor shall have all modifications clearly shown on a separate layer and using a red color font.
- .3 Record locations of concealed components of electrical services.
- .4 Identify drawings as "Project Record Copy". Maintain in new condition and make available to Departmental Representative for inspection on-site and at all job meetings.
- .5 On completion of Work and prior to final inspection, submit record documents to Departmental Representative for preparation of "Record Drawings" transparencies.

1.16 MATERIALS AND EQUIPMENT

- .1 Provide materials and equipment in accordance with Section 01 61 00 – Common Product Requirements.
- .2 Equipment and material to be CSA certified. Where there is no alternative to supplying equipment which is not CSA certified, obtain special approval from Electrical Inspection Department.

1.17 ELECTRIC MOTORS, EQUIPMENT AND CONTROLS.

- .1 Review Mechanical drawings; coordinate final electrical connection to all mechanical equipment and controls with Division 23 and coordinate testing.

1.18 FINISHES

- .1 Clean and touch up surfaces of shop-painted equipment scratched or marred during shipment or installation, to match original paint.
- .2 Clean and prime exposed non-galvanized hangers, racks and fastenings to prevent rusting.

1.19 LOCATION OF OUTLETS

- .1 Locate outlets as shown on drawings and as indicated below.

- .2 Do not install outlets back-to-back in wall; allow minimum 150 mm horizontal clearance between boxes.
- .3 Change location of outlets at no extra cost or credit, providing distance does not exceed 3000 mm, and information is given before installation.
- .4 Locate light switches on latch side of doors or as indicated.

1.20 MOUNTING HEIGHTS

- .1 Mounting height of equipment is from finished floor to centreline of equipment unless specified or indicated otherwise.
- .2 If mounting height of equipment is not specified or indicated, verify before proceeding with installation.
- .3 Install electrical equipment at following heights unless indicated otherwise.
 - .1 Local switches and sensors: 1200 mm.
 - .2 Wall receptacles:
 - .1 General: 300 mm.
 - .2 Above top of continuous baseboard heater: 200 mm.
 - .3 Above top of counters or counter splash backs: 200 mm.
 - .4 In mechanical rooms: 1400 mm.
 - .5 In utility rooms: 1200 mm.
 - .6 In washrooms and janitor closets: 1200 mm.
 - .3 Emergency lights: 300 mm above door frame.
- .4 Coordinate device heights with architectural room and casework elevations.
- .5 Generally, masonry outlet boxes are to be installed in bottom of concrete boxes to approximate heights indicated.
- .6 Refer to all detail drawings and confirm mounting of devices prior to roughing-in.
- .7 In renovated areas, mounting height shall be match those of existing devices.

1.21 CONDUIT AND CABLE INSTALLATION

- .1 All core drilling patching and firestopping of penetrations through walls and floors shall be the responsibility of the General Contractor.
- .2 Core drill through walls and floor, as required. Submit exact locations and sizes to Departmental Representative for approval prior to drilling.
- .3 Seal all conduits which enter air handling units, cooler or freezers in accordance with CEC rule 22-302.

1.22 VOLTAGE DROP

- .1 All conductors were sized for a maximum voltage drop of 3% per cable run and a total of 5% from Utility supply service to device. Contractor wishing to reduce cable sizes based on cable ampacity from CEC tables shall provide calculations showing that CEC rule 8-102 is respected

1.23 FIELD QUALITY CONTROL

- .1 All electrical work to be carried out by qualified, licensed electricians or apprentices as per the conditions of the Provincial Act respecting manpower vocational training and qualification. Employees registered in a provincial apprentices program shall be permitted, under the direct supervision of a qualified licensed electrician, to perform specific tasks - the activities permitted shall be determined based on the level of training attained and the demonstration of ability to perform specific duties.
- .2 Conduct and pay for following tests:
 - .1 Circuits originating from branch distribution panels.
 - .2 Lighting and associated controls.
 - .3 Motors, heaters and associated control equipment including sequenced operation of systems where applicable.
- .3 Furnish manufacturer's certificate or letter confirming that entire installation as it pertains to each system has been installed to manufacturer's instructions.
- .4 Provide instruments, meters, equipment and personnel required to conduct tests during and at conclusion of project.
- .5 Submit test results for Departmental Representative's review.

1.24 CO-ORDINATION OF PROTECTIVE DEVICES

- .1 Ensure circuit protective devices such as overcurrent trips, relays and fuses are installed to required values and settings.

1.25 AUTHENTIC MANUFACTURER

- .1 Only authentic manufacturer equipment purchased through an authorized distributor shall be accepted. Refurbished or used equipment are not acceptable and if found will be replaced by authentic parts at contractor expense.

1.26 DELIVERY, STORAGE AND HANDLING

- .1 Material Delivery Schedule: provide Departmental Representative with schedule within 2 weeks after award of Contract.

Part 2 Products

2.1 Not used

Part 3 Execution

3.1 WORKMANSHIP

- .1 All connections and terminations shall be securely tightened so that heat cycling over the life of the equipment does not result in loose or overheated connections. Lugs, terminals, and wire shall be compatible materials not subject to electrolytic corrosion.
- .2 All panels, equipment, conduit, and wiring shall be installed to avoid interferences with other equipment or working spaces. Layout all work in consultation with other trades and suppliers. Adhere to manufacturers shop drawings to locate conduits and terminations. Keep equipment and wiring clear of high temperature areas, where possible.
- .3 When handling equipment, ensure that only proper lifting lugs or jacking pads are used, and that slings are clear of equipment.
- .4 All equipment shall be properly leveled, plumbed, shimmed, secured in place, and grouted where necessary. Equipment shipped in pieces shall be securely assembled using all bolt holes provided.
- .5 Where applicable, equipment shall be mounted so as to permit access by operations or maintenance personnel.
- .6 Contractor shall provide watertight weather protection to seal all openings to the exterior required by this contract.

3.2 CLEANING

- .1 Clean and touch up surfaces of shop-painted equipment scratched or marred during shipment or installation, to match original paint.
- .2 Clean and prime exposed non-galvanized hangers, racks and fastenings to prevent rusting.

END OF SECTION

PART 1 General

1.1 DESCRIPTION OF WORK

- .1 This section addresses the complete removal of electrical equipment that is obsolete, abandoned or made redundant by this Contract as specified. It also covers alteration of existing electrical services affected by renovations.
- .2 Existing electrical services including conduit and wire shall be removed to outside zone of firing range as required to allow for new electrical installations. Work include, but is not limited to, the following:
 - .1 Removal of lighting and switching.
 - .2 Removal of wiring devices.
 - .3 Removal of heating equipment.
 - .4 Removal of equipment and devices as indicated.
 - .5 Testing of equipment and cleaning of site.
- .3 Refer to Section 26 00 10 - Electrical Installations General Requirements.
- .4 Refer to Section 01 74 11 – Cleaning and Section 01 74 21 - Construction/Demolition Waste Management and Disposal

1.2 SITE SURVEY

- .1 Prior to tender submission, visit the site and survey and quantify the extent of the removals / alterations required for this contract and include for all costs in the total tendered price. Any existing conditions (demolition) information indicated on the drawings is for general guidance only.
- .2 In conjunction with the site visit, review architectural, mechanical and electrical drawings and include all costs due to existing conditions in total tendered price.

1.3 REFERENCE STANDARDS

- .1 All removal or modification work of electrical construction to be done in accordance with the safety standards outlined in the Canadian Electrical Code and Occupational Health and Safety Act.

1.4 PROTECTION

- .1 The Contractor is responsible for any damages to existing structure as a result of the work.

1.5 DISPOSAL

- .1 All removed materials shall be left on site for disposal (by lead abatement contractor).

PART 2 Products

2.1 NOT USED

PART 3 Execution

3.1 GENERAL REMOVALS

- .1 Remove all obsolete or abandoned electrical services including wire and conduit, except those designated for reuse.
- .2 Remove, relocate, extend and/or reinstall existing electrical services as required to accommodate other trades.
- .3 Coordinate work of this Section with other trades.
- .4 Schedule all removal work with the Owner and the General Contractor. Do not disrupt building operations except as permitted by the Schedule.
- .5 Any conduit, wiring, boxes or equipment that is to remain in service is to be properly supported as required by the CEC. Any additional hangers, straps or fasteners required are to be supplied under this contract.
- .6 Make alterations to existing electrical services as required and make good all circuits affected by the renovations.
- .7 Any relocation of existing equipment and any rerouting of existing wire and conduit to accommodate new work shall be included in total tendered price.
- .8 Perform all related shutdown work beforehand to keep down-time to a minimum. Once a shutdown is taken, work must progress continuously until power is restored.
- .9 With the new mechanical services being routed through the existing building, existing conduits, boxes, etc. must be relocated as required to accommodate new duct work and piping. Accessibility must be retained.

3.2 CUTTING

- .1 Cutting required for removals and alterations to be to the approval of the Departmental Representative and performed with appropriate power tools.

3.3 CLEANING

- .1 Cleaning in accordance with Section 26 00 10 – Electrical Installations General

END OF SECTION

PART 1 General

1.1 RELATED SECTIONS

- .1 Section 26 00 10 - Electrical Installations General Requirements.

1.2 EQUIPMENT IDENTIFICATION

- .1 Identify with labels as follows:
- .2 Embossed plastic labels with 6 mm high letters unless specified otherwise.
- .2 All wiring devices, including but not limited to receptacles and switches, shall have a transparent circuit identification permanently installed on coverplate indicating panelboard and circuit. Acceptable labelling product: Panduit #LS5 c/w LS5-530 tape or equivalent.

Example

EFG-36

1.3 WIRING IDENTIFICATION

- .1 Identify wiring (including neutral conductors) with permanent indelible identifying markings, either numbered or coloured plastic tapes, on both ends of phase conductors of feeders and branch circuit wiring including in all junction boxes/ pull boxes located between.
- .2 Markings shall indicate panel and circuit number; i.e., A1-27. Normal ground circuits to have ground, neutral and phase wires identified with black on white background tape or insulation.
- .3 Tape to be vinyl, self-adhesive Electrovert Type Z Markers or equivalent.
- .4 Use coloured plastic tapes to identify feeders on both ends of phase conductors and at junction and pull boxes of conductor insulation colours are other than red, black, blue, white and green.
- .5 Maintain phase sequence and colour coding throughout.
- .6 Colour code: to CSA C22.1.

1.4 CONDUIT AND CABLE IDENTIFICATION

- .1 Colour code conduits, boxes and metallic sheathed cables.
- .2 Code with plastic tape or paint at points where conduit or cable enters wall, ceiling, or floor, and at 15 m intervals.

- .3 Colours: 25 mm wide prime colour and 20 mm wide auxiliary colour.

up to 250 V	Black
up to 600 V	Yellow

- .4 Contractor shall coordinate colors with existing building color coding, if any, and modify accordingly. All modifications shall be registered in Operation and Maintenance.

1.5 WIRING TERMINATIONS

- .1 Lugs, terminals, screws used for termination of wiring to be suitable for either copper or aluminum conductors.

1.6 MANUFACTURERS AND CSA LABELS

- .1 Visible and legible, after equipment is installed.

PART 2 Products

2.1 NOT USED

PART 3 Execusion

3.1 NOT USED

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Electrical and Electronic Manufacturers' Association of Canada (EEMAC)
- .2 National Electrical Manufacturers Association (NEMA)

1.2 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 26 00 10 – Electrical Installations General Requirements and with manufacturer's written instructions

Part 2 Products

2.1 MATERIALS

- .1 Pressure type wire connectors to: CAN/CSA-C22.2 No.65, with current carrying parts of copper sized to fit copper conductors as required.
- .2 Fixture type splicing connectors to: CAN/CSA-C22.2 No.65, with current carrying parts of copper sized to fit copper conductors 10 AWG or less.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for wire and box connectors installation in accordance with manufacturer's written instructions.

3.2 INSTALLATION

- .1 Remove insulation carefully from ends of conductors and cables and:
 - .1 Apply coat of zinc joint compound on aluminum conductors prior to installation of connectors.
 - .2 Install fixture type connectors and tighten to CAN/CSA-C22.2 No.65. Replace insulating cap.
 - .3 Install bushing stud connectors in accordance with EEMAC 1Y-2.

3.3 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 26 00 10 – Electrical Installations General Requirements.
 - .1 Leave Work area clean at end of each day.

- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 26 00 10 – Electrical Installations General Requirements.

END OF SECTION

Part 1 General

1.1 RELATED REQUIREMENTS

- .1 Section 26 00 10 – Electrical Installations General Requirements.
- .2 Section 26 00 53 – Identification for Electrical Systems.
- .3 Section 26 05 20 – Wire Box and Connectors (0 – 1000V).
- .4 Section 26 05 34 – Conduits, Conduit Fastenings and Conduit Fittings.

1.2 REFERENCES

- .1 Canadian Standard Association (CSA)
 - .1 CSA C22.2 No. 0.3, latest revision, Test Method for Electrical Wires and Cables.

1.3 PRODUCT DATA

- .1 Provide product data in accordance with Section 26 00 10 – Electrical Installations General Requirements

Part 2 Products

2.1 BUILDING WIRES

- .1 Conductors: stranded for 10 AWG and larger. Minimum size: 12 AWG unless noted otherwise..
- .2 Copper conductors: size as indicated, with 600 V insulation of cross-linked thermosetting polyethylene material rated RW90 XLPE, Jacketted.

2.2 ARMOURED CABLES

- .1 Conductors: insulated, copper unless indicated otherwise on drawings, size as indicated.
- .2 Type: AC90
- .3 Connectors: anti short connectors.

Part 3 Execution

3.1 FIELD QUALITY CONTROL

- .1 Perform tests in accordance with Section 26 00 10 – Electrical Installations General Requirements.

- .2 Perform tests using method appropriate to site conditions and to approval of Departmental Representative and local authority having jurisdiction over installation.
- .3 Perform tests before energizing electrical system.

3.2 INSTALLATION OF BUILDING WIRES

- .1 Install wiring as follows:
 - .1 In conduit systems in accordance with Section 26 05 34 - Conduits, Conduit Fastenings and Conduit Fittings.

3.3 INSTALLATION OF ARMOURED CABLES

- .1 Group cables wherever possible on channels.
- .2 Terminate Cables in accordance with Section 26 05 20 – Wire Box and Connectors (0 – 1000V)
- .3 Install anti-short, straps and connectors as required.
- .4 Maximum length shall be 1500mm from junction box to luminaire and installed only where concealed. Loops between luminaires are not acceptable.
- .5 Use only for drops from junction box in existing walls where installation of conduit is not possible, and for drops from junction box to luminaire. Maximum length of 3000mm for walls and 1500mm for luminaires. All wiring not respecting these conditions shall be replaced at contractor cost.

END OF SECTION

Part 1 General

Part 2 Products

2.1 SUPPORT CHANNELS

- .1 U shape, size 41 x 41 mm, 2.5 mm thick, surface mounted.

Part 3 Execution

3.1 INSTALLATION

- .1 Secure equipment to hollow masonry, tile and plaster surfaces with lead anchors or nylon shields.
- .2 Secure equipment to poured concrete with expandable inserts.
- .3 Secure equipment to hollow masonry walls or suspended ceilings with toggle bolts.
- .4 Secure surface mounted equipment with twist clip fasteners to inverted T bar ceilings. Ensure that T bars are adequately supported to carry weight of equipment specified before installation.
- .5 Support equipment, conduit or cables using clips, spring loaded bolts, cable clamps designed as accessories to basic channel members.
- .6 Fasten exposed conduit or cables to building construction or support system using straps.
 - .1 One-hole steel straps to secure surface conduits and cables 50 mm and smaller.
 - .2 Two-hole steel straps for conduits and cables larger than 50 mm.
 - .3 Beam clamps to secure conduit to exposed steel work.
- .7 Suspended support systems.
 - .1 Support individual cable or conduit runs with 6 mm dia threaded rods and spring clips.
 - .2 Support 2 or more cables or conduits on channels supported by 6 mm dia threaded rod hangers where direct fastening to building construction is impractical.
- .8 For surface mounting of two or more conduits use channels at 1.5 m on centre spacing.
- .9 Provide metal brackets, frames, hangers, clamps and related types of support structures where indicated or as required to support conduit and cable runs.
- .10 Ensure adequate support for raceways and cables dropped vertically to equipment where there is no wall support.
- .11 Do not use wire lashing or perforated strap to support or secure raceways or cables.

- .12 Do not use supports or equipment installed for other trades for conduit or cable support except with permission of other trade and approval of Departmental Representative.
- .13 Install fastenings and supports as required for each type of equipment cables and conduits, and in accordance with manufacturer's installation recommendations.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CSA C22.1, latest revision, Canadian Electrical Code, Part 1.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 26 00 10 – Electrical Installations General Requirements.
- .2 Provide shop drawings: in accordance with Section 26 00 10 – Electrical Installations General Requirements.

Part 2 Products

2.1 JUNCTION AND PULL BOXES

- .1 Construction: welded steel enclosure.
- .2 Covers Flush Mounted: 25 mm minimum extension all around.
- .3 Covers Surface Mounted: screw-on flat covers.

Part 3 Execution

3.1 JUNCTION, PULL BOXES AND CABINETS INSTALLATION

- .1 Install pull boxes in inconspicuous but accessible locations.
- .2 Only main junction and pull boxes are indicated. Install additional pull boxes as required by CSA C22.1.

3.2 IDENTIFICATION

- .1 Equipment Identification: to Section 26 00 53 – Identification for Electrical Systems.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CSA C22.1, latest revision, Canadian Electrical Code, Part 1.

1.2 SUBMITTALS

- .1 Provide submittals in accordance with Section 26 00 10 – Electrical Installations General Requirements.

1.3 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 26 00 10 – Electrical Installations General Requirements.

Part 2 Products

2.1 OUTLET AND CONDUIT BOXES GENERAL

- .1 Size boxes in accordance with CSA C22.1.
- .2 102 mm square or larger outlet boxes as required.
- .3 Gang boxes where wiring devices are grouped.
- .4 Blank cover plates for boxes without wiring devices.

2.2 GALVANIZED STEEL OUTLET BOXES

- .1 One-piece electro-galvanized construction.
- .2 Single and multi-gang flush device boxes for flush installation, minimum size 76 x 50 x 38 mm or as indicated. 102 mm square outlet boxes when more than one conduit enters one side with extension and plaster rings as required.
- .3 Utility boxes for outlets connected to surface-mounted EMT conduit, minimum size 102 x 54 x 48 mm.
- .4 102 mm square or octagonal outlet boxes for lighting fixture outlets.
- .5 Extension and plaster rings for flush mounting devices in finished plaster and/or tile walls.

2.3 MASONRY BOXES

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

2.4 CONCRETE BOXES

- .1 Electro-galvanized sheet steel concrete type boxes for flush mount in concrete with matching extension and plaster rings as required.

2.5 CONDUIT BOXES

- .1 Cast FS aluminum boxes with factory-threaded hubs and mounting feet for surface wiring of devices.

2.6 OUTLET BOXES FOR NON-METALLIC SHEATHED CABLE

- .1 Electro-galvanized, sectional, screw ganging steel boxes, minimum size 76 x 50 x 63 mm with two double clamps to take non-metallic sheathed cables.

2.7 FITTINGS - GENERAL

- .1 Bushing and connectors with nylon insulated throats.
- .2 Knock-out fillers to prevent entry of debris.
- .3 Conduit outlet bodies for conduit up to 35mm and pull boxes for larger conduits.
- .4 Double locknuts and insulated bushings on sheet metal boxes.

Part 3 Execution

3.1 INSTALLATION

- .1 Support boxes independently of connecting conduits.
- .2 Fill boxes with paper, sponges or foam or similar approved material to prevent entry of debris during construction. Remove upon completion of work.
- .3 For flush installations mount outlets flush with finished wall using plaster rings to permit wall finish to come within 6 mm of opening.
- .4 Provide correct size of openings in boxes for conduit, mineral insulated and armoured cable connections. Do not install reducing washers.
- .5 Vacuum clean interior of outlet boxes before installation of wiring devices.
- .6 Identify systems for outlet boxes as required in accordance with Section 26 00 53 – Identification for Electrical System.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 Canadian Standards Association (CSA International)
 - .1 CAN/CSA C22.2 No. 18, latest revision, Outlet Boxes, Conduit Boxes, Fittings and Associated Hardware, A National Standard of Canada.
 - .2 CSA C22.2 No. 83, latest revision, Electrical Metallic Tubing.

Part 2 Products

2.1 CONDUITS

- .1 Electrical metallic tubing (EMT): to CSA C22.2 No. 83, with couplings.

2.2 CONDUIT FASTENINGS

- .1 One hole steel straps to secure surface conduits 50 mm and smaller.
 - .1 Two hole steel straps for conduits larger than 50 mm.
- .2 Beam clamps to secure conduits to exposed steel work.
- .3 Channel type supports for two or more conduits at 3 m on centre.
- .4 Threaded rods, 6 mm diameter, to support suspended channels.

2.3 CONDUIT FITTINGS

- .1 Fittings: to CAN/CSA C22.2 No. 18, manufactured for use with conduit specified.
Coating: same as conduit.
- .2 Ensure factory "ells" where 90 degrees bends for 25 mm and larger conduits.
 - .1 Set-screws type couplings and connectors.

2.4 FISH CORD

- .1 Polypropylene.

Part 3 Execution

3.1 MANUFACTURER'S INSTRUCTIONS

- .1 Compliance: comply with manufacturer's written recommendations or specifications, including product technical bulletins, handling, storage and installation instructions, and datasheets.

3.2 INSTALLATION

- .1 Install conduits to conserve headroom in exposed locations and cause minimum interference in spaces through which they pass.
- .2 Conceal conduits throughout project unless noted otherwise.
- .3 Surface mount conduits except where accessible to ceiling spaces.
- .4 Minimum conduit size for lighting and power circuits: 21 mm.
- .5 Bend conduit cold:
 - .1 Replace conduit if kinked or flattened more than 1/10th of its original diameter.
- .6 Mechanically bend steel conduit over 21 mm diameter..
- .7 Install fish cord in empty conduits.
- .8 Remove and replace blocked conduit sections.
 - .1 Do not use liquids to clean out conduits.
- .9 Dry conduits out before installing wire.

3.3 SURFACE CONDUITS

- .1 Run parallel or perpendicular to building lines.
- .2 Locate conduits behind infrared or gas fired heaters with 1.5 m clearance.
- .3 Run conduits in flanged portion of structural steel.
- .4 Group conduits wherever possible on suspended or surface channels.
- .5 Do not pass conduits through structural members except as indicated.
- .6 Do not locate conduits less than 75 mm parallel to steam or hot water lines with minimum of 25 mm at crossovers.

3.4 CONCEALED CONDUITS

- .1 Run parallel or perpendicular to building lines.
- .2 Do not install horizontal runs in masonry walls.

3.5 CLEANING

- .1 Proceed in accordance with Section 26 00 10 – Electrical Installations General Requirements.
- .2 On completion and verification of performance of installation, remove surplus materials, excess materials, rubbish, tools and equipment.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 CSA International
 - .1 CAN/CSA C22.2 No.42.1, latest revision, Cover Plates for Flush-Mounted Wiring Devices (Bi-national standard, with UL 514D).

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 26 00 10 – Electrical Installations and General Requirements.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for wiring devices and include product characteristics, performance criteria, physical size, finish and limitations.
- .3 Shop Drawings:
 - .1 Submit drawings as per Section 26 00 10 – Electrical Installations and General Requirements
 - .1 Indicate on drawings:
 - .1 Rating
 - .2 NEMA configuration
 - .3 Connection method

1.3 CLOSEOUT SUBMITTALS

- .1 Submit in accordance with Section 26 00 10 – Electrical Installations and General Requirements.
- .2 Operation and Maintenance Data: submit operation and maintenance data for wiring devices for incorporation into manual.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 26 00 10 – Electrical Installations and General Requirements and with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials off ground, indoors, in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect wiring devices from nicks, scratches, and blemishes.

- .3 Replace defective or damaged materials with new.

Part 2 Products

2.1 SWITCHES

- .1 15A, 120 V, single pole, three-way, switches to: CSA C22.2 No.55 and CSA C22.2 No.111.
- .2 Manually-operated general purpose AC switches with following features:
 - .1 Terminal holes approved for No. 10 AWG wire.
 - .2 Silver alloy contacts.
 - .3 Urea or melamine moulding for parts subject to carbon tracking.
 - .4 Suitable for back and side wiring.
 - .5 White toggle.
- .3 Toggle operated locking fully rated for tungsten filament and fluorescent lamps, and up to 80% of rated capacity of motor loads and/or heating loads.
- .4 Switches of one manufacturer throughout project.
- .5 Acceptable materials:
 - .1 120V Toggle:
 - .1 Hubbell #CSB115W
 - .2 Leviton #CSB1-15W
 - .3 Pass & Seymour #CSB15AC1W
 - .2 120V, 3 Way Toggle:
 - .1 Hubbell #CSB315W
 - .2 Leviton #CSB3-15W
 - .3 Pass & Seymour #CSB15AC3W

2.2 RECEPTACLES

- .1 Duplex receptacles, CSA type 5-15 R, 125 V, 15 A, U ground, with following features:
 - .1 White urea molded housing.
 - .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.
 - .5 Triple wipe contacts and riveted grounding contacts.
 - .6 Acceptable materials:
 - .1 Hubbell #BR15WHITR
 - .2 Leviton #TBR15-W
 - .3 Pass & Seymour #

2.3 COVER PLATES

- .1 Cover plates for wiring devices to: CSA C22.2 No.42.1.
- .2 Stainless steel, vertically brushed, 1 mm thick cover plates cover plates for wiring devices mounted in flush-mounted outlet box.
- .3 Cover plates for wiring devices mounted in surface-mounted FS or FD type conduit boxes.

2.4 SOURCE QUALITY CONTROL

- .1 Cover plates from one manufacturer throughout project.

Part 3 Execution

3.1 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for wiring devices installation in accordance with manufacturer's written instructions.
 - .1 Visually inspect substrate in presence of Departmental Representative.
 - .2 Inform Departmental Representative of unacceptable conditions immediately upon discovery.
 - .3 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

3.2 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 in accordance with Section 26 00 10 – Electrical Installations General Requirements unless indicated otherwise.
- .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 in accordance with Section 26 00 10 – Electrical Installations General Requirements unless indicated otherwise.
 - .3 Where split receptacle has one portion switched, mount vertically and switch upper portion.
- .3 Cover plates:
 - .1 Install suitable common cover plates where wiring devices are grouped.
 - .2 Do not use cover plates meant for flush outlet boxes on surface-mounted boxes.

3.3 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 26 00 10 – Electrical Installations General Requirements.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 26 00 10 – Electrical Installations General Requirements.

3.4 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Protect stainless steel cover plate finish with paper or plastic film until painting and other work is finished.
- .3 Repair damage to adjacent materials caused by wiring device installation.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 American National Standards Institute (ANSI)
- .2 American National Standards Institute/Institute of Electrical and Electronics Engineers (ANSI/IEEE)
 - .1 ANSI/IEEE C62.41, latest revision, Recommended Practice for Surge Voltages in Low-Voltage AC Power Circuits.
- .3 ASTM International Inc.
 - .1 ASTM F1137, latest revision, Standard Specification for Phosphate/Oil and Phosphate/Organic Corrosion Protective Coatings for Fasteners.
- .4 Canadian Standards Association (CSA International)
- .5 ICES-005, latest revision, Radio Frequency Lighting Devices.
- .6 Underwriters' Laboratories of Canada (ULC)
 - .1 UL 8750, latest revision, The Standard for Safety of Light Emitting Diode (LED) Equipment for use in Lighting Product.
- .7 Consortium for Energy Efficiency (CEE).

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Provide submittals in accordance with Section 26 00 10 – Electrical Installations General Requirements.
- .2 Product Data:
 - .1 Provide manufacturer's printed product literature, specifications and datasheet and include product characteristics, performance criteria, physical size, finish and limitations.
 - .2 Provide complete photometric data prepared by independent testing laboratory for luminaires where specified, for approval by Departmental Representative.
 - .3 Photometric data to include: VCP Table where applicable.
- .3 Quality assurance submittals: provide following in accordance with Section 26 00 10 – Electrical Installations General Requirements.
 - .1 Manufacturer's instructions: provide manufacturer's written installation instructions and special handling criteria, installation sequence and cleaning procedures.

1.3 QUALITY ASSURANCE

- .1 Provide mock-ups in accordance with Section 26 00 10 – Electrical Installations General Requirements.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 26 00 10 – Electrical Installations General Requirements.
- .2 Deliver materials to site in original factory packaging, labelled with manufacturer's name, address.

Part 2 Products

2.1 LIGHT EMITTING DIODE (LED) LUMINAIRE

- .1 The LED luminaire shall consist of a LED Luminaire Assembly, LED Driver and mounting hardware.
- .2 LED Luminaire requirements shall be as described, but no limited to, below:
 - .1 Voltage input as indicated in luminaire schedule ($\pm 10\%$), 60Hz.
 - .2 Correlated Color Temperature (CCT) and Color Rendering Index (CRI) as indicated in luminaire schedule.
 - .3 Conformance with UL 8750.

2.2 FINISHES

- .1 Light fixture finish and construction to meet ULC listings and CSA certifications related to intended installation.

2.3 LUMINAIRES

- .1 As indicated in luminaire schedule or approved equal such as CREE Lighting, Lithonia and Canlyte.

Part 3 Execution

3.1 INSTALLATION

- .1 Locate and install luminaires as indicated.
- .2 Provide adequate support to suit ceiling system.

3.2 WIRING

- .1 Connect luminaires to lighting circuits:
 - .1 Install EMT conduit with AC90 able for luminaires as indicated.

3.3 LUMINAIRE SUPPORTS

- .1 For suspended ceiling installations support luminaires independently of ceiling.

3.4 LUMINAIRE ALIGNMENT

- .1 Align luminaires mounted in continuous rows to form straight uninterrupted line.
- .2 Align luminaires mounted individually parallel or perpendicular to building grid lines.

3.5 CLEANING

- .1 Clean in accordance with Section 26 00 10 – Electrical Installation General Requirements.
 - .1 Remove surplus materials, excess materials, rubbish, tools and equipment.

END OF SECTION

Part 1 General

1.1 REFERENCES

- .1 CSA International
 - .1 CSA C22.2 No.141, latest revision, Emergency Lighting Equipment.

1.2 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submit in accordance with Section 26 00 10 – Electrical Installations General Requirements.
- .2 Product Data:
 - .1 Submit manufacturer's instructions, printed product literature and data sheets for emergency lighting and include product characteristics, performance criteria, physical size, finish and limitations.

1.3 CLOSEOUT SUBMITTALS

- .1 Submit in accordance with Section 26 00 10 – Electrical Installations General Requirements.
- .2 Operation and Maintenance Data: submit operation and maintenance data for emergency lighting for incorporation into manual.

1.4 DELIVERY, STORAGE AND HANDLING

- .1 Deliver, store and handle materials in accordance with Section 26 00 10 – Electrical Installations General Requirements and with manufacturer's written instructions.
- .2 Delivery and Acceptance Requirements: deliver materials to site in original factory packaging, labelled with manufacturer's name and address.
- .3 Storage and Handling Requirements:
 - .1 Store materials off ground, indoors, in dry location and in accordance with manufacturer's recommendations in clean, dry, well-ventilated area.
 - .2 Store and protect emergency lighting from nicks, scratches, and blemishes.
 - .3 Replace defective or damaged materials with new.
- .4 Packaging Waste Management: remove for reuse and return of pallets, crates, padding, and packaging materials as specified in 26 00 10 – Electrical Installations General Requirements.

1.5 WARRANTY

- .1 For batteries in this Section 26 52 00 - Emergency Lighting, 12 months warranty period is extended to 120 months.

Part 2 Products

2.1 EQUIPMENT

- .1 Emergency lighting equipment: to CSA C22.2 No.141.
- .2 Supply voltage: 120V, AC.
- .3 Output voltage: 12V DC.
- .4 Operating time: 30 minutes.
- .5 Battery: sealed, maintenance free.
- .6 Charger: solid state, multi-rate, voltage/current regulated, inverse temperature compensated, short circuit protected with regulated output of plus or minus 0.01 V for plus or minus 10% input variations.
- .7 Solid state transfer circuit.
- .8 Low voltage disconnect: solid state, modular, operates at 80% battery output voltage.
- .9 Signal lights: solid state, for 'AC Power ON' and 'High Charge'.
- .10 Lamp heads: integral on unit, 345 degrees horizontal and 180 degrees vertical adjustment. Lamp type: LED, 5.7 W, minimum 200 lumen minimum output.
- .11 Cabinet: suitable for direct or shelf mounting to wall and c/w knockouts for conduit. Removable or hinged front panel for easy access to batteries.
- .12 Auxiliary equipment:
 - .1 Test switch.
 - .2 Time delay relay.
 - .3 Battery disconnect device.
 - .4 AC input and DC output terminal blocks inside cabinet.
- .13 Acceptable manufacturers for battery pack fixtures:
 - .1 Lumacell RG12QB Series.
 - .2 Aim-Lite EBQV12 Series.
 - .3 Ready-Lite LDX12VQ Series.

2.2 EXAMINATION

- .1 Verification of Conditions: verify that conditions of substrate previously installed under other Sections or Contracts are acceptable for emergency lighting installation in accordance with manufacturer's written instructions.
 - .1 Inform Departmental Representative of unacceptable conditions immediately upon discovery.

- .2 Proceed with installation only after unacceptable conditions have been remedied and after receipt of written approval to proceed from Departmental Representative.

2.3 INSTALLATION

- .1 Install unit equipment connected to same circuit as area served.
- .2 Direct heads.

2.4 CLEANING

- .1 Progress Cleaning: clean in accordance with Section 26 00 10 – Electrical Installations General Requirements.
 - .1 Leave Work area clean at end of each day.
- .2 Final Cleaning: upon completion remove surplus materials, rubbish, tools and equipment in accordance with Section 26 00 10 – Electrical Installations General Requirements.

2.5 PROTECTION

- .1 Protect installed products and components from damage during construction.
- .2 Repair damage to adjacent materials caused by emergency lighting installation.

END OF SECTION