

PART 1 - GENERAL

- 1.1 Related Sections
- .1 Section 31 23 33 01 - Excavating, Trenching and Backfilling.
  - .2 Section 26 05 00 - Common Work Results - Electrical.
- 1.2 References
- .1 Canadian Standards Association, (CSA International)
  - .2 Insulated Cable Engineers Association, Inc. (ICEA)
- 1.3 Waste Management and Disposal
- .1 Separate and recycle waste materials in accordance with Sthe General Contractor's Waste Management And Disposal plan.
  - .2 Remove from site and dispose of all packaging materials at appropriate recycling facilities.
  - .3 Collect and separate for disposal paper, plastic, polystyrene, corrugated cardboard and packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan.
  - .4 Unused sealant material must not be disposed of into sewer system, into streams, lakes, onto ground or in other location where it will pose health or environmental hazard.
  - .5 Divert unused metal and wiring materials from landfill to metal recycling facility as approved by Engineer.
  - .6 Do not dispose of preservative treated wood through incineration.
  - .7 Do not dispose of preservative treated wood with other materials destined for recycling or reuse.
  - .8 Dispose of treated wood, end pieces, wood scraps and sawdust at sanitary landfill approved by Engineer.
  - .9 Fold up metal banding, flatten and place in designated area for recycling.

PART 2 - PRODUCTS

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PART 3 - EXECUTION

3.1 CABLE  
INSTALLATION IN  
DUCTS

- .1 Install cables as indicated in ducts.
  - .1 Do not pull spliced cables inside ducts.
- .2 Install multiple cables in duct simultaneously.
- .3 Use CSA approved lubricants of type compatible with cable jacket to reduce pulling tension.
- .4 To facilitate matching of colour coded multiconductor control cables reel off in same direction during installation.
- .5 Before pulling cable into ducts and until cables are properly terminated, seal ends of lead covered cables with wiping solder; seal ends of non-leaded cables with moisture seal tape.
- .6 After installation of cables, seal duct ends with duct sealing compound.

3.2 FIELD QUALITY  
CONTROL

- .1 Perform tests in accordance with Section 26 05 00 - Common Work Results - Electrical.
- .2 Perform tests using qualified personnel. Provide necessary instruments and equipment.
- .3 Check phase rotation and identify each phase conductor of each feeder.
- .4 Check each feeder for continuity, short circuits and grounds. Ensure resistance to ground of circuits is not less than 50 megohms.
- .5 Pre-acceptance tests.
  - .1 After installing cable but before splicing and terminating, perform insulation resistance test with 1000 V megger on each phase conductor.
  - .2 Check insulation resistance after each splice and/or termination to ensure that cable system is ready for acceptance testing.
- .6 Provide Engineer with list of test results showing location at which each test was made, circuit tested and result of each test.
- .7 Remove and replace entire length of cable if cable fails to meet any of test criteria.