

Construction & Refurbishment of Bay Class  
SAR Lifeboat Marine Infrastructures  
Burin, NL  
R.116548.001

2022-01-17

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PART 1      GENERAL

1.1    RELATED SECTIONS

- .1    Division 01.
- .2    Section 26 05 00 - Common Work Results  
for Electrical.

1.2    REFERENCES

- .1    Canadian Standards Association, (CSA)
- .2    Insulated Cable Engineers Association,  
Inc. (ICEA)
- .3    Adhere to Canadian Electrical Code -  
current edition.

PART 2      PRODUCTS

2.1    MARKERS

- .1    Warning tape run entire length of  
trench 200 mm below surface.

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

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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 MARKERS

- .1 Install 200 mm below surface. See  
drawings for details.

### 3.3 FIELD QUALITY CONTROL

- .1 Perform tests in accordance with  
Section 26 05 00 - Common Work Results  
for Electrical and Division 01.
- .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 Acceptance Tests
  - .1 Ensure that terminations and  
accessory equipment are  
disconnected.
  - .2 Ground shields, ground wires,  
metallic armour and conductors  
not under test.
  - .3 High Potential (Hipot) Testing.

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- .1 Conduct hipot testing at 100% of original factory test voltage in accordance with manufacturer's recommendations.
- .4 Leakage Current Testing.
  - .1 Raise voltage in steps from zero to maximum values as specified by manufacturer for type of cable being tested.
  - .2 Hold maximum voltage for specified time period by manufacturer.
  - .3 Record leakage current at each step.
- .7 Provide Departmental's Representative with list of test results showing location at which each test was made, circuit tested and result of each test. Include results in Commissioning Manual.
- .8 Remove and replace entire length of cable if cable fails to meet any of test criteria.

END OF SECTION