

**PART 1 - GENERAL**

- 1.1 Related Sections .1 Section 01 33 00 - Submittal Procedures.  
.2 Section 01 74 21 - Construction/Demolition Waste Management And Disposal (short form).
- 1.2 Measurement Procedures .1 Mooring cleats: Shall be based on a price per mooring cleat.
- 1.3 References .1 American Society for Testing and Materials (ASTM)  
.1 ASTM A 27/A27M-[95], Standard Specification for Steel Castings, Carbon, for General Application.  
.2 ASTM A 48/A148M-[01], Standard Specification for Steel Castings, High-Strength, for Structural Purposes.  
.2 Canadian General Standards Board (CGSB)  
.1 CAN/CGSB-1.61-[99], Exterior and Interior Marine Alkyd Enamel.  
.2 CAN/CGSB-1.212-[95], Chromate and Lead Free Marine Primer for Steel and Light Alloy Surfaces.  
.3 Canadian Standards Association (CSA)  
.1 CSA G40.20/G40.21-[98(June 2000)], General Requirements for Rolled or Welded Structural Quality Steel/Structural Quality Steel.  
.2 CSA C22.1SB-[98], Canadian Electrical Code, Part 1 (18th Edition), Safety Standard for Electrical Installations (Spiral-bound).
- 1.4 Shop Drawings .1 Provide manufacturer's shop drawings to a Departmental Representative before installation.

1.5 Closeout Submittals Not Applicable.

- 1.6 Waste Management and Disposal
- .1 Separate and recycle waste materials in accordance with Section 01 74 21 - Construction/Demolition Waste Management And Disposal (short form).
  - .2 Collect and separate for disposal any packaging material for recycling in accordance with Waste Management Plan.
  - .3 Divert unused metal materials from landfill to metal recycling facility as approved by Departmental Representative.
  - .4 Unused paint or coating material must be disposed of at an official hazardous material collections site as approved by Departmental Representative.
  - .5 Fold up metal banding, flatten and place in designated area for recycling.
  - .6 Unused paint material must not be disposed of into sewer system, into streams, lakes, onto ground or in any other location where they will pose a health or environmental hazard.

1.7 Environmental Requirements .1 Provide proper protection for a marine environment.

**PART 2 - PRODUCTS**

- 2.1 Materials
- .1 Mooring cleats assemblies:
    - .2 Mooring cleats: cast steel to ASTM A 148/A148M, grade 80-50.
    - .3 Base plate: cast steel to ASTM A

27/A27M, grade N-2.

.4 Other metal parts: structural steel to CSA G40.21.

.2 Paint:

.1 Shop prime coat: to CAN/CGSB-1.212 MPI #79

.2 Two finish coats: to CAN/CGSB-1.61 MPI], colour as directed by a *Departmental Representative*.

.3 Grout: shrinkage compensating non-metallic.

### **PART 3 - EXECUTION**

#### 3.1 Workmanship

.1 Install mooring cleats in accordance with manufacturer's instructions.

#### 3.2 Setting and Grouting

.1 Set all mooring cleats at locations and elevations as indicated.

.1 After tightening of anchor bolts or positioning wedges, grout under base as required to fill void between the cleat and the channel beam cap.

.2 Ensure that temperatures of foundation, air, base and grout are within range specified by grout manufacturer.

#### 3.3 Acceptance

.1 Departmental Representative is solely responsible for the approval of all mooring cleats.