

PART 1 - GENERAL

- 1.1 DESCRIPTION .1 This section specifies the requirements for supply and installation of mooring devices as follows:
.1 Supply and installation of Type "B1" mooring cleats.
.2 Supply and installation of mooring rings.
- 1.2 RELATED WORK .1 Section 02 41 16 - Sitework, Demolition, and Removal.
.2 Section 03 10 00 - Concrete, Forming and Accessories.
.3 Section 03 20 00 - Concrete Reinforcing.
.4 Section 03 30 00 - Cast-in-Place Concrete.
- 1.3 MEASUREMENT FOR PAYMENT .1 Mooring Cleats - Type "B1": The supply and installation of Type "B1" mooring cleats, including reinforced concrete block and pedestal, will be measured by the unit secured in place. Contractor to provide all concrete, reinforcing steel, anchor bolts, nuts, washers, steel anchor plates, welding, grout, fastenings, paint, plant, equipment, and labour.
.2 Mooring Rings: The supply and placement will be measured by unit secured in place. Contractor to provide all fastenings, equipment and labour.

PART 2 - PRODUCTS

- 2.1 MATERIALS .1 Mooring Devices:
.1 Mooring Cleats Type "B1": galvanized cast iron cleats, 36.2 kg weight as dimensioned on the attached drawing.
.2 Mooring rings galvanized cast iron dimensioned on drawings.
.3 Anchor Bolts and Nuts: to ASTM A307, galvanized.

- 2.1 MATERIALS .1 (Cont'd)
- (Cont'd)
- .4 Non-Shrink Grout: pre-mixed compound of non-metallic aggregate and plasticizing agents, capable of developing minimum compressive strength of 50 MPa at 28 days.
- .5 Welding: to CSA W59.
- .6 Sealer: to Section 07 92 10 Joint Sealer.
- .7 Concrete: to Section 03 30 00 Cast-in-Place Concrete.
- .8 Concrete Reinforcement: to CSA G30.12M, Grade 400.

- 2.2 SHOP DRAWINGS .1 Submit fabricator's shop drawings on cleats in accordance with Section 01 33 00 - Submittal Procedures.

PART 3 - EXECUTION

- 3.1 INSTALLATION .1 Mooring Cleats - Type "B1":
- .1 Install Type "B1" cleats as indicated.
- .2 Secure cleats with anchor bolts of lengths required complete with associated nuts and washers as indicated.
- .3 After cleat installations is complete, bolt holes in cleats to be filled with approved waterproofing compound.
- .4 Do not paint.

- .2 Mooring Rings:
- .1 Install mooring rings as per attached drawings.

- 3.2 GROUT .1 Set all mooring cleats at locations and elevations indicated or as directed by the Departmental Representative. Grout under base of cleat using a non-shrink, non-metallic type of grout after tightening of anchor bolts or positioning wedges. Grout must be approved by Departmental Representative. Fill anchor bolt holes with approved sealer. Ensure that temperatures of foundation, air, base and grout are within range specified by grout manufacturers.
- .2 Do not grout until approval given by Departmental Representative.