# 1 GENERAL

## 1.1 SUMMARY

.1 Section Includes: .1 Materials and installation for plumbing specialties and accessories.

#### 1.2 REFERENCES

- .1 American Society for Testing and Materials International (ASTM).
  - .1 ASTM A 126-95(2001), Specification for Gray Iron Castings for Valves, Flanges and Pipe Fittings.
  - .2 ASTM B 62-02, Specification for Composition Bronze or Ounce Metal Castings.
- .2 American Water Works Association (AWWA).
  - .1 AWWA C700-02, Cold Water Meters-Displacement Type, Bronze Main Case.
  - .2 AWWA C701-02, Cold Water Meters-Turbine Type for Customer Service.
  - .3 AWWA C702-1-01, Cold Water Meters-Compound Type.
- .3 Canadian Standards Association (CSA International).
  - .1 CSA-B64 Series-01, Backflow Preventers and Vacuum Breakers.
  - .2 CSA-B79-94(R2000), Floor, Area and Shower Drains, and Cleanouts for Residential Construction.
  - .3 CSA-B356-00, Water Pressure Reducing Valves for Domestic Water Supply Systems.
- .4 Health Canada/Workplace Hazardous Materials Information System (WHMIS). .1 Material Safety Data Sheets (MSDS).
- .5 Plumbing and Drainage Institute (PDI).
  - .1 PDI-G101-96, Testing and Rating Procedure for Grease Interceptors with Appendix of Sizing and Installation Data.
  - .2 PDI-WH201-92, Water Hammer Arresters Standard.

### 1.3 ACTION AND INFORMATIONAL SUBMITTALS

- .1 Submittals in accordance with Section 01 33 00 Submittal Procedures.
- .2 Product Data:
  - .1 Submit manufacturer's printed product literature, specifications and datasheet for fixtures and equipment.
  - .2 Indicate dimensions, construction details and materials for specified items.
  - .3 Submit WHMIS MSDS. Indicate VOC's for adhesive and solvents during application and curing.
- .3 Shop Drawings:
  - .1 Submit shop drawings to indicate materials, finishes, dimensions and accessories.
- .4 Certificates: submit certificates signed by manufacturer certifying that

materials comply with specified performance characteristics and physical properties.

- .5 Instructions: submit manufacturer's installation instructions.
- .6 Manufacturers' Field Reports: manufacturers' field reports specified.
- .7 Closeout submittals: submit maintenance and engineering data for incorporation into manual specified in Section 01 78 00 Closeout Submittals, include:
  - .1 Description of plumbing specialties and accessories, giving manufacturers name, type, model, year and capacity.
  - .2 Details of operation, servicing and maintenance.
  - .3 Recommended spare parts list.

### 1.4 QUALITY ASSURANCE

- .1 Pre-Installation Meetings:
  - .1 Convene pre-installation meeting one week prior to beginning work of this Section.
    - .1 Verify project requirements.
    - .2 Review installation and substrate conditions.
    - .3 Co-ordination with other building subtrades.
    - .4 Review manufacturer's installation instructions and warranty requirements.

### 1.5 DELIVERY, STORAGE AND HANDLING

- .1 Waste Management and Disposal:
  - .1 Separate waste materials for reuse and recycling in accordance with Section01 74 00 - Cleaning and Waste Management and Disposal.
  - .2 Remove from site and dispose of packaging materials at appropriate recycling facilities.
  - .3 Collect and separate for disposal paper, plastic, polystyrene and corrugated cardboard packaging material in appropriate on-site bins for recycling in accordance with Waste Management Plan.
  - .4 Fold up metal and plastic banding, flatten and place in designated area for recycling.

# 2 PRODUCTS

### 2.1 FLOOR DRAINS

- .1 Floor Drains: to CSA B79.
- .2 lacquered cast iron floor drain with anchor flange, weepholes, and extended rim (specify diameter), satin finished nickel bronze strainer.
- .3 Acceptable Product: MIFAB F1100-ER Series or approved equal in accordance with B6.

### 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 data sheet.

# 3.2 INSTALLATION

- .1 Install in accordance with National Plumbing Code of Canada provincial codes, and local authority having jurisdiction.
- .2 Install in accordance with manufacturer's instructions and as specified..

#### 3.3 START-UP

- .1 Timing: start-up only after:
  - .1 Pressure tests have been completed.
  - .2 Disinfection procedures have been completed.
  - .3 Certificate of static completion has been issued.
  - .4 Water treatment systems operational.
- .2 Provide continuous supervision during start-up.

### 3.4 FIELD QUALITY CONTROL

- .1 Verification requirements include:
  - .1 Materials and resources.
  - .2 Storage and collection of recyclables.
  - .3 Construction waste management.
  - .4 Resource reuse.
  - .5 Recycled content.
  - .6 Local/regional materials.
  - .7 Wood.
  - .8 Low-emitting materials.

#### 3.5 TESTING AND ADJUSTING

#### .1 Timing:

- .1 After start-up deficiencies rectified.
- .2 After certificate of completion has been issued by authority having jurisdiction.
- .2 Application tolerances:
  - .1 Pressure at fixtures: +/- 70kPa.
  - .2 Flow rate at fixtures: +/- 20%.
- .3 Adjustments:
  - .1 Verify that flow rate and pressure meet design criteria.
  - .2 Make adjustments while flow rate or withdrawal is (1) maximum and (2) 25% of maximum and while pressure is (1) maximum and (2) minimum.
- .4 Floor drains:
  - .1 Verify operation of trap seal primer.

- .2 Prime, using trap primer. Adjust flow rate to suit site conditions.
- .3 Check operations of flushing features.
- .4 Check security, accessibility, removeability of strainer.
- .5 Clean out baskets.
- .5 Training:
  - .1 Demonstrate full compliance with Design Criteria.

# END OF SECTION