

**DIVISION 22**  
**SECTION 22 13 19**  
**SANITARY WASTE PIPING SPECIALTIES**

**PART 1 - GENERAL**

**1.01 RELATED DOCUMENTS**

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

**1.02 SUMMARY**

- A. Section Includes:
  - 1. Cleanouts.
  - 2. Floor Drains
  - 3. Miscellaneous sanitary drainage piping specialties.

**1.03 DEFINITIONS**

- A. ABS: Acrylonitrile-butadiene-styrene plastic.
- B. FOG: Fats, oils, and greases.
- C. FRP: Fiberglass-reinforced plastic.
- D. HDPE: High-density polyethylene plastic.
- E. PE: Polyethylene plastic.
- F. PP: Polypropylene plastic.
- G. PVC: Polyvinyl chloride plastic.

**1.04 ACTION SUBMITTALS**

- A. Provide Data: For cleanouts, floor drains..

**1.05 CLOSEOUT SUBMITTALS**

- A. Operation and Maintenance Data: For drainage piping specialties to include in emergency, operation, and maintenance manuals.

## 1.06 QUALITY ASSURANCE

- A. Drainage piping specialties shall bear label, stamp, or other markings of specified testing agency.
- B. Electrical Components, Devices, and Accessories: Listed and labeled as defined in NFPA 70, Article 100, by a testing agency acceptable to authorities having jurisdiction, and marked for intended use.
- C. Comply with NSF 14, "Plastics Piping Components and Related Materials," for plastic sanitary piping specialty components.

## 1.07 COORDINATION

- A. Coordinate size and location of concrete bases. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified in Section 03 30 00 "Cast-in-Place Concrete."
- B. Coordinate size and location of roof penetrations.

## PART 2 - PRODUCTS

### 2.01 CLEANOUTS

- A. Exposed Metal Cleanouts:
  - 1. ASME A112.36.2M, Cast-Iron Cleanouts:
    - a. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
      - 1) Josam Company.
      - 2) MIFAB, Inc.
      - 3) Smith, Jay R. Mfg. Co.
      - 4) Tyler Pipe.
      - 5) Watts Drainage Products.
      - 6) Zurn Plumbing Products Group.
    - 2. Standard: ASME A112.36.2M for cast iron for cleanout test tee.
    - 3. Size: Same as connected drainage piping
    - 4. Body Material: Hub-and-spigot, cast-iron soil pipe T-branch as required to match connected piping.
    - 5. Closure: Countersunk, cast-iron plug.
    - 6. Closure Plug Size: Same as or not more than one size smaller than cleanout size.
    - 7. Closure: Stainless-steel plug with seal.
- B. Metal Floor Cleanouts:

1. ASME A112.36.2M, Cast-Iron Cleanouts:
  - a. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
    - 1) Josam Company.
    - 2) Oatey.
    - 3) Sioux Chief Manufacturing Co., Inc.
    - 4) Smith, Jay R. Mfg. Co.
    - 5) Tyler Pipe.
    - 6) Watts Drainage Products.
    - 7) Zurn Plumbing Products Group.
2. Standard: ASME A112.36.2M for cast-iron soil pipe with cast-iron ferrule cleanout.
3. Size: Same as connected branch.
4. Type: Cast-iron soil pipe with cast-iron ferrule.
5. Body or Ferrule: Cast iron.
6. Outlet Connection: Threaded.
7. Closure: Brass plug with straight threads and gasket.
8. Adjustable Housing Material: Cast iron threads.
9. Frame and Cover Material and Finish: Nickel-bronze, copper alloy
10. Frame and Cover Shape: Round.
11. Top Loading Classification: Heavy Duty.
12. Riser: ASTM A 74, Service class, cast-iron drainage pipe fitting and riser to cleanout.
13. Standard: ASME A112.3.1.
14. Size: Same as connected branch.
15. Housing: Stainless steel.
16. Closure: Stainless steel with seal.
17. Riser: Stainless-steel drainage pipe fitting to cleanout.

## 2.02 FLOOR DRAINS

### A. Cast-Iron Floor Drains:

1. Manufacturers: Subject to compliance with requirements, available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
  - a. Commercial Enameling Co.
  - b. Josam Company; Josam Div.
  - c. MIFAB, Inc.
  - d. Prier Products, Inc.
  - e. Smith, Jay R. Mfg. Co.
  - f. Tyler Pipe; Wade Div.
  - g. Watts Drainage Products.
  - h. Zurn Plumbing Products Group

2. Standard: ASME A112.6.3
3. Pattern: Floor drain.
4. Body Material: Gray iron.
5. Seepage Flange: Required
6. Anchor Flange: Required
7. Clamping Device: Required
8. Outlet: Bottom.
9. Top or Strainer Material: Nickel bronze.
10. Top of Body and Strainer Finish: Nickel bronze.
11. Top Shape: Round.
12. Top Loading Classification: Heavy Duty.
13. Trap Material: Cast Iron
14. Trap Pattern: Standard P-Trap
15. Trap Features: Trap-seal primer valve drain connection.

## **PART 3 - EXECUTION**

### **3.01 INSTALLATION**

- A. Install cleanouts in aboveground piping and building drain piping according to the following, unless otherwise indicated:
  1. Size same as drainage piping up to NPS 4. Use NPS 4 for larger drainage piping unless larger cleanout is indicated.
  2. Locate at each change in direction of piping greater than 45 degrees.
  3. Locate at minimum intervals of 50 feet for piping NPS 4 and smaller and 100 feet for larger piping.
  4. Locate at base of each vertical soil and waste stack.
- B. For floor cleanouts for piping below floors, install cleanout deck plates with top flush with finished floor.
- C. Install deep-seal traps on floor drains and other waste outlets, if indicated.
- D. Install floor-drain, trap seal primer fittings on inlet to floor drains that require trap-seal primer connection.
  1. Exception: Fitting may be omitted if trap has trap-seal primer connection.
  2. Size: Same as floor drain inlet.

### **3.02 CONNECTIONS**

- A. Comply with requirements in Section 22 13 16 "Sanitary Waste and Vent Piping" for piping installation requirements. Drawings indicate general arrangement of piping, fittings, and specialties.
- B. Install piping adjacent to equipment to allow service and maintenance.

### **3.03 LABELING AND IDENTIFYING**

- A. Distinguish among multiple units, inform operator of operational requirements, indicate safety and emergency precautions, and warn of hazards and improper operations, in addition to identifying unit. Nameplates and signs are specified in Section 22 05 53 "Identification for Plumbing Piping and Equipment."

### **3.04 FIELD QUALITY CONTROL**

- A. Tests and Inspections:
  - 1. Leak Test: After installation, charge system and test for leaks. Repair leaks and retest until no leaks exist.
  - 2. Test and adjust controls and safeties. Replace damaged and malfunctioning controls and equipment.

### **3.05 PROTECTION**

- A. Protect drains during remainder of construction period to avoid clogging with dirt or debris and to prevent damage from traffic or construction work.
- B. Place plugs in ends of uncompleted piping at end of each day or when work stops.

**END OF SECTION**

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SAMPLE