

## SECTION 15020

### PLUMBING WORK GENERAL

#### **PART 1 - GENERAL**

##### **1.1 DESCRIPTION**

- A. All plumbing work and specified associated work in Division 15000 is governed by this section. Provide labor, service, and materials necessary to provide the work as shown on the drawings and specified herein.
- B. Refer to other division for continuation of exterior and allied work.

##### **1.2 QUALITY ASSURANCE**

- A. Obtain and pay for all permits, inspections, and connection fees required by governing bodies in connection with the Work. Deliver Certificates of Inspection to the Owner.
- B. All work shall comply with governing codes, ordinances, and regulations of City, Parish, and State having jurisdiction and requirements of the Board of Health.

##### **1.3 SUBMITTALS**

- A. Shop Drawings: Submit on all materials, products, equipment, and systems as specified under each plumbing section in this division, in accordance with the General Conditions. Show pipe sizes, location, slopes of horizontal runs, fittings, valves, meters, gages, and connections.
- B. Product Data: Submit on all materials, products, and equipment unless otherwise specific or acknowledged in writing.
- C. Samples: Submit when specified or requested.
- D. Submit manufacturer's data on access doors, and drawing or verbal description indicating size, location, and function.
- E. Shop Drawings and Manufacturer's Data for plumbing equipment, submitted for approval shall follow the General Conditions.

##### **1.4 RECORD DOCUMENTS**

- A. Refer to General Conditions for requirements concerning record documents. Additional requirements are specified in Division 1.
- B. Furnish Architect with one (1) neatly, accurately marked reproducible copy of the drawings indicating all changes from original drawings as installed.

##### **1.5 PRODUCT HANDLING:**

- A. Pipe, fixtures, and accessories shall be protected from damage in shipment, handling, storage, and installation; from moisture dirt, and debris.
- B. Pipe, clean-out, and floor drain openings shall be temporarily plugged with oakum or test plugs until final connections are made.

## **PART 2 - PRODUCTS**

### **2.1 GENERAL**

- A. Plumbing systems shall be provided complete. Should a system or any part thereof fail to meet performance requirements, necessary replacement, alterations, or repairs, as required by the Architect, shall be made to bring performance up to specified requirements and all building construction and finishes damaged or marred by such replacements, alterations, or repairs shall be restored to prior condition, at no additional cost to the Owner.
- B. Where multiple items of equipment or materials such as fixtures, valves, etc., are required, they shall be the product of a single manufacturer.
- C. Inserts, pipe sleeves, hangers, supports, fixtures, trim, drains, and anchorage of plumbing shall be provided as specified herein and as required to provide and complete and functioning plumbing system. Where such items are to be set or embedded in concrete, masonry, or similar work, the items shall be furnished and layout made at the proper time for the setting or embedment thereof so as to cause no delay in the work.
- D. Piping assemblies of equipment shown on the drawings are diagrammatic. All piping and appurtenances required for the proper operation of all equipment shall be provided. Route pipe as required to clear all duct work structural elements, shafting, etc.

## **PART 3 - EXECUTION**

### **3.1 INSTALLATION AND WORKMANSHIP**

- A. The work shall be installed in accordance with the manufacturer's recommendation or instructions. Any material, apparatus, or equipment which, in the opinion of the Architect, is improperly installed shall be removed and reinstalled in an approved manner at no additional cost to the Owner.
- B. The location of plumbing piping shall be coordinated to determine that it clears openings and structural members; that piping indicated as concealed can be properly concealed in walls or partitions and that it does not interfere with lights, duct work, or equipment having fixed locations. Make necessary horizontal and vertical offsets with pipe fittings to install the systems in the available space. Conceal all piping except where otherwise noted. Piping shall be exposed in finished areas only where specifically indicated with a note, or with the approval of the Architect.

- C. Where drain and water connections necessary to the operation of fixtures or equipment are not specifically indicated, extend necessary branches to the closets indicated branch or main.
- D. Each fixture, equipment drain, or floor drain shall be separately trapped unless otherwise indicated or specified.

### 3.2 CUTTING AND PATCHING

- A. Identify openings for cutting by other trades prior to construction. Contractor to provide cutting and patching in accordance with General Conditions of this specification.
- B. Cutting of steel, concrete, or any other structural part shall be approved in writing by Architect prior to cutting.
- C. Equipment locations may be shown without indication of how clearance is provided to access or install such equipment. It shall be the Contractors responsibility to locate such equipment at the locations indicated on the drawings, and perform the necessary coordination, cutting and patching, assembly and disassembly as required to install the equipment in the location indicated. This work shall be considered in the scope of work, and provided without additional cost to the Owner.

- 3.3 WATERPROOFING:** Do not cut or penetrate waterproofed surfaces, or waterproofing membranes, without first making arrangements or repair by a method approved by Architect.

END OF SECTION