



## **DESIGN GUIDELINE 220523**

### **VALVES**

#### **Scope**

Valves for fire protection, plumbing, steam and hydronic service.

#### **Related Sections**

##### **U-M Design Guideline Sections:**

[1.0 - Codes and Regulatory Agencies](#)

##### **U-M Master Specification Sections:**

[211313 - Wet and Dry Pipe Sprinkler Systems](#)

[220523 - Valves](#)

[336330 - Steam and Condensate Distribution Systems](#)

#### **Design and Application Requirements**

##### **General**

U-M Master Specification Section 20523 shall be used as the basis for valve specifications on projects, with the exception of valves for fire protection and steam and condensate valves in the tunnels. This specification contains the minimum requirements for valves at U-M. Project specific requirements may dictate valves with additional features, higher pressure/temperature ratings, etc. The A/E shall therefore edit the U-M valve specification to make it project specific. While many valve service types are covered in the specification, not all are included. Add to the specification, service types not included, as required for the project. Turn on hidden text and read all spec. editor's notes when editing the specification.

The A/E must include Section 336330 Steam and Condensate Distribution Systems for the steam and condensate valves used in the tunnel systems.

Valves shall be specified with seats, stem seals and disc materials compatible for intended fluid, temperature, pressure and service. Valve pressure and temperature ratings shall be specified to meet or exceed those of the system in which they are installed.

Strainer blow-down valves shall be quarter turn ball valves.

##### **Fire Protection**

For valve used in fire protection systems, refer to Master Specification Section 211313 Wet and Dry Pipe Sprinkler Systems.

## **Potable Water Systems**

Valves in city water mains exterior to the building shall comply with City of Ann Arbor requirements