

**PART 1: GENERAL**

1.01 Purpose:

- A. This standard is intended to provide useful information to the Professional Service Provider (PSP) to establish a basis of design. The responsibility of the engineer is to apply the principles of this section such that the University may achieve a level of quality and consistency in the design and construction of their facilities. Deviations from these guidelines must be justified through LCC analysis and submitted to the University for approval.

1.02 Requirements:

B. Valves:

I. Full throat ball valves only

1. Provide valves with extended stems to be accessible on outside of insulation. Valve body and stem shall be insulated.
2. Provide means of access where valves are not exposed.
3. Provide valve vaults or boxes, as conditions demand, to provide access to valves installed below grade.
4. Valves applied to cold water and piping systems with fluids typically less than ambient temperature shall be constructed with all components exposed to atmosphere of stainless steel or brass. Steel components are not acceptable. For valves 3" or smaller use Stainless steel components with suitable trim on underground valve installations.
5. For all domestic water 4" or larger underground valves must be PRATT groundhog butterfly valves. No substitutions allowed.

C. Hangers and Supports:

1. Provide hangers fabricated to allow adequate vertical adjustment of 1.5 inches minimum after installation while still supporting the load. The use of pipe hooks, chains, or perforated iron piping for support is prohibited.
- 2.



## **PART 2: PRODUCTS**

### 2.01 Motors:

- A. Refer to Section 5.26.60 for motor standard.

### 2.02 Valves:

#### A. Shutoff and Section Valves:

1. 2" and Smaller: Provide ball valves.
2. 2 1/2" or Larger: Provide butterfly valves.
3. No gate valves on domestic water
4. SHSU require Ball Valves or butterfly valves; Watts or Nibco brand, Bronze, full throated.

#### B. Drain Valves:

1. 2" and Smaller: Provide ball valves.
2. 2-1/2" and Larger: Provide butterfly valves.
3. No gate valves
4. SHSU require Ball Valves or butterfly valves; Watts or Nibco brand, Bronze, full throated.

#### C. Check Valves:

1. Provide spring-loaded silent check valves.
  - a. For valves 3" or larger split wafer check valve
2. SHSU require; Watts or Nibco brand, Bronze, full throated.

#### D. Vent Valves:

## **PART 3: EXECUTION**

END OF STANDARD