

Resilient Wedge Series 45 Gate Valve for Fire Protection Sample Specification

1. General

- A. The valve shall be a ductile iron body and bonnet as specified. The valves shall be non-rising stem (NRS), open left, resilient seated, with an AWWA standard 2" square operating nut or Outside Stem and Yoke (OS&Y), open left, with hand wheel.
- B. Valves shall comply with AWWA C509 except where modified and/or augmented in these specifications.
- C. All bolting shall be stainless steel AlSI grade 304. If nuts are used on the bolts the nuts shall be 304 stainless steel and the bolt threads shall be coated with an anti-galling compound.
- D. Valves shall comply with the requirements of ANSI/NSF 61 and ANSI/NSF 372.
- E. Valves shall comply with the requirements of Underwriter's Laboratories and Factory Mutual specifications.

2. Resilient gate

- A. The valve gate shall be ductile iron, fully encapsulated with EPDM rubber, and shall be capable of a drip-tight shutoff with flow in either direction.
- B. The EPDM shall be permanently vulcanized to the gate.

3. Stems

- A. Valve stems shall be made of 304 stainless steel or bronze with minimum yield strength of 40,000psi.
- B. Stems shall be provided with separate or integral bronze thrust collars.



4. Seals and Gaskets

- A. Valve stem seals shall be an o-ring type with not less than one o-ring below the thrust collars and two o-rings above the thrust collars.
- B. If an o-ring groove is cut into the stem the diameter of the groove shall not be less than the root diameter of the stem threads.
- C. O-rings and gaskets shall be made of an NBR rubber to help prevent the effects of permeation.
- D. Bonnet gaskets shall be an o-ring type that completely encircles each individual bonnet bolt so that the bolts are isolated from internal or external water sources.

5. Protective Coatings

A. The exposed ferrous surfaces shall be coated with a fusion bonded epoxy in accordance with AWWA C550.

6. End Connections

- A. End Connections shall be either Mechanical Joint, Push On Joint, Flanged, or a combination thereof.
- B. Mechanical and Push-On joints shall comply with the requirements of AWWA C111.
- C. Flanged ends shall comply with ANSI/ASME B16.1, class 125 flanges.

