

Foundation for Cross-Connection Control & Hydraulic Research

NOTICE 89-001

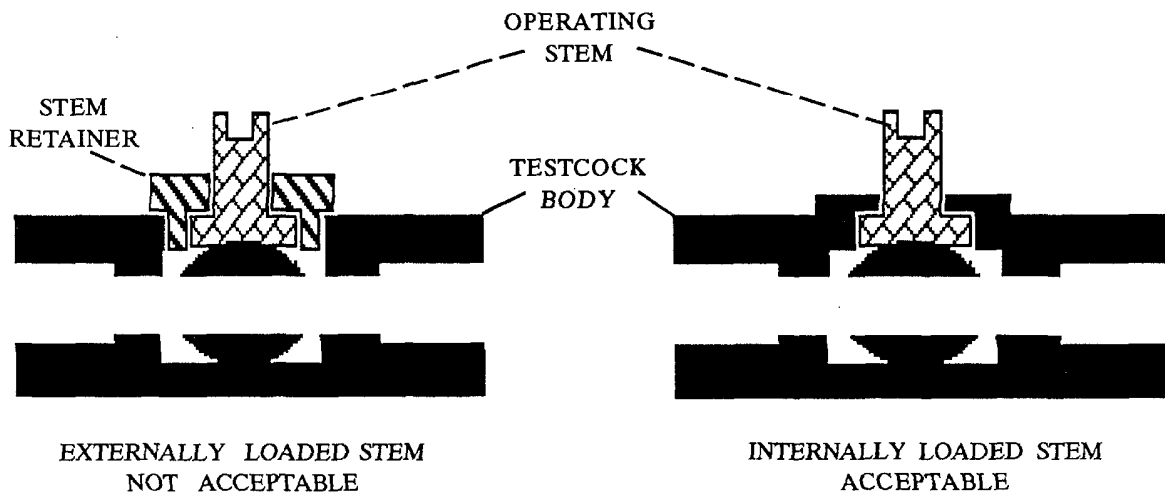
An Approved backflow prevention assembly (i.e. reduced pressure principle, double check valve, pressure vacuum breaker) is required to have testcocks for in-line testability. The testcocks prior to the 7th Edition of the **MANUAL OF CROSS-CONNECTION CONTROL** were only required to be "sturdy and drip-tight." Feedback from field testers helped to change the 7th Edition Specifications, in 1985, to require a "resilient seated" type of testcock. To further clarify the type of acceptable testcocks, modifications in the 8th Edition were published in June 1988. Material and design requirements for all testcocks were implemented on the publication date of the 8th Edition.

The testcocks used on all Approved backflow prevention assemblies sold after June 1988 shall be:

- 1) Resilient seated - no metal to metal types
- 2) Fully ported - waterway opening must be full rated size
i.e. 1/8", 1/4", 1/2", 3/4"
- 3) Operating stem must indicate if testcock is open/closed
- 4) Operating stem on a ball valve type of testcock must be "blow out proof".
- 5) Body materials are specified as bronze, stainless steel, or engineered plastic

In general, our office has seen that the backflow prevention assembly manufacturers are using fully ported ball valves to meet these requirements. There are several types of testcock designs which look similar, but not all of them fully comply with the requirements.

Item #4 above (i.e., blow out proof stem) is required to insure that the stem does not come out of the body. With this type of construction the operating stem of the ball valve can not be removed unless the testcock is totally disassembled. This is to prevent the tester from accidentally releasing the stem while operating the testcock. The testcock may have a packing gland which seals the stem and body, but this packing gland can not be the part retaining the stem. See examples below.



Any backflow prevention assembly utilizing the improper testcocks is NOT Approved.