

RPZ's - Inside or Outside?

When the status quo creates unnecessary design risk

Five things
you need to
know



1 An RPZ inside the building = flood damage liability
The backflow RPZ is designed to dump water if either of the check valves fail. Check valves fail due to debris in the water line or mechanical failure. The RPZ ≠ Double Check.

2 Most design engineers are not aware of the flood risk.
Safe-T-Cover made lunch & learn presentations to over 1,500 engineers over a two year period. Most design engineers were unaware the RPZ is designed to dump water.

3 More and more water jurisdictions are requiring the RPZ instead of the Double Check.
The RPZ provides greater assurance the public drinking water system will be protected in the event one of the two check valves fail.

4 The drain below the RPZ may not be adequate.
A 3" RPZ will dump 275 gallons per minute at 60 pounds of water pressure in a catastrophic discharge. That's 100 gallons of water per minute more than the 4" drain can handle.

5 As a design engineer, what should you do?
Move the backflow design responsibility to the civil engineer. The RPZ will be installed outside the building in an above ground ASSE 1060 enclosure, with heat if necessary