Backflow Bulletin #2

BOILERS & PRESSURE VESSELS

Hydronic Heating

- Commercial Boiler – High Pressure...above 30psi
  Must have an air gap or break tank

- Commercial Hot Water Boiler - No Chemicals
  Low pressure, hot water boiler, no additives or means to add chemicals

- Commercial Hot Water Boiler - No Chemicals But Has the Capability
  May not have chemicals but has provisions to add chemicals

- Commercial Hot Water Boiler - Chemicals
  Contains anti-freeze, corrosion inhibitors, cleaners, has a snow melt system, etc

- Commercial Steam Boiler - Chemicals or No Chemicals
  Almost all steam boilers require additives to keep the water from surging.

- Commercial Boiler with Solar Panels
  Heat exchanger should be double-walled per Plumbing Code. If not, RP or AG

- Residential Steam Boiler - Chemicals or No Chemicals
  Almost all steam boilers require additives to keep the water from surging.

- Residential Hot Water Boiler with Solar Panels
  Heat exchanger should be double-walled per Plumbing Code. If not, must be RP

- Residential Hot Water Boiler with Snow Melt
  Generally will have anti-freeze in the system (toxic chemicals require an AG or Break Tank)

- Residential “Small” Hot Water Boiler without Snow Melt
  Under 200,000 btu, no chemicals or means to put chemicals into the boiler

- Residential “Large” Hot Water Boiler without Snow Melt
  Over 200,000 btu, no chemicals (toxic chemicals require an air gap or break tank)

Miscellaneous:

► ALWAYS check with your local Water Purveyor, Building Department, and/or Inspection Department
► MANY communities have stricter policies, regulations and/or ordinances
► ALL backflow preventers must be tested annually.
► RP installations must be high enough above the floor or ground to allow for an air gap below the relief valve.
► Backflow preventers shall not be installed in pits, be no higher than 5’ and shall be fully accessible

Note that an air gap or break tank is always best!

NOTE: The reference code for Chicago is 18-29-608 and its sub part. Chicago is much more stringent

This Bulletin has been provided as a service to all Illinois plumbers & testers, municipal employees, & water professionals. This is our interpretation of existing Illinois plumbing codes and IEPA regulations. Accuracy is critical. If you are a professional with questions or concerns over our interpretations, please contact us immediately.