

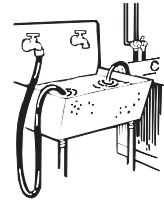
# Backflow Terminology

## Terminology Associated with Backflow Prevention

- **Degree of Hazard** – Potential threat to water quality of a particular cross connection or chemical.
- **First Line of Defense** – Backflow Preventers located just prior to the contaminant source, or located at each fixture which might allow a contaminant to enter the potable water system.
- **Containment** – Backflow Preventers located at points where public water supply and private water supply are connected. This “Second Line of Defense” ensures that the public water quality is not compromised if the first line of defense is tampered with, altered, or is not adequately serviced.
- **Cross Connection Control Program** – This is a combined cooperative effort between plumbing and health officials, waterworks companies, property owners, and certified testers to establish and administer guidelines for controlling cross connections and implementing means to ensure their enforcement so that the public potable water supply will be protected both in the city main and within buildings. The elements of a program define the type of protection required and responsibility for the administration and enforcement. Other elements ensure continuing education programs.

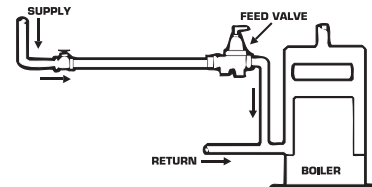


- **Cross Connection** – Arrangement of piping which allows a potable water supply to become connected to a line which contains a contaminant.



- **Back-Siphonage** – Reversal of normal flow direction due to a negative pressure in the supply piping.

- **Backpressure Backflow** – Reversal of normal flow direction due to an increase in downstream pressure.



- **Thermal Expansion** - Once a backflow preventer is installed a system becomes closed. After this point as the temperature rises, the water will expand. Without proper room for expansion there is an increased risk of damage to the plumbing system.
- **Potential Results** – Leaking TCP valve or other relief valves, leaking joints, blown joints, ruptured boilers, ruptured hot water heaters, serious burns, water damage, mold, mildew, water hammer, and many more symptoms may result.

## Selection Guidelines for Backflow Prevention Assemblies

| CONDITION              | REDUCED PRESSURE (RP) | DOUBLE CHECK (DBL CK) | PRESSURE VACUUM BREAKER (PVB) | ATMOSPHERIC VACUUM BREAKER (AVB) | DUAL CHECK (DC) | DUAL CHECK W/ATMOSPHERIC PORT (DCAP) |
|------------------------|-----------------------|-----------------------|-------------------------------|----------------------------------|-----------------|--------------------------------------|
| Continuous Pressure    | ✓                     | ✓                     | ✓                             |                                  | ✓               | ✓                                    |
| Possible Back Pressure | ✓                     | ✓                     |                               |                                  | ✓               | ✓                                    |
| Possible Backsiphonage | ✓                     | ✓                     | ✓                             |                                  | ✓               | ✓                                    |
| Non-Toxic              | ✓                     | ✓                     | ✓                             | ✓                                | ✓               | ✓                                    |
| Toxic                  | ✓                     |                       | ✓                             | ✓                                |                 |                                      |