ALL JOINTS SHALL BE RESTRAINED. BURIED FITTINGS: MEGALUG RESTRAINTS, OR EQUAL EXPOSED FITTINGS: FLANGED, MEGALUG, OR VICTAULIC JOINTS.

FOR METER BOX AND WATER METER INSTALLATION, SEE W-3A, W-3B & W-3C.

C900, DUCTILE IRON PIPE AND FITTINGS ONLY FROM WATER METER TO 90° FITTING.

WRAPPED WITH 8-MIL POLYETHYLENE WRAP BETWEEN WATER METER AND BACKFLOW DEVICE, FOR METALLIC PIPE.

18" (MIN)

18" (MIN)

18" (MIN)

18" (MIN)

PROFILE

ALTERNATE MATERIALS MUST BE APPROVED BY THE CITY OF NAPA WATER DIVISION PRIOR TO USE.

PLAN

CLEARANCE REQUIREMENTS

FLANGETYTE GASKETS BY U.S. PIPE SHALL BE USED FOR ALL FLANGED FITTINGS.
1. This standard applies to commercial/industrial/multi-family/irrigation services or as required by the City of Napa’s Cross Connection Specialist after completing a cross connection control survey. Properties utilizing recycled water shall install reduced pressure backflow devices on all services unless otherwise approved by the City of Napa’s Cross Connection Specialist.

2. **Above ground installation is mandatory** for reduced pressure backflow devices.

3. Backflow device must be installed behind the back of sidewalk outside of the public right-of-way and protected from traffic hazards, either by location or barriers.

4. Backflow device can be installed within a building in a dedicated utility closet if the building is located within 20-ft of the public right-of-way, the backflow device is placed at the corner of the building closest to the public right-of-way where the connection is made, and with the approval from the Utilities - Water Division (see W-6B for internal installation requirements).

5. No connections are allowed between the water meter and the backflow assembly, or directly to the backflow device. A thermal expansion relief valve shall be installed between backflow device and water heaters being served.

6. All parts must be easily accessible for inspection by the Utilities - Water Division.

7. Any other location or method of installation must be approved in advance by the Utilities - Water Division.

8. All buried sections of metallic pipe and fittings between the water meter and the backflow device shall be wrapped with 8-mil polyethylene wrap. Wrapping metallic pipe and fittings beyond the backflow device is recommended, but not required.

9. Installation must be approved by the Utilities - Water Division and the device tested by a City approved AWWA certified backflow tester before water is turned on.

10. Reduced pressure backflow devices must be approved by the State Water Resources Control Board and the University of Southern California (USC) Hydraulics Research Section. For USC’s Foundation List of approved devices go to [https://fccchr.usc.edu/list.html](https://fccchr.usc.edu/list.html).

11. No trees shall be planted within 10-ft, or large shrubs within 5-ft, of reduced pressure backflow device.

12. Approved backflow prevention devices shall be installed and tested and water meters shall be set, prior to any use of water service. Use of jumpers, hose bibs, or other devices shall not be permitted.

13. The visual impact of backflow devices should be considered if not placed within a utility closet.