



EXTERIOR ABOVE-GROUND PIPING PERMITTED ONLY IF BUILDING IS NOT AT PUBLIC RIGHT-OF-WAY

EXTERIOR WALL
BRASS OR COPPER PIPE AND FITTINGS ONLY
NO SOLDERED JOINTS

36" (MIN) CLEARANCE

PUMP (IF REQUIRED) AND PIPING PER PLUMBING CODE

18" (MIN) - 24" (MAX) CLEARANCE

FLOW

36" (MAX)

FLEXIBLE COUPLING (VICTAULIC OR SIMILAR)

1" (MIN)

12" (MIN) 24" (MAX)

TO DRAIN

FOUNDATION

BRASS OR COPPER AND FITTINGS ONLY (NO SOLDERED JOINTS) FROM WATER METER TO BACKFLOW DEVICE

FOR WATER METER INSTALLATION, SEE W-1, W-2A & W-2B

NO FITTINGS UNDER BUILDING FOUNDATION

PIPE SLEEVE THROUGH SLAB (4" PIPE & LARGER REQUIRES 2" MIN CLEARANCE ON ALL SIDES)

SUPPORTS FOR BACKFLOW DEVICE (TO BE ATTACHED TO FOUNDATION)

THRUST BLOCK

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

NO OTHER CONNECTIONS PERMITTED ON THE SERVICE BETWEEN THE BACKFLOW DEVICE AND THE WATER METER

ALL INTERIOR RESTRAINTS, SUPPORTS, SEISMIC PROTECTION, AND DRAINAGE FOR THE BACKFLOW DEVICE SHALL MEET THE CURRENT CALIFORNIA BUILDING AND PLUMBING CODES

DRIVABLE ANODE, FOR METALLIC PIPE (SEE W-24E FOR INSTALLATION DETAILS)

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

**** LEAD FREE DEVICES ONLY ****

CITY OF NAPA

UTILITIES DEPARTMENT

TITLE **INTERIOR REDUCED PRESSURE BACKFLOW DEVICE INSTALLATION FOR 3/4" TO 2" WATER SERVICES** (SEE NOTE 1)

DRAWN BY: DF
APPROVAL DATE: 09/2021
SCALE: NTS
REVISED DATE: 09/2021

CHECKED BY: SL
APPROVED BY: DD
DRAWING NO. W-6B.1

NOTES

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 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. THE BACKFLOW DEVICE MUST BE APPROVED BY AWWA FOR VERTICAL INSTALLATION.
4. VERTICAL INSTALLATIONS SHALL HAVE A MINIMUM CLEARANCE OF 3-FT FROM THE FRONT OF THE DEVICE AND 18-IN TO EACH SIDE OF THE DEVICE FROM ANY STRUCTURE, UTILITY, OR OTHER FEATURE FOR ACCESSIBILITY.
5. PIPE INSTALLATION TO THE BACKFLOW DEVICE SHALL MEET CITY STANDARD REQUIREMENTS FOR PUBLIC WATER MAINS (INCLUDING, BUT NOT LIMITED TO, CORROSION PROTECTION, SAND BEDDING, AND PRESSURE TESTING). CONTRACTOR IS RESPONSIBLE FOR CONTACTING UTILITIES - WATER DIVISION FOR INSPECTION OF PIPE INSTALLATION AND TESTING FROM THE CONNECTION AT THE WATER METER TO THE BACKFLOW DEVICE
6. 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.
7. ALL PARTS MUST BE EASILY ACCESSIBLE FOR INSPECTION BY THE UTILITIES - WATER DIVISION.
8. ANY OTHER LOCATION OR METHOD OF INSTALLATION MUST BE APPROVED IN ADVANCE BY THE UTILITIES - WATER DIVISION.
9. 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.
10. DRAINAGE SHALL BE PROVIDED IN THE UTILITY CLOSET (AS REQUIRED BY THE BUILDING DIVISION) TO DRAIN WATER THAT MAY BE RELEASED FROM THE TESTING OR DRAINAGE OF THE BACKFLOW DEVICE.
11. 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.
12. REDUCED PRESSURE BACKFLOW DEVICES MUST BE APPROVED BY THE STATE WATER RESOURCES CONTROL BOARD AND THE UNIVERSITY OF SOUTHERN CALIFORNIA (USC) HYDRAULIC RESEARCH SECTION. FOR USC'S FOUNDATION LIST OF APPROVED DEVICES GO TO [HTTPS://FCCCHR.USC.EDU/LIST.HTML](https://fccchr.usc.edu/list.html).
13. NO TREES SHALL BE PLANTED WITHIN 10-FT, OR LARGE SHRUBS WITHIN 5-FT, OF REDUCED PRESSURE BACKFLOW DEVICE.
14. 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.

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BACKFLOW DEVICE INSTALLATION FOR
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APPROVAL DATE: 09/2021
SCALE: NTS
REVISED DATE: 09/2021

CHECKED BY: SL
APPROVED BY: DD
DRAWING NO. W-6B.2