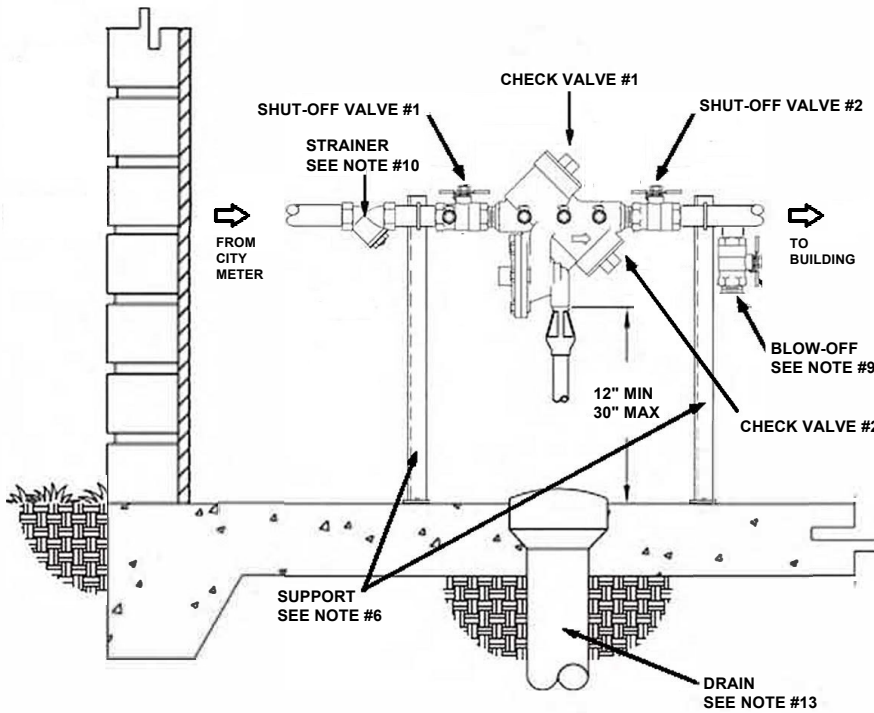


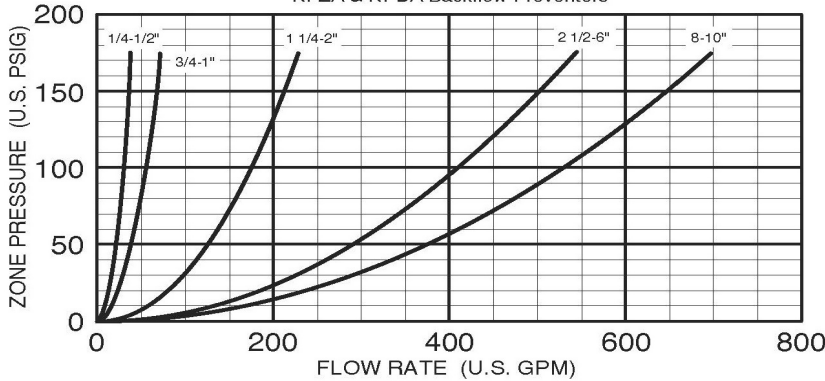
REDUCED PRESSURE ZONE ASSEMBLY INDOOR

NOTES



Relief Valve Discharge Rates

(Worst case condition- If 1st check or relief valve is lodged wide open)
RPZA & RPDA Backflow Preventers



Source Wilkins/Zurn Co. Document No. BF-RV Discharge Rev. A Date: 6/13

Indoor Drain Requirements for RPZA Backflow Preventer					
Pipe Size	1/2"	3/4" - 1"	1 1/4" - 2"	2 1/2" - 6"	8" - 10"
Flow rate @ 85 psig	30 gpm	50 gpm	80 gpm	375 gpm	500 gpm
Minimum Drain Diameter	6" decline per 100'	3"	4"	6"	8"
	9" decline per 100'	3"	4"	4"	8"
	12" decline per 100'	3"	4"	4"	8"

Source Engineering Toolbox.com

- REDUCED PRESSURE ZONE ASSEMBLY (RPZA), SIZE, MAKE, MODEL AND INSTALLATION ORIENTATION APPROVED BY USC FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH MUST BE INSTALLED ON THE WATER SERVICE LINE AFTER SERVICE CONNECTION AND PRIOR TO FIRST BRANCH OR CONNECTION TO USER'S SYSTEM. RPZA INSTALLED ON DOMESTIC WATER SERVICE MUST BE LEAD FREE.
- ASSEMBLY MUST BE INSTALLED IN A MANNER THAT PROVIDES EASY ACCESS FOR TESTING, MAINTAINING, REPAIRING AND REPLACING ASSEMBLY.
- ASSEMBLY MUST BE INSTALLED IN HEATED AREA. ASSEMBLY MUST BE ACCESSIBLE BY DOOR FROM OUTSIDE (KEY REQUIRED TO BE PROVIDED) AND ISOLATED FROM ACCESS TO REMAINDER OF FACILITY, OR BUILDING OWNER MUST FURNISH LIST OF CONTACT NAMES AND TELEPHONE NUMBERS TO BE CONTACTED IN CASE OF EMERGENCY.
- LOWEST POINT OF ASSEMBLY OR RELIEF VALVE OUTLET SHALL BE AT LEAST 12 INCHES BUT NOT MORE THAN 30 INCHES ABOVE FLOOR.
- ADEQUATE AND PERMANENT METHOD OF HANDLING TEST WATER DISCHARGE SHALL BE PROVIDED.
- ADEQUATE SUPPORT, EXCLUDING WATER LINES, SHALL BE PROVIDED UNDER ASSEMBLY VALVES FOR ASSEMBLIES THAT ARE 3-INCHES OR LARGER. ADJUSTABLE PIPE STAND SUPPORTS SHALL BE CONSTRUCTED OF MINIMUM 2-INCHES DIAMETER PIPE AND SHALL HAVE A FLOOR FLANGE FOR FASTENING STAND TO CONCRETE SLAB. PIPE STANDS SHALL BE FASTENED TO CONCRETE SLAB USING CONCRETE EXPANSION ANCHORS. FOR ASSEMBLIES 10-INCHES OR LARGER THREE PIPE STAND SUPPORTS WILL BE REQUIRED. THIRD BEING UNDER CENTER OF ASSEMBLY.
- ALL TEST COCKS SHALL BE IN PLACE WITH SHUT-OFF VALVES. ASSEMBLY MUST BE COMPLETELY TESTABLE.
- ASSEMBLIES MUST BE INSTALLED HORIZONTALLY UNLESS VERTICAL APPLICATION IS APPROVED BY UNIVERSITY OF SOUTHERN CALIFORNIA FOUNDATION FOR CROSS CONNECTION CONTROL AND HYDRAULIC RESEARCH.
- APPROVED BLOW-OFF SHALL BE INSTALLED IN WATER LINE IMMEDIATELY AFTER ASSEMBLY, TO ALLOW FOR FLUSHING. ASSEMBLIES 2-INCH THROUGH 8-INCH SHALL HAVE BLOW-OFF NOT LESS THAN 2 INCHES IN DIAMETER. ASSEMBLIES LARGER THAN 8-INCHES SHALL HAVE A MINIMUM 4-INCH BLOW-OFF. ASSEMBLIES LESS THAN 2-INCH RECOMMENDED MINIMUM DIAMETER BLOW-OFF SAME AS ASSEMBLY OR PIPE SIZE. DISCHARGE MUST BE PIPED TO OUTSIDE OF BUILDING OR PROVIDE OTHER MEANS OF ADEQUATELY CONVEYING DISCHARGE OF BLOW-OFF TO OUTSIDE OF STRUCTURE.
- IF NOT PART OF APPROVED ASSEMBLY, APPROVED STRAINER SHALL BE INSTALLED ON INLET SIDE OF RPZA PRIOR TO ASSEMBLY ISOLATION VALVE, SO THAT ALL WATER MUST PASS THROUGH STRAINER IMMEDIATELY BEFORE ENTERING ASSEMBLY.
- CLEAR UNOBSTRUCTED SPACE FOR RELIEF VENT SHALL BE PROVIDED TO PREVENT VENT FROM BECOMING BLOCKED OR FLOODED. RELIEF PORT DISCHARGE MUST BE PIPED TO OUTSIDE OF BUILDING.
- FACTORY BOLT ON AIR GAP AND DRAINAGE ATTACHMENT SHALL BE PROVIDED BETWEEN RELIEF VENT AND DRAIN LINE.
- RELIEF VENT DRAINS TO BE SIZED FOR MAXIMUM DISCHARGE AS RECOMMENDED BY ASSEMBLY MANUFACTURER.
- UPON COMPLETION OF INSTALLATION INSTALLER MUST CONTACT WATER UTILITIES DEPARTMENT AT (479) 494-3913 FOR SCHEDULING OF FINAL INSPECTION OF ASSEMBLY TO VERIFY CONFORMANCE TO APPROVED INSTALLATION PLANS AND DIVISION 8 OF CITY OF FORT SMITH'S CROSS-CONNECTION CONTROL PROGRAM.

NO SCALE

CITY OF FORT SMITH STANDARD DRAWINGS - CROSS CONNECTION CONTROL



REDUCED PRESSURE RELIEF ASSEMBLY (RPZA)
DOMESTIC & IRRIGATION WATER SERVICES
(INDOOR)

STANDARD NO.
2

VERSION NO.
1

VERSION DATE
02/26/2025