

REDUCED PRESSURE ZONE ASSEMBLY (RPZA)

THE FOLLOWING MINIMUM BACKFLOW PREVENTION/ENCLOSURE NOTES SHOULD APPEAR ON PLANS WHERE APPLICABLE

1. ENCLOSURE TYPE MUST BE (“AQUA SHIELD”, “HOTBOX” OR “SAFE-T-COVER BY HYDROWCOWL”, LIST ONE). ENCLOSURES SHALL BE CERTIFIED TO ASSE STANDARD #1060.
2. ENCLOSURE OUTSIDE DIMENSIONS ARE (____) WIDE, (____) DEEP & (____) HIGH.
3. HEATER(S) SHALL BE (____) UNIT(S), (____) WATTS, 120 VAC, 1 PHASE, 20 AMPS. HEATERS FOR ABOVE GROUND ENCLOSURES MUST BE OF THE TYPE AND SIZE RECOMMENDED AND APPROVED BY THE MANUFACTURER. HEATER UNITS COME WITH THE “HOTBOX” ENCLOSURE, BUT ARE ORDERED SEPARATELY FOR THE “AQUA SHIELD” AND “SAFE-T-COVER BY HYDROWCOWL” ENCLOSURES.
4. ELECTRICAL OUTLET(S) SHALL BE TYPICAL FOR OUTDOOR USE AND INSTALLED ON A GROUND FAULTED CIRCUIT. THE OUTLET SHALL BE MOUNTED A MINIMUM OF 6" ABOVE THE HIGHEST FLANGE FACE.
5. ACCESS OPENINGS ARE A MINIMUM 16" X 22" AND SHALL BE ON THE TESTABLE DETECTOR SIDE OF THE ASSEMBLY. ALL DOORS ON ENCLOSURES MUST FUNCTION PROPERLY WITHOUT BINDING. ENCLOSURE ACCESS DOORS MUST BE INSTALLED ON THE TEST COCK SIDE OF THE ASSEMBLY.
6. FOUNDATION SHALL BE A 6" CONCRETE PAD (4" CONCRETE PAD FOR 4" AND SMALLER ASSEMBLIES) THAT IS (____) WIDE AND (____) LONG. ASSEMBLY ENCLOSURES SHALL BE AFFIXED TO A CONCRETE SLAB OF 3,000 PSI MIX CONCRETE AND (1) LAYER OF WELDED WIRE MESH. SLAB SHALL BE PITCHED TO DRAIN AT A SLOPE OF 1% TOWARDS DRAIN PORT END OF ENCLOSURE. PAD MUST BE FINISHED SO ENCLOSURE SETS FLUSH WITH PAD SURFACE WITH NO GAPS. ENCLOSURE SHALL BE CENTERED ON PAD WITH A MINIMUM 6" CLEARANCE ON ALL SIDES.
7. 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 MIN. 2" DIA. 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 THAT ARE 10" OR LARGER A THIRD PIPE STAND SUPPORT UNDER THE ASSEMBLY WILL BE REQUIRED.
8. INSTALLATION SHALL BE MADE IN STRICT ACCORDANCE WITH LOCAL UTILITY AND MANUFACTURER’S STANDARDS. CONTACT THE CITY OF FORT SMITH WATER UTILITIES DEPARTMENT AT (479) 494-3913 ON ANY QUESTIONS.
9. WATER MUST BE DRAINED FROM THE ASSEMBLY UNTIL THE HEATER(S) HAVE AC POWER DURING COLD MONTHS.

10. THE LOWEST POINT OF THE ASSEMBLY OR RELIEF PORT SHALL BE AT LEAST 12 INCHES BUT NOT MORE THAN 30 INCHES ABOVE THE PAD OR HIGH WATER LEVEL, WHICHEVER IS HIGHEST.
11. ALL TEST COCKS SHALL BE IN PLACE WITH SHUT-OFF VALVES.
12. ELECTRICAL WIRING FOR HEATERS IN ABOVE GROUND ENCLOSURES MUST BE IN CONDUIT THROUGH THE CONCRETE PAD. UNDERGROUND CONDUIT MUST EXTEND BEYOND THE EDGE OF THE PAD IN THE DIRECTION OF THE POWER SOURCE A DISTANCE OF 4 FEET. A CORD OR ROPE MUST BE TIED FROM THE END OF THE CONDUIT TO GROUND LEVEL AND TIED TO A STAKE MARKING ITS LOCATION PRIOR TO BACKFILLING. ELECTRICAL OUTLETS MUST BE AFFIXED TO THE ENDS OF THE ENCLOSURE ABOVE THE ASSEMBLY.
13. ONE ENCLOSURE KEY MUST BE PROVIDED TO THE CITY'S WATER UTILITIES DEPARTMENT.
14. ENCLOSURE DOORS MUST BE EASY TO REMOVE AND REINSTALL WITHOUT BINDING.
15. IF INSTALLING THE ASSEMBLY IN AN ABOVE GROUND ENCLOSURE DIRECTLY OVER AN EXISTING VAULT, THE VAULT MUST BE FILLED AND COMPACTED PRIOR TO INSTALLING THE ENCLOSURE PAD.
16. APPROVED ASSEMBLIES ARE ORDERED AS AN ASSEMBLY WITH VALVES ATTACHED AND TESTED AT THE FACTORY IN THAT CONFIGURATION. DO NOT INSTALL AN ASSEMBLY WITH VALVES PURCHASED SEPARATELY. IT IS ACCEPTABLE PRACTICE FOR THE FACTORY TO SHIP ASSEMBLY VALVES IN SEPARATE CONTAINERS ON THE LARGER ASSEMBLIES. THESE VALVES, HOWEVER, ARE PART OF THE ASSEMBLY CONFIGURATION.
17. BACKFLOW PREVENTER TO BE A (SIZE) (MANUFACTURER) (MODEL).
18. AN ADEQUATE AND PERMANENT METHOD OF HANDLING RELIEF VENT DISCHARGE AND TEST WATER DISCHARGE SHALL BE PROVIDED.
19. CLEAR UNOBSTRUCTED SPACE FOR THE RELIEF VENT SHALL BE PROVIDED TO PREVENT THE VENT FROM BECOMING BLOCKED OR FLOODED.
20. THE ASSEMBLIES MUST BE INSTALLED HORIZONTALLY. RELIEF PORT VENTS MUST POINT DOWN.
21. AN AIR-GAP SEPARATION SHALL BE PROVIDED BETWEEN THE RELIEF VENT AND ATMOSPHERE. IF A DRAIN LINE IS USED THE FACTORY BOLT ON AIR GAP AND DRAINAGE ATTACHMENT ARE REQUIRED.
22. THE RELIEF VENT OPENING SHALL NOT BE REDUCED IN SIZE.
23. A BLOW-OFF VALVE MUST BE INSTALLED IN THE WATER LINE IMMEDIATELY AFTER THE ASSEMBLY TO ALLOW FOR FLUSHING. TWO THROUGH EIGHT INCH

ASSEMBLIES SHALL HAVE A BLOW-OFF NOT LESS THAN 2 INCHES IN DIAMETER. ASSEMBLIES LARGER THAN 8 INCH SHALL HAVE A MINIMUM 4 INCH BLOW-OFF. BLOW-OFF SHALL BE PIPED TO DISCHARGE TO THE EXTERIOR ATMOSPHERE OF THE VALVE ENCLOSURE. PROVIDE A MINIMUM OF 48" INCHES OF PIPING BETWEEN EXTERIOR OF ENCLOSURE AND BLOW-OFF VALVE TO PREVENT CONDUCTION OF FREEZING TEMPERATURE TO THE VALVE.

24. OWNER SHALL BE RESPONSIBLE FOR ADEQUATELY SECURING THE VALVE ENCLOSURE, OS&Y WHEELS AND ACCESS PANELS AGAINST VANDALISM, TAMPERING, ETC.
25. IF NOT PART OF THE APPROVED ASSEMBLY, AN APPROVED STRAINER SHALL BE INSTALLED ON THE INLET SIDE OF THE RPZA PRIOR TO THE ASSEMBLY ISOLATION VALVE, SO THAT ALL WATER MUST PASS THROUGH THE STRAINER IMMEDIATELY BEFORE ENTERING THE ASSEMBLY.
26. UPON COMPLETION OF INSTALLATION, INSTALLER MUST CALL (479) 494-3913 FOR FINAL INSPECTION.