## DOUBLE CHECK DETECTOR ASSEMBLY (DCDA)

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 AND FOR DETECTOR ASSEMBLIES, ON THE DETECTOR LOOP SIDE.
- 6. FOUNDATION SHALL BE A 6" CONCRETE PAD 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.

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- 10. THE LOWEST POINT OF THE ASSEMBLY 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 BACK 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. VALVE ENCLOSURE SHALL BE (MANUFACTURER), (MODEL) EQUIPPED FOR OS&Y VALVE (AND FIRE DEPARTMENT INSTALLATIONS).
- 17. 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. APPROVED ASSEMBLIES COME WITH THE DETECTOR LOOP ATTACHED AS PART OF THE ASSEMBLY, DO NOT ADD A DETECTOR LOOP TO A DOUBLE CHECK VALVE ASSEMBLY.
- 18. BACKFLOW PREVENTER TO BE A (SIZE) (MANUFACTURER) (MODEL).
- 19. ALL UNDERGROUND PIPING SHALL BE FULLY FLUSHED AND TESTED PER THE UNDERGROUND NOTES PRIOR TO INSTALLATION OF THE BACKFLOW PREVENTER.
- 20. A BLOW-OFF VALVE SHALL 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.

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- 21. OWNER SHALL BE RESPONSIBLE FOR ADEQUATELY SECURING THE VALVE ENCLOSURE, OS&Y WHEELS AND ACCESS PANELS AGAINST VANDALISM, TAMPERING, ETC.
- 22. ON OUTDOOR INSTALLATIONS THE FIRE DEPARTMENT CONNECTION (FIVE INCH STORZ WITH A 30 DEGREE TURN DOWN) MUST BE LOCATED ON THE ENCLOSURE AND 30 TO 100 FEET FROM AN APPROVED HYDRANT. THE ADDRESS OF BUILDING(S) SERVED MUST BE CLEARLY SHOWN ON ENCLOSURE.
- 23. FIRE SERVICE CONNECTION TO FACE STREET. ENCLOSURE TO HAVE AN IDENTIFICATION PLATE LOCATED NEAR THE FIRE PROTECTION CONNECTION IDENTIFYING THE ADDRESS) OF THE BUILDING(S) THAT IT WILL SERVE. LETTERING SHALL BE 2" HIGH, BLOCK STYLE, BLACK ON WHITE BACKGROUND SO THE FIRE DEPARTMENT CAN READILY RECOGNIZE THE LOCATION THE FIRE DEPARTMENT CONNECTION IS SERVING. LETTERING SHALL BE MECHANICALLY FASTENED TO A BASE PLATE. ADHESIVE BACKING IS NOT ACCEPTABLE.
- 24. ON INDOOR INSTALLATIONS THE FIRE DEPARTMENT CONNECTION (FIVE INCH STORZ WITH A 30 DEGREE TURN DOWN) MUST BE PIPED TO THE OUTSIDE TO A LOCATION A MINIMUM OF 50 FEET FROM THE BUILDING WHEN POSSIBLE AND 30 TO 100 FEET TO AN APPROVED HYDRANT.
- 25. UPON COMPLETION OF INSTALLATION, INSTALLER MUST CALL (479) 494-3913 FOR FINAL INSPECTION.

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