Residential Landscape Irrigation Systems

General code requirements:

1. A building permit is required for lawn irrigation sprinkler systems.

2. Install backflow preventers in accordance with the manufacturer’s listing and the 2009 *International Residential Code*®. All plumbing upstream from and including backflow preventers shall be installed by a licensed plumbing contractor or the occupying homeowner (CRS 12-58-101 and 12-58-113 (4)).

3. Support interior copper tubing 6’ maximum on center.

4. Underground service connections are required to be flared or silver-soldered when using Type-K copper tubing.

5. Soldered connections require lead-free solder.

6. Use direct burial U.L. listed low voltage wiring for underground use. Minimum 6" burial depth is required for low voltage wiring to zone valves.

7. Secure all interior sprinkler control wiring in an approved manner 4½ feet on center and protect from physical damage by an approved means.

8. Exterior and below grade low voltage wiring connections shall be made moisture proof by approved means (i.e. grease pack connectors or liquid tape).

9. Provide maximum 6 foot long electrical cord from the time clock to an electrical receptacle outlet.

10. A water hammer arrestor shall be installed inside the house on the supply line to reduce the possibility of water hammer per IRC P2903.5. Provide access to the interior of the building during final inspection in order to verify installation of the water hammer arrestor in accordance with the manufacturer's installation instructions. Water hammer arrestors may be installed outside only if specifically approved for exposure to freezing temperatures.

11. Irrigation Rain Sensors - An approved rain sensor device shall be installed in an approved location for all new irrigation system permits.

12. When all work is complete, you must call for an inspection. We will check both the installation of the backflow preventer on the outside of the house and the water hammer arrestor on the inside of the building.
PRESSURE VACUUM BREAKER BACKFLOW PREVENTER (PVB)

Locate PVB 12" min. above ground and highest sprinkler head.

- Water Hammer Arrestor
- Type M Copper Tubing Inside of House
- Shut-Off Valve with Drain
- Type M Copper Tubing to this Point
- Schedule 40 PVC
- Poly Sprinkler Pipe
- Underground Manual Drain Valve (Hose threads not permitted)

SEE GENERAL REQUIREMENTS REVERSE SIDE

COMBINATION AUTOMATIC ZONE VALVE WITH ATMOSPHERIC VACUUM BREAKER (AVB)

Locate AVB min. 6" above ground and highest sprinkler head.

- Type M Copper Pipe or Schedule 80 PVC Above Ground
- Water Hammer Arrestor
- Shut-Off Valve with Drain
- Above Ground Manual Drain Valve (No Hose Threads permitted)

SEE GENERAL REQUIREMENTS REVERSE SIDE

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