

21 NCAC 23 .0402 PIPING

(a) The following rules of maximum safe flow rate apply to irrigation systems connected to municipal and community water suppliers, with the lowest safe flow rate prevailing as the design minimum standard:

- (1) The maximum allowable pressure loss through the meter shall be less than 10 percent of the static pressure at the meter.
- (2) The maximum flow rate through the meter shall not exceed 75 percent of the maximum safe flow rate through the meter.
- (3) Piping in irrigation systems shall be designed and installed so that the flow of water in the pipe will not exceed a velocity of five feet per second for polyvinyl chloride (PVC), polyethylene (PE), and high density polyethylene (HDPE) pipe and seven feet per second for metal pipe.

(b) When designing an irrigation system, an irrigation contractor shall use the following criteria for piping:

- (1) The manufacturer's recommendations for the intended application.
- (2) The minimum PVC pipe thickness shall be PR200 — (SDR21) with sch40 fittings.
- (3) PVC piping from the above-grade backflow to below grade shall be a minimum of sch80.
- (4) All PVC risers shall be a minimum thickness of sch80.
- (5) Thrust blocking details and locations shall be included when bell and gasket pipe is used.
- (6) Exposed PVC piping shall be protected from UV degradation per the manufacturer's recommendations.

*History Note: Authority G.S. 89G-5;
Eff. July 1, 2011;
Pursuant to G.S. 150B-21.3A, rule is necessary without substantive public interest Eff. September 22, 2014;
Amended Eff. November 1, 2016.*