

## APPENDIX C1 RAIN WATER RECYCLING SYSTEMS

*Note:* Section 301.3 of this code requires all plumbing fixtures that receive water or waste to discharge to the sanitary drainage system of the structure. In order to allow for the utilization of a rain water system, Section 301.3 should be revised to read as follows:

**301.3 Connections to drainage system.** All plumbing fixtures, drains, appurtenances and appliances used to receive or discharge liquid wastes or sewage shall be directly connected to the sanitary drainage system of the building or premises, in accordance with the requirements of this code. This section shall not be construed to prevent indirect waste systems required by Chapter 8.

### SECTION C1-101 GENERAL

**C1-101.1 Scope.** The provisions of this appendix shall govern the materials, design, construction and installation of rain water systems for flushing of water closets and urinals.

**C1-101.2 Definition.** The following term shall have the meaning shown herein.

**GRAY WATER.** Waste discharged from lavatories, bathtubs, showers, clothes washers and laundry trays.

**RAIN WATER.** Water collected from the roof of a building or other catchment surface during a rainfall event and stored in a reservoir for non-potable use.

**C1-101.3 Permits.** Permits shall be required in accordance with Section 106.

**C1-101.4 Installation.** In addition to the provisions of Section C1-101, systems for flushing of water closets and urinals shall comply with Section C1-102. Except as provided for in Appendix C1, all systems shall comply with the provisions of the *International Plumbing Code*.

**C1-101.5 Materials.** Above-ground drain, waste and vent piping for rain water systems shall conform to one of the standards listed in Table 702.1. Rain water underground building drainage and vent pipe shall conform to one of the standards listed in Table 702.2.

**C1-101.6 Tests.** Drain, waste and vent piping for rain water systems shall be tested in accordance with Section 312.

**C1-101.7 Inspections.** Rain water systems shall be inspected in accordance with Section 107.

**C1-101.8 Potable water connections.** Only connections in accordance with Section C1-102.3 shall be made between rain water recycling system and a potable water system.

**C1-101.9 Rain water connections.** Rain water recycling systems shall receive only the water discharge from the roof of buildings or other catchments.

**C1-101.10 Collection reservoir.** Rain water shall be collected in an approved reservoir constructed of durable, nonabsorbent and corrosion-resistant materials. Access openings shall be provided to allow inspection and cleaning of the reservoir interior.

**C1-101.11 Filtration.** Rain water entering the reservoir shall pass through an approved filter strainer, be disinfected and colored blue or green.

**C1-101.12 Overflow.** The collection reservoir shall be equipped with an overflow pipe having the same or larger diameter as the influent pipe for the rain water. The overflow pipe shall discharge to the storm drainage system or to day light.

**S E C T I O N   C 1 - 1 0 2**  
**SYSTEMS FOR FLUSHING WATER**  
**CLOSETS AND URINALS**

**C1-102.1 Collection reservoir.** The holding capacity of the reservoir is not limited.

**C1-102.2 Makeup water.** An alternate water supply shall be provided as a source of makeup water for the rain water system. An alternate water supply shall be protected against backflow in accordance with Section 608. The alternate water source may be a potable water system or an irrigation well.

**C1-102.3 Materials.** Distribution piping shall conform to one of the standards listed in Table 605.4. This does not apply to the irrigation portion of the system.

**C1-102.4 Identification.** Distribution piping (not including irrigation piping) and reservoirs shall be identified as containing nonpotable water. Piping identification shall be in accordance with Section 608.8.

The delayed effective date of this Rule is January 1, 2011.

The Statutory authority for Rule-making is G. S. 143-136; 143-138.