



Maintenance Issues and Repair Guidelines for Precast Concrete Toilets and Utility Buildings

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Cracked panels and peeling paint on some concrete Sweet Smelling Toilets (SSTs) have USDA Forest Service field personnel wondering how best to repair and maintain these toilets and other precast concrete buildings (figure 1). Though concrete SSTs are virtually indestructible, vandals, weather, and the nature of the concrete itself, can still take their toll. Small cracks in panels typically won't affect the building's structural stability. This report describes the best methods and materials for repairing cracks in concrete and coatings. The tech tip also documents field inspections we conducted, manufacturing information, safety and structural issues, and warranty and contract issues.

Field Inspections

The Missoula Technology and Development Center (MTDC) randomly inspected about 35 SSTs in Idaho, Montana, Wyoming, Colorado, and Nevada. The SSTs ranged from 1 to 7 years old. We typically found cracks in panels at sharp angles near doors and windows, and at panel connection joints (figure 2). A few panels had full-length, full-depth cracks across the roof and wall sections (figure 3). Only one SST had a visible crack in the floor panel. Coatings were commonly seen peeling under the eaves or in areas where concrete was cracking. The coating on one SST was peeling off in sheets on flat, open areas of the panels (figure 4).



Figure 1—Precast concrete toilets are tough, but still require some periodic maintenance. This Tioga special double-vault toilet is made by CXT, Inc., of Spokane, WA.

