

# Recreation & Engineering Tech Tips

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## NEW-TRADITIONAL STYLE SINGLE UNIT ACCESSIBLE TOILET

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A new disabled access vault toilet system has been developed by Romtec, Inc. (see fig. 1, below). This new single unit accessible toilet is referred to as the "SST Traditional" because of its more traditional appearance. The current cost of this complete toilet system is \$6,985. (plus shipping).

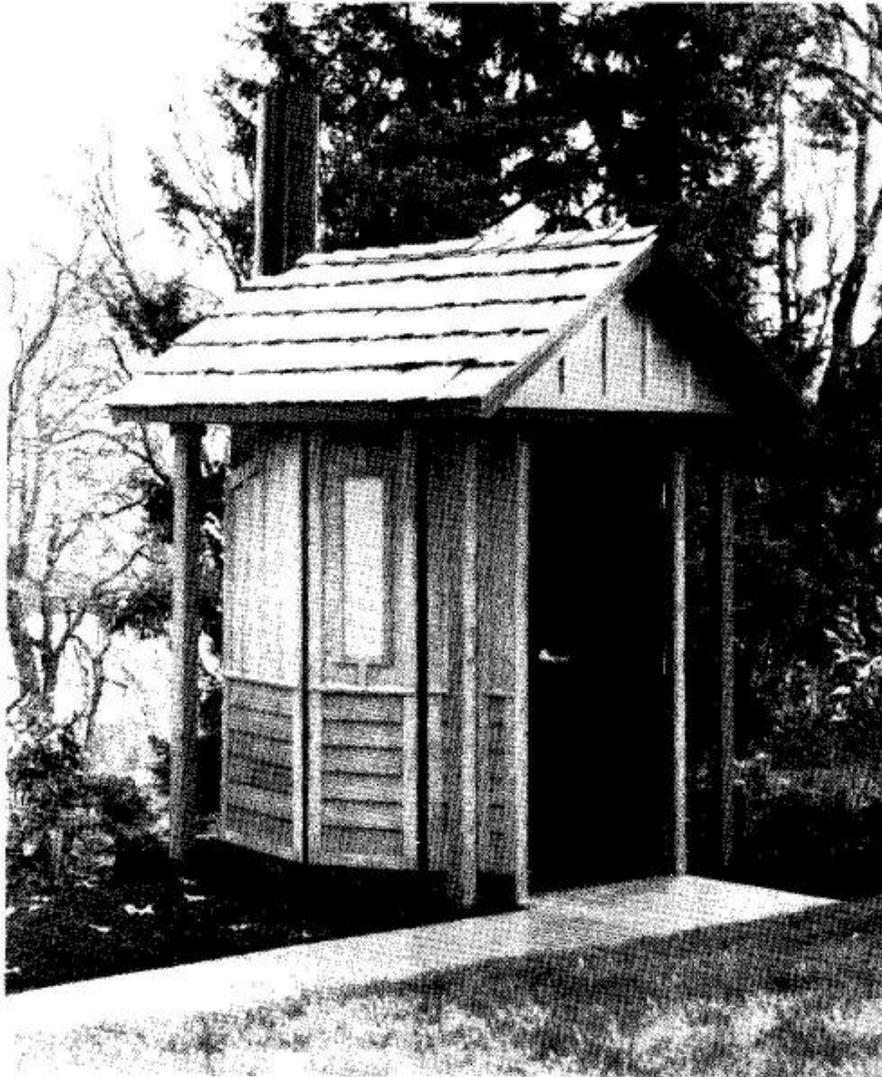


Figure 1. New - "SST Traditional" Single Unit Accessible Toilet

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This cost includes the complete building (preassembled), the shake roof, the 750-gallon black cross-linked polyethylene vault (see fig. 2), and all roof attachment hardware and accessories. Included are the accessible toilet riser, the accessible hand rails, the 12-inch diameter, black, ABS plastic vault vent pipe and the kickproof building vent.

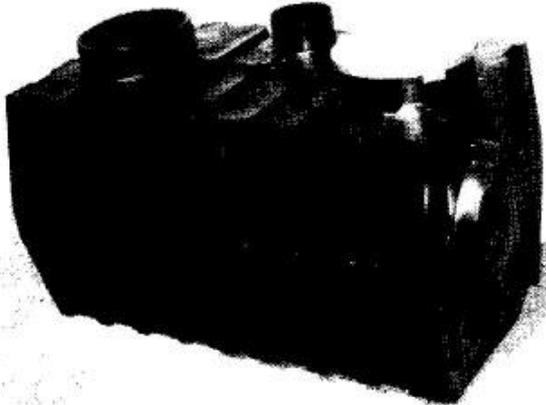


Figure 2. 750-Gallon, Black, Cross-Linked Polyethylene Vault

The first toilet system that Romtec developed (now referred to as the "SST original") was manufactured in 1990 (see fig. 3).

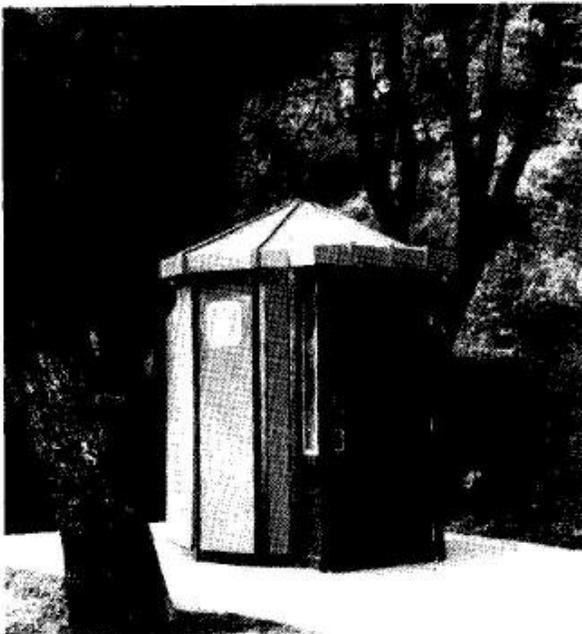


Figure 3. "SST Original" Single Unit Assessible Toilet

The Forest Service entered into a multi-year contract with Romtec in September of 1990 and a number of the first units were purchased nationwide. Originally, this first toilet system was referred to as the "Concept Toilet" because it was the first of its kind and more of a prototype system. The cost of the SST Original is now \$4,985 (plus shipping), which includes the complete building (preassembled), the roof assembly, the 750-gallon vault, and all roof attachment hardware and accessories. Included are the accessible toilet riser, the accessible handrails, the 12-inch diameter, black, ABS plastic vault vent pipe and a building vent assembly.

Although modern, the SST Original blends in with most wooded settings due to the vertical profile of the building exterior against the vertical profile of the trees. Romtec staff members recently worked with Forest Service personnel from Region 6 and created the new SST Traditional toilet system (see fig. 1) for situations and ROS classes where a more traditional design is desired.

Except for the exterior appearance, both the SST Original and the new SST Traditional toilet systems are virtually the same. NOTE: The SST Original toilet system had some initial problems with the outside wood panels warping because of the difference in the coefficient of expansion between the wood and the cross-linked polyethylene. Romtec has corrected this problem by using an innovative new floating insert fastener which will eliminate the warping.

Both systems meet the Sweet Smelling Toilet (SST) criteria. These criteria are:

1. One vault for each toilet riser.
2. Sealed, black, 4 1/2-foot-deep vault with a floor slope of 1 inch per foot (inside to outside) and an outside manhole with a minimum dimension of 24 inches.
3. Nonporous interior building walls that are difficult to write on and free of ledges, angles and shelves.
4. An insulated roof to help keep out the heat generated by the sun.
5. Lighting within the building adequate for the user to function, but not directed in such a way that the visitor can see the waste in the vault.

6. A single building vent of approximately 120 square inches (free air space) placed on only one side of the building (prevailing wind side) and constructed of a heavy-duty material.

7. A dark-colored, 12-inch diameter vault vent pipe (which is left uncovered and unshielded) that rises a minimum of three feet above the highest point of the roof.

NOTE: The concrete floor placement, sloping, and sealing are the responsibility of the purchaser. Refer to the July 1991 "In-Depth Design and Maintenance Manual For Vault Toilets" for guidelines in designing or installing vault or pit-type toilets. PROPER LOCATION OF THE BUILDING ON THE SITE IS CRITICAL.

In 1979, at the request of the San Dimas Technology and Development Center, Romtec developed a 1000-gallon, black, cross-linked polyethylene vault (see fig. 4).

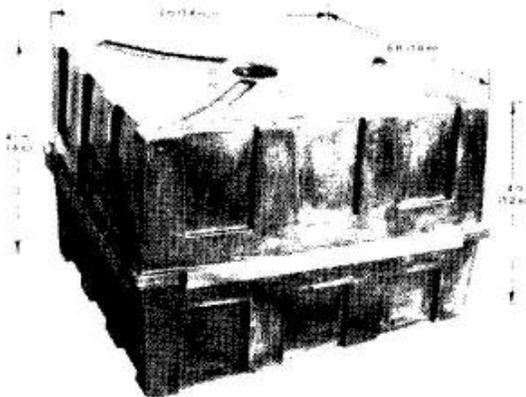


Figure 4. 1000-gallon Black, Cross-Linked Polyethylene Vault

Field personnel have had some difficulties trying to create adaptors for the toilet riser, the manhole, and the vent stack before pouring the concrete slab on top of the tank. Romtec has now developed 3 adaptors (cross-linked polyethylene) for the original 1000-gallon tank; one for properly fitting the white cross-linked polyethylene toilet riser, one for the manhole, and one for the 12-inch diameter vault vent stack (see fig. 5). These adaptors simply screw or bolt down anywhere on top of the flat top of the 1000-gallon vault and are then held firmly in place after the concrete is poured.



Figure 5. Adaptors For The 1000-Gallon Vault

Romtec has also developed a new kickproof building vent (see fig. 6). This vent is included with the new SST Traditional system. This vent can also be purchased separately and used in virtually any building design.

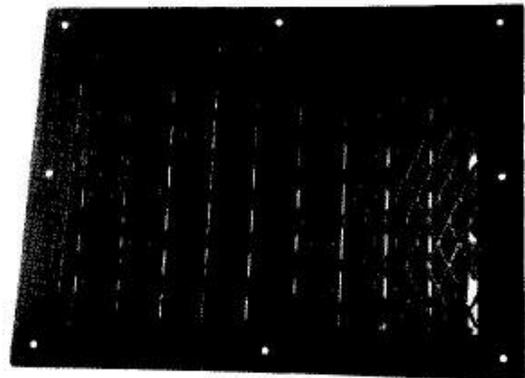


Figure 6. Kickproof Building Vent

The 750-gallon vault, the 1000-gallon vault, the accessible and regular toilet risers, the 3 adaptors, the manhole cover, the kickproof building vent and the 12-inch ABS plastic vent stack can all be purchased separately.

The cost of the items (not quoted before) are as follows: ALL PRICES QUOTED ARE AS OF APRIL 1992 AND ARE FOB ROSEBURG, OR.

Regular toilet riser .....	\$115.
Accessible toilet riser .....	\$135.
(see fig. 7)	
Kickproof building vent .....	\$120.
Adaptor for the toilet riser .....	\$58.
Adaptor for the vault vent .....	\$58.
Adaptor for the manhole cover .....	\$148.
(Includes manhole cover)	
Set of all three adaptors .....	\$200.
Manhole cover by itself	
(also cross-linked polyethylene) .....	\$68.
Brush for cleaning the toilet risers	
(see fig. 7) .....	\$35.
1000-gallon vault .....	\$1,795.
1000-gallon vault with all three	
adaptors and manhole cover .....	\$1,995.
750-gallon vault (includes manhole	
cover and molded in adaptors) ....	\$1,595.
12-inch diameter vault vent	
stack (sold by the foot) .....	\$15. /Ft

NOTE: Both the SST Original and the SST Traditional toilet systems are covered in a multi-year Forest Service Contract (No. 54-9JA9-1-1Q02†) and can be purchased without going out for competitive bids.

All of the above items can be purchased from:  
 Romtec, Inc.  
 15587 North Bank Rd.  
 Roseburg, OR 97470  
 Phone 503-496-3541      FAX 503-496-0803

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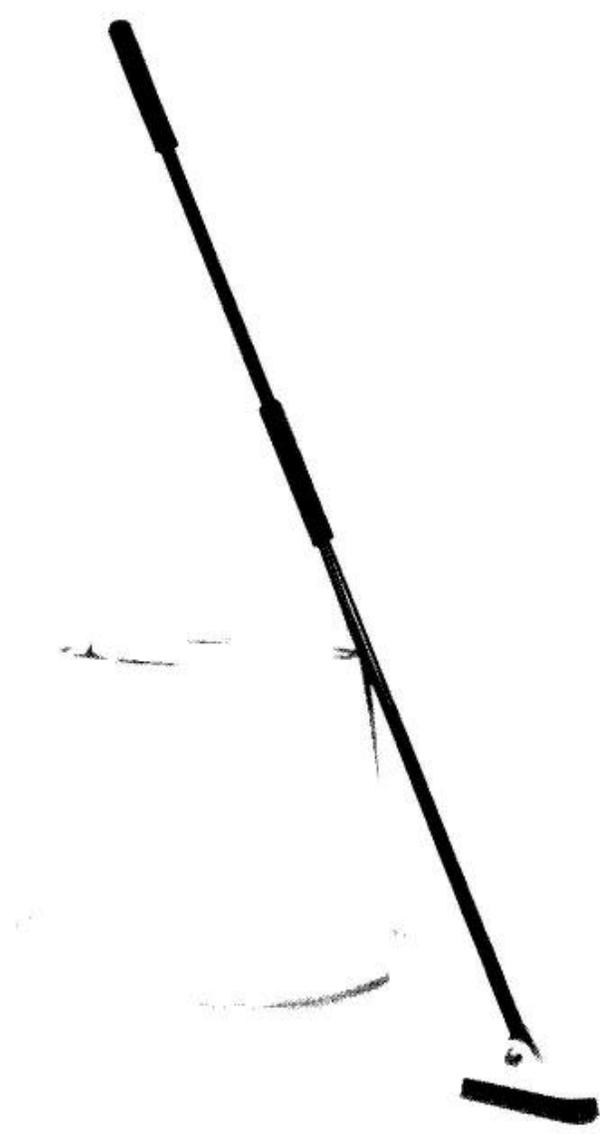


Figure 7. Accessible Toilet Riser and Brush Specifically Designed To Clean Toilet Risers

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