



## COMPOSITES ARE FLUSH WITH DECOMPOSITION TOILETS

For years, national parks, state parks, Forest Service, and Bureau of Land Management in remote areas have struggled with ways to effectively handle waste management. In most instances, parks have installed pit style and occasionally tried traditional composting toilets.

Both systems have proven to be ineffective in long-term applications due to transport logistics, odors, accessibility, occupational hazards, environmental concerns, and lack of effective decomposition in composting toilets due to constant ammonia exposure from the mixing of urine with feces.

Since 2013, Toilet Tech Solutions (Toilet Tech) has been researching and installing environmentally-friendly waste reduction management systems throughout North America. Toilet Tech developed a proven product with a urine diversion system capable of separating solid and liquid waste regardless of how or who uses the toilet. By means of an inclined in-toilet conveyor belt, human solid waste can be collected for transport (Waste Away) or decomposed in situ by native soil bugs in an open bottom vault (Decompose - most similar to how a composting toilet is purported to work) without any bulking agent, mixing, or extra work of any kind. By separating human waste streams, the system mimics the natural way in which the ecosystem processes animal waste, urine by soil and plant root

uptake of nutrients, and solid waste by invertebrate consumption, resulting in a highly efficient, low maintenance, no odor, natural waste elimination process.

Due to the careful placement of these structures in remote front country and backcountry locations, the company turned to pultruded composites for ease of onsite fabrication, portability (flat pack pallet shipping), flexibility in design, and overall durability.

It recently installed “The Grand Poobah” in a National Forest in California. This four-season shed-style structure was constructed and erected in just a few days by a small team. The walls of this heavy-duty flagship composting toilet were fabricated with COMPOSOLITE®. Additional cladding and structural support components were fabricated with EXTREN®. As an added bonus for durability, this structure was also designed to endure the wallowing behavior of bison for years to come.

Since the installation of the toilet, the forest has been “flush” with positive reviews of the structure, which is on par for the other 300+ toilets Toilet Tech has installed from Alaska to Patagonia. ●

### TECHNICAL DATA

Product:	Composting Toilet
Process:	Pultrusion, Fabrication
Materials & Sizes:	<ul style="list-style-type: none"> <li>• COMPOSOLITE® Structural Building Panels</li> <li>• EXTREN® Series 525 Structural Shapes &amp; Plate: angle and plate</li> <li>• DURASHIELD® Foam Core Building Panels: 1" x 12"</li> </ul>
For:	Toilet Tech Solutions
User:	Public



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