BERGER BIOTECHNIK GmbH

Sustainable Systems and Products for on site Biological Waste Treatment, Ecological Sanitation and Water Saving

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Act ecologically:

The TerraNova®-Composting Toilet System

The Biological Dry Toilet System for Family and Multi Story Houses or Public Facilities



- saves 100% water
- needs no water or waste water installations
- utilizes human waste and other organic waste
- produces garden compost for ornamental flowerbeds
- discharges nutrients and and organic waste from waste water
- air trap by plain ventilation system
- creates hygienic sanitation even on extreme sites
- easy to use and clean
- a small ecological cycle with a sustainable effect

Funktionsschema TerraNova®-Komposttoilette



 $Kompostbeh\"{a}lter\ f\"{u}r\ 4-Personen-Haushalt$

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The TerraNova® Composting Toilet System

1. Function

The TerraNova® Composting Toilet System turns human excreta (faeces, urine), toilet paper and organic waste from kitchen and garden into compost, which can be used as a soil improver for ornamental flowerbeds in the garden. This happens by natural decomposition process within a period of at least two years. The system consists of a container which is connected to each toilet by a vertical down pipe. The toilets are provided with an insert, which can be removed for cleaning. A ventilation system, which leads above the roof and gets increased by an electrical fan, provides essential oxygen supply and ensures odourless operation.

2. Range of applications

The TerraNova® Composting Toilet System is suitable for family and multi story houses, weekend and summer houses, mountain huts, associations, kindergardens, leisure facilities and all other purviews, where a compost container can be placed under the toilets.

BERGER BIOTECHNIK has installed more than 400 units in family and multi story houses among others in settlements, partly with more than 250 inhabitants. The intake capacity is, depending on the container size, limited up to 1-8 households (according 5-40 uses/day), so more containers have to be installed if higher capacities are required.

3. Building conditions

The TerraNova® composting container has to be placed under the vertical down pipes of the toilets. Further, the installation area of the container can be integrated inside the house (halfbasement), while maintenance and removal occurs from outside or a next room. If there is only little space, BERGER BIOTECHNIK also offers seats, which can be affixed directly on the container.

4. Plumbing

It is possible to connect up to four toilets (one down pipe for each toilet) in up to four stories. The toilets are made of glass-fibre reinforced plastic (GRP). For larger capacity requirements (>4 persons), we recommend the installation of a dry separation toilet or a separate urinal respectively urine diverting inserts (additional parts) for easier maintaining and function. Organic food waste can be thrown into the toilets as well as into separate waste pipes (additional part).

5. Maintenance

The TerraNova® Composting Toilet system needs a supply air temperature of at least 10°C (year round use). To regulate the composting process, structural material (bark, chaff) and composting aids (minerals, activetors) have to be added regularly. Maintenance should be done once a month by a responsible person. The obtained compost (about 40 litres per person and year) can be given directly on ornamental flowerbeds.