

ICS 13.060.30

English version

**Small wastewater treatment systems for up to 50 PT - Part 2:
Soil infiltration systems**

Petites installations de traitement des eaux usées jusqu'à
50 PTE - Partie 2: Systèmes d'infiltration dans le sol

Kleinkläranlagen für bis zu 50 EW - Teil 2:
Bodeninfiltrationssysteme

This Technical Report was approved by CEN on 19 December 2004. It has been drawn up by the Technical Committee CEN/TC 165.

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Foreword

This document (CEN/TR 12566-2:2005) has been prepared by Technical Committee CEN/TC 165 "Wastewater engineering", the secretariat of which is held by DIN.

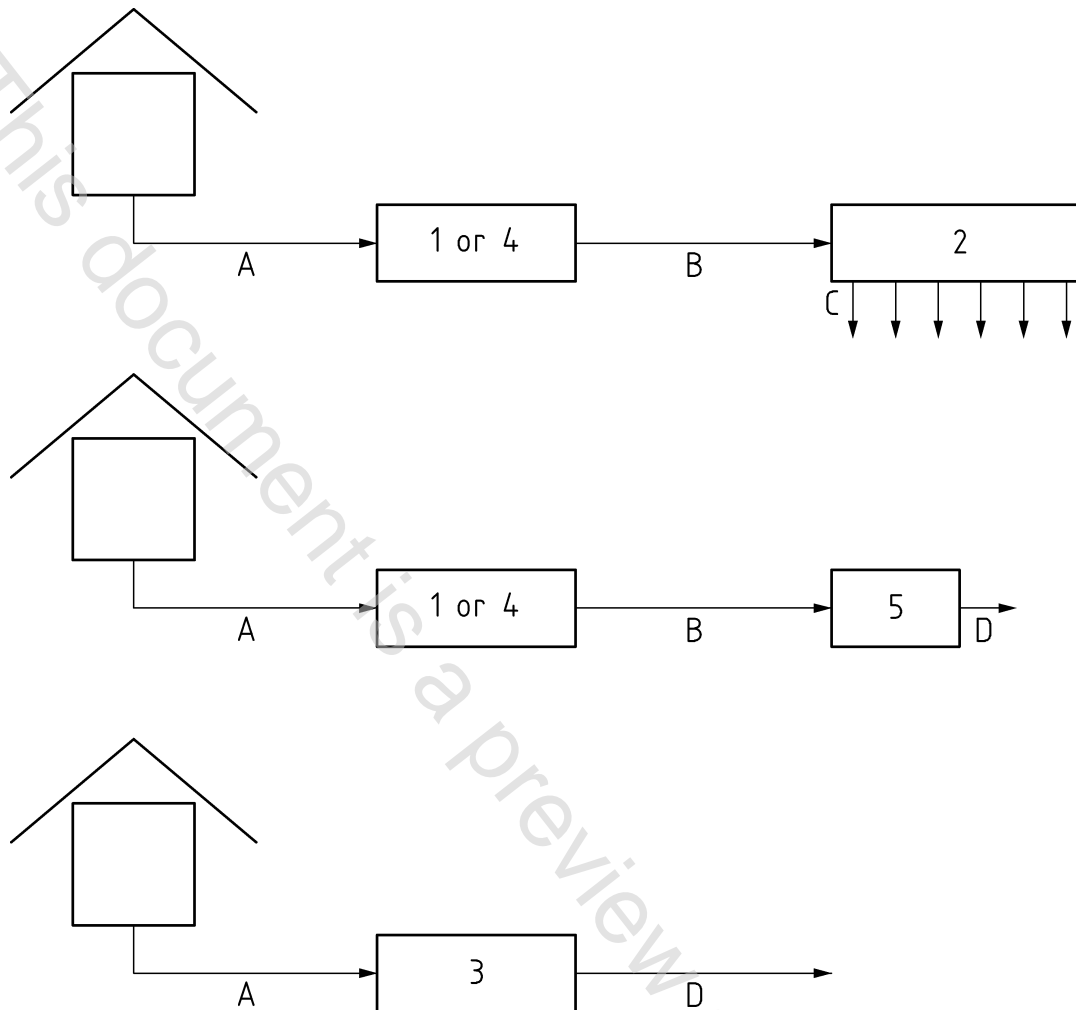
Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

This document is considered as Code of Practice and provides the general requirements for packaged and/or site assembled treatment plants used for domestic wastewater treatment for a total number of inhabitants and population equivalents (PT) ≤ 50 PT (see Clause 1).

EN 12566 with the generic title "Small wastewater treatment systems up to 50 PT" consists of the following parts:

- Part 1: Prefabricated septic tanks (specifies the requirements and laboratory test method for prefabricated septic tank units. Requirements and tests for treatment efficiency are not specified),
- Part 2: Soil infiltration systems (applies for in-situ constructed soil infiltration systems. No treatment requirements are specified; Technical Report),
- Part 3: Packaged and/or site assembled domestic wastewater treatment plants (specifies the requirements and laboratory test method used to evaluate packaged wastewater treatment plants, which are required to treat sewage to a predetermined standard),
- Part 4: Septic tanks built in situ from pre-fabricated kits - Execution standard (in preparation),
- Part 5: Filtration systems (including sand filters) (in preparation),
- Part 6: Test methods for the evaluation of the effectiveness of treatment on users site.

The application of the parts of EN 12566 is shown in the following scheme:



Key

- | | |
|--|--|
| A Domestic wastewater (influent) | 2 Infiltration system (into the ground) (see CEN/TR 12566-2; in preparation) |
| B Pre-treated wastewater | 3 Wastewater treatment plant (see prEN 12566-3) |
| C Infiltration into the ground | 4 Septic tank built in situ (see prEN 12566-4) |
| D Outlet of treated wastewater (effluent) | 5 Filtration systems (see prEN 12566-5) |
| 1 Prefabricated septic tank (see EN 12566-1) | |

NOTE National regulations may specify different arrangements between the products described in the standards series EN 12566.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to announce this Technical Report: Austria, Belgium, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Slovakia, Slovenia, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This document gives guidance for soil infiltration systems which can be used together with small waste water systems according to EN 12566-1, prEN 12566-3 or prEN 12566-4 in places of use where legally provisions for soil infiltration systems do not exist.

National forewords of this document may give information on provisions for soil infiltration in the place of use (see Clause 5).

1 Scope

This document specifies the recommended requirements for soil infiltration systems ranging in size from a single house to 50 PT receiving domestic wastewater from septic tanks manufactured according to the requirements given in EN 12566-1 and prEN 12566-4.

This document gives design parameters, construction details, installation and component requirements for soil infiltration systems.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1085, *Waste water treatment – Vocabulary*

EN 12566-1, *Small wastewater treatment systems for up to 50 PT — Part 1: Prefabricated septic tanks*

prEN 12566-4, *Small wastewater systems for up to 50 PT — Part 4: Septic tanks assembled in situ from prefabricated kits*

EN 12056-2, *Gravity drainage systems inside buildings - Part 2: Sanitary pipework, layout and calculation*

EN ISO 10319, *Geotextiles – Wide-width tensile test (ISO 10319:1993)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1085 and the following apply.

3.1

biological layer

biological film which grows on the base of the infiltration system or on top of the filter material when pre-treated effluent infiltrates the subsoil or the filter material

3.2

connection pipe

non-perforated pipe used to connect the septic tank to the distribution chamber

3.3

disposal area

total area of the site where the pre-treated effluent is discharged into the ground using a soil infiltration system

3.4

distribution chamber

chamber allowing even gravity distribution of pre-treated effluent via the distribution pipes

3.5

distribution layer

layer of the system composed of granular fill material in which pre-treated effluent is discharged through infiltration pipes

3.6

distribution pipe

non-perforated pipe used to connect the distribution chamber to a single infiltration pipe

3.6

dosing chamber

small tank receiving pre-treated effluent and containing a dosing device e.g. a pump, a hydraulic siphon or a tipping trough, which automatically discharges the desired quantity