

norm

NEN-EN 12566-6

Kleine afvalwaterzuiveringsinstallaties tot en met 50 IE - Deel 6: Geprefabriceerde elementen voor zuivering effluent van septictanks

Publicatie uitsluitend voor commentaar

Small wastewater treatment systems for up to 50 PT - Part 6:
Prefabricated treatment units for septic tank effluent

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Voorbeeld
Preview

October 2008

ICS 13.060.30

English Version

Small wastewater treatment systems for up to 50 PT - Part 6: Prefabricated treatment units for septic tank effluent

Petites installations de traitement des eaux usées jusqu'à
 50 PTE - Partie 6: Unités préfabriquées de traitement des
 effluents de fosses septiques

Kleinkläranlagen für bis zu 50 EW - Teil 6: Vorgefertigte
 Anlagen für die weitergehende Behandlung des aus
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Voorbeeld
 Preview

Foreword

This document (prEN 12566-6:2008) has been prepared by Technical Committee CEN/TC 165 "Waste water engineering", the secretariat of which is held by DIN.

This document is currently submitted to the CEN Enquiry.

This document has been prepared under a mandate given to CEN by the European Commission and the European Free Trade Association, and supports essential requirements of EC Directive(s).

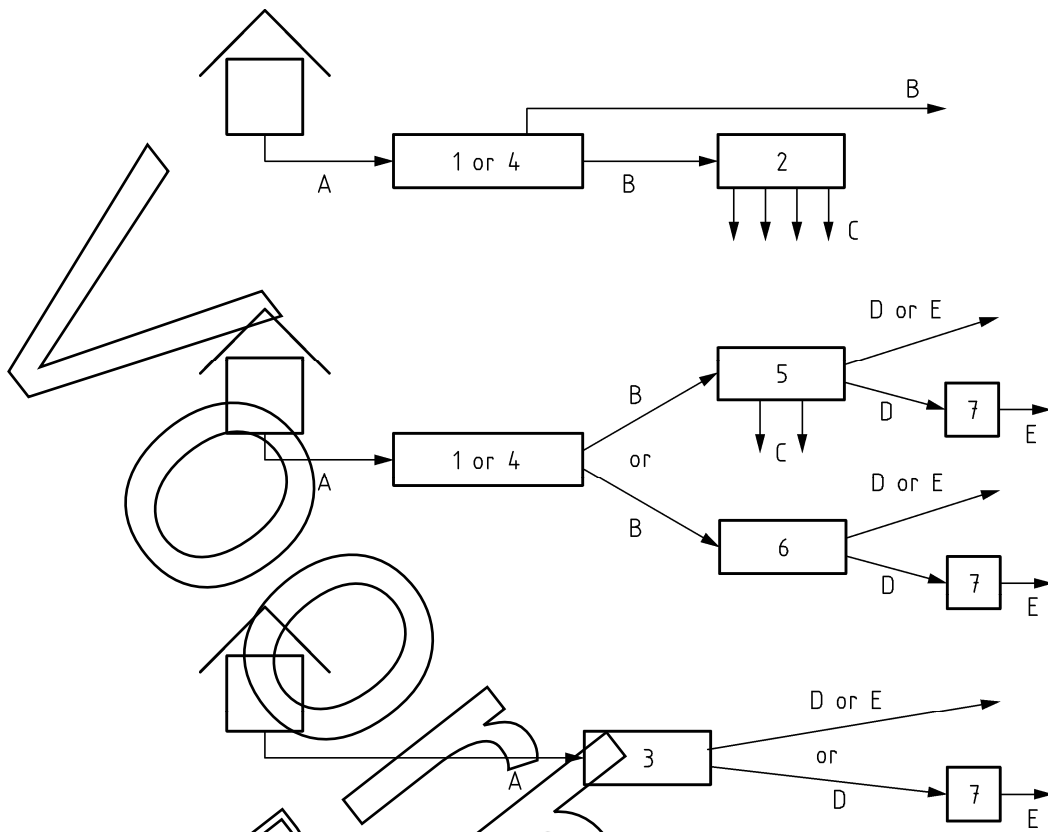
For relationship with EC Directive(s), see informative Annex ZA, which is an integral part of this document.

The standard series EN 12566 "Small wastewater treatment systems for up to 50 PT" contains the following parts (see Figure 1):

- Part 1: Prefabricated septic tanks;
- Part 3: Packaged and/or site assembled domestic wastewater treatment plants;
- Part 4: Septic tanks assembled in situ from prefabricated kits (in preparation);
- Part 6: Prefabricated treatment unit used for septic tank effluent (this document);
- Part 7: Prefabricated tertiary treatment unit (in preparation).

For filtration systems, CEN/TC 165 decided to publish the following Technical Reports, which are considered as Code of Practices and do not specify treatment requirements:

- CEN/TR 12566-2, Small wastewater treatment systems for up to 50 PT — Part 2: Soil infiltration systems;
- CEN/TR 12566-5, Small wastewater treatment systems for up to 50 PT — Part 5: Pre-treated effluent filtration systems.



Key

- | | | | |
|---|------------------------------|---|--|
| A | Raw domestic wastewater | 1 | Prefabricated septic tank |
| B | Septic tank effluent | 2 | Soil infiltration system |
| C | Treated infiltrated effluent | 3 | Packaged and/or site assembled domestic wastewater treatment plant |
| D | Treated wastewater | 4 | Septic tank assembled in situ from prefabricated kit |
| E | Tertiary treated wastewater | 5 | Pre-treated Effluent Filtration system |
| | | 6 | Prefabricated treatment unit used for septic tank effluent |
| | | 7 | Prefabricated tertiary treatment unit |

Figure 1 — Scheme related to the arrangement of the parts of EN 12566

1 Scope

This European Standard specifies requirements, test methods, evaluation of conformity and marking for prefabricated secondary treatment units used for the treatment of effluent from septic tanks according to EN 12566-1 or EN 12566-4 in small wastewater treatment systems for up to 50 PT.

It applies to the prefabricated secondary treatment unit, where all its components are factory or site-assembled and placed on the market as a kit by one manufacturer.

These prefabricated secondary treatment units are watertight without any direct infiltration into the ground.

The prefabricated secondary treatment unit consists of one or more tanks made of concrete, steel, unplasticized polyvinylchloride (PVC-U), polyethylene (PE), glass reinforced polyester (GRP-UP) or polypropylene (PP). Other components specified by the manufacturer, such as pipes, pumps and filter material may be used in the unit.

This standard establishes the performance of the prefabricated secondary treatment units needed to verify their suitability for the end use conditions for which the test methods are specified.

This standard applies for the secondary treatment units for use on the top of the ground (outside the building) or buried in the ground where no vehicle loads are applied to the unit.

Retrofit kits (see definition in 3.7) are not covered by this standard.

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, *Wastewater treatment — Vocabulary*

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

EN 12566-3, *Small wastewater treatment systems for up to 50 PT — Part 3: Packaged and/or site assembled domestic wastewater treatment plants*

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

EN 1899-1, *Water quality — Determination of biochemical oxygen demand after n days (BOD_n) — Part 1: Dilution and seeding method with allylthiourea acid addition*

ISO 6060, *Water quality. Determination of the chemical oxygen demand*

EN 872, *Water quality — Determination of suspended solids — Method by filtration through glass fibre filters*

ISO 5664, *Water quality — Determination of ammonium — Distillation and titration method*

ISO 6778, *Water quality — Determination of ammonium — Potentiometric method*

ISO 7150-1, *Water quality — Determination of ammonium — Part 1: manual spectrometric method*

EN ISO 11732, *Water quality — Determination of ammonium nitrogen — Method by flow analysis (CFA and FIA) and spectrometric detection*

EN ISO 11905-1, *Water quality — Determination of nitrogen — Part 1: method using oxidative digestion with peroxodisulfate*

EN 12260, *Water quality — Determination of nitrogen — Determination of bound nitrogen (TN sub b), following oxidation to nitrogen oxides*

ISO 7890-3, *Water quality. Determination of nitrate — Part 3: spectrometric method using sulfosalicylic acid*

EN ISO 6878, *Water quality — Spectrometric determination of phosphorus using ammonium molybdate*

EN ISO 9308-1, *Water quality — Detection and enumeration of Escherichia coli coliform bacteria — Part 1: Membrane filtration method*

EN ISO 9308-3, *Water quality — Detection and enumeration of ESCHERICHIA COLI and coliform bacteria in surface and waste water — Part 3: miniaturized method (most probable number) by inoculation in liquid medium*

EN ISO 7899-1, *Water quality — Detection and enumeration of intestinal enterococci in surface and waste water — Part 1: Miniaturized method (most probable number) by inoculation in liquid medium*

EN ISO 7899-2, *Water quality — Detection and enumeration of intestinal enterococci — Part 2: membrane filtration method*

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 12566-3:2005 and EN 1085 and the following apply.

3.1

packaged secondary treatment unit

prefabricated factory-built unit which treats septic tank effluent to a declared quality

3.2

site assembled secondary treatment unit

unit supplied by one manufacturer composed of prefabricated components, assembled on site, which treats septic tank effluent to a declared quality

3.3

open unit

prefabricated unit where there is no cover

3.4

nominal designation

appropriate values for declared organic daily load expressed in kilogram of BOD₅ (or BOD₇) per day and for declared hydraulic daily flow expressed in cubic metres of septic tank effluent per day (Q_N)

3.5

product family

group of products produced by one manufacturer for which the test results for one or more characteristics from any one product within the family are valid for all other products within this family

3.6

plant

combination of units and/or products that lead to construction work for waste water treatment system according to Figure 1

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