

**REOVEE VÄIKEPUHASTID KUNI 50 PT. OSA 6: TEHASES
VALMISTATUD PUHASTID SEPTIKU HEITVEELE**

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

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

| | |
|---|--|
| See Eesti standard EVS-EN 12566-6:2013 sisaldab Euroopa standardi EN 12566-6:2013 ingliskeelset teksti. | This Estonian standard EVS-EN 12566-6:2013 consists of the English text of the European standard EN 12566-6:2013. |
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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
Faulgruben ablaufenden Abwassers

This European Standard was approved by CEN on 7 December 2012.

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Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (EN 12566-6:2013) has been prepared by Technical Committee CEN/TC 165 "Wastewater engineering", the secretariat of which is held by DIN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by August 2013, and conflicting national standards shall be withdrawn at the latest by August 2013.

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

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 EU Directive(s).

For relationship with EU 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*
- *Part 6: Prefabricated treatment units for septic tank effluent* (the present document)
- *Part 7: Prefabricated tertiary treatment units* (in preparation)

For filtration and infiltration systems, CEN/TC 165 decided to publish the following CEN 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*

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

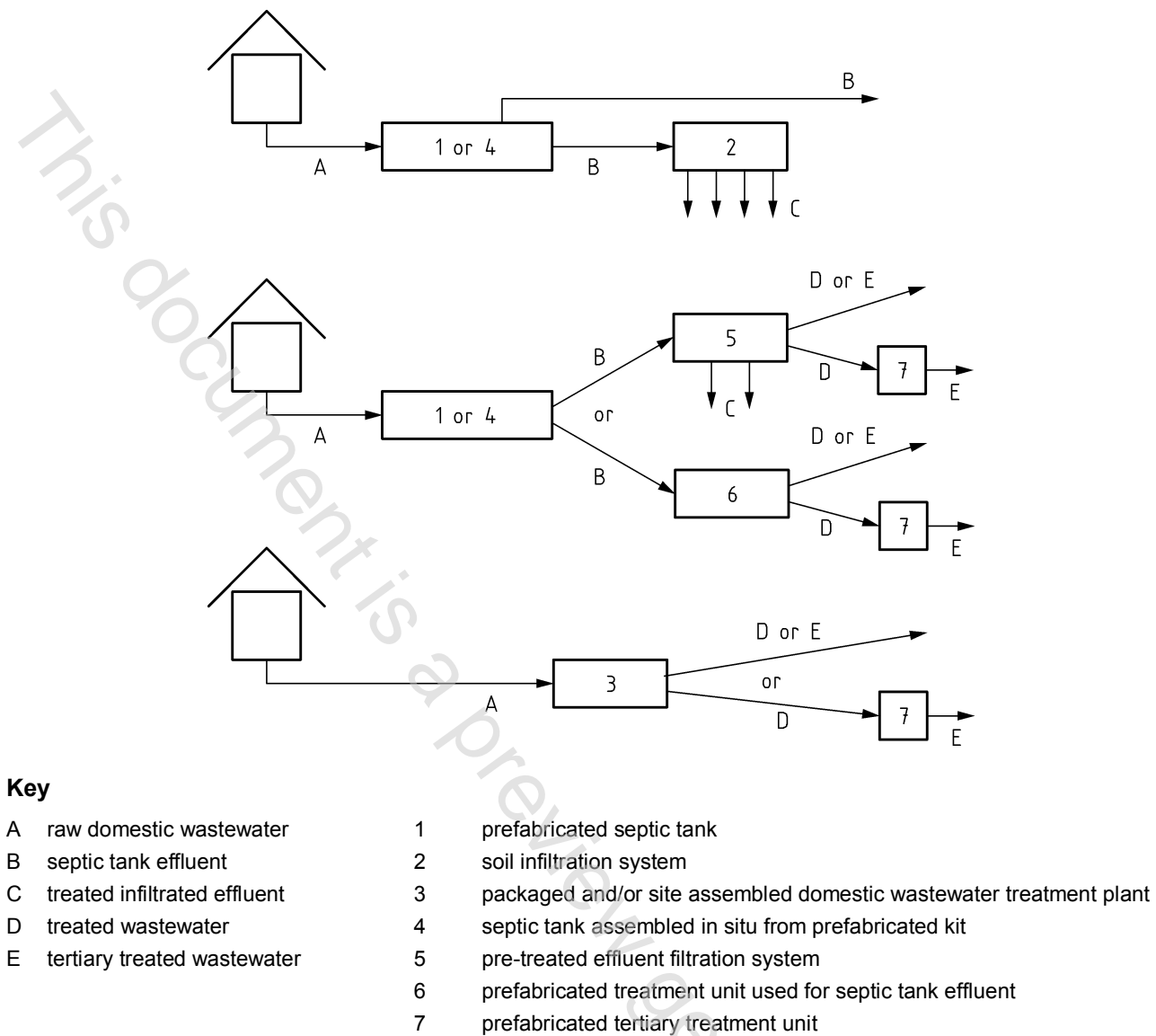


Figure 1 — Scheme related to the arrangement of the parts of EN 12566 or CEN/TR 12566

NOTE National regulations may specify different arrangements between the products described in the series of EN 12566 and CEN/TR 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.

NOTE Equivalent septic effluent may come from existing septic tanks.

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

The prefabricated secondary treatment unit consists of one or more tanks made of concrete, steel, unplasticised polyvinylchloride (PVC-U), polyethylene (PE), glass reinforced polyester (GRP-UP), polypropylene (PP), polydicyclopentadiene (PDCPD) or container made of flexible sheets (PEHD, PP, PVC, EPDM). Other components specified by the manufacturer, such as pipes, pumps and filter material will be considered as part of 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 packaged and/or site assembled 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.

This standard does not cover:

- non watertight secondary treatment units with direct infiltration into the ground;
- retrofit kits (see definition in 3.7).

2 Normative references

The following referenced documents, in whole or in part, are normatively referenced in this document and are indispensable for its 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 1085:2007, *Wastewater treatment — Vocabulary*

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

EN 12566-3:2005+A1:2009, *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 12311-2, *Flexible sheets for waterproofing — Determination of tensile properties — Part 2: Plastic and rubber sheets for roof waterproofing*

EN 13501-1, *Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests*

EN 14150, *Geosynthetic barriers — Determination of permeability to liquids*

EN ISO 527-1, *Plastics — Determination of tensile properties — Part 1: General principles (ISO 527-1)*

EN ISO 2555, *Plastics — Resins in the liquid state or as emulsions or dispersions — Determination of apparent viscosity by the Brookfield Test method (ISO 2555)*

EN ISO 7899-1, *Water quality — Detection and enumeration of intestinal enterococci in surface and wastewater — Part 1: Miniaturized method (Most Probable Number) by inoculation in liquid medium (ISO 7899-1)*

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

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

EN ISO 9308-3, *Water quality — Detection and enumeration of Escherichia coli and coliform bacteria in surface and wastewater — Part 3: Miniaturized method (Most Probable Number) by inoculation in liquid medium (ISO 9308-3)*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12566-3:2005+A1:2009 and EN 1085:2007 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

unit family

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

3.6

waste water treatment system

combination of units (e.g. septic tank) and/or products (e.g. pipes, pumps) required for the construction of waste water treatment plant according to Figure 1

3.7

retrofit kit

set of components that are provided by a single manufacturer for installation within an existing septic tank

3.8

flexible sheet

flexible impermeable liner