

SVENSK STANDARD

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Avlopp – Reningsanläggning upp till 50 pe – Del 4: Slamavskiljare sammansatta på plats av fabriksstillverkade delar

Small wastewater treatment systems for up to 50 PT – Part 4: Septic tanks assembled in situ from prefabricated kits



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Denna standard ersätter SS-EN 12566-4:2007, utgåva 1.

The European Standard EN 12566-4:2016 has the status of a Swedish Standard. This document contains the official English version of EN 12566-4:2016.

This standard supersedes the Swedish Standard SS-EN 12566-4:2007, edition 1.

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Denna standard är framtagen av kommittén för Avloppsteknik, SIS/TK 198/AG 165.

Har du synpunkter på innehållet i den här standarden, vill du delta i ett kommande revideringsarbete eller vara med och ta fram andra standarder inom området? Gå in på www.sis.se - där hittar du mer information.

EUROPEAN STANDARD

EN 12566-4

NORME EUROPÉENNE

EUROPÄISCHE NORM

August 2016

ICS 13.060.30

Supersedes EN 12566-4:2007

English Version

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

Petites installations de traitement des eaux usées
jusqu'à 50 PTE - Partie 4: Fosses septiques assemblées
sur site en kit d'éléments préfabriquées

Kleinkläranlagen für bis zu 50 EW - Teil 4: Bausätze für
vor Ort einzubauende Faulgruben

This European Standard was approved by CEN on 25 June 2016.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of 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 United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

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European foreword

This document (EN 12566-4:2016) 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 February 2017, and conflicting national standards shall be withdrawn at the latest by May 2018.

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 supersedes EN 12566-4:2007.

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.

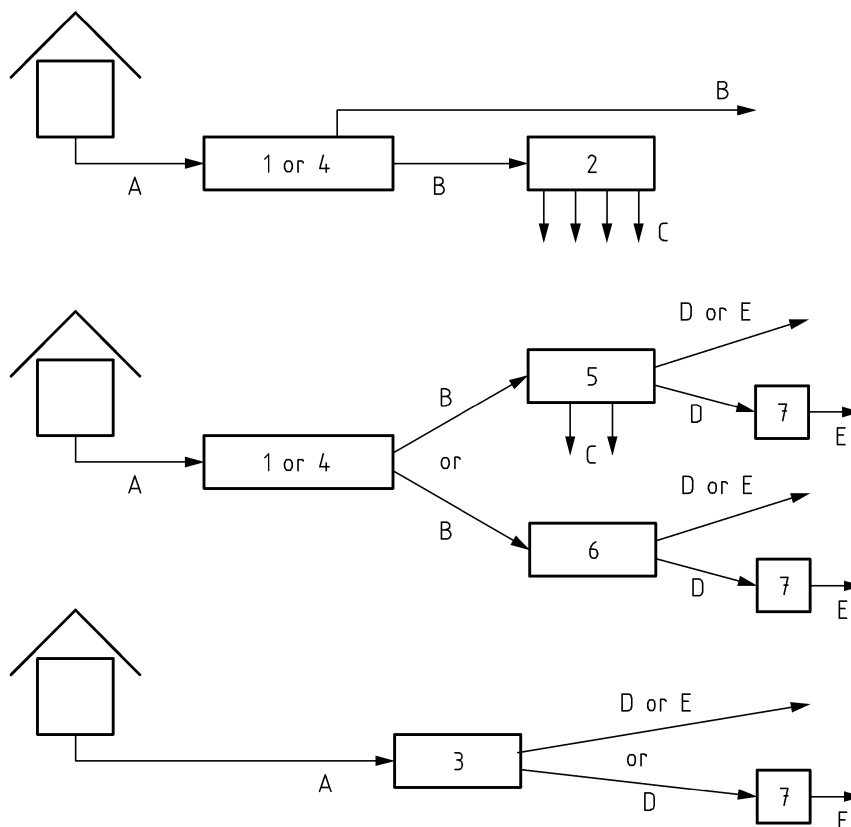
The differences between this version and EN 12566-4:2007 are mainly editorial changes according to the Construction Product Regulation (CPR).

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 (this document);*
- *Part 6: Prefabricated treatment unit used for septic tank effluent;*
- *Part 7: Prefabricated tertiary treatment unit.*

For filtration 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:

- *Part 2: Soil infiltration systems;*
- *Part 5: Pre-treated Effluent Filtration systems.*



Key

- | | | | |
|---|------------------------------|---|--------------------------------------------------------------------|
| A | 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 <i>in situ</i> 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 |

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

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

According to the CEN/CENELEC Internal Regulations, the national standards organizations 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.

1 Scope

This European Standard specifies the requirements for septic tanks assembled *in situ* from prefabricated kits and ancillary equipment where applicable, used outside buildings for the partial treatment of domestic wastewater for a population up to 50 PT. Pipe sizes, loads, watertightness, marking and evaluation of conformity are specified.

This European Standard does not apply to septic tanks receiving grey water only.

2 Normative references

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

EN 681-1, *Elastomeric seals — Materials requirements for pipe joint seals used in water and drainage applications — Part 1: Vulcanized rubber*

EN 12566-1:2016, *Small wastewater treatment systems for up to 50 PT — Part 1: Prefabricated septic tanks*

EN 16323:2014, *Glossary of wastewater engineering terms*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12566-1:2016, EN 16323:2014 and the following apply.

3.1

kit

complete set of components provided by a single manufacturer and assembled on its permanent site from a kit in order to form a septic tank

3.2

ancillary equipment

pipe connections and internal components that are part of the septic tank kit

3.3

product family

group of products in which, for the purpose of evaluation, the selected property(s) is/are similar for all products within the group

Note 1 to entry: The definition of family takes into account at least similar shape, equipment, materials and conditions of end use and ensures the minimum hydraulic efficiency and minimum structural behaviour for all the products in the range.

Note 2 to entry: The minimum level of performance (hydraulic efficiency and structural behaviour) are given by the test carried out on one model of the family.

4 Product characteristics

Products according to this standard shall meet the requirements of EN 12566-1:2016, Clause 4.

In addition to the specifications of EN 12566-1, elastomeric seals for joints shall conform to EN 681-1, where applicable.

Where the product consists of more than one tank, the evaluation of the structural behaviour of the product family shall be carried out according to EN 12566-1 for each different sized tank.

Where the product consists of more than one tank, the hydraulic efficiency test shall be done according to EN 12566-1 after assembling the tanks.

Pipe connections and ancillary equipment shall be in accordance with the relevant standards.

Durability is ensured by the product passing the relevant requirements for each essential characteristic, if they represent the state of the art.

5 Testing, assessment and sampling methods

Products according to this standard shall be tested according to EN 12566-1:2016, Clause 5 as relevant.

6 Assessment and verification of constancy of performance – AVCP

6.1 General

The compliance of the septic tank with the requirements of this standard and with the performances declared by the manufacturer in the DoP shall be demonstrated by:

- determination of the product type;
- factory production control by the manufacturer, including product assessment.

The manufacturer shall always retain the overall control and shall have the necessary means to take responsibility for the conformity of the product with its declared performance(s).

6.2 Type testing

6.2.1 General

All performances related to characteristics included in this standard shall be determined when the manufacturer intends to declare the respective performances unless the standard gives provisions for declaring them without performing tests. (e.g. use of previously existing data, CWFT and conventionally accepted performance).

Assessment previously performed in accordance with the provisions of this standard, may be taken into account provided that they were made to the same or a more rigorous test method, under the same AVCP system on the same product or products of similar design, construction and functionality, such that the results are applicable to the product in question.

NOTE 1 Same AVCP system means testing by an independent third party, and for reaction to fire under the responsibility of a notified product certification body (only for products covered by system 1+ and 1).

For the purposes of assessment, the manufacturer's products may be grouped into families, where it is considered that the results for one or more characteristics from any one product within the product family are representative for that same characteristics for all products within that same family