

REOVEE VÄIKEPUHASTID KUNI 50 IE. OSA 3: KOMPAKT-
JA/VÕI KOHAPEAL MONTEERITAVAD PUHASTID

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

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 12566-3:2016 sisaldab Euroopa standardi EN 12566-3:2016 ingliskeelset teksti.	This Estonian standard EVS-EN 12566-3:2016 consists of the English text of the European standard EN 12566-3:2016.
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English Version

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

Petites installations de traitement des eaux usées
jusqu'à 50 PTE - Partie 3: Stations d'épuration des eaux
usées domestiques fabriquées en usine et/ou
assemblées sur site

Kleinkläranlagen für bis zu 50 EW - Teil 3:
Vorgefertigte und/oder vor Ort montierte Anlagen zur
Behandlung von häuslichem Schmutzwasser

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

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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 12566-3:2016) has been prepared by Technical Committee CEN/TC 165 “Waste water 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of an identical text or by endorsement, at the latest by February 2017, and conflicting national standards shall be withdrawn at the latest by May 2018.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 12566-3:2005+A2:2013.

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.

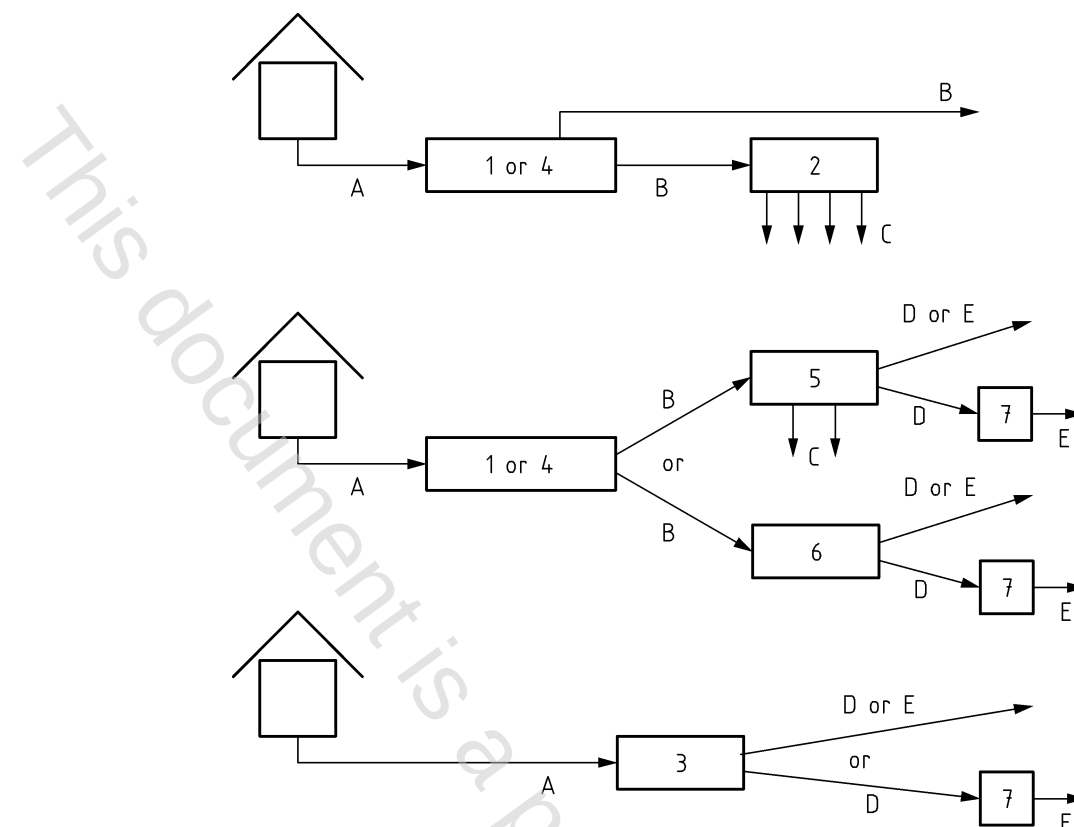
The differences between this version and EN 12566-3:2005+A2:2013 are mainly editorial changes according to the Construction Product Regulation (CPR) and declaration of power consumption and desludging during treatment efficiency test.

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 (this document);*
- *Part 4: Septic tanks assembled in situ from prefabricated kits;*
- *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 requirements, test methods, the marking and evaluation of conformity for packaged and/or site assembled domestic wastewater treatment plants (including guest houses and businesses) used for populations up to 50 inhabitants. Small wastewater treatment plants according to this European Standard are used for the treatment of domestic wastewater.

It covers plants made of concrete, steel, PVC-U, Polyethylene (PE), Polypropylene (PP), Glass Reinforced Polyester (GRP-UP), Polydicyclopentadiene (PDCPD), PVC and EPDM.

The test methods specified in this European Standard establish the performance of the plant, needed to verify its suitability for the end use (see 5.2).

This European Standard applies to small wastewater treatment plants for use buried in the ground where no vehicle loads are applied to the product.

This European Standard applies to plants where all prefabricated components are factory or site-assembled by one manufacturer and which are tested as a whole.

NOTE In some countries, domestic wastewater treatment plants are followed by other systems to conform to national regulations.

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 206, *Concrete — Specification, performance, production and conformity*

EN 580, *Plastics piping systems — Unplasticized poly(vinyl chloride) (PVC-U) pipes — Test method for the resistance to dichloromethane at a specified temperature (DCMT)*

EN 727, *Plastics piping and ducting systems — Thermoplastics pipes and fittings — Determination of Vicat softening temperature (VST)*

EN 858-1, *Separator systems for light liquids (e.g. oil and petrol) — Part 1: Principles of product design, performance and testing, marking and quality control*

EN 976-1:1997, *Underground tanks of glass-reinforced plastics (GRP) — Horizontal cylindrical tanks for the non-pressure storage of liquid petroleum based fuels — Part 1: Requirements and test methods for single wall tanks*

EN 978:1997, *Underground tanks of glass-reinforced plastics (GRP) — Determination of factor alpha and factor beta*

EN 1905, *Plastics piping systems — Unplasticized poly(vinyl chloride) (PVC-U) pipes, fittings and material — Method for assessment of the PVC content based on total chlorine content*

EN 10088-1, *Stainless steels — Part 1: List of stainless steels*

EN 12311-2, *Flexible sheets for waterproofing — Determination of tensile properties — Part 2: Plastic and rubber sheets for roof waterproofing*

EN 13369, *Common rules for precast concrete products*

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 16323:2014, *Glossary of wastewater engineering terms*

EN ISO 178, *Plastics — Determination of flexural properties (ISO 178)*

EN ISO 179 (all parts), *Plastics — Determination of Charpy impact properties (ISO 179, all parts)*

EN ISO 527-2, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics (ISO 527-2)*

EN ISO 899-2, *Plastics — Determination of creep behaviour — Part 2: Flexural creep by three-point loading (ISO 899-2)*

EN ISO 1133-1:2011, *Plastics — Determination of the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of thermoplastics — Part 1: Standard method (ISO 1133-1:2011)*

EN ISO 1133-2, *Plastics — Determination of the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of thermoplastics — Part 2: Method for materials sensitive to time-temperature history and/or moisture (ISO 1133-2)*

EN ISO 1183 (all parts), *Plastics — Methods for determining the density and relative density of non-cellular plastics (ISO 1183, all parts)*

EN ISO 2505:2005, *Thermoplastics pipes — Longitudinal reversion — Test method and parameters (ISO 2505:2005)*

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 9967, *Thermoplastics pipes — Determination of creep ratio (ISO 9967)*

EN ISO 9969, *Thermoplastics pipes — Determination of ring stiffness (ISO 9969)*

EN ISO 13229, *Thermoplastics piping systems for non-pressure applications — Unplasticized poly(vinyl chloride) (PVC-U) pipes and fittings — Determination of the viscosity number and K-value (ISO 13229)*

EN ISO 14125:1998, *Fibre-reinforced plastic composites — Determination of flexural properties (ISO 14125:1998)*

3 Terms, definitions, symbols and abbreviated terms

3.1 Terms and definitions

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

3.1.1

end use

condition in which a plant is normally installed