



NSAI
Standards

Standard Recommendation
S.R. 66:2015

Standard Recommendation providing
guidance to wastewater treatment
products in compliance with the EN 12566
series of standards

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S.R. 66:2015

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I.S. xxx: Irish Standard – national specification based on the consensus of an expert panel and subject to public consultation.

S.R. xxx: Standard Recommendation - recommendation based on the consensus of an expert panel and subject to public consultation.

SWiFT xxx: A rapidly developed recommendatory document based on the consensus of the participants of an NSAI workshop.

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Foreword

This Standard Recommendation (S.R.) was prepared by a committee of technical experts including members of the National Standards Authority of Ireland Wastewater Engineering Standards Committee.

The objective of this S.R. is to provide guidance to designers, manufacturers and installers when selecting a wastewater treatment system for domestic applications for populations of up to 50 PE in Ireland. The laboratory testing conditions in the I.S. EN 12566 series may not be replicated in normal use.

This S.R. should be used in conjunction with the appropriate part of the I.S. EN 12566 series and the *Code of Practice entitled Wastewater Treatment and Disposal Systems Serving Single Houses (PE < 10)* published by the Environmental Protection Agency in 2009 or with the Wastewater Treatment System Manual entitled *Treatment systems for Small Communities, Business, Leisure Centres and Hotels*, published by the Environmental Protection Agency in 1999, as appropriate.

This is the first edition of this S.R. and it incorporates guidance previously given in National Annexes to I.S. EN 12566 Parts 1, 3 and 4 which are now withdrawn.

Where a Water Pollution Act discharge licence is required the effluent values in this S.R. may not be appropriate and site specific values may be determined by the licensing authority.

S.R.s are reviewed as necessary e.g. when a new edition, an amendment or a corrigendum is issued to the relevant European Standard(s). This S.R. identifies what amendments/corrigenda are addressed. The user should check that the S.R. addresses the latest changes to the relevant European Standard. Previews of all documents are available on www.standards.ie. Any questions should be directed to NSAI.

Where a European Standard has been changed (revised/amended/corrected) and the S.R. has yet to be revised to account for the change(s), the S.R. for the previous version is available. Engineering judgement must be applied if using guidance contained therein e.g. when selecting appropriate parameters.

The table below indicates which changes have been considered by the relevant National Committee during the life of this edition.

Publication	Date published	Assessed and taken into account if relevant
I.S. EN 12566-1:2000	2000-04-28	Yes
I.S. EN 12566-1:2000/A1:2003	2004-04-07	Yes
I.S. EN 12566-3:2005+A1:2009+A2:2013	2013-06-27	Yes
I.S. EN 12566-4:2007	2007-11-28	Yes
I.S. EN 12566-6:2013	2013-02-25	Yes

1 Scope

This Standard Recommendation (S.R.) provides guidance on the:

- selection of wastewater treatment plants to treat domestic wastewater for applications for populations up to 50 PE in areas without a public sewer;
- minimum performance required for wastewater treatment plants that have been tested to I.S. EN 12566 (Parts 1, 3, 4 and 6) standards;
- scaling parameters and the sludge storage capacity necessary to achieve the minimum performance recommended for wastewater treatment plants that have been scaled up from the tested plant.

This S.R. does not provide guidance on suitable tertiary treatment for wastewater from domestic applications

2 References

The following documents, in whole or in part, are 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.

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

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

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

I.S. EN 12566-6, *Small wastewater treatment systems for up to 50 PT – Part 6: Prefabricated treatment units for septic tank effluent*

I.S. EN 16323, *Glossary of Wastewater engineering terms*

Environmental Protection Agency Code of Practice (EPA CoP): *Wastewater Treatment and Disposal Systems Serving Single Houses (pe ≤ 10)*

Environmental Protection Agency (EPA Manual): *Treatment Systems for Small Communities, Leisure Centre and Hotels*

3 Terms and definitions

For the purposes of this Standard Recommendation, definitions given in I.S. EN 16323 (some are repeated below for information) and below apply.

NOTE Where definitions used in I.S. EN 16323 differ from those in common use in Ireland, e.g. EPA manuals, this is noted.

baffle

device used in a tank to reduce eddies and promote a more uniform flow through the tank

biochemical oxygen demand (BOD)

measure of the rate at which micro-organisms use dissolved oxygen in the biochemical breakdown of organic matter in wastewaters under aerobic conditions

Note 1 to entry: EN 16323 **biochemical oxygen demand**, concentration of dissolved oxygen consumed under specific conditions (t days at 20 °C with or without nitrification inhibition) by the biological oxidation of organic and/or inorganic matter in water

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