

BS EN 1253-5:2017



BSI Standards Publication

Gullies for buildings

Part 5: Gullies with light liquids closure

National foreword

This British Standard is the UK implementation of EN 1253-5:2017. It supersedes BS EN 1253-5:2003 which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee B/505/11, Waste Fittings For Sanitary Appliances.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2017.
Published by BSI Standards Limited 2017

ISBN 978 0 580 90753 1

ICS 91.140.80

Compliance with a British Standard cannot confer immunity from legal obligations.

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 28 February 2017.

Amendments/Corrigenda issued since publication

Date	Text affected
------	---------------

EUROPEAN STANDARD

EN 1253-5

NORME EUROPÉENNE

EUROPÄISCHE NORM

February 2017

ICS 91.140.80

Supersedes EN 1253-5:2003

English Version

Gullies for buildings - Part 5: Gullies with light liquids closure

Avaloirs et siphons pour bâtiments - Partie 5 : Siphons
avec obturateur pour liquides légers

Abläufe für Gebäude - Teil 5: Abläufe mit
Leichtflüssigkeitssperren

This European Standard was approved by CEN on 14 December 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, Serbia, 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

Contents		Page
European foreword		3
1	Scope	4
2	Normative references	4
3	Terms and definitions	4
4	Types	4
5	Materials	4
6	Requirements	5
6.1	General	5
6.2	Inflow	5
6.3	Security height	5
6.4	Tightness	5
6.5	Maintenance	6
6.6	Flow rates	6
7	Test methods	7
7.1	General	7
7.2	Closing ability and tightness	7
7.3	Security height	7
8	Marking	7
9	Evaluation of conformity	8
Bibliography		9

European foreword

This document (EN 1253-5:2017) 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 2017, and conflicting national standards shall be withdrawn at the latest by August 2017.

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

This document supersedes EN 1253-5:2003.

This is the fifth part in EN 1253, a series of standards relating to different types of floor gullies, roof drains and access covers for drainage systems inside buildings. The EN 1253 series under the main title *Gullies for buildings* actually consists of the following parts:

- Part 1: Trapped floor gullies with a depth water seal of at least 50 mm;
- Part 2: Roof drains and floor gullies without trap;
- Part 3: Evaluation of conformity;
- Part 4: Access covers;
- Part 5: Gullies with light liquids closure.

Since the latest versions of EN 1253-5 the most significant technical changes are the following:

- a) introduction of the new standards on trapped floor gullies with a depth of water seal of at least 50 mm (EN 1253-1) and evaluation of conformity (EN 1253-3);
- b) amendment of scope, classification, requirements as well as methods of marking.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

1 Scope

This European Standard specifies requirements for the design, construction, performance, application and marking as well as test methods of factory made gullies with a light liquid closure for buildings.

Light liquid closures for buildings are applied to avoid uncontrolled discharge of light liquids into drainage systems in case of emergency.

This European Standard does not apply to installations for separation of light liquids covered by EN 858-1.

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 1253-1:2015, *Gullies for buildings - Part 1: Trapped floor gullies with a depth water seal of at least 50 mm*

EN 1253-3, *Gullies for buildings - Part 3: Evaluation of conformity*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 1253-1:2015 and the following apply.

3.1 gully with a light liquid closure

trapped floor gully with closure device which prevents the light liquid from entering the drainage system

3.2 light liquid closure

device which automatically closes the gully outlet when a certain level of light liquid is present

3.3 light liquid

liquid with a density not greater than 0,95 g/cm³ which is actually or practically insoluble in water and unsaponifiable

Note 1 to entry: Such liquids are, e.g. petrol, diesel fuel, fuel oil.

4 Types

Type A: Gully with an integrated light liquid closure with a flow rate in accordance with Table 1 for the unlimited use in gravity drainage systems.

Type B: Gully with light liquid closure which is incorporated as an accessory, with a minimum flow rate given in Table 1, which may be reduced up to 30 % for use in gravity drainage systems.

5 Materials

All material in contact with the light liquid and the wastewater shall be resistant to light liquids and to wastewater.

6 Requirements

6.1 General

A gully with light liquid closure shall fulfil all requirements given in EN 1253-1, except for flow rates, and the following requirements given in 6.2 to 6.6.

The manufacturer shall supply all the appropriate information concerning the use of the trapped gully with a light liquid closure, e.g. handling, transport, temporary storage and instructions for installation, operation and maintenance.

6.2 Inflow

The inflow shall be through the grating on the top of the gully.

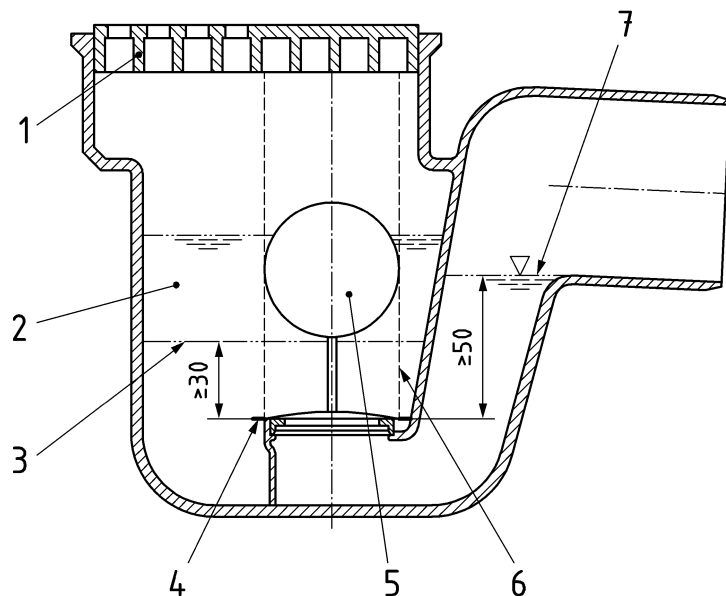
Inlets under the grating and behind the light liquid closure are not allowed.

The light liquid closure shall be sufficiently protected against dust, dirt, inflow and others which could impair functioning.

6.3 Security height

When the light liquid closure has closed the gully, there shall be a security distance between the sealing and the separating line between water and light liquid of ≥ 30 mm.

Dimensions in millimetres



Key

1	grating	4	sealing level	7	static water level
2	light liquid layer	5	float		
3	parting line light liquid – water	6	float guiding device		

Figure 1 — Gully with light liquid closure

6.4 Tightness

When tested in accordance with 7.2, the leakage shall be less than 0,1 l/h.

6.5 Maintenance

Closure devices shall be easily removable for servicing.

6.6 Flow rates

Where a gully with a light liquid closure device is designed, the gully flow rate shall be as given in Table 1.

Table 1 — Minimum flow rates

Nominal size of outlet ^a		Floor gullies (q_{grate})	
DN/OD	DN/ID	Minimum flow rate l/s	Head of water h mm
32		0,4	20
	30	0,4	
40		0,6	
	40	0,6	
50		0,8	
	50	0,8	
63		0,8	
75		0,8	
	70	0,8	
	75	0,8	
90		0,8	
100		1,4	
	100	1,4	
110		1,4	
125		2,8	
	125	2,8	
	150	4,0	
160		4,0	

^a All dimensions not mentioned in this table shall be tested with the next higher dimension.

7 Test methods

7.1 General

The gully shall, by means of the test methods in EN 1253-1, demonstrate the fulfilling the requirements given in EN 1253-1 and the following.

7.2 Closing ability and tightness

After the flow rate test in accordance with EN 1253-1 add light liquid with a density corresponding to that indicated by the manufacturer $\pm 0,015 \text{ g/cm}^3$ at 12 °C, slowly ($\leq 0,1 \text{ l/s}$) into the gully, until the closure device closes, but at least up to the top of the grating. Place a container under the pipe outlet, and determine after 1 h the amount of water and light liquid in the container.

7.3 Security height

When the closure device has closed (see 7.2), measure by suitable methods the distance between the sealing and the separating line between water and light liquid.

8 Marking

Gullies with a light liquid closure device and their components shall bear the following clear and durable markings, for example, cast on, by engraving, painting, stamping or labelling (including electronic recognition labelling) as indicated in Table 2:

- a) EN 1253-5;
- b) name and/or mark of the manufacturer;
- c) period of manufacture (coded or not);
- d) identification of independent certification body, where applicable;
- e) identification of DN, load class and type.

Table 2 — Location of marking of gullies with a light liquid closure device

Items ^d	Gully body	Grating	Float device	Components	Package
EN 1253-5	X	χ ^a	χ ^a	χ ^a	X
Manufacturer's name or mark	X			χ ^a	X
Period of manufacture					X
Independent certification body ^b					X
Load class		χ ^c			X
DN	χ ^a				X
Type ^e				χ ^a	X
<p>a If possible.</p> <p>b Where applicable.</p> <p>c For the classes H and K the marking is optional.</p> <p>d Further marking may be added (e.g. for application). The marking shall be visible where possible, after the unit has been installed.</p> <p>e Only for condition as specified in Clause 4, Type B.</p>					

Where the application of the marking would be detrimental to the production and/or functioning of the product, the marking shall be included on the packaging.

9 Evaluation of conformity

The evaluation of conformity shall be provided as given in EN 1253-3.

Bibliography

- [1] 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*

British Standards Institution (BSI)

BSI is the national body responsible for preparing British Standards and other standards-related publications, information and services.

BSI is incorporated by Royal Charter. British Standards and other standardization products are published by BSI Standards Limited.

About us

We bring together business, industry, government, consumers, innovators and others to shape their combined experience and expertise into standards-based solutions.

The knowledge embodied in our standards has been carefully assembled in a dependable format and refined through our open consultation process. Organizations of all sizes and across all sectors choose standards to help them achieve their goals.

Information on standards

We can provide you with the knowledge that your organization needs to succeed. Find out more about British Standards by visiting our website at bsigroup.com/standards or contacting our Customer Services team or Knowledge Centre.

Buying standards

You can buy and download PDF versions of BSI publications, including British and adopted European and international standards, through our website at bsigroup.com/shop, where hard copies can also be purchased.

If you need international and foreign standards from other Standards Development Organizations, hard copies can be ordered from our Customer Services team.

Copyright in BSI publications

All the content in BSI publications, including British Standards, is the property of and copyrighted by BSI or some person or entity that owns copyright in the information used (such as the international standardization bodies) and has formally licensed such information to BSI for commercial publication and use.

Save for the provisions below, you may not transfer, share or disseminate any portion of the standard to any other person. You may not adapt, distribute, commercially exploit, or publicly display the standard or any portion thereof in any manner whatsoever without BSI's prior written consent.

Storing and using standards

Standards purchased in soft copy format:

- A British Standard purchased in soft copy format is licensed to a sole named user for personal or internal company use only.
- The standard may be stored on more than 1 device provided that it is accessible by the sole named user only and that only 1 copy is accessed at any one time.
- A single paper copy may be printed for personal or internal company use only.

Standards purchased in hard copy format:

- A British Standard purchased in hard copy format is for personal or internal company use only.
- It may not be further reproduced – in any format – to create an additional copy. This includes scanning of the document.

If you need more than 1 copy of the document, or if you wish to share the document on an internal network, you can save money by choosing a subscription product (see 'Subscriptions').

Reproducing extracts

For permission to reproduce content from BSI publications contact the BSI Copyright & Licensing team.

Subscriptions

Our range of subscription services are designed to make using standards easier for you. For further information on our subscription products go to bsigroup.com/subscriptions.

With **British Standards Online (BSOL)** you'll have instant access to over 55,000 British and adopted European and international standards from your desktop. It's available 24/7 and is refreshed daily so you'll always be up to date.

You can keep in touch with standards developments and receive substantial discounts on the purchase price of standards, both in single copy and subscription format, by becoming a **BSI Subscribing Member**.

PLUS is an updating service exclusive to BSI Subscribing Members. You will automatically receive the latest hard copy of your standards when they're revised or replaced.

To find out more about becoming a BSI Subscribing Member and the benefits of membership, please visit bsigroup.com/shop.

With a **Multi-User Network Licence (MUNL)** you are able to host standards publications on your intranet. Licences can cover as few or as many users as you wish. With updates supplied as soon as they're available, you can be sure your documentation is current. For further information, email subscriptions@bsigroup.com.

Revisions

Our British Standards and other publications are updated by amendment or revision.

We continually improve the quality of our products and services to benefit your business. If you find an inaccuracy or ambiguity within a British Standard or other BSI publication please inform the Knowledge Centre.

Useful Contacts

Customer Services

Tel: +44 345 086 9001

Email (orders): orders@bsigroup.com

Email (enquiries): cservices@bsigroup.com

Subscriptions

Tel: +44 345 086 9001

Email: subscriptions@bsigroup.com

Knowledge Centre

Tel: +44 20 8996 7004

Email: knowledgecentre@bsigroup.com

Copyright & Licensing

Tel: +44 20 8996 7070

Email: copyright@bsigroup.com

BSI Group Headquarters

389 Chiswick High Road London W4 4AL UK