

**RESTKAEVUDE PÄISED JA HOOLDUSKAEVUDE PÄISED
SÕIDUTEED E JA JALAKÄIJATE ALADELE. OSA 2:
MALMIST REST- JA HOOLDUSKAEVUDE PÄISED**

**Gully tops and manhole tops for vehicular and
pedestrian areas - Part 2: Gully tops and manhole tops
made of cast iron**

EESTI STANDARDI EESSÕNA**NATIONAL FOREWORD**

See Eesti standard EVS-EN 124-2:2015 sisaldab Euroopa standardi EN 124-2:2015 ingliskeelset teksti.	This Estonian standard EVS-EN 124-2:2015 consists of the English text of the European standard EN 124-2:2015.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 10.06.2015.	Date of Availability of the European standard is 10.06.2015.
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ICS 93.080.30

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English Version

**Gully tops and manhole tops for vehicular and pedestrian areas -
Part 2: Gully tops and manhole tops made of cast iron**

Dispositifs de couronnement et de fermeture pour les zones
de circulation utilisées par les piétons et les véhicules -
Partie 2: Dispositifs de couronnement et de fermeture en
fonte

Aufsätze und Abdeckungen für Verkehrsflächen - Teil 2:
Aufsätze und Abdeckungen aus Gusseisen

This European Standard was approved by CEN on 12 March 2015.

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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.

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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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Foreword

This document (EN 124-2:2015) 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of an identical text or by endorsement, at the latest by December 2015 and conflicting national standards shall be withdrawn at the latest by March 2017.

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.

Together with EN 124-1:2015, EN 124-3:2015, EN 124-4:2015, EN 124-5:2015 and EN 124-6:2015, this document supersedes EN 124:1994.

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 the Regulation (EU) No. 305/2011.

For relationship with EU Regulation(s), see informative Annex ZA, which is an integral part of this document.

EN 124, *Gully tops and manhole tops for vehicular and pedestrian areas*, consists of the following parts:

- *Part 1: Definitions, classification, general principles of design, performance requirements and test methods;*
- *Part 2: Gully tops and manhole tops made of cast iron;*
- *Part 3: Gully tops and manhole tops made of steel or aluminium alloys;*
- *Part 4: Gully tops and manhole tops made of steel reinforced concrete;*
- *Part 5: Gully tops and manhole tops made of composite materials;*
- *Part 6: Gully tops and manhole tops made of polypropylene (PP), polyethylene (PE) or unplasticized poly(vinyl chloride) (PVC-U).*

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 is applicable to gully tops and manhole tops made of flake graphite cast iron and/or spheroidal graphite cast iron whether in combination with concrete or not, with a clear opening up to and including 1 000 mm for covering gullies, manholes and inspection chambers for installation within areas subjected to pedestrian and/or vehicular traffic.

It is applicable to manhole tops and gully tops for use in

- areas which can only be used by pedestrians and pedal cyclists (at least class A 15),
- pedestrian areas and comparable areas, car parks or car parking decks (at least class B 125),
- the area of kerbside channels of roads which, when measured from the kerb edge, extends a maximum of 0,5 m into the carriageway and a maximum of 0,2 m into the pedestrian area (at least class C 250),
- carriageways of roads (including pedestrian streets), hard shoulders and parking areas, for all types of road vehicles (at least class D 400),
- areas imposing high wheel loads, e.g. docks, aircraft pavements (at least class E 600),
- areas imposing particularly high wheel loads, e.g. aircraft pavements (class F 900).

This European Standard is not applicable in isolation but only in combination with EN 124-1 and gives guidance for combinations of covers/grating made of cast iron with frames according to EN 124-3, EN 124-4, EN 124-5 or EN 124-6.

This European Standard is not applicable to:

- cover fillings installed on site, e.g. concrete, paving blocks, etc.;
- concave gratings for class D 400 installed in carriageways of roads or hard shoulders and concave gratings for classes F 900 and E 600;
- gratings/covers as part of prefabricated drainage channels according to EN 1433;
- floor and roof gullies in buildings which are specified in EN 1253 (all parts); and
- surface boxes.

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 124-1:2015, *Gully tops and manhole tops for vehicular and pedestrian areas — Part 1: Definitions, classification, general principles of design, performance requirements and test methods*

EN 124-3:2015, *Gully tops and manhole tops for vehicular and pedestrian areas — Part 3: Gully tops and manhole tops made of steel or aluminium alloys*

EN 124-4:2015, *Gully tops and manhole tops for vehicular and pedestrian areas — Part 4: Gully tops and manhole tops made of steel reinforced concrete*

EN 124-5:2015, *Gully tops and manhole tops for vehicular and pedestrian areas — Part 5: Gully tops and manhole tops made of composite materials*

EN 124-6:2015, *Gully tops and manhole tops for vehicular and pedestrian areas — Part 6: Gully tops and manhole tops made of polypropylene (PP), polyethylene (PE) or unplasticized poly(vinyl chloride) (PVC-U)*

EN 206:2013, *Concrete — Specification, performance, production and conformity*

EN 1561, *Founding — Grey cast irons*

EN 1563, *Founding — Spheroidal graphite cast irons*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 124-1:2015 apply.

4 Materials

4.1 General

Manhole tops and gully tops according to this European Standard shall be made from the materials listed below.

- a) flake graphite cast iron according to EN 1561,
- b) spheroidal graphite cast iron according to EN 1563,
- c) one of the materials a) and b) combined with concrete with a minimum compressive strength class of C35/45.

Any element made of the materials specified in 4.1 a) to c) can be used in combination with elements of materials specified in EN 124-3, EN 124-4, EN 124-5 or EN 124-6. In such cases the manhole tops or gully tops shall comply with the relevant design and performance and testing requirements as listed in Table 1.

In addition elements shall comply with the requirements for the material related to EN 124-3, EN 124-4, EN 124-5 or EN 124-6, as applicable. Each element shall be marked accordingly. The class to be declared for the combined product shall be restricted to the lower class determined for any constituent element according to the relevant part of EN 124 series.

EXAMPLE Where a cover is made of cast iron, class D 400, and the frame is made of PVC-U, class B 125, the manhole top or gully top is marked with EN 124-2, and the class to be declared for the combined product is the class of the frame according to EN 124-6.

4.2 Coating materials

Manhole tops and gully tops made of cast iron can be supplied uncoated or coated. Coating materials shall comply with the environmental and/or toxicological regulations at the place of intended use.

NOTE In general, coatings are for aesthetic purposes only and are not regarded as a corrosion protection system. The specifier or client may require a more durable coating if appropriate.

4.3 Cover fillings

In the case of covers placed on the market in filled condition the filling shall consist of either:

- a) concrete with a minimum compressive strength class of C35/45 according to EN 206:2013 at least suitable for use in “cyclic wet and dry” conditions, or