DIN EN 1610
Construction and Testing of Drains and Sewers

and

DWA-A 139E
Construction and Testing of Drains and Sewers

Januar 2010

DIN EN 1610
Verlegung und Prüfung von Abwasserleitungen und -kanälen

DWA-A 139
Einbau und Prüfung von Abwasserleitungen und -kanälen
Introduction to the Joint Publication

The creation of standards within the framework of the DWA Set of Rules and Standards and DIN within CEN is a task for self-regulation by all interested circles. It takes place according to the principles of

- voluntary action,
- public opinion,
- participation of all those interested and
- a high degree of consensus

The standard specifications resulting from this – also the European Standard Specifications and Standards – contain recommendations for action the application of which is voluntary. At the same time they also set criteria for legally correct technical conduct. A legally binding effect first arises, if third parties adopt the recommendations either within the scope of private contractual law or within the framework of public law.

In this connection attention is drawn in particular to the VOB [German Construction Contract Procedures] Part C which, for example, in the General Technical Contractual Conditions for Construction Services in the standard specifications DIN 18300 and DIN 18306, points out expressly the Set of Rules and Standards of the DWA and DIN EN 1610.

The current publication is a summary of DIN EN 1610 Construction and testing of drains and sewers and Standard DWA-A 139E Construction and testing of drains and sewers.

The European Standard Specification DIN EN 1610 was produced, under the direction of Dr.-Ing. Harald O. Howe, by the Working Group "Pipe laying" within the Technical Committee TC 165 "Wastewater engineering" of the CEN. Through a close timely interlinking of the work on European standardisation with the setting of rules by the DWA, it was possible to elaborate, within the European area, a qualitatively sophisticated standard specification and to achieve a high degree of acceptance with, in the meantime, the adoption by 20 countries.

DIN EN 1610, which has been valid since October 1997, describes the European standard for the laying and testing of drains and sewers outside buildings. In the new edition of the DWA Standard DWA-A 139E, supplementary information and more detailed statements on DIN EN 1610 are described which, from the point of view of those experts involved, are considered to be necessary remarks and which are expressly intended in DIN EN 1610. In this respect the Standard DWA-A 139E is to be taken as the national supplement to DIN EN 1610. The elaboration was undertaken, under the leadership of Dipl.-Ing. Dieter Sternagel, by the DWA-Working Group "General principles for the construction of drainage systems" within the DWA Main Committee "Drainage systems".

The Standard applies for the production and testing of earth-covered drains and sewers placed in open cut trenches and above ground outside buildings. With this, the planning engineer is given an aid which is to be recognised and utilised within the scope presented in DIN EN 1610. The supplements and notes refer to the placing of pipes, their testing, to the materials to be used and to the acceptance procedure for the structure. Attention is drawn particularly in that the requirements placed on the qualification of the implementing firm are also to be described, which in the same manner also apply in other countries.

Through the joint application of DIN EN 1610 and Standard DWA-A 139E a qualitatively high standard implementation of construction will be achieved. The technically correct production of sewers and drains, together with the use of suitable and reliable materials, is the prerequisite for a long-term functioning, economic and groundwater-protective sewer network.

Note:
This publication contains DIN EN 1610 and Standard DWA-A 139E respectively in the original [English] text. The passages of text originating from Standard DWA-A 139E are underplayed in grey.

*) Comp. VOB, Issue December 2000
Foreword

This European Standard was approved by CEN on 1997-05-18.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

This European Standard has been prepared by Technical Committee CENTC 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 March 1998, and conflicting national standards shall be withdrawn at the latest by March 1998.

Annexes A, B and C are informative.

According to the CEN/CENELEC Internal Regulations, the national standards organisations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

This standard has been prepared by CEN/TC 165.

The responsible German body involved in its preparation was the Normenausschuß Wasserwesen (Water Practice Standards Committee), Technical Committee Rohrverlegung/Rohrstatik.

Amendments

DIN 4033, November 1979 edition, has been superseded by the specifications of EN 1610.

Previous editions


The new edition of Standard DWA-A 139E contains supplementary information that is considered necessary by the expert groups involved as well as in-depth information on DIN EN 1610 “Construction and Testing of Drains and Sewers”.

The Standard is intended to facilitate applying and interpreting DIN EN 1610 and help all those involved in construction to identify the standard’s scope and apply it.

Besides the utilisation of appropriate and durable materials, building drains and sewers in a professional way is a particular prerequisite for a long-term operating and watertight sewer network.

DIN EN 1610 “Construction and Testing of Drains and Sewers” defines requirements regarding the appropriate creation (planning and construction) and testing of drains and sewers. As a supplement, it is possible to phrase stipulations that are not or not entirely included in European standards in order to cover nationally required contents.

Thus, the Standard contains supplements and information on planning, installation, testing, construction materials as well as approval of drains and sewers. It also defines the requirements regarding the qualification of on-site personnel.
In order to preserve consistency in the text, repetitions of text extracts from DIN EN 1610 are necessary in some parts.

Compared to the 2001 edition, besides alterations, this revised Standard also contains additional information on the following topics:

- Requirements regarding planning and tendering
- Subsoil
- Short construction pits
- Creating the utility trench
- Sheeting
- Self-compacting filling materials
- Further information on leakage testing
- Qualifications
- Occupational safety and health

Additional annexes were drafted regarding the following topics:

- Quality monitoring and requirements regarding the installation of 'self-compacting' filling materials
- Forms for tightness testing
- Deviations/tolerances informative
- Abstract from BGR 236 (status: January 2006)
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