ICS 93.020 SLOVENSKÁ TECHNICKÁ NORMA September 2024

STN	**Vykonávanie špeciálnych geotechnických prác Štetovnicové steny, kombinované štetovnicové steny, steny s vysokou tuhosťou**	**STN EN 12063** 73 1022

Execution of special geotechnical work - Sheet pile walls, combined pile walls, high modulus walls

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/24

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EUROPEAN STANDARD
NORME EUROPÉENNE
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EN 12063

May 2024

ICS 93.020 Supersedes EN 12063:1999

English Version

Execution of special geotechnical work - Sheet pile walls, combined pile walls, high modulus walls

Exécution des travaux géotechniques spéciaux - Rideaux de palplanches, rideaux mixtes, rideaux à forte inertie

Ausführung von Arbeiten im Spezialtiefbau - Spundwandkonstruktionen

This European Standard was approved by CEN on 15 April 2024.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

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European foreword

This document (EN 12063:2024) has been prepared by Technical Committee CEN/TC 288 “Execution of special geotechnical works”, the secretariat of which is held by AFNOR.

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of an identical text or by endorsement, at the latest by November 2024, and conflicting national standards shall be withdrawn at the latest by November 2024.

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 12063:1999.

The general scope of TC 288 is the standardization of the execution procedures for geotechnical works (including testing and control methods) and of the required material properties. WG19 has been charged to revise EN 12063:1999, with the subject area of sheet pile walls.

In comparison with the previous edition EN 12063:1999, the following technical modifications have been made:

— the document has been technically revised;

— normative reference has been updated;

— all figures have been revised;

— combined pile walls, high modulus walls, synthetic sheet pile walls, precast concrete sheet pile walls and timber sheet pile walls have been added in the scope;

— execution classes have been introduced in the document;

— five new annexes were added:

  — Annex G, Additional tolerance for tubular piles;

  — Annex H, Ground movement due to installation;

  — Annex I, Precast concrete sheet piles and capping beams;

  — Annex J, Synthetic sheet piles;

  — Annex K, Percussive drilling as installation method for tubular piles.

Any feedback and questions on this document should be directed to the users’ national standards body. A complete listing of these bodies can be found on the CEN website.

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, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Türkiye and the United Kingdom.

1 Scope

This document specifies requirements, recommendations and information concerning the execution of permanent or temporary sheet pile walls, combined pile walls, high modulus wall structures and the handling of equipment and materials.

This document does not give requirements and recommendations for the installation of specific parts of the structure such as ground anchorages, displacement piles and micropiles which are covered by other documents.

This document is applicable to steel sheet pile walls, combined walls, high modulus walls, synthetic sheet pile walls (composite), precast concrete sheet pile walls and timber sheet pile walls. Tubular piles included in combined walls and high modulus walls can be filled with concrete.

Composite structures such as Berliner walls and sheet pile walls in combination with shotcrete, are not covered by this document.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

EN 1090-2, *Execution of steel structures and aluminium structures - Part 2: Technical requirements for steel structures*

EN 1537, *Execution of special geotechnical works - Ground anchors*

EN 1992 (all parts), *Eurocodes 2: Design of concrete structures*

EN 1993-1-1, *Eurocode 3 - Design of steel structures - Part 1-1: General rules and rules for buildings*

EN 1993-5, *Eurocode 3 - Design of steel structures - Part 5: Piling*

EN 1997 (all parts), *Eurocode 7: Geotechnical design*

EN 10020, *Definition and classification of grades of steel*

EN 10079, *Definition of steel products*

EN 10219-1, *Cold formed welded structural hollow sections of non-alloy and fine grain steels - Part 1: Technical delivery conditions*

EN 10219-2, *Cold formed welded steel structural hollow sections - Part 2: Tolerances, dimensions and sectional properties*

EN 10248-1, *Hot-rolled steel sheet piles - Part 1: Technical delivery conditions*

EN 10248-2, *Hot rolled sheet piling of non alloy steels - Part 2: Tolerances on shape and dimensions*

EN 10249-1, *Cold formed sheet piling of non alloy steels - Part 1: Technical delivery conditions*

EN 10249-2, *Cold formed sheet piling of non alloy steels - Part 2: Tolerances on shape and dimensions*

EN 12699, *Execution of special geotechnical works - Displacement piles*

EN 14199, *Execution of special geotechnical works - Micropiles*

EN 15804, *Sustainability of construction works - Environmental product declarations - Core rules for the product category of construction products*

EN 16228-1, *Drilling and foundation equipment - Safety - Part 1: Common requirements*

EN 16228-2, *Drilling and foundation equipment - Safety - Part 2: Mobile drill rigs for civil and geotechnical engineering, quarrying and mining*

EN 16228-4, *Drilling and foundation equipment - Safety - Part 4: Foundation equipment*

EN 16228-6, *Drilling and foundation equipment - Safety - Part 6: Jetting, grouting and injection equipment*

EN 16228-7, *Drilling and foundation equipment - Safety - Part 7: Interchangeable auxiliary equipment*

EN ISO 3834-3, *Quality requirements for fusion welding of metallic materials - Part 3: Standard quality requirements (ISO 3834-3:2021)*

EN ISO 3834-4, *Quality requirements for fusion welding of metallic materials - Part 4: Elementary quality requirements (ISO 3834-4:2021)*

EN ISO 5817, *Welding - Fusion-welded joints in steel, nickel, titanium and their alloys (beam welding excluded) - Quality levels for imperfections (ISO 5817:2023)*

EN ISO 9606-1, *Qualification testing of welders - Fusion welding - Part 1: Steels (ISO 9606-1:2012 including Cor 1:2012 and Cor 2:2013)*

EN ISO 9692-1, *Welding and allied processes - Types of joint preparation - Part 1: Manual metal arc welding, gas-shielded metal arc welding, gas welding, TIG welding and beam welding of steels (ISO 9692-1:2013)*

EN ISO 9692-2, *Welding and allied processes - Joint preparation - Part 2: Submerged arc welding of steels (ISO 9692-2:2024)*

EN ISO 15607, *Specification and qualification of welding procedures for metallic materials - General rules (ISO 15607:2019)*

EN ISO 15609-1, *Specification and qualification of welding procedures for metallic materials - Welding procedure specification - Part 1: Arc welding (ISO 15609-1:2019)*

EN ISO 22477 (all parts), *Geotechnical investigation and testing - Testing of geotechnical structures (ISO 22477)*