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Conservation of Cultural Heritage - Waterlogged archaeological wood - Characterization of waterlogged archaeological wood to support decision-making processes for its preservation

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

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English Version

Conservation of Cultural Heritage - Waterlogged
archaeological wood - Characterization of waterlogged
archaeological wood to support decision-making
processes for its preservation

Conservation du patrimoine culturel - Bois
archéologique gorgé d'eau - Caractérisation du bois
archéologique gorgé d'eau dans le but de soutenir les
processus de prise de décision concernant sa
préservation

Erhaltung des kulturellen Erbes - Archäologisches
Nassholz - Charakterisierung von archäologischem
Nassholz zur Unterstützung von
Entscheidungsprozessen für seine Erhaltung

This European Standard was approved by CEN on 2 March 2025.

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

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EN 18056:2025 (E)

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European foreword

This document (EN 18056:2025) has been prepared by Technical Committee CEN/TC 346 “Conservation of Cultural Heritage”, the secretariat of which is held by UNI.

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of an identical text or by endorsement, at the latest by October 2025, and conflicting national standards shall be withdrawn at the latest by October 2025.

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EN 18056:2025 (E)**Introduction**

Although waterlogged archaeological wood might appear intact or in good condition, upon excavation, its physical state can be extremely unstable. This is due to severe changes in its properties, caused by different deterioration agents during burial. Uncontrolled drying, or even limited exposure to an uncontrolled environment, can cause undesirable permanent deformation of the wooden structure altering the integrity of the wooden find.

Microbial activity is the principal agent of degradation in waterlogged environments, and it usually proceeds inwards from the outer surface of the wood.

It affects the physico-mechanical properties of the material (e.g. strength, hardness, shrinkage and density) and the structural chemical components of the wood cells.

The application of a preservation strategy will only be successful once full knowledge of the material to be preserved has been recorded. Characterization of the wood is carried out by specialists and is essential in order to manage the finds on the site and to aid the implementation of further actions regarding *in situ* preservation, reburial, remedial conservation or preservation by record.

The management of archaeological wood on archaeological terrestrial sites is covered by EN 16873:2016, and *in situ* preservation and monitoring by EN 17652:2022.

1 Scope

This document provides guidelines for the characterization of waterlogged archaeological wood to support decision-making processes for its preservation.

This document can be applied for the management of wood discovered in waterlogged environments, including terrestrial and aquatic (marine and freshwater) sites, as a basis for designing conservation strategies (e.g. reburial, *in situ* preservation, post-excavation storage). In the case of composite artefacts made of wood and other materials, this document is applicable only for the wooden components. Methods for conservation, site protection and monitoring for reburial as well as *in situ* preservation are beyond the scope of 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 15898, *Conservation of cultural heritage — Main general terms and definitions*

EN 16085, *Conservation of Cultural property — Methodology for sampling from materials of cultural property — General rules*

EN 16682, *Conservation of cultural heritage — Methods of measurement of moisture content, or water content, in materials constituting immovable cultural heritage*

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