

# Stabilné hasiace zariadenia Systémy na vodnú hmlu Časť 4: Protokol o skúške systémov s automatickými dýzami pre neskladovacie priestory

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Fixed firefighting systems - Water mist systems - Part 4: Test protocol for non-storage occupancies for automatic nozzle systems

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

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## **English Version**

# Fixed firefighting systems - Water mist systems - Part 4: Test protocol for non-storage occupancies for automatic nozzle systems

Installations fixes de lutte contre l'incendie - Systèmes à brouillard d'eau - Partie 4 : Protocole d'essai des systèmes à buses automatiques pour locaux non destinés au stockage Ortsfeste Brandbekämpfungsanlagen -Wassernebelsysteme - Teil 4: Prüfprotokoll für Nicht-Lager-Belegungen für automatische Düsensysteme

This European Standard was approved by CEN on 29 January 2024.

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# EN 14972-4:2024 (E)

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# **European foreword**

This document (EN 14972-4:2024) has been prepared by Technical Committee CEN/TC 191 "Fixed firefighting systems", the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by September 2024, and conflicting national standards shall be withdrawn at the latest by September 2024.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

The EN 14972 series, published under the general title *Fixed firefighting systems* — *Water mist systems*, consists of the following parts. This list includes standards that are in preparation, and other standards can be added. For the current status of published standards, refer to www.cencenelec.eu.

- Part 1: Design, installation, inspection and maintenance;
- Part 2: Test protocol for shopping areas for automatic nozzle systems;
- Part 3: Test protocol for office, school classrooms and hotel for automatic nozzle systems;
- Part 4: Test protocol for non-storage occupancies for automatic nozzle systems;
- Part 5: Test protocol for car garages for automatic nozzle systems;
- Part 6: Test protocol for false floors and false ceilings for automatic nozzle systems;
- Part 7: Test protocol for commercial low hazard occupancies for automatic nozzle systems;
- Part 8: Test protocol for machinery in enclosures exceeding 260 m³ for open nozzle systems;
- Part 9: Test protocol for machinery in enclosures not exceeding 260 m³ for open nozzle systems;
- Part 10: Test protocol for atrium protection with sidewall nozzles for open nozzle systems;
- Part 11: Test protocol for cable tunnels for open nozzle systems;
- Part 12: Test protocol for commercial deep fat cooking fryers for open nozzle systems;
- Part 13: Test protocol for wet benches and other similar processing equipment for open nozzle systems;
- Part 14: Test protocol for combustion turbines in enclosures exceeding 260 m³ for open nozzle systems;
- Part 15: Test protocol for combustion turbines in enclosures not exceeding 260 m³ for open nozzle systems;

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- Part 16: Test protocol for industrial oil cookers for open nozzle systems;
- Part 17: Test protocol for residential occupancies for automatic nozzle systems.

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.

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# 1 Scope

This document specifies the evaluation of the fire performance of water mist systems for lightly loaded non-storage and non-manufacturing occupancies with ordinary combustibles, such as offices, schools, hospitals and hotels.

This document is applicable to ceiling mounted automatic nozzles to be used in restricted and/or unlimited areas.

This document is applicable for horizontal, solid, flat ceilings with heights of 2 m and above, up to the maximum tested ceiling height.

## 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 636:2012+A1:2015, Plywood — Specifications

EN 13501-1:2018, Fire classification of construction products and building elements — Part 1: Classification using data from reaction to fire tests

EN 14972-1, Fixed firefighting systems — Water mist systems — Part 1: Design, installation, inspection and maintenance

ISO 5660-1, Reaction-to-fire tests — Heat release, smoke production and mass loss rate — Part 1: Heat release rate (cone calorimeter method) and smoke production rate (dynamic measurement)

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