

BRITISH STANDARD

Code of practice for the operation of fire protection measures

Part 5: Electrical actuation of watermist systems (except pre-action systems)

ICS 13.220.20



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Foreword

Publishing information

This part of BS 7273 is published by BSI and came into effect on 31 January 2008. It was prepared by Subcommittee FSH/12/4, *Automatic operation of fire protection*, under the authority of Technical Committee FSH/12, *Fire detection and alarm systems*. A list of organizations represented on this committee can be obtained on request to its secretary.

Relationship with other publications

BS 7273 is published in a series of parts:

- Part 1: *Electrical actuation of gaseous total flooding extinguishing systems*;
- Part 2: *Mechanical actuation of gaseous total flooding and local application extinguishing systems*;
- Part 3: *Electrical actuation of pre-action watermist and sprinkler systems*;
- Part 4: *Actuation of release mechanisms for doors*;
- Part 5: *Electrical actuation of watermist systems*.

Parts 1 and 2 give recommendations for the electrical and mechanical actuation of gaseous fire extinguishing systems respectively. Part 3 provides recommendations for electrical actuation of pre-action watermist and sprinkler systems. Part 4 gives recommendations for the actuation of release mechanisms for doors. This current part of BS 7273 provides recommendations for the electrical actuation of watermist systems (other than pre-action watermist systems).

Recommendations for the design, installation, commissioning and maintenance of fire detection and fire alarm systems are given in BS 5839-1. Recommendations for the design, installation, commissioning and maintenance of watermist systems will be given in DD 8489-1, which is currently in preparation. It is anticipated that an amendment will be issued to BS 7273-5 when DD 8489-1 is published.

Information about this document

There has been a significant growth in the use of watermist fire protection since the demise of halon gas fire extinguishing agents on environmental grounds. Such systems are now used to protect special hazards such as turbines, generators and kitchen ranges. They are also being used for residential applications, such as hotels, for office environments and to protect electrical equipment installations. This part of BS 7273 addresses the interface between the fire detection and fire alarm systems that control watermist systems, and the mechanical components of such systems.

Use of this document

As a code of practice, this part of BS 7273 takes the form of guidance and recommendations. It should not be quoted as if it were a specification and particular care should be taken to ensure that claims of compliance are not misleading.

Any user claiming compliance with this British Standard is expected to be able to justify any course of action that deviates from its recommendations.

Hazard warnings

CAUTION. Certain electromagnetic fields, such as those generated by radio frequency transmitters, could potentially trigger watermist systems or cause them to malfunction. In such cases it is essential to avoid the risk of accidental discharge due to the electromagnetic field radiated by such apparatus. It might be necessary to seek specialist advice.

Presentational conventions

The provisions in this standard are presented in roman (i.e. upright) type. Its recommendations are expressed in sentences in which the principal auxiliary verb is “should”.

Commentary, explanation and general informative material is presented in smaller, italic type, and does not constitute a normative element.

Contractual and legal considerations

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

Compliance with a British Standard cannot confer immunity from legal obligations.

1 Scope

This part of BS 7273 gives recommendations for the design, installation and commissioning of electrical actuation arrangements for watermist systems. It covers the interface between fire detection and fire alarm systems (see BS 5839-1) and watermist systems¹⁾.

The recommendations are applicable to systems intended either for local application or volume protection.

Recommendations relating to pre-action watermist systems are contained in BS 7273-3.

NOTE Watermist systems can be used for the suppression, control and extinguishing of fires. In this part of BS 7273, the references to watermist systems relate to watermist systems of any type.

2 Normative references

The following referenced documents are indispensable for the application 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.

BS 5839-1:2002, *Fire detection and fire alarm systems for buildings – Part 1: Code of practice for design, installation, commissioning, and maintenance*

BS 6266, *Code of practice for fire protection for electronic equipment installations*

BS EN 54-2, *Fire detection and fire alarm systems – Part 2: Control and indicating equipment*

BS EN 54-4, *Fire detection and fire alarm systems – Part 4: Power supply equipment*

BS EN 12094-1, *Fixed firefighting systems – Components for gas extinguishing systems – Part 1: Requirements and test methods for electrical automatic control and delay devices*

BS EN 12094-3, *Fixed firefighting systems – Components for gas extinguishing systems – Part 3: Requirements and test methods for manual triggering and stop devices*

¹⁾ Watermist systems will be covered in DD 8489-1, which is currently in preparation.