Certificate No: EW534B

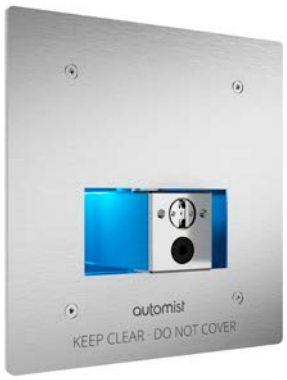
This certificate is valid for Building Regulations & associated technical guidance in force on the date of registration and for the regulations in the countries indicated

Plumis Automist 'Smartscan Hydra'

Description of Product

This is an assessment of the Plumis Automist multiroom Smartscan Hydra targeted fire suppression system. The system utilises multiple water nozzle spray heads connected to a single pump which is capable of discharging water mist spray effectively cooling and suppressing the fire.

Please consult the 'Conditions of Certificate' and 'Non-Regulatory Information' sections to see if the system is acceptable for use on sites covered by LABC Warranty.



Key Factors Assessed

- Safety in case of Fire
- Safety in Use
- Durability serviceability and identification

Validity

This certificate was first issued on 22nd June 2018 and is valid until 18th March 2022.

Issue Dated 23rd June 2021

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Scope of Registration

The system operates when fire is detected by the Plumis multi-sensor detector. This causes all the linked spray heads to scan the room, the temperature in the room is measured by the infrared sensor which registers exceptionally high temperatures. All heads registering high temperatures are compared to select the spray head which has the best view of the fire. The selected spray head locks onto the fire location and pump activation takes place. Mains water is driven through the unique nozzle unit directing a dense fog into the location of the fire. The fire is saturated with mist spray suppressing the fire.

Watermist uses fine droplets that evaporate at the base of the fire to extract heat, cooling the fire and displacing oxygen from the fire zone. This results in fire control and suppression.

Nozzle heads are typically installed on the wall 1400mm-1450mm above the floor. Coverage is typically within a 6m radius with a 180 degree spray pattern. Sufficient heads must be installed to cover the whole room taking account of obstructions and room configuration. Electrical supply to equipment should be in fire rated cabling typically FP200.

The system is intended to be used as an alternative to residential sprinkler systems. The system allows multiple heads to be connected to a single pump. Fire suppression can be controlled from a single nozzle head.

Each installation must be carried out by Plumis authorised installers who will specify, install, commission and maintain the Automist Smartscan system in accordance with the Plumis Installation and Maintenance Manual. The design must take into account the individual circumstances of the installation including issues such as room obstructions, which will impact on the effectiveness of the watermist spray, nozzle locations and any individual circumstances which might prejudice the system installation.

Typical System components include but are not limited to the following:

- Plumis multi-sensor detector(s)
- Automist Smartscan Head(s)
- High pressure outlet hose
- Testing point
- Automist controller and pump unit
- Stainless steel hose
- Filter
- WRAS approved check valve
- Data Cable

The capability of the system has been independently tested by Exova Warrington Fire in accordance with BS 8458:2015 Annex C. The system may be used as an automatic water fire suppression system for life safety in both domestic and residential occupancies subject to limitations listed in the design documents referred to and in the Conditions of the Certificate below.

The system coverage is limited in use to those specific situations identified in Approved Document B (fire safety) volume 1: Dwellings, 2019 edition incorporating 2020 amendments and Table 2 of BS 9991:2015 Fire Safety in the Design management and use of residential buildings-code of practice.

Regulations

LABC consider that, Automist 'Smartscan Hydra' will meet the functional requirements of the Building Regulations (listed below) if the criteria detailed in this certificate are met;

The Building Regulations 2010 (as amended) England & Wales

Please refer to the individual Regulations below.

The Building Regulations 2010 (as amended) England

AD B (2019 edition) 2020 as amended	Fire Safety
Note:	When following the recommendations of the following guidance documents: Approved Document B (fire safety) volume 1: Dwellings, 2019 edition incorporating 2020 amendments, BS 9991:2015 - Fire safety in the design, management and use of residential buildings: code of practice and BS 8458:-2015 'Fixed Fire Protection Systems - Residential and Domestic Watermist Systems - Code of Practice for Design and Installation'.
Regulation 7(1) (2013 edition) 2018 as amended	Materials and workmanship
Note:	The system is acceptable when installed, commissioned and maintained in accordance with the manufacturers recommendations and the documentation referenced in 'Supporting Documentation' below.

The Building Regulations 2010 (as amended) Wales

The Building Regulations in Wales were amended in 2016 and have guidance for sprinklers in residential purpose groups and therefore any applications in Wales will need a specific proposal for Regulation 37A and 37B accordingly.

The Building (Scotland) Regulations 2004 (as amended)

If you would like to discuss a specific use of the system in Scotland it will require an additional assessment under the Scottish Building Regulations and accordingly you should contact the LABSS STAS Administrator at www.labss.org.

Non-Regulatory Information

LABC Warranty

The system has not been assessed by LABC Warranty.

Supporting Documentation

Exova Warringtonfire Test to BS 8458: 2015 Annex 'C' 'Method of measuring the capability of a Watermist System to control a Fire - Room fire test for Watermist Systems with Automatic Nozzles' Document reference: 396489 Dated 23rd April 2018

BS 8458 2015 'Fixed Fire Protection Systems - Residential and Domestic Watermist Systems - Code of Practice for Design and Installation'

BS 9991; 2015 'Fire Safety in the design, management and use of residential buildings - code of practice'

Plumis Automist Smartscan® Hydra Design, Installation, Operation and Maintenance (DIOM) Manual - Version 2.00.1

Plumis LABC Hydra Validation tests on 24th March 2018

ISO 9001 2015 Design Manufacture and Supply of Watermist Systems

Items that should be provided in conjunction with the LABC Assured certificate as part of an Application to determine compliance:

1. Manufacturers detailed design for all elements of the watermist system.
2. Manufacturers latest Design Manual.
3. Floor plans drawn to scale showing the individual design and position of relevant components such as the pump unit, water supplies and nozzle locations.
4. A full fire engineering assessment is required where flats are created and the building has a floor >11m in accordance with Part B Fire Safety Volume 1 (2019 edition incorporating 2020 amendments)

Items that should be provided in conjunction with the LABC Assured certificate as part of the Inspection regime to determine compliance:

1. Manufacturers Installation and commissioning guide from the authorised supplier prior to the issue of any Building Regulation Certificate under Regulation 17 and any related information under Regulation 38. (where applicable)

Items that should be provided in conjunction with the LABC Assured certificate as part of a Completion to determine compliance:

1. Evidence of adequate system commissioning
2. Evidence of adequate electrical certification / commissioning
3. Water suppler declaration / approval where applicable

Contact Information

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