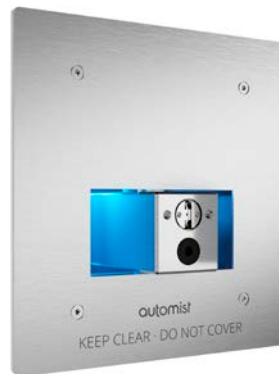


This certificate is valid for Building Regulations & associated technical guidance in force on the date of registration and for the regulations in the countries indicated

## Plumis Automist 'Smartsan Hydra'

### Description of Product

This is an assessment of the Plumis Automist multiroom Smartsan 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.



### Key Factors Assessed

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

### Validity

This certificate was first issued on 22<sup>nd</sup> June 2018 and is valid until 22<sup>nd</sup> April 2020.

Issue Dated 24<sup>th</sup> April 2019

## Scope of Registration

The system operates when fire is detected by the Plumis multisensor detector. This causes all the linked spray heads to scan the room, the temperature in room is measured by the infrared sensor which register 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, suppression and extinguishment.

Nozzle heads are typically installed on the wall 1400mm-1450mm above the floor. Coverage is typically 6m radius with 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 accredited installers who will specify, install, commission and maintain the Automist Smart Scan 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 detector
- Automist Smart Scan Head
- 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 BS8458 2015 Annex C. The system may be used as an automatic fire suppression system for life safety in both domestic and residential occupancies up to a maximum building height of 45m.

The system coverage is limited in use to those specific situations identified in Approved Document B Fire Safety or Table 2 of BS 9991;2015 Fire Safety in the Design management and use of residential buildings-code of practice.

LABC and LABSS consider that, Automist 'Smartsan 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

Regulation 7 Materials and workmanship

Note: The product is acceptable when installed, commissioned and maintained in accordance with the manufacturers recommendations and the documentation referenced in 'Supporting Documentation' below.

AD B Fire Safety

Note: Where following the recommendations of the following guidance documents: Approved Document B: Fire Safety and 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'.



## The Building Regulations 2010 (as amended) England

AD B Fire Safety

Note: Where following the recommendations of the following guidance documents: Approved Document B: Fire Safety and BS 9991:2015 - Fire safety in the design, management and use of residential buildings: code of practice



## The Building Regulations 2010 (as amended) Wales

AD B Fire Safety

Note: Where following the recommendations of the following guidance documents: Approved Document B: Fire Safety and BS 9991:2015 - Fire safety in the design, management and use of residential buildings: code of practice



## The Building (Scotland) Regulations 2004 (as amended)

Technical Handbooks Domestic and Non-Domestic

Regulation 8 Durability, workmanship and fitness of materials

0.8.5: Ways of establishing the fitness of materials

Note: The product is acceptable when installed in accordance with all of the manufacturer's instructions and the documentation referenced in 'Supporting Documentation' below and within the Scope of registration and the Conditions of this Certificate specified above.

Regulation 9 Building Standards applicable to construction

Note: Construction shall be carried out so that the work complies with the applicable requirements of schedule 5.

## Non-Regulatory Information



### LABC Warranty

The use of the Automist 'Smartsan Hydra' has not been assessed to meet the requirements of the LABC Warranty Technical Manual. If you would like to discuss a specific use please make an enquiry to [technical.services@labcwarranty.co.uk](mailto:technical.services@labcwarranty.co.uk)

## 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 23<sup>rd</sup> 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 Smartsan® Hydra Design, Installation Maintenance Manual - Version 0.0.5

Plumis LABC Hydra Validation tests on 24<sup>th</sup> March 2018

ISO 9001 2015 Design Manufacture and Supply of Watermist Systems

## Contact Information

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