

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

STX12 Water Mist System (Engineered and Pre-Engineered Solutions, inclusive of Q12i and STN12 Water Mist Nozzles)

Description of Product

This is an assessment of the iMist STX12 Water Mist System. The system is designed to control and suppress a fire by automatically discharging very small water droplets into the air.

System operation occurs when a heat sensitive liquid filled glass bulb ruptures at a predetermined temperature discharging watermist at high pressure into the air. This fine mist remains in the air which has a cooling effect reducing the temperature in the room and causing surface wetting which helps to limit fire spread.



Key Factors Assessed

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

Validity

This certificate was first issued on 19th February 2018 and is valid until 19th February 2019

Issue Dated 19th February 2018

Scope of Registration

This registered system relates to the iMist STX12 Water Mist System which includes both the Q12i and STN12 nozzle types.

Each installation is subject to an individual design carried out by iMist in accordance with their Design Installation, Operation and Maintenance Manual and in accordance with BS 8458: 2015 Fixed Fire Protection Systems - Residential and Domestic Watermist Systems - Code of Practice for Design and Installation. The design must take account of 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 circumstance which might prejudice the system installation.

Typical system components include, but are not limited to the STN 12 or Q12i nozzle heads, a temperature sensitive activation bulb, the water distribution pipe work, zone valve, test and drain valve, pump isolation valve, flow monitoring device, high decibel activation alarm, water pressure gauge, pump control panel, high pressure pump unit, water supply monitoring device, inlet stop valve and a suitable maintained water supply.

The capability of the system has been independently tested by Exova Warrington Fire in accordance with BS 8458 2015 Annex C and DD 8458-1 2010 Annex A. 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'.

Conditions of Certificate

The system is limited in use to those specific situations identified in Table 2 of BS 9991; 2015 'Fire Safety in the design, management and use of residential buildings - code of practice'.

The system must be designed, installed and maintained by iMist Ltd in accordance with BS 8458: 2015 Fixed Fire Protection Systems - Residential and Domestic Watermist Systems - Code of Practice for Design and Installation.

Design limits are detailed in BS 8458 2015. These include the limits of application based on fire tests identified in Table 3 of BS 8458 2015 'Fixed Fire Protection Systems - Residential and Domestic Watermist Systems - Code of Practice for Design and Installation'. The fire testing carried out by Exova Warrington identified the following fire test limits; Q12i Nozzle- room size 80m² and ceiling height limit 3.5m, STN Nozzle; fire test room size 32m² and ceiling height limit 3.5m. A comprehensive fire engineering assessment would be needed to justify installations where these limits are exceeded.

The extent of watermist coverage should include all parts of the dwelling with the possible exception of areas without a fire risk such as bathrooms floor area <5m², cupboards floor area <2m², non-communicating attached buildings, ceiling voids and uninhabited roof voids as identified in clause 6.4 of BS 8458; 2015.

The system may be fed direct from the mains or from a mains water supply subject to water authority approval. The design will include recommendations for water pressure, flow and duration.

Installation must be carried out by suitably trained and competent individuals or by one of the manufacturers approved licensees.

Only components approved by iMist may be utilised in the system.

The installed system must be subject to weekly, monthly and annual servicing as advised by iMist. Annual maintenance must be carried out by an approved iMist contractor.

All other requirements of Approved Document B or BS9991 2015 relating to fire safety measures includes for example smoke detection, passive fire protection, smoke ventilation must be fully complied with to ensure adequate safety in the event of fire.

LABC consider that, STX12 Water Mist System 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 system is acceptable when installed, commissioned and maintained in accordance with the manufacturers recommendations.

AD B Fire Safety

Note: The system is acceptable where recommendations of the following guidance documents are met: Approved Document 'B' Fire Safety, 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: The system is acceptable where recommendations of the following guidance documents are met: Approved Document 'B' Fire Safety, 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) Wales

AD B Fire Safety

Note: The system is acceptable where recommendations of the following guidance documents are met: Approved Document 'B' Fire Safety, 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 (Scotland) Regulations 2004 (as amended)

If you would like to discuss a specific use of the product 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 use of the STX12 Water Mist System 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

Supporting Documentation

Fire Test by Exova Warringtonfire 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 367730. Dated 18th August 2016

Fire Test by Exova Warringtonfire to DD 8458-1;2010 Annex 'A' 'Method of measuring the capability of a Watermist System to control a Fire - Room fire test for Watermist Systems with Automatic Nozzles'. Document reference 350439. Dated 1st June 2015

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'.

ISO 9001 2015 Quality Management System (expires 10th January 2020)

iMist Design, Installation, operation and maintenance manual STX12 Watermist System (second issue version 2 incorporating the Q12i nozzle)

iMist Design Manual BSi DD 8458 Approved (incorporating the STN nozzle)

iMist Brochure Domestic and Residential Watermist fire protection System

CHAS Certificate of Accreditation Contractors health and Safety Scheme (expires 19th July 2018)

iMist Pocket pre installation Guide

Corporate member of International Watermist Association 13th July 2017

Contact Information

iMist Ltd

41a High Street

Swanley

Sevenoaks

BR8 8AE

Tel: 0207 965 7237

Email: sales@imist.co.uk

Web: www.imist.co.uk