

Automist Smartscan is fully compliant with BS 8458:2015

What is BS 8458?

BS 8458 is a British Standard for fixed fire protection systems – Residential and domestic water mist systems. It is a code of practice for design and installation.

As per Clause 9.4.1 of [BS 0:2021](#), the British Standard for Standards:

A code of practice 'contains recommendations and guidance, where the recommendations relevant to a given user have to be met in order to support a claim of compliance.'

'Users may also justify substitution of any of the recommendations in a code of practice with practices of equivalent or better outcome'

Why does Automist Smartscan conform with BS 8458?

Automist Smartscan conforms to BS 8458. Its performance has been validated by BSI Verification Certificate, [VC 712581](#). To learn more about our product's conformance to BS 8458 and details of any substitution from the code of practice please review [page 14](#) of our Design Installation and Operation Manual ([DIOM](#)). Here we evidence and explain the [improved performance obtained by substitution](#).

Should Automist Smartscan be accepted by building control for BS 8458 applications?

Yes, [Regulation 7 and Approved Document 7](#) states in Section 1:

1.7 If the declared performance of a product is suitable for its intended use, the building control body should not prohibit or impede the use of the product.

Please review [Plumis' Manufacturer's Declaration of Conformity \(MDOC\)](#).

Is there any fire engineer research that supports the use of Automist Smartscan?

We have worked with numerous well-established independent fire engineers and published a few peer-reviewed papers.

- [Probabilistic Modelling of Automist in Open Plan Dwellinghouses](#)
The system can typically perform equivalent to or better than the minimum expectations of a domestic sprinkler system conforming to BS 9251:2021. Consideration has also been given to more 'open plan' designs which deviate from guidance through a probabilistic computational fire modelling assessment of a series of representative dwellinghouse arrangements.
- [Estimating the Suppression Performance of an Electronically Controlled Residential Water Mist System from BS 8458:2015 Fire Test Data](#)
- [Calculating a reliability target for Automist](#)

- [Replicating the activation time of electronically controlled watermist system nozzles in B-RISK](#)

Automist has an effective RTI of 20 m^{1/2}s^{1/2} and C factor of 0.25 m^{1/2}s^{-1/2}. The measured activation times of Automist can be 2.0 to 13.7 times faster than a concealed sprinkler, this significantly impacts its ability to aid means of escape.

Does Automist's electronic nozzle meet BS 8663-1?

Plumis have [summarised](#) all the first-party (internal) and third-party (external) testing done on its system. The test program was either carried out using the applicable BS 8663-1 test protocols or equivalent international certification protocols.

Is there any precedent for accepting Automist to meet UK building regulations?

We have completed over 12000 UK installations. It has been assessed time and time again by different approvers and fire engineers. In April 2023, having carefully considered all the information submitted, Scottish Ministers concluded that a proposal for Automist in the development of 3 blocks of flats met the requirements of Standard 2.15.

<https://www.gov.scot/publications/building-standards-ministerial-view-automatic-fire-suppression-systems-ref-v2023-1/>

Downloads and more information

- Fire Performance test report to BS 8458
[Exova Warrington Automist BS 8458.pdf](#)
- Frequently asked questions
<https://plumis.co.uk/faqs#approver>
- Email technical@plumis.co.uk if you have any further questions