

BRE Global Assessment Report

**Assessment report for a Prevent low pressure water mist system
tested to BS 8489-7**

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1 Introduction

This assessment report presents an opinion on the fire performance of the Prevent Systems (hereafter referred to as Prevent) automatic low pressure water mist system in relation to compliance with fire test requirements contained in Clauses 8 f) and g) given in BS 8489-7 'Fixed fire protection systems – Industrial and commercial watermist systems – Part 7: Fire performance tests and requirements for watermist systems for the protection of low hazard occupancies', 2016.

Prevent completed a series of fire tests in March 2014 against the requirements of DD 8489-7: 2011¹. The results of this programme of work are presented in BRE Global report 293115.

Following publication of BS 8489-7: 2016² Prevent has requested BRE Global to provide an assessment report reviewing the performance of the Prevent automatic low pressure water mist system tested in 2014 and detailed in BRE Global report 293115 against the requirements of BS 8489-7: 2016. They have additionally requested that the performance of a stainless steel variant of the nozzle used in March 2014 also be considered as part of this assessment.



2 Supporting data

Two BRE Global test reports have been used as supporting data for this assessment, as given below.

1. BRE Global test report 293115 'Fire tests to DD 8489-7: 2011 Category III (Clauses 6.7, 6.8 and 6.9) with a Prevent Systems A/S low pressure water mist fire suppression system', dated 23 April 2014.
2. BRE Global test report P106045-1000 'Fire test to BS 8489-7 with a Prevent low pressure water mist system incorporating stainless steel Prev5exp nozzles', dated 19 January 2017.



5 Conclusion

On the basis of the information provided, in our opinion:

1. The Prevent automatic low pressure water mist system tested in 2014 (as reported in BRE Global report 293115) met the fire test requirements of Clauses 8 f) and g) of BS 8489-7: 2016.
2. There was no detrimental impact in the nozzle operation time or the suppression effectiveness of the stainless steel Prev5exp nozzle compared to the brass Prev5exp nozzle.