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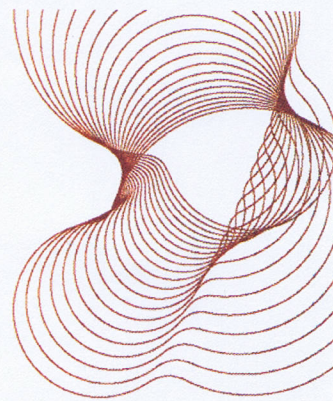
Fire testing of a low pressure water mist system to Annex A of British Standard Draft for Development 'Fixed fire protection systems – Residential and domestic watermist systems – Part 1: Code of practice for design and installation', DD 8458-1:2010 for Ultra Fire Group

Prepared for: Ultra Fire Group

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Client report number 266829

Protecting People, Property and the Planet



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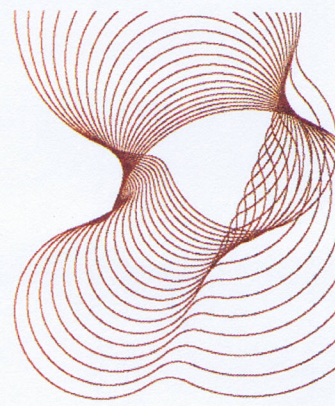
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Executive Summary

BRE Global was requested by Ultra Fire Group (hereafter referred to as Ultra) to undertake fire testing against the specifications of Annex A in Draft for Development British Standard BS DD 8458-1:2010 'Fixed fire protection systems – Residential and domestic watermist systems – Part 1: Code of practice for design and installation'. Annex A (normative) is titled 'Room fire test for watermist systems with automatic nozzles'. A series of 5 fire tests was conducted with a low pressure automatic water mist system for Ultra. This report details the findings from the experimental testing carried out.

Tests were carried out between the 14th December 2010 and the 20th December 2010 by BRE Global in the Burn Hall laboratory. The testing was witnessed by representatives of Ultra Fire Group and Prevent Systems AS (Norway).

The overall finding from the testing was that Ultra's automatic low pressure water mist system, incorporating 'Prev3v' nozzles with a 57 °C rated quick response frangible glass bulb, successfully achieved the fire test pass criteria specified in Table A.1 of DD 8458-1 Annex A.

BRE Global identified a number of areas, particularly with respect to the specified fire test pass/fail criteria, in Annex A of DD 8458-1 which would benefit from additional explanation or clarification. These will be brought to the attention of the BSI committee of which BRE Global is an active member.