Non-Compliant Sprinkler Systems for Residential and Domestic Premises

BAFSA is often asked to express a view on the use of sprinkler systems that do not comply with BS 9251. It has to be understood that there is no legal obligation to comply with this, or indeed any other standard unless such requirement is written into law – as for example in the Technical Handbooks to the Scottish Building Standards or where building control or an Approved Inspector are being asked to consider alternative forms of compliance with Approved Document 'B' of the Building Regulations 2010. That said, it is BAFSA's belief that only sprinkler systems designed and installed to BS 9251:2005 should be specified for residential and domestic premises as reliability and efficacy is a paramount issue for such occupancies.

There are available on the market a number of systems that purport to comply with BS 9251 or 'provide an equivalent degree of protection'. Such systems may be designed to other standards – or to no standards - but it is clear to BAFSA that they are unlikely to provide the necessary assurances and levels of protection of premises where life safety is the primary concern.

Such systems include 'low-cost sprinkler protection' where the sprinkler heads are installed on the domestic cold water feed, 'grey' water and rain water harvesting systems, pre-action or double-knock sprinkler systems and systems fed by pressurised gas cylinders.

It should also be noted that any sprinkler systems taking a feed from domestic appliances or where a WC or appliance is supplied by the sprinkler pipe network almost certainly does not comply with the water regulations.

BAFSA also takes the view that certain proprietary systems, actuated by heat or smoke sensors, providing water spray protection for kitchens and other spaces cannot be said to comply with BS 9251.

It should also be accepted that water mist systems do not and cannot comply with BS 9251. Such systems now have their own document in the form of a BS Draft for Development.: *Fixed fire protection systems – Residential and domestic watermist systems – BS DD 8458:2010 Part 1: Code of practice for design and installation.*

BAFSA's concerns for such non-compliant systems relates to fears that these lack the 130 years experience and constant refinement of 'conventional' sprinkler systems and may fail to operate as intended and thus call into question the usefulness and reliability of sprinkler systems in general.

Claims that systems or equipment comply with British Standards when they do not are a breach of the Trade Descriptions Act 1968 and also constitute an offence under the Sale of Goods Acts.

As is made clear in BAFSA Technical Guidance Document No 1, any systems that deviate in any significant way from BS 925:2005 must have the approval of the authority having jurisdiction. It would therefore be the responsibility of the ahj to ensure that an assessment of the proposed system is made to determine whether this will provide equivalent protection to a fully compliant BS9251 system.

Specifiers or those involved in providing guidance on the procurement of such non-standard systems (including the fire and rescue services) should also be aware that, at the time of writing, no third party certification company, such as FIRAS or BRE Certification Ltd, will allow a certificate to be issued for non compliant systems. There proposing the use of systems which do not comply with the appropriate standards may result in the assumption of liabilities should such systems be discovered to be unfit for the purpose for which they have been installed.