

CABINET

27 JANUARY 2009

FIRE SPRINKLER SYSTEMS

Portfolio Holder: Councillor Alan Jarrett, Finance

Report from: Deborah Upton, Assistant Director Housing and Corporate Services

Author: John Richardson, Senior Building Services Surveyor
Nick Anthony, Head of Property

Summary

This report has been prepared following Cabinet's request for further information at its meeting on 4 November 2008, where it considered the views of the Regeneration, Community and Culture Overview and Scrutiny Committee following their meeting on 21 October 2008.

1. Budget and Policy Framework

- 1.1 There is currently no formal policy in place on the use of fire sprinkler systems in the Council's property portfolio.
- 1.2 At present there is therefore no separately identifiable basis for the consideration of the use of fire sprinkler systems. Currently, the decision would be made on financial costs and in conjunction with Building Regulations applicable for each project.
- 1.3 There is no identified separate funding stream for fire sprinkler systems and their installation would form part of the overall capital funding allocated for each project.

2. Background

- 2.1 Cabinet considered a report regarding this matter at its meeting on 4 November 2008 and requested officers to evaluate the possibility of making the installation of fire sprinklers mandatory in all the Council's new buildings, with details of the possible savings and advice from Kent Fire and Rescue Service.

3. Options

- 3.1 The Council does not need to install fire sprinkler systems, as there is no legal requirement to do so. However there are very strong guidelines and recommendations as to their use and these should be taken into account.
- 3.2 As such, adopting guidance would be in accordance with published guidance and best practice within Local Authorities.

4. Advice and Analysis

- 4.1 Officers have looked into the matter in more detail and met with representatives of the Kent Fire and Rescue Service. As a result of the meeting officers are confident that the installation of fire sprinkler systems in all new schools should be mandatory. The overall cost can be as little as 2-3% of the total build cost. In addition if sprinklers are installed travel distances to fire exits are increased reducing the need for fire protected corridors, which can lead to associated savings in construction costs. In some instances it may be possible to effectively design out the additional cost of installing sprinklers. Furthermore the Council's insurers have indicated that building insurance premiums would reduce by 60% for schools with sprinklers. The resulting annual saving for a typical primary school would be £2,500. In addition they would remove the fire deductible requirement in such schools. In the event of a claim the Council are currently liable for up to £1,250,000. This liability to the Council would be removed in the event of fire damage where sprinkler systems are installed.
- 4.2 The fire authority would also strongly support the installation of sprinklers in any new residential buildings, which are to be occupied by vulnerable groups. Officers are therefore also recommending the installation of fire sprinkler systems in all new sheltered housing schemes and residential institutions, such as care homes, respite care homes and children's homes.
- 4.3 In terms of other new builds, officers are of the view that making the installation of fire sprinklers mandatory would be unduly prescriptive as in some cases the resources may be better directed. A current example is a proposed extension of an existing children's home where, following the meeting with the fire authority representatives, officers are investigating the possibility of retro-fitting sprinklers.
- 4.4 However, officers are of the view that the installation of fire sprinkler systems should properly be evaluated in all new builds and major refurbishments and this is reflected in the proposed revised guidance. It is proposed decisions are made on a case-by-case basis (and where appropriate in consultation with the Kent Fire & Rescue Service) according to the level of risk, feasibility and financial viability.
- 4.5 Finally, it is considered the Council should support the introduction of fire sprinkler systems in new buildings in consultation with the fire authority and again this is also reflected in the suggested guidance.
- 4.6 Applications for grant funding to cover up to 50% of the cost of installing fire sprinkler systems into residential buildings for vulnerable people can be made

to the Kent Fire & Rescue Service, which if successful would reduce the installation costs.

5. Financial and Legal Implications

5.1 The cost of installing a fire sprinkler system is estimated at around 2.5% of the capital budget, however it will vary depending on the design of the building. (It is anticipated that a new £4 million primary school will need an extra £100,000 to install a suitable fire sprinkler system).

5.2 There are revenue budget implications, as systems will need to be serviced and maintained on an annual basis in accordance with British Standards at estimated annual costs of upwards of £1,000 per system.

5.3 The legislation governing fire protection and escape from buildings includes:

- The Building Regulations Part B (amended 2007)
- The Regulatory Reform (Fire Safety) Order 2005

Government guidance relating to schools is contained in the DCSF Building Bulletin 100 – Design for fire safety in schools.

5.4 There have been campaigns and petitions, lobbying Government to make installation of fire sprinkler systems a mandatory requirement but this has not been achieved and as such there is no legal requirement to install fire sprinkler systems in England, in either existing or new buildings.

5.5 Notably this is not the case in Scotland where under Scottish Building Regulations there is a mandatory requirement to install fire sprinkler systems in all new or converted buildings which are high rise blocks of flats, residential care buildings or sheltered housing complexes.

5.6 In England, fire sprinkler systems are recommended in schools on a risk assessment basis as part of Building Bulletin 100 or designed in conjunction with the Building Regulations for commercial buildings.

6. Recommendation

6.1 The Cabinet is asked to adopt the fire sprinkler systems guidance, as set out in appendix A to the report, as guidance within the Council's Property Strategy.

7. Suggested reason for decision

7.1 The benefits of undertaking risk assessments and where appropriate installing fire sprinkler systems in all new builds and major refurbishments would be in accordance with published guidance and best practice within Local Authorities.

Background Documents

- Member's Item – The Use of Sprinklers in Public Buildings – report to Regeneration and Development Overview & Scrutiny Committee, 24 July 2007
- Report to Regeneration, Community and Culture Overview and Scrutiny Committee 21 October 2008
- Report to Cabinet 4 November 2008
- BB100 Design for Fire Safety in Schools
- Building Regulations approved document B

Contact for further details:

John Richardson, Senior Building Services Surveyor
Telephone: 01634 331714
Email: john.richardson@medway.gov.uk

Fire Sprinkler Systems - Guidance to form part of the Council's Property Strategy

In respect of its property portfolio it is Council policy to:

1. Fit fire sprinkler systems in all new schools, new sheltered housing schemes and new residential institutions.
2. Consider fitting fire sprinkler systems in all other new buildings and major refurbishments. A decision to be taken on the results of the risk assessment, feasibility and financial viability.
3. Support the installation of fire sprinkler systems in new buildings and consult with Kent Fire & Rescue Service regarding their appropriate introduction.