



ASFP Technical Guidance Document 13

**Code of practice for the over-cladding of
reactive coatings when used as fire
protection to steel structural sections**

A similar text was previously published on 16 June 2007

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Association for Specialist Fire Protection (ASFP)

The Association was formed in 1976, and currently represents the majority of UK contractors and manufacturers of specialist fire protection products, with associate members representing regulatory, certification, testing and consulting bodies.

ASFP seeks to increase awareness and understanding of the nature of fire and the various forms, functions and benefits provided by passive fire protection.

It is willing to make available its specialist knowledge on all aspects of fire protection and can assist specifiers and main contractors in identifying products suitable for specific requirements, both in the UK and overseas.

Although care has been taken to ensure, to the best of our knowledge, that all data and information contained herein is accurate to the extent that it relates to either matters of fact or accepted practice or matters of opinion at the time of publication, the Association for Specialist Fire Protection assumes no responsibility for any errors in or misinterpretations of such data and/or information or any loss or damage arising from or related to its use.

Compliance with this ASFP Technical Guidance Note does not of itself confer immunity from legal obligation.

FIRE AND YOUR LEGAL LIABILITY

2008 produced the highest UK peace time fire losses of all time, rising over the previous year by 16% to a record £1.3bn. That's why we must all play our part.

Why is this of relevance to me?

If you are involved in provision of a fire protection package, at any level, then you share liability for its usefulness and its operation when it's needed in fire, and that liability will still be there in the event of a court case.

I place the order; it is not my responsibility to install the works!

If it is your responsibility to specify the materials and/or appoint the installation contractor, it is also your responsibility to ensure that they can prove competency for the fire protection materials used, or the works to be carried out. It's no longer simply a duty of care or voluntary – it's a legal obligation.

If you knowingly ignore advice that leads to a failure in the fire performance of any element of installed fire protection within a building, then you are likely to be found to be just as culpable as the deficient installer.

You share liability for the provision of information required under Building Regulation 16B that tells the user of the building about the fire prevention measures provided in the building. Otherwise, the user cannot make an effective risk assessment under the Regulatory Reform (Fire Safety) Order 2005.

What is expected of me?

In the event of fire, and deaths, a court will want to know how every fire protection system was selected; the basis for selection of the installer, whether adequate time was provided for its installation, and whether there was adequate liaison between the different parties to ensure it was installed correctly. No ifs, no buts – it's all contained in the Construction, Design and Management Regulations 2007.

The CDM 2007 regulations, enforced by Health and Safety Executive concentrate on managing the risk, and the health and safety of all those who build, those that use the building, those who maintain it and those that demolish it – cradle to grave.

Be aware – the time to consider the above is before the event, not after it!



OVER-CLADDING OF REACTIVE COATINGS ON STRUCTURAL STEEL SECTIONS

A similar text was previously published on 16 June 2007

The ASFP includes member companies who provide & apply fire resisting boards, cementitious sprays, & decorative intumescent reactive coatings to structural steelwork in buildings. The intention is to ensure that adequate resistance to fire attack is available for the steel sections, as required by Approved Document B in support of the Building Regulations.

In the case of reactive coatings, the fire resistance is provided when the specialist coating foams up to provide a protective char to fire exposure. If the space for foaming up is limited, then the effect can be significant.

The ASFP and specialist Task Group 1 (Intumescent) has agreed a statement so that unintended limitations to the available fire resistance can be avoided, when cladding or other decorative or protection systems are added to steel beams and columns.

QUESTION - *Can external cladding systems be close fitted to structural steel surfaces which are protected from fire by intumescent reactive coatings?*

ASFP STATEMENT

Where cladding systems are to be applied over an intumescent coating used for protecting steel sections from fire, in general, a minimum gap of 50 times the dry film thickness of the reactive coating is recommended to allow adequate expansion of the reactive coating in fire. This guidance applies to the gap between the cladding and the flat surfaces of the protected steel section, as well as to flange tips, unless specific fire test data proves otherwise. Gap sizes may be reduced where the reactive coating manufacturer has specific fire test evidence to justify the reduction for the appropriate period of fire protection.

Where the cladding is mounted onto continuous linear fixings/spacers, made of timber or metal, the spacers should be considered as a part of the main steel section and duly protected from fire, unless other supporting fire test evidence can be provided to justify alternative action.

The ASFP recognises that this may not always be welcome news, but it has a legal Duty of Care to provide this information, since it may affect the appropriate use of cladding products intended for decorative or mechanical protection of the steelwork, in conjunction with steelwork protected from fire by reactive coatings.

If any queries arise, please contact ASFP for further discussion. Alternatively take discussion with BRE Fire division [tel 0192 664000] or Bodycote Warringtonfire [tel 01925 655116]

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