



BOLT CAPS **providing fire protection for bolted connections**

The Best Way to Protect Bolted Connections
and the only way to be sure

There is a recognised danger that where the steel frame is coated with a wet applied intumescent paint, the bolt and nut protection will not easily be validated. Furthermore there is also a danger that the bolt and nut surfaces may not be prepared in accordance with specific standards compromising the adhesion of the fire protection to the surface of the nut and bolts

The Background:

It has additionally been demonstrated that theoretical failure of the bolts can take place at lower temperatures than the structural elements they are connecting, questioning the viability of providing equivalent protection to that on the **beams and columns** (studies and fire tests carried out by The Steel Construction Institute). Evidence shows that breakdown occurs through heat shock of the high tensile material which can result in **premature failure of the connection**.

Ongoing research involving fire engineers, material technologists, manufacturers and applicators into a method of applying an enhanced level of protection to the bolts, whilst seeking to keep within the tight cost constraints typical in the construction market place has led to **the fire bolt cap solution**.

During independent testing to BS and UL standards, the Bolt cap has demonstrated it can provide sufficient external protection to ensure the bolts remain within their limiting temperature for a period of **120minutes**, addressing the growing need in multi-storey construction to meet the increasing degree of performance demanded for **Eurocode** structural fire engineering.



The difference between a wet coated system and a bolt cap system after a fire.



Our Fire Bolt Caps provide:

- Fully fire tested to BS476 part 20
- Easy to validate. If it's not there it's not protected
- An easily specified solution to critical elements of the steel structure
- A cost effective solution that can match any like system with full integrity and verification
- Very easy to handle and very quick to install
- Approved and base line specified by major architects and specifiers
- A retrofit solution to existing buildings without wet trades
- Enhanced fire safety
- Aesthetically pleasing finish for exposed steelwork
- Available in many different colours on the RAL scale
- Provides enhanced corrosion protection
- Shown to outperform alternative fire protection systems
- Quality controlled to ISO 9001:2000 and ISO 14001:2004

If it's not on it's not protected.

