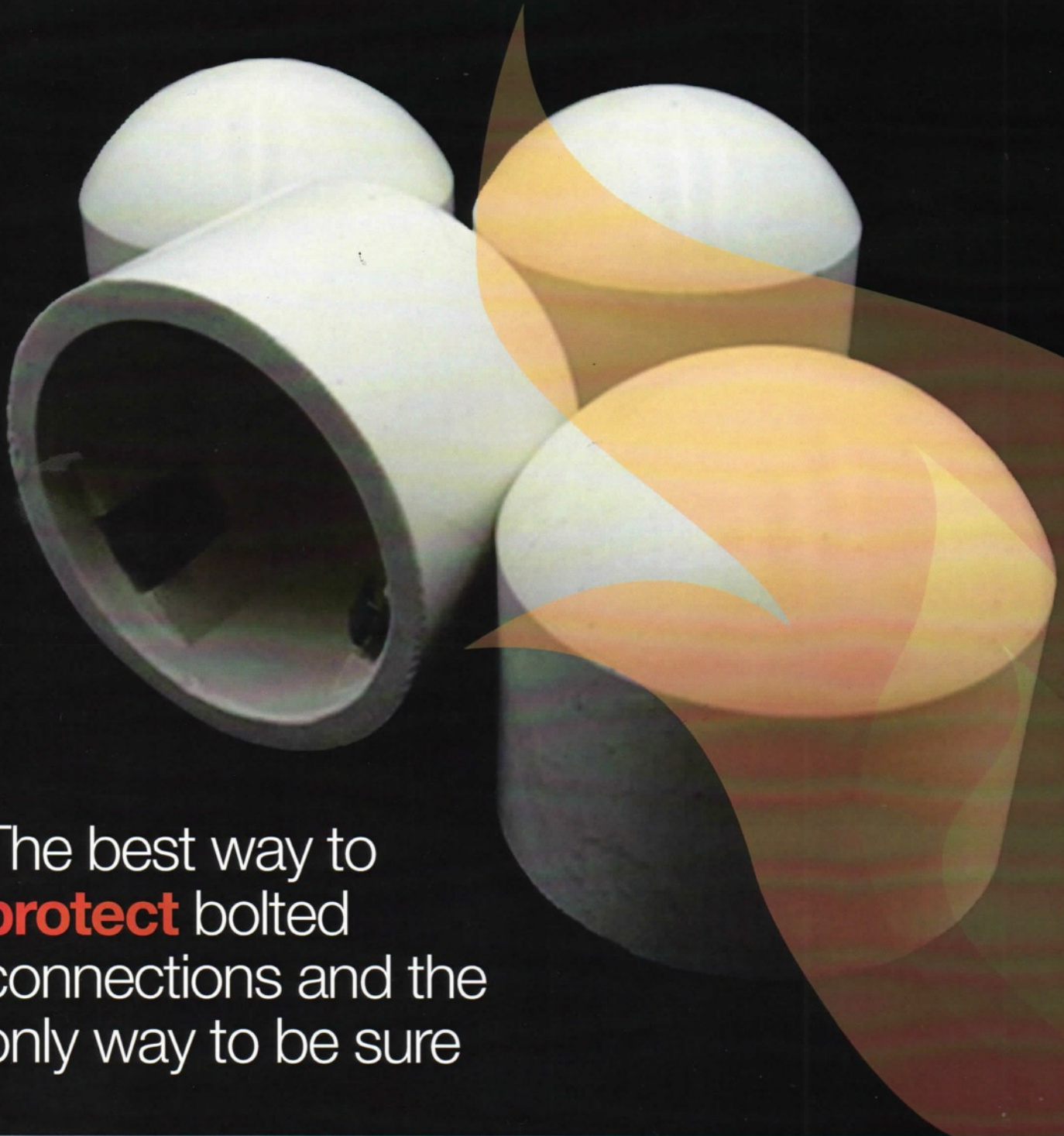




Typhoon Performance
Products Ltd.

TAPON
BOLT CAPS

providers of aesthetic fire protection for bolted connections



The best way to
protect bolted
connections and the
only way to be sure

Typhoon Performance Products Limited, PTMC, Marsh Lane, Preston, PR1 8QU, Lancs.

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There are presently no definitive standards for the protection of structural connections. It can be assumed that where the steel frame is coated with wet applied intumescent materials, the bolts rarely receive protection that is easily quantified. Furthermore, the paint is usually applied to untreated surfaces, begging the question of sufficient adhesion.



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 testing, the Bolt Cap is seen to provide sufficient external protection to ensure the bolts remain within their limiting temperature for a period of **180 minutes** addressing the growing need in multi-storey construction to meet the increasing degree of performance demanded for **Eurocode** structural fire engineering.



Our Fire Bolt Caps Provide

- 🔥 A level of fire protection to structural bolts unachievable by present methods.
- 🔥 A Quality Controlled product that can be visually inspected.
- 🔥 An aesthetically pleasing finish to exposed steelwork.
- 🔥 Provides colour options as it can be supplied in any specified colour.
- 🔥 A cost effective solution.
- 🔥 A sprung friction grip connection which will expand with the heating bolt.
- 🔥 A dry easily handled and transportable product.
- 🔥 Provides simple-to-fix solution, which fits the fire stopping package.
- 🔥 An easily specified solution to a critical element of the structure, previously unaddressed.
- 🔥 Enhanced fire safety.
- 🔥 Provides enhanced corrosion protection.



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