



TYPHOON BOLT CAPS - TECHNICAL DATA SHEET

1. DESCRIPTION:

Bolt Caps are designed to provide protection to the bolted connections in structural steel frames in the event of fire, and can provide up to three hours fire protection, depending on test protocol used. Bolt Caps are simply clipped on to bolt heads and nuts

Bolt caps are manufactured from a proprietary compound TPL MS 1500HL.

2. PHYSICAL PROPERTIES:

Bolt Caps are precision moulded under pressure from the proprietary compound which incorporates a unique formulation developed from research in the advanced materials industry which imparts excellent insulating and mechanical properties. Available in all commonly used structural bolt sizes, bolt caps are produced in ISO 9002 accredited UK factories in accordance with all US, EU, UK legislation. Precise moulding, consistent high quality and fine tolerances mean fit and finish are of the highest order.

3. FIRE PERFORMANCE:

Tests carried out in the UL labs in the USA have indicated that caps made to TPL MS 1500HL are adequate for the purpose of providing up to three hours protection in cellulosic fires, and are adequate for the purpose of providing up to two hours protection in hydrocarbon or jet fires.

4. MATERIAL SPECIFICATION:

Bolt caps are manufactured from compounds that are defined by materials specification TPL MS 1500HL and the manufacture takes place in the UK. Specifications cannot be changed without further testing. The raw materials used are all sourced within the EU in accordance with EU and UK legislation and with regards to Article 57 of Regulation No 1907/2006 EC ("the REACH Regulation") Candidate List of 151 (up-dated 16 December 2013) Substances of Very High Concern (SVHC's), that the raw material suppliers have determined that these substances are not present within their manufacturing process/product supplied to ourselves and hence are not in either of the bolt cap variants.

Also with regard to Heavy Metals: Heavy metals Cadmium (Cd), Mercury (Hg), Lead (Pb), Chromium (Cr(VI)), PBB or PBDE are not intentionally used in the manufacture of these products. Raw materials used in the manufacture are reviewed with the suppliers for the continuance of compliance to European Directive 2011/65/EU Restriction of Hazardous Substances (RoHS 2) it is therefore expected that the total heavy metal concentrations that may be present are therefore below the thresholds currently imposed by this regulation.

4. DURABILITY:

Polymer compounds are known for their durability. Independent external exposure tests in the Middle East and accelerated weathering tests in a profession cabinet confirm there is no loss of performance when subject to severe weather conditions.

5. SPECIFICATION:

Tap On Bolt Caps can be incorporated into specifications wherever fire protection to bolts is required.

Fire resisting bolt caps:

Manufacturer: Typhoon Performance Products Limited, PTMC, Marsh Lane, Preston, PR1 8UQ.

Web Site: www.boltcap.com

Product references: **Tapon Bolt Caps.**

Colour: white

Bolt Caps enable bolts to have guaranteed fire protection, installed quickly and economically with the added advantage of excellent, consistent aesthetic appearance.