

# furse

Summer newsletter

01|2017

furse 



- 
- 04-05 Product updates
  - 06-07 Innovation highlights
  - 08-09 Technical solutions
  - 10-11 Company



06

Advances in surge protection



Manufacturing advances



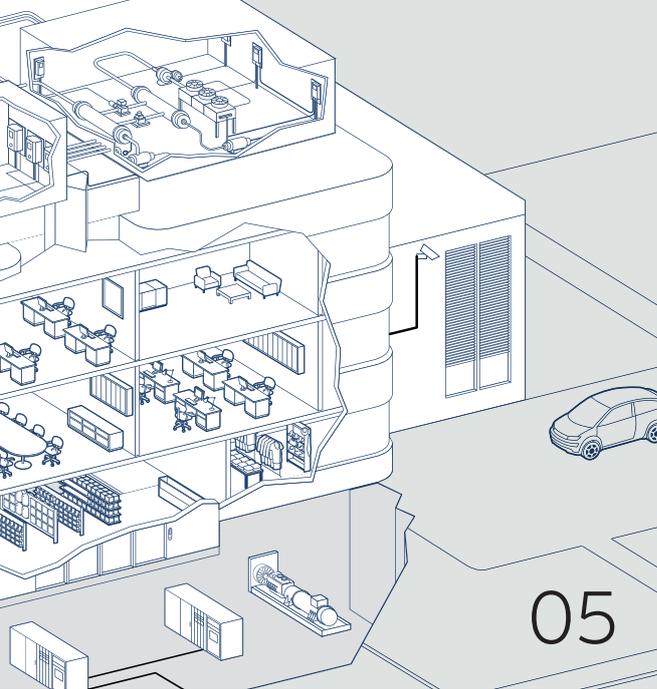
04

Trapezoidal cladding solutions



Technical support and design





An overview to earthing and lightning protection

**Product updates**

- 04 Trapezoidal cladding solutions
- 05 Aluminium and copper tape product update
- 05 An overview to earthing & lightning protection

**Innovation highlights**

- 06 Advances in surge protection
- 06 Lightning and surge protection for sustainable energy and smart home applications
- 07 Furse provides fast response for Bristol Water SCADA system

**Technical solutions**

- 08 Technical support and design
- 09 Manufacturing advances

**Company**

- 10 Project profile
- 11 Meet the team



Project profile



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 PRODUCT FOCUS - AIR TERMINATION

# Solutions for trapezoidal cladding systems

Today many buildings use trapezoidal cladding systems for their roofs and exterior elevations. Where this cladding is punctured by a lightning strike, the building and its contents below may be at significant risk of damage.

- 01 Trapezoidal holdfast with square tape clamp
- 02 Trapezoidal holdfast with conductor clip

Repair costs to the roof and contents, as well as any unnecessary downtime incurred, would be considered unacceptable to companies and public service institutions.

Historically protecting metallic roofs against lightning has presented a challenge for lightning protection designers and installers. As the majority of trapezoidal cladding systems do not meet the minimum thickness requirements for use as an air termination system.

These challenges can be overcome by installing the new Furse range of holdfast assemblies specifically designed to help protect trapezoidal cladding systems.

[SEE MORE](#)

This new solution enables secure connection of air rods and conductors on to trapezoidal cladding systems using an innovative holdfast base and industry standard stitching screws.



## PRODUCT UPDATE - CONDUCTORS

# Furse aluminium and copper tape update

Furse bare aluminium and bare copper tape now includes our renowned Furse brand stamp - providing a further assurance of quality to our customers.



Branded part numbers are listed in the table below:

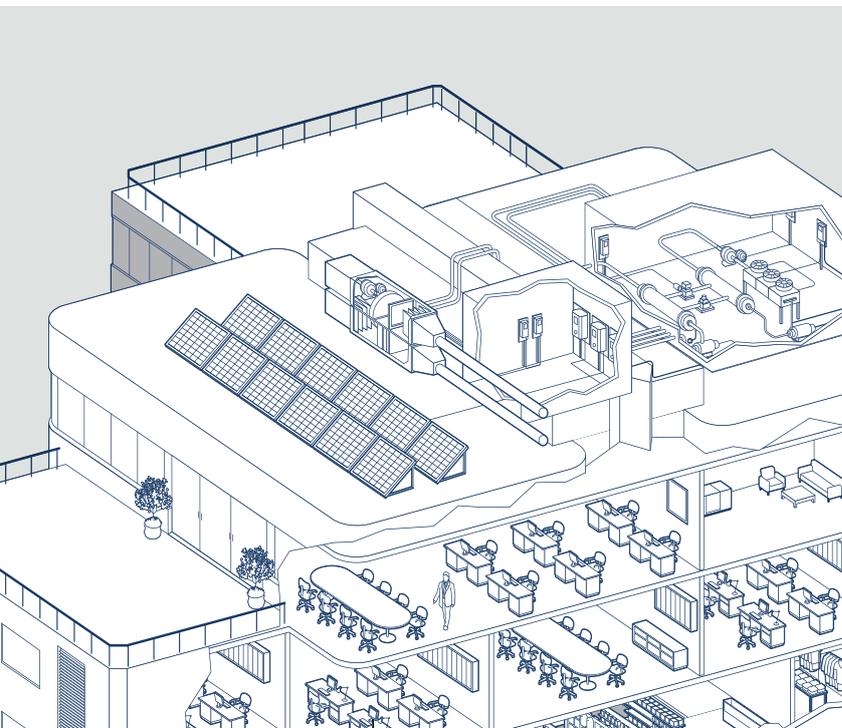
### Bare Aluminium Tape

| Part No.  | GID Code        | Material      | Size (mm)  |
|-----------|-----------------|---------------|------------|
| TA005     | 7TCA083040R0005 | Aluminium     | 12.5 x 1.5 |
| TA020     | 7TCA083040R0006 | Aluminium     | 20 x 3     |
| TA030     | 7TCA083040R0011 | Aluminium     | 25 x 3     |
| TA040     | 7TCA083040R0020 | Aluminium     | 25 x 6     |
| TA042     | 7TCA083040R0022 | Aluminium     | 30 x 3     |
| TA068     | 7TCA083040R0023 | Aluminium     | 40 x 6     |
| TA068/025 | 7TCA083040R0024 | Aluminium     | 40 x 6     |
| TA080     | 7TCA083040R0030 | Aluminium     | 50 x 6     |
| TC005     | 7TCA083010R0047 | Copper        | 12.5 x 1.5 |
| TC010     | 7TCA083010R0051 | Copper        | 12.5 x 3   |
| TC015     | 7TCA083010R0054 | Copper        | 20 x 1.5   |
| TC239     | 7TCA083030R0063 | Tinned Copper | 30 x 2     |

Please call 0333 999 9900 for further information. Or email [enquiry@furse.com](mailto:enquiry@furse.com)

## ANIMATED VIDEO

# Our Total Solution overview



The ABB Furse 'Total Solution' to earthing, lightning and electronic systems protection delivers long lasting, reliable protection of a structure, its electronic systems and personnel within it.

Find out why it is essential in the control of hazardous, potentially life threatening lightning strikes and transient overvoltages.

[CLICK HERE](#) to watch the video.

# Leading the way with surge protection

For over a decade specifiers around the world have been using Furse ESP 240/415 M1 protectors now, to safeguard mains power supplies. Further innovations enhance the protection levels.

The ABB Furse technical design team has taken another step forward in innovation to enhance the ESP 240/415 M1. The ESP 240/415 M1 are one of the most advanced surge protectors in the market today. The M1 Series now provides customers, users and specifiers with all of the existing benefits of the original ESP M1 Series, with the addition of the latest, most innovative technology in transient overvoltage protection applied.

[SEE MORE](#)

Now the new advanced ESP 240/415 M1 Series offers:

- Transient discriminative technology to ensure the industry's best voltage protection level
- Safer disconnection from faulty supplies when tested to the latest IEC/EN 61643 standards
- Increased direct surge current (10/350 waveform) ratings (phase and neutral modes to earth).



# Lightning and surge protection for sustainable energy & smart home applications

Over recent years a 'quiet revolution' has taken place in UK homes, with more than 500,000 households now enjoying the clean energy and financial benefits of solar panels – photovoltaics (PV).

With the photovoltaic industry currently installing approximately 1,900 new schemes on average every week, the UK sustainable energy homes market is set to continue expanding. The introduction of these sustainable energy and smart home automation technologies not only requires an upgrade of domestic electrical infrastructure, but - just as importantly - the vital necessity of ensuring comprehensive lightning protection and surge protection is in place.



Our unrivalled range of electronic systems protection (ESP) solutions such as ESP PV and ESP WT series are specifically designed and manufactured to address the individual protection requirements of the equipment they serve.

[SEE MORE](#)



# Furse provides fast response for Bristol Water SCADA system

Furse provided its latest state-of-the-art surge protection devices to overcome intermittent issues at a Bristol Water site.

A project to improve the SCADAs (Supervisory Control and Data Acquisition) system at a water treatment works experienced a problem when on-site signals dropped out intermittently with no explanation. Any unexplained loss of communication on a site's SCADA system has the potential to impact continuity of supply and water quality – so it was vital to resolve the issue quickly.

Furse identified that the issue was caused by different earthing conditions along the lengthy signal cable between nodes and the control room. The difference in conditions effectively blocked communications through current leakage, meaning that a signal would be sent at 6V, but the receiver at the other end of the cable might only read 1-2V.

Joe Ellwood, Product Marketing Manager - Surge Protection Devices explains, “Once the problem was identified, Software Links



contacted us, as experts in the field of lightning and surge protection. Our experienced technical team were able to quickly select the correct solution from our comprehensive portfolio of products and successfully prevent the problem from reoccurring.”

[SEE MORE](#)



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## TECHNICAL SOLUTIONS

# Technical support and design

From our own designed and manufactured products, through to risk assessment software and systems design advice, Furse offer a renowned Total Solution to all your earthing and lightning protection needs.

—  
01 Soil resistivity surveys

—  
02 Analysis & earthing design

—  
03 Earth resistance testing

### Expertise

Specialist advice from our fully qualified technical engineers - focusing on your earthing & lightning protection issues and concerns.

### Experience

Experience to provide the optimum design - one that doesn't use more material than is necessary, saving you money.

### Knowledge

Our knowledge of the latest products ensures a tailored design that can be installed using the most appropriate and up-to-date products.

### Lightning protection solutions

- Team of experienced engineers
- Engineered designs to meet client specifications
- Risk assessment complying to latest standards

### Soil resistivity surveys

- Experienced surveyors
- Key to creating effective earthing system
- Multiple readings taken to ensure safe and accurate designs

### Analysis & earthing design

- Latest CDEGS software to optimise designs
- Range of detailed reports to clients requirements

### Earth resistance testing

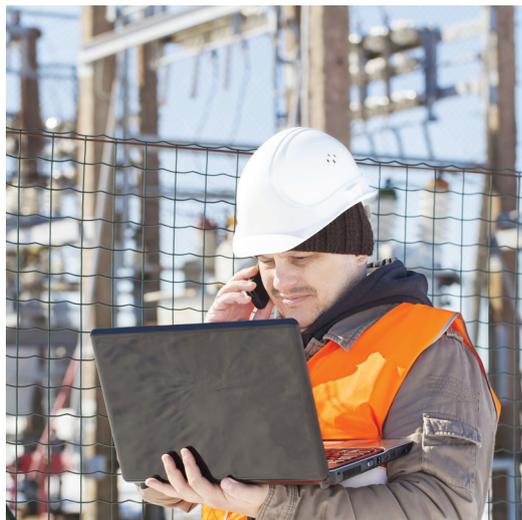
- Verification of earthing design through measurement
- Experienced team of engineers with full understanding of electrode testing

[SEE MORE](#)

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## SITE NEWS - NOTTINGHAM

# Manufacturing advances

Furse are proud to announce their investment in a brand new fully automated continuous rotary copper extruder at our manufacturing facility in Nottingham.

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01 Ian Funnell ABB's UK Managing Director meets the team and visits the new copper extruder at our Nottingham facility.

The new HC2200 copper extruder with its advanced technology, touch screen operating interface and patented vertical axis tooling positioning system gives excellent control over the process position and relative geometry enabling immediate process adjustment for faster running, longer tooling life, longer extrusion wheel life and faster set up times whilst all the time reducing flash.

Also as health and safety is always at the forefront at ABB, the copper extruder incorporates many new safety features including safety interlocks and protected points of entry, all meeting current European safety standards. Additionally it reduces environmental impact by minimising waste and scrap levels, conserving water and power whilst using a heat recovery system.

Mohinder Singh, ABB Local Product Group Manager explains "We have invested close to £1 million on a new copper extrusion machine

which has almost doubled our production rate since it became fully operational this year, giving us the capability to produce various geometries from flat conductors to custom profiles."

—  
"This investment will allow us to meet the growing demand we have experienced as well as work with our customers on unique applications."

**Mohinder Singh**, ABB Local Product Group Manager

This along with our wealth of knowledge and experience assures now more than ever we will deliver a quality product with a superior finish and be able to fulfill customer orders promptly and in a more cost efficient way.

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PROJECT PROFILE

# Making a difference

- 01 Bank of England, UK
- 02 Channel Tunnel Rail Link, UK
- 03 Canary Wharf, London, UK
- 04 Circle Line, Mass Rapid Transit System, Singapore
- 05 Heathrow Airport, London, UK
- 06 Kuala Lumpur Stock Exchange, Malaysia
- 07 Manchester United Training Ground, UK
- 08 Financial Towers, Bahrain

Our Total Solution approach, delivering innovative, high quality products supported by intelligent, ensures technical support, makes Furse the brand of choice for many projects, in many markets, worldwide. We work closely with our customers to deliver the best possible solution for earthing & lightning protection.

In over 120 years since its inception, the Furse name continues to be synonymous with innovative engineering. “Our approach to the market is to provide a total solution for earthing and lightning protection”, says Gary Blackshaw, Global Business Development Manager. “Of course we offer best-in-class products, which can be found in many prestigious projects in the UK and globally.”

“We truly make a difference with customers by being a solution provider who can support our customers throughout the entire project lifecycle, including risk assessment and the systems design process.”

**Gary Blackshaw**, Global Business Development Manager

We believe in sharing our knowledge, so work closely with our customers so they are

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able to make informed decisions on the best earthing an lightning protection solutions to suit their needs.

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COMPANY

# Meet the sales & marketing team



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