

A close-up photograph of a metal cable management tray. The word 'SWIFTS' is embossed in a bold, sans-serif font on the surface of the tray. The tray has a series of rectangular slots along its length.

# Fire safety and cable management

Since the Grenfell disaster and the public debate and change in regulatory landscape that followed, the most common question asked of Legrand's Cable Management team has been

“What is the fire rating of your products?”

The simple answer – both then and now – is that there is no requirement or product standard that manufacturers of cable management systems and supports can test their products to or against.

There are several reasons we believe there is no standard test for metallic cable management, one of which being that steel is classed by the construction industry as 'A1', non-combustible and does not contribute to the spread of fire. Additionally, there have been a number of high profile fires over the years, with coroners only making recommendations which have led to standards being changed in regards to non-metallic products and supports. Harrow Court, Stevenage, in 2005, where cable collapsed due to the use of plastic cable clips, led to the introduction of BS 8519:2010. A 2010 fire at Shirley Towers, Southampton, saw the failure of the non-metallic trunking system and the premature collapse of wiring system contained within. This was instrumental to the introduction of then amendment 3 of the 17th edition of the IET wiring regulations BS 7671. Both BS 8519 and BS 7671 require the use of metallic/non-combustible supports for cables. This suggests that metallic cable management systems have performed as expected and neither failed or

caused danger to life during past fire events. However, even though there is no recognised British standard to test the performance of metallic cable management systems to in the event of a fire, asset owners and consultants are regularly requesting evidential proof from contractors regarding the fire rating of the cable management systems they are planning to install.

Legrand has therefore looked outside the UK to identify a test/standard that would allow us to offer a declaration of performance for our systems giving a defined time they would maintain their integrity in a fire event. Additionally, Legrand has BIM models for its products, helping our customers meet their obligations with regard to BS 8644-1:2022.

Our search for a suitable European standard proved fruitless proving the UK is not alone in not having a standard to fire test cable management systems to. Without the option to test to an existing standard, we decided to use the German standard for circuit integrity cabling, DIN 4102-12, as this would allow us to test our cable management as part of a system for up to 90 minutes. The test uses a fire curve which follows the internationally agreed norm for the temperature rise in commercial/residential buildings during a fire over a 90 minute period, eventually reaching a temperature of 1,000°C at the conclusion of the test.

The installation of Legrand's Swifts and Salamandre ranges of tray, ladder and trunking all performed as expected and withstood collapse for the duration of the test.

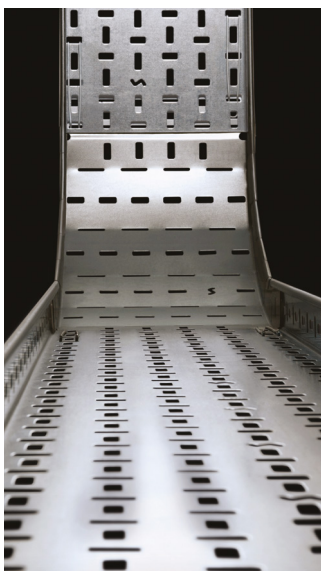
# Conclusion

When designing cable management pathways within buildings in the UK, it is of course paramount to follow the methodology and/or directions of the standards. Customers that require additional evidential proof of performance in the event of a fire can now count on Legrand's new declarations of performance stating the products have been tested and withstood collapse for the full 90 minutes.



## Where to Learn More

When it comes to fire safety, we know that continuous education on the latest legislation and installation requirements is something our customers are keen to obtain. At Legrand, our collaborative approach drives us to continue to develop approved CPDs. Available for free, all CPDs can be carried out at one of Legrand's offices, at client premises across the UK and Ireland, or online, with Teams as a preferred method. Fire safety CPDs include:



### Creating a Cable Pathway

Explaining the updates of BS 7671:2018 IET Wiring Regulations 18th Edition, this CPD focuses on escape routes and premature collapse.

### Fire stopping: Breaking the cycle of non-compliance

Providing discussion around the importance and relevance of fire stopping cable pathways, this CPD advises on issues relating to cable moves, additions and changes. It also demonstrates how to achieve successful fire protection and containment while breaking the cycle of non-conformance.

### Premature collapse and fire rated containment

This CPD explores the current UK standards landscape that applies to Cable Management Systems which don't currently require any fire testing, and offers an alternative standard as a solution to those looking for reassurance that their installations meet the requirements of both BS7671:2019 and BS8519:2020.



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