UL Solutions fire safety

European Union and the United Kingdom



Safety. Science. Transformation.™

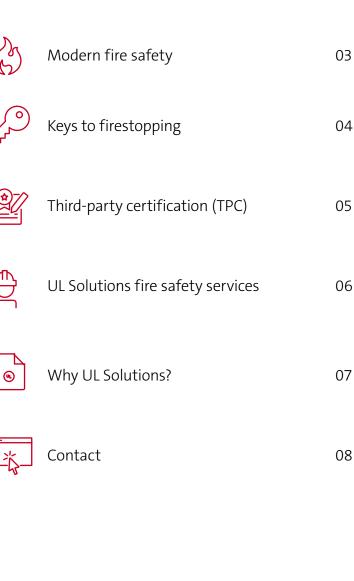
Introduction

Building and construction manufacturers selling products in Europe and internationally need a thorough understanding of complex issues, including fire code requirements and required certifications, to successfully and efficiently bring their products to market. UL Solutions can help.

As a global safety science leader with decades of dedicated experience in fire protection, UL Solutions is uniquely qualified to assist European manufacturers, contractors, installers, building owners and public safety stakeholders in their work in reducing fire risks, strengthening protections and bringing CE, UKCA and UKNI marked products to market. Our offerings cover the life cycle of a building, including testing and certification for manufactured products and system services. At UL Solutions, we can help you successfully bring your risk reduction and life safety products to market and differentiate your offerings from the competition.



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Modern fire safety

As recent fire disasters — such as the 2017 Grenfell Tower fire in London — have shown, modern fire codes and regulations are not always enough to protect life and property. Faults in existing construction and fire safety systems have led to the recent introduction of competence systems for working groups in all phases of construction, increasingly rigorous fire protection standards and other refinements.

Complementing these improvements, testing and certification have grown in importance for manufacturers and distributors of firestopping products and systems. The independent third-party certification (TPC) of products, services and management systems helps local and export suppliers improve quality and help ensure compliance with ever-evolving regulations. At UL Solutions, we can help you achieve market continuity in the European Union and the United Kingdom for your products with CE, UKNI, UL-EU and UKCA markings. We can help you demonstrate compliance with National House Building Council (NHBC) standards, the Technical Building Rules in Germany and similar European regulations.

At UL Solutions, we have the flexibility to use existing test methods or create customized test procedures to evaluate new and innovative products and construction designs as well as various fire suppression techniques. The test data can identify specific levels of fire risk, evaluate possible solutions and substantiate performance acceptance. The testing and certification of your products can help improve the accuracy of residential and commercial building safety. This accuracy helps you manage risks more effectively and make informed decisions to ensure business continuity.

Keys to firestopping

A crucial part of a building's fire prevention measures is firestopping. The first task of firestopping is sealing holes made in fire compartment walls and floors by service penetrations. Ventilation systems, electrical, communication and plumbing services can all cause breaches in compartment lines through which fire can spread. Uncontrolled fire spread can lead to loss of life and property. For a fire containment strategy to work, compartmentation and fire barrier management must be implemented correctly. Other keys to firestopping include competence and quality information. Accountable persons — designers, managers, manufacturers, owners, fire safety officials and others — must demonstrate skill, aptitude, knowledge and experience in their roles. Additionally, fire protection information must be reliable and quickly accessible.

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The complexity of structures, materials and building contents is always increasing. You need a precise understanding of the risks you face in the event of a fire and catastrophic loss. To mitigate those risks, keep in mind this checklist of firestopping tips in mind:



Plan firestopping from the beginning of a project



Engage a team exhibiting competence, cooperation and coordination



Submit detailed fire safety plans to the building safety regulator



Use TPC to select products and solutions with the best evidence of performance



Provide a controlled example of how each firestop should be installed



Engage specialist contractors to complete firestopping work



Back up contractor's work with third-party quality control checks



After completion, submit all information related to fire and structural safety



Hire a competent building safety manager

The <u>Association of Specialist Fire Protection (ASFP) Red Book</u> is a well-respected source for considerations relating to the process of firestop design.

Third-party certification (TPC)

There is no single solution to improve the delivery of fire safety in the construction process. However, one area that has international recognition for helping improve quality and compliance is that of independent TPC of products, services and management systems.



In the absence of regulation and stringent enforcement, voluntary TPC of firestopping systems is a useful differentiator for those who purchase and then depend on products or services to be fit for purpose. TPC also offers strong support to the due diligence process for those procuring firestopping products or services. TPC is a demonstration that the product has complied with applicable requirements.



As a global company, UL Solutions appreciates the subtleties of different geographic markets. The common element across those markets is the value placed on independent TPC. That value isn't just for the manufacturer or service provider; the added value TPC offers is also for those purchasing from a complicated and sometimes confusing marketplace.



With products or services that have a life safety function or performance requirement, TPC from an independent expert body such as UL Solutions help give the buyer confidence in their purchases. Someone other than the user, manufacturer or service provider has tested and certified the product or service. TPC evaluates whether the product or service conforms to an accepted set of requirements.

UL Solutions fire safety services

Fire safety services should encompass all aspects of prevention and protection. At UL Solutions, our authoritative fire and security testing and certification capabilities include:

- <u>Door hardware testing</u> We conduct performance testing of door hardware and door sets to widely recognized European Standards (EN) and other standards.
- Fire resistance products, systems and designs We provide evidence that products and systems meet regulatory and market requirements.
- <u>Structural steel fire protection testing and certification</u> We help you demonstrate European compliance for the fire protection attributes of structural steel for buildings and petrochemical installations.
- <u>Gas and smoke detector testing and certification</u> –
 We help you demonstrate regulatory compliance and efficiently bring your fire, smoke and gas devices to market.
- Firestopping, joint protection and perimeter fire containment <u>testing</u> – We help you demonstrate compliance, performance, reliability, security, durability and sustainability of fire-resistant rated designs.
- <u>Fire alarm control equipment testing</u> Our services help ensure fire alarm control technologies are interoperable and perform reliably.

Fire safety has been at the core of UL Solutions mission since its founding in 1894 when we conducted our first test, proving that a certain insulation was non combustible. Ten years later, in 1904, we published our first Standard for Safety: Tin Clad Fire Doors. More than a century has since passed, but UL Solutions mission to promote safer living and working environments for people remains constant and unchanged.





Why UL Solutions?

At UL Solutions, our reach is worldwide. Our employees are based in more than 40 countries, and our customers are in more than 100 nations. Our European laboratories include two in the <u>United Kingdom</u> (Blockley and Warrington) and one in <u>Germany</u> (Rosenheim), but our laboratories are found all over the world, from Northbrook, Illinois, to Shenzhen, China. UL Solutions software is used by more than 10,000 organizations across nearly every industry. The UL Mark and its regional variants are trusted symbols of competence, functionality, integrity and safety on all seven continents.

UL Solutions brings increased confidence to your products, technologies, services and environments. We help you meet global regulations and standards — along with retailer and purchaser requirements. We help protect and enhance brand reputation in the global marketplace. We can help you strengthen the security of your data, connected technologies and services, and our solutions make it easier for you to confidently track, measure and share the results of your sustainability initiatives.

By partnering with us, you gain greater visibility into your supply network with our quality assurance checks, factory-to-shelf inspection offerings and certification services. We help you evaluate technology performance, bring quality products to market, maintain brand reputation and mitigate business risks.

Related resources

- <u>UL.com/resources/future-firestopping-</u> and-fire-safety
- <u>UL.com/resources/guide-firestopping-getting-it-right-future</u>
- <u>UL.com/resources/firestopping-and-</u> third-party-certification





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