

FLASHPOINT SAFETY



Your fire prevention specialists



INNOVATION BASED ON EXPERIENCE



About our company

The spread of fire and smoke has been a central challenge ever since for anybody involved in the construction or conversion of buildings and technical facilities. G+H Insulation supports you in avoiding these hazards, ensuring your fire protection measures meet the highest standards and offering you all the expertise that has established us as a European market leader. With some 50 branches in Germany and numerous subsidiaries in the other European countries, our strong international presence guarantees that local assistance is always available. G+H Group belongs to VINCI Energies Deutschland and is thus part of VINCI S.A., one of the world's leading concessions and construction companies.

Our maxim is to integrate structural fire protection – in a manner to meet our customers' requirements. For us, this maxim implies the exigency to develop and enhance it continuously. The research and development division at G+H continues to set new market standards and trends with its innovative fire protection products and customized solutions – and its successes are documented by many certificates and awards.



SERVICES

360 degree safety: from consulting to installation and maintenance.

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FIRE PROTECTING SPRAY PLASTER

Special fire protection coatings to prevent the collapse of load-bearing structures.

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PYROMENT®-IK90

The first electrical installation duct which actively suppresses cable fire, approved for use throughout Europe.

6



PYROMENT®-EK

An easily installable fire protection duct to shield electric lines from outside fires.

8



PYROMENT®-KVB2000 + W

Flexible full-surface cable bandages for indoor and outdoor use.

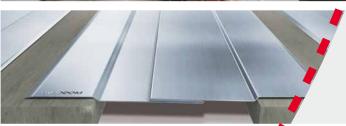
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PYROMENT®-UNI

Universal solution: the versatile firewall for piping, approved up to DN 800.

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PYRODOM®-BWF

Patented fire protection even for wide building joint. Also capable of compensating for significant movements in the structure.

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CUSTOMIZED SOLUTIONS

Special systems from G+H protect facilities and buildings.

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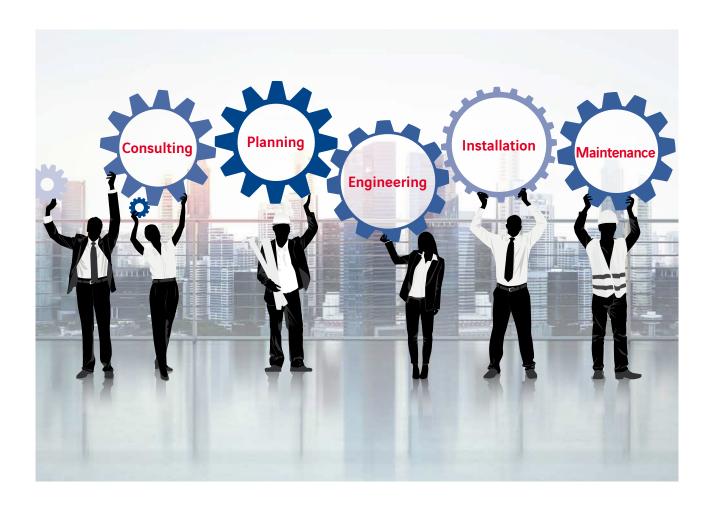


Safe and running

like clockwork

For G+H, work on fire protection starts long before the construction phase. We guide you through the entire process: from consulting and planning to installation and even servicing and maintenance. We call it 360 degree safety. We assess your object, we analyze your project, we develop a concept. We provide independent advice and select the most suitable products. And if the optimum solution is not available on the market, we invent it ourselves – from fire protection for load-bearing structures, cables and pipes to wall penetra-

tion seals, joints and ventilation systems. Absolute reliability, professional installation and efficiency are our watchwords. All relevant processes are seamlessly documented using specially developed software. All our designs and plans comply with statutory specifications and standards. We dedicate the experience and ideas we have gathered over decades to achieving our goal – finding the best possible fire protection solution for your building.



FIRE PROTECTING SPRAY PLASTER



Keep your building in shape

Heat destroys load-bearing structures: Steel loses its rigidity. Concrete splits. Wood burns. Components fail. The building, infrastructure and technical building systems are in danger of collapsing. The consequences of this are usually even more devastating than the fire damage itself. Therefore, it is vital to protect the load-bearing structures in your building against heat and ensure they continue to function even in the case of a fire. G+H offers a range of spray plaster

systems for fire protection, e.g. based on vermiculite, perlite or mineral wool as effective raw materials in fire protection. These systems have been tested and approved in accordance with German, European and international standards. They meet the most diverse requirements in the areas of building, industrial and tunnel construction and secure the load-bearing structures of your construction projects.



PYROMENT®-IK90

Protection for all emergency and escape routes

This innovative proprietary development by G+H is pioneering in many ways: PYROMENT®-IK90 is the first electrical installation duct that actively suppresses cable fires and thus minimizes consequential damages and costs. It was the first installation duct to receive pan-European approval and complies with the high requirements of the European standard. It prevents fire and smoke from spreading to the next fire compartment and therefore provides effective protection for emergency and escape routes.

The installation duct is made from galvanized sheet or stainless steel sheet with a coating of material that forms an insulating layer on the interior. At high temperatures, this coating instantly expands into a foam, smothers the fire and prevents smoke from spreading. The installation duct is much thinner than standard systems and is also convenient to install in narrow spaces. Available in any geometry on request. Quick to install and easy to recoat.



The foamed insulating material inside the cable duct prevents the fire from spreading

First European approval, June 4, 2015

ETA-15/0293



PRODUCT OF THE YEAR 2013

Actively prevents fires from spreading through cable ducts

Secures emergency and escape routes

Minimizes the consequential damages and costs of a cable fire

Tested in accordance with DIN 4102 Part 11 and approved by building authorities for use in Germany

European approval (European Technical Assessment ETA-15/0293) based on European testing standard 1366-5

Thinner than traditional systems

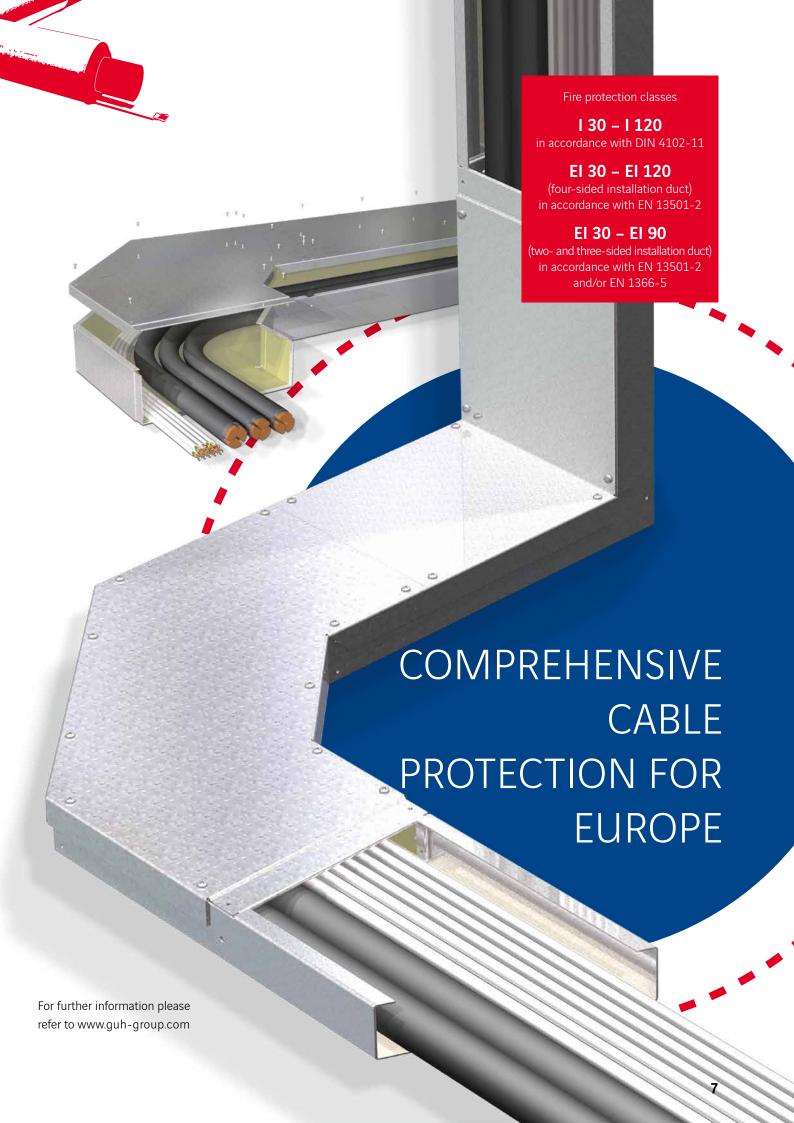
Easy to use in narrow spaces

Made-to-measure product

Quick and easy to install (time saving up to 80 percent)

Dust-free installation also suitable for sensitive areas

First installation duct with pan-European approval – may be sold and installed throughout Europe



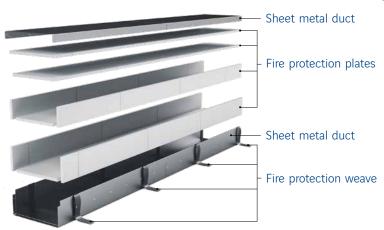
PYROMENT®-EK

Maintaining the functional integrity of electric lines

The fire protection duct PYROMENT®-EK by G+H reliably shields electric lines from outside fires for up to 90 minutes, thereby guaranteeing their functionality. Different models are available and the installation is fast and easy, allowing for both time savings and weight reduction. Because its individual components are pre-assembled, one-man installation regardless of installation size is possible.

The fire protection plates are not glued, clamped or bolted on, but instead each one is placed in the metal duct in two overlapping layers.

Thanks to the reliable and permanent protection against rain, frost, UV radiation and mechanical damage, it is fully usable both inside and outside including critical areas such as tunnels, production and chemical facilities, power plants, data centers, clinics, underground parking spaces, and high-rise buildings.





Shields electrical lines from outside fires

Ensures functional integrity of electrical lines
for up to 90 minutes

Tested in accordance with DIN 4102 Part 12 and approved by building authorities for use in Germany

Functional integrity E30 – E90

Max. exterior dimensions: up to W 640 x H 300 mm; interior: up to W 520 x H 180 mm

Sheet metal duct available in galvanized steel, stainless steel, or color-coated

Easier handling compared to traditional solutions

One-man installation possible

Significant time savings and weight reduction

2-, 3- and 4-sided models available

Suitable for demanding areas

Suitable for inside and outside areas

Reliable safety thanks to longstanding and proven competence

100 % maintenance-free operation



PYROMENT®-KVB2000 + W



Flexible fire protection

Short circuits or overheating in electrical cables can have serious and wide ranging consequences. PYROMENT®-KVB2000 full surface cable bandage from G+H stops fires in their tracks. The special bandage is coated on both sides with a material that forms an insulating layer and completely encases the cable. In the event of a fire, it immediately expands to create the perfect barrier. Cable fires and fumes are smothered at the source. And that's not all: the full surface cable bandage also protects sensitive electrical systems against external influences, such as fires

elsewhere in the building. Only 1 mm thick, it can even be used without additional mountings or supports in areas that are difficult to access.

And the principle that works so well indoors also protects outdoors with PYROMENT®-KVB2000 + PYRO-MENT®-KVB2000 W: this black full-surface cable bandage based on graphite was specially developed for outdoor applications and offers optimum protection even in wet conditions.



RODUCT

Full surface cable bandage suppresses cable fires in both indoor and outdoor applications

Prevents localized fires from spreading via cable routes

No covers, suspensions or supports, and no paint required

DVANTAGE

Thin and flexible:

1 mm (KVB 2000) to 1.6 mm (Typ W)

Low weight per area (approx. 1,200 g/m²)

Easy to install and fix

Can be retrofitted at any time

No problems with difficult geometries



PYROSTAT®-UNI



Pipe penetrations through ceilings and walls

PYROSTAT®-UNI is the versatile solution for pipes. The fire protection bandage can be used to isolate virtually all standard pipes – both in solid walls and lightweight partition walls. During a fire, burning pipes or insulation materials can create gaps in walls or ceilings which act as conduits allowing fire and smoke to spread. PYROSTAT®-UNI counteracts

this threat: when heated the bandage expands into a foam which automatically seals the gap and creates a smoke-proof, fire resistant barrier. The fire protection bandage by G+H has also proven itself effective as a retrofitted solution over many years.



RODUC

Fire protection bandage securely seals wall penetrations

Suitable for use with solid walls and ceilings as well as lightweight partition walls

For flammable and non-flammable pipes with and without insulation

Approved for use with pipe diameters up to 813 mm

VANTAGE

Flexible, space-saving solution

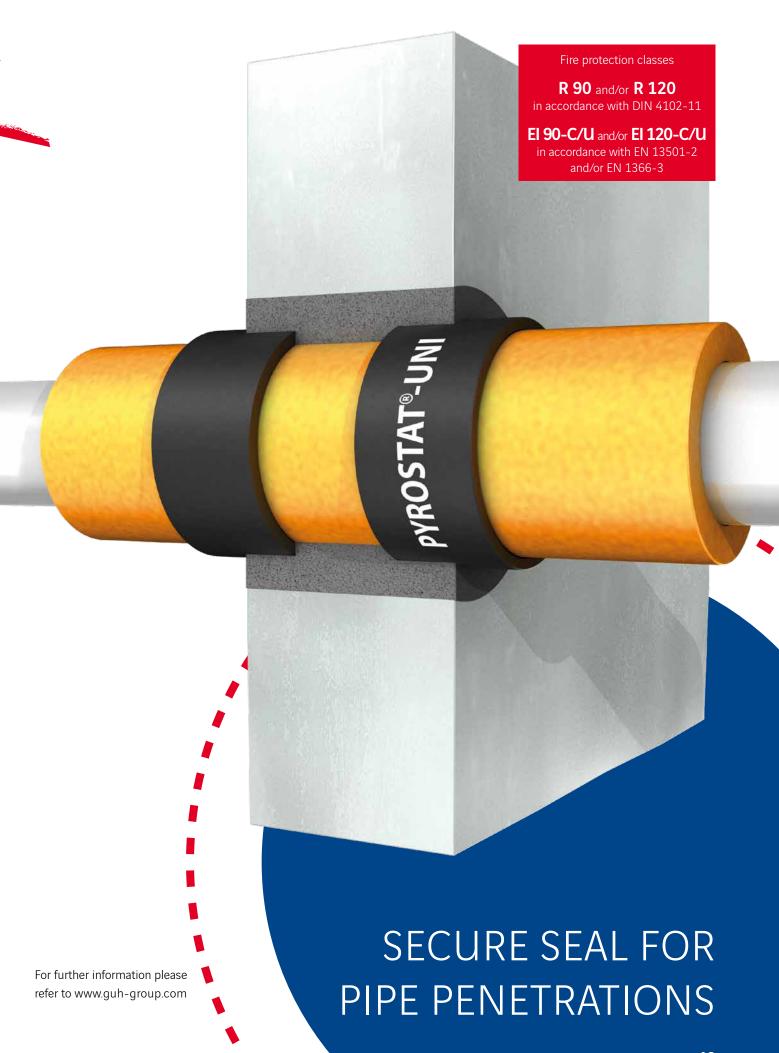
Only approx. 1 mm thick

Retrofittable

Easy to faster

Suitable for use even with difficult geometries

No change of insulating material required in the area of the wall penetration



PYRODOM®-BWF

For seamless fire protection

Expansion joints in solid walls and ceilings can easily turn into a safety hazard without adequate fire protection: fire and smoke can pass through unsealed joints into adjacent rooms.

PYRODOM®-BWF is the first fire protection system to offer secure protection even for very wide joints while also compensating for extreme expansion. The patented joint cover bridges joint widths of up to 200 mm and reliably compensates for joint movements of up to 50 mm. The system offers an additional advantage when being retrofitted to existing buildings: there is no longer any need to clean the joint. PYRODOM®-BWF is approved for joints containing dirt, residues of old materials or even combustible substances.

European patent

EP 1 589 157



RODUCT

Fire protection system for expansion joints in solid walls and ceilings

Bridges joint widths of up to 200 mm and expansions of up to 50 mm

For solid walls and ceilings with a minimum thickness of 150 mm

Mobile in all three axes

Suitable for use in new and existing buildings

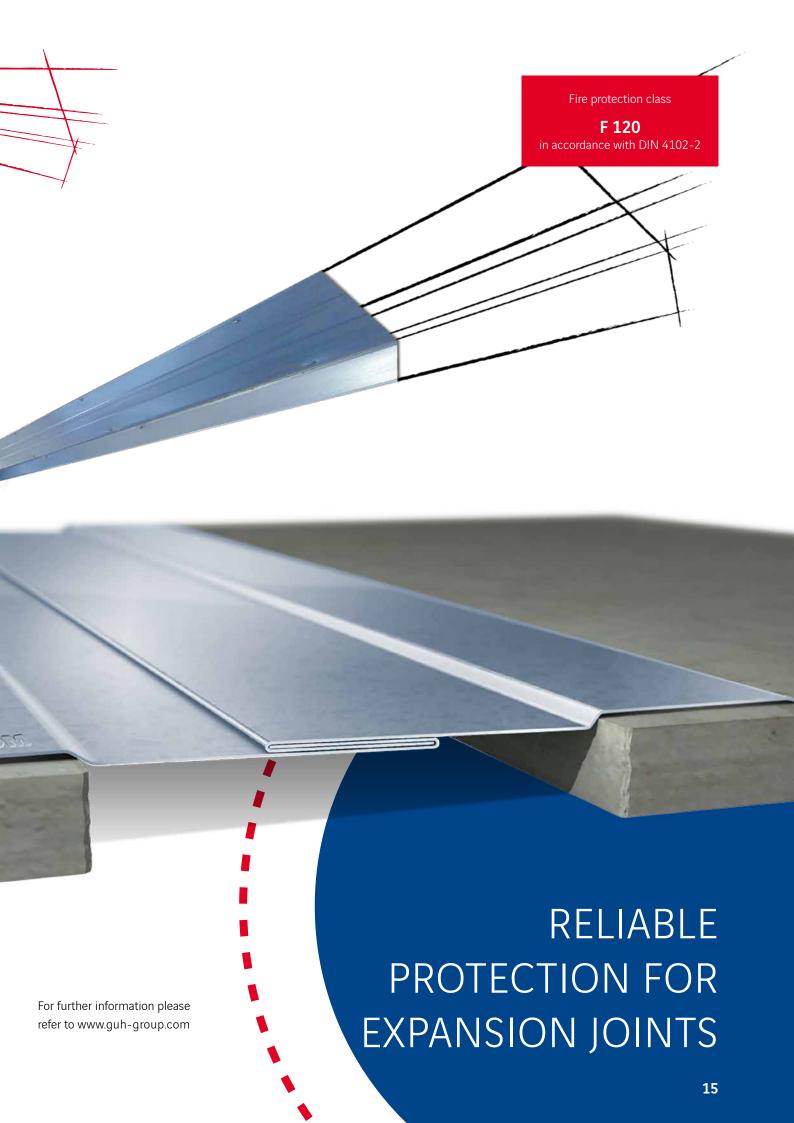
Smoke and dust proof

loint retains its mobility

Creep resistant and therefore low maintenance

Prevents spread of toxic gases in the event of a fire

No need to remove dirt, residues or old materials from the joint before installation



CUSTOMIZED SOLUTIONS (C)



Tailor-made and systematic

Our motto is: Everything is possible. If we cannot find an existing solution, we will make one ourselves. G+H not only develops its own fire protection products but combines and customizes them as required to create comprehensive fire

protection systems – or invents a completely new solution to meet your need. We have every system tested and certified – and can satisfy even unusual customer wishes.

PYROTAM®-SH solves space problems with wall penetrations for pipes

When pipes pass through fire walls, they generally have to be secured by mountings or supports no more than 1 meter from the wall on both sides. Sometimes this is not achievable. PYROTAM®-SH allows the bracket to be fitted as far as 8 meters away from the wall. The system is approved for use with wall pipes ≤ DN 1200 and medium pipes ≤ DN 800 (Approval no. Z-19.17-2099).

Fire protection class up to R 120



Fire protection encapsulation for mobile emergency diesel generators

Nuclear power stations are required to have emergency diesel generators. If these are parked in emergency and escape routes, they must be encapsulated with a fire proof material for safety. G+H offers a special fire protection system for this application.

Fire protection class

F 30



Housing for cable conduits in power stations

Emergency power generators, which are connected to emergency coolant pumps via cable conduits with inbuilt redundancy, require outstanding fire protection. G+H has developed a fire- and earthquake-proof housing for this purpose.

Fire protection class

EI 60



Rupture elements for pressure relief in transformer stations

In the event of a transformer station fire, a special protective system provides the necessary pressure relief. Overpressure activates a special cassette developed by G+H and blows it out of the wall. Instantly, a second cassette falls down – like a guillotine – and creates a fire resistant seal for the opening.

Fire protection class

F 90



Fire protection housing for valve capsules

What is the best way to protect valves – especially in petrochemical plants with high fire loads? With a special fire protection housing which is tested, compliant with all statutory specifications (test report no. 20151042 – MPA Dresden) and safe to use.

Fire protection class

120 minutes based on the hydrocarbon curve in accordance

with UL 1709:2011-08



Our competence is your advantage

We offer you innovative solutions not only in the area of fire protection: No matter whether it concerns the right temperatures in pipes, tanks or plants – we are also the right partner for you in all matters relating to heat and cold insulation as well as cryogenic insulation. If you are looking for tailored solutions in industrial or power plant sound protection or in vibration isolation, we



can also provide you with competent advice based on our decades of experience. Our engineering experts are happy to develop individual measures – whether for noise reduction of machines, with silencers or acoustic enclosures or for the reduction of structure-borne sound transmissions. Just contact us.







