

FOCUS ON SAFETY



Your experts in preventive fire protection



G+H – YOUR PARTNER FOR INNOVATIVE FIRE PROTECTION



The G+H Group stands for expertise, proximity and trust – we have been a reliable partner for modern structural fire protection for decades. We protect people, property and the environment with customised fire protection solutions. As part of VINCI Energies Building Solutions, the G+H Group belongs to the globally active VINCI S.A. group. We offer you a strong network with around 40 branches in Germany and numerous subsidiaries throughout Europe. Our state-of-the-art research and a clear service commitment is setting new standards – for your safety.

Our portfolio

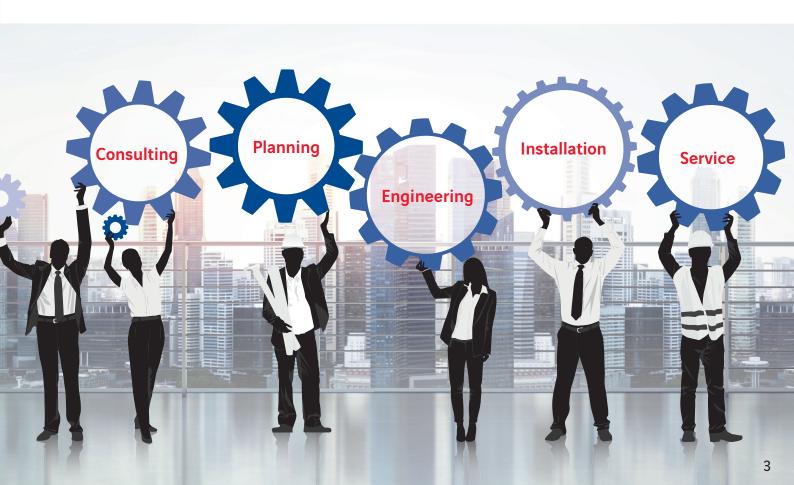
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SERVICES

So everything runs safely



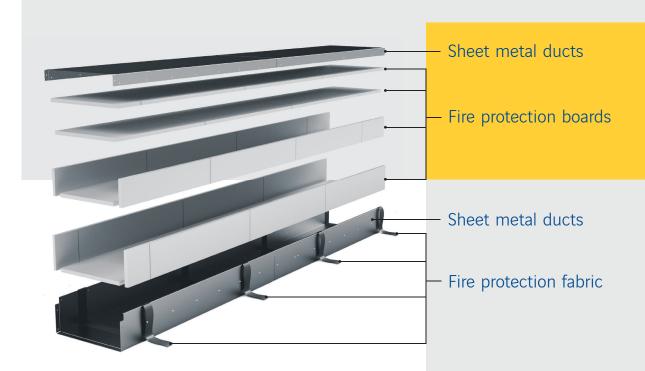
At G+H, fire protection begins long before the construction work planned. We stay with you throughout the entire process: from consultation and planning to installation, maintenance and servicing. That is 360-degree security. After taking stock of the existing situation, we analyse the needs of your property and develop a design. We provide brand-independent advice and select the best solutions for your requirements. If no optimum solution is available on the market, we develop it ourselves – a bespoke and innovative approach. Whether it is fire protection for supporting structures, cables, pipework, wall penetrations, joints or ventilation systems, our work is characterised by absolute reliability, professional execution and efficient processes – always based on the latest legal requirements and standards. Our aim is to realise the best possible fire protection for your building. We rely on our comprehensive expertise and future-oriented solutions.



PYROMENT®-EK

Maintaining the functional integrity of electrical cables

PYROMENT®-EK fire protection ductwork reliably protects electrical cables for up to 90 minutes in the event of an external fire, ensuring their continued function. Simple and quick assembly with pre-assembled individual parts means that installation is quick and efficient – no gluing, stapling or screwing. The channel is robust against rain, frost, UV radiation and mechanical damage, offering long-lasting protection. Perfectly suited for demanding areas of application such as tunnels, chemical plants, data centres, clinics and more – both indoors and out. PYROMENT®-EK is available in external dimensions up to a maximum of W 640 x H 300 mm and internal dimensions of W 520 x H 180 mm.



Tested in accordance with DIN 4102 Part 12 and approved by the building authorities

E30 - E90 functional preservation



- Easier handling than with conventional systems
- One-man assembly possible
- Enormous time and weight savings
- 2-, 3- and 4-sided versions possible
- Suitable for indoor and outdoor use
- 100% maintenance-free operation
- Available in galvanised steel, stainless steel or colour-coated



PYROMENT®-IK90

Safety in all escape and rescue routes

PYROMENT®-IK90 is the first electrical installation duct to contain cable fires with the aid of an intumescent coating that foams up at high temperatures. This minimises consequential damage and costs. PYROMENT®-IK90 is made of galvanised sheet metal or stainless steel sheet and is easy to install, flexibly adaptable and space-saving. As an I-channel approved throughout Europe, it fulfils the highest testing standards and effectively protects escape and rescue routes.

Fire resistance classes

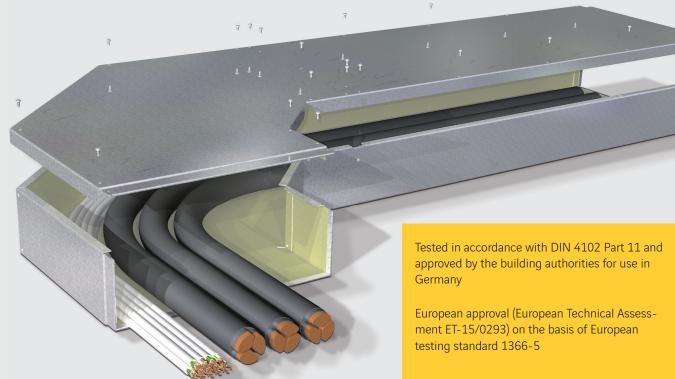
I 30 - I 120 according to DIN 4102-11

El 30 - El 120

(four-sided installation duct) according to EN 13501-2

EI 30 - EI 90

(two- and three-sided installation duct) according to EN 13501-2 or EN 1366-5





Foamed intumescent layer inside the cable duct prevents the spread of fire

- Thinner than conventional systems
- Suitable even where space is restricted
- Perfect-fit prefabrication
- Quick and easy installation (up to 80 per cent time saving)
- Dust-free processing, even for sensitive areas
- First I-channel with European approval
- Actively stops the spread of fire in cable ducts

PYROMENT®-IK90 A

Robust fire protection for outdoor areas

Tested according to DIN 4102 Part 11 in fire resistance classes

130 to 1120

and approved by the building authorities in Germany.

Weather-resistant PYROMENT®-IK90 A electrical installation duct is ideal for outdoor applications, e.g. for photovoltaic systems on flat roofs. It protects pipe systems against the spread of fire within the duct for up to 120 minutes without the fire spreading beyond the fire wall, thus minimising consequential damage. Thanks to its waterproof fire protection layer, the duct reacts to heat, foams up and prevents the supply of oxygen in order to actively contain cable fires.

ADVANTAGES

- Waterproof and weather-resistant
- Actively stops the spread of fire from the inside
- Low weight (6.5 to 10.5 kg/m²) facilitates handling and transport
- Active fire inhibition, reduces consequential damage and costs

Entry/exit in accordance with section 2.1.3 of the general type approval number Z-19.30-2231



PYROMENT®-KVB2000 + W

Flexible fire protection

Short circuit or overheating? Not with PYROMENT®-KVB2000 full cable tape! Thanks to its double-sided intumescent material, this flexible tape, just 1 mm thick, protects against cable fires, combustion gases and external influences – even in hard-to-reach places. PYROMENT®-KVB2000 + Wis available for outdoor use: robust, weatherproof and safe, even in wet conditions.



- Waterproof and weather-resistant
- Protects cables in the event of a short circuit inside and also in the event of a fire from outside
- Low mass per unit area (approx. 1,200 g/m²)
- Active fire inhibition, reduces consequential damage and costs
- Dust-free assembly





PYROSTAT®-UNI

The multi-talented fire damper

Practically all types of pipe can be sealed with PYROSTAT®-UNI fire protection tape – in solid walls as well as in lightweight partition walls. When pipes or their insulation deform in a fire, a gap in the wall or ceiling results, allowing fire and smoke to spread. PYROSTAT®-UNI counteracts this: In the event of a fire, the tape foams up when exposed to heat, automatically closing the resulting gap to form a smoke-tight and fireproof barrier.

Applications:

Component	Component thickness	Pipe material	Diameter	Insulation	Fire resistance class
Lightweight partition wall	≥100	Copper Cast iron Steel Stainless steel	≤ DN 400	Mineral wool Synthetic rubber Polyethylene Polyurethane Foam glass	EI45-C/U to EI120-C/U R90 to R120
Solid wall	≥100	Copper Cast iron Steel Stainless steel	≤ DN 400	Mineral wool Synthetic rubber Polyethylene Polyurethane Foam glass	EI15-C/U to EI120-C/U
	≥200		≤ DN 800		R90 to R120
Solid ceiling	≥150	Copper Cast iron Steel	≤ DN 300	Mineral wool Synthetic rubber Polyethylene Polyurethane Foam glass	El45-C/U to El120-C/U
	Stai ≥200	Stainless steel	≤ DN 350	Mineral wool Synthetic rubber Polyethylene	R90 to R120
Lightweight partition wall Solid wall	≥100	Solar cables	≤ 41 mm	Mineral wool Synthetic rubber Polyethylene	EI120-C/U R90 to R120
Lightweight partition wall / Solid wall	≥100 Plastic	Plastic	< 110 mm	Synthetic rubber	R90 to R120
Solid ceiling			≤ 110 mm	Synthetic rubber	R90 to R120
Lightweight partition wall / Solid wall	≥100	Copper Cast iron Steel Stainless steel	≤ 54 mm	Mineral wool	El120-C d en
Solid ceiling	≥150		≤ 88.9 mm	Synthetic rubber	R90 to R120

Fire resistance class

R 90 and R 120

according to DIN 4102 part 11

Fire resistance classes

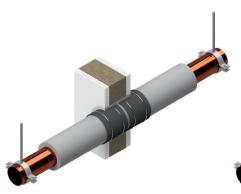
EI 30 to EI 120 C/U according to EN 1366-3



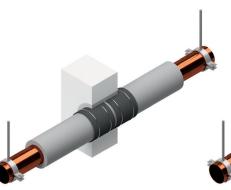
Solid ceiling



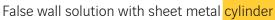
Solar cable also with tracer cable

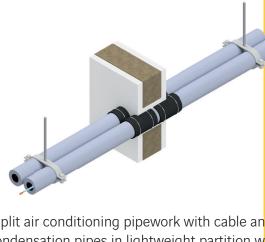


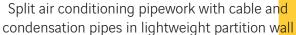
Lightweight partition wall



Solid wall

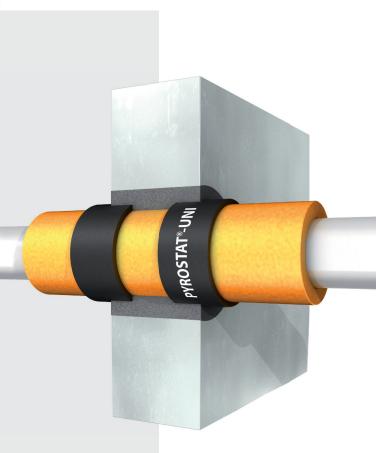








- Flexible and space saving
- Only about 1 mm thick
- Retrofitting around existing pipes is no problem
- Insulation can be interrupted in the wall/ceiling
- Easy to fasten
- Even difficult shapes present no problem
- Can be used with numerous special insulations such as solar cables, air conditioning split cables etc.
- Delivery form: Width 125 mm / length 10 m



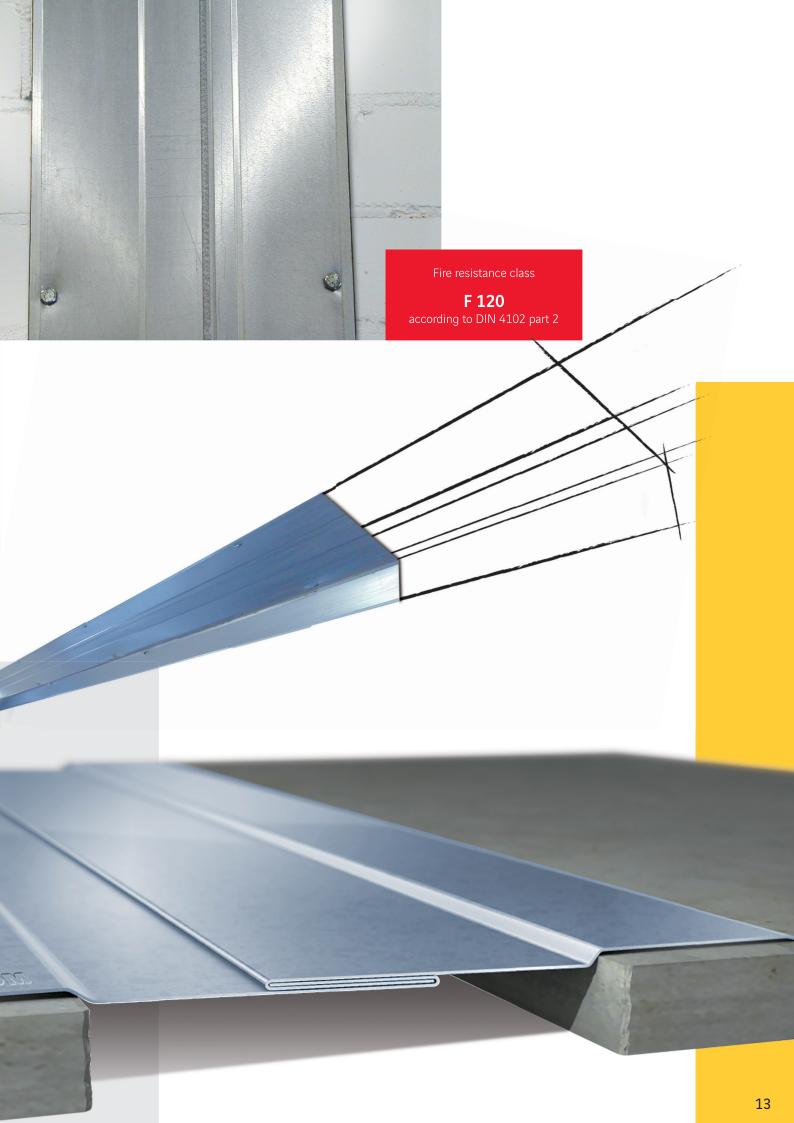
PYRODOM®-BWF

To prevent cracks in your fire protection

Movement joints on solid walls and ceilings can easily become a safety risk without adequate fire protection: In the event of a fire, fire and smoke can spread to adjacent rooms through unsecured joints. PYRODOM®-BWF is the first fire protection system that reliably protects even very wide joints and at the same time compensates for extreme expansion movements. The system offers an additional advantage for retrofitting in existing buildings: The cleaning of the joint that was once necessary can now be omitted. PYRODOM®-BWF is also approved for joints that still contain dirt, residues of old material or even flammable substances.

- Fire protection system for expansion joints on solid walls and ceilings with a minimum thickness of 150 mm
- Bridges joint widths of up to 200 mm and expansion movements of up to 50 mm
- Allows movement in all three axes
- For use in new and existing structures
- Smoke and dust-tight
- Durable and low-maintenance
- No spread of toxic gases in the case of fire





SPECIAL SOLUTIONS

Tailored to the specific requirements

If you still have not found the ideal solution, then find out more about our special fire protection solutions and contact us directly. We can develop, test and certify new solutions or customized fire protection systems to suit your specific needs, so we can comply even with unusual customer requests.

PYROTAM®-SH solves space problems with pipe penetrations

As a rule, pipes that are routed through fire protection walls must be secured on both sides by means of suspensions or supports no more than 1 meter from the wall. This is not always feasible. PYROTAM®-SH allows the bracket to be fitted on one side only at a distance of 8 metres from the wall. The system is approved for wall pipes \leq DN 1200 and service pipes \leq DN 800 (approval no. Z-19.17-2099).

Fire resistance class up to R 120

Fire protection encapsulation of mobile emergency diesel generators

Nuclear power plants must keep mobile emergency diesel generators at the ready. If parked in the area of escape and rescue routes, they must be fitted with a fire protection enclosure for safety reasons. G+H offers a special fire protection system for this requirement.

Fire resistance class

F 30



Enclosure of cable ducts in power stations

Emergency power generators that are connected to the emergency feed coolant pump via redundantly designed cable conduits must be optimally protected in terms of fire protection. G+H has developed a fire-resistant and earthquake-proof enclosure for this purpose.

Fire resistance class **EI 60**



Bursting elements for transformer stations for pressure equalisation

Should fire break out in a transformer station, a special device provides the necessary overpressure relief. A cartridge specially developed by G+H for this purpose triggers in the event of overpressure and is blown out of the wall. Immediately afterwards, a second cartridge falls down, immediately closing the resulting opening in a fireproof manner.

Fire resistance class F 90

Fire protection housing for valve capsules

Fittings in petrochemical plants with high fire loads are protected by a tested and compliant fire protection housing (test report no. 2015 1042 – MPA Dresden). It ensures maximum safety during use.

Fire resistance class

120 minutes according to the hydrocarbon curve according to UL 1709:2011-08







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