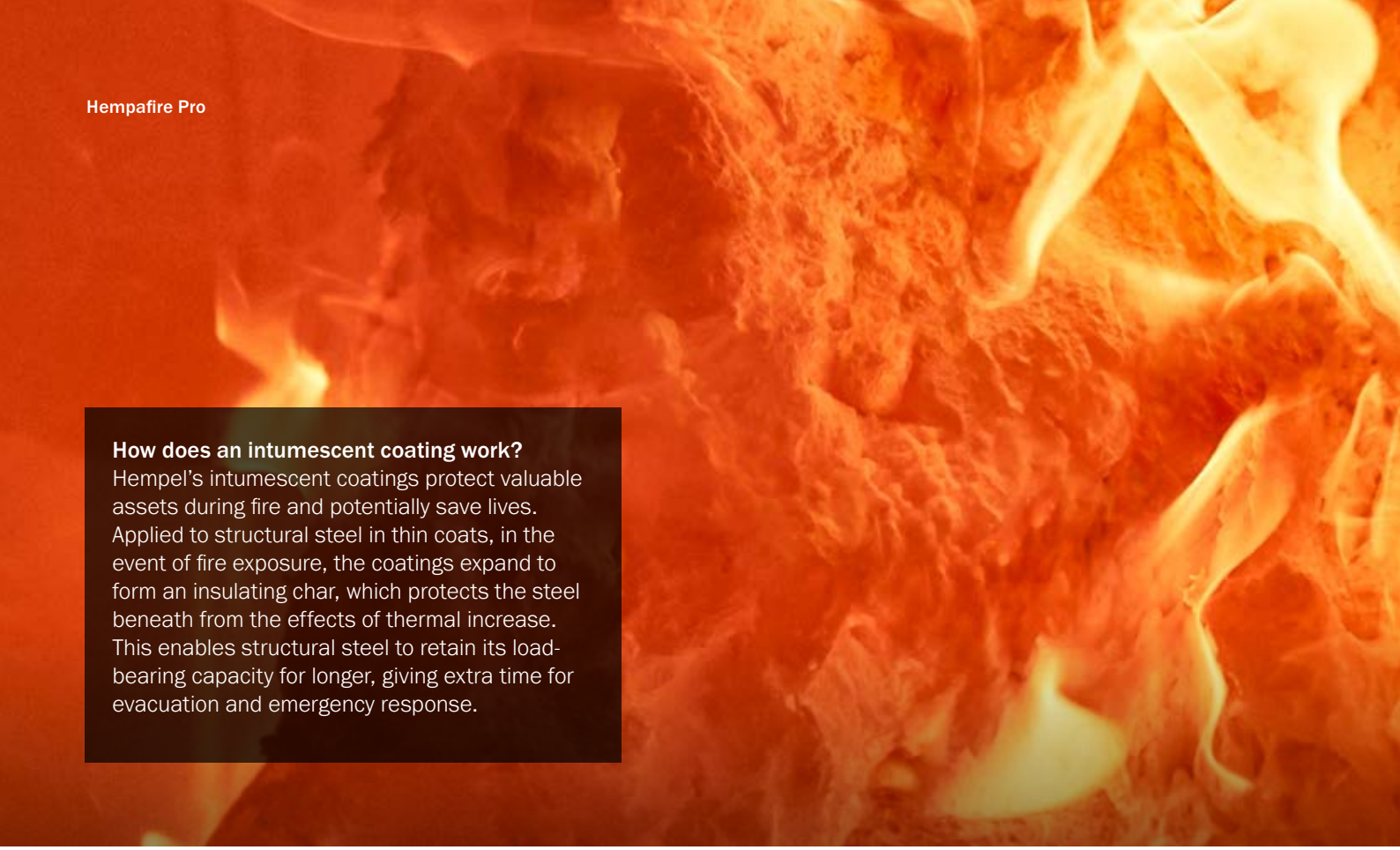
HEMPEL
Trust is earned

Hempafire Pro

Highly efficient coating solutions
for protection against cellulosic fire



How does an intumescent coating work?
Hempel's intumescent coatings protect valuable assets during fire and potentially save lives. Applied to structural steel in thin coats, in the event of fire exposure, the coatings expand to form an insulating char, which protects the steel beneath from the effects of thermal increase. This enables structural steel to retain its load-bearing capacity for longer, giving extra time for evacuation and emergency response.

Introducing our Hempafire Pro range

Proven passive fire protection coatings, with lower loadings and higher application efficiency.

Our passive fire protection products, Hempafire Pro 315, Hempafire Pro 320 and Hempafire Pro 400, have been developed to maintain the stability of steel structures in the event of a fire.

Hempafire Pro range has been independently certified for both I sections and hollow sections and can be used on most common steel profile, including cellular beams.

They have been optimised to provide cellulosic fire protection for the following time periods:

Product	Best performance at	Tested up to
Hempafire Pro 315	30 and 60 min	90 min
Hempafire Pro 320	30 and 60 min	90 min
Hempafire Pro 400	90 min	120 min

The Hempafire Pro range dries to a smooth, aesthetically pleasing finish. Used with a primer as part of a two-coat system, they provide both fire protection and corrosion protection in interior semi exposed conditions (Type Y or C2). When combined with a primer and topcoat, they also offer excellent long-term protection in outdoor conditions (Type X and C4 environments) – making an ideal choice for a wide range of applications.

Recognising that your business requires more than just high-performance protection, the Hempafire Pro product range is meticulously engineered to enhance the efficiency of your project at every stage, from initial specification to the completion of application.

These products are both available in two versions – standard and fast drying. Please contact your local sales representative to learn which product is best for your project and environmental conditions.

Certifications:
- BS 476 - 20/21
- EN-13381-8
- EN-13381-9 (Cellular Beams)
- EN-13381-10 (Tension Rods)

Cost savings with highly competitive loadings

Increase productivity with less application

Gain optimum results effortlessly

Sustainability gains with reduced consumption

Cost efficiency, without compromise

Hempafire Pro 315, Hempafire Pro 320 and Hempafire Pro 400 are cost-effective solutions for priceless safety in the event of cellulosic fire.

When it comes to project efficiency, our Hempafire Pro range is hard to beat.

Thanks to the efficient loadings, you require lower dry film thicknesses on most steel profiles, reducing paint consumption compared to similar products. The lower film thicknesses also mean shorter drying times – giving you faster application, with less waste, fewer resources and lower costs.

Due to the lower film thicknesses required, the coating also achieves better mechanical characteristics faster, reducing the risk of damage during handling and transportation to lower your repair costs.

Very competitive low loadings mean:

- lower DFTs reducing paint consumption and drying times
- lower thickness and less coats to apply, less labour costs
- Reduced application and touch ups

Cost savings with highly competitive loadings

Maison Des Avocats, France
protected by Hempel intumescent coatings

One solution up to the challenge of fire protection

Gain optimum results effortlessly

Excellent application properties not only reduce complexity and problems with coating, but also speed up operations.

Schiphol Airport - New Pier (The Netherlands) protected by Hempel intumescent coatings

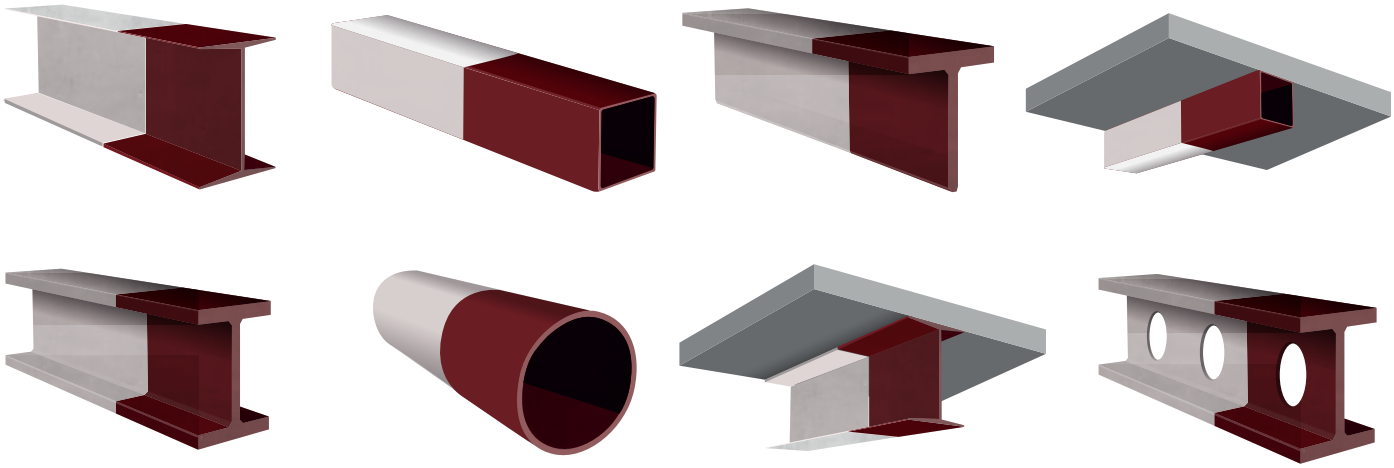
Made up of multiple coatings for different steel profiles, fire protection can be complex – but with Hempafire Pro 315, Hempafire Pro 320 and Hempafire Pro 400, it no longer has to be.

Thanks to Hempafire Pro's very low loadings, you require thinner dry film thicknesses on most steel profiles, significantly reducing paint consumption and waste compared to similar products. As a result, you will lower stock requirements and simplify application, logistics and specification processes.

Reduced project complexity for better application results

- Easier processes during project planning and execution
- Versatile and applicator-friendly coating - quick and easy to apply
- Extra simplicity reduces the risk of incorrect application
- Performs exceptionally well at high film thicknesses, without sagging
- Can be used with most standard 1K spray equipment (eg. pumps 40:1 ratio)

Open (I) sections, circular and rectangular hollow sections and cellular beams

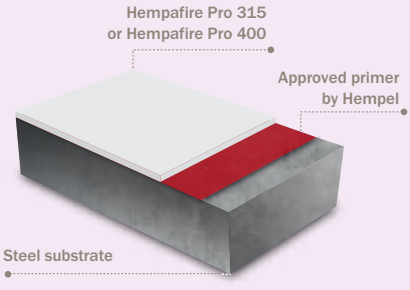


Exposure conditions during service life / corrosion environments

Semi exposed Type Y (EAD 350402)

Two-coat system

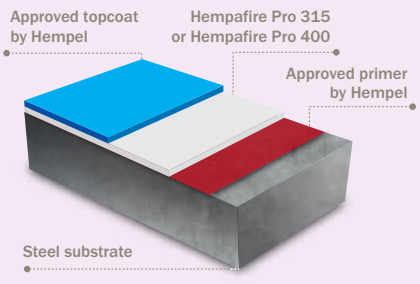
As a part of system without topcoat



Interior C2-High (ISO 12944)

Three-coat system

As a part of system with an approved Acrylic topcoat

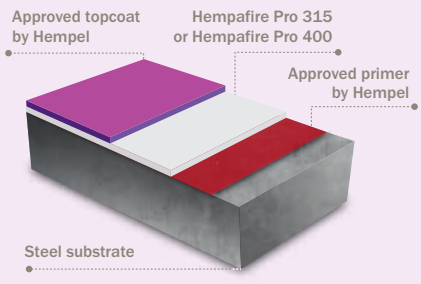


Exterior C3-High (ISO 12944)

Exterior Type X (EAD 350402)

Three-coat system

As a part of system with an approved PU topcoat



Exterior C4-High (ISO 12944)

Because your time and effort are valuable

Get more done in less time with Hempafire Pro, the perfect choice for higher productivity, reduced labour and faster job completion.

Due to their efficient loadings, Hempafire Pro 315, Hempafire Pro 320 and Hempafire Pro 400, deliver excellent fire protection with lower film thicknesses, which helps reduce application and drying times.

As a result, your coated steel section can be handled or overcoated sooner, reducing bottlenecks and increasing throughput and efficiency for off-site applications in the paint shop.

As high-build coatings, the Hempafire Pro range can also be applied up to 1,600 microns DFT in one coat. This means fewer coats are required, which results in lower on-site labour costs and faster project completion times, allowing other trades to continue operating upon completion of coatings application.

In-shop applications
Lower DFT and less coats to dry mean the section can be handled or overcoated more quickly - increasing throughput.

On-site applications
Less coats to apply thanks to less intumescent required due to low loadings and high build qualities of the product

Faster throughput and reduced bottlenecks in the application step
- Quicker drying time increases off-site and in-shop application efficiency
- Most steel sections protected in one coat
- Less damages due to very good mechanical properties achieved faster

"Due to the lower loadings of Hempafire Pro, we can now use less paint, resulting in quicker drying times. This is a big advantage to our business as it will improve our delivery times, reduce project delays and maximise our overall productivity and throughput."

Chief Executive Officer, Nanosteel, SA., Portugal

Increase productivity with less application

Even further productivity gains can be achieved by using approved Hempel fast drying primers and topcoats. Contact your technical representative to get the best specification for your project.

Jordal Amfi stadium, Norway
Protected by Hempel intumescent coatings

Improving sustainability and efficiency for the future

Each advanced fire protection coating is designed to lower your environmental impact, whilst improving your application speed and efficiency through lower loadings and faster drying times.

Engineered with applicators in mind, as well as the environment

Sustainability gains with reduced consumption

Hempafire Pro 315, Hempafire Pro 320 and Hempafire Pro 400 are quick and easy to apply, giving you outstanding application properties and compatibility with your processes.

Each coating goes on evenly and dries with a visually attractive finish. In addition, reduced dust formation means you need to spend less time on masking.

For on-site applications, the Hempafire Pro range can be applied up to 1,600 microns in one coat without sagging. This means fewer coats are required, which results in lower on-site labour costs and faster project completion times, allowing other trades to continue operating upon completion of coatings application.

Increased sustainability and efficiency gains
The Hempafire Pro range boasts of very low DFTs required to protect steel sections, resulting in reduced amount of paint and application needed to protect the structures. With lower paint consumption and reduced application, this results in decreased environmental impact.

You can be assured with Hempel's global manufacturing footprint and selection of locally sourced high quality raw materials results in very low values of embedded CO_2. This positively contributes to reduced carbon footprint of your project. Hempafire Pro coatings, along with compatible Hempel primers and topcoats have been tested and certified with Environmental Product Declarations (EPD), which contribute to achieving points and credits for Green Building Schemes such as LEED and BREEAM.

We are here to support you

From specification through to ongoing maintenance, we work with you to improve the quality and efficiency when applying our coatings.

Hempel services puts our unique expertise at the heart of your coating process

Our certified coating advisors work with you to assist with a smooth start-up on new projects and advise on application and application equipment, ensuring you benefit from lower application costs, more efficient application and a high-quality finished coating.

A more efficient coating project

- Coating advisory service helps you save time and resources during application
- Global network of more than 600 coating advisors ensures local expertise

Hempel's Centre of Excellence in Barcelona focuses on the research and development of coating products within the field of passive fire protection.

This state-of-the-art facility comprises of 3,000 m^2 of laboratory, testing areas and offices and is home to a team of highly skilled technicians, applicators, fire testers and scientists. As a global leader in the coatings industry, Hempel is committed to developing and increasing a range of solutions that our customers can trust to protect their buildings and industrial installations.

Maison de l'Ordre des Avocats, Paris, France

This modern building is designed with glass façade and a glossy metal exoskeleton, which needed proven passive fire protection coating that would enable the steel to maintain its load-bearing capacity for up to 90 minutes during a fire.

Hempel's Hempafire Pro 315 intumescent coating system was chosen due to its compliance with the EN 13501-2 standard as well as its exceptionally low loadings, the product requires significantly lower dry film thicknesses resulting in reduced paint consumption, reduced application time and lower project costs.

Products
Hempafire Pro 315

Sandwell Aquatics Centre, Birmingham, UK

This facility was initially constructed to host The Commonwealth Games in 2022. It boasts of contemporary architecture and design of exposed steel, sprawling over a significant area featuring state-of-the-art swimming pools, diving areas, and leisure zones. This ambitious project required a fire protection solution that could ensure the safety and integrity of its steel structures while contending with the unique challenges posed by high humidity environments typical of aquatic centers.

Hempafire Pro 315 was the preferred choice for its outstanding performance characteristics—namely, its superior fire resistance, ease of application, and its aesthetic excellence. Efficiencies in application processes ensured that the ambitious timelines of the construction were met without compromise, facilitating a smooth and uninterrupted build.

Products
Hempafire Pro 315

Assima Tower, Kuwait City, Kuwait,

The Assima Tower is part of the Assima Project, the largest commercial building complex in Kuwait City, featuring over 380,000 m^2 of usable space spread across 54 storeys – housing over 150 offices, which required passive fire protection.

Gulf Crescent Mechanical, the project's application company needed to turnaround painted steel from yard to site quickly. Hempafire Pro 400 was chosen due to its highly competitive loadings and increased productivity with fast throughput, offering 90 minutes of fire protection respectively.

Our Hempafire Pro 400 coating system also benefited from reduced paint consumption, increased sustainability gains and lower project and labour costs.

Products
Hempafire Pro 400

Selected references

Project	Location	Products
Adla Car Park	Dubai, United Arab Emirates	Hempafire Pro 400
Amazon Data Centre	India	Hempafire Pro 400
Ansari Hospital Project	Yanbu, Saudi Arabia	Hempafire Pro 400
Aplitesca Project	Spain	Hempafire Pro 315
Assima Tower	Kuwait City, Kuwait	Hempafire Pro 400
Castlewood House	London, UK	Hempafire Pro 400
Catl Car Battery Factory	Hungary	Hempafire Pro 315
Chemical Warehouse	Saudi Arabia	Hempafire Pro 400
City Square Hassima Tower	Manchester, UK	Hempafire Pro 400
Cogersa Project	Spain	Hempafire Pro 315
Colt Data Center	Mumbai, India	Hempafire Pro 400
Data Hall Project	UK	Hempafire Pro 400
Extruder Lines 3 & 4	Indonesia	Hempafire Pro 400
Faze Apartments	Setúbal, Portugal	Hempafire Pro 400
Hamad International Airport	Qatar	Hempafire Pro 400
Kings Cross S3	London, UK	Hempafire Pro 400
La Cerámica Football Stadium	Villarreal, Spain	Hempafire Pro 400
Latiitude Yellow Project	UK	Hempafire Pro 400
LIV Tower	Saudi Arabia	Hempafire Pro 400
Logistic Warehouse	Greece	Hempafire Pro 400
New Centre Showroom	Doha, Qatar	Hempafire Pro 400
New Fill Mill	Oman	Hempafire Pro 400
Planta Quimica	Spain	Hempafire Pro 315
Porto Arabia Yacht Club	Doha, Qatar	Hempafire Pro 400
Red Sea Project	Saudi Arabia	Hempafire Pro 400
Santiago Bernabèu Stadium	Madrid, Spain	Hempafire Pro 315
Starsmet Project Warehouse	Latvia	Hempafire Pro 315
Tabuk Entertainment Centre	Saudi Arabia	Hempafire Pro 400
Tata Electronics Hosur	India	Hempafire Pro 400
The Hub, Victoria	London, UK	Hempafire Pro 400
The Usher Building	London, UK	Hempafire Pro 400
Vantage Data Centre	UK	Hempafire Pro 400
Wellington Place	Leeds, UK	Hempafire Pro 400
100 Fetter Lane	London, UK	Hempafire Pro 400

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As a world-leading supplier of trusted coating solutions, Hempel is a global company with strong values, working with customers in the energy, infrastructure, industrial, marine, decorative, container and yacht industries. Hempel factories, R&D centres and stock points are established in every region.

Across the globe, Hempel's coatings protect surfaces, structures and equipment. They extend asset lifetimes, reduce maintenance costs and make homes and workplaces safer and more colourful. Hempel was founded in Copenhagen, Denmark in 1915. It is proudly owned by the Hempel Foundation, which ensures a solid economic base for the Hempel Group and supports cultural, social, humanitarian and scientific purposes around the world.

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