

Hempafire Optima 500

Smart steel fire protection
with enhanced productivity



Hempafire Optima 500

For more productivity, apply a smarter solution.

Whenever productivity and safety matter, the smart solution is Hempafire Optima 500, the new generation waterborne intumescent paint, optimised to bring greater efficiency to your steelwork project.

Hempafire Optima 500 provides minimum environmental impact since it is low-emitting material. Third party tested and certified to BS 476 20/21, it has been optimised to provide 120 minutes protection to steel against cellulosic fire, with additional coverage up to 180 minutes. It can be used for on-site or off-site* applications and works effectively in a wide range of conditions with outstanding performance, including warm climates.

*Based on specification depending on project and process conditions.

The product is designed to meet the needs of specifiers and applicators for large-scale infrastructure projects, from warehouses and commercial centres, to high-rise buildings, airports and sports stadiums.

Product values:

- Faster job completion
- Reduced total project costs
- Right first time quality
- Excellent aesthetic appearance
- Simplified project management

When you work smarter, the efficiencies add up

With Hempafire Optima 500, every step of your project is improved. Fast throughput, robust application and reduced complexity leads to faster job completion and greater all-round efficiency.

<p>Increase productivity with fast throughput</p>	<p>High DFT per coat, even at high temperatures, delivers required protection in fewer coats. Faster drying coats mean shorter intervals to recoat and overcoat, reducing labour demand, project completion time and application costs.</p>	<p>Improve efficiency with robust application properties</p>	<p>Hempafire Optima 500's robust application properties and high solid content means less tendency to defects thus providing better appearance and reduced reworks.</p>
<p>Save project costs with competitive loadings</p>	<p>Specially optimised for the steel sections most commonly used in large civil infrastructure projects, Hempafire Optima 500 can be applied in competitive DFTs, making for reduced paint consumption, fewer applications and time.</p>	<p>Reduce complexity with one product for all profiles</p>	<p>Use one product across I-sections, hollow sections and cellular beams. Specification and project management is simplified, especially in complex mixed structure projects and streamlined supply chain and operations.</p>



Porsche Hamburg Centre, coated with Hempel intumescent coatings

How Hempafire Optima 500 enhances project delivery

Reduced drying times to recoat, either with itself or finishing topcoats.

Hempafire Optima 500 has high DFTs per coat without sagging, with hold-ups per coat of up to 900 µm. Protection is achieved in fewer coats, helping reduce labour costs in on-site applications. Optimised balance of drying times at coats of 500 µm maximises film build up in short times.

Especially suited to increase the throughput particularly for the in-shop applications, when combined with Hempel's fast throughput primers and topcoats. In fact, the whole protection system (Primer + PFP + PU finishing topcoat) can be applied in less than 36 hours*.

Because your time is valuable

2 hour fire protection with C3 interior corrosion protection delivered within two days, or less



Primer applied, 3600 µm DFT of PFP, topcoated with PU and handled in 36 hours

- Primer **Multi500 (45950)** or **Hempadur (17410)** (100 µm DFT x 1 coat)
- Intumescent PFP **Hempafire Optima 500** (900 µm DFT x 4 coats)
- Topcoat **Hempathane 55610 HS** (100 µm DFT x 1 coat)
- Drying period

Increase productivity with fast throughput

*At 40°C and below 50 per cent relative humidity. Higher temperatures or lower humidity may reduce drying times and vice versa. Total drying times and PFP thicknesses may depend on your project specific conditions, application process and steel sections. Any steel section covered in our assessment can be potentially protected within 48 hours.

Some of our worldwide reference jobs using Hempel passive fire protection products

- Arena Torun** (Poland)
- Birmingham Hospital** (United Kingdom)
- Domodedovo Airport - Terminal 2** (Russia)
- Dubrovnik Airport** (Croatia)
- Duqm Airport** (Oman)
- Evangelismos Athens Hospital** New surgical wing (Greece)
- Halle Secrétan** (France)
- Khoula Hospital** (Oman)
- Lakhta Centre** (Russia)
- La Samaritaine Restoration** (France)
- North Gate Mall** (Qatar)
- Palestinian and Sudanese School** (Qatar)
- Porsche Centre Hamburg** (Germany)
- Riyadh Western Metro Station** (Kingdom of Saudi Arabia)
- Sakhir Conference Hall** (Bahrain)
- Václav Havel Airport Prague** (Czech Republic)
- Vigo Railway Station** (Spain)
- Volkswagen Production Hall** (Slovakia)

We work closely with our customers on every project, large or small

We are there every step of the way, offering advice, support and inspiration – and solutions that provide superior protection and performance.



Khoula Hospital (Oman), protected by Hempel intumescent coatings

We are here to support you

From specification through to the completion of the project, we support you and help you achieve your best outcome.

Hempel services puts our expertise at the heart of your coatings process. Our coating advisors work with you to assist with a smooth start-up on new projects and advise on both application and equipment, ensuring you benefit from lower costs, and better all-round results. Our estimation team work with you to provide the right product and thicknesses specification for your project steel structures.

A more efficient coating project

- Coating advisory service helps you save time and resources during application
- Global network of coating advisors to ensure local expertise
- Estimation team with the aim to provide technical advice on compliant and optimised solutions for every project
- Fire engineering support

Hempel's new 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 m² 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.



As a world-leading supplier of trusted coating solutions, Hempel is a global company with strong values, working with customers in the protective, 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.

Hempel A/S

Lundtoftegaardsvej 90
2800 Kgs. Lyngby
Denmark

Tel: +45 4593 3800
Email: hempel@hempel.com