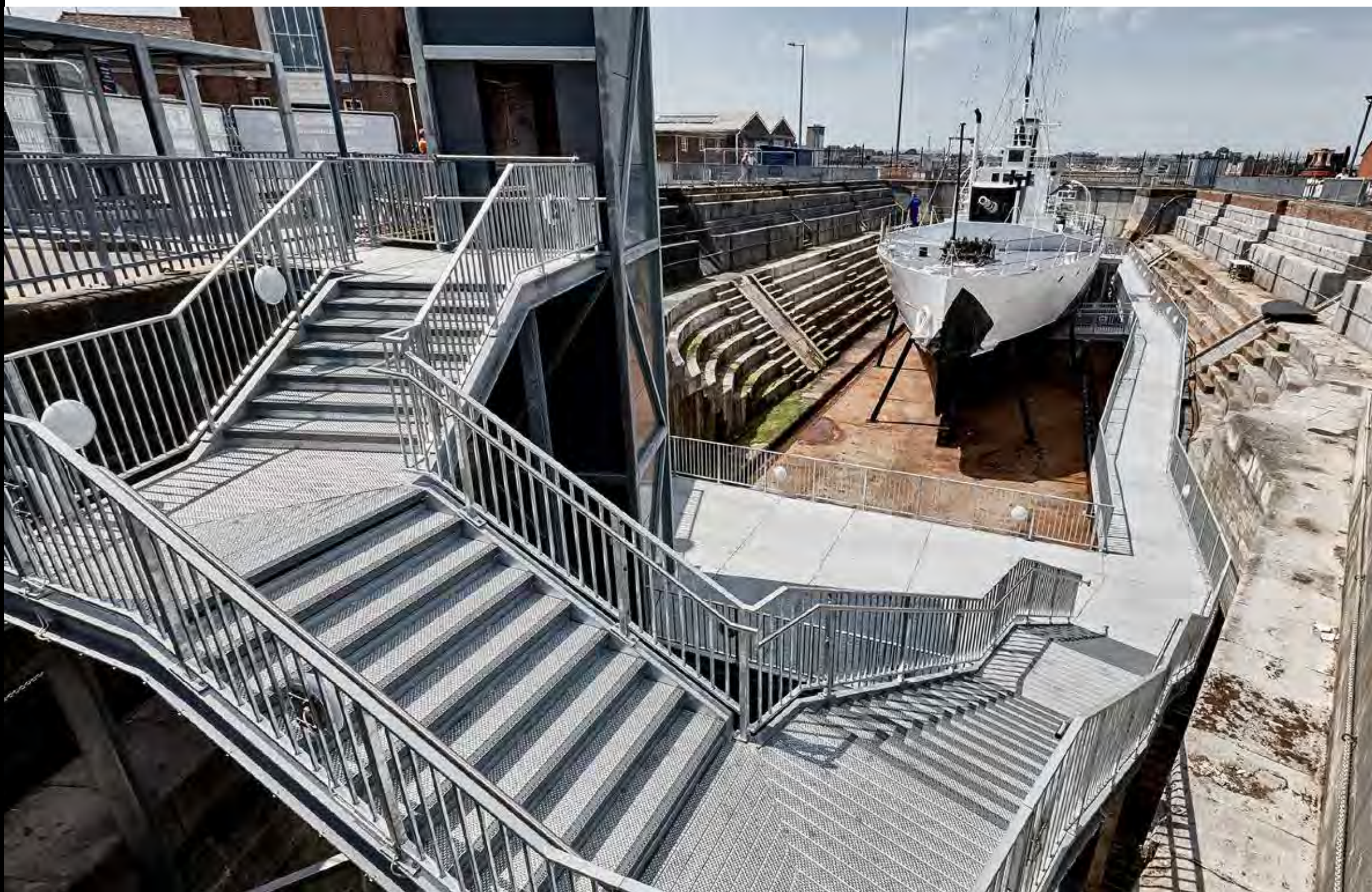


Lookbook

A collection of design solutions made of steel for the public, building and construction industries.

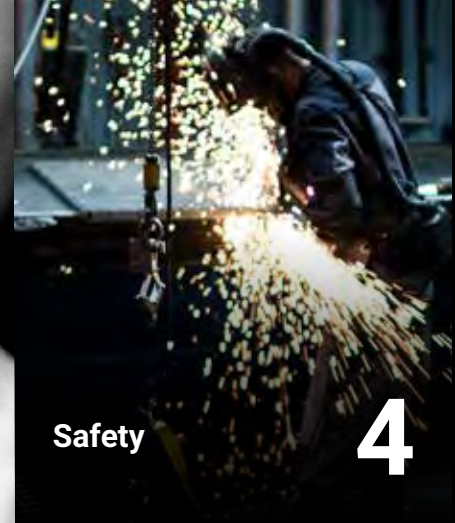
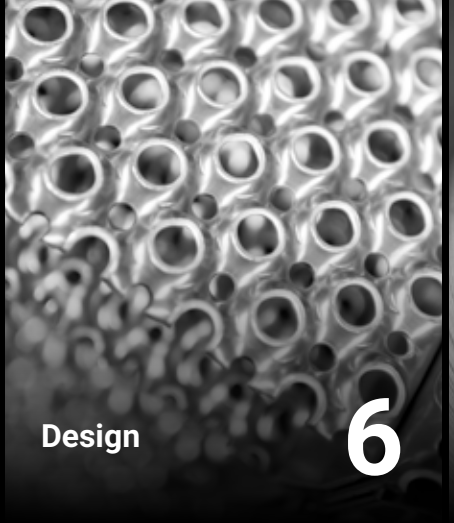
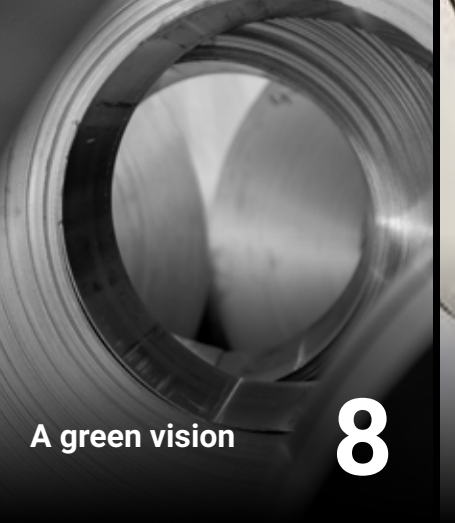
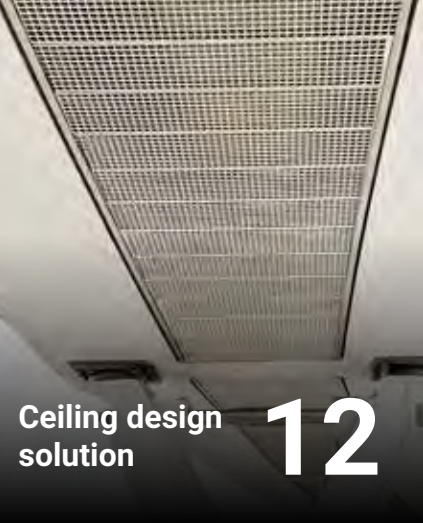
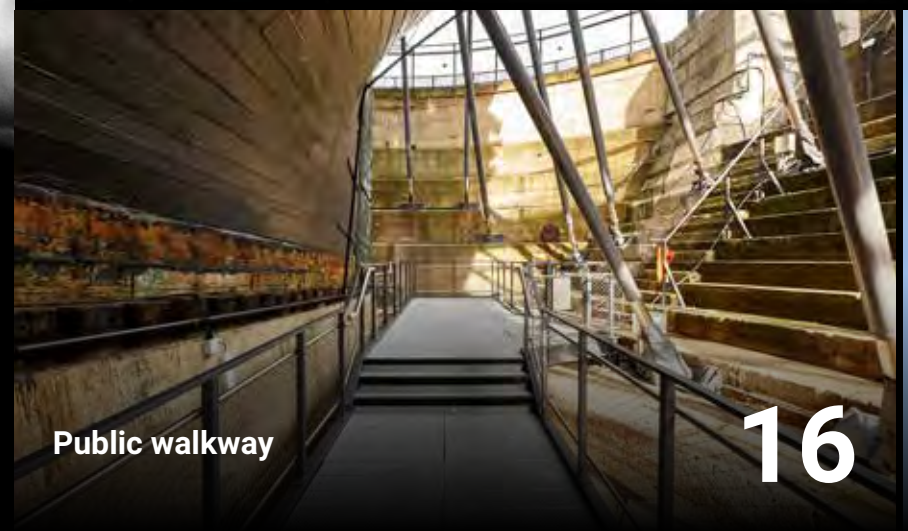
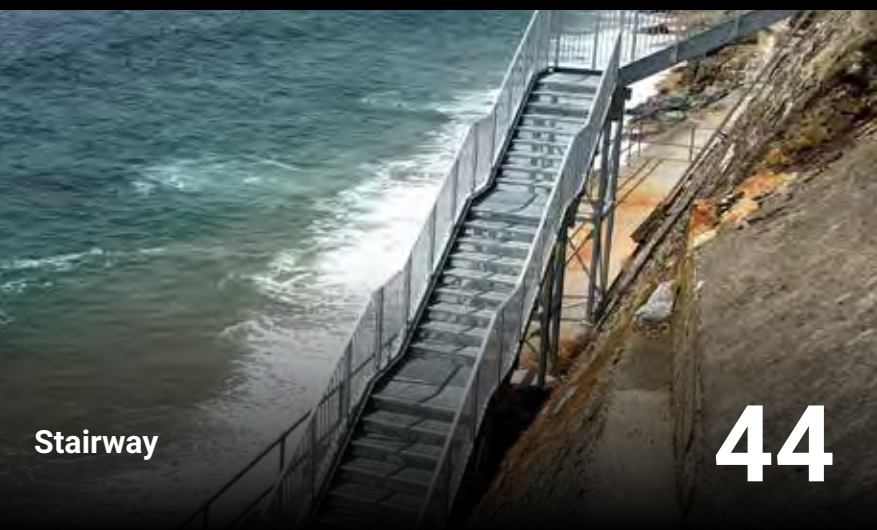
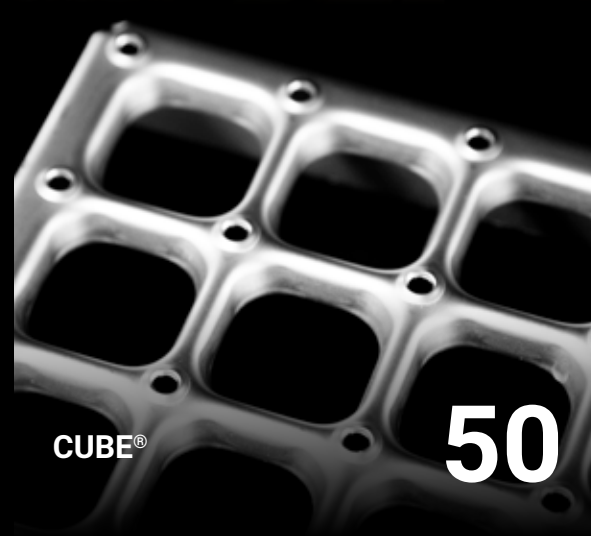
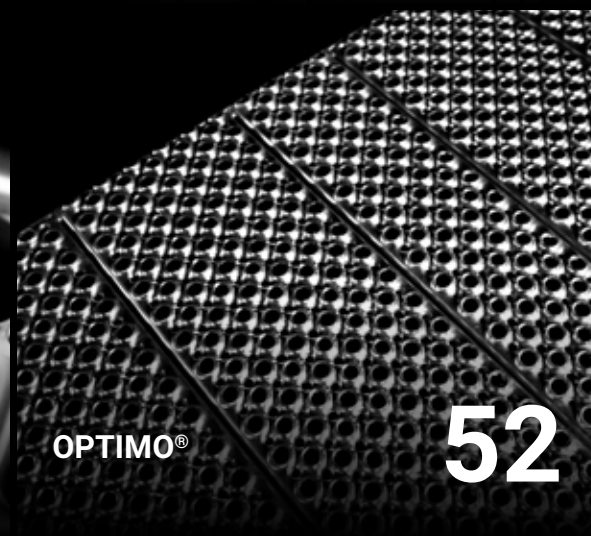
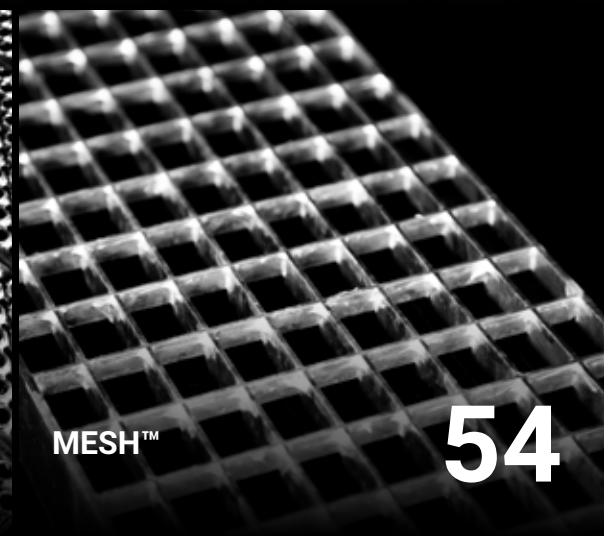
Inspiration for Architects & Engineers.

PcP
Engineering Safety™





Engineering Safety™

 Safety 4	 Design 6	 A green vision 8	 Ceiling design solution 12
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Safety

Quality & safety is our bond

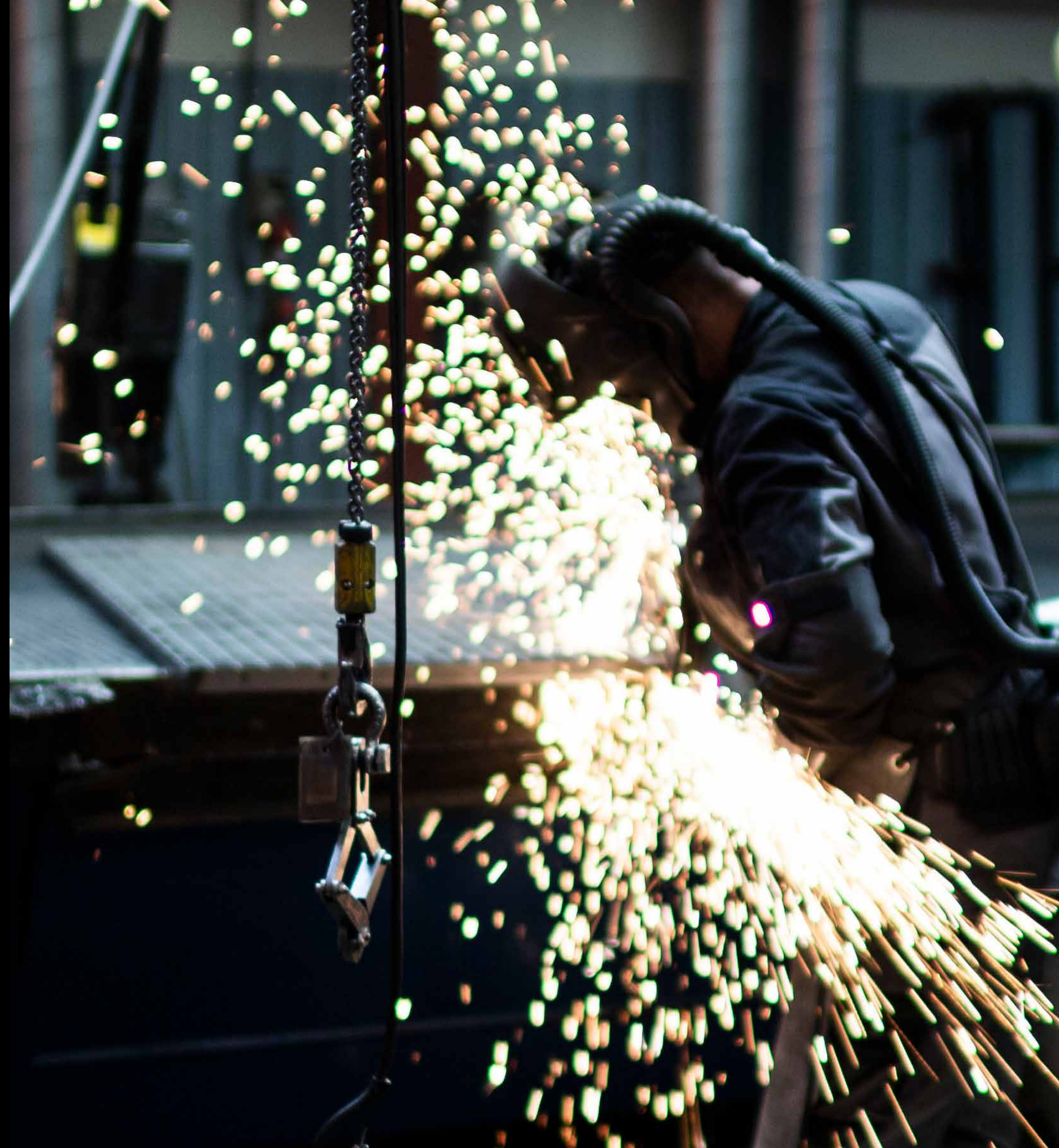
PcP always takes full responsibility for the quality of our products and solutions. From design and development to manufacturing, we always strive to deliver reliable, high-quality products. This is why our solutions have been trusted by clients for more than half a century.

Our products live up to some of the strictest safety standards, which enables our clients to use our solutions in demanding environments, where only the best is good enough.

Safety is at the very heart of all of our products and through everything we do. Our drive is to enable our customers - no matter their industry - to safely operate in their business routine, supported and surrounded by innovative PcP solutions.

Our drive is to deliver on our promise on every project: **Engineering Safety™**

PcP is certified according to ISO 9001:2015, EN 1090-1:2009 +A1:2012 and ISO 3834-2:2006 to make sure we meet clients, authorities and own requirements and expectations of world class safety solutions. Welding are done according to execution class 2 (EXC2) in both steel, stainless steel and aluminum. We also meet CE certification requirements.



Design

Safety meets architecture

Engineering is so much more than the scientific art of crafting structures. Embedded within the word, is a promise of innovation, design excellence and pioneering tomorrows' safety solutions. We use our high level of know-how, and a fine-tuned sense of quality to design new solutions in close partnership with our customers, pushing industrial standards and innovating market-leading solutions.

That is why we at PcP develop not only standard products but also custom solutions with our clients. Because we know it is the fabric between requirements and creativity, application and environment, the right solution is engineered.

In many cases, PcP solutions are not only the very centre of safety - but also vital to the architectural appeal of an installation. This is why we believe imagination, design and safety finds common ground through our solutions.



A green vision

Innovation paves the way for greener ways of working

Safety and sustainability are vital focus areas to us. From a strict zero-waste policy to new product innovations, our focus on being environmentally conscious, is one of the guiding principles in how we conduct business. We continuously look for new approaches and measures to push towards a greener future.



Zero waste policy

Our coil-to-product process allows us to maintain a zero-waste policy. 99,9% of surplus material is carefully collected, melted and returned to the value chain. We also primarily source metal from companies at the forefront of sustainability, contributing to a lower carbon footprint.



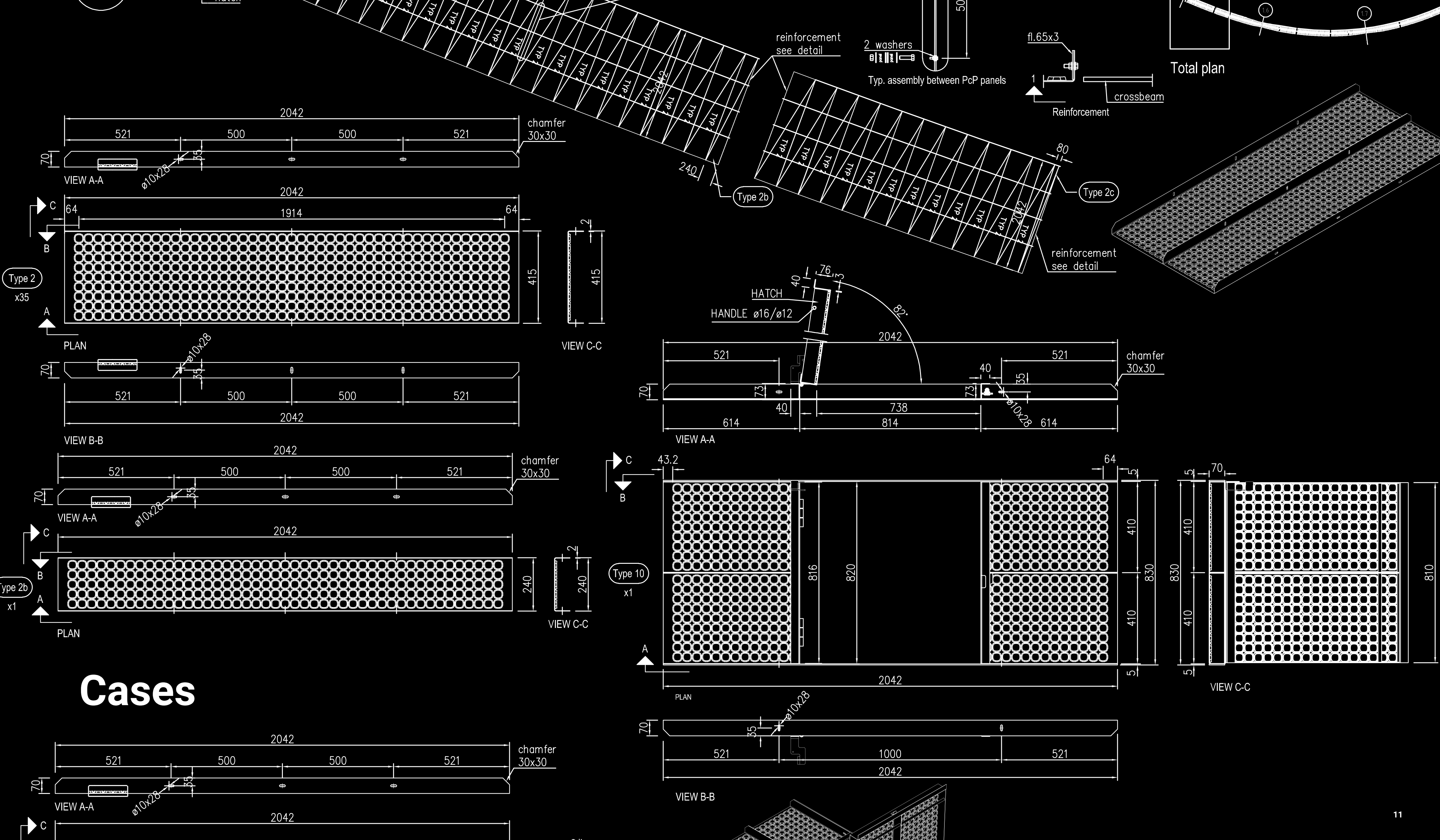
Product innovations

Product innovations such as OPTIMO® and CUBE® gratings require significantly less steel than traditional mesh gratings. As a result, CO2 emissions from producing our OPTIMO® and CUBE® lines are significantly lower due to improved strength-to-weight ratio.



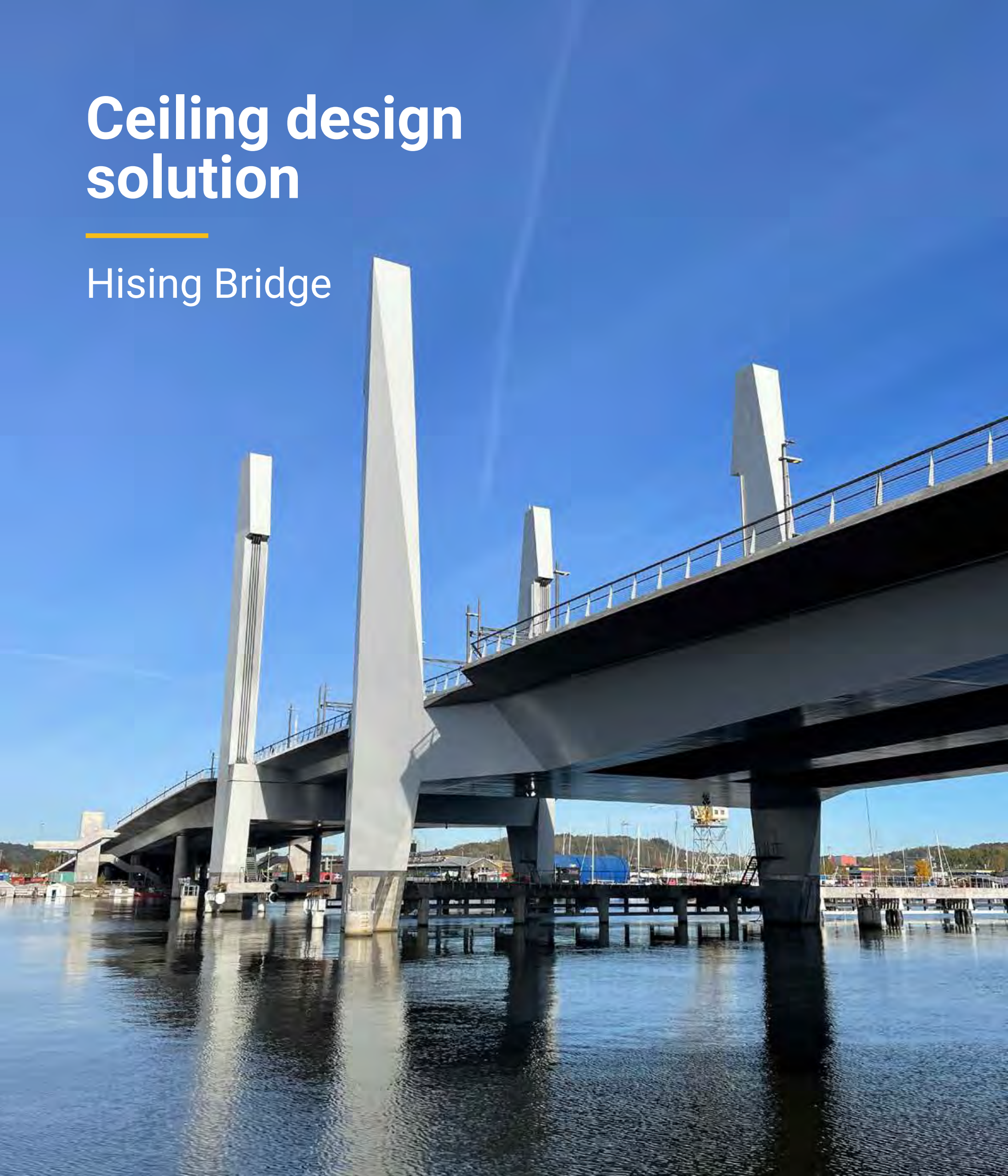
New product developments

Our attention to sustainability also applies to new product innovations. For instance, the brand-new DENSA™ 2.5 airflow channels as well as our scaffolding planks are manufactured from 100% recycled aluminium.



Ceiling design solution

Hising Bridge



Facts

Architectural CUBE® ceiling for the 440 metre Hising Bridge.

CUBE® gratings provide a unique design and decorate the 1000 m² ceiling below the new Hising Bridge of Gothenburg.

Project Partners
Trafikverket & Skanska

Location
Gothenburg

Sector
Transport

Project
Hising Bridge



Introduction

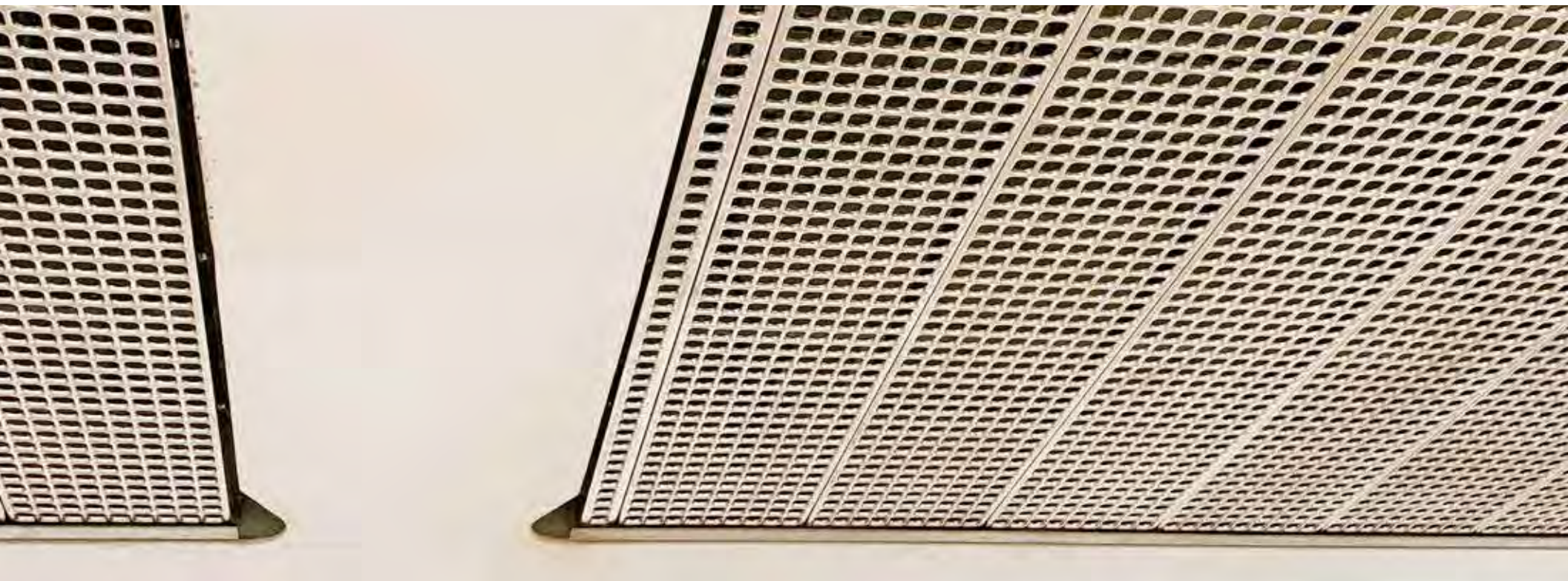
The Hising Bridge is set to become the new landmark of Gothenburg. Spanning over the central part of Scandinavia's most significant commercial harbour, The Hising Bridge will replace the existing Göta River Bridge from 1939.



Project criteria

The project specified stainless steel gratings to decorate the bridge with an architectural ceiling that would blend into the atmosphere and surroundings. The idea was to achieve an aesthetic ceiling design and at the same time provide a functional safety platform for maintenance workers.

Additionally, the project had prescribed the need for safe access walkways, stairs, and service platforms to ensure maximum safety for workers on the entire bridge.



The solution

The entire solution involved PcP products from the OPTIMO®, CUBE® and GUARDRAIL lines.

The different applications needed required close collaboration between the partners throughout design, development, test and delivery. The range of applications was a thorough process of designing, drawing and technical advice.

1000 m² CUBE® gratings decorate the ceiling below the bridge, combining design and functionality. The unique design is simplistic yet efficient and provides excellent light penetration at night.

A complete PcP solution that combines modern design, functionality and safety on the Swedish Hising bridge

Unique design

Safe

Ease of maintenance

Functional





Public walkway

HMS Victory

Facts

The HMS Victory Under Hull Walkway provides safety for visitors.

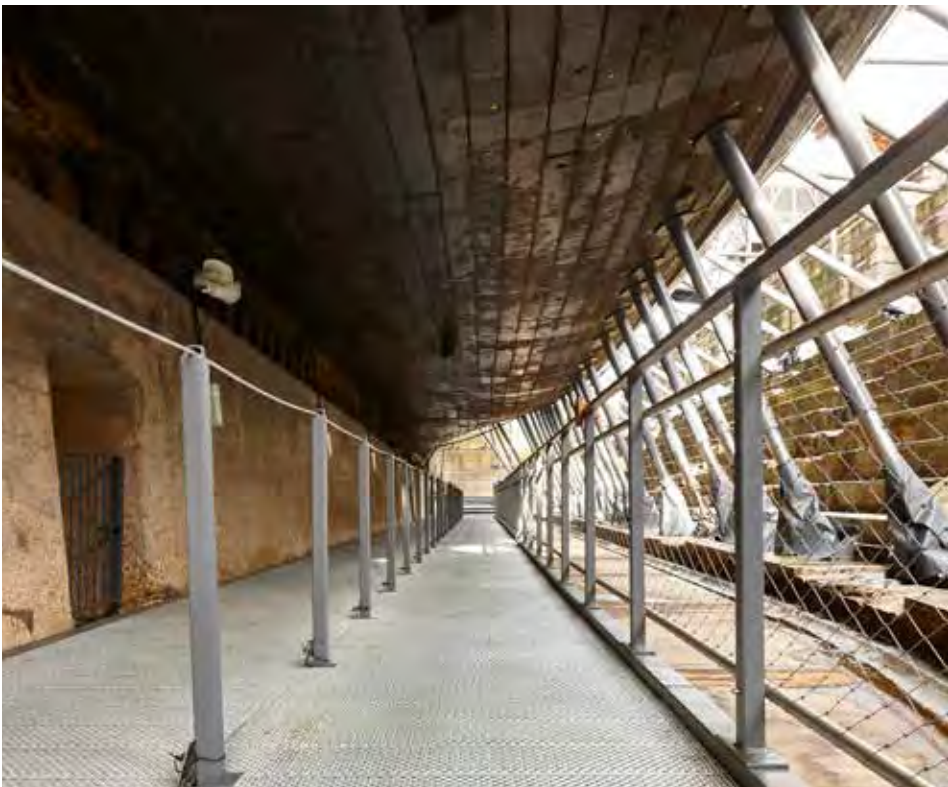
We delivered more than 150m2 walkways/landings and stair treads with DDA compliant nosings for public access at the HMS Victory.

Project Partners
Power System Services

Sector
Public

Location
Portsmouth Historic Dockyard

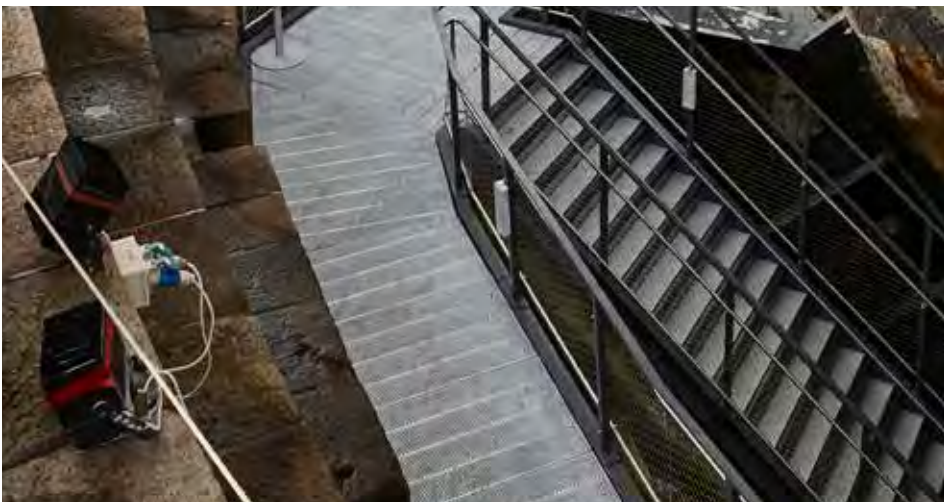
Project
HMS Victory



Introduction

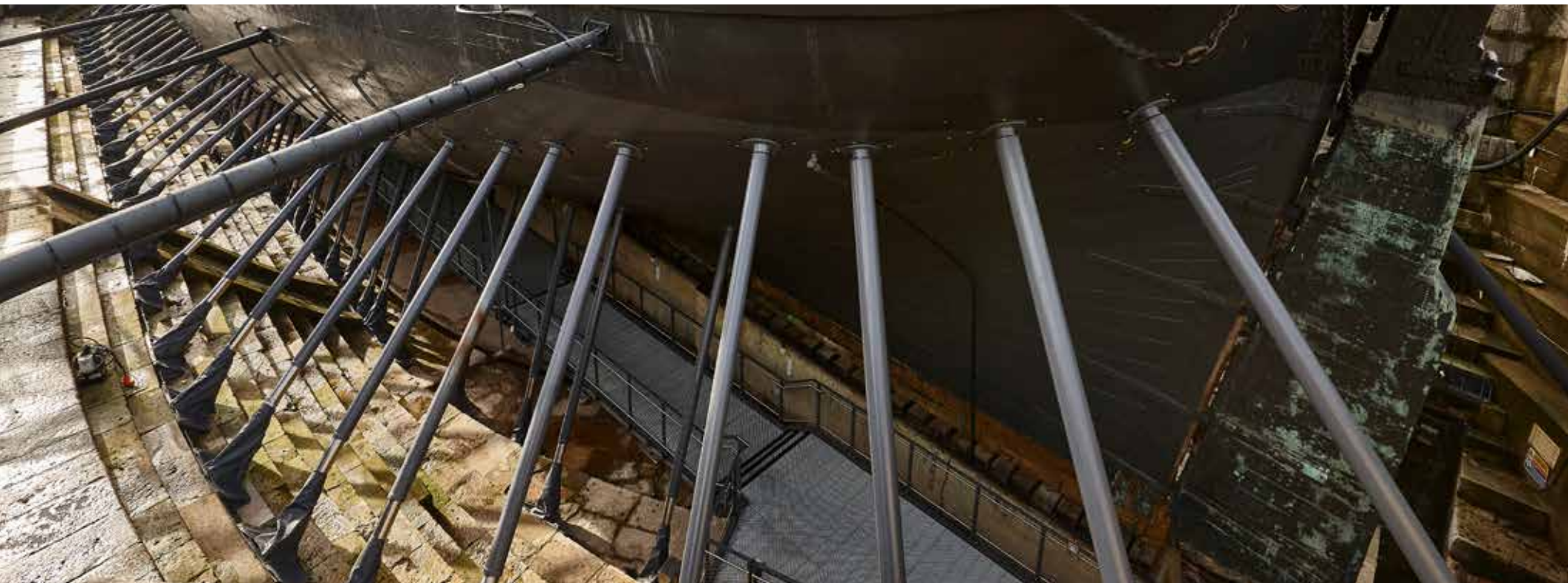
HMS Victory, situated in Portsmouth Historic Dockyard, is best known for her role in the Battle of Trafalgar. Currently, the HMS Victory has a dual role as the Flagship of the First Sea Lord and as a living museum to the Georgian Navy.

A new under-hull walkway provides visitors to Portsmouth Historic Dockyard with the ability to walk beneath HMS Victory. The new walkway enables visitors to safely descend into the dry dock base and admire the 3600-tonne ship safely from below.



Project criteria

The under-hull walkway required new access walkways, landings, and stairs for visitors to visit this part of the ship. It was essential to provide a safe solution that not only met but exceeded the criteria for public access walkways, treads & landings whilst also fulfilling the design requirements.



The solution

We delivered a complete solution consisting of 150 m2 OPTIMO® O5-M treads, landings & walkways, allowing public access at the HMS Victory. This combination enabled excellent slip resistance, a multi-directional, stiletto and walking stick proof surface, DDA compliant colour contrasting nosings, self-drainage and high strength to weight ratio.



PcP was involved with product development and design assistance to supply a suitable safety solution

High strength

Safe

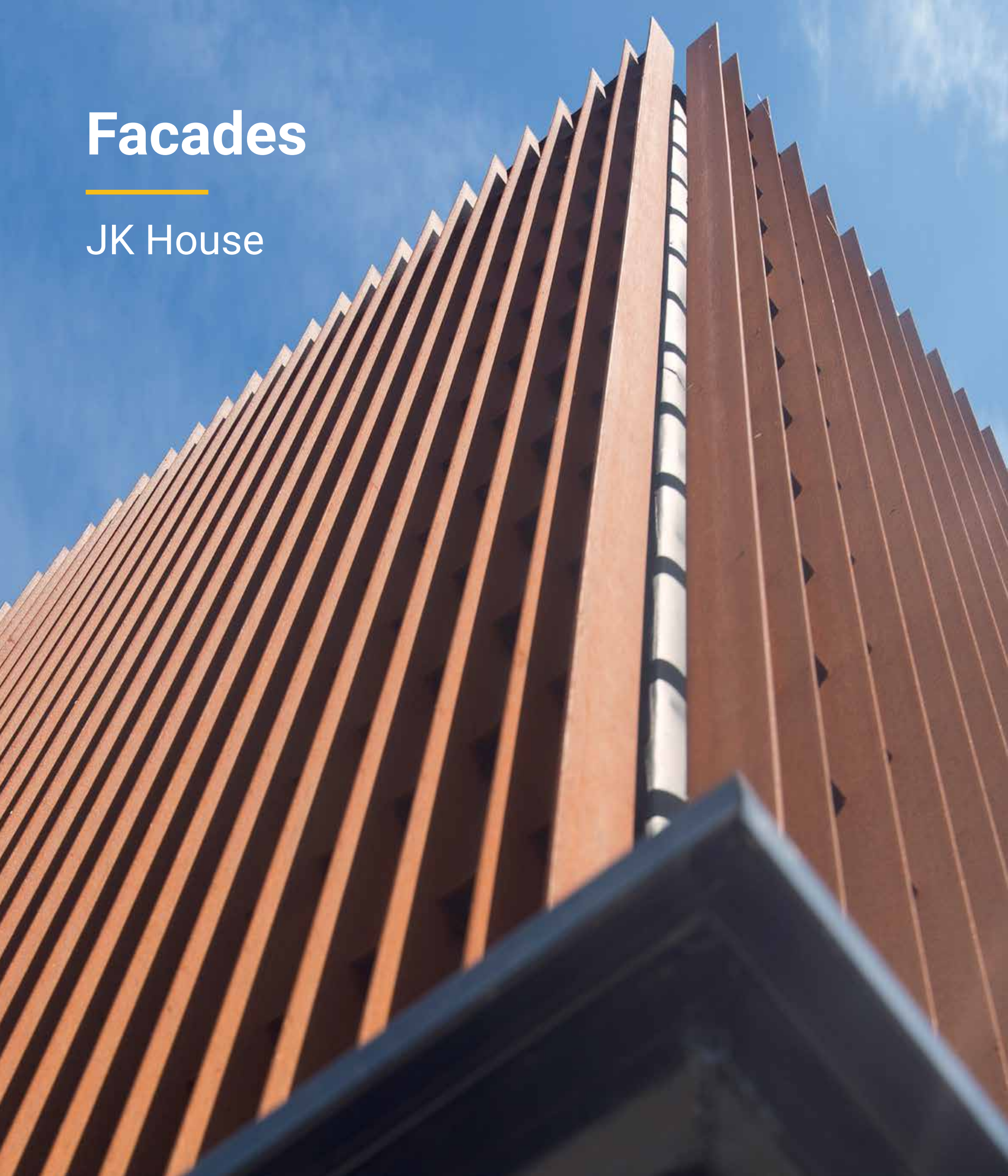
Comfortable

Drawings



Facades

JK House



Facts

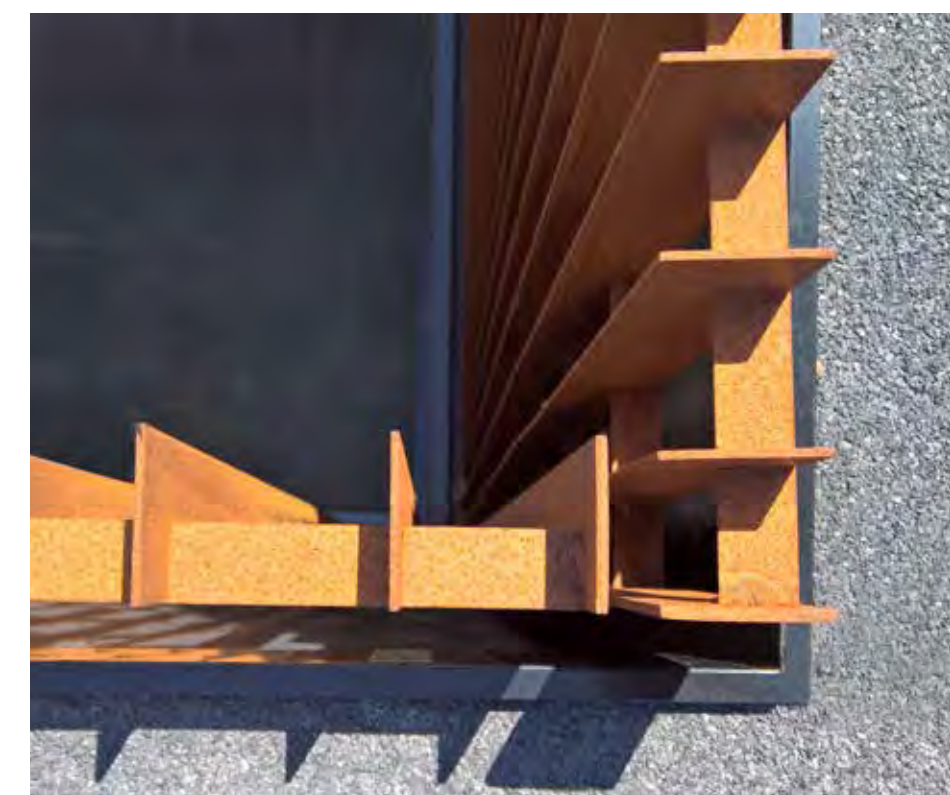
The JK House is a visually distinctive villa located in the Bezuidenhout area of The Hague. The architect responsible for this project is Jacco van Wengerden from Atelier van Wengerden, located in Amsterdam.

Architect
Jacco van Wengerden

Location
Amsterdam

Sector
Private housing

Project
JK House, The Hague



Introduction

The unusual location of the site, surrounded by buildings erected in the 1930s, required balanced choices in the materials selected for the facade. Furthermore, the design of the villa needed to meet the conservative demands of the local aesthetics committee in the Hague municipality whilst blending in with adjacent buildings.



Project criteria

The architect, Van Wengerden, immediately realised the potential of the site. By selecting the right materials for the facade, he could refer to the former garden centre on this location and the colour and structure of the brickwork of the adjacent buildings. In his quest to find the ideal materials for the unique facade of the JK House, Van Wengerden decided to use COR-TEN steel MESH® gratings in his design, enabling a visually striking appearance of the facade.



The solution

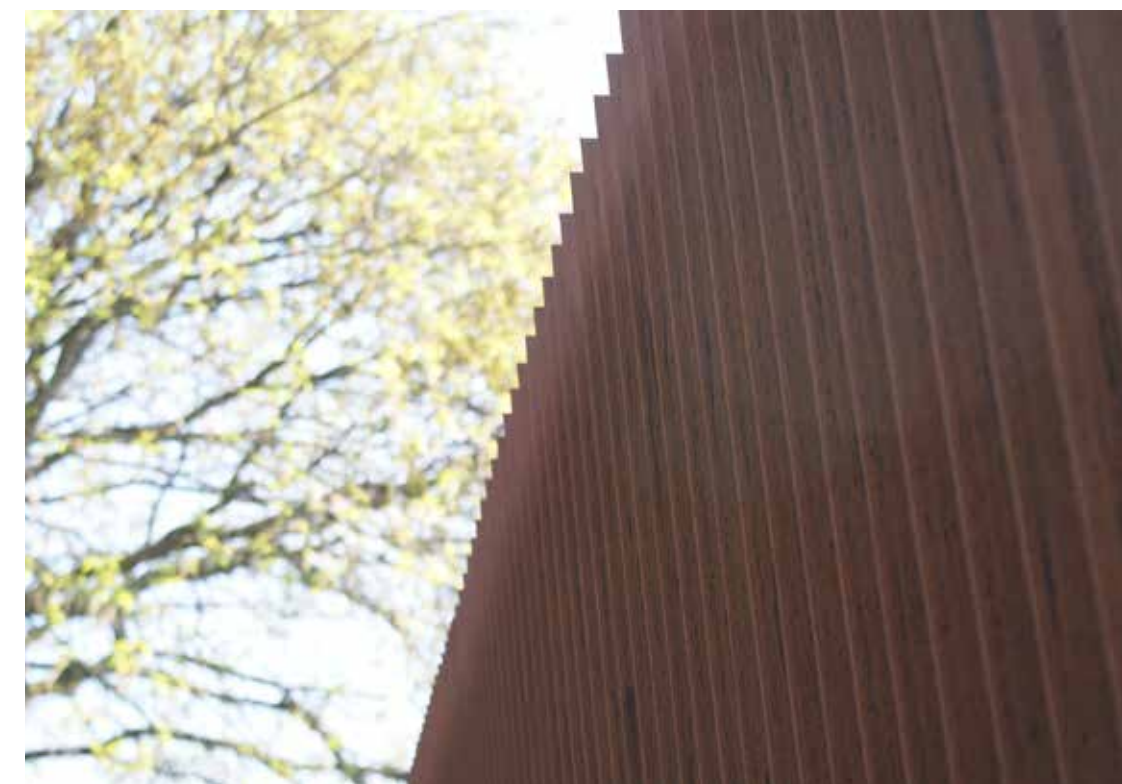
As PcP could manufacture the MESH® gratings in a wide variety of dimensions in both bearing and filler bars, Van Wengerden had the freedom to design the gratings to match his initial idea of vertical lines throughout the facade.

PcP produced gratings with dimensions between the vertical bearing bars of both 44 and 55mm, with in-between filler bars, spaced by 150 mm. In addition, the gratings were mounted backwards, leaving only the bearing bars visible. The desire was also to have no edge bars on the top side of the gratings to provide a more airy appearance - a requirement PcP was able to meet.



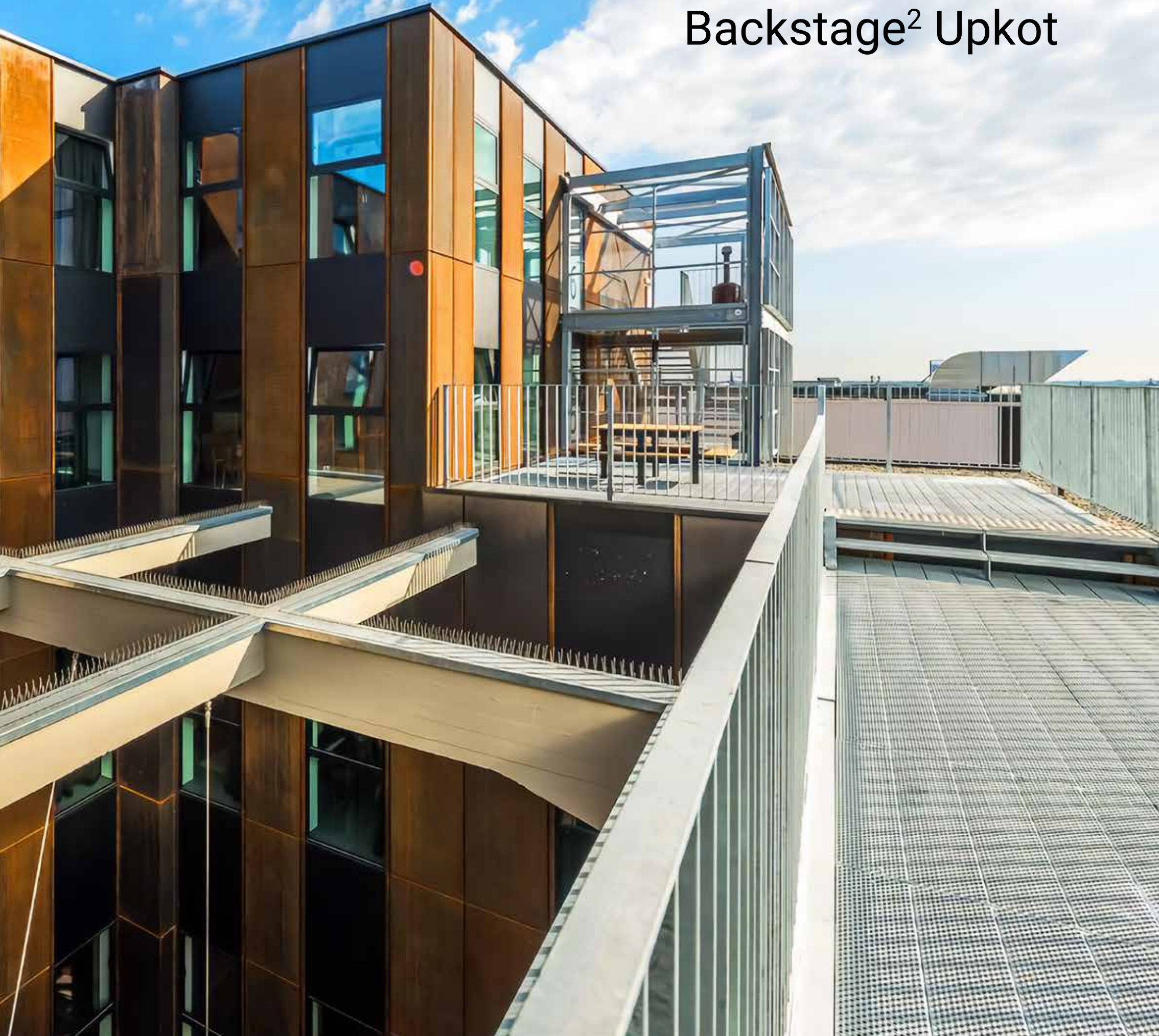
COR-TEN steel MESH™ gratings with almost unlimited design options. Barely visible welded-in fixing plates enabled fast and secure mounting. A lightweight solution that demands a minimal supportive structure.

- ✂ Close collaboration
- ✂ Easy installation
- 📏 Tailor-made mesh
- ⚡ Fast production



Stairways & platforms

Backstage² Upkot



Facts

Steel stairways and platforms for Backstage² Upkot student flats.

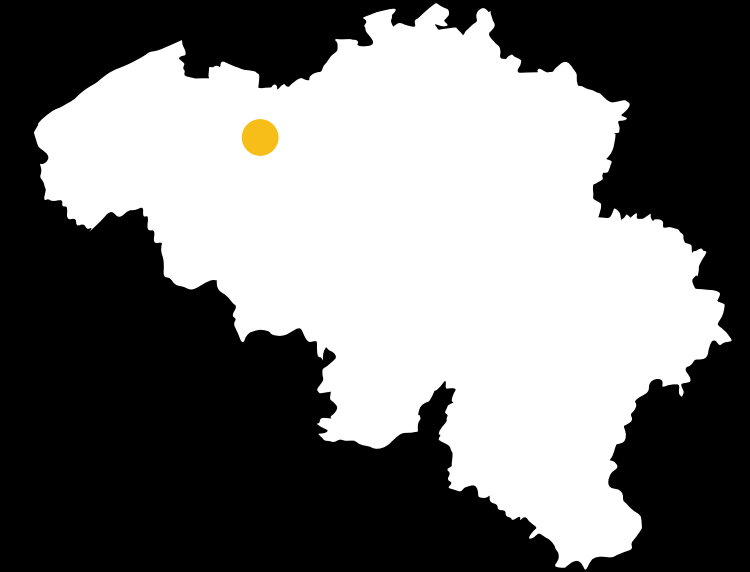
Ultramodern student accommodation using steel with safe stairways, safe and comfortable platforms as well as exterior seating areas for students.

Project Partners
Lannoo Konstruktie

Location
Ghent

Sector
Student flats

Project
Backstage² Upkot



Introduction

The ancient printing house of “De Vooruit” in the Center of Ghent, was completely stripped to only the ancient concrete supporting structure. From there the renovation commenced, and the ambition was to create ultramodern student housing made from steel. The requirement was to provide safe stairways, safe and easy to walk platforms, as well as outside recreational areas for the students. These safety solutions needed to co-exist in aesthetical harmony with the materials used predominantly throughout the project, such as COR-TEN steel, completing the striking and modern look of the project.



Project criteria

PcP had to meet the criteria for a sustainable, durable solution that was safe and comfortable to walk on. At the same time, the solution needed to blend in well with the COR-TEN steel being used for other parts of the project, providing a modern look that would appeal to students. Another challenge was installing the new steel structure onto the existing supportive concrete structure of the original building.



The solution

Lannoo Konstruktie chose the OPTIMO® O2, Spiral treads – Type K and panels, as these high-quality products met all stated requirements. As an added bonus the OPTIMO® O2 perforation is easy to walk on in all types of shoes and is even suitable for outdoor furniture, such as tables and lounge chairs. In total, 150 spiral K treads were used for three spiral stairs in the three-storey building. More than 100 OPTIMO® O2 treads were installed, along with almost 300 square metres of OPTIMO® O2 panels, in both standard and custom sizes.



PcP was involved with product development & design assistance to supply a suitable safe solution that met design requirements

🛡️ High strength

🛡️ Safe

🌿 Lightweight

🛠️ Tailor-made



Platform

Stauning Whisky



Facts

Galvanised steel platforms adorn Stauning Whisky's distillery.

PcP mesh gratings and steps in galvanised steel make up 1,000 square metres of working platform and mezzanines at Stauning Whisky.

Project Partners
Stauning Whisky

Sector
Whisky production

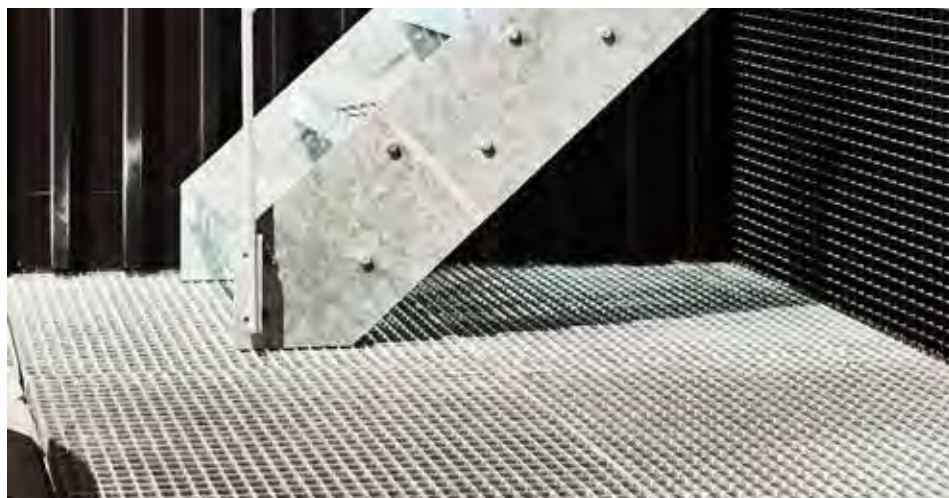
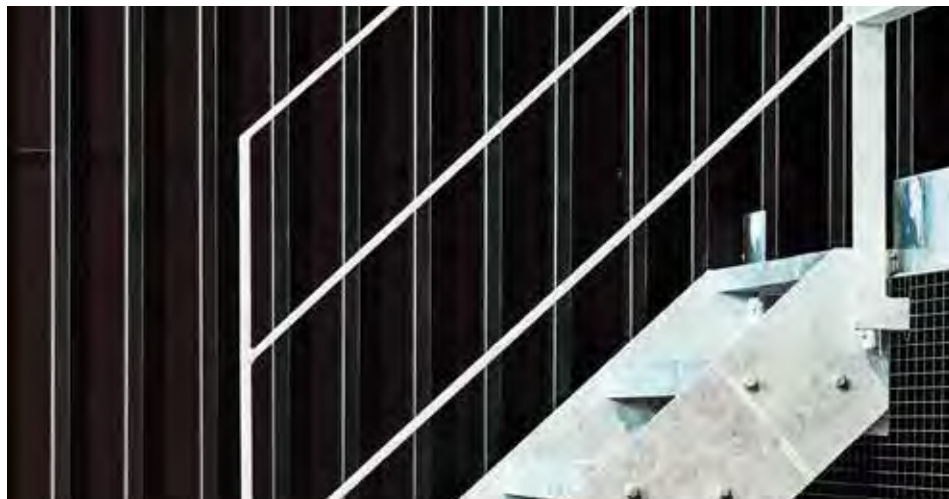
Location
Stauning

Project
Stauning Whisky



Introduction

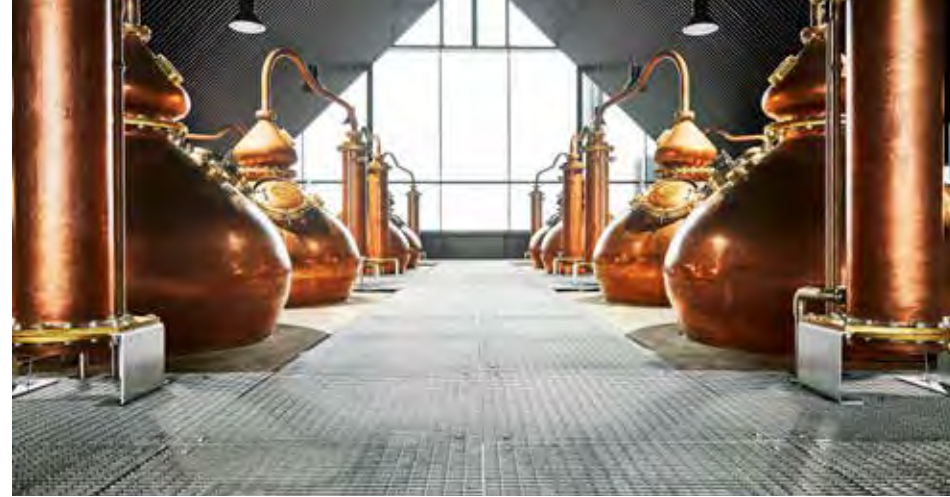
Stauning Whisky dreamed of creating a modern distillery where real whisky was made. PcP was chosen to provide mesh gratings for the platforms and mezzanine floors, as well as ventilation gratings for the drying halls. Before building work started, construction meetings were held with the building's owners as well as the architect, consulting engineer and smith.



Project criteria

As the designated supplier of mesh gratings for the distillery's platforms, PcP's specialists advised on the choice of product, solution, material, load and safety requirements and matched the desired project demands. Stauning Whisky was also very keen that the solution would visually match the rest of the distillery.

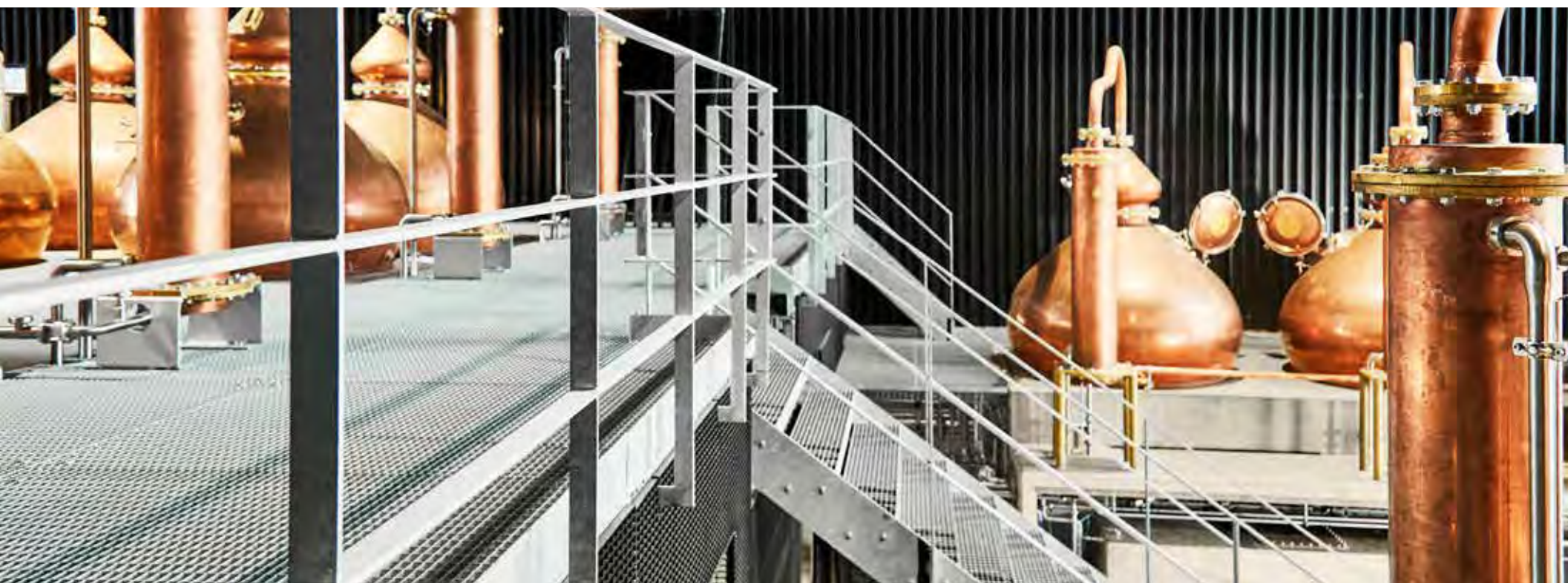
The height of the distillery was set at 3.2 metres, so safety was a key factor for employees as well as visitors. Therefore, a mesh grating solution was chosen, intended to look like a solid floor.



The solution

PcP supplied a customised solution with press-locked mesh gratings and steps with cut-outs for copper pipes. PcP tailored the galvanised steel mesh gratings to create a 1,000-square-metre platform and mezzanine level in the distillery, where the whisky is produced in copper pot stills. The combination of different metal types ensured a modern design whilst providing visitors with an authentic experience of a real whisky distillery.

The galvanised steel platform had to be integrated with the copper still pots in the distillery, while the mesh gratings needed to comply with special mesh size requirements.



A tailor-made solution that helps promote an atmosphere of authentic whisky production. The sense of safety on the 3+ metre tall mezzanine levels at Stauning Whisky ensure that visitors have the best possible experience when visiting the distillery.

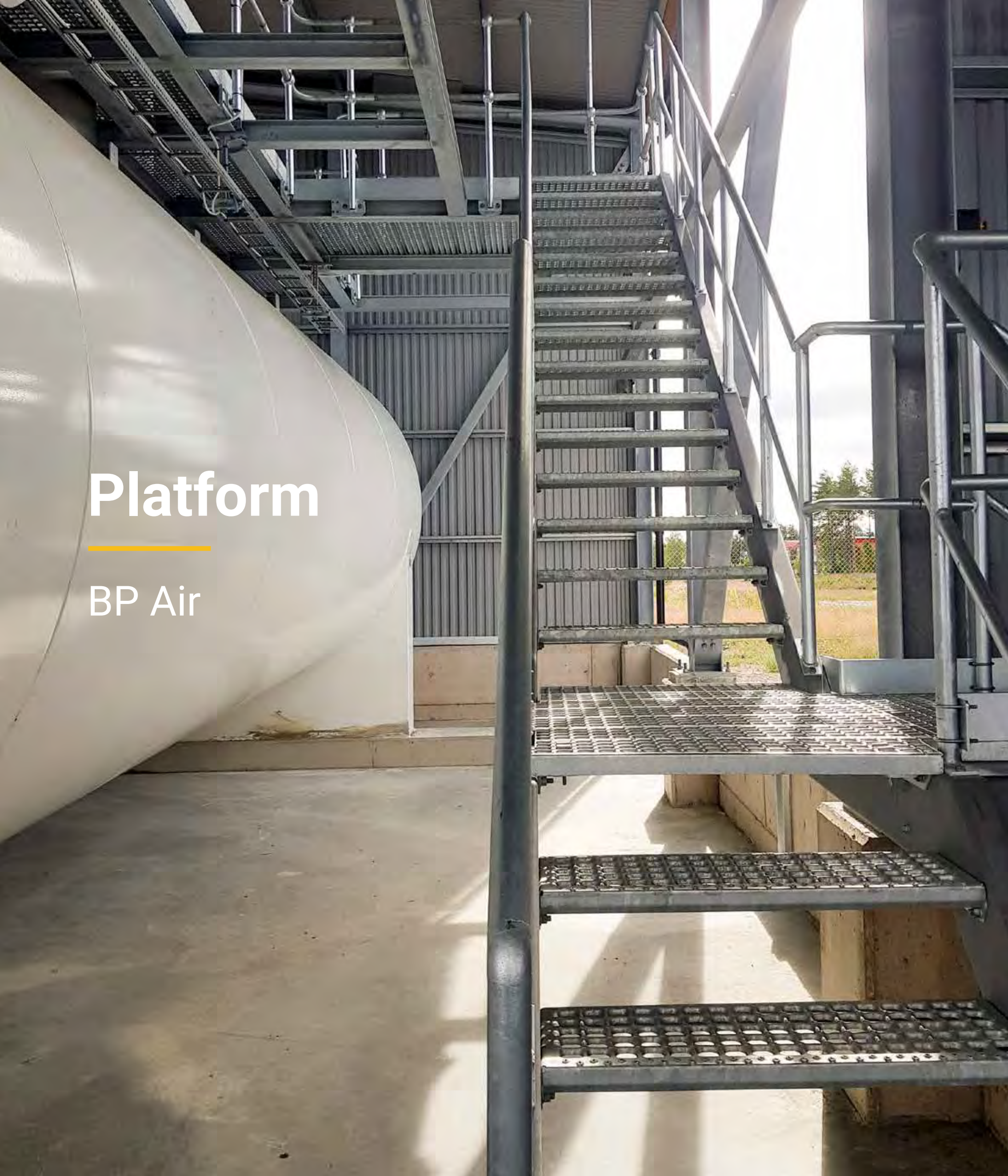
 High strength

 Safe

 Slip-resistant

 Modern design





Platform

BP Air

Facts

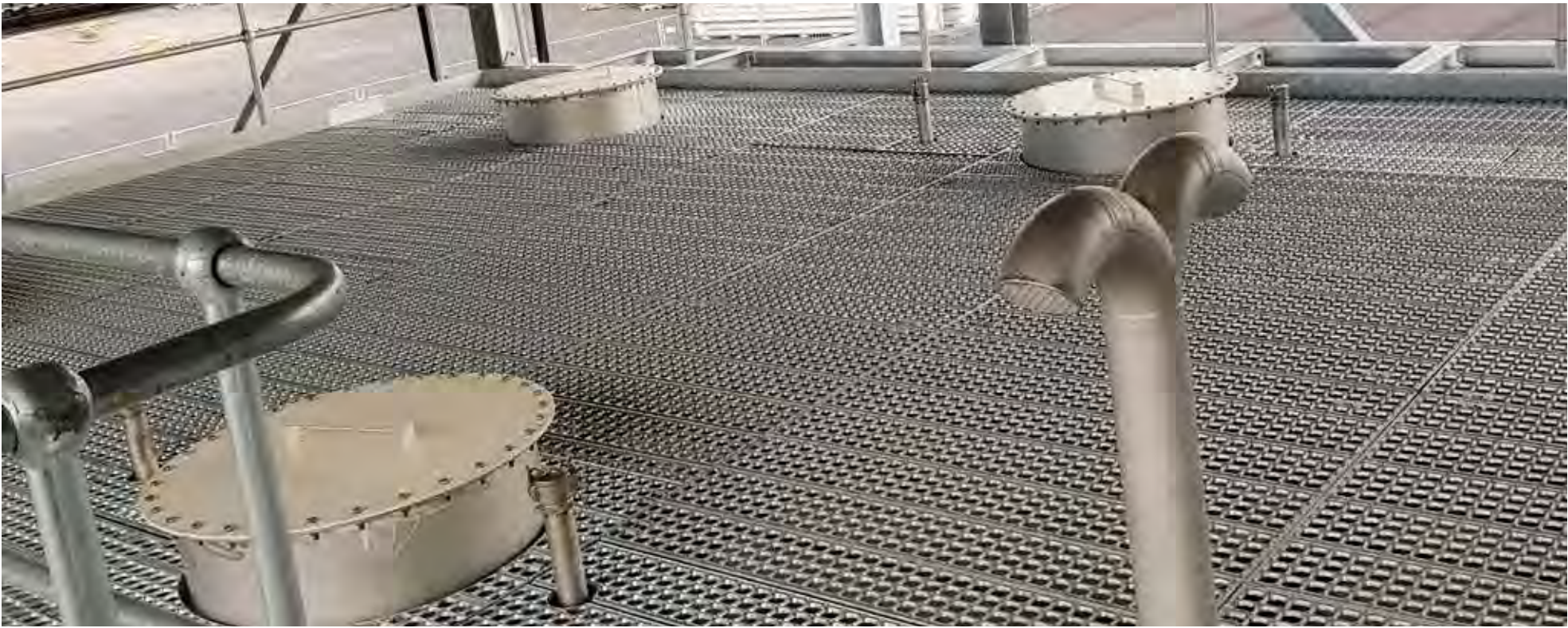
The Air BP jet fuel station project is the result of close collaboration between the Swedish partners Totech (project lead) and Fremek, who installed the entire construction. The solution from PcP consisted of a safe work platform.

Project Partners
FREMEK Service AB & Totech AB

Location
Dals-Långed

Sector
Jet fuel station

Project
Air BP



Introduction

For this project, Air BP required an anti-slip platform due to the use of oil during maintenance.

Although the platform is new construction, it was erected on an existing outdoor structure consisting of nothing but a roof and fuel tanks. Thus, custom dimensions were required.

The project involved the partners Fremek AB, Totech AB and PCP A/S. The project had a strict timeline of 10 weeks as construction had to be finalised before winter set in.



Project criteria

Fremek was responsible for designing the air-plane fuel station and sourcing the right materials. Totech undertook the construction of the project. Totech has more than 25 years of experience managing complex projects for a large range of industries and, therefore, held extensive knowledge of industrial constructions and which materials to use.

PcP has delivered gratings to Fremek in several previous projects. Totech, therefore, approached PcP to showcase gratings with high slip resistance for the platform.

Totech sought to use standard sizes to meet customer requirements of both lead time and budget. At this point, Totech discovered that PCP also could provide handrail and ladder systems.



The solution

The PcP CUBE® gratings, treads and toe-plates were provided for the platform in standard sizes. For easy access to the platform, PcP provided fire escape ladders and safety handrails. PcP CUBE® gratings and treads benefit from outstanding high PTV slip-resistance reducing trip and fall risk. Lightweight yet strong, the solution fit perfectly into the existing construction from ground to roof.

Fremek installed the platform, and the workers on-site made cut-outs to suit various plant equipment. Additionally, PcP provided escape ladders, mountable on fuel tanks. In case of fire incidents/emergencies, this enabled workers to escape rapidly.



The new platform is vital for workers who access the station multiple times per day to check fuel levels and conduct tests

Slip-resistant

Installation

Maintenance

Safety



Wood combined with steel for architectural pier

Waterplein Revaleiland

Facts

The Waterplein Revaleiland Amsterdam project was constructed by Knipscheer Infrastructuur BV, a medium-sized construction company specialising in infrastructure (roads, bridges etc.). With about 120 employees, Knipscheer is specialised in civil engineering tasks in the Netherlands.

Project Partners
Knipscheer Infrastructuur BC

Location
Amsterdam

Sector
Public Pier

Project
Waterplein Revaleiland



Introduction

As the contractor, Knipscheer's role was to construct a new and modern area to be used by the general public at Waterplein Revaleiland. The project presented challenges because the design criteria specified a wooden pier to match the existing environment.



The solution

To create the new public square at Amsterdam Waterplein Revaleiland, Knipscheer selected PcP as the supplier of 1,400 square metres of press-welded gratings. The mesh gratings are placed upside down on a concrete surface, ensuring stability of the wooden planks.

Each press-welded grating is tailor-made to meet the design requirements, with a mesh size of 111 x 99/60 x 3 mm. Customised mesh sizes can only be made with a press-welded grating, making MESH® the optimal choice for this particular project. The gratings were placed upside down on the concrete. Knipscheer then laid 28 mm thick hardwood planks into the gratings, providing a striking and elegant look.



Project criteria

High safety standards and a modern design were the ultimate criteria for constructing the pier. Normally steel beams are often used as support for wooden planks, but this would require substantially larger quantities of steel, resulting in much higher costs. Instead MESH® gratings were chosen for this project. The wood planks were installed into the gratings, creating a perfectly straight line, the full breadth of the structure.



Using PcP press-welded MESH™ gratings, the wooden planks could be installed in one line to meet the design requirements. Gratings, instead of panels, require less steel, which makes the gratings a cost-effective solution when installing wooden planks on a pier

-  **Cost-effective**
-  **High strength**
-  **Easy installation**
-  **Safety**

Public walkways

HMS Gallipoli



Facts

The HMS M.33 is not only the sole remaining British veteran of the bloody Dardanelles Campaign of 1915-1916, but also of the Russian Civil War which followed. The ship is one of just three British warships from World War I still in existence.

Project Partners
ML (UK) Ltd.

Location
Portsmouth Historic Dockyard

Sector
Public

Project
HMS Gallipoli



Introduction

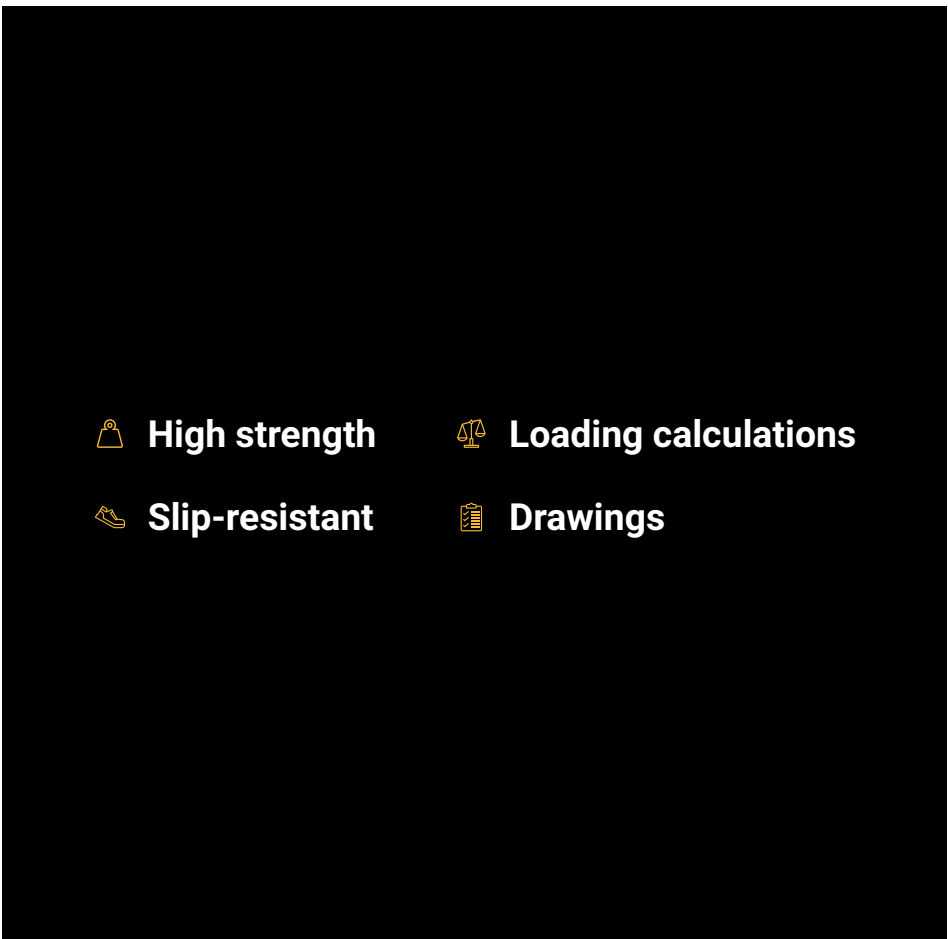
Public access walkways, landings, and stairs for visitors was needed to enable the public to explore the outside of the ship. It was essential to provide a safe solution that not only met but exceeded the criteria for public access walkways, treads & landings while also meeting the project criteria.



The solution

The platform consists of 200m2 of walkways/landings plus 48 No. stair treads with DDA compliant Nosings for public access.

Type O5-M treads, landings & walkways were used, providing excellent slip resistance, multi directional, stiletto and walking stick proof properties, DDA compliant colour contrasting nosings, self-draining capabilities and a high strength to weight ratio.



Safe Stairway

Blue Buoy



Facts

Safe Stairway for the Blue Buoy public beach in Porthleven on the South West Coast of Britain.

Project Partner
Insteel

Location
Porthleven

Sector
Public

Project
Cornwall County Council



Introduction

Cornwall County Council was responsible for upgrading and renovating an existing stairway to Blue Buoy Beach at Porthleven. A specification and sample were given to the Council, who approached three different fabricators/installers, all of whom came to PcP for an engineered safety solution on treads/landings.

Insteel Industries is one of the largest architectural fabricators in the county of Cornwall. Insteel successfully won the contract to supply and install the stairway.



The solution

The stairways are suitable for access with all types of footwear and pets. The 05m nosing on the treads comply with the slip-resistance recommendations of BS7976 which is a superior alternative to the durbar plate initially requested. In addition, the applied 33/8 mm pattern is very suitable for heels.

Shotblasting offered an increase in the thickness of galvanizing treatment and enhanced corrosion resistance, providing a more durable product. A perforated rear riser allowed water to pass through when storms and high waves hit the staircase.

Project criteria

The Blue Buoy stairway project specification initially demanded stainless steel and open-mesh gratings with an alternative for a heel-proof version with a 20mm gap and a durbar plate for a slip-resistant surface.

PcP proposed a galvanised alternative instead of stainless steel and anti-slip nosing allowing a slip-resistant surface. The proposed solution was cost-effective, safe, durable and matched budget criteria.



Ingenuity, security, comfort, stability and good looks went hand in hand in the Blue Buoy stairway project

-  Slip-resistant
-  Safe
-  Efficient drainage
-  Corrosion resistant



Our main product lines





Embrace cost efficiency, safety and modern design with PcP CUBE® mesh gratings

The PcP CUBE® gratings embrace design, quality and safety and can be applied in all industries where 33×33 mesh gratings are used today. The CUBE® is a punched hole mesh grating that combines lightweight with high strength and is an ideal and cost-efficient solution for the construction and food & beverage industry where grating panels and stair treads are required.



Enhanced slip resistance

The slip resistance offered by the CUBE® is tested in accordance with BS 7976-2 and with DIN 5110.



Unique design

Designed by PcP, the CUBE® is the latest innovation, new to the world and comes with a unique and modern design and manufacturing technology.



High strength & low weight

The CUBE® grating has the optimal balance between weight and strength making it a suitable and cost-efficient solution for all types of industrial applications.



Simple & quick installation

We designed the CUBE® gratings to be simple and easy to install - saving valuable time and enabling quick commissioning.



Easy to clean

In food and beverage industries where hygiene is important, the C-CUBE® grating is suitable and easy to clean.



EN ISO 14122

CUBE® gratings comply with the European standard EN ISO 14122 for loading and BS 4592 Part 0: 2006 + A1:2012.



An all-round solution. Infinite potential.

Ever since its introduction, the OPTIMO® series of planks, panels, and treads have been synonymous with safety and stability. The OPTIMO® safety gratings design contains the characteristic punched hole pattern, allowing essential properties such as high slip resistance, drainage, optimal airflow, and strength to weight ratio, recognized by clients and industries through decades.



Optimal strength to weight ratio
The sturdy design of the OPTIMO® line ensures a construction that is as light as it is strong. Lighter than a mesh grating with the same strength. Punched and drainage holes, purposely designed to be easy to install, flexible in its construction and a strong foundation for any safety need across industries and applications.



The right material
Available in steel, stainless steel, special high strength steel, mill finish, aluminium, and corten steel. Your project defines the material.



High slip resistance
Carefully placed drainage holes and punched holes ensure that the OPTIMO® line proves end-users with maximum slip resistance.



Suitable for high altitudes
The OPTIMO® line is very suitable to be used at high altitudes. Even though the construction employs punched holes for its features, its low level of transparency provides the end-user with a high degree of comfort.



Flexible by design
OPTIMO® gratings can be used in numerous types of climates, environments, industries, and applications. The product line is available in various widths, heights, lengths, and profile forms and can furthermore be customised to meet your exact needs.



Install with a breeze
OPTIMO® has been designed to be simple and easy to install. This allows for quicker installation in challenging environments, allowing safety for end-users on short notice. The flexible and sturdy design means that the planks, panels, and treads can be installed virtually anywhere.



Certified Quality
The OPTIMO® product line has been rigorously tested and approved according to the European standards EN 1991 and EN ISO 14122.



MESH™

A design trusted for generations

MESH™ gratings and treads are available in countless variations and find use throughout numerous industries, construction, offshore, energy and transport sectors. In operation all across Europe for generations, MESH™ gratings represent stability and versatility that has stood the test of time.



A myriad of materials

Mesh™ gratings are available in various materials and surfaces. Untreated steel, galvanized steel, aluminium, stainless AISI 304 or acid-proof AISI 316 - the choice is yours.



Mix & match

Pick from 3 different masks - square mesh, rectangular masks or louve bars. Variations and combinations between these three and add on properties makes for endless possibilities of how your next MESH™ installation looks.



Slip resistance

MESH™ gratings are available with serrated edges which provides enhanced slip resistance.



Custom cut-outs

Our MESH™ gratings are also available with cut-outs - a classic project request. Our experienced team is more than happy to provide you with further assistance in choosing the right solution.



Properties per project

Special load requirements? Extra high slip resistance? Cut-outs? We got you covered. The MESH™ product range contains the versatility to meet even the most specific requirements.

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