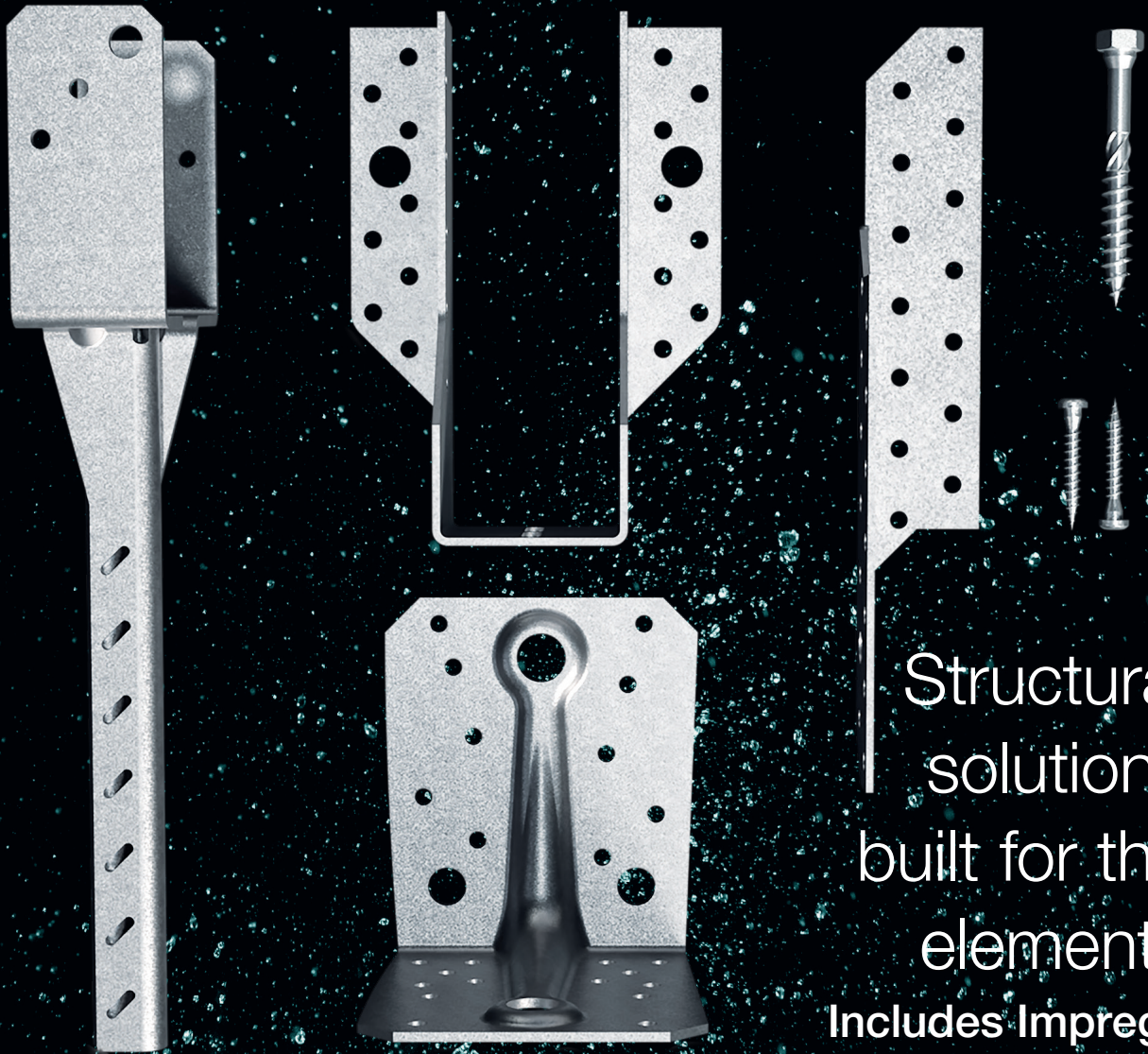


ZPRO®

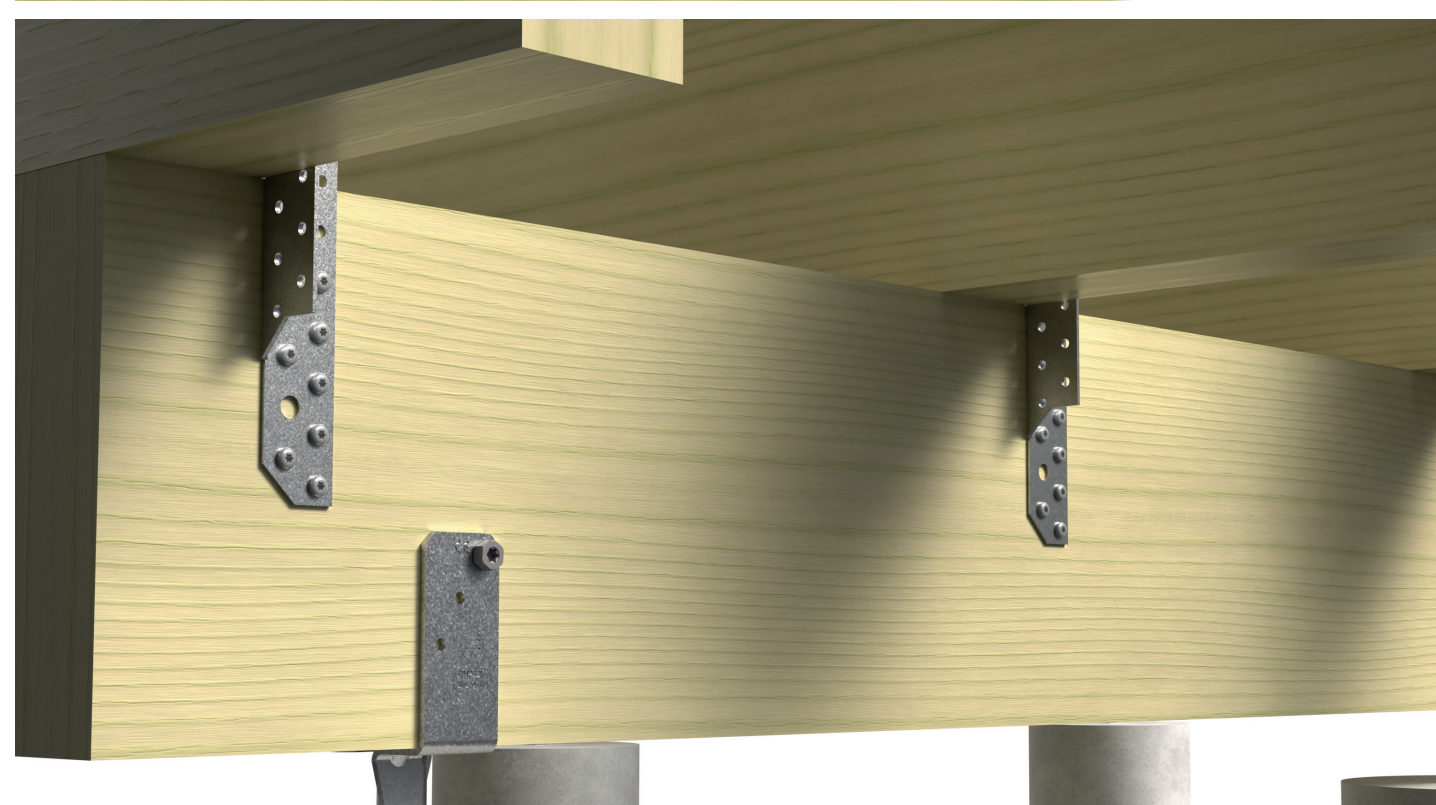
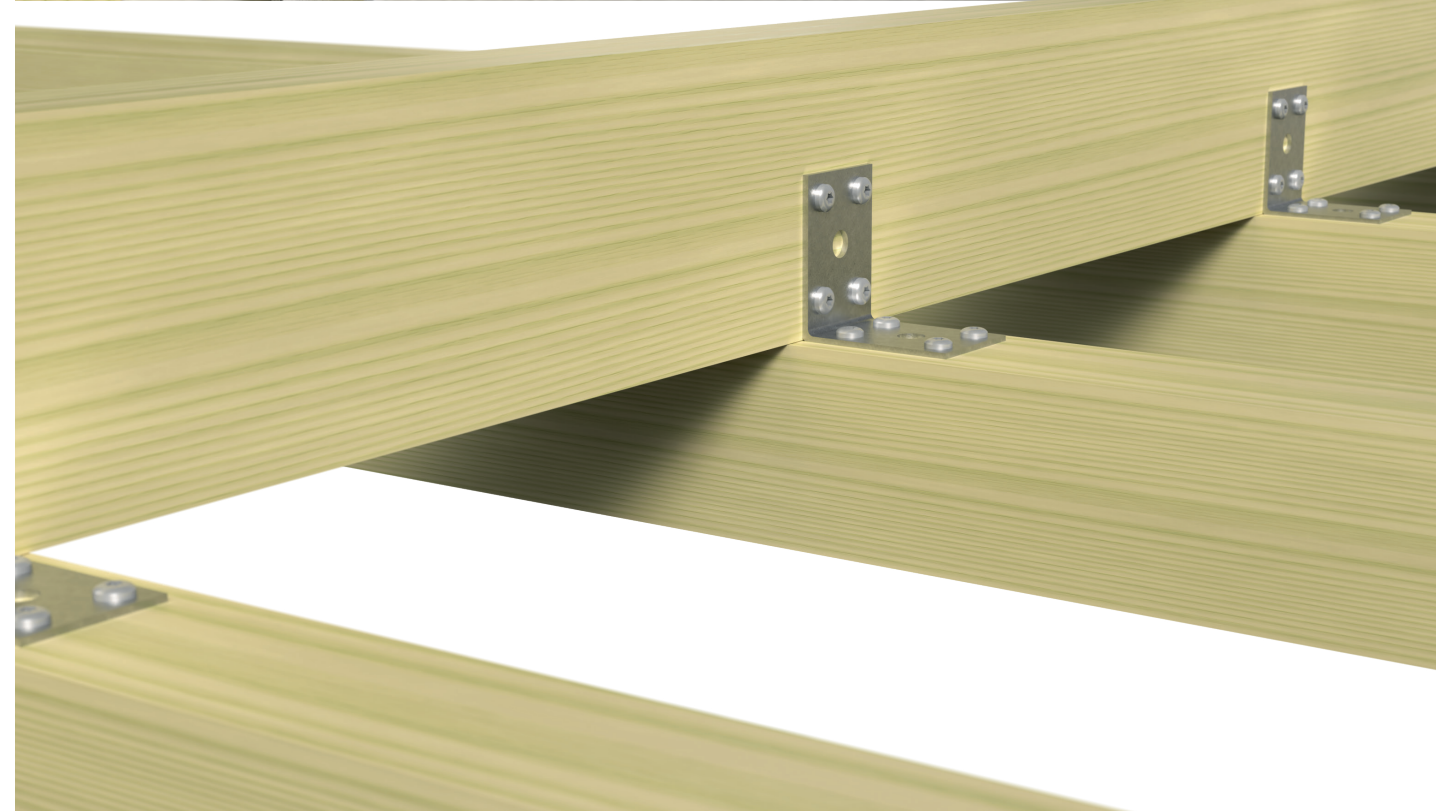
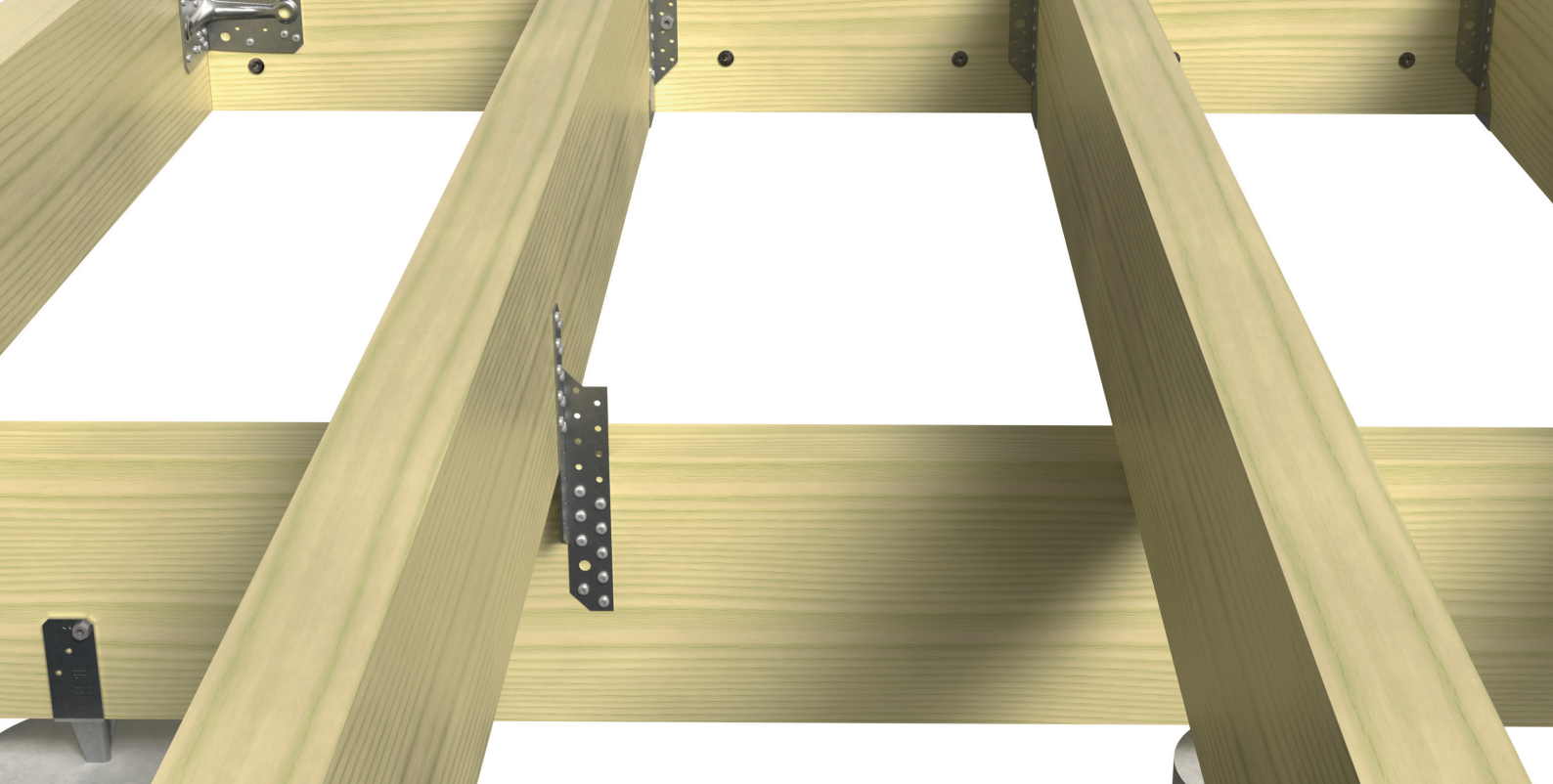
Connector Coating for Exterior Use

SIMPSON

Strong-Tie



Structural
solutions
built for the
elements
Includes Impreg+
fasteners



Structural solutions built for the elements



Take our performance tested solutions outside. The ZPRO range of structural connectors provides a highly cost effective alternative to stainless steel in situations where structural metalwork is exposed to external conditions such as patio awnings, car ports and decking.

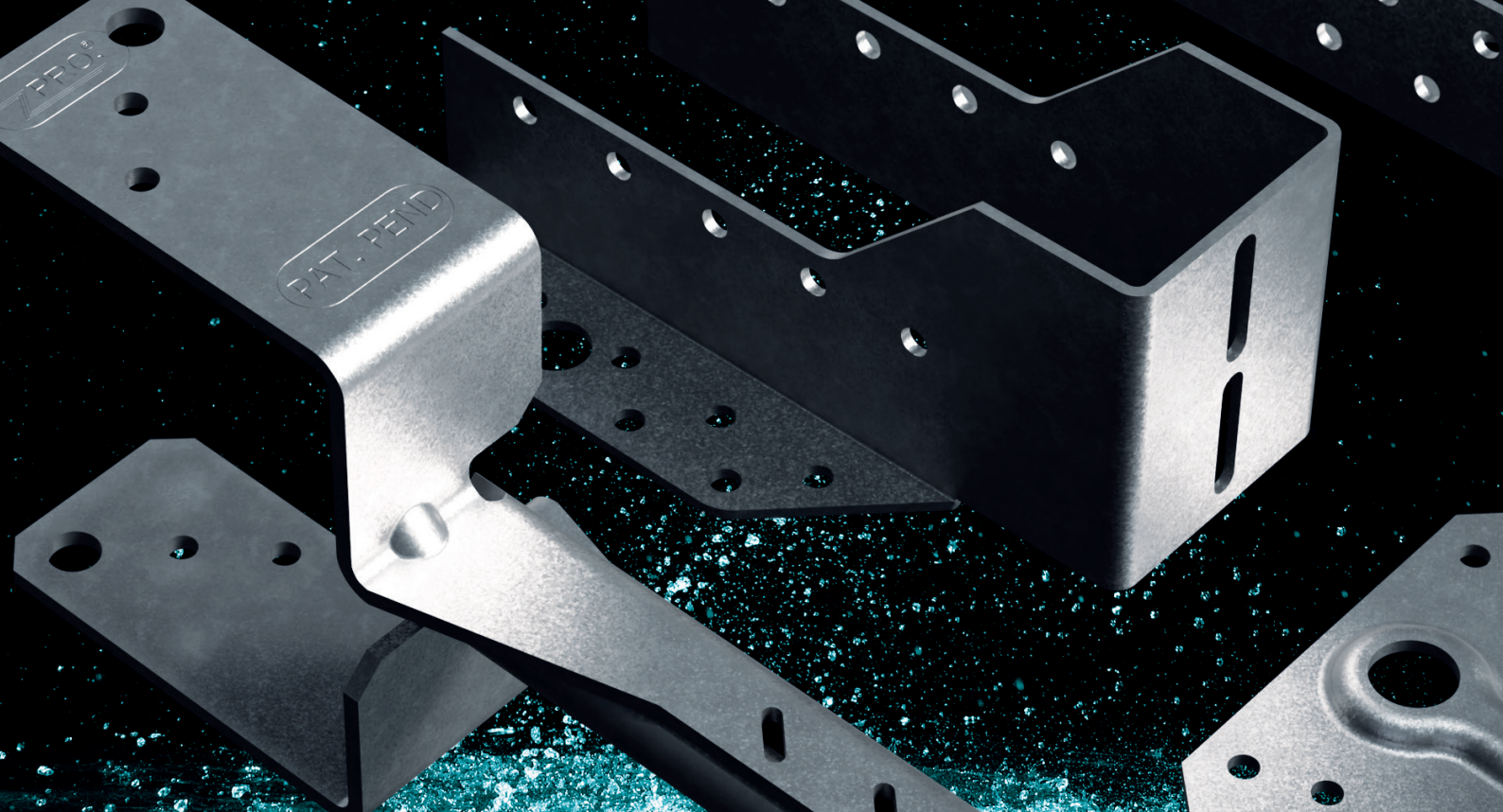
Performance tested and CE marked, ZPRO coated connectors are identical to those trusted by professional builders around the world to ensure safer, stronger structures. Equivalent to an extra layer of hot-dip galvanisation rated to corrosion category C3 (EN ISO 12944), the coating is certified for exterior use for 15 years. So, with the exception of high wind/salt areas such as sea-coasts - they can be used to build super strong timber structures in driveways, patios and gardens at a fraction of the cost of stainless steel connections and fastenings.

- Suitable for outdoor structures
- Self-healing, the coating deposits a protective layer over rust as soon as it begins to form
- Comparable to A2 stainless steel, tested for over 1,200 hours ISO 9223

Partner with Impreg+ Fasteners

Partner with our Impreg+ coated screws. Impreg+ provides the same level of protection, to ensure long lasting structural security and avoid cosmetic issues such as rust staining.

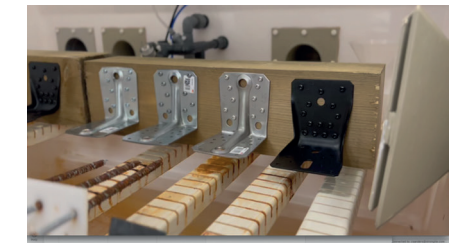




Tested: Laboratory (Salt Spray Chamber)

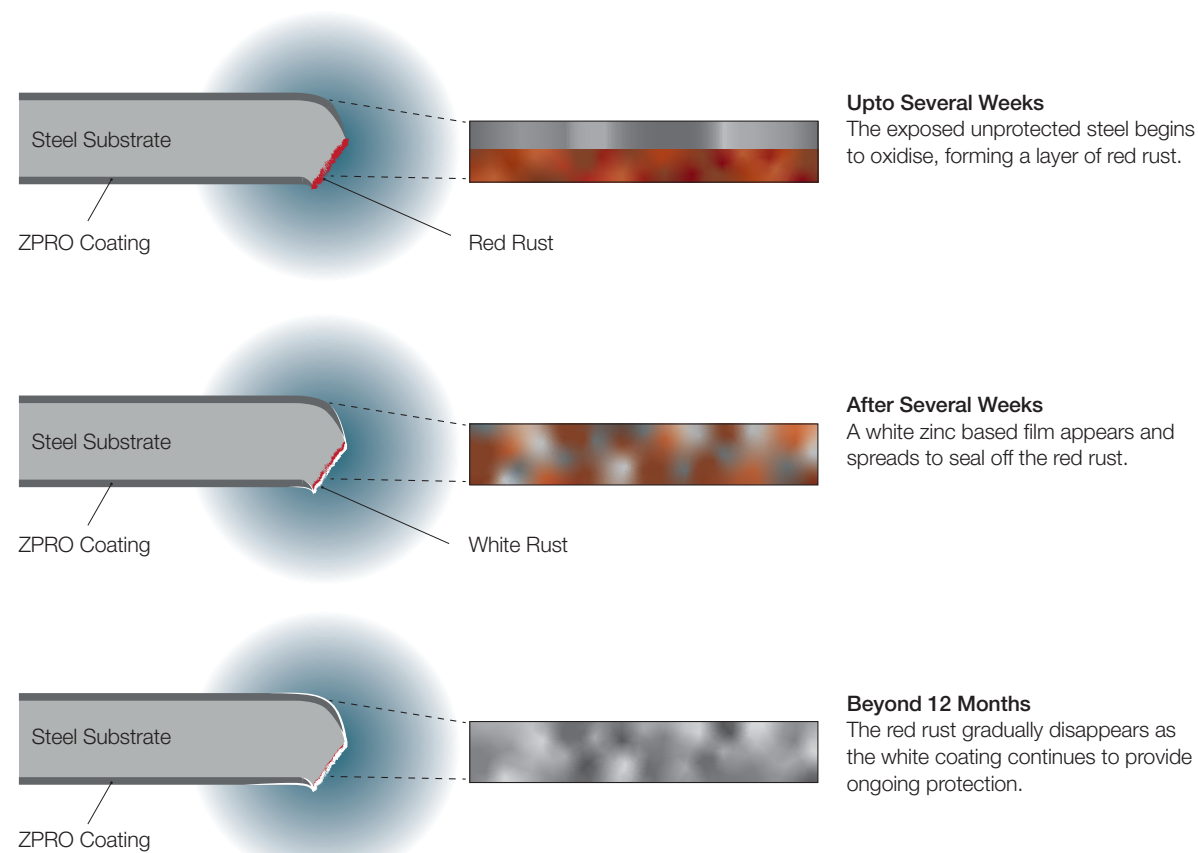
ZPRO is suitable for Service Class 3 (according to EN1995-1-1) except in high corrosion environments such as coastal areas. In Service Class 4 environments a lifespan of 15 years can be expected from connectors and fasteners coated with ZPRO and Impreg+ respectively.

In lab tests conducted at our UKAS accredited facility in the UK, we compared the the performance of connectors coated in galvanised steel, ZPRO and also stainless steel, ZPRO performed over seven times better than galvanised steel.



What is ZPRO®

ZPRO is a coating of zinc magnesium ($\geq 25\mu\text{m}$ thick) that we apply to a selection of our connectors to make them suitable for outdoor use. This is made possible due to the way the coating behaves once a connector is exposed to the elements. Eventually rust will start to form, however it is quickly coated in a thin white layer of magnesium which halts the process and provides ongoing protection for the the exposed area.



Comparison after 4,000 hours in salt spray testing chamber



Galvanised Steel Z275 Coated Connector
Most of the connector is completely rusted.



ZPRO Coated Connector
Rust forming on the edges becomes coated with protective magnesium deposits.

- Galvanised steel (Z275): rust appeared after 168 hours
- ZPRO: rust appeared after 1,200 hours (similar to A2 stainless steel)
- The images shown left were taken after 4,000 hours of exposure in a salt spray chamber.

Tested: the Arctic Circle

To see how ZPRO holds up in extremely harsh conditions, back in September 2020 we took a ZPRO coated connector to Vabø i Fensfjorden on the Norwegian coast - and left it there!

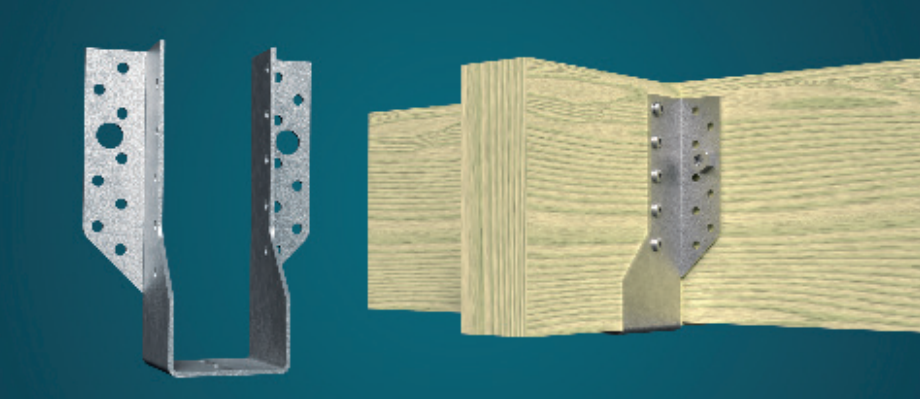
After almost two years of daily submersion in seawater, the connector continues to resist the rigours of the Arctic Circle - as shown in the photo comparison here.



ZPRO coated BSNN, still going strong in April 2022.



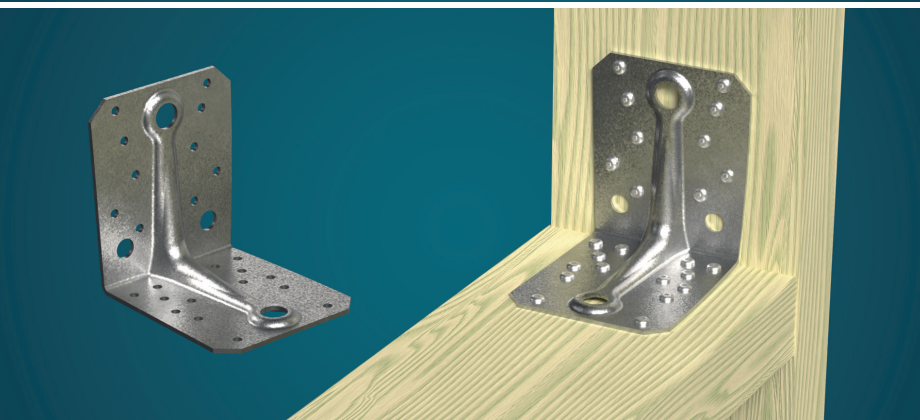
Standard galvanised steel Z275 coating for comparison.



BSNN-Z Joist Hanger

Flexible and capable, the 45mm wide BSNN-Z joist hanger can be used to support solid wood or engineered timber joists from timber, steel and even directly from masonry.

- Up to 2.9 tons capacity (BSNN45/168Z)
- Bolt holes for fixing to the steel or masonry
- Available in 92, 138 and 168mm heights



ABR-Z Reinforced Bracket

The ABR-Z provides high structural load capacities where any form of 90° angle connection is required. It's trademark keyhole rib design provides additional reinforcement to the connector.

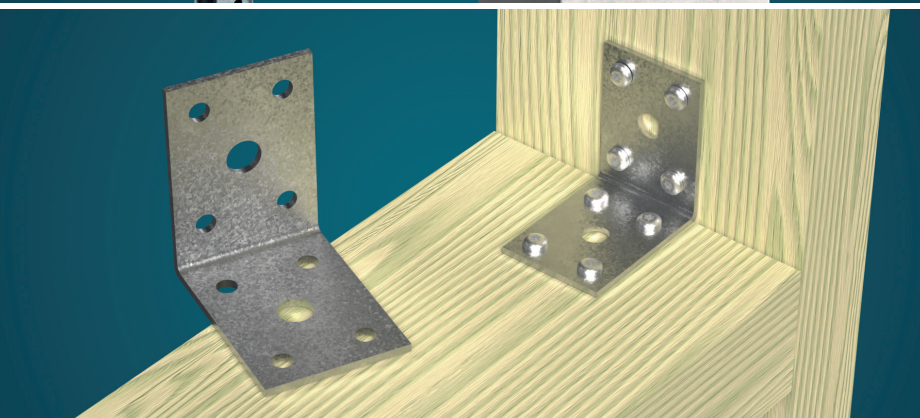
- Up to 2.9 tons capacity (ABR10525Z)
- Bolt holes for fixing to timber or steel
- Available in three height and width combinations



PBWS-Z Post Base

Designed and made in Denmark, our PBWS-Z post base features a unique folded design which makes it strong, yet much lighter than similar performing timber post to concrete connectors.

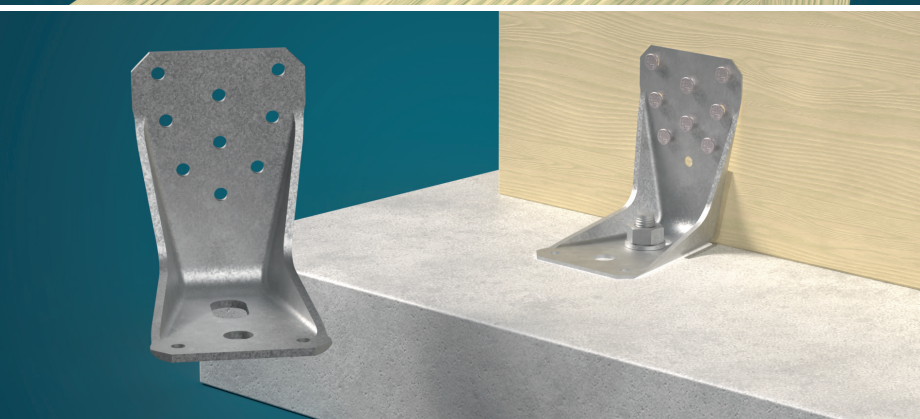
- Up to 2.0 tons capacity (all sizes)
- Up to 45% less material (than conventional choice)
- Available in widths from 45-100mm



AC-Z Light Duty Bracket

The 35mm wide AC35350Z is ideal for connecting timber to timber or concrete at 90° where structural loads are not required. It is a popular choice for many DIY applications outdoors.

- Simple to install
- Symmetrical fixing holes for nails, screws or bolts
- 35mm wide with 50mm long sides



AKR-Z Hold Down Bracket

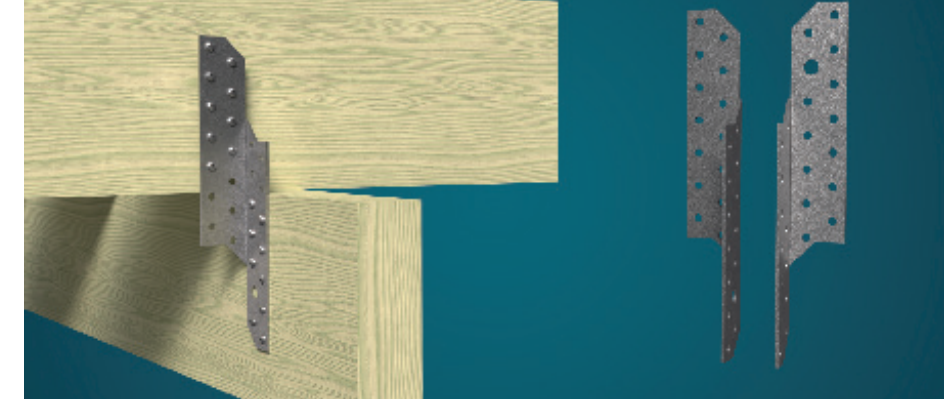
With reinforced side flanges and flexible fixing options, the 65mm wide AKR-Z range is the optimum way to connect timber to concrete pads or steel in way that is as economical as it is robust.

- Up to 1.4 tons capacity (AKR285Z)
- Some options include slotted bolt holes
- Available in heights 95, 135 and 285mm

SPF-Z Purlin Anchor

Providing additional resistance to wind uplift where structural timbers intersect, the SPF also provides horizontal load support as well as tensile resistance.

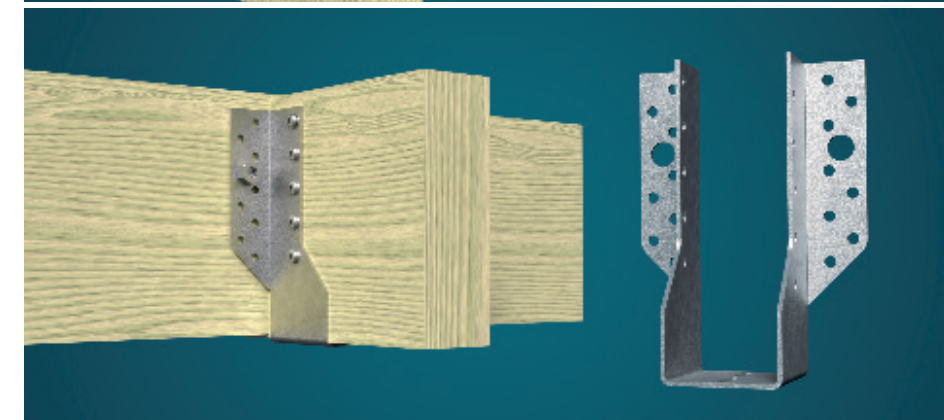
- Up to 400 kg capacity (using CNA4,0x60 screws)
- Can also attach timber as it crosses concrete
- Available in right and left handed configurations



DJH-Z Divisible Joist Hanger

Designed so it can be split into two symmetrical pieces before installation, DJH achieves the ultimate flexibility and convenience for any carried joist width from 45mm all the way to 160mm with one single connector size.

- Up to 2.7 tons capacity (DJH167/46Z)
- Bolt holes for fixing to timber, steel or masonry
- Available in heights 92, 137 and 167mm



PPG-Z Post Base Legs

Elegant yet strong, the 200mm long PPG-Z post base consists of a pair of symmetrical legs making it suitable for timber post installations of varying widths up to 250mm. For post thicknesses greater than 150mm, simply add another pair.

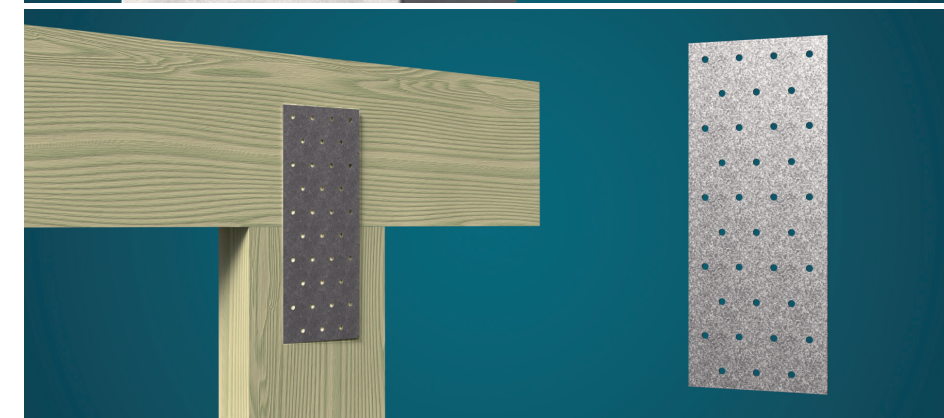
- Strong 3mm thick steel
- 25mm stand-off protects timber from moisture



NP-Z Nailing Plates

Nailing plates are a fast and convenient way to make timber to beam or post connections. Typically a plate would be installed on opposite faces of the joining timber.

- Suitable for square butting or 'T' connections
- Two sizes: 100 x 200mm and 120 x 300mm

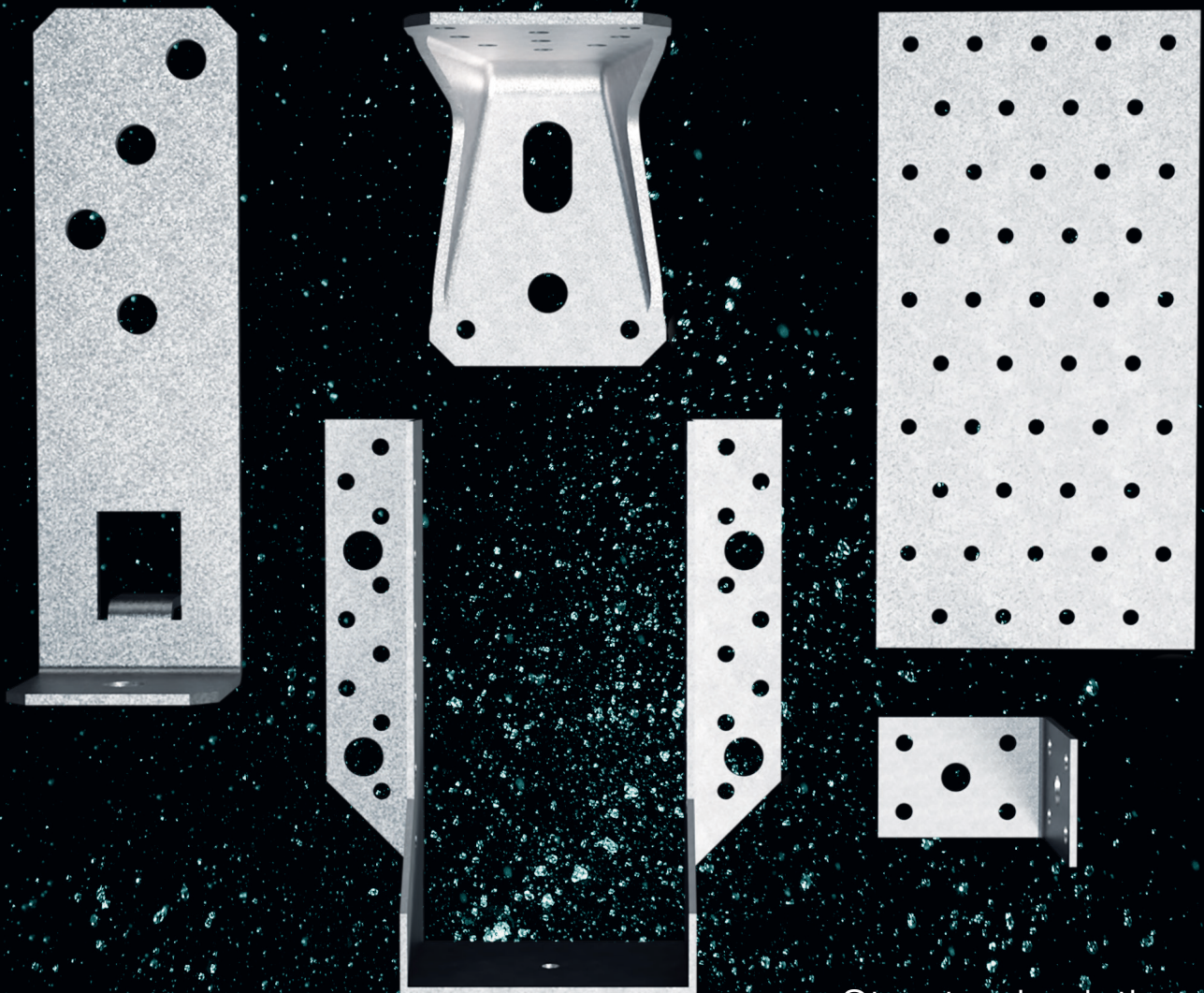


Impreg+ Coated Fasteners

Tested especially for use with Simpson Strong-Tie® connectors. Our SSH and CSA screws are coated with Impreg+ for a corrosion performance matched with ZPRO for the perfect connector fixing partnership.

- SSH features a hex head with integral 6 lobe drive
- CSA-Z is a conical head with 6 lobe drive





Structural solutions
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Includes Impreg+
fasteners