COMPANY & PRODUCT OVERVIEW

J&P Building Systems Limited







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Company Introduction





J&P Building Systems work closely with customers and engineering consultants to provide cost-effective, and reliable products to the construction and engineering industries.

J&P Building Systems works closely with customers and engineering consultants to provide cost effective, and reliable products to the construction and engineering industries. All company activities are controlled and audited by an ISO 9001:2015 Quality Management System. Bespoke manufactured products are produced to BS EN1090-1.

Where applicable most of our products comply with European Technical Assessments (ETA), European Machinery Directive, or may have other documentation such as Local Authority Building Control (LABC), or NHBC recognition.

For **over 25 years** J&P has represented the renown brands of JORDAHL[®], H- BAU, and PFEIFER, which provides customers with an extensive range of connection, lifting and waterproofing products that are focused on today's modern construction requirements. Together, these brands have over 600 years of international experience.

Quality, innovation, and safety are at the heart of what the company and our products stand for. Alongside our extensive range of high-performance products, we are known for excellent customer service plus high levels of engineering competence and innovation.

Specific project design requirements

will often involve our team providing bespoke design and manufacture of special product configurations. Such solutions may be required to accommodate the structural geometry of a project, special installation situations, or demanding loading conditions.

Product solutions are supported by quality-controlled fabrication, comprehensive product data, engineering calculations, and verified by downloadable design software. Examples of typical applications for our products are listed as follows:

Concrete and steel connection technology for:

- Curtain wall façades
- Structural and architectural
- components
- Thermally insulated balcony
- connections
- Structural, facade, and utility
- precast components
- Infrastructure and tunnel components

Lifting and handling technology for all types of precast concrete.

Structural concrete waterproofing technology.

Concrete reinforcement technology.

Disposable concrete formwork technology.











Adjustable Connections to Concrete JORDAHL® Anchor Channels and T-bolts

Anders Jordahl registered the first patent for cast-in anchor channels in 1913. For over 100 years since, JORDAHL[®] has been at the forefront of concrete connection technology.

The simple premise of the JORDAHL® anchor channel system is to provide easy and adjustable connections to concrete structures. Twist-in T-bolts can be positioned anywhere along the length of the JORDAHL® cast-in channels. This provides adjustment for accurate connection positioning. Use of this system means no welding or drilling of the concrete is needed. This avoids drill damage to the reinforcement of the concrete. It also means reduced workforce exposure to the risks of fires, airborne silica dust, harmful noise levels, or HAVS that may result from use of vibrating hand tools.

The wide variety of JORDAHL® cast-in channel types enable a huge selection of load conditions to be accommodated. Light and static loads can be supported with an extensive range of cold formed anchor channels.







A generous selection of toothed and non toothed, hot rolled channels allow heavy, dynamic, seismic and explosive loads to be reliably transferred into the structure.

Fixed or sliding connections can be achieved according to the requirements of the application.

Technical Evaluations:

Quality-monitored and certified in accordance with CE marking, ETA-09/0338.

- Façade connections
- Structural steel connections
- Connections for architectural metal









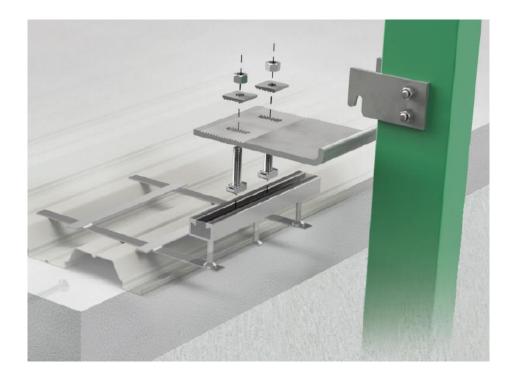
Adjustable Connections to Concrete - Facades J&P J-Sleds

J&P specialise in engineered connection designs to suit customer requirements. Each J-Sled is an engineered adaption of the JORDAHL® anchor channel system to enable easy placement of connections within metal deck floor slabs.

The product is designed by the J&P engineering team to suit the load and structure geometry of each project. It is a very popular system with both installers and designers. J-Sleds have been extensively used throughout the UK, particularly on high rise structures.

Typical applications include:

- Curtain wall façade connections
- Precast façade connections.





Adjustable Connections to Steel JORDAHL[®] Mounting Channels and T-Bolts

The JORDAHL® channel and T-bolt system provides an excellent method to achieve adjustable connections to steel structures or machinery. With excellent welding properties, toothed and non-toothed hot rolled channels enable loads to be supported in all directions.

The system is perfect for applications where multiple connection patterns or centres are required, or where the connected equipment or components need to be replaced or maintained periodically.

Technical Evaluations:

ETA- 15/0386

Typical applications include:

Structural steel connections

Machinery connections







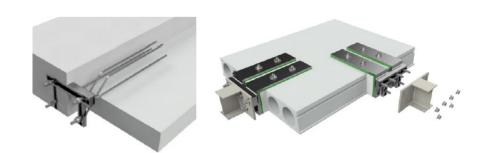
Thermally Insulated Connections – Steel Balconies J&P Balcon® and J&P Balcor®

J&P Balcon® provides thermally isolated adjustable connection for steel to concrete, and steel to steel connections. J&P Balcor® provides similar connections to hollow precast floors or existing structures. Effective prevention of cold bridging plus easy installation and adjustability have made these systems popular with both installers and designers. Used throughout the UK to provide thermally insulated connections to meet part L of the building regulations.

Technical Evaluations: LABC- EW838 Hodkinson Assoc. - Thermal modelling

Typical applications include:

Steel balcony connections



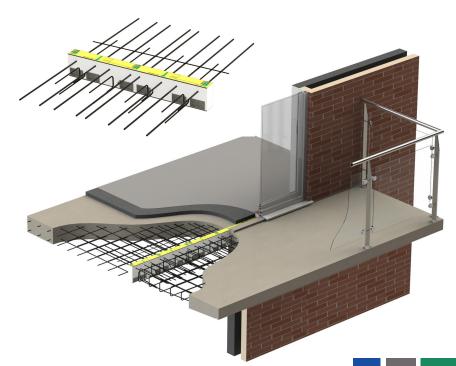


Thermally Insulated Connections – Concrete Balconies H-BAU Isopro[®] and Isomaxx[®]

The H-BAU Isopro[®] and Isomaxx[®] systems provide thermally isolated connection systems for concrete balconies and walkways. Available with up to 120 min. fire protection, Isopro[®] with 80mm of insulation is the most commonly used system to prevent cold bridging, The Isomaxx[®] system provides 120mm of insulation. Used throughout the UK to provide thermally insulated connections to meet part L of the building regulations.

Technical Evaluations: Fire resistance - EN 1365-1 to REI 120

- Concrete balcony connections
- Concrete walkway connections







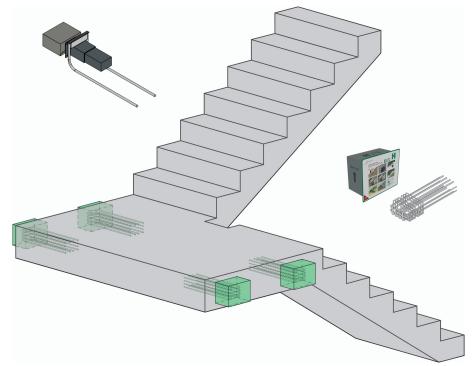
Acoustically Insulated Connections - Concrete Stairs H-BAU Sinton®

The H-BAU Sinton[®] HQW and Sinton[®] X systems provide acoustically isolated connection systems for supporting the landings of precast and insitu concrete stairs.

Supporting both positive and negative shear loads, the systems provide up to 41dB sound reduction from footfall and 90 min. fire protection. These systems are designed to provide safety and increase comfort levels for building residents.

Typical applications include:

Concrete stair landings





Acoustically Isolated Connections – Elevator Components JORDAHL® Sound Isolation Bracket - JAI

JORDAHL[®] Sound Isolation Bracket -

JAI provides acoustic isolation for connections to the lift shaft wall. Comprising elastomeric and steel components, the brackets efficiently support dynamic loads while dampening noise and vibration. (In tests the JAI units reduced noise transfer by 18dB).

Excellent news for designers and developers wanting to maximise comfort levels for building occupants. JAI Sound Isolation Brackets are installed to cast-in hot rolled JORDAHL® anchor channels, or for retro-fit applications may also be attached by dynamically qualified drilled bolts.

- Guide rail connections.
- Connections for the counterweight and drive support structure.





Reinforcement Systems H-BAU GFRP Reinforcement - Fibernox®

H-BAU GFRP Reinforcement - Fibernox[®] is an economical high performance alternative to stainless steel reinforcement.

- Non-corrosive, non-conductive, non-magnetic
- Tensile strength 1,000 N/mm2
- E = 60,000 N/mm2
- Diameters 6mm to 32mm
- Full range of bent shapes and helical configurations.
- Comprehensive design support

Technical Evaluations: CSA 807.

Typical applications include:

- Low alkaline/cement concrete.
- Marine or tunnel structures
- Structures requiring non-conductive or non magnetic reinforcement.





Reinforcement Systems JORDAHL[®] Punching Shear Reinforcement - JDA

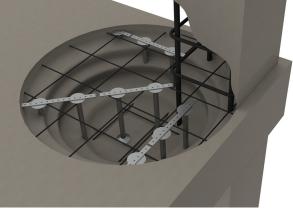
JORDAHL[®] Punching Shear Reinforcement - JDA comprise of double-headed reinforcement anchors that are factory-welded to carrier rails. Installed into the concrete from above, the units are positioned in floor slabs and foundation slabs to distribute punching shear loads above column or pile locations.

Typically supplied in two to five stud configurations, JDA units replace the need for drop beams or closely spaced traditional link reinforcement. This reduces cost and reinforcement congestion.

Technical Evaluations: ETA-13 / 0136

Typical Applications Include: Flat Slab Concrete Construction Precast Filigree Slabs.







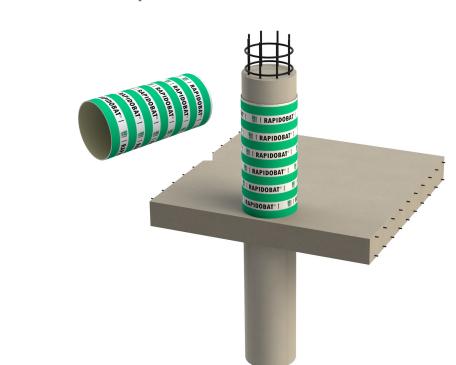


The H-BAU Rapidobat[®] is a disposable column formwork system that speeds construction and enables very high-quality concrete finishes to be achieved. Made from recyclable materials and available in a range of shapes and finishes.

- Cretcon HD for ultimate finish to circular columns.
- Also available in lined and unlined versions for circular, square, rectangular, hexagonal and octagonal columns.

Typical applications include:

Exposed concrete columns in public areas.





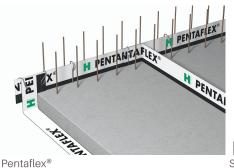
The H-BAU range of waterproofing products provides a complete answer to project waterproofing requirements.

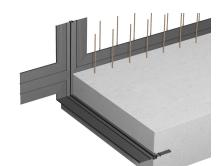
- Pentaflex[®] is a user-friendly coated metal water bar system that is easily lapped without the need to plan day joints.
- Kunex[®] is a proven traditional rubberised PVC waterstop.
- Swellflex[®] is a hydrophilic system for concrete joints.
- Pluraflex[®] is an injection system to seal cracked concrete.

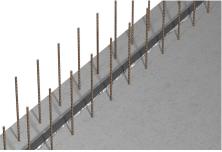
Technical Evaluations: NHBC recognition. ETA-15/0003 (Pentaflex)

Typical applications include:

- Underground structures
- Traditional concrete and Twin Wall basement walls.







Swellflex®



Kunex®

Pluraflex®



Precast and Structural Concrete Connection Systems PFEIFER FS Box Systems

The PFEIFER FS Box offers high load continuity connections. Wire loops are housed inside a steel box which is cast into concrete so that its outside cover is flush with the concrete surface.

Removing the cover releases the loops so they project to receive reinforcement which is then passed through the loops prior to pouring the concrete of the adjacent part of the structure.

The FS Box supports acting loads in 3 dimensions and its projecting wire loops are much safer for site personnel than projecting reinforcing bars. Design load capacities up to 45 kN per box.

Typical applications include:

• Structural concrete to concrete connections



Precast and Structural Concrete Connection Systems JORDAHL[®] Sliding Restraint Ties JVB

JORDAHL® Sliding Restraint Ties JVB are offered in a range of sizes and load capacities. They are available in stainless steel or zinc plated steel.

The JVB-V range supports shear and tension loads while allowing vertical movement caused by differential settlement or thermal movement.

The JVB-N range supports tension loads while allowing vertical movement. Both versions have load capacities in line with matching JORDAHL® anchor channels. Design loads up to 17kN per anchor.

Technical Evaluations: Quality-monitored and certified in accordance with CE marking,

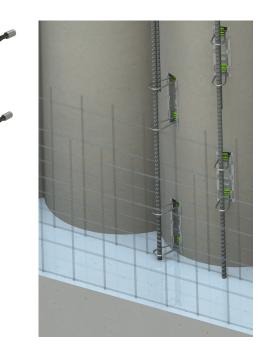
- Precast panels
- Retained facades













Precast Concrete Connection Systems PFEIFER Column and Wall Shoe Systems

PFEIFER Column Shoes offer fast installation of precast columns. They enable connections between stacked columns and for foundation slab connections. Column installation can be made without propping, which can have a hugely beneficial impact on programme.

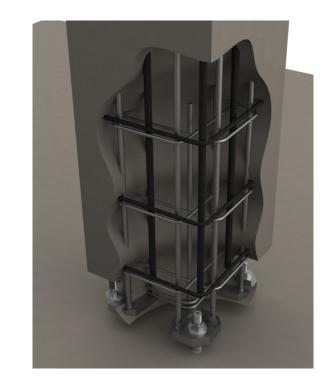
PFEIFER Wall Shoes offer the same benefits for precast walls, with the added advantage that they will transfer horizontal loads.

Technical Evaluations:

Quality-monitored and certified to EN 1090-1 in accordance with CE marking. Anchorage ETA-16/0868.

Typical applications include:

Fast-track precast structures for stadiums, commercial and residential projects.



Precast Concrete Connection Systems PFEIFER VS Loop Box Systems

The PFEIFER VS Loop Box System is normally used to connect precast panels together. Wire loops are housed inside steel boxes which form pockets in the edges of precast panels. Removing the cover releases the loops so they project into the joint between panels and overlap with loops in the adjoining panel.

Vertical reinforcement is passed through loops and free-flowing grout is used to bond the connection and seal the joint. VS boxes are available in different loop formats and lengths. Load choices range from simple non-rated restraint connections to fully load-rated 'alldirectional 3-D' connections.

- Precast panel connections
- Concrete to concrete connections







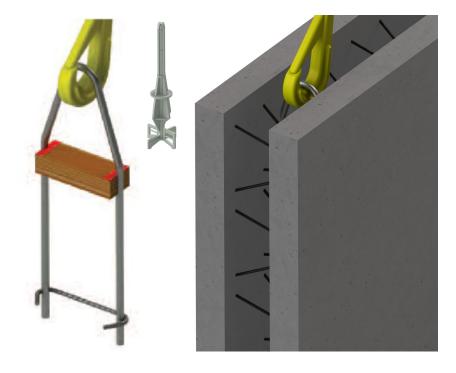


Precast Concrete Lifting Systems H-BAU KE Anchors and Multi-Rockets for Twin Wall Panels

H-BAU KE Anchors and Multi -Rockets are complimentary systems for Twin Wall transportation and production.

- KE Anchors provide safe lifting points for moving the panels in the factory or at site. Its innovative design eliminates weld embrittlement in the stressed areas of the anchor.
- In production, Multi-Rockets conveniently support the mesh reinforcement during casting of the first wall, while then setting out and supporting the casting of the second wall after flipping the panel.

Technical Evaluations: KE Anchors quality-monitored and certified in accordance with CE marking.





Precast Concrete Lifting Systems PFEIFER Threaded Lifting System

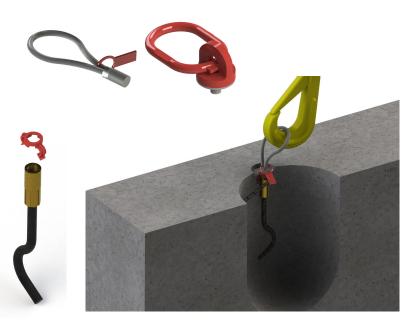
The PFEIFER Threaded Lifting System is renowned for quality and safety. A wide variety of anchor types and lifting units makes the system very versatile in application across most types of precast components.

Threaded anchors are available in many configurations which include waved tail anchors, flat steel anchors, and sockets

Safe vertical, transverse and rotational lifts are achieved with a selection of PFEIFER lifting units which attach to the anchors, including several versions of wire rope loop lifters and swivel eyes.

Technical Evaluations:

Quality-monitored and certified in accordance with CE marking, VDI/BV-BS 6205 and the Machinery Directive 2006/42/EC



Further information

Website and available downloads

J & P Building Systems offers customers and designers a variety of downloadable software and product data from our website: **www.jp-uk.com**

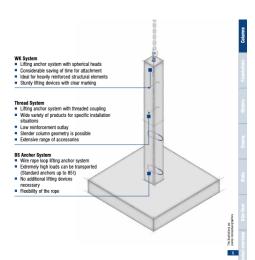
Downloadable files include:

- Copies of Quality Management and Product Certifications
- Technical Catalogues
- Product Application Videos
- Installation Instructions
- Installation Videos
- 2D and 3D AutoCAD[®] product drawings
- Revit[®] and IFC product drawing files
- Product Design Software

Some graphical examples of typical data and software downloads are shown on this page.



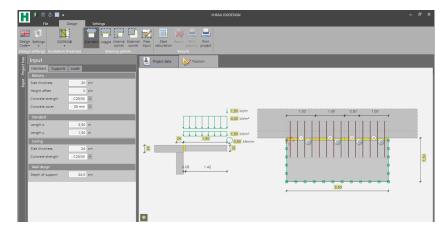
ISO 2001:2015 registration certificate for J&P Building Systems



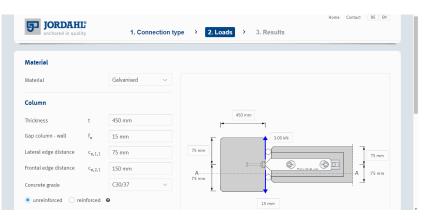
PFEIFER application catalogue for precast column, wall and slab connections.



 ${\sf JORDAHL}^{\otimes}$ "Expert" design software for JTA cast-in channel connections and JDA punching shear reinforcement to current ETA certification.



H-BAU "Isodesign" software for creating thermally insulated connection designs for concrete floor slabs and concrete balconies.



 ${\sf JORDAHL}^{\otimes}$ design tool for JVB sliding structural connections between differentially moving concrete components.



JORDAHL® application video for tunnel connections



Projects





Tottenham Hotspur Football Club



Salford Quays

Projects





'The Cheesegrater', Leadenhall Street, London



22 Bishopsgate, London



Nottingham Railway Station

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