



Schöck solutions for precast.
Applications for the precast industry.

Build on our experience in precast.

Make the most of Schöck products and services.



Applications for the precast industry

This brochure features the extensive range of market-leading product solutions that Schöck has developed for the precast industry.

The brochure also describes the comprehensive choice of planning and building support services for precast construction applications in areas such as product selection; thermal analysis; structural analysis; and BIM services.

All Types of the Schöck Isokorb® product range guarantee totally verifiable performance standards. They meet full compliance with the relevant UK building regulations; offer BBA Certification and LABC Registration; and are available in fire resistance class REI120.



Efficient construction is only possible when top-class products are combined with top-class service. This philosophy has prompted Schöck to design a comprehensive portfolio of services to support the integration of our innovative solutions into your project. From pre-planning through to execution, make your day-to-day work easier, and put the experience and expertise of our specialists to use in your construction projects.

Our specialist contact for precasters

If you need specific advice about the various solutions we have for precast elements, then please contact our Key Account Manager.

Ashley Houlton

Key Account Manager for precast elements
Tel: 07471 350 681
design@schoeck.co.uk

Free Software

Calculation programs for different applications are available for download to help you select the best products for your needs.

Software

Automatic updates guarantee current status at all times.
Download for free:
www.schoeck.co.uk/software



As important as our products: Schöck's Service

Outstanding product quality and pioneering services complement each other at Schöck. No matter what stage you are at in your project, we are there when you need us.

- ▶ Contact and advice – from our technical design department, sales managers, key account managers and product engineers
- ▶ Seminars (CPDs) – in-depth knowledge transfer for aspiring experts
- ▶ Analyses of structural strength and building physics – everything you need for a successful planning phase
- ▶ Technical knowledge and expert advice on installation - our specialist guidance can even be provided on site
- ▶ CAD/BIM service – all types of Schöck Isokorb® in 2- and 3-D model format for simple integration into your own software
- ▶ Technical literature – detailed data sheets and literature in hard copy or digital format



Innovation for energy-efficient precast walls.

Schöck Isolink®.

All of the advantages at a glance:

Freedom of design

One system for all kind of applications, two types with the same diameter.

Thermally separated connections

Effective glass fibre connector with excellent U-values.

Approved and certified

Approved by the DIBt, fire tested and certified as a Passive House component.

Cost-efficient storage

Saves warehousing space in prefabricating plants.

The use of steel as concrete reinforcement has been tried and tested for decades. But there are still applications where alternatives are called for. Combar® is a glass fibre reinforcing bar, offering unique benefits in comparison to steel. Combar® has a very high tensile strength, is extremely durable and corrosion resistant and has a low thermal conductivity. Schöck Isolink® with Combar® offers precast manufacturers and designers a construction material which is a cost-effective alternative to conventional anchoring solutions for element walls and sandwich walls.

The more economical solution for precasters

Right from the planning stage, the Schöck Isolink® provides a connection between the outer and inner leaf of element and sandwich walls with almost no thermal bridging. This significantly improves the U-value of the finished wall.



Reduction in labour and materials

The Schöck Isolink® is a combined spacer and tension rod. Schöck provides a time saving, cost-effective, feasible solution for different wall structures with reduced quantity of connectors per m² compared with other systems (sandwich wall 2 per m², element wall 5 per m²).



**Schöck Isolink® TA-HC
with Depth Stop**

► For more information and literature:
www.schoeck.co.uk/isolink



Concrete-to-concrete precast balconies.

Schöck Isokorb® Type K and Type KXT.

All of the advantages at a glance:

Solutions for any requirement

Available for precast balconies either with an insulation thickness of either 80 mm or 120 mm.

Easy to install

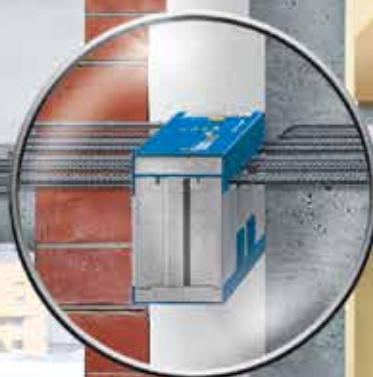
Time and cost saving through simple installation.

Superb thermal performance ensured

The insulation body consisting of EPS instead of Rockwool perfectly resists water infiltration.

Peace of mind

Through independent verifications from BBA and OISD incl. fire protection REI120 and a service life time of 60 years.



Concrete is a high-tech construction material which is indispensable in modern buildings. It enables architecturally sophisticated construction. And in conjunction with Schöck products, concrete is used to manufacture ready-to-install precast balconies: streamlined processing in the precast factory, efficient installation at the construction site and durability. So all the partners involved in the construction project save time, money and resources.

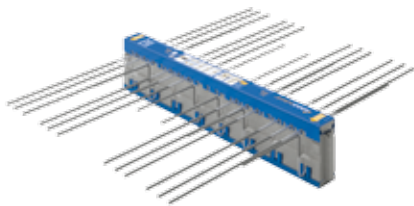
Production in the precast factory

Easy processing thanks to low weight, dovetail joints for fast and practical joining of elements as well as easy cutting to the required length of the Schöck Isokorb®.

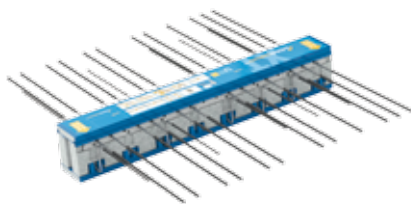


Installation at the construction site

The Schöck Isokorb® enables easy installation of the entire precast part at the construction site because the pressure bearing pads line up precisely with the insulating element and the shear force rods are correspondingly guided into the upper position.



Schöck Isokorb® Type K (80 mm)



Schöck Isokorb® Type KXT (120 mm)

► For more information and literature:
www.schoeck.co.uk/isokorb



Steel balconies in precast.

Schöck Isokorb® Type KS.

All of the advantages at a glance:

Freedom of design

For use with hollowcore slabs and precast planks.

Thermally separated connections

Steel structures with no risk of condensation, mould or corrosion.

Superb load bearing capacity

Capable of absorbing large bending moments and shear forces.

Certified

Certified safe and verifiable solution through independent third party evaluations from BBA and Oxford Brookes University.

The Schöck Isokorb® Type KS is ideal for connecting steel elements to reinforced concrete structures. It minimizes thermal bridges between the components while at the same time transferring high loads. Whether you need to connect a steel balcony to a hollowcore slab or a precast plank, we have a solution to solve the thermal and structural requirements of a modern balcony.

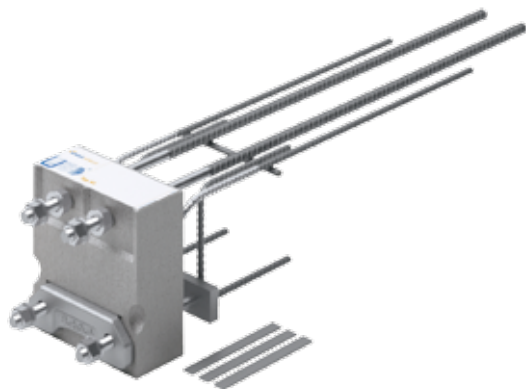
Steel balconies to hollowcore slabs

Since it can be prefabricated to a large degree, installation time on the building site is reduced. Also, benefitting from a faster build time using innovative off-site manufacturing, the Schöck Isokorb® Type KS is ideal for use in hollowcore floor systems. The Schöck Isokorb® Type KS also allows cantilever balconies to be thermally broken from precast planks with structural topping. The special construction of the product without long bars in the lower part allows for simple integration onsite.



Steel balconies to precast planks

The Schöck Isokorb® Type KS also allows cantilever balconies to be thermally broken from precast planks with structural topping. The special construction of the product without long bars in the lower part allows for simple integration onsite.



Schöck Isokorb® Type KS

► **For more information and literature:**
www.schoeck.co.uk/concrete-to-steel



Efficient thermal insulation for concrete parapets.

Schöck Isokorb® Type AXT.

All of the advantages at a glance:

Freedom of design

For narrow in-situ or precast parapets, architectural concrete on the inside, and larger terrace areas.

Certified quality

Parapets can also be designed to Passive House standard.

Installation benefit without wrapping

No longer any need to tediously wrap with insulation material.

Sustainable

Durable solution without any maintenance costs.

Cost-saving

No additional costs, initial cost savings up to 10% depending on the structure.



Designing in-situ or precast parapets is a particularly demanding challenge and the Schöck Isokorb® Type AXT offers just the right solution. Which is why it is the only load bearing thermal insulation element for parapets to have been certified by the Passive House Institute in Darmstadt.

Efficient thermal insulation

The Schöck Isokorb® Type AXT eliminates the need for tedious wrapping with insulation material. Thus making sure that no additional thermal bridges are created by fastening elements or railings. And giving you more scope for design – for narrow parapets, architectural concrete on the inside, and larger terrace areas.



Concrete precast parapets

The Schöck Combar® precast installation jig is used in prefabricated parapets in conjunction with the Schöck Isokorb® Type AXT. That makes it possible to manufacture thermally separated parapets efficiently and durably from precast parts and architectural concrete. Thus an all-inclusive system is available for use in the precast factory.



Schöck Isokorb® Type AXT



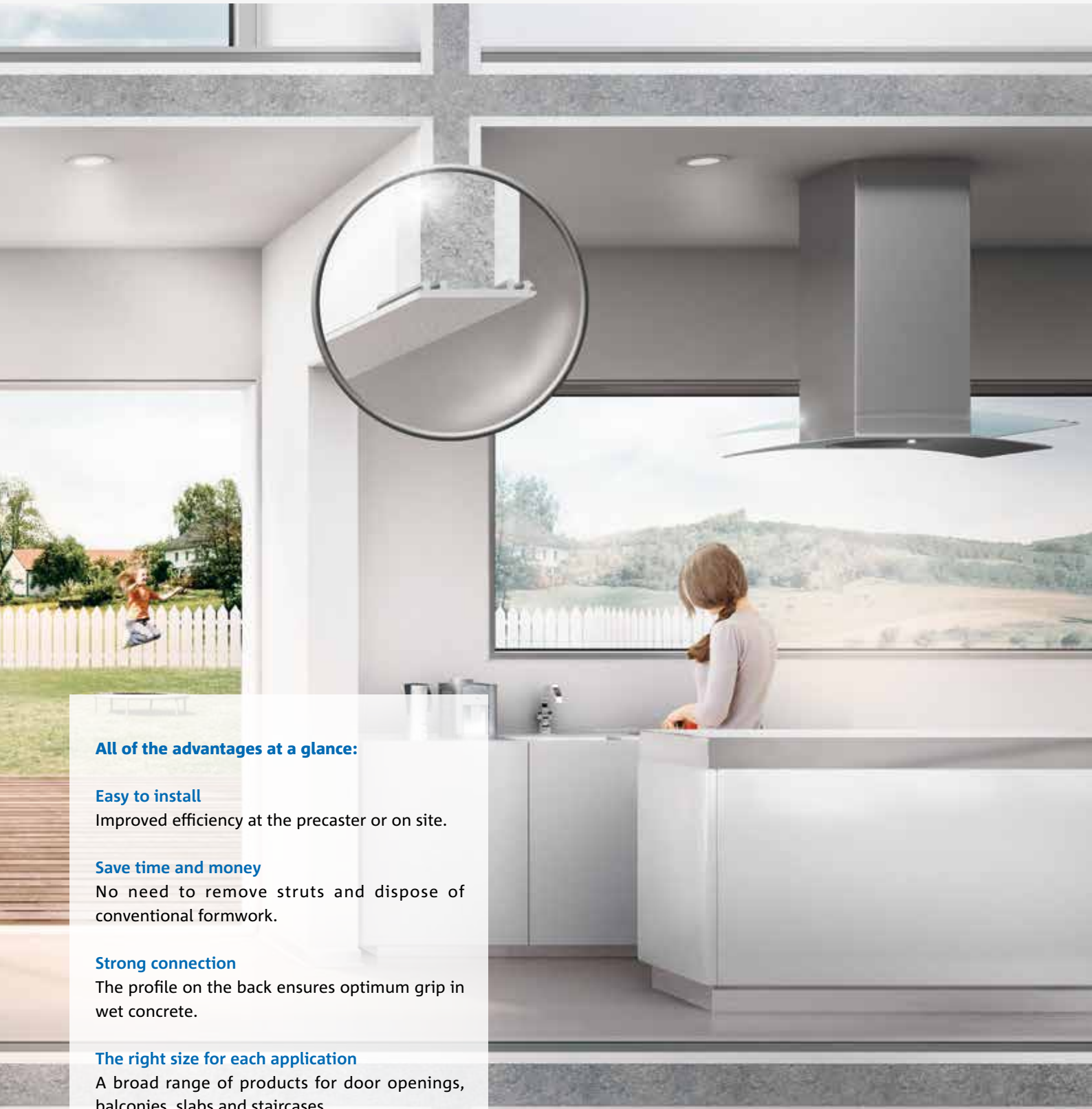
Schöck Combar® installation jig

► **For more information and literature:**
www.schoeck.co.uk/parapet



The perfect finish for concrete construction elements.

Schöck ASE formwork.



All of the advantages at a glance:

Easy to install

Improved efficiency at the precaster or on site.

Save time and money

No need to remove struts and dispose of conventional formwork.

Strong connection

The profile on the back ensures optimum grip in wet concrete.

The right size for each application

A broad range of products for door openings, balconies, slabs and staircases.

Schöck ASE formwork provides an architectural finish to concrete elements and plays a key role in ensuring efficient production. The smooth surfaces are ready for painting and eliminate the need for time-consuming post-finishing treatment. There is also no need for costly and time consuming temporary timber or polystyrene formwork - also saving disposals costs.

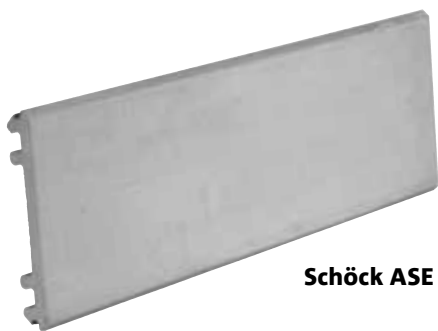
The lean solution for formwork

Made of high density fibre-reinforced concrete, Schöck ASE creates a high-quality finish for walls, floors and openings. And because they eliminate the need to remove the formwork, Schöck ASE enables lean, cost-efficient fabrication, both at the precasters' and on site.



High quality concrete finish

Unlike conventional formwork, Schöck ASE eliminates the need to post-treat the concrete surface. These formwork elements have a clean, homogeneous concrete surface without any cavities, creating a high quality finish that is ready for painting.



Schöck ASE

Case study.

The HOOLA.

The HOOLA, East London

The HOOLA in Tidal Basin Road in East London, gateway to the soon-to-be regenerated Royal Victoria Docks area and a short stroll from the Excel Exhibition Centre, is now home to a new twin tower glass-clad landmark building – the ‘HOOLA’. This £80m development has transformed a brownfield site into two rippling 23 and 24 storey glass towers, that offer 360 apartments with a mix of studios, along with one, two and three-bedroom units. All apartments have floor-to-ceiling windows and sliding doors with balcony access.



Balcony insulation is especially critical

The balconies on the HOOLA, which are all precast in a Reconstituted Portland Stone Concrete, meant that thermal break suppliers Schöck had to work closely with specialists Thorp Precast of Newcastle-under-Lyme. Luke Smerdon-White, Technical Director at Thorp, takes up the story: “We had to design, manufacture and deliver 1410 precast concrete balcony sections that had to then be cast integrally with the in situ concrete structure. The design and detailing coordination on our part was taken from the 2D consultant’s information, which we converted into 3D Tekla modelling”. “The balcony detailing is complex. The exposed front-face is curved, with almost 50 different dimensional configurations, while the internal face has a faceted line that had to correlate with the glazing line and opening doors. The ability to integrate the Schöck Isokorb® Type K thermal breaks using 3D BIM details was critical; as we had to both accommodate the slab and column reinforcement – and achieve the finite positioning of the connection modules for structural and cost efficiency.



A critical design requirement for such a super-insulated building was the avoidance of any risk of thermal bridging at the many concrete-to-concrete balcony connectivity points – so highly efficient structural thermal breaks were required throughout. The preferred solution was the Schöck Isokorb® Type K for cantilever precast balconies.



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Schöck Ltd
Staniford House
4 Wedgwood Road
Bicester
Oxfordshire
OX26 4UL
Telephone: 01865 290894
design@schoeck.co.uk
www.schoeck.co.uk

LAROS[®]
TECHNOLOGIES 
www.laros.com.au 02 6160 7777

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Dependable by design