

Electrical installation in precast concrete construction and prefabricated room modules. Boxes, housings and systems.





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The user can directly access the information section on tendering and planning on the KAISER homepage via the link <https://to.kaiser-elektro.de/planung>.

At <https://kaiser.partcommunity.com>, 3D Multi-BIM CAD data are available. Autodesk Revit users can also use the BIMcatalogs.net content plugin. In addition to downloading product data, you can also configure products to suit your specific requirements. After configuring the product, the corresponding CAD model can be generated together with a PDF data

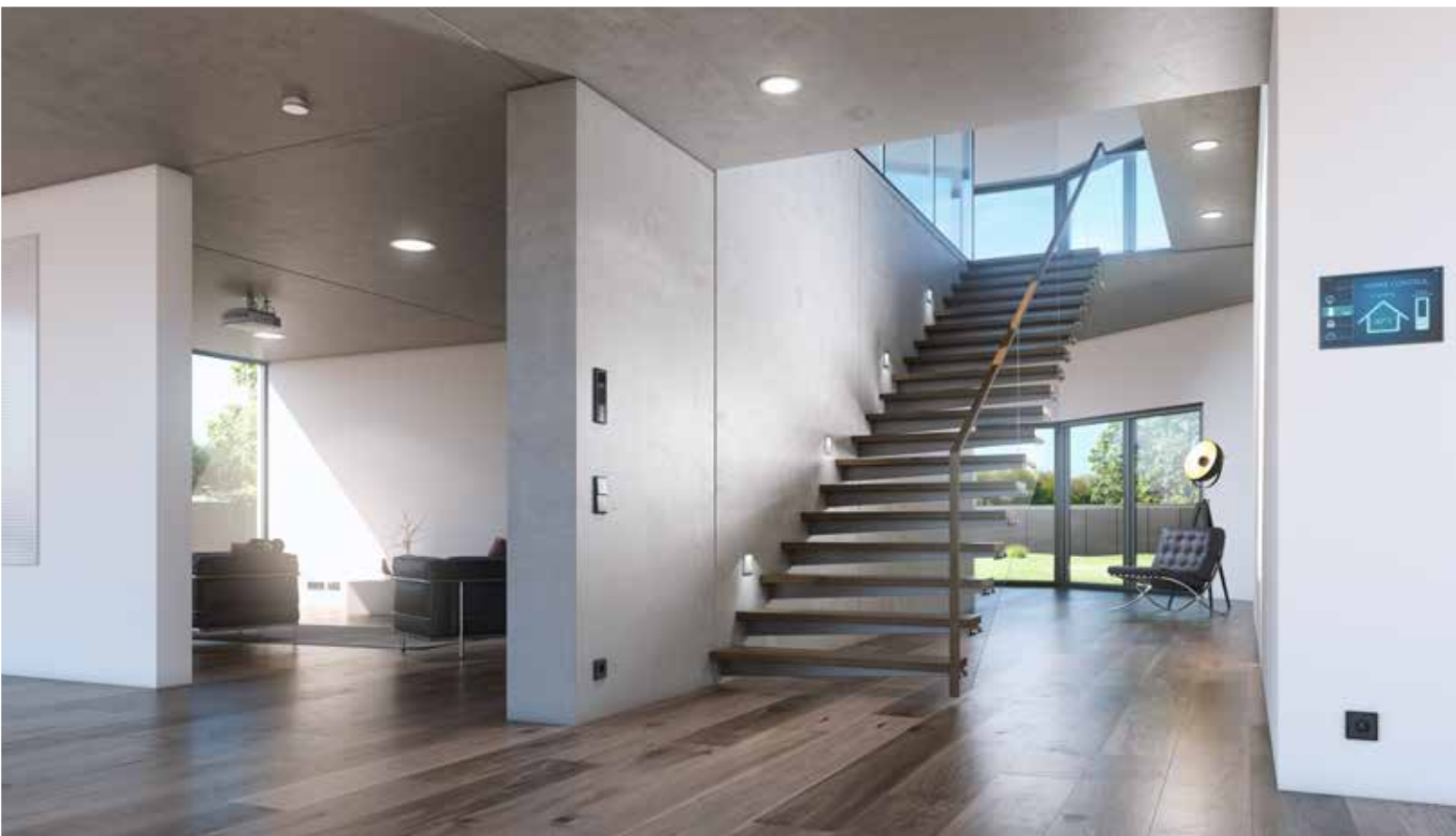
sheet and incorporated into the planning and documentation. All changes in BIM are directly reflected in the orders of magnitude, quantities and costs of the construction project. This allows all project participants to be informed rapidly and also ensures precise cost, schedule, and quality control.

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Requirements	Product solutions
<p>Precast concrete</p> <p>The new standard in precast concrete Simple and efficient concrete construction. Wall installation.</p> <p>Ceiling installation.</p> <p>Transitions for wall and ceiling Solutions for a simplified overhead installation. Inclined support attachment. Prefabricated room modules</p>	<p>Precast concrete 4</p> <p>System magnet and system magnet PLUS 6</p> <p>B² one-gang junction boxes also for automated production, conduit connectors, conduit transition couplings, extension element 8</p> <p>Slab ceiling boxes 115 also for automated production, 105 also for retrofitting, central transition casing 14</p> <p>Wall and ceiling transitions 18</p> <p>Prefix® universal support seat 20</p> <p>System magnet adapter 22</p> <p>System Flat 45 24</p>
<p>Luminaire and loudspeaker housings</p> <p>Solutions for luminaires and loudspeakers The solution for a clean ceiling appearance after plastering. Variable installation compartment for various installation accessories.</p>	<p>System HaloX® 28</p> <p>Signal cover 36</p> <p>Universal installation housings for concrete ceilings and walls. 38</p>
<p>Electrical installation in concrete. At a glance.</p> <p>Well informed. KAISER Service</p> <p>KAISER PRODUCT RANGE. Solutions and systems for professional electrical installations.</p>	<p>40</p> <p>43</p> <p>44</p>

Precast concrete.

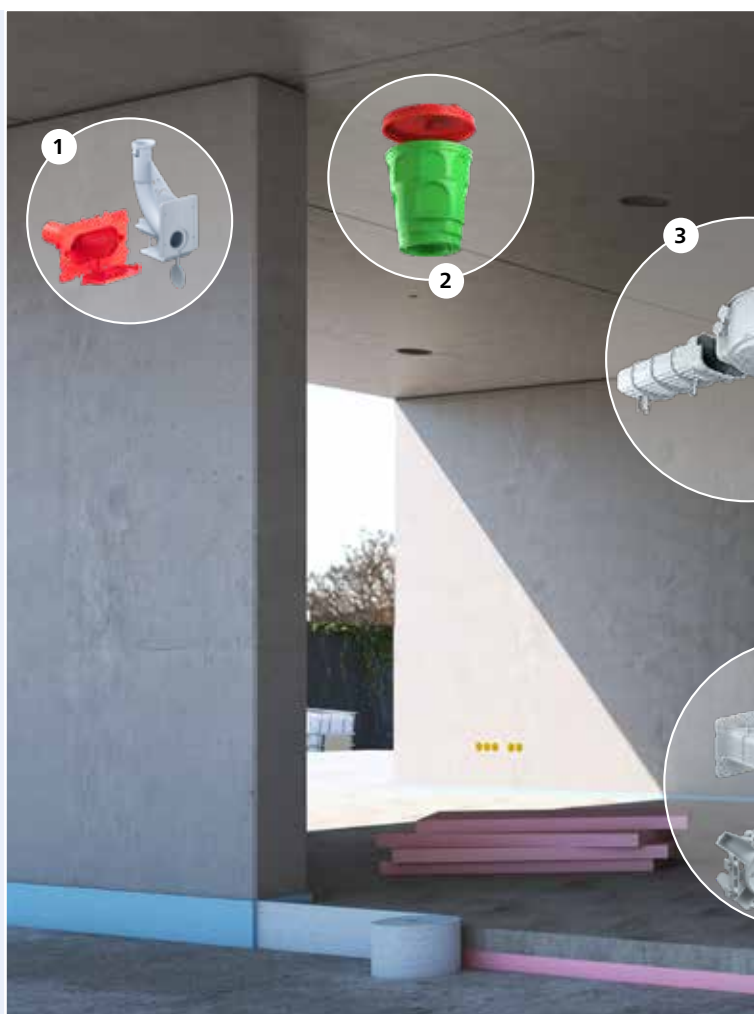
Prefabricated construction (precast concrete) is well suited for the series production of individual elements. They are manufactured completely or partially in concrete factories. This type of construction is characterised by high efficiency due to short installation times, weather-independent production and the consistent quality of the ceiling and wall elements.

The high degree of automation in horizontal production on steel formwork tables ensures high-precision and fast production runs. Mounting and fixing an installation system on the steel formwork must be carried out precisely, securely and rapidly. For this operation, where every minute counts, magnets, hot glues or adhesive films are used. For precast concrete, too, KAISER provides a practical system with various fixing and supporting options in order to guarantee trouble-free production.

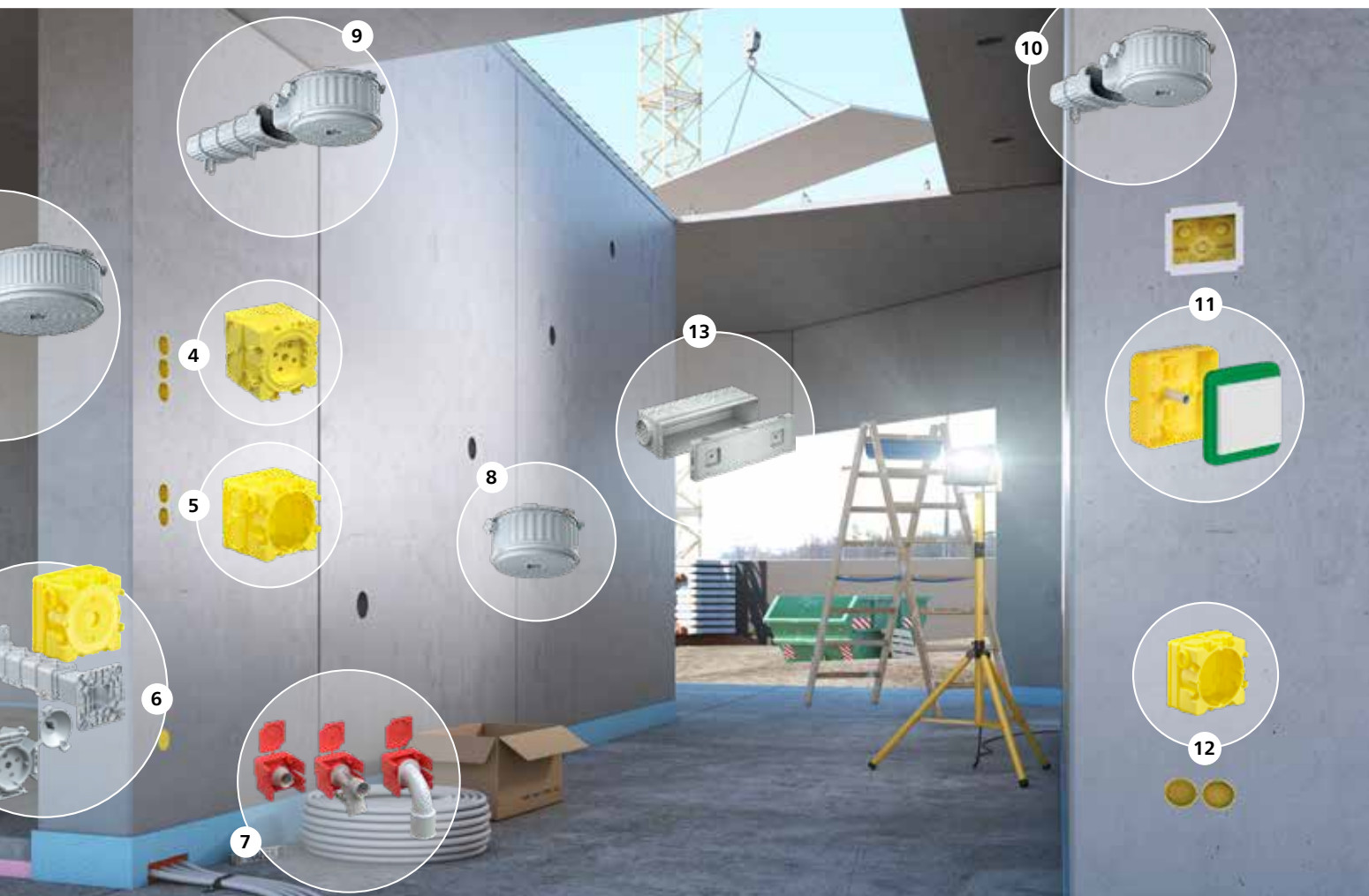
A crucial factor for maximum efficiency for concrete construction in precast concrete is the production lead times. The set-up times for reinforcement and electrical installation play a significant role here - especially in computer-controlled factories with circulation systems. A decisive factor for further processing on the on-site mixed concrete construction site is the quality of the pre-installation and therefore the cost-reduced further processing (installation) in walls and ceilings.

The KAISER programme for precast concrete consists mainly of the B² system with one-gang junction boxes as well as special slab ceiling boxes and housings. This programme is supplemented for precast concrete with intelligent products for conduit installation such as wall to ceiling transitions and oval funnels for faster wall mounting. In addition to these products, which have been specially developed for precast concrete, all KAISER on-site mixed concrete products can also be used in precast concrete.

- 1 Wall to ceiling transition 90°, oval funnel
- 2 Large slab ceiling box 115 for magnet attachment
- 3 HaloX® 250 with tunnel for precast concrete for magnet attachment
- 4 B² one-gang junction boxes for magnet attachment
- 5 One-gang junction box without plaster skin with 68.5 mm depth
- 6 One-gang junction box with plaster skin, universal extension element 175 to 300 mm and extension element 48.5 mm
- 7 End and transition bush, wall and ceiling elbow 30° and wall and ceiling transition 90° for magnetic attachment
- 8 HaloX® 180 for precast concrete for magnet attachment
- 9 HaloX® 180 / 250 for precast concrete for magnet attachment
- 10 HaloX® 180 with tunnel for precast concrete for magnet attachment
- 11 Universal installation housing with mineral fibreboard
- 12 One-gang junction box without plaster skin with 48.5 mm depth
- 13 Central transition casing



Find out more about the
precast concrete solution area.
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Simple and efficient concrete construction. **System magnet and system magnet PLUS.**

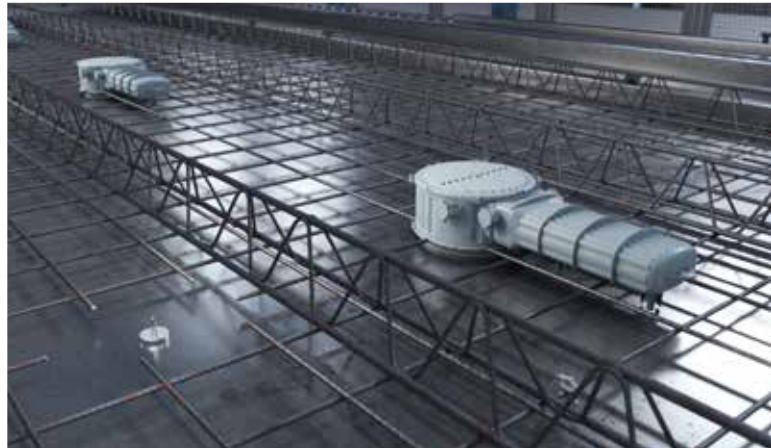
NEW

The system magnets are suitable for all installation parts required in wall and ceiling production to prepare the electrical installation in-factory. The system magnets can be used for correct positioning in both manual and automated production. In automated production, the magnets can be placed on the formwork table by machine and in the correct position using the multifunction gripper. The system magnet PLUS (1299-70) can also be automatically removed and magnetized.

The high adhesive force of 500 N ensures that the magnets remain exactly where the installation parts have been placed in their correct position.

Installation parts, such as one-gang boxes and one-gang junction boxes, are aligned via lateral notches on the system magnets and system magnets PLUS. This ensures that the vertical and horizontal alignment is dimensionally accurate, even when multiple combinations are used. The exact fitting connection between the system magnets / system magnets PLUS and the installation parts with peripheral seal ensures that the ingress of concrete is prevented.

After removal of the formwork, the magnets remain on the formwork table and can then be returned to production.



The **system magnet** and **system magnet PLUS** are used to hold B² one-gang boxes and one-gang junction boxes, large panel ceiling boxes, wall and ceiling transitions as well as HaloX[®] luminaire and loudspeaker housings, the central transition casing, extension element 48.5 mm and the adapter for the inclined support attachment.



System magnet
Art. no. 1299-69



System magnet PLUS
Art. no. 1299-70

- The complete installation requires only one type of magnet.
- For automated setting (system magnet Art. no. 1299-69) or setting and removal (system magnet PLUS Art. no. 1299-70)
- Four lateral notches ensure torsion-proof installation of the one-gang boxes
- Adhesive force of 500 N
- Reusable

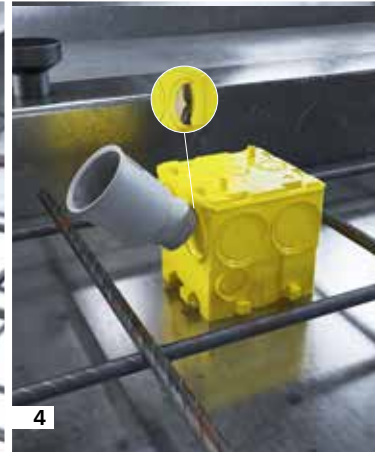
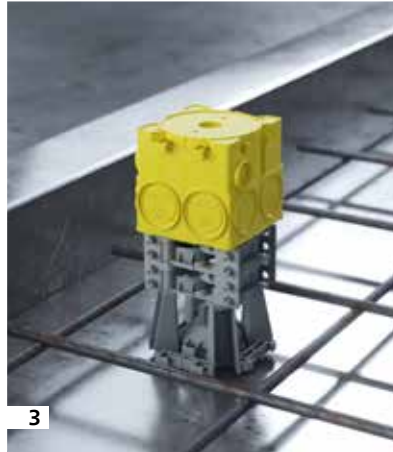


Precast concrete: B² wall installation.

The B² concrete construction system was specially developed for the requirements of production in horizontal steel formwork. B² is designed to be simple and practice-oriented so that it saves both time and money.

With B² almost every imaginable combination can be realized with the help of the individual components. This allows you to accommodate any wall thickness - in 5 or 10 mm increments - and insert the one-gang junction boxes exactly. Even single boxes that are to be installed on top of the formwork table can be positioned in a stable and torsion-proof manner with the aid of the extension elements and the counter bearing. Using distance piece 142 (Art. no 1261-18), combinations for the separate covering of different voltage types or to avoid wall weakening can be realised by a recessed installation (e.g. for sound, stability or fire protection reasons).





B² system for installation in horizontal precast concrete. All installation requirements can be met with just a few components. The one-gang junction boxes are adhesive and the accessories provide a practice-oriented product range.

- 1 Conduit connectors can be attached by simply snapping them in.
- 2 Conduits are inserted into the locked-in conduit connector.
- 3 Extension elements are used to bridge the wall thickness and support one-gang boxes when installed on the opposing formwork.
- 4 Conduit transition coupling Ø 32 mm for tool-free connection of Ø 32 mm conduits to the B² one-gang junction boxes 1262-XX and 1263-XX

B² one-gang junction boxes with magnetic recess
Art. no. 1262-06 / 1263-06 / 1264-06

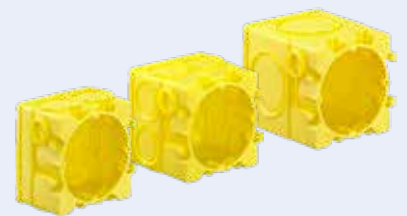
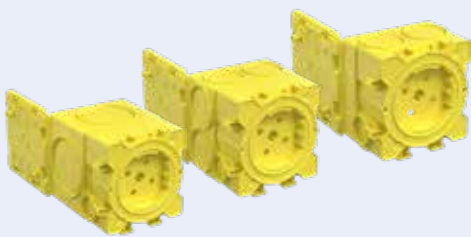
NEW

B² one-gang junction boxes with plaster skin

Art. no. 1262-60 / 1263-60 / 1264-60

B² one-gang junction boxes without plaster skin

Art. no. 1262-61 / 1263-61 / 1264-61

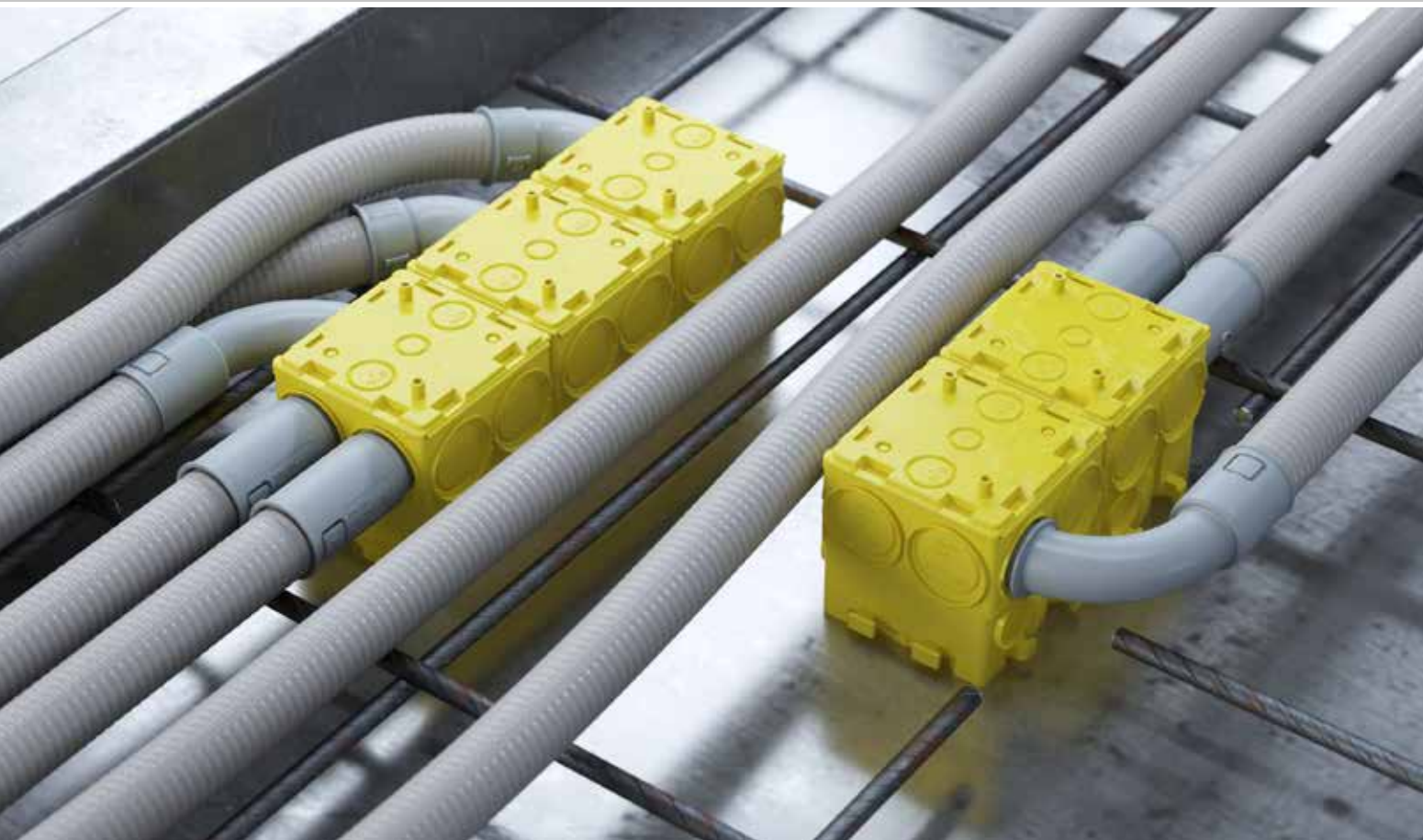


System magnet
System magnet PLUS
Art. no. 1299-69 / 1299-70



Extension element
10 to 50 mm
Art. no. 1261-10





B² conduit connectors.

Secure and fast connections.

The range of B² conduit connectors offers a secure and toolless conduit connection to B² one-gang junction boxes without the need for special tools. The conduit connection created using a conduit connector is absolutely sealed against concrete and safely dampens the vibrations of the conduit during the compaction process. As the conduit connection is made outside the B² one-gang junction boxes, no conduit protrudes into the interior of the box, thus eliminating the need to shorten conduits on the inside. With the new 90° conduit connectors, lateral conduit connections can now also be easily implemented in tight installation areas.

- Toolless conduit connection, no special tools required
- Exact "variable" conduit connection, completely sealed against concrete
- Damping of vibrations during the high-frequency or low-frequency Compaction process
- Conduit connection outside the one-gang junction box, no conduits protruding into the interior of the box
- Conduit connectors, 90° for the lateral connection of conduits in narrow installation areas



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- 1 The tip of the conduit connector is inserted at the desired conduit entry and turned with pressure against the one-gang junction box until the feed-through is cut out.
- 2 The conduit connectors buffer the vibrations between the conduit and body that occur during the compaction process ...
- 3 ...and at the same time securely seal the connection to the box in any position.
- 4 The B² range, consisting of one-gang junction boxes, conduit connectors and wall and ceiling transitions, enables complete prefabrication of the electrical installation. The conduit connectors and wall and ceiling transitions offer the greatest possible tolerance compensation when using rigid conduits.

With the extensive **KAISER conduit connector programme**, all rigid or flexible conduits in diameters of 20, 25, 32 and 40 mm can be connected to the B² one-gang junction boxes. Two cutting edges on the connection piece are used to open the box entries without the need for tools; here, all you need to do is turn the box with pressure to open the insert.



Conduit connector
Art. no. 1261-21/26/32/40



Conduit transition coupling Ø 32 mm
Art. no. 1263-32



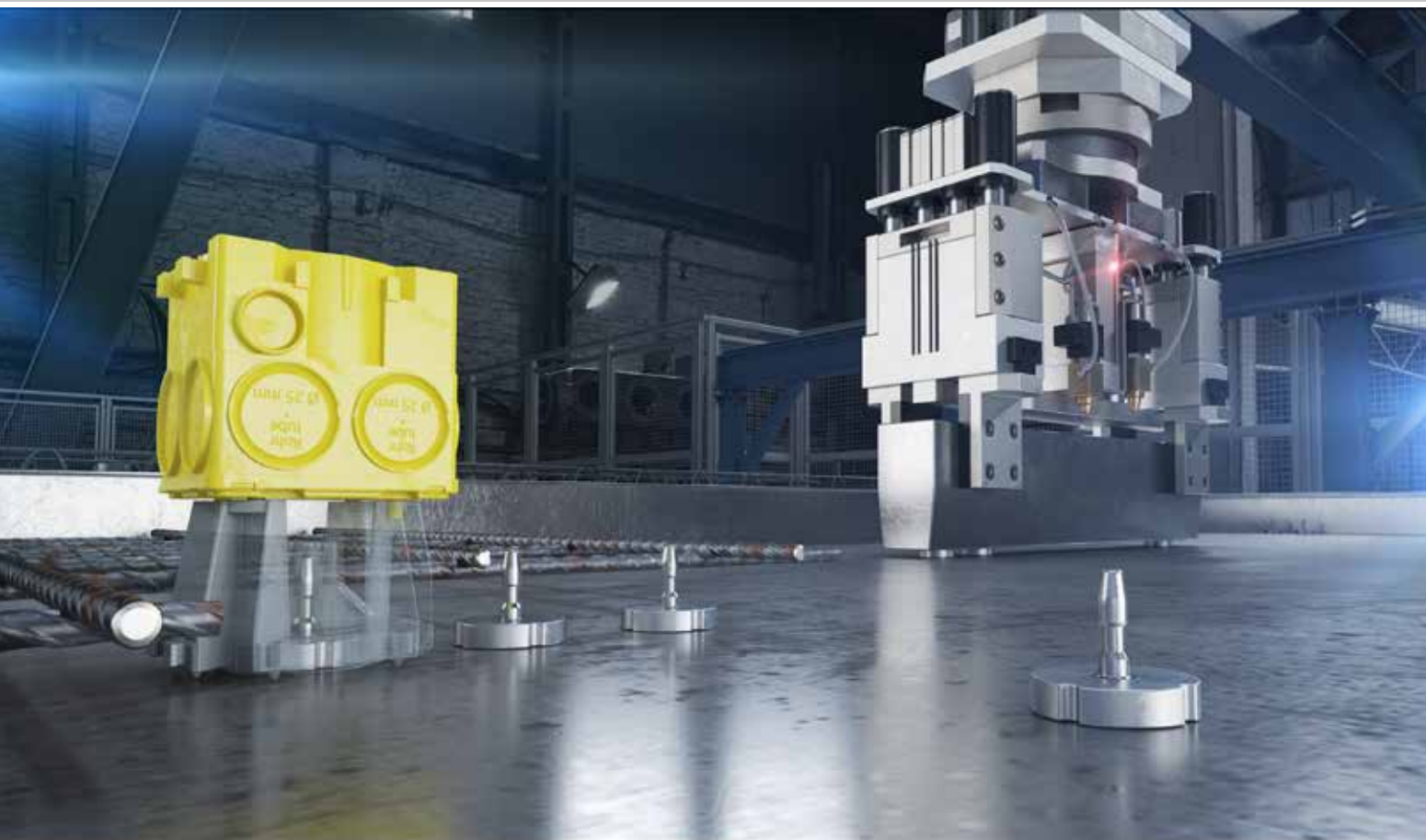
Conduit connector 90°
Art. no. 1262-20/25/32



Conduit connector 60°
Art. no. 1266-25



NEW



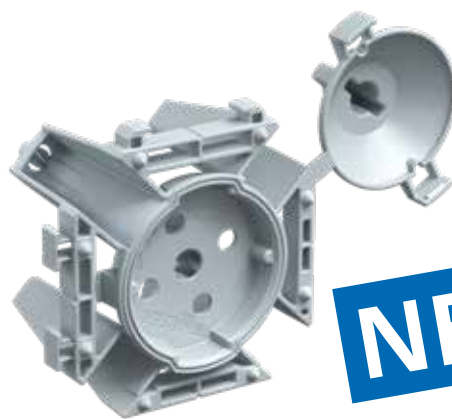
Extension element 48.5 mm for system magnet.

For all wall thickness of 100 mm and more.

The new 48.5 mm extension element for precast concrete enables automated positioning and fixing of overhead electrical installations in solid concrete walls as well as double concrete walls.

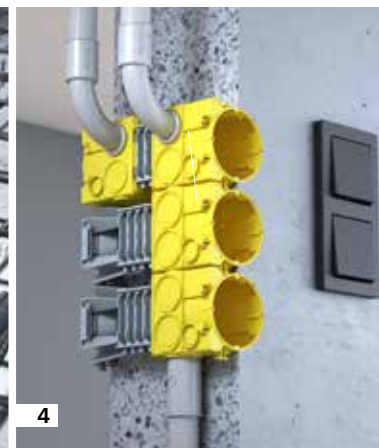
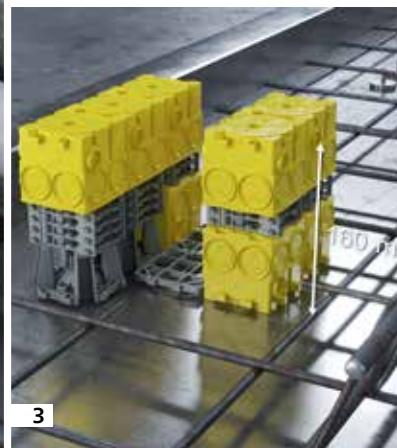
The integrated slot for the system magnets (Art. no. 1299-69) and system magnet PLUS (Art. no. 1299-70) offers a safe, formwork-flush fit on the horizontal steel formwork for the circulation systems used in the concrete plants. At the same time, the tried-and-tested B² push-button connection ensures a secure connection to all B² one-gang junction boxes and B² extension elements and thus enables overhead installation from a wall thickness of 100 mm.

- Slot for system magnet (Art. no. 1299-69) and system magnet PLUS (Art. no. 1299-70) for use in automated production lines
- For use in automated production lines
- Push-button connection to all B² one-gang junction boxes and B² extension elements
- Can be combined with itself, the B² one-gang junction boxes and the distance piece 142
- Integrated closing cap to protect the rear of the system magnet from concrete
- Spacers at the front ensure complete flow around the magnetic recess
- After formwork removal, the system magnet remains on the formwork table



NEW

Extension element 48.5 mm
1261-02



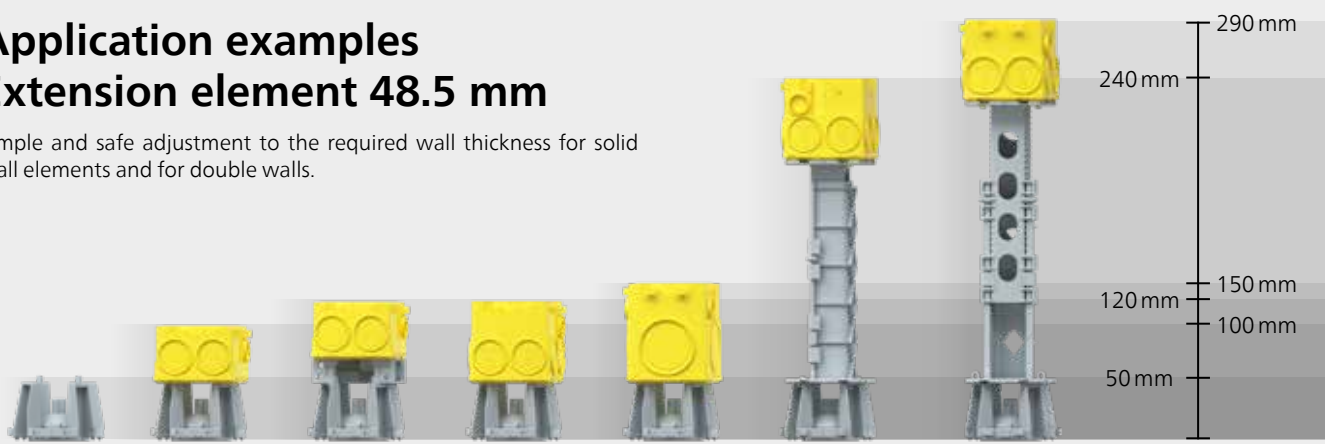
- 1 Fixing is carried out via the system magnets and thus provides the precisely aligned and secure basis for overhead installation.
- 2 The connection between the extension element and B² one-gang junction boxes is made via the proven B² push-button connection.

- 3 In combination with the extension element 10 to 50 mm and the universal extension elements 105 - 170 mm
- 4 ... or 175 - 300 mm, overhead installations can be realised in all wall element thicknesses.

Application examples

Extension element 48.5 mm

Simple and safe adjustment to the required wall thickness for solid wall elements and for double walls.



B² one-gang junction boxes with plaster house 1262-60 / 1263-60 / 1264-60

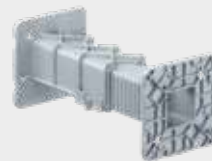


Counter bearing
1261-11

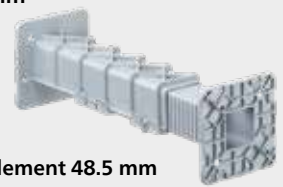
Extension element 10 – 50 mm
1261-10



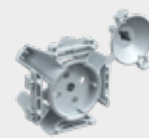
Universal extension element 105 – 170 mm
1261-08



Universal extension element 175 – 300 mm
1261-09



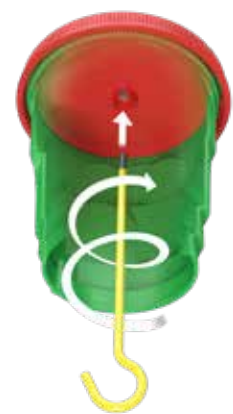
Extension element 48.5 mm
1261-02

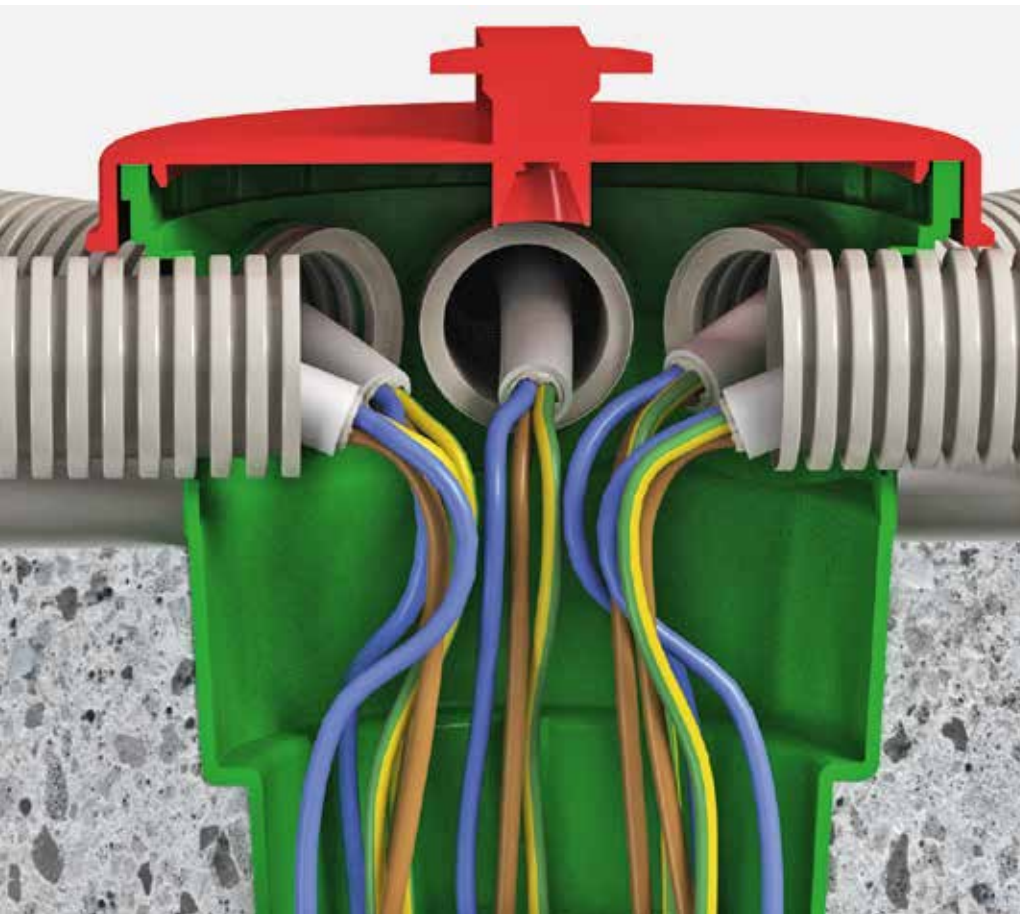




Slab ceiling boxes. Ceiling installation.

The **large slab ceiling box 115** is suitable for in-factory installation in prefabricated ceilings. The version with a slot for the system magnets (Art. no. 1299-69) or system magnet PLUS (Art. no. 1299-70) is perfect for quick attachment to system magnets that have already been set automatically. The large slab ceiling boxes are already a part of the ceiling when they reach the construction site and enable the quick insertion of empty conduits. The resealable quick-release cover can be opened with a quarter turn and so enables the quick and exact creation of conduit entries using punch pliers (Art. no. 1286-33/-34).





Large slab ceiling boxes are already a part of the ceiling when they reach the construction site and enable the quick insertion of empty conduits.

- 1 The conduits of the slab ceiling elements are fitted at the construction site.
- 2 Slab ceiling boxes are easily opened with KAISER punch pliers.
- 3 The conduit is inserted tightly and accurately and the box is sealed with the cover.

Large slab ceiling boxes were specially designed for industrial manufacturing. With two different installation heights of 105 and 115 mm, they are precisely tailored to the requirements of in-factory installation and the different heights of the space frames and/or designed for maximum installation space. The boxes are secured and moulded on the formwork table with hot glue or double-sided adhesive foils in the concrete plant. The conduits are fitted after the slab ceiling elements are laid by crane at the construction site. To do so, the box screw-on covers are removed so that KAISER punch pliers can be used to make exact openings in the upper part of the box for the conduit and then the conduit is connected to the box. This can be done even if an installation box was not inserted during industrial production or when additional installation boxes are desired later on. The slab ceiling box for subsequent installation can be retrofitted into a cut core drilling of Ø 65 mm in the pre-fabricated ceiling.

<p>Large slab ceiling box 105 Art. no. 1227-54</p> 	<p>Large slab ceiling box 115 Art. no. 1227-16</p> 	<p>Large slab ceiling box 115 Art. no. 1227-55</p> 
<p>Slab ceiling box for retrofitting Art. no. 1247-01</p> 	<p>Light hook Art. no. 1226-97 / 1226-98 / 1226-99</p> 	



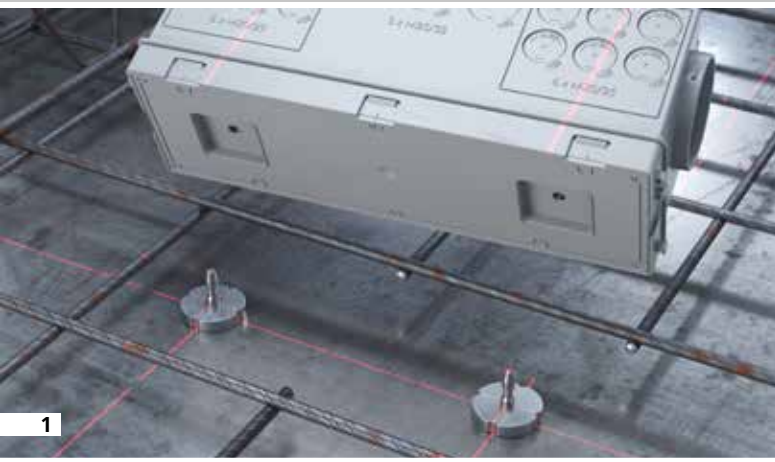
Central transition casing. For universal conduit entries.

NEW

The new **central transition casing** for use in factory prefabricated element ceilings is used for centralised joining of conduits of different diameters. As a central entry point, it enables a clean transition to electrical circuit distributors and cable routing systems, allowing, for example, all supply lines required for the electrical installation of a flat to be brought together at one transition point.

- For the exit of several electric cables, e.g. above an electrical distribution board located in the lightweight wall or surface-mounted
- For system magnetic, adhesive or nail fastening
- Conduit entries for Ø 20 mm, Ø 25 mm and Ø 32 mm on the long sides, up to Ø 63 mm on the short sides
- Positioning of the conduit entries above the first reinforcement layer or the top of the filigree ceiling
- Can be connected in a row as often as required





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- 1 Fixing by means of KAISER System magnet (Art. no. 1299-69) and system magnet PLUS (Art. no. 1299-70).
- 2 Fixing by means of hot glue.

- 3 If required, several central transition casings can be lined up next to each other.
- 4 Numerous entries for conduits from Ø 20 mm to Ø 63 mm.

The new central transition casing is designed so that the upper conduit entries 24 x M20-25 and 6 x M25-32 are located above the filigree ceiling, which is usually 4 to 6 cm thick.

At the end faces, where several boxes can also be connected in a row, there is an M40-63 entry in each case. Moreover, it is possible to use four large windows for bundled conduit entries.

Optional 45 mm high extension frames, which can also be stacked on top of each other as required, allow the gap between the bare concrete and finished ceiling to be bridged in the case of suspended ceiling insulation.

The front part of the new transition casing is attached to the formwork with nails or adhesives and the upper part is simply snapped on. After formwork removal, the opening contour of the front part can be easily knocked out with (one) blow of the hammer. Plastic or aluminium screw-on covers are available for clean room separation.

Central transition casing
Art. no. 9914.10



Extension frame for Central transition casing
Art. no. 9914.10.68



Screw-on cover Plastic
Art. no. 9914.10-02



Moisture-proof cover aluminium
Art. no. 9914.10-03





Wall and ceiling transitions.

NEW

For the first time, the new end and transition bushes and ceiling transitions 30° and wall and ceiling transitions 90° allow the automated positioning and fastening of conduit connections in precast concrete elements. The integrated slot for the system magnets (Art. no. 1299-69) and system magnet PLUS (Art. no. 1299-70) enables a safe, formwork-flush fit on the horizontal steel formwork for the circulation systems used in the concrete plants. The new articles also provide alternative options for fixing to formwork. They can be fixed using hot glue, steel nails and even for overhead installation in solid wall elements using Prefix® Universal support seats (Art. no. 1261-00).

- Slot for system magnet (Art. no. 1299-69) and system magnet PLUS (Art. no. 1299-70) for use in automated production lines
- For conduit sizes of Ø 20 mm, Ø 25 mm and Ø 32 mm
- All end and transition bushes, wall and ceiling elbow 30° and wall and ceiling transitions 90° can be combined with each other
- Resealable closing cover to protect the empty conduit system from concrete when installed on top, during transport and when erected on site
- Signal bristle and bold colouring for easy retrieval in the concrete surface
- Easy cable pull-in due to optimal transition radius
- 1-piece design, immediately ready for use





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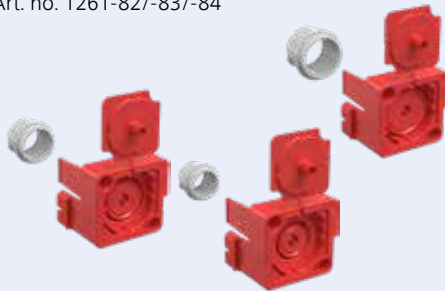


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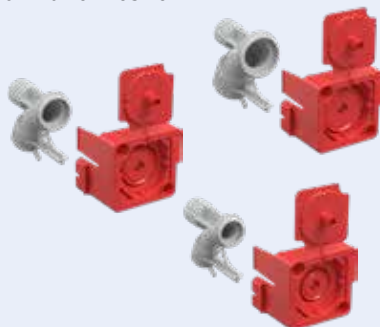
- 1 Wall and ceiling transitions with slot for the KAISER system magnet (Art. no. 1299-69) and system magnet PLUS (Art. no. 1299-70).
- 2 Perfect connections for automated production.
- 3 Wall and ceiling transitions for fixing by means of hot glue.

- 4 Prefix® universal support seat (Art. no. 1261-00, page 35) - Simple and fast fitting for overhead installations.
- 5 The optimal elbow radius of the new unit facilitates flexible and easy electric cable insertion.

End and transition bush, Ø 20 / 25 / 32 mm
Art. no. 1261-82/-83/-84



Wall and ceiling transition 30°
Ø 20 / 25 / 32 mm
Art. no. 1261-92/-93/-94

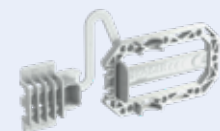


Wall and ceiling transition 90°
Ø 20 / 25 / 32 mm
Art. no. 1261-95/-96/-97



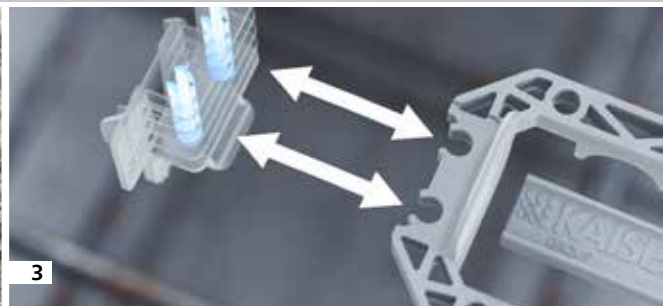
NEW

Prefix® universal support seat
Art. no. 1261-00

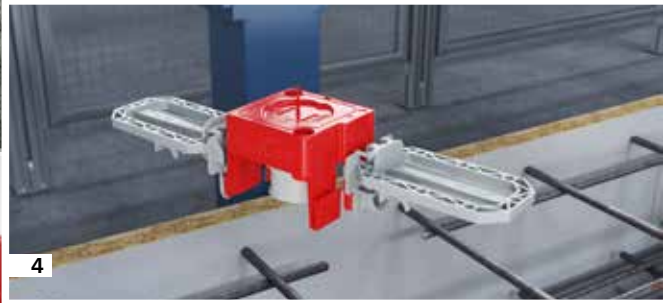




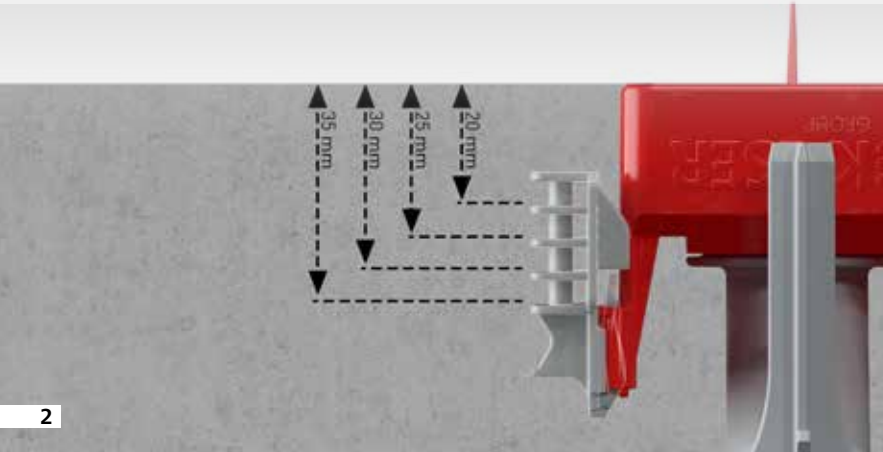
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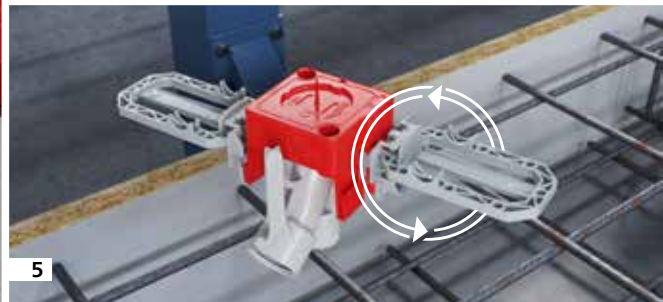
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- 1 The new wall and ceiling transitions each have two opposing stable slots for the new Prefix® universal support seat.
- 2 The required concrete ceiling can be quickly read off and precisely set using the dimensional scale.

- 3 The support seats have a stable snap-in connection. If the concrete cover is set incorrectly, these can be loosened again and repositioned.
- 4 The Prefix® universal support seat allows all end and transition bushes...
- 5 ...as well as install the wall and ceiling transitions 30° without support element on top.

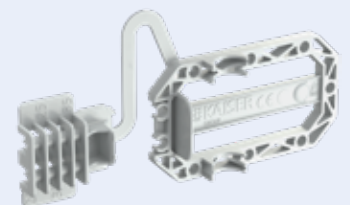
The Prefix® universal support seat.

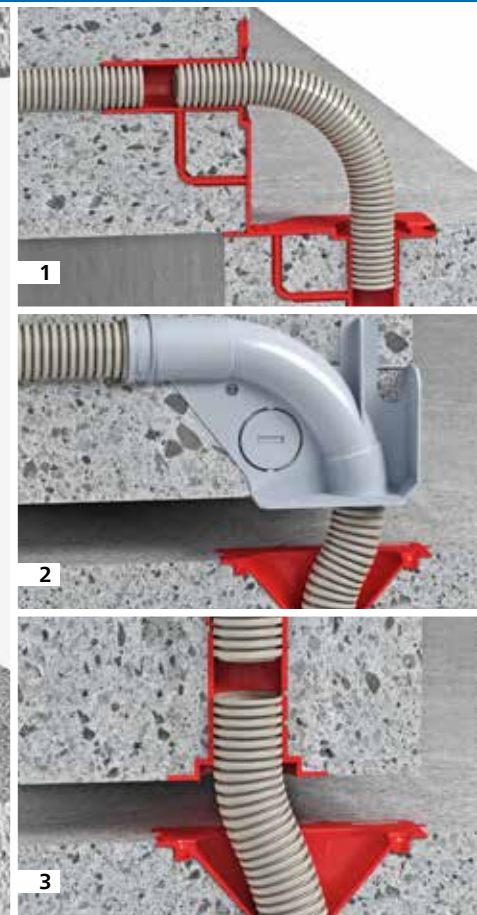
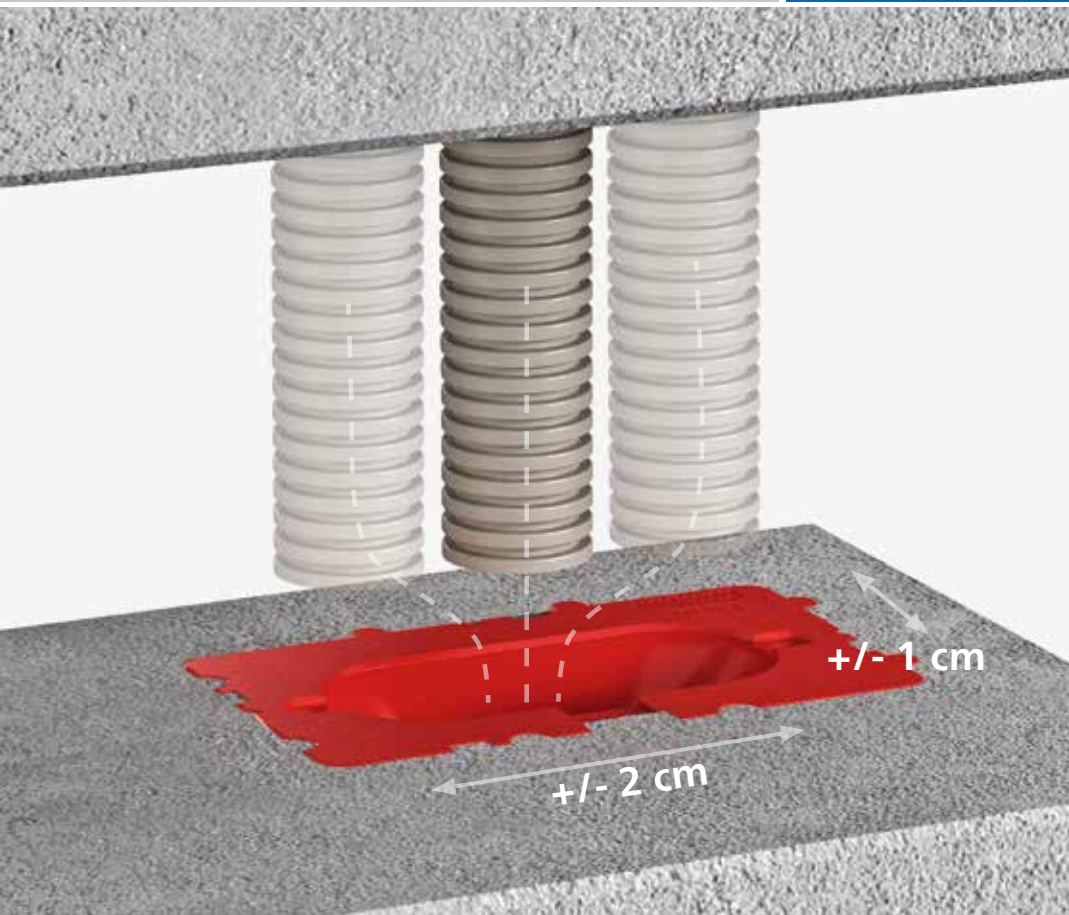
Solutions for a simplified overhead installation.

The Prefix® universal support seat enables simple, fast fitting of overhead electrical installations in solid wall elements without a support element for the steel formwork table. The support seat can be easily adjusted to the required concrete ceiling by means of a snap-in connection and attached to the new end and transition bushes, wall and ceiling elbow 30° and wall and ceiling transitions 90° by means of a snap-in connection. The previously customary and costly in-house constructions using timber blanks can thus be dispensed with, disruptions to the further production process are a thing of the past and production of a good wall surface quality is guaranteed without restriction.

- For overhead electrical installations in prefabricated solid walls without support elements
- With integrated dimension specifications, easily adjustable to the conventional concrete- ceilings 20 mm, 25 mm, 30 mm or 35 mm
- Generous tolerance compensation for fixing to the reinforcement
- Prefixing using Prefix® installation technology leaves both hands free for fastening with tie wires

Prefix® universal support seat
Art. no. 1261-00





With the help of the oval funnel, a tolerance compensation of 2 or 1 cm is possible. The secure conduit entry is thus maintained.

- 1 Wall and ceiling transitions serve as wall exits or as connecting elements between prefabricated concrete elements.
- 2 The 90° wall to ceiling transition is ideal for slab ceilings.
- 3 Tolerance compensation of 2 or 1 cm possible.

Transitions for precast concrete.

KAISER offers several variants for **wall and ceiling transitions**. The 90° bend makes it easier to pull in the electric cables and is suitable for exits above the plain concrete ceiling or for suspended ceilings. Due to its design height, the 90° wall to ceiling transition is ideal for slab ceilings. The straight variant has an integrated measurement strip. The required distance to the formwork can be fixed in increments of 5 mm. The 90° wall to ceiling transition is available for Ø 20 and Ø 25 mm conduits, the straight version for Ø 25 mm conduits with protective covers and with or without glue.

The **oval funnel simplifies the assembly** of individual prefabricated parts. It offers a tolerance compensation of 2 or 1 cm and ensures secure conduit entry for M20 and M25 conduits. On steel formwork, the oval funnel can be fixed with hot glue and, on wooden formwork, it can be fixed to the auxiliary formwork or side formwork with nails or wood screws. During installation, the oval opening is closed with a hinged cover to prevent concrete from flowing in during pouring.

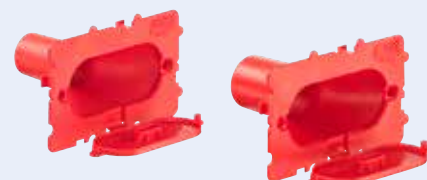
Wall and ceiling transition
Art. no. 1261-12/73

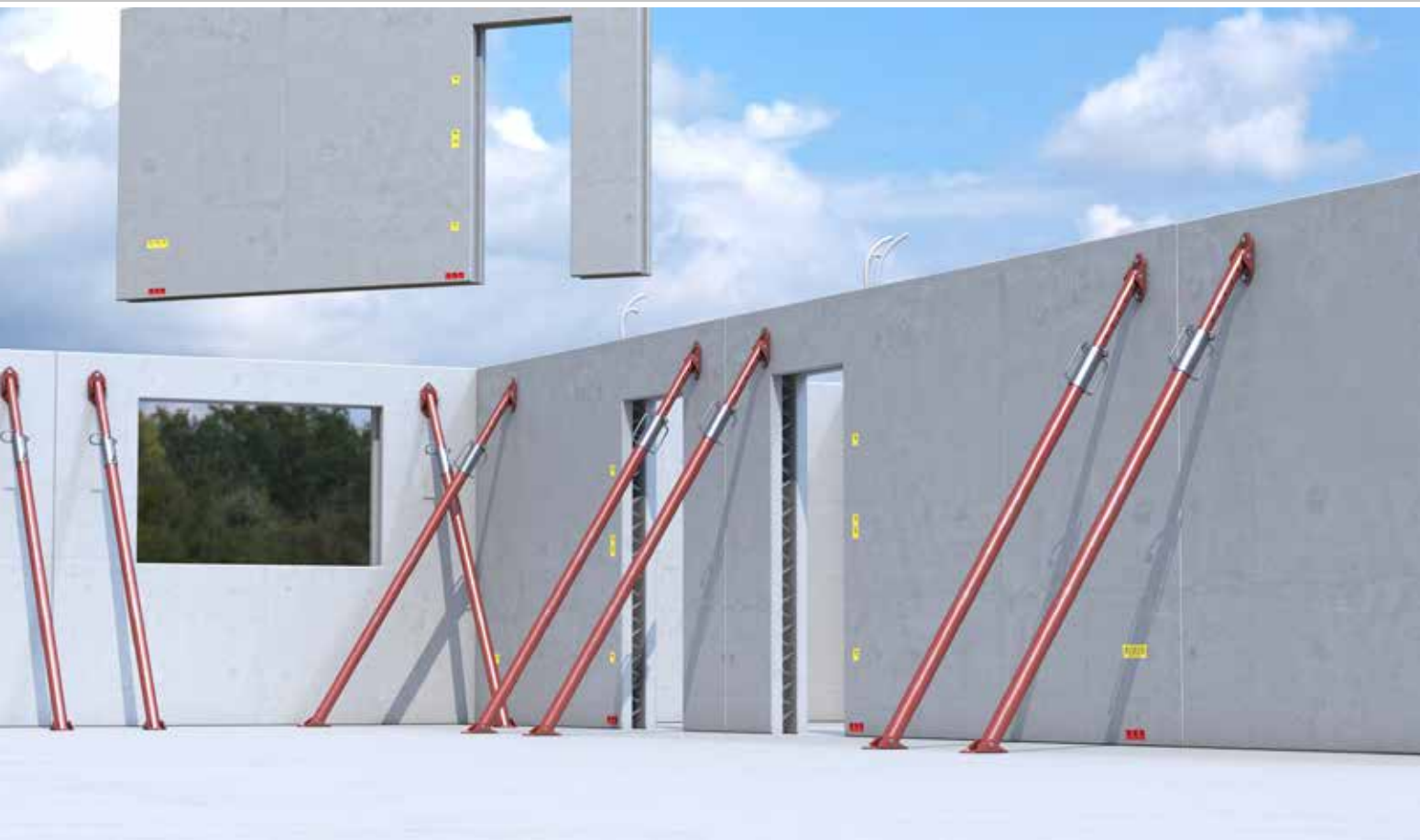


Wall to ceiling transition 90°
Art. no. 1261-16 / 1261-14



Oval funnel
Art. no. 1261-42 / 1261-43





System magnet adapter for push-pull prob anchors.

NEW

In order to be able to automatically integrate not only the electrical installation components but also the mounting anchors for setting up the wall elements on the construction site into the factory production process in concrete wall production, there are new system magnet adapters. These are matched to the available push-pull probs on the market and thus enable the complete factory integration of all components required for a wall element.

- Patented system magnet lock for a secure hold on the system magnet with attached push-pull prob anchor
- Easy placement on the system magnet and simple removal after formwork removal
- Secure and concrete-tight connection to the mounting anchor
- Tapered contour for the adapter to remain securely on the formwork table





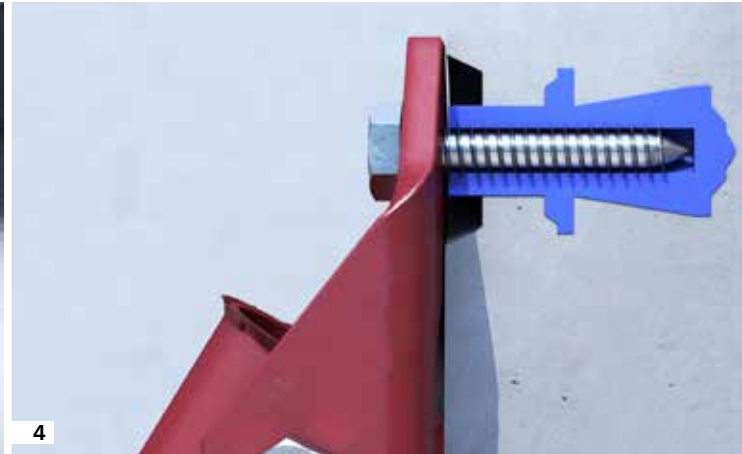
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2



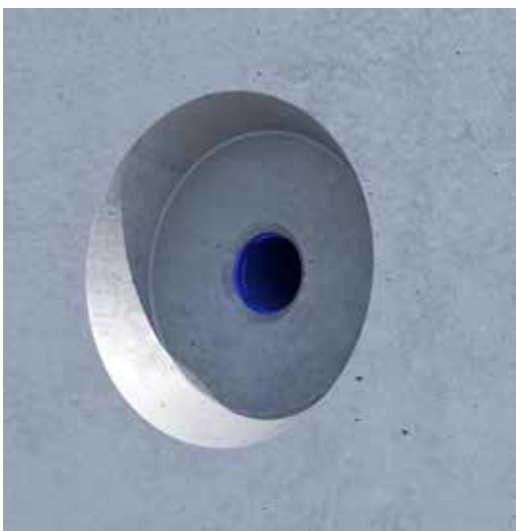
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4

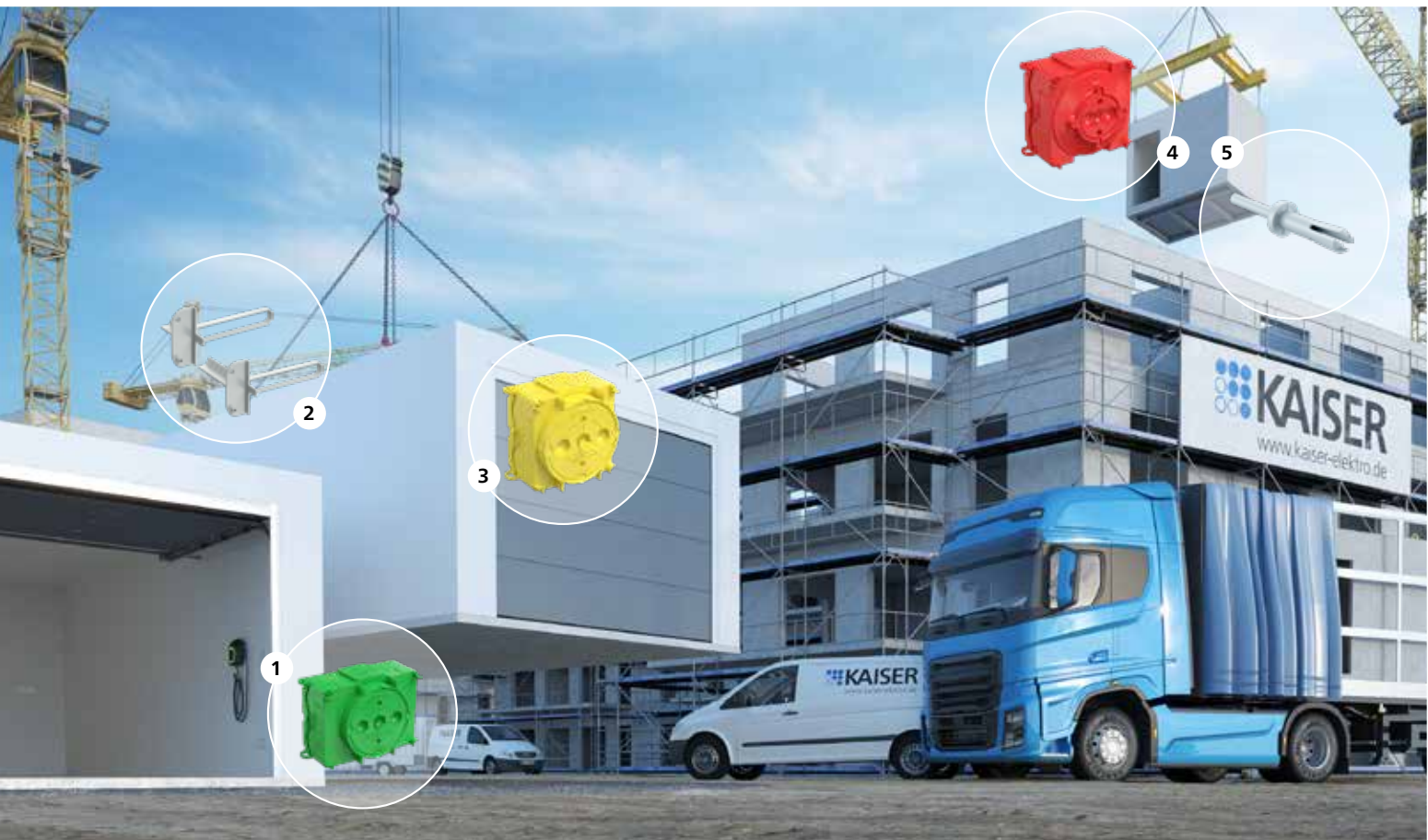
- 1 Thanks to the innovative system magnet interlock, the adapter can be easily attached to and removed from the system magnets (Art. no. 1299-69 / 1299-70).
- 2 As soon as the mounting anchor is placed on the adapter, the system magnet interlocking engages,...

- 3 ...so that thanks to its conical contour, remains securely on the magnets after formwork removal.
- 4 At least two mounting anchors are required for each wall element when installing the concrete wall elements.



System magnet adapter
1200-99
on request





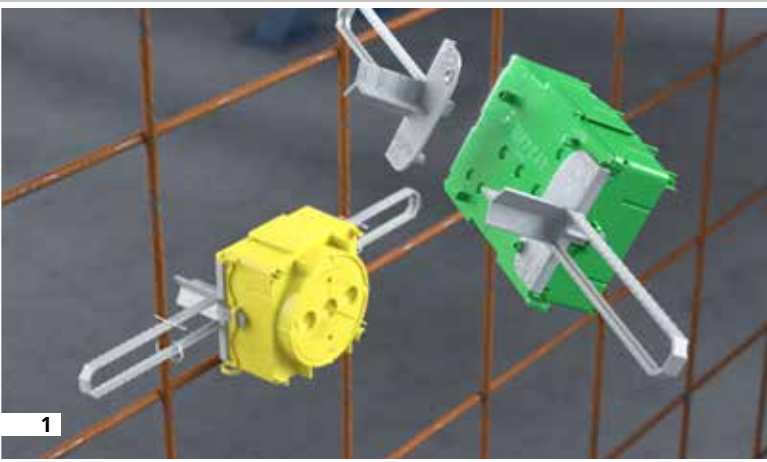
System Flat 45 for serially pre-assembled room modules made of concrete.

NEW

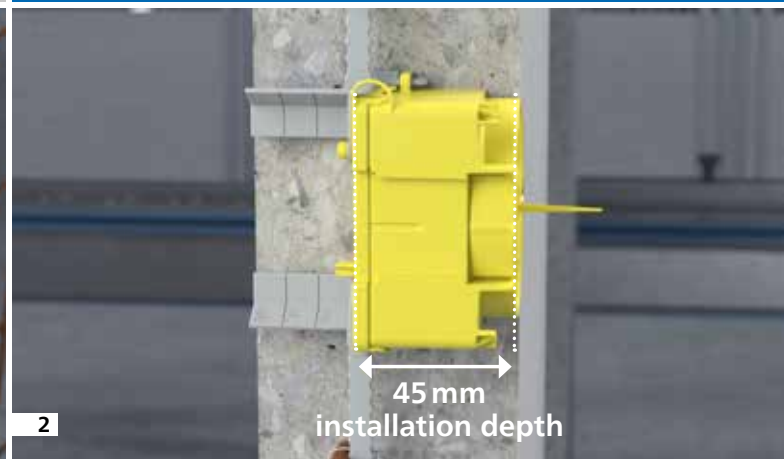
In the area of prefabricated garages, prefabricated bathrooms or also living space modules industrially precast concrete modules are precast with dimensional accuracy. The high degree of pre-planning, industrial prefabrication in a protected environment and prefabrication with regard to the assembly of

installation parts ensure short assembly times and minimised costs. The components for the electrical installation must also be fixed and integrated with the same level of precision as is applied to their manufacture.



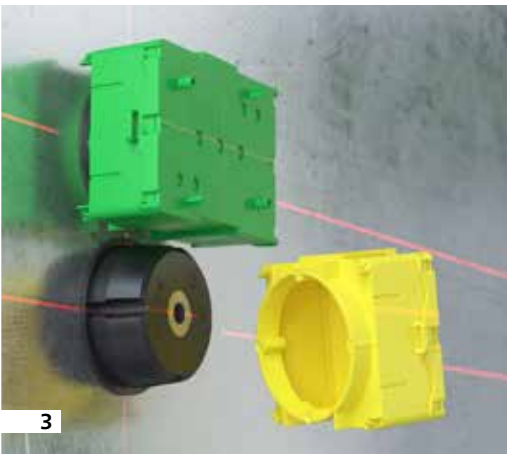


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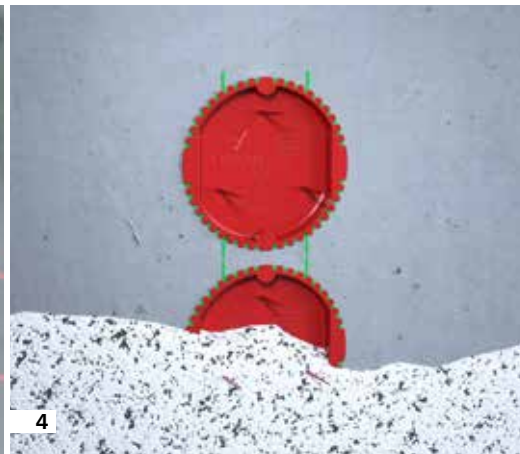


2

45 mm
installation depth



3



4



5

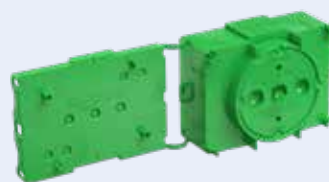
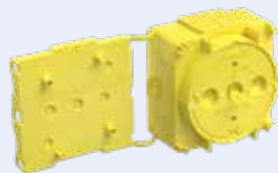
- 1 By means of the KAISER push-button connection, the Flat 45 fixing and support elements can be easily attached to the Flat 45 system boxes.
- 2 Exact position retention with rear securing by using fixing and support element Flat 45.

- 3 Fixing by magnet (Art. no. 1281-61) for a secure hold on the formwork.
- 4 The signal cover (Art. no. 1181-60) protects the inside of the box when applying the spray plaster.
- 5 Universal VDE cover (Art. no. 1184-90) for using the Flat 45 system boxes as junction boxes.

One-gang box Flat 45
Art. no. 1256-01

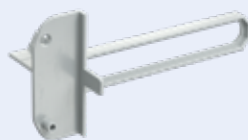
One-gang junction box Flat 45
Art. no. 1266-01

Wall light connection box Flat 45
Art. no. 1246-01



Fixing and support element Flat 45/80
Art. no. 1256-08

Fixing and support element Flat 45/120
Art. no. 1256-12



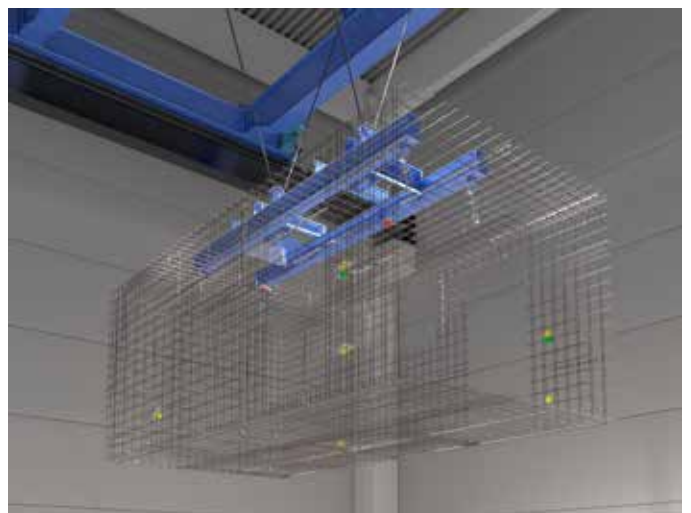


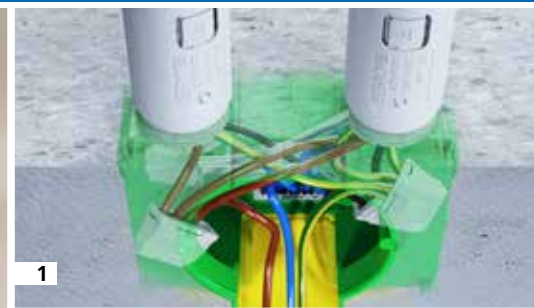
Prefabricated garages.

- 1 Exact position retention with rear securing by using fixing and support element Flat 45.
- 2 In combination with the pipe transition coupling \varnothing 32 mm, the Flat 45 junction box can be upgraded to a wallbox outlet box.

The Flat 45 system has been especially adapted to the production of concrete garages. The electrical installation boxes, which are usually integrated into the reinforcement cage, can be fixed in place with the help of the **Flat 45 fixing and support elements** and securely fastened by means of tie wires. For this purpose, the fixing and support elements Flat 45 can simply be attached to the back of the Flat 45 fixing and support elements using the proven KAISER push-button connection.

With the **conduit transition coupling \varnothing 32 mm** (Art. no. 1263-32), 32 mm conduits can also be securely connected to the **Flat 45 one-gang junction box**. This means that garage modules manufactured in the factory can already be prepared for the connection of a wallbox with an eye to the future. Thanks to the three conduit entry options on the long sides, it is also easy to prepare for a network line, so that the wallbox can communicate with the PV system, for example, and the electric car can be charged with solar power.





Prefabricated bathrooms.

With prefabricated bathrooms, which are delivered fully equipped and ready for connection and are simply positioned in the right place in the shell of the building by crane, investors benefit from the short construction times and low coordination effort. After all, here the manufacturer combines the services of ten trades with 19 work steps. Coordinating all of these on the construction site can lead to friction points, fluctuations in quality, loss of time and unpredictable costs. Particularly cost-saving and construction time-reduction are objects in which bathrooms of the same type are required in larger quantities.

The required **one-gang, one-gang junction and wall light connection boxes Flat 45** must therefore not exceed an installation depth of 45 mm. High-frequency compacting of the highly flowable concrete used also generates high concrete pressure and requires secure fixing of the fixtures. As with the prefabricated garages, the robust **Flat 45 system boxes have proven themselves**. hFastening to the formwork is done on the front or rear side by means of expanding dowels, rivets or threaded screws.

- 1 One-gang junction box Flat 45 with generous lateral terminal compartment for convenient accommodation of conductors and connection terminals.
- 2 Fixing to the formwork is carried out on the front or rear side of the formwork by means of expanding dowels, rivets or threaded screws.
- 3 Wall light connection box Flat 45



System overview: HaloX® 180 and HaloX® 250 for precast concrete

The HaloX® system for precast concrete consists of various elements, which are configured individually as required. Follow the steps below to choose the required components:

1 Installation compartment for luminaires/loudspeakers and operating devices

without additional space for operating devices



Additional space for operating devices



up to max. 150 x 90 x 50 mm

Additional space for larger operating devices



up to max. 280 x 90 x 50 mm



max. 140 mm (with tolerance compensation)
max. 180 mm (without tolerance compensation)

Adhesive attachment

One piece housing with universal mineral fibreboard



HaloX® 180
1282-71



HaloX® 180 with tunnel 190
1282-72



HaloX® 180 with tunnel 325
1282-73

Magnet attachment

one-piece housing with universal plastic panel for the magnet recess

System magnet 1299-69



System magnet PLUS 1299-70



HaloX® 180
1282-74



HaloX® 180 with tunnel 190
1282-75



HaloX® 180 with tunnel 325
1282-76



max. 210 mm (with tolerance compensation)
max. 250 mm (without tolerance compensation)

Adhesive attachment

One piece housing with universal mineral fibreboard



HaloX® 250
1283-71



HaloX® 250 with tunnel 325
1283-73

Magnet attachment

one-piece housing with universal plastic panel for holding the magnet recess

System magnet 1299-69



System magnet PLUS 1299-70



HaloX® 250
1283-74



HaloX® 250 with tunnel 325
1283-76

2 Installation depth



Installation height > 110 mm



Extension rings 25 / 50 mm
1282-25/50



Extension rings 25 / 50 mm
1283-25/50

3 Accessories



Wall installation in vertical formwork

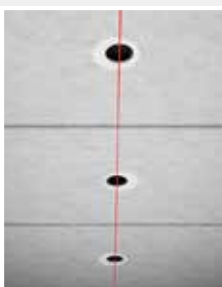


Wall installation set for installation in vertical formwork
1299-60...64

Easy to find after formwork removal



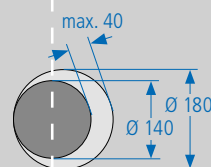
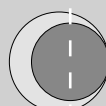
Signal cover
1281-31...33



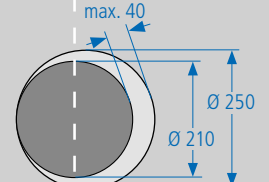
Tolerance compensation

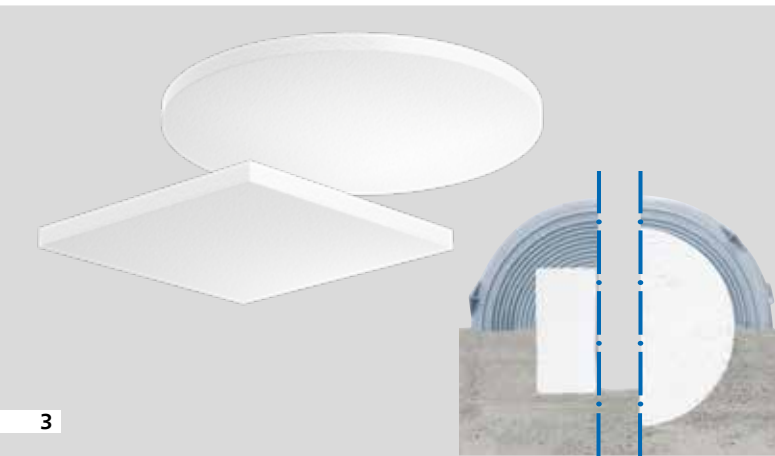
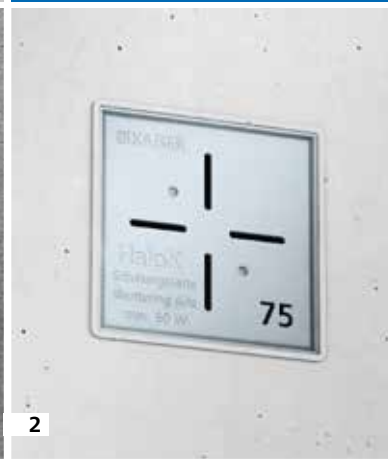
Depending on the installation diameter, inaccuracies arising during installation of the slab ceilings can subsequently be corrected. Variable installation diameters can be cut out precisely in the front parts with the KAISER VARIOCUT universal hole cutter.

HaloX® 180



HaloX® 250





Forms and functions.

Front parts with defined installation diameters are available for all enclosure sizes - also for the facing concrete versions. An additional elastomer sheathing prevents the dry concrete from cracking in this case. Styrofoam moulded parts are available for individual installation diameters in almost any shape and thickness, and universal front parts are suitable for variable or as-yet-undefined ceiling exits.

- 1 Round front parts with and without an elastomer seal.
- 2 Square front parts with and without an elastomer seal.
- 3 Styrofoam mouldings for individual cut-outs in any shape and size (with and without an elastomer seal).
- 4 Universal front parts for variable or not yet defined ceiling cut-outs.

HaloX® 100/180/250 front parts
1281-01..07
1282-01..06
1283-01..06



HaloX® 100/180/250 universal front parts with plastic panels
1281-10
1282-10
1283-10



HaloX® 100 front parts, square
1281-08/09



HaloX® 100/180/250 universal front parts with mineral fibreboard
1281-11
1282-11
1283-11



HaloX® 100/180/250 front parts for facing concrete
1281-61..67
1282-61..66
1283-61..66

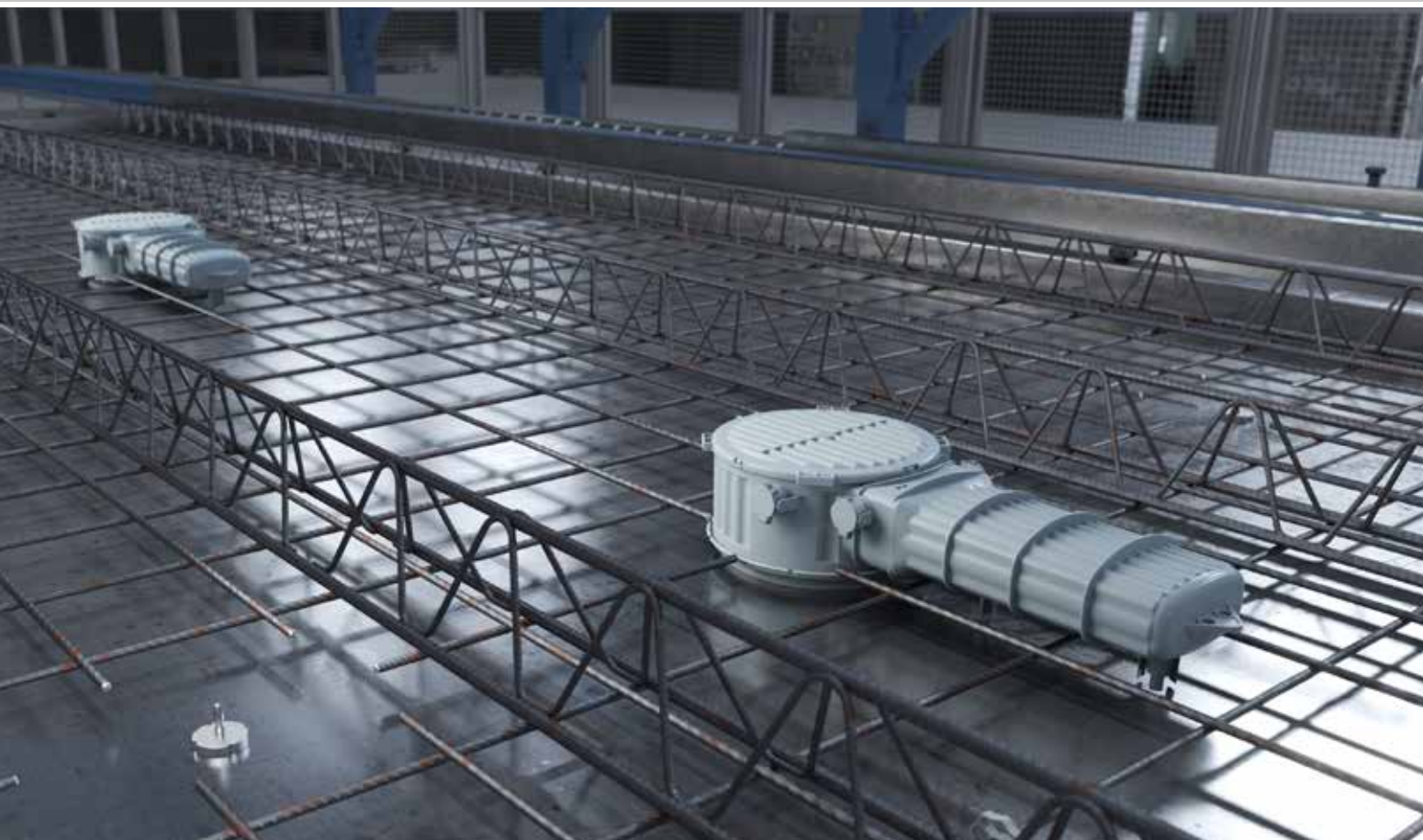


HaloX® Moulded styrofoam parts
1292-90



HaloX® 100 front parts, square for facing concrete
1281-68/69





Fitting in precast concrete.

The HaloX® system is designed as a single element for fitting in precast concrete. The housings can easily be aligned on the formwork table by means of markings on the housing. The housing with pre-fitted mineral fibreboard allows easy glueing and the housings can be turned by 360° on the formwork table even after glueing. For the magnet attachment, housings are available with pre-fitted front parts to accommodate the system magnet (Art. no. 1299-69 / 1299-70). Laying tolerances which may occur during the fitting of panel elements are compensated for via the housing sizes in connection with a variable cut-out surface. Because of the compact dimensions of the housings, the reinforcement can easily be placed around the housing. For luminaires or loudspeakers with installation depths equal to or greater than 110 mm, the installation compartment of the HaloX® housings can be increased on the on-site concrete building site by means of extension rings. The fitting of the conduits on-site takes place without the need for tools for M20/M25 conduits without any internal shortening of the conduits.

HaloX® 180
Art. no. 1282-71



HaloX® 250
Art. no. 1283-71



**HaloX® 180
for magnet attachment**
Art. no. 1282-74



**HaloX® 250
for magnet attachment**
Art. no. 1283-74





- 1 Mounting of the single-piece housing with mineral fibreboard.
- 2 Alignment marks for exact positioning on the formwork table.
- 3 Fitting of the one-piece housing by means of a magnet (Art No. 1299-69).
- 4 Precise and level fixing of the housing.

**HaloX® 180
with tunnel 190**
Art. no. 1282-72



**HaloX® 180
with tunnel 325**
Art. no. 1282-73



**HaloX® 250
with tunnel 325**
Art. no. 1283-73



**Replacement
mineral fibreboard
for HaloX® 180,
HaloX® 250**
Art. no. 1282-27
Art. no. 1283-27



**Extension rings
HaloX®**
Art. no. 1282-25/50
Art. no. 1283-25/50



**HaloX® 180
with tunnel 190
for magnet attachment**
Art. no. 1282-75



**HaloX® 180
with tunnel 325
for magnet attachment**
Art. no. 1282-76



**HaloX® 250
with tunnel 325
for magnet attachment**
Art. no. 1283-76



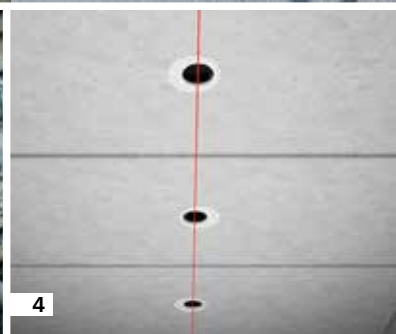
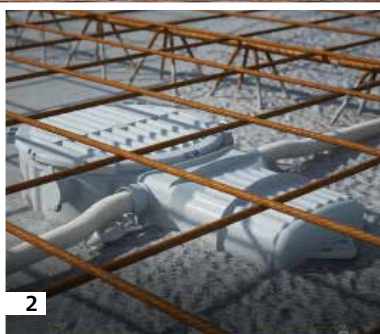
**System magnet /
System magnet PLUS**
Art. no. 1299-69 / 1299-70



Signal cover
Art. no. 1281-
31 / ..32/ ..33



NEW



Further processing of the finished elements on the construction site.

Further processing of HaloX® housings is quite simple. The housing sizes in combination with the universal front parts allow the compensation of tolerances, which may arise when laying the panel elements. After laying the panel elements, the conduits can be fitted. The toolless opening of the M20/M25 combination entries enables fast and secure conduit insertion. At the same time, the depth stop obviates the need for subsequent internal shortening of the conduits.

For luminaires or loudspeakers with greater installation depths (> 100 mm), the installation compartment of the HaloX® housing can be subsequently raised with extension rings at the on-site mixed concrete construction site.

- 1 Toolless conduit entry for M20/M25 conduits with depth stop.
- 2 Finished conduit installation of the HaloX® housing.
- 3 Increase of the installation depth by means of extension rings.
- 4 Making the ceiling cut-outs (e.g. with Art. No 1083-10) in compliance with the laying tolerance.



1



2



3



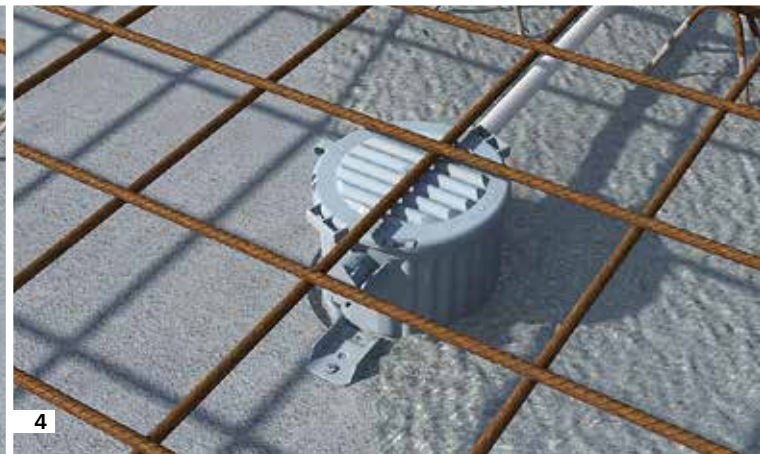
4

There are many types of luminaires and loudspeakers. **HaloX[®]** suits them all.

The new generation of concrete installation housing offers secure installation space for loudspeakers and luminaires with LED, halogen or compact fluorescent lights and their operating devices in ceilings and in walls. HaloX[®] creates the space required for modern lighting and sound solutions. Due to its modular and flexible structure, the system offers a solution for virtually all installation diameters and installation depths.

Choosing the appropriate housings and accessories is extremely simple. The HaloX[®] housing system is available in three basic types - HaloX[®] 100, HaloX[®] 180 and HaloX[®] 250 - together with a tunnel for the secure fastening of operating devices (e.g. LED drivers).

- 1 HaloX[®] system 100 with multi-conduit entry
- 2 HaloX[®] system 180 with tunnel 190
- 3 HaloX[®] system 250 with tunnel 325
- 4 HaloX[®] creates a secure installation compartment for luminaires and loudspeakers in concrete ceilings and walls



- 1 A core drilling (\varnothing 150 - 160 mm) is cut into the slab ceiling.
- 2 Front parts and extension rings are combined according to the ceiling thickness and installation depth.
- 3 Place the housing in the core drilling and fasten.
- 4 The housing attached to the reinforcement now sits firmly and precisely in place.

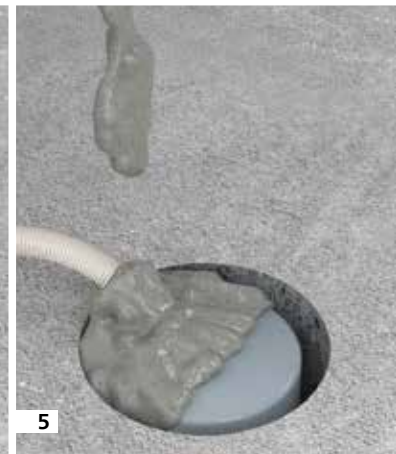
HaloX[®] installation kit.

For subsequent installation in slab ceilings.

The HaloX[®] installation kit can be retrofitted in existing slab ceilings (from thickness 50 mm) with or without a transformer tunnel. Be sure to take into account the ceiling thickness and the structural alteration of the ceiling (e.g. fire protection and statics).

- For subsequent installation in filigree ceilings
- Minimal effect on statics
- Enables convenient short-term planning changes
- Large selection of opening sizes up to \varnothing 100 mm
- Extension rings for bridging the slab ceiling element and for increasing the luminaire installation depth





- 1 Cut core drilling in the solid ceiling with a diameter \varnothing 150 - 160 mm.
- 2 The universal opening cutter is used to create precisely fitting conduit entries for the corresponding conduit sizes.
- 3 Front parts and extension rings are combined according to the ceiling thickness and installation depth.
- 4 The complete housing with the mounted installation conduit is inserted into the core drilling.
- 5 Then the free space is filled with concrete and compacted.

HaloX[®] for solid concrete ceilings.

For subsequent installation.

HaloX[®] concrete installation housing for solid concrete ceilings can be inserted into existing and retrofitted core drillings.

- For subsequent installation in solid ceilings
- Minimal effect on statics
- Quick installation with snap-in connections
- Robust construction, ideal for use on building sites
- Large selection of opening sizes up to \varnothing 100 mm

HaloX[®] housing for core drillings in solid ceilings
Art. no. 1290-30





Signal cover. The solution for a clean ceiling appearance after plastering.

NEW

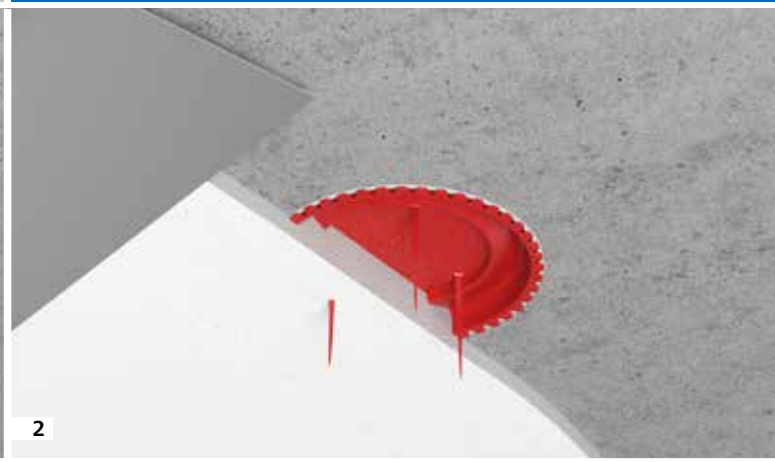
The new signal cover ensures a clean ceiling appearance and avoids time-consuming reworking of the installation opening after plastering. As an accessory item for the KAISER HaloX® concrete installation housings, the signal cover is simply inserted into the already opened front part after formwork removal from the rough ceiling or wall. Thus, the installation opening is securely closed and protected against penetration of plaster. Three signal bristles, in combination with the bright red colour, ensure that the installation opening in the plastered rough ceiling or wall can be found quickly and easily. The installation opening can be opened with one targeted blow of the hammer without destroying the surrounding plaster pattern. With one turn of the knife edge, cleaning residues are removed effortlessly. The flexible signal cover can then be removed easily and cleanly. Its specially serrated edge structure preserves the plaster edge.

- Stable and robust clamping in the installation diameters \varnothing 68 mm, \varnothing 75 mm and \varnothing 80 mm
- For use in fixed HaloX® front parts, universal HaloX® front parts and other installation openings
- Stable signal bristles and strong colouring for easy retrieval from the plaster surface
- Reusable, easy to clean

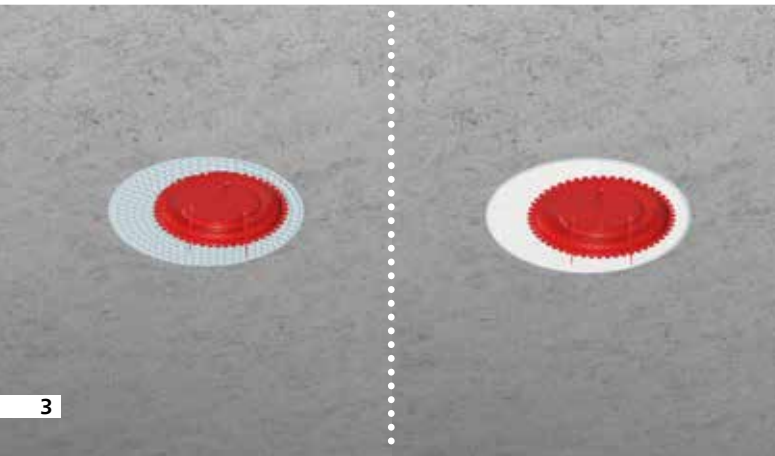




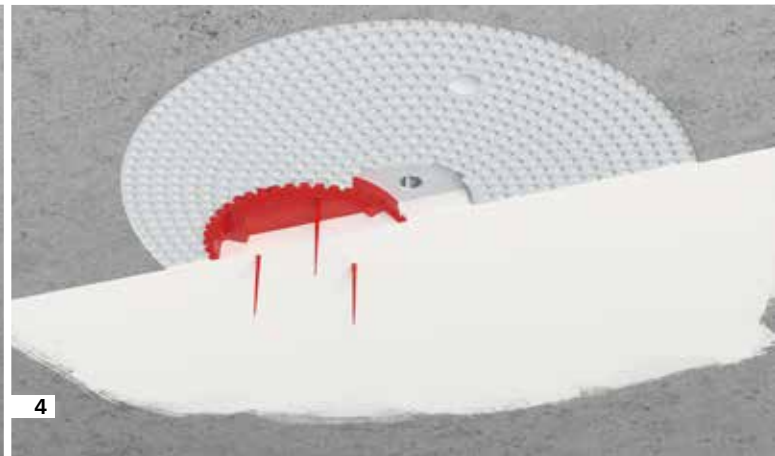
1



2



3



4

- 1 After formwork removal and pull-in of the supply conduits, the signal cover is inserted into the installation opening.
- 2 The red signal bristles are flexible during the smoothing process and do not hinder this work step but, at the same time, are stable enough to keep the position in the plaster surface recognisable.

- 3 In addition to being able to use the HaloX® front parts with fixed exit opening, these can also be inserted into the universal HaloX® front parts.
- 4 In the case of factory-fitted HaloX® housings for one of the system magnets (e.g. 1299-69 / 1299-70), the signal covers allow the magnetic recess to be smoothed or filled over the entire surface.

Signal cover

Art. no. 1281-31/ .. 32/ ..33





Universal installation housings for concrete ceilings and walls. Variable for various installation accessories.

Universal installation housings allow easy and secure installation of many applications for which no concrete installation solutions are commercially available. Devices such as touch panels for smart home applications, for example, can be optimally installed via the installation opening that can be made in the mineral fibreboard.

Universal installation housings also provide the perfect solution for other applications used for control, lighting or sound systems of rooms and buildings.

The fitting of the universal installation housings is similar to that of the junction casings, so that both the planning and the installation can be carried out just as easily.

The housing system is equally suited for installations in on-site mixed concrete and in precast concrete elements, as well as for use in walls and ceilings, so that the system has no restrictions here either.

The universal mineral fibreboard can be easily and precisely opened for the relevant applications using a jigsaw. A peripheral groove in the mineral fibreboard determines the maximum possible cut-out.



1



2



3



4

- 1 The housing in the concrete is flush-mounted with the mineral fibreboard.
- 2 The support element prevents it from being pressed inward while the concrete is being cast.
- 3 The front plates are easy to process, ensuring the ability to create flexible cut-outs.
- 4 The groove in the mineral fibreboard marks the maximum fitting area.

Universal installation housing with mineral fibreboard
Art. no. 1223-22



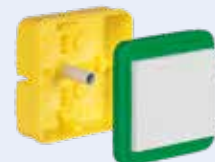
Universal installation housing with mineral fibreboard
Art. no. 1224-22



Universal installation housing with mineral fibreboard
Art. no. 1295-22



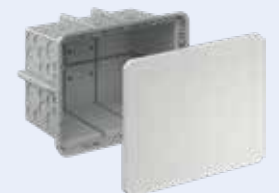
Universal installation housing with mineral fibreboard
Art. no. 1296-22



Universal installation housing with mineral fibreboard
Art. no. 1297-22



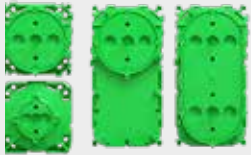
Universal installation housing with mineral fibreboard
Art. no. 1297-../1298-..



Electrical installation in concrete. At a glance.

The KAISER colour system.

The different colours of the individual components make correct installations easier.



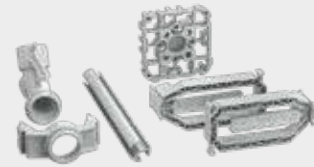
Green
Front parts for fixing to the formwork.



Yellow
Box and casing rear parts for wall installation.



Red
Box rear parts for ceiling installation.



Grey
Intermediate parts and attachment accessories.

Precast concrete.

www.kaiser-elektro.org/bbwerksfertigung



Installation in walls



B² one-gang junction boxes with recess (48.5 mm)
1262-06 | p.9



B² one-gang junction boxes with recess (68.5 mm)
1263-06 | p.9



B² one-gang junction box with magnet attachment (83.5 mm)
1264-06 | p.9



B² one-gang junction box (48.5 mm)
1262-60 | p.9



B² one-gang junction box (68.5 mm)
1263-60 | p.9



B² one-gang junction box (83.5 mm)
1264-60 | p.9



System magnet adapter
1200-99 | p.32



B² one-gang junction box (48.5 mm)
1262-9



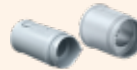
B² one-gang junction box (68.5 mm)
1263-61 | p.9



B² one-gang junction box (83.5 mm)
1264-61 | p.9



Conduit connector 60°
1266-25 | p.9



Conduit connector
1261-21/26/32/40
p.11



Conduit transition coupling Ø 32 mm
Art. no. 1263-32
p.11



Conduit connector 90°
1262-20/25/32
p.11

Accessories



Distance piece 142
1261-18



System magnet
1299-69 | p.7
System magnet PLUS
1299-70 | p.7



Plaster compensation ring
1261-60



Counter bearing
1261-11 | p.13



Extension element 10 to 50 mm
1261-10 | p.9



Extension element 48.5 mm for system magnet
1261-02 | p.12



Universal-Extension element
1261-06/07/08/09

Prefabricated room modules



One-gang box Flat 45
1256-01 | p.25



One-gang junction box Flat 45
1266-01 | p.25



Wall light connection box Flat 45
1246-01 | p.25



Fixing and support element Flat 45/80
1256-08 | p.25



Fixing and support element Flat 45/120
1256-12 | p.25



Expanding dowel
1217-02



Signal cover
1181-35
1181-60 | p.25

Installation in ceilings



Large slab ceiling box 115
1227-16 | p.15



Large slab ceiling box 115
1227-55 | p.15



Large slab ceiling box 105
1227-54 | p.15



Slab ceiling box for retrofitting
1247-01 | p.15



Central transition casing
326 x 104 x 118mm
9914.10 | P.17



End and transition bush
Ø 20 mm
1261-82 | p.19



End and transition bush
Ø 25 mm
1261-83 | p.19



End and transition bush
Ø 32 mm
1261-84 | p.19



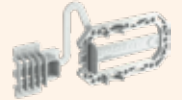
Wall and ceiling transition 30°
Ø 20 mm
1261-92 | p.19



Wall and ceiling transition 30°
Ø 25 mm
1261-93 | p.19



Wall and ceiling transition 30°
Ø 32 mm
1261-94 | p.19



Prefix® universal support seat
1261-00 | p.19



Wall to ceiling transition
1261-12 | p.21



Wall to ceiling transition
1261-16 | p.21



Wall to ceiling transition
1261-14 | p.21



Oval funnel
1261-42 | p.12



Oval funnel
1261-43 | p.12



Wall and ceiling transition 90°
Ø 20 mm
1261-95 | p.19



Wall and ceiling transition 90°
Ø 25 mm
1261-96 | p.19



Wall and ceiling transition 90°
Ø 32 mm
1261-97 | p.19

Installation housing for precast concrete.

www.kaiser-elektro.org/bbeinbauehaeuse



Installation dimension up to Ø 180 mm | adhesive attachment



HaloX® 180
1282-71 | p.28



HaloX® 180 with tunnel 190
1282-72 | p.28



HaloX® 180 with tunnel 325
1282-73 | p.28



HaloX® 180 extension rings
1282-25/50 | p.28



HaloX® 180 replacement mineral fibreboard
1282-27 | p.31

Installation dimension up to Ø 180 mm | magnet attachment



HaloX® 180
1282-74 | p.28



HaloX® 180 with tunnel 190
1282-75 | p.28



HaloX® 180 with tunnel 325
1282-76 | p.28



HaloX® 180 extension rings
1282-25/50 | p.28



System magnet
1299-69 | p.7



System magnet PLUS
1299-70 | p.7

Installation dimension up to Ø 250 mm | adhesive attachment



HaloX® 250
1283-71 | p.28



HaloX® 250 with tunnel 325
1283-73 | p.28



HaloX® 250 extension rings
1283-25/50 | p.28



HaloX® 250 replacement mineral fibreboard
1283-27 | p.28

Installation dimension up to Ø 250 mm | magnet attachment



HaloX® 250
1283-74



HaloX® 250 with tunnel 325
1283-76 | p.28



HaloX® 250 extension rings
1283-25/50 | p.28



System magnet
1299-69 | p.7



System magnet PLUS
1299-70 | p.7



Signal cover Ø 68 mm
1281-31 | p. 37



Signal cover Ø 75 mm
1281-32 | p. 37



Signal cover Ø 80 mm
1281-33 | p. 37

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Universal installation housing.



Universal installation housing 90 x 90 x 70mm
1223-22 | p.39



Universal installation housing 150 x 90 x 70mm
1224-22 | p.39



Universal installation housing 128 x 128 x 86mm
1295-22 | p.39



Universal installation housing 180 x 180 x 90mm
1296-22 | p.39



Universal installation housing 250 x 220 x 90mm
1297-22 | p.39



Universal installation housing 258 x 188 x 135mm
1298-37 | p.39



Universal installation housing 258 x 188 x 200mm
1298-38 | p.39



Universal installation housing 408 x 308 x 135mm
1297-34 | p.39



Universal installation housing 408 x 308 x 235mm
1297-35 | p.39



Telescope support
9957

Installation housings for retrofitting.

Installation dimension up to Ø 100 mm



HaloX® 100 installation kit
1281-20 | p.34



HaloX® housing for core drillings in solid ceilings
1290-30 | p.34

www.kaiser-elektro.org/werkzeuge

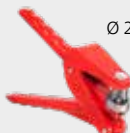


Installation in concrete.

Tools



Universal-Opening cutter
Art. no. 1085-80 | p.35



Punch pliers
Art. no. 1286-33 | p.14



Punch pliers
Art. no. 1286-34 | p.14



AMZ 2 stripping pliers
Art. no. 1190-02



Reamer
Art. no. 1284-34/35/36



Step drill
Art. no. 1284-32 | p.39



Hole punch and expanding dowel fitting tool
Art. no. 1284-62/63



Nail inserter
Art. no. 1284-69/68



Well informed. KAISER Service.

When you decide to use KAISER products, you always receive comprehensive service as well. This allows both you and your customers to take advantage of all the benefits we offer.

Videos on products and applications Helpful tips & tricks for your everyday work. Here we clearly show all product and processing advantages, installation instructions, certificates and declarations of performance as well as conformity that make the product perfect.

Intelligent product filters in the online catalogue help you with your product selection. Our BIM data, tender texts and CAD data are important building blocks for your digital planning.

- Online product catalogue
- Download of digital media
- Seminars, trade fairs and events
- Technical sales and service consultation
- Article master data and price information
- Tender texts
- BIM data
- CAD data

The most important websites at a glance:

www.kaiser-elektro.de

www.youtube.com/kaiserelektro

kaiser.partcommunity.com

www.ausschreiben.de

www.eplandataportal.de/agro

www.kaiser-elektro.org/elbridge

Systems and solutions for professional electrical installation work.

KAISER has been developing and producing systems and products as the basis for professional installation work since 1904. Planners and fitters all over the world use our practice-oriented solutions for their daily work in all installation areas.



Energy efficiency.

Innovative KAISER products help you to ensure compliance with the requirements of EU Directives and national regulations such as the Energy Savings Regulations (EnEV).



Radiation protection.

The use of the new radiation-protection one-gang boxes allows the radiation protection of the wall to be maintained without additional shielding measures.



Fire protection.

KAISER fire-protection systems provide reliable solutions for electrical installations in fire-protection walls and ceilings.



Construction.

KAISER has matching product system solutions for safe, durable and practical use in redevelopment, renovation and modernisation projects.



Sound insulation.

KAISER's innovative sound insulation boxes ensure compliance with the construction requirements for sound insulation walls, as well as for built-in installations.



Concrete construction.

Complete systems for on-site mixed concrete, pre-cast concrete and prefabricated room modules. Fully optimised to professional electrical installation work.

Technical information and advice

All further information on products, system solutions and communication media can be found on website:

www.kaiser-elektro.de

For additional questions or information, our team of technical consultants will be happy to assist you and look forward to talking to you: **+49 (0) 23 55 / 809-61** · technik@kaiser-elektro.de

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