

On-site mixed concrete

- Complete systems for on-site mixed concrete B¹
- Sophisticated colour system for easy assignment of system components
- Prefix® installation technology for simple, fast installation against the opposing formwork without a support element
- Central transition casings for feeding in electrical circuit distributors
- Wide range of fastening options on the formwork



International

- International products for accessory installation according to country-specific standards and requirements



Cable routing, conduit feeding and sealing systems


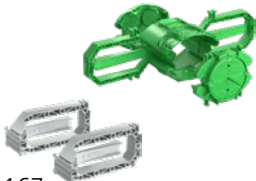

- Practical solutions for wall-ceiling transitions
- Safe, visible and certified protection through the use of KAISER sealing systems for cables and conduits, as well as cable and conduit bundles








Tools

- Professional system tools for fast, safe installation
- Extensive system accessories

see chapter **TOOLS**
from page 376

	On-site mixed concrete B ¹ Fixing to the working formwork	Prefix® for fastening to the reinforcement	International Installation of international accessories
		 pg. 167	
For installation accessories			
One-gang boxes	pg. 161	-	pg. 200
One-gang junction boxes	pg. 161	pg. 175	pg. 200
Large conduit boxes	pg. 162	-	-
Perilex® one-gang boxes	pg. 164	-	-
CEE one-gang boxes	pg. 164	-	-
Electronics box	pg. 166	-	-
Two-gang junction box	pg. 166	-	-
Universal installation housings	pg. 197	-	-
For cable outlets			
Wall light connection	pg. 162	pg. 175	-
Luminaire connection	pg. 178	-	-
Luminaire installation and connection	pg. 177	-	-
For cable connections			
Junction boxes	pg. 164	-	-
Junction casings	pg. 168/201	-	pg. 200
Potential equalisation casing	pg. 169	-	-
Accessories			
Fixing	pg. 167/187	pg. 167	pg. 167/187
Support element	pg. 173	-	pg. 173
Sealing of electrical installation conduits (air-tight and smokeproof)	pg. 33/117/302	pg. 33/117/302	-
Plaster compensation	-	-	-
End cover	pg. 205	-	-

Cable and conduit entry systems | Product overview

	Transitions	Exits	Conduit supports	Central transition casing	Sealings in fire protection ceilings and walls
	 pg. 184	 pg. 188	 pg. 189	 pg. 190	 pg. 295
Conduit sizes					
Ø 20 mm	•	•	•	•	•
Ø 25 mm	•	•	•	•	•
Ø 32 mm	•	•	•	•	•
Ø 40 mm	•	•	•	•	•
Ø 50 mm	-	-	-	•	•
Ø 63 mm	-	-	-	•	•
Cables / cable bundles	-	-	-	-	•

Production methods for on-site mixed concrete



Concrete walls can be manufactured in upright (vertical) or flat (horizontal) formwork. Horizontal formwork has only one formwork side, while vertical formwork has two formwork sides: the working formwork and the opposing formwork.



Free-standing reinforcement is always used when formwork elements are still installed in other places and can only be set up later on.



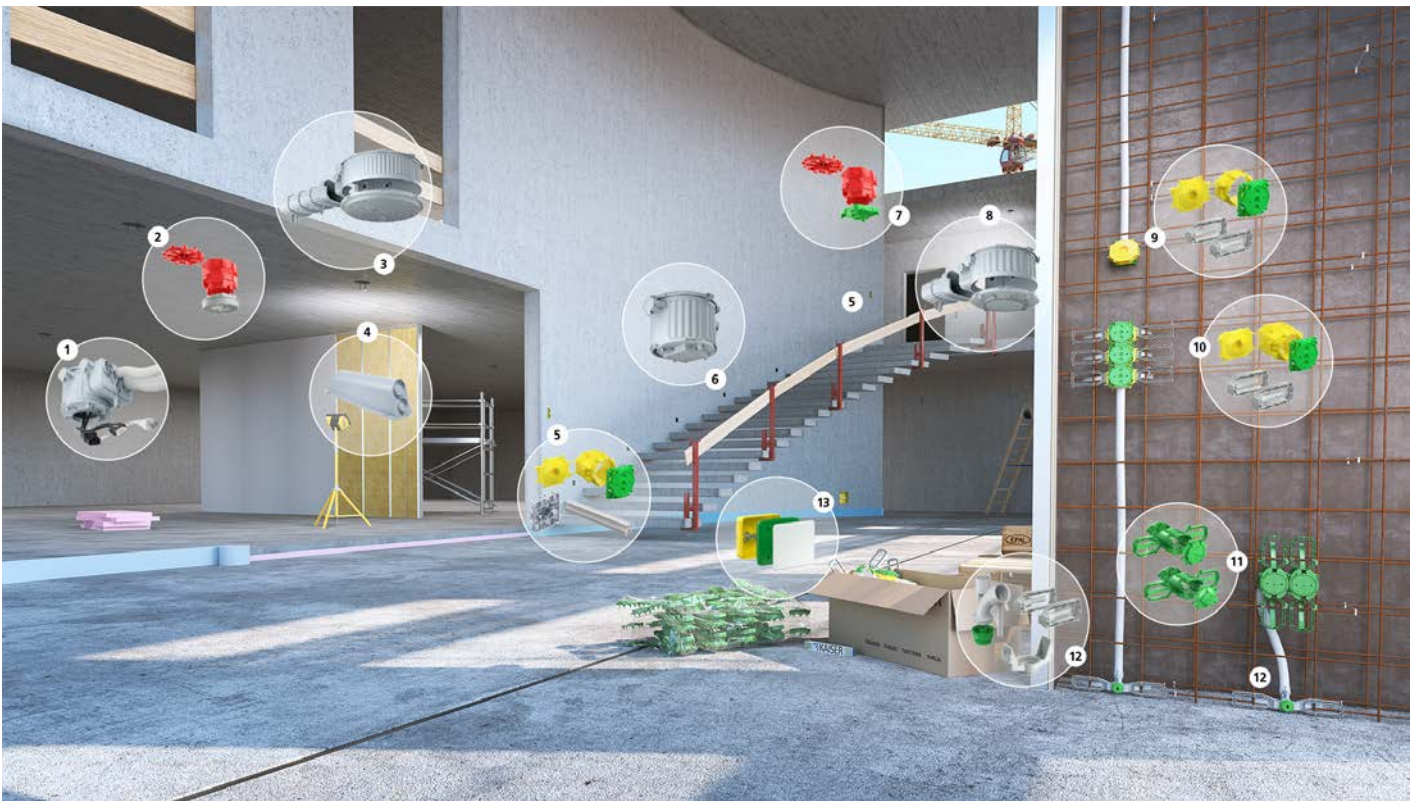
Sliding or travelling formwork is used vertically for the production of structures with great heights and horizontally, e.g. for roadway pavements and concrete safety barriers.



The slow sliding or travelling of the formwork ensures a steady construction progress.

Installation in on-site mixed concrete

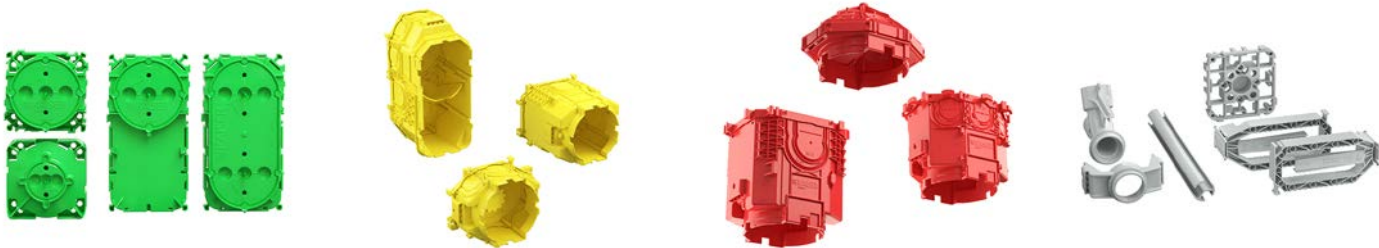
The KAISER concrete construction system for all concreting methods and types of construction. It offers an extensive programme with numerous wall and ceiling boxes as well as practical solutions for wall to ceiling transitions.



1 HaloX® 100 Multi-conduit entry | **2** B¹ universal ceiling exit | **3** HaloX® 250 with tunnel 325 for on-site mixed concrete, HaloX® 250 universal front part | **4** Formwork protection | **5** B¹ device connection socket | **6** HaloX® 100 for on-site mixed concrete, HaloX® 100 front part, square | **7** B¹ ceiling junction box | **8** HaloX® 180 with tunnel 190 for on-site mixed concrete, HaloX® 180 facing concrete front part | **9** B¹ large conduit one-gang junction box, B¹ Prefix® system wing set | **10** B¹ device connection socket | **11** Prefix® concrete building box | **12** Wall and ceiling transition 30°, B¹ Prefix® system wing set, B¹ Prefix® wall exit adapter Ø 25 mm | **13** Potential equalisation casing 16²

The KAISER colour system.

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











Green: Front parts for fixing to the formwork.

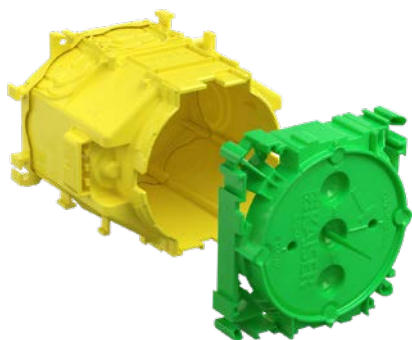
Yellow: Box and casing rear parts for wall installation.

Red: Box rear parts for ceiling installation.

Grey: Intermediate parts and attachment accessories.

Ways of attaching to various types of formwork

Product description	For wood formwork			For steel formwork				
								
	Nail Ø 2 mm	Wood screw Ø 4 mm	M6 threaded dowel	Expanding dowel	Magnet	Adhesive foil	M6 weld-on screw	Hot glue
Wall and ceiling box	•	•	•	•	•		•	•
Boxes*	•	•	•	•		•	•	•
Bushes	•	•						•
transitions	•	•						•
Abutment	•	•	•	•		•	•	•
Ceiling strips	•	•						•
Conduit and cable distance spacer	•	•	•	•				•



B¹ one-gang box and B¹ one-gang junction boxes

B¹, the new on-site mixed concrete range of products for electrical installation work. In addition to the tried-and-tested system features such as the flat front part, sturdy fixing domes and the support element slot with a sprung box base, the new B¹ range has innovative conduit entries, sturdy slots for the new B¹ Prefix® system wing range, and also bridges – which can be broken out later if required – for connecting accessories in combinations.

- Suitable for all types of formwork
- Slot for B¹ Prefix® system wing set
- Can be stably combined over the complete box body with a standardised combination distance of 71 mm
- Innovative conduit entries for fast processing on the construction site
- Signal bristles for easy location with installations on the opposing formwork side
- Larger mounting and installation space
- Installation of pre-wired installation accessories with multiple combinations, because the bridge can be broken out later



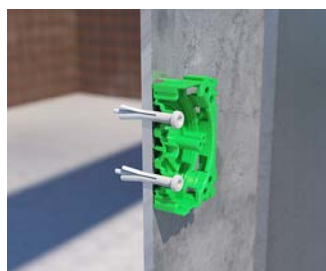
Fixing and alignment of the front part



Exact alignment by centre marking.



Fixing by means of steel nails.

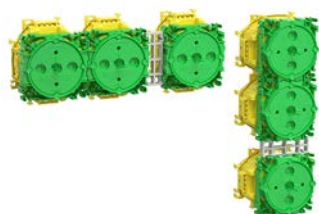


Fixing by means of KAISER expanding dowels (Art. No. 1217-02).

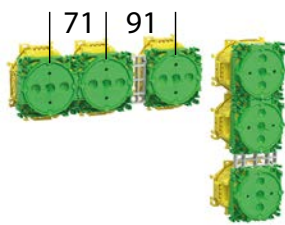


Fixing by means of threaded dowels.

Combination in accordance with DIN



For multiple combinations, many of the B¹ wall applications can be combined in two directions at a standard combination distance of 71 mm (DIN 49075).



By using the 91 distance piece (Art. No. 1259-04), the combination distances for communication connections can be extended to 91 mm in 20 mm increments.

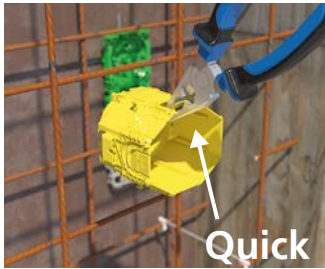


The B¹ one-gang box, B¹ one-gang junction box, B¹ large conduit one-gang junction box and the B¹ electronics box...



...can be connected stably and securely to both the front part and the box body.

The new conduit insertion technology



The required conduit connection opening can be easily and exactly broken out with a quick tilting movement using a standard pair of combination pliers,...



...for this purpose, the combination pliers are applied to the marked break-off edge for the required conduit size and broken out via a tilting movement.



Once all the required conduit entry openings have been created, the rear cover can be closed.





The conduit can now be inserted easily.

B¹ one-gang box

- with 4 screw domes and 2 expanding claw fields
- 2-piece with moulded rear part
- Two slots for B¹ Prefix® system wings
- Rear part of box with slot for support element
- Suitable for all types of formwork
- Standardised combination distance 71 mm

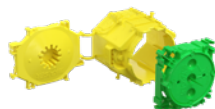


3D animation



Length x Width x Depth	94 x 75 x 59 mm
Installation opening Ø	60 mm
Break-out openings for DIN EN Ø 20/25 mm conduits	6
Markings for cables up to Ø 16 mm	6
Number of parts	2
 / 	Yes / Yes
Art.-No.	1255-01
Inner packaging/shipping	20 / 200

B¹ one-gang junction box

- with 4 screw domes and 2 expanding claw fields
- 2-piece with moulded rear part
- Two slots for B¹ Prefix® system wings
- Rear part of box with slot for support element
- Suitable for all types of formwork
- Standardised combination distance 71 mm



3D animation

Length x Width x Depth	94 x 75 x 91 mm
Installation opening Ø	60 mm
Break-out openings for DIN EN Ø 20/25 mm conduits	7
Markings for cables up to Ø 16 mm	7
Number of parts	2
 / 	Yes / Yes
Art.-No.	1265-01
Inner packaging/shipping	20 / 100

B¹ One-gang boxes, B¹ One-gang junction boxes



for on-site mixed concrete

B¹ large conduit one-gang junction box

- with 4 screw domes and 2 expanding claw fields
- 2-piece with moulded rear part
- Two slots for B¹ Prefix® system wings
- Rear part of box with slot for support element
- Suitable for all types of formwork
- Standardised combination distance 71 mm



3D animation



Length x Width x Depth	94 x 75 x 106 mm
Installation opening Ø	60 mm
Break-out openings for DIN EN Ø 32/40 mm conduits	3
Markings for cables up to Ø 16 mm	3
Number of parts	2
 / 	Yes / Yes
Art.-No.	1260-01
Inner packaging/shipping	20 / 100

B¹ wall light connection box

- space for 3 terminal blocks and associated cables
- 2-piece with moulded rear part
- Two slots for B¹ Prefix® system wings
- Rear part of box with slot for support element
- Suitable for all types of formwork

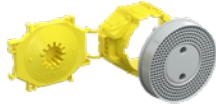


3D animation

Length x Width x Depth	94 x 75 x 59 mm
Installation opening Ø	35 mm
Break-out openings for DIN EN Ø 20/25 mm conduits	6
Markings for cables up to Ø 16 mm	6
Number of parts	2
 / 	Yes / Yes
Art.-No.	1248-01
Inner packaging/shipping	20 / 200

B¹ universal wall exit

- Accessory fitting without drilling or dowelling
- space for 3 terminal blocks and associated cables
- Grey front part version for exposed concrete applications
- 2-piece with moulded rear part
- Two slots for B¹ Prefix® system wings
- Rear part of box with slot for support element
- Suitable for all types of formwork



3D animation

Length x Width x Depth	95 x 90 x 67 mm
Installation opening Ø	45 mm
Break-out openings for DIN EN Ø 20/25 mm conduits	6
Markings for cables up to Ø 16 mm	6
Number of parts	2
Art.-No.	1248-03
Inner packaging/shipping	20 / 180

Note

According to DIN VDE 0100, Part 559, feed lines for wall lights must terminate in connection boxes. Wall light connection boxes must have at least one option for attaching wall lights. According to DIN VDE 60670, wall and ceiling luminaire connection boxes must provide enough room for 3 individual terminals or be fitted with a 3-pole connector.

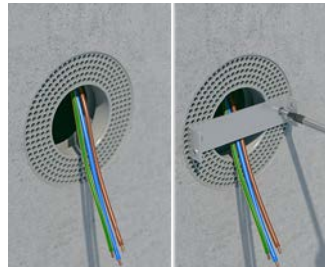
Installation with the universal screw-on surface



B¹ Universal wall exit



B¹ Universal wall exit with Prefix® installation technology.



In addition, thanks to the universal screw-on surfaces, the complete installation can be done...



For wall lights, for example, only screws and a cordless screwdriver are needed.

One-gang box

- with 4 screw domes and 2 expanding claw fields
- suitable for all types of form-work
- combinations have fully-insulated cable transitions
- Standardised combination distance 71 mm



Depth	41 mm
Installation opening Ø	60 mm
Markings for cables and DIN EN conduits to Ø 16 mm	2
Number of parts	2
Art.-No.	1255-43
Inner packaging/shipping	10 / 100

One-gang boxes, One-gang junction boxes

for on-site mixed concrete

Junction box

- cover screw distance 67 mm
- suitable for all types of form-work



Depth	66 mm	66 mm
Installation opening Ø	70 mm	70 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	Yes	Yes
Rear part with holder for support element	Yes	Yes
Number of parts	2	2
with cover and cover screws	Yes	-
Art.-No.	1276-70	1276-71
Inner packaging/shipping	10 / 100	10 / 100

One-gang box PERILEX®

- device screws distance 67 mm
- with 2 countersunk device screws Ø 4 mm, length 16 mm
- for use with 16 A PERILEX® inserts
- suitable for all types of form-work



Depth	66 mm
Installation opening Ø	70 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	Yes
Rear part with holder for support element	Yes
Number of parts	2
Art.-No.	1276-40
Inner packaging/shipping	10 / 100

One-gang box CEE

- device screws distance 67 mm
- With sealing ring for protection class IP 34 and 2 raised head 4 mm Ø device screws, length 20 mm
- for use with 16A CEE equipment inserts
- suitable for all types of form-work

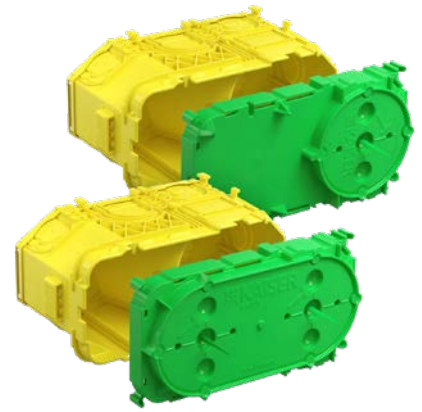


Depth	66 mm
Installation opening Ø	70 mm
Markings for cables and DIN EN conduits up to Ø 25 mm	Yes
Rear part with holder for support element	Yes
Number of parts	3
Art.-No.	1275-40
Inner packaging/shipping	10 / 100

B¹ Electronics box and B¹ two-gang junction box

The B¹ electronics box and B¹ two-gang junction box are especially suitable for installations in on-site mixed concrete vertical formwork. The B¹ electronics box provides plenty of space for accessory installations, and additional space for devices such as switch actuators or other components for smart home applications. The relevant separator wall allows the standardised installation of bus and operating voltages in a single box. B¹ Two-gang junction boxes allow the installation of block and pre-wired accessories, and provide space for the assembly of cable for multi-media connections.

- Plenty of space for accessories and cables
- Separator wall for the standardised incorporation of two voltage types
- Flat front part for fast, easy nailing
- Innovative conduit entries for fast processing on the construction site
- Slot for B¹ Prefix® system wing set
- Spring travel ensures secure fit in standing formwork



Examples of applications for the B¹ electronics box



By inserting the separator wall, two different voltage types can be fitted in a standardised way in the B¹ electronics box. In addition, they provide a generously-sized installation space...



...for the decentral installation of, for example, small window actuators for controlling Venetian blinds and heating in the external wall.

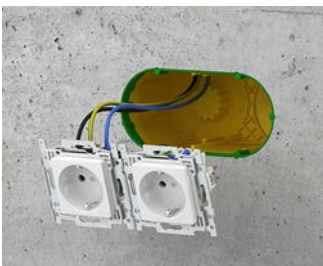


Thanks to the B¹ electronics box, it is easy to install radio-controlled actuators etc. without putting excessive strain on cables or accessories.



Network connection boxes can be used while maintaining the cable bending radii and with the best possible data transfer speeds.

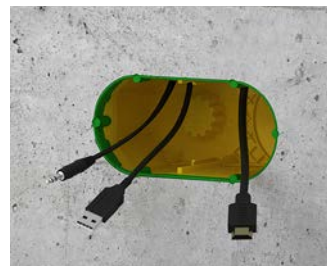
Examples of applications for the B¹ two-gang junction box



Thanks to its large installation opening without a central bridge, the B¹ two-gang junction box allows...



...the use of pre-wired accessories, pre-wired block inserts and many more.



It also provides an easy-to-use basis for the installation of multi-media connection boxes. The very large installation compartment has plenty of space for configuring cables.



Reserve cables and connection plugs can easily be inserted into the box and are then concealed behind the installation accessories.

B¹ Electronics box and B¹ two-gang junction box



for on-site mixed concrete

B¹ electronics box

- with separator wall for separating electrical circuits
- with 4 screw domes
- Suitable for all types of formwork
- 2-piece with moulded rear part
- Two slots for B¹ Prefix® system wings
- Rear part of box with slot for support element
- Standardised combination distance 71 mm



3D animation



Length x Width x Depth	160 x 75 x 91 mm
Installation opening Ø	60 mm
Break-out openings for DIN EN Ø 20/25 mm conduits	7
Break-out openings for DIN EN Ø 32/40 mm conduits	2
Markings for cables up to Ø 16 mm	7
Number of parts	9
 / 	Yes / Yes
Art.-No.	1268-01
Inner packaging/shipping	5 / 50

B¹ double one-gang junction box

- 6 screw domes
- Suitable for all types of formwork
- 2-piece with moulded rear part
- Two slots for B¹ Prefix® system wings
- Rear part of box with slot for support element
- Standardised combination distance 71 mm

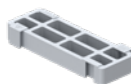


3D animation

Length x Width x Depth	160 x 75 x 91 mm
Installation opening Ø	60 x 131 mm
Break-out openings for DIN EN Ø 20/25 mm conduits	7
Break-out openings for DIN EN Ø 32/40 mm conduits	2
Markings for cables up to Ø 16 mm	7
Number of parts	9
 / 	Yes / Yes
Art.-No.	1269-01
Inner packaging/shipping	5 / 50

Distance piece 91

- for separate covers for antenna sockets in combinations with sockets without electric shock protection
- Centre distance 91 mm
- for multiple row combinations
- fits one-gang boxes, one-gang junction boxes, abutments



Length	60 mm
Art.-No.	1259-04
Inner packaging/shipping	10 / 100

B¹ Prefix® system wings

The B¹ Prefix® system wing allows fast, easy fixing to the reinforcement. This means optimal installation on the opposing formwork side and for free-standing reinforcement, and also for sliding or travelling formwork constructions. All wall applications in the new B¹ range have slots for the locking of two Prefix® system wings. This ensures fast, easy installation on the opposing formwork side.

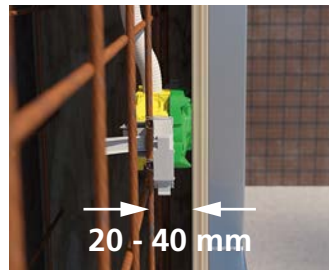
- Fast and easy installation on opposing formwork without support element and abutment
- Holding in place using the Prefix® installation technology leaves both hands free for securing with tie wires
- A pronounced corrugated profile and additional fixing opportunities for secure fixing using tie wires
- Combinable when using wall and ceiling transitions
- For installation in exposed concrete, pressed against the front formwork
- Suitable for 20 - 60 mm concrete covers



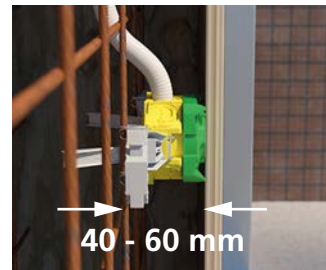
Examples of use



Connect the B¹ Prefix® system wings to the slot of the B¹ one-gang box which you are installing.



During installation, the front side of the B¹ one-gang box must protrude from the wall thickness by between 5 and 20 mm. This ensures optimal pressure on the opposing formwork.



If the B¹ one-gang box is less than the required wall thickness: Turn the B¹ Prefix® system wing by 180°, connect it again to the B¹ one-gang box, pre-fix the box...



...to the reinforcement and, using both hands, secure to the reinforcement by means of tie wires.

B¹ Prefix® system wing bracket set

- Facilitates fixing to the reinforcement
- Pre-fixing by means of B¹ Prefix® installation technology
- Can be used for the following articles:
 - B¹ device socket
 - B¹ device connection socket
 - B¹ large-conduit device connection socket
 - B¹ electronics socket
 - B¹ two-device connection socket
 - B¹ wall light connection socket
 - B¹ universal wall outlet
 - B¹ Prefix® adapter - Ø 20, Ø 25 and Ø 32 mm



3D animation

Length x Width x Depth	103 x 49 x 36 mm
For concrete coverings of	20 - 60 mm
Number of wings	2
Art.-No.	1211-00
Inner packaging/shipping	1 / 175