



EÜK-SN screed-covered duct system

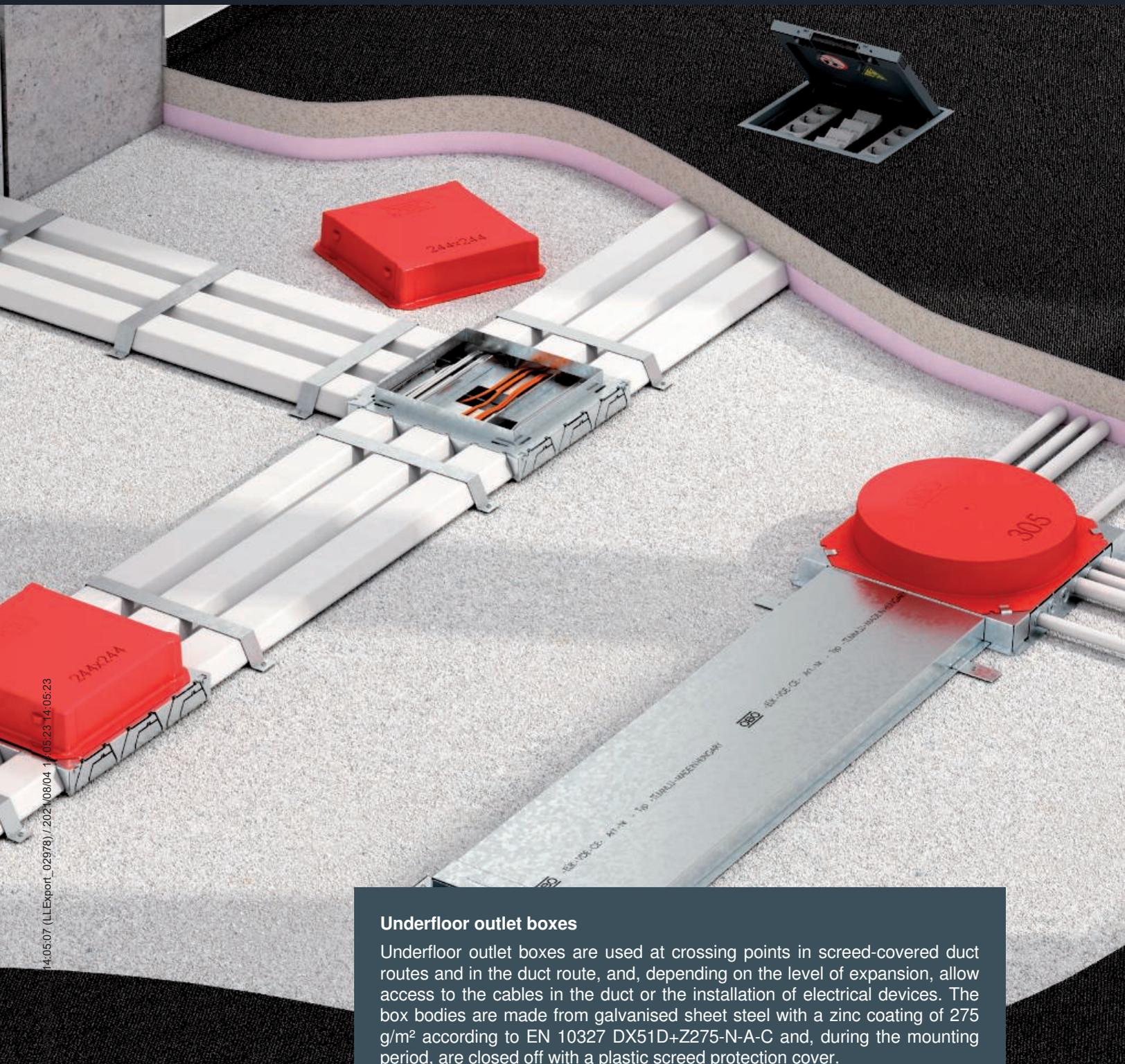
Access to power and data hidden in the screed

EÜK-SN screed-covered duct system

The EÜK-SN screed-covered duct system from OBO is the ideal electrical installation system for large areas with fixed furnishing plans, for example in office or administration buildings. Duct sections and under-floor boxes form a tight grid, hidden in the screed, for cable routing. When combined with device installation units, access is given to power, data and multimedia technology.

Single-compartment PVC duct systems, multi-compartment metal ducts and installation pipes are suitable for cable routing beneath screed layers.





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Underfloor outlet boxes

Underfloor outlet boxes are used at crossing points in screed-covered duct routes and in the duct route, and, depending on the level of expansion, allow access to the cables in the duct or the installation of electrical devices. The box bodies are made from galvanised sheet steel with a zinc coating of 275 g/m² according to EN 10327 DX51D+Z275-N-A-C and, during the mounting period, are closed off with a plastic screed protection cover.

Floor structure

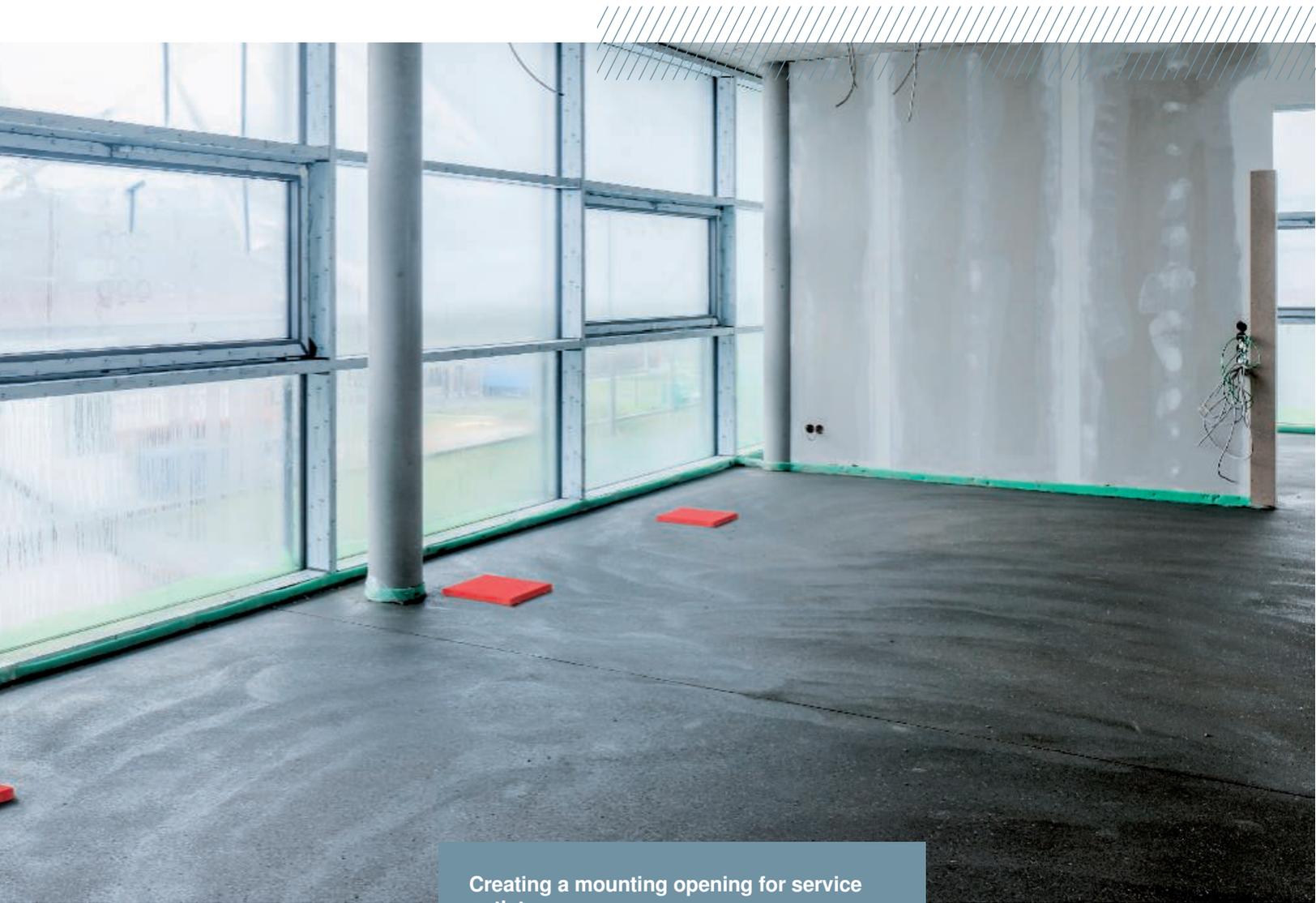
This means that the interior is protected against soiling also during the screed work. After screed laying, the section of the screed protection cover above the screed is removed. The service outlet or the inspection cover can be installed directly in the opening created.



Raised screed protection cover mounting

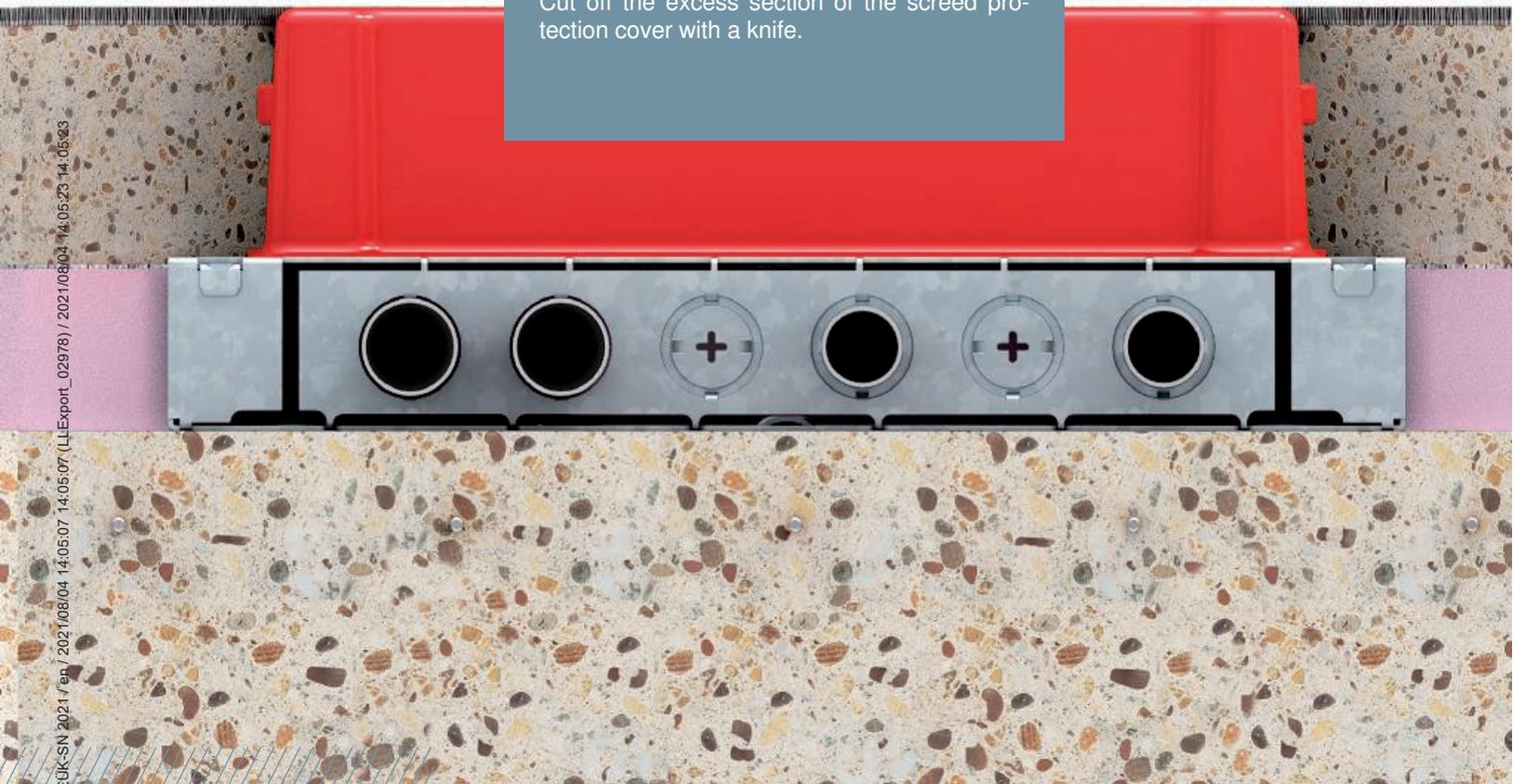
Attach the raised screed protection cover to the existing screed protection cover and stick it fast.





Creating a mounting opening for service outlets

Cut off the excess section of the screed protection cover with a knife.



Universal application

This duct system is ideal for supplying large areas, in particular in offices and administrative buildings.

Duct sections and underfloor boxes form a tight grid, hidden in the screed, for cable routing and access to power, data and telecommunications networks.

Vertical bend

The matching vertical bends allow the creation of vertical changes of direction, e.g. as a connection to wall connections or supplies.

System sizes

The PVC underfloor trunking is available in the sizes 60 x 25 mm and 90 x 35 mm.

The metal underfloor trunking is available in the size 250 x 38 mm.

Equipotential bonding

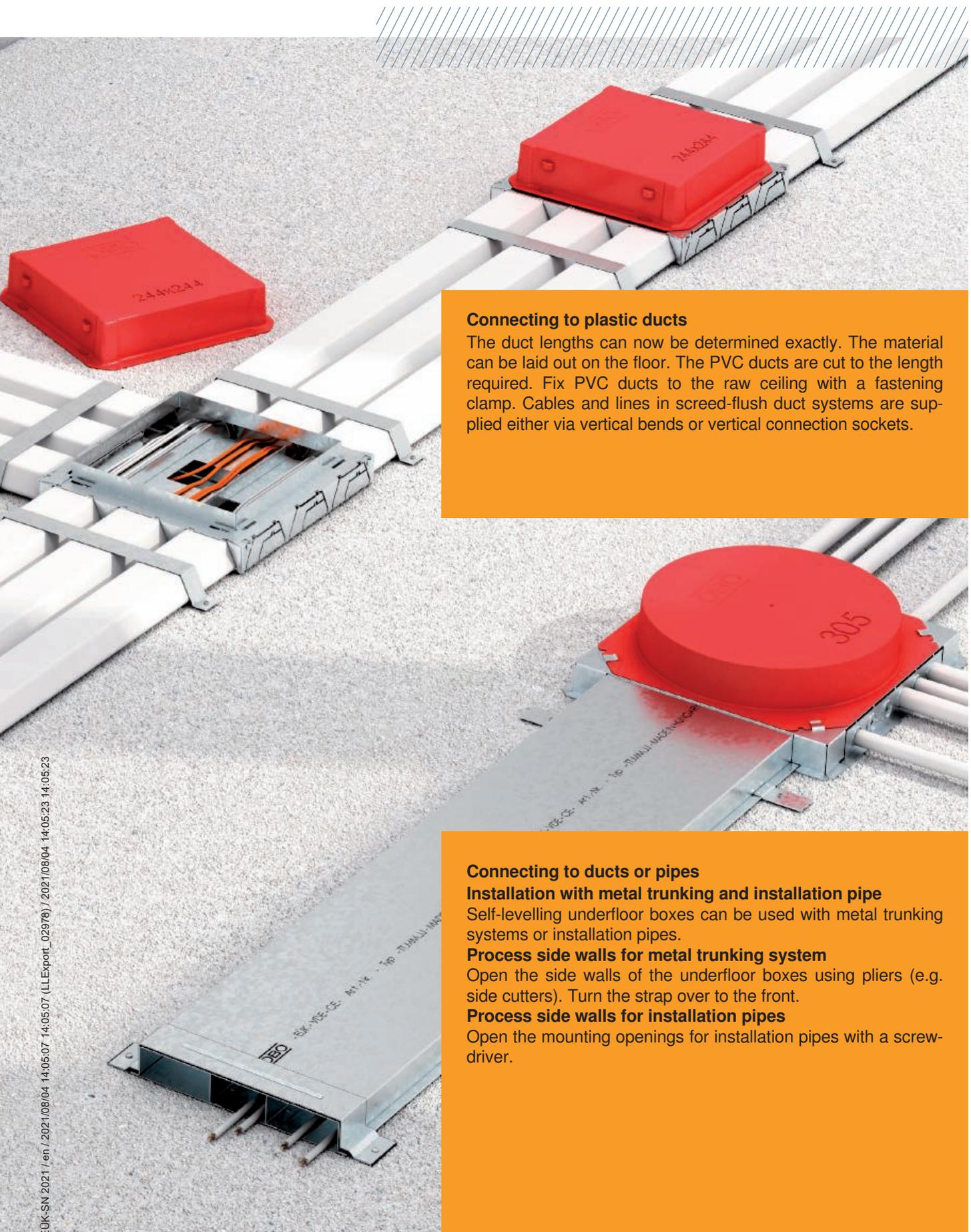
It is recommended to include the screed-covered EÜK duct system in the equipotential bonding. The EÜK system provides the required connection options for protective conductors. All system components are continuously conductive. The EMC regulations according to DIN EN 50174-2 (VDE 0800-174-2) require the inclusion of all metal system components to the connection point as part of the functional equipotential bonding.

Earthing of the duct system

The connection angle VW E forms the conductive connection between the duct and the underfloor socket.

Earthing of the top frame

Metal parts are live in case of an error. The protective conductor connection bracket 8AWR includes the underfloor socket in the equipotential bonding. The contact screw is tightened with a torque of at least 1.2 Nm. Alternatively, the components can also be connected conductively using external connections, through soldering, welding, riveting or screwing.



Connecting to plastic ducts

The duct lengths can now be determined exactly. The material can be laid out on the floor. The PVC ducts are cut to the length required. Fix PVC ducts to the raw ceiling with a fastening clamp. Cables and lines in screed-flush duct systems are supplied either via vertical bends or vertical connection sockets.

Connecting to ducts or pipes

Installation with metal trunking and installation pipe

Self-levelling underfloor boxes can be used with metal trunking systems or installation pipes.

Process side walls for metal trunking system

Open the side walls of the underfloor boxes using pliers (e.g. side cutters). Turn the strap over to the front.

Process side walls for installation pipes

Open the mounting openings for installation pipes with a screwdriver.

Range of functions – a fixed point

When installed, the underfloor box is securely anchored in the screed. The screed can be worked particularly well around the drip edge of the socket, which also serves as a broad support in the screed. The box top can be completely uncoupled from the box body, so that no sound can be transferred via the ducts.

Earthing of the underfloor box

Insert the earth conductor clamp in the underfloor box. Safety: tighten the fastening screw to 1.2 Nm.



Creating a mounting opening for service outlets

Cut off the excess section of the screed protection cover with a knife.



Flexible equipment

Device installation units, in the form of cassettes and service outlets, can be installed in underfloor boxes from the EÜK-SN system.

The device installation units accommodate sockets, data and multimedia connections.

Square

Rectangular service outlets can be installed in nominal sizes 4, 6 and 9.



Round

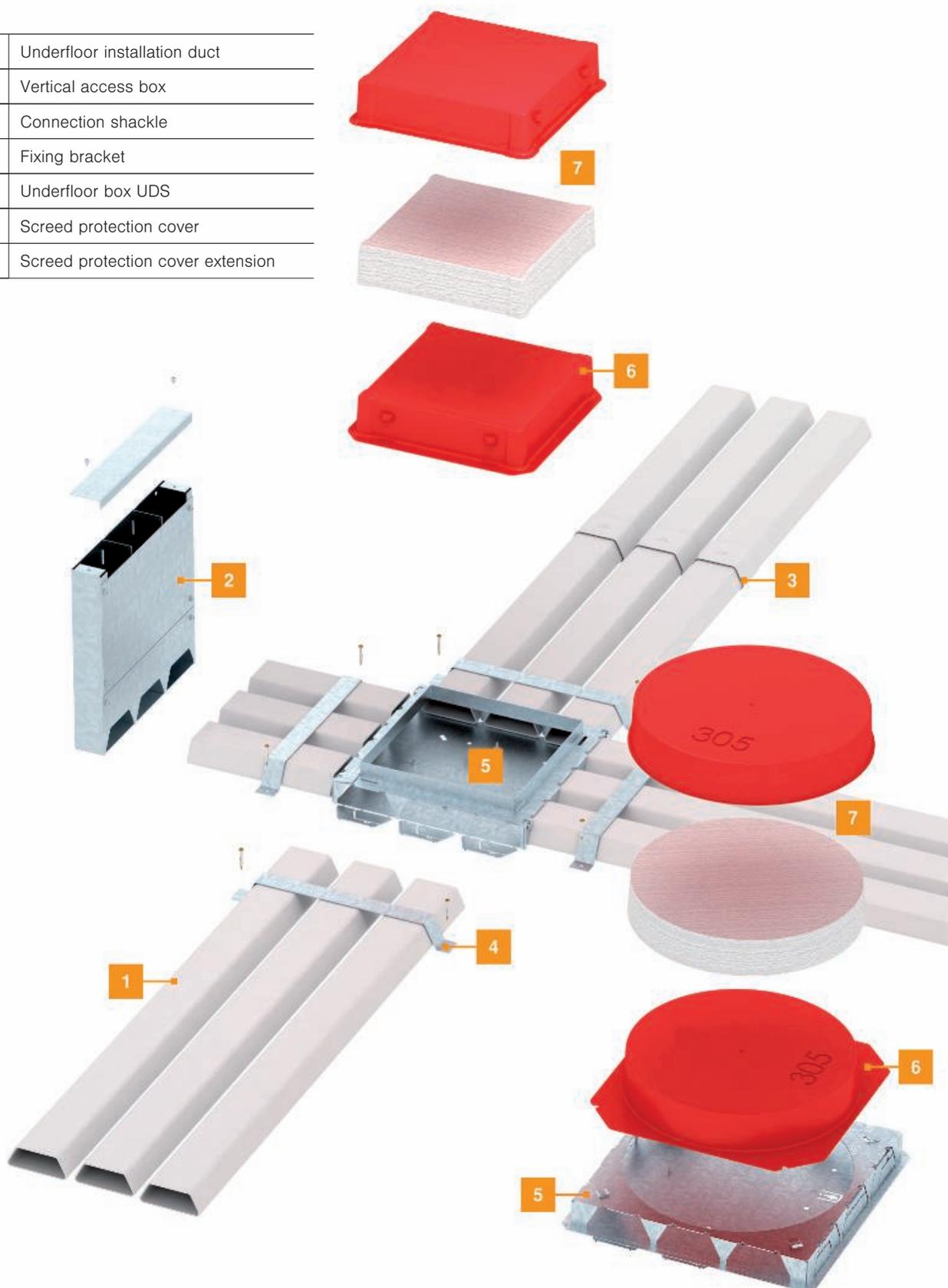
Round service outlets can be installed in nominal sizes R4, R7 and R9.



Installation principle

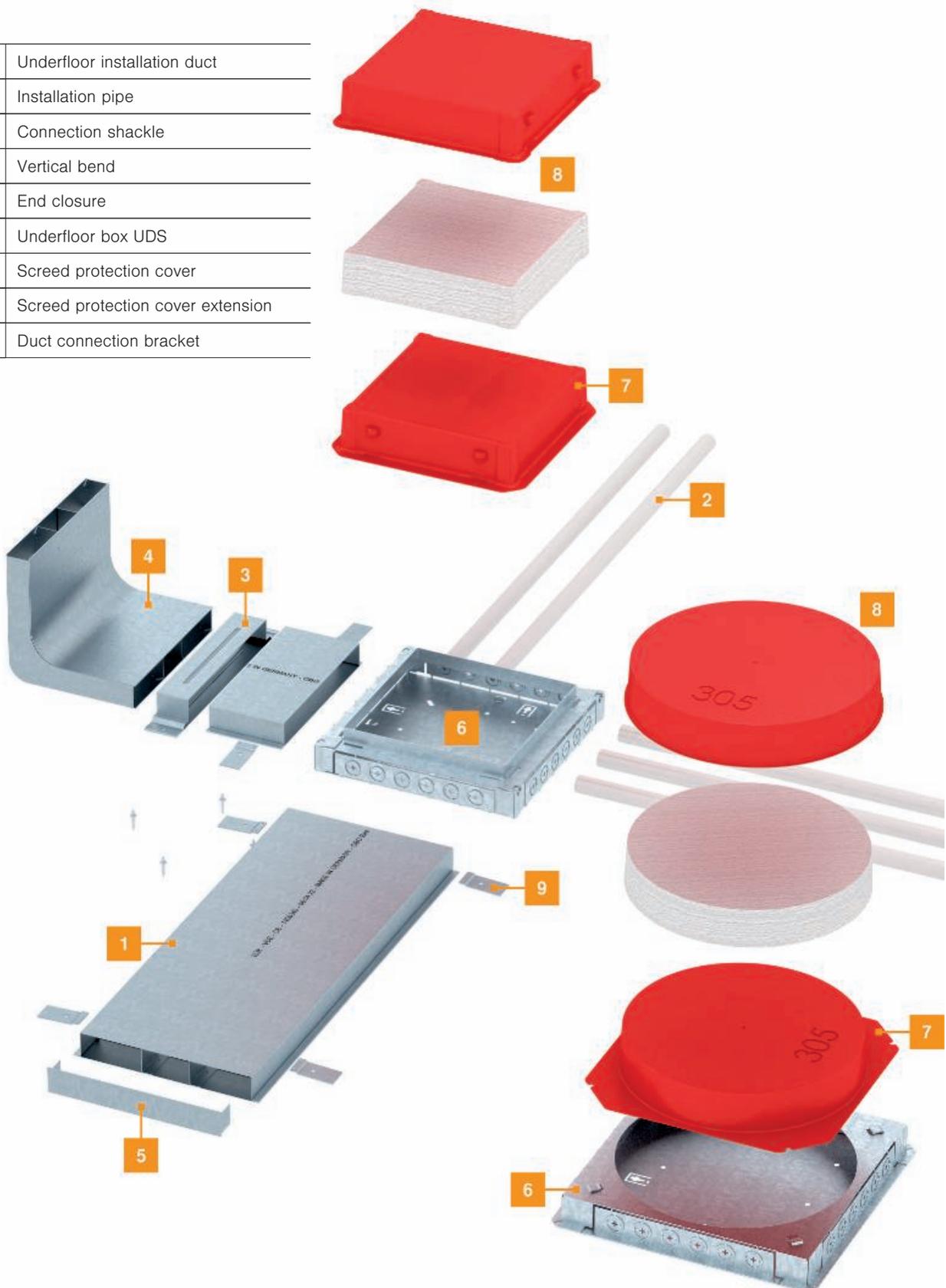
Screed-covered duct system with PVC duct

1	Underfloor installation duct
2	Vertical access box
3	Connection shackle
4	Fixing bracket
5	Underfloor box UDS
6	Screed protection cover
7	Screed protection cover extension



Screed-covered duct system, EÜK with metal duct and installation pipe

1	Underfloor installation duct
2	Installation pipe
3	Connection shackle
4	Vertical bend
5	End closure
6	Underfloor box UDS
7	Screed protection cover
8	Screed protection cover extension
9	Duct connection bracket



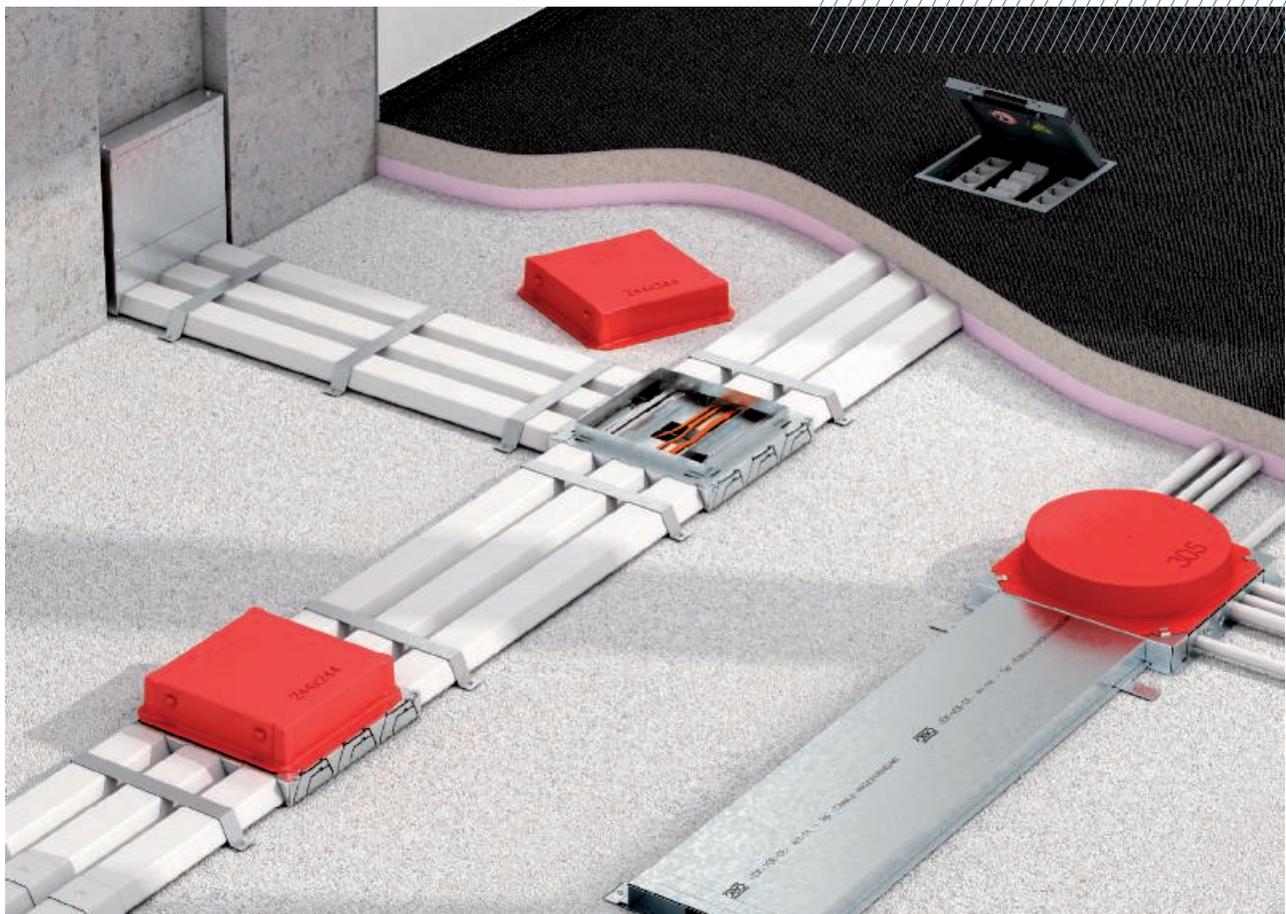
Filling overview – filling factor

Cables in an installation duct

Here, you can find an overview which tells you how many cables of which diameter fit into which compartment width. Always observe an initial filling factor of 50%.

60 x 25 number of cables				8										
Cable Ø in mm	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Duct height 25 mm	20	14	10	8	6	5	4	3	3	2	2	2	1	1

90 x 35 number of cables														
Cable Ø in mm	5	6	7	8	9	10	11	12	13	14	15	16	17	18
Duct height 35 mm	46	32	23	18	14	11	9	8	6	5	5	4	4	3



Planning checklist

When planning a screed-covered underfloor system, the following points should be observed:



Matching of floor construction (screed height, screed type, insulation, sealing, etc.) to the architecture.



Observe minimum installation depth of device installation units.



Match the structural physics requirements (loads, footfall sound, etc.).



Select device installation units according to the floor care.

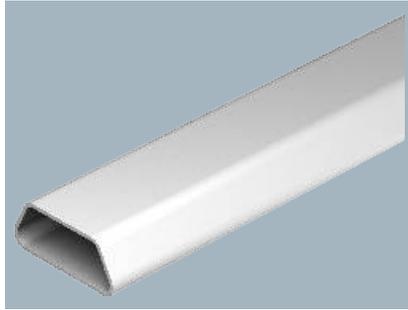


Determine the distances between two underfloor sockets, taking into account strain loads and bend radii.



EÜK PVC underfloor installation duct, duct height 25 mm

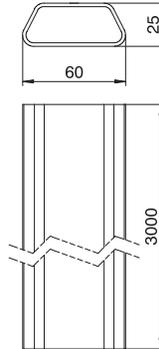
PVC



Type	Width mm	Trun-king height mm	Length mm	Number of compart-ments pc.	Cross-section draw a mm ²	Pack m	Weight kg/100 m	Item no.
DU 6025	60	25	3000	1	1030	3	43.000	7425900

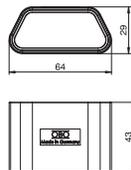
Trapezoidal duct, one-compartment, for use in cement screeds and under false floors.

An important precondition for correct underfloor installation is the screed structure. In the case of a screed-covered system, it is important that the screed thickness above the duct has a sufficiently high load capacity.



EÜK duct connector

PVC

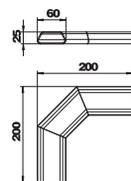


Type	Width mm	Trun-king height mm	Pack Piece	Weight kg/100 pc.	Item no.
DUC 6025	60	25	50	1.698	7425910

Coupling element for connecting one-compartment PVC duct lengths with a trapezoid-shaped cross-section.

EÜK horizontal bend

PVC

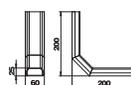


Type	Width mm	Trun-king height mm	Pack Piece	Weight kg/100 pc.	Item no.
KH DU 6025 90	60	25	1	10.400	7425920

Horizontal bend, 90°, suitable for duct size 60x25.

EÜK vertical bend

PVC



Type	Width mm	Trun-king height mm	Pack Piece	Weight kg/100 pc.	Item no.
KV DU 6025 90	60	25	1	13.000	7425935

Vertical bend, 90°, suitable for duct size 60x25.

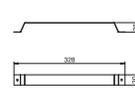
EÜK-SN PVC underfloor installation ducts, 25 mm

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EÜK fastening clamp

Type	Trun-king height mm	Pack Piece	Weight kg/100 pc.	Item no.
DC6025	25	10	10.000	7428342



Fixing strap for three neighbouring 1-compartment PVC duct lengths of width 60 mm.

EÜK-SN PVC underfloor installation ducts, 35 mm

PVC

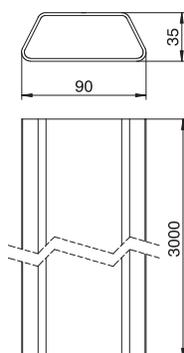
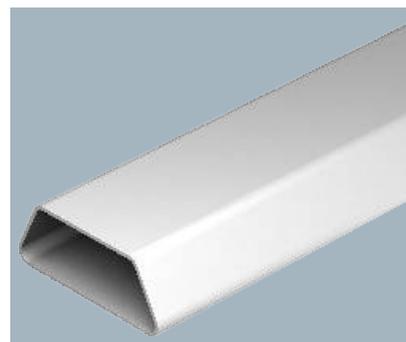


EÜK PVC underfloor installation duct, duct height 35 mm

Type	Width mm	Trun-king height mm	Length mm	Number of compart-ments pc.	Cross-section draw a mm ²	Pack m	Weight kg/100 m	Item no.
DU 9035	90	35	3000	1	2305	3	58.000	7425902

Trapezoidal duct, one-compartment, for use in cement screeds and under false floors.

An important precondition for correct underfloor installation is the screed structure. In the case of a screed-covered system, it is important that the screed thickness above the duct has a sufficiently high load capacity.

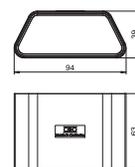


PVC



Duct connector

Type	Width mm	Trun-king height mm	Pack Piece	Weight kg/100 pc.	Item no.
DUC 9035	90	35	50	3.525	7425912



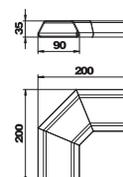
Coupling element for connecting one-compartment PVC duct lengths with a trapezoid-shaped cross-section.

PVC



EÜK horizontal bend

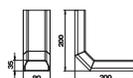
Type	Width mm	Trun-king height mm	Pack Piece	Weight kg/100 pc.	Item no.
KH DU 9035 90	90	35	1	15.500	7425925



Horizontal bend, 90°, suitable for duct size 90x35.

EÜK vertical bend

PVC

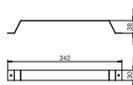


Type	Width mm	Trun- king height mm	Pack Piece	Weight kg/100 pc.	Item no.
KV DU 9035 90	90	35	1	19.200	7425940

Vertical bend, 90°, suitable for duct size 90x35.

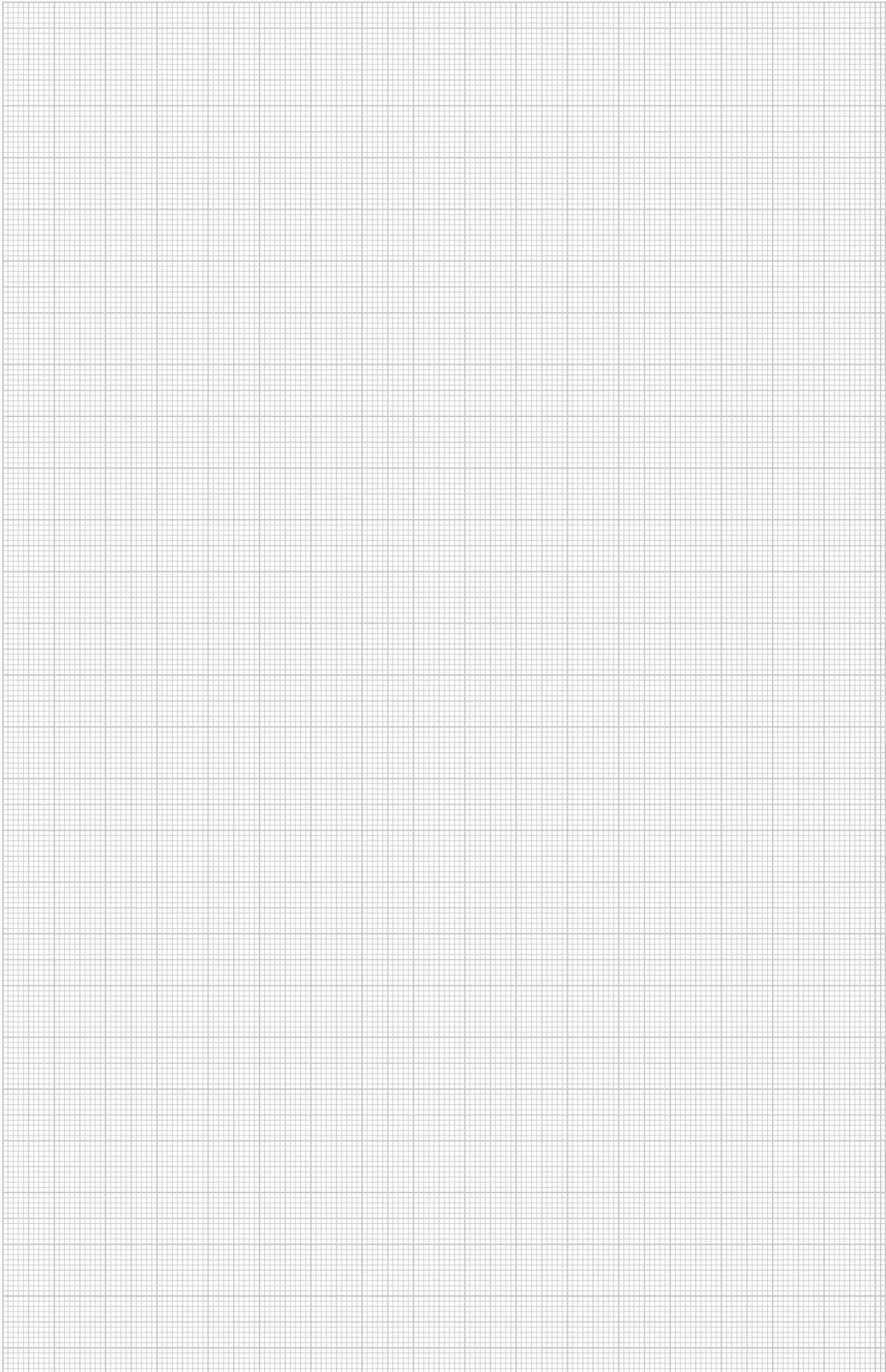
Fastening clamp for 3x PVC system, trunking height 35 mm

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Type	Trun- king height mm	Pack Piece	Weight kg/100 pc.	Item no.
DC9035	35	10	10.000	7428340

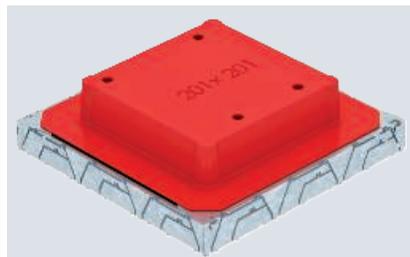
Fixing strap for three neighbouring 1-compartment PVC duct lengths of width 90 mm.



Underfloor box UDS4 for PVC duct

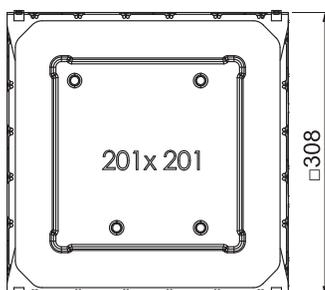
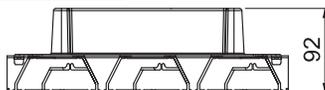
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CE



Underfloor outlet box with fixed, unchangeable 201 x 201 mm installation opening for an installation unit of nominal size 4. The mounting opening is created using the screed protection cover contained in the scope of supply. The underfloor box possesses installation openings for three single-compartment PVC ducts of nominal size 60 x 25 and 90 x 35 on all four sides. The box is principally suited for use in floor structures in cement screed with a structure height of up to 90 mm.

Type	Screed height		Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
	mm					
UDSPD 9035 4	65-90	4		1	246.000	7400348



Underfloor box UDS6 for PVC duct

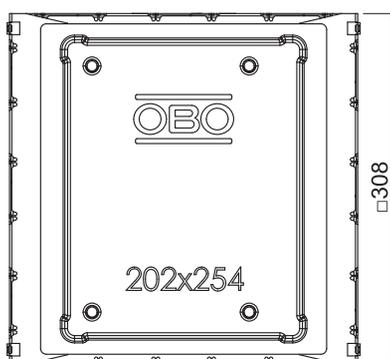
St FS

CE



Underfloor outlet box with fixed, unchangeable 202 x 254 mm installation opening for an installation unit of nominal size 6. The mounting opening is created using the screed protection cover contained in the scope of supply. The underfloor box possesses installation openings for three single-compartment PVC ducts of nominal size 60 x 25 and 90 x 35 on all four sides. The box is principally suited for use in floor structures in cement screed with a structure height of up to 90 mm.

Type	Screed height		Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
	mm					
UDSPD 9035 6	65-90	6		1	231.000	7400350

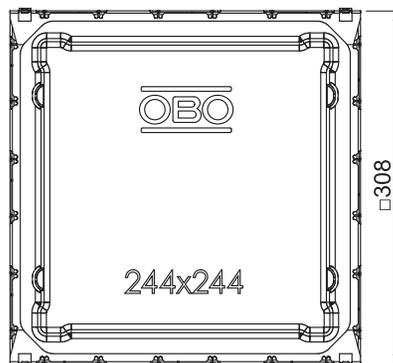


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CE

Underfloor box UDS9 for PVC duct

Type	Screed		Pack Piece	Weight kg/100 pc.	Item no.
	height mm	Nominal size			
UDSPD 9035 9	65-100	9	1	225.000	7400352



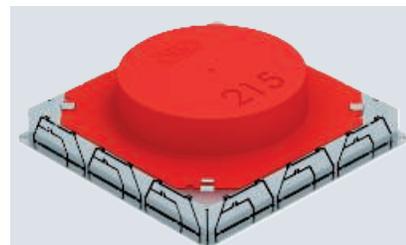
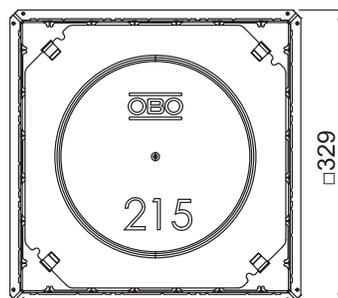
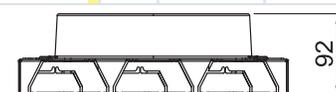
Underfloor outlet box with fixed, unchangeable 244 x 244 mm installation opening for an installation unit of nominal size 9. The mounting opening is created using the screed protection cover contained in the scope of supply. The underfloor box possesses installation openings for three single-compartment PVC ducts of nominal size 60 x 25 and 90 x 35 on all four sides. The box is principally suited for use in floor structures in cement screed with a structure height of up to 100 mm.

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CE

Underfloor box UDSR4 for PVC duct

Type	Screed		Pack Piece	Weight kg/100 pc.	Item no.
	height mm	Nominal size			
UDSPD 9035 R4	65-90	R4	1	217.000	7400354



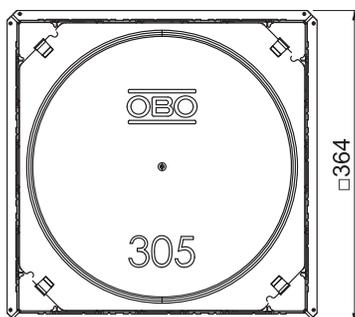
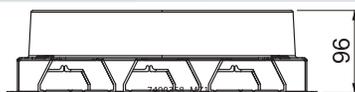
Underfloor outlet box with fixed, unchangeable installation opening of Ø 215 mm for an installation unit of nominal size R4. The mounting opening is created using the screed protection cover contained in the scope of supply. The underfloor box possesses installation openings for three single-compartment PVC ducts of nominal size 60 x 25 and 90 x 35 on all four sides. The box is principally suited for use in floor structures in cement screed with a structure height of up to 90 mm.

Underfloor box UDSR9 for PVC duct



Underfloor outlet box with fixed, unchangeable installation opening of Ø 305 mm for an installation unit of nominal size R9. The mounting opening is created using the screed protection cover contained in the scope of supply. The underfloor box possesses installation openings for three single-compartment PVC ducts of nominal size 60 x 25 and 90 x 35 on all four sides. The box is principally suited for use in floor structures in cement screed with a structure height of up to 95 mm.

Type	Screed height mm	Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
UDSPD 9035 R9	65-95	R9	1	236.000	7400358



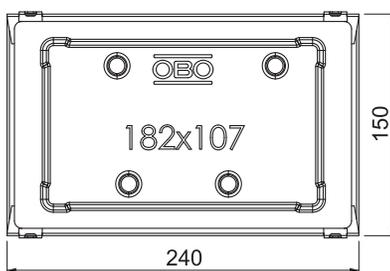
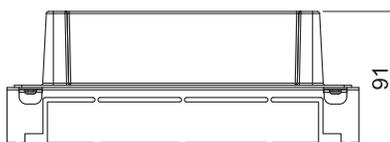
EÜK-SN underfloor connection socket, for metal ducts, self-adjusting

Underfloor box UGE2 for installation pipe and metal duct



Underfloor outlet box with fixed, unchangeable 106 x 182 mm installation opening for an installation unit of nominal size 2. The mounting opening is created using the screed protection cover contained in the scope of supply. The underfloor box has two openings for M20 conduit on the narrow sides. The underfloor box is suitable for screed floor constructions with height 70 mm up to 90 mm.

Type	Screed height mm	Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
UGE 2C	70-90	2	1	74.100	7428062



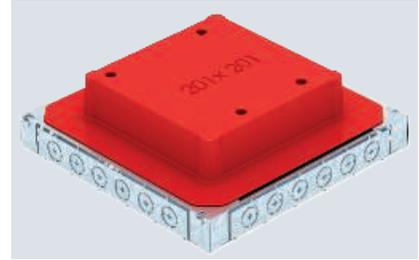
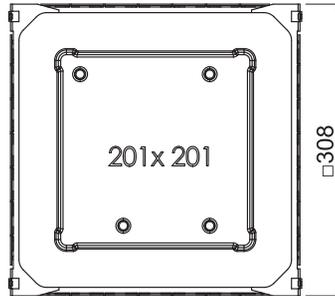
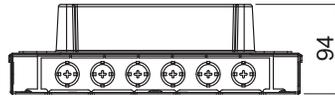
EÜK-SN underfloor connection socket, for metal ducts, self-adjusting

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Underfloor box UDS4 for installation pipe and metal duct

Type	Screed		Pack Piece	Weight kg/100 pc.	Item no.
	height mm	Nominal size			
UDSSD 25038 4	65-90	4	1	277.400	7400349



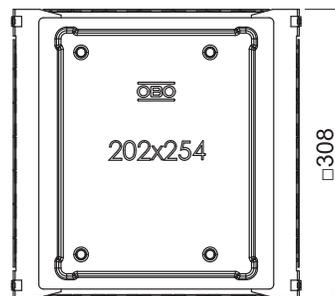
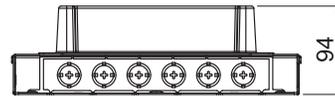
Underfloor outlet box with fixed, unchangeable 201 x 201 mm installation opening for an installation unit of nominal size 4. The mounting opening is created using the screed protection cover contained in the scope of supply. The underfloor box possesses installation openings for a 2 or 3-compartment sheet steel underfloor duct of nominal size 25038 as well as six M20 or M25 installation pipes on all four sides. The box is principally suited for use in floor structures in cement screed with a structure height of up to 90 mm.

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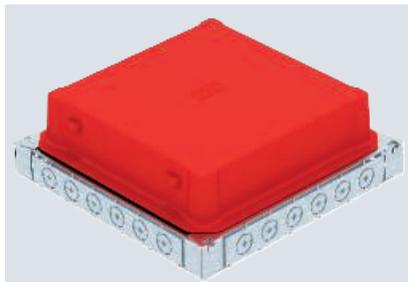
Underfloor box UDS6 for installation pipe and metal duct

Type	Screed		Pack Piece	Weight kg/100 pc.	Item no.
	height mm	Nominal size			
UDSSD 25038 6	65-90	6	1	232.000	7400351

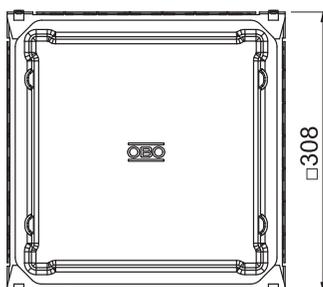
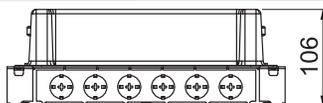


Underfloor outlet box with fixed, unchangeable 202 x 254 mm installation opening for an installation unit of nominal size 6. The mounting opening is created using the screed protection cover contained in the scope of supply. The underfloor box possesses installation openings for a 2 or 3-compartment sheet steel underfloor duct of nominal size 25038 as well as six M20 or M25 installation pipes on all four sides. The box is principally suited for use in floor structures in cement screed with a structure height of up to 90 mm.

Underfloor box UDS9 for installation pipe and metal duct



Type	Screed height mm	Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
UDSSD 25038 9	65-100	9	1	226.000	7400353

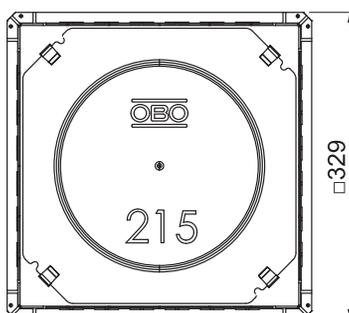
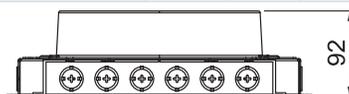


Underfloor outlet box with fixed, unchangeable 244 x 244 mm installation opening for an installation unit of nominal size 9. The mounting opening is created using the screed protection cover contained in the scope of supply. The underfloor box possesses installation openings for a 2 or 3-compartment sheet steel underfloor duct of nominal size 25038 as well as six M20 or M25 installation pipes on all four sides. The box is principally suited for use in floor structures in cement screed with a structure height of up to 90 mm.

Underfloor box UDSR4 for installation pipe and metal duct



Type	Dimension d mm	Screed height mm	Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
UDSSD 25038 R4	215	65-90	R4	1	224.500	7400355



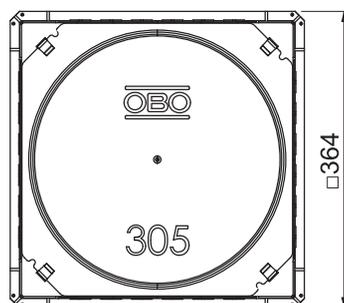
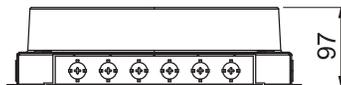
Underfloor outlet box with fixed, unchangeable installation opening of \varnothing 215 mm for an installation unit of nominal size R4. The mounting opening is created using the screed protection cover contained in the scope of supply. The underfloor box possesses installation openings for a 2 or 3-compartment sheet steel underfloor duct of nominal size 25038 as well as six M20 or M25 installation pipes on all four sides. The box is principally suited for use in floor structures in cement screed with a structure height of up to 90 mm.

St FS



Underfloor box UDSR9 for installation pipe and metal duct

Type	Dimension d Ø mm	Screed height mm	Nominal size	Pack Piece	Weight kg/100 pc.	Item no.
UDSSD 25038 R9	305	65-95	R9	1	229.000	7400359



Underfloor outlet box with fixed, unchangeable installation opening of Ø 305 mm for an installation unit of nominal size R9. The mounting opening is created using the screed protection cover contained in the scope of supply. The underfloor box possesses installation openings for a 2 or 3-compartment sheet steel underfloor duct of nominal size 25038 as well as six M20 or M25 installation pipes on all four sides. The box is principally suited for use in floor structures in cement screed with a structure height of up to 95 mm.

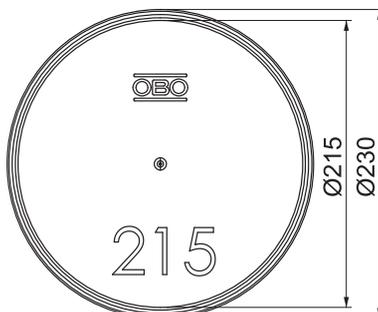
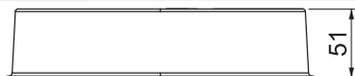
Height extension kit for underfloor box UDSR4

PS



Height extension kit for screed protection cover of underfloor box UDS or a screed protection cover for installation opening of nominal size R4. Height extension of + 40 mm.

Type	Height mm	Pack Piece	Weight kg/100 pc.	Item no.
SKE R215	51	1	15.000	7404388



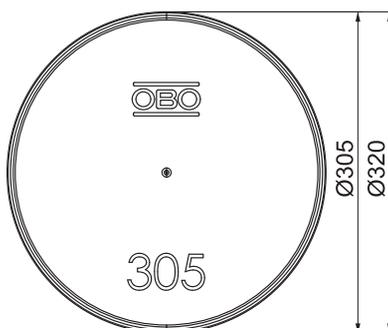
Height extension kit for underfloor box UDSR9

PS



Height extension kit for screed protection cover of underfloor box UDS or a screed protection cover for installation opening of nominal size R9. Height extension of + 45 mm.

Type	Height mm	Pack Piece	Weight kg/100 pc.	Item no.
SKE R305	58	1	22.000	7404392

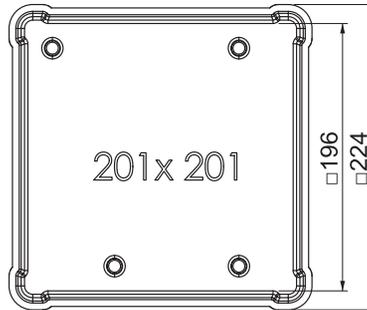


PS



Height extension kit for underfloor box 201 x 201

Type	Height mm	Dim.		Pack Piece	Weight kg/100 pc.	Item no.
		A mm	B mm			
SKE 201X201	52	201	201	1	15.000	7404394



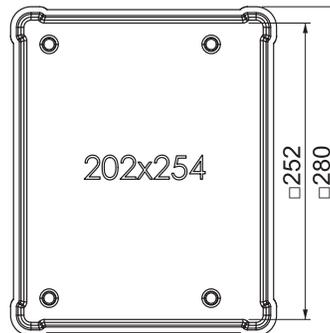
Height extension kit for screed protection cover of underfloor box UDS or a screed protection cover for installation opening of nominal size 4. Height extension of + 40 mm.

PS



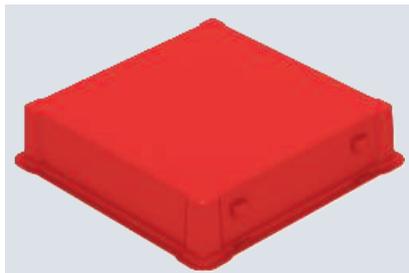
Height extension kit for underfloor box 202 x 245

Type	Height mm	Dim.		Pack Piece	Weight kg/100 pc.	Item no.
		A mm	B mm			
SKE 202X254	52	202	254	1	17.000	7404396



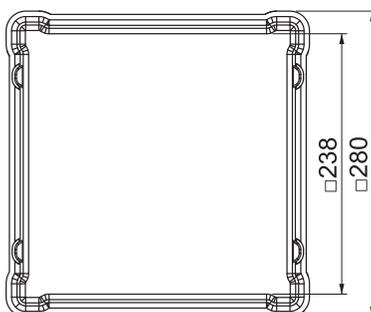
Height extension kit for screed protection cover of underfloor box UDS or a screed protection cover for installation opening of nominal size 6. Height extension of + 40 mm.

Height extension kit for underfloor box 245 x 245

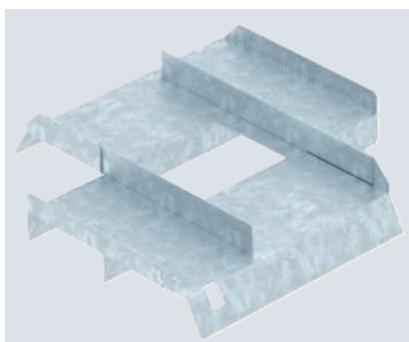


Height extension kit for screed protection cover of underfloor box UDS or a screed protection cover for installation opening of nominal size 4. Height extension of + 50 mm.

Type	Height mm	Dim.		Pack Piece	Weight kg/100 pc.	Item no.
		A mm	B mm			
SKE 245X245	63	245	245	1	18.000	7404398

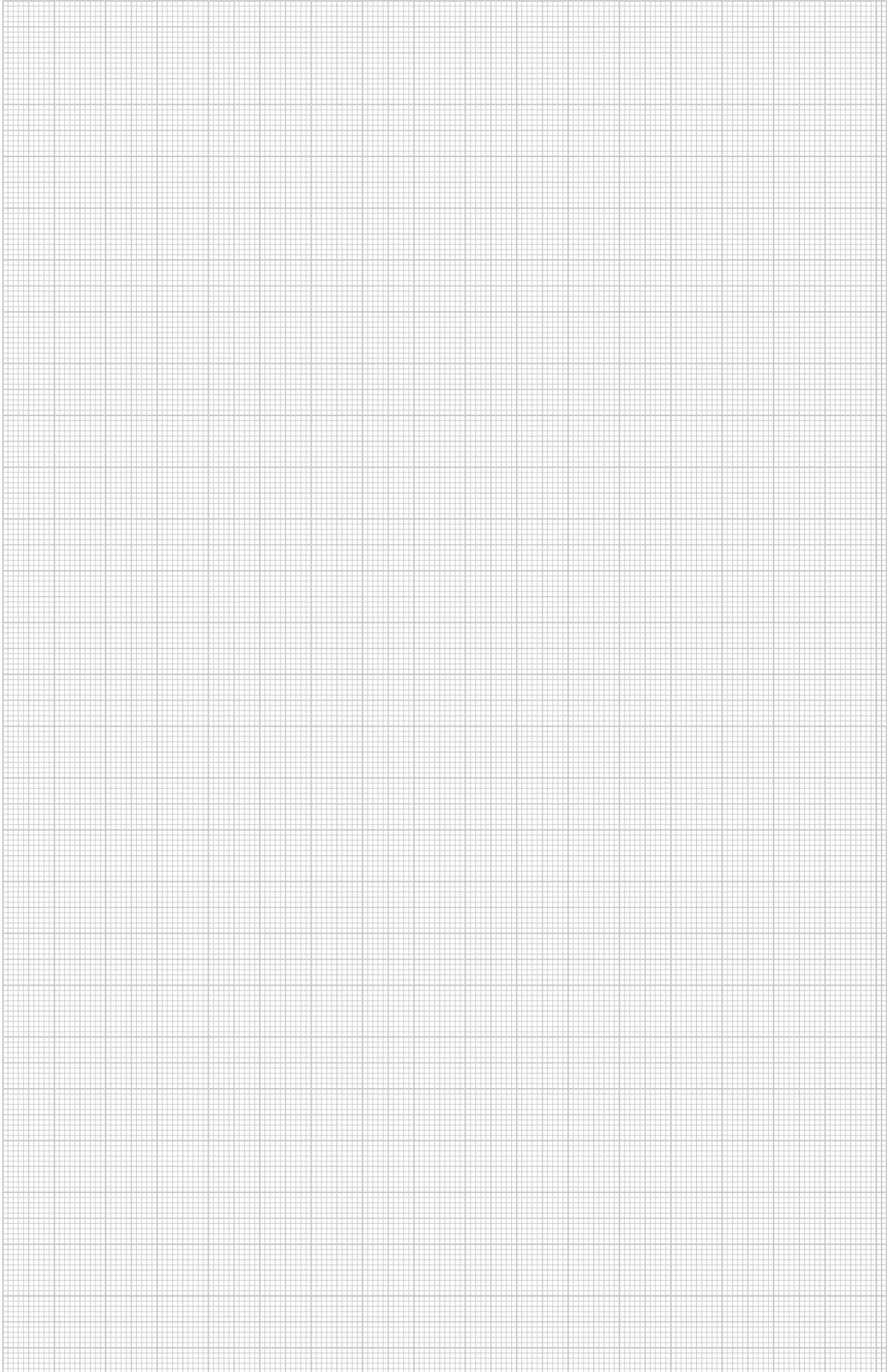


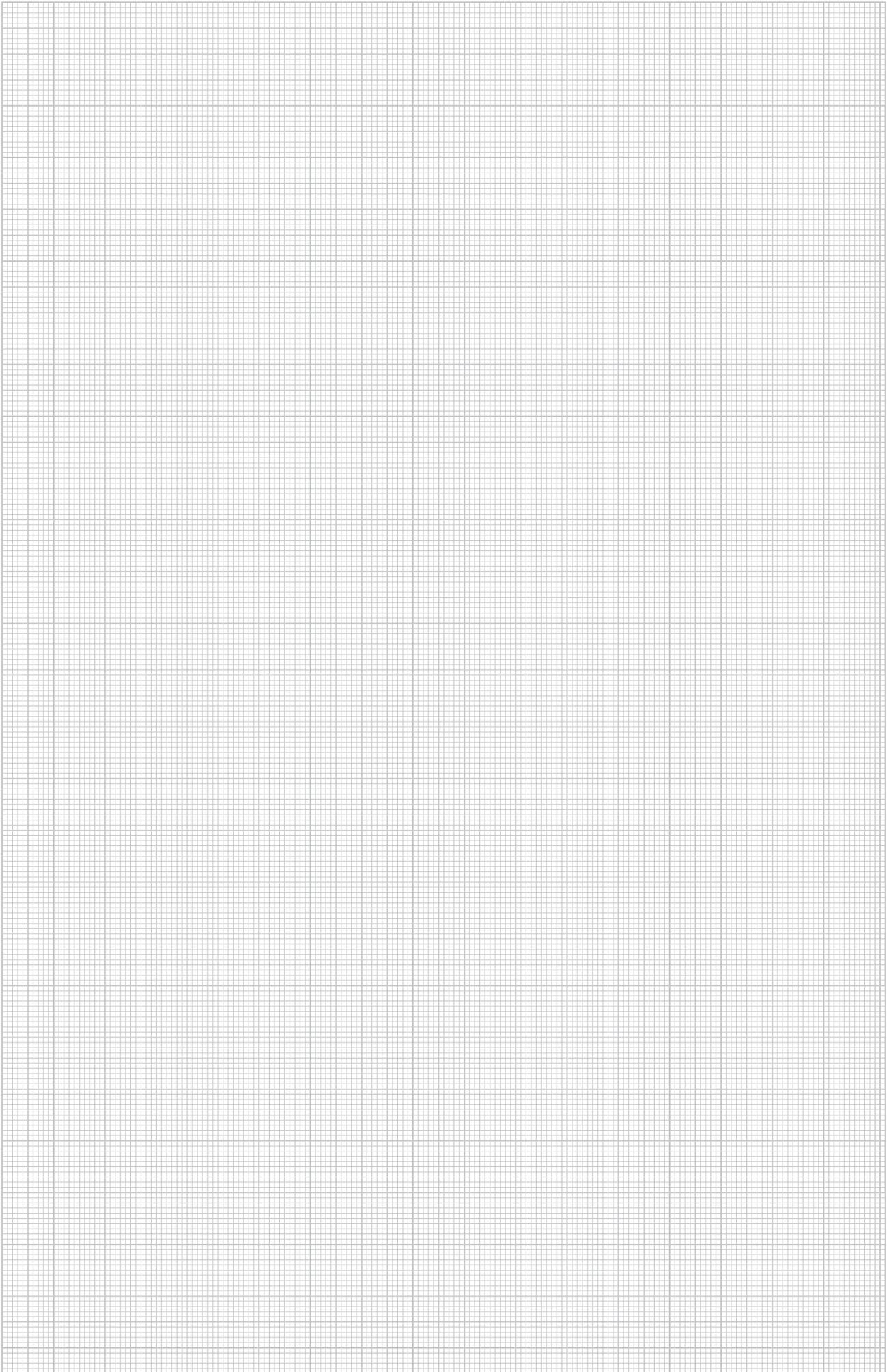
Separating retainer, intersection, for UDS

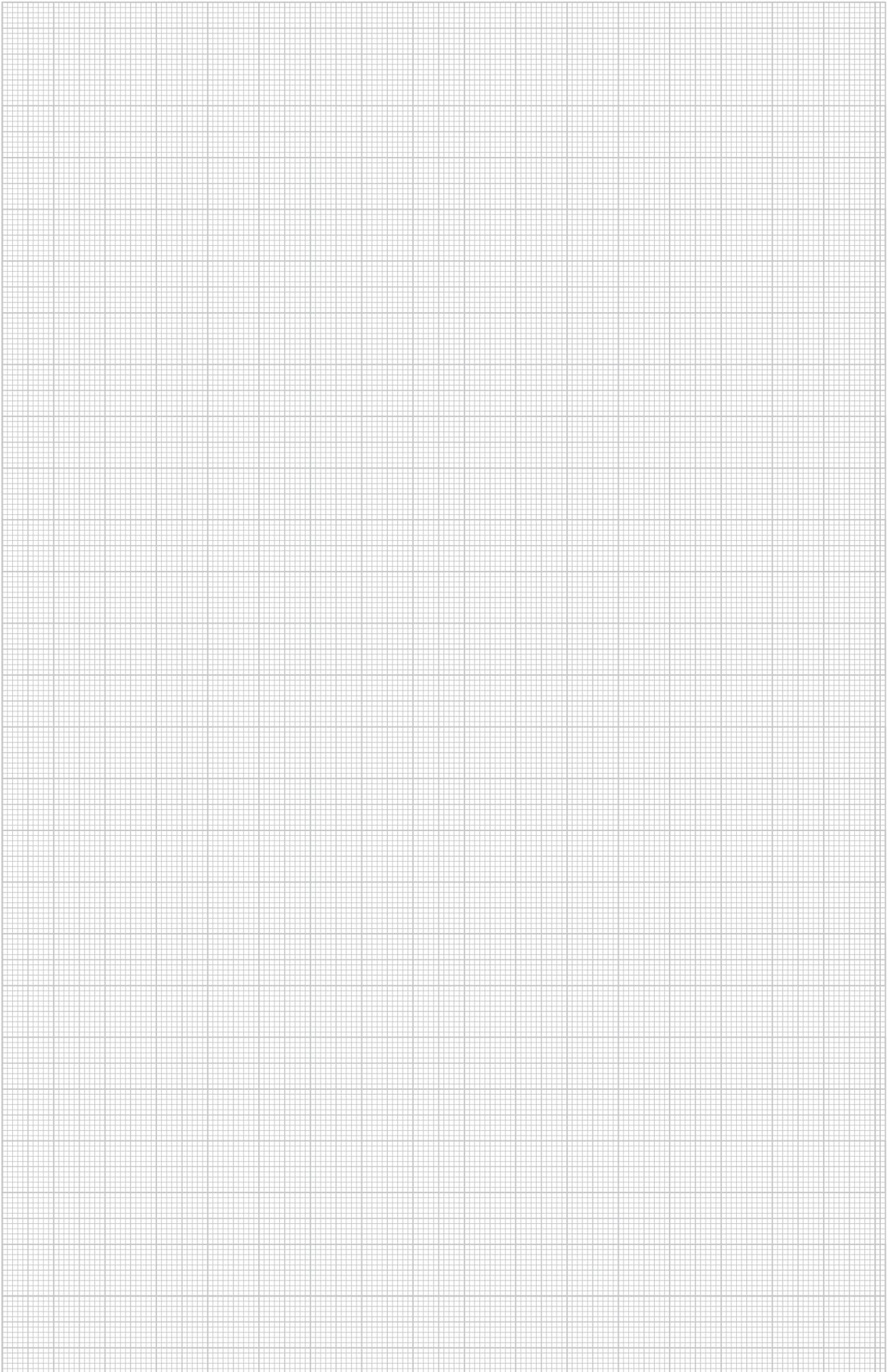


Separating retainer, 3-compartment, for intersection in a UDS underfloor box.

Type	Pack Piece	Weight kg/100 pc.	Item no.







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