PERFECT FUNCTIONALITY

Electrical building infrastructure for architects and planners

Building Connections

OBO BETTERMANN

THE PERFECT SOLUTION FOR SUPPLYING ROOMS WITH POWER AND DATA

There are many different types of rooms that people spend time in. Some are for living in, some for working in, and some for celebrating in or for sleeping in. No matter how rooms are used, they have one thing in common: they must be supplied with power and data. There are always three dimensions for this supply: floor, ceiling and wall. OBO Bettermann is the only manufacturer to offer innovative system solutions for all of these dimensions of electrical infrastructure that harmonise design and function. For points of supply that are flexible over a long period and easily accessible, safe and match visually and technically.

Building Connections

OBO Bettermann is one of the leading manufacturers of installation systems for the electrical infrastructure of buildings and plants. Whenever the perfect flow of power, energy and data is required, that's where architects, planners and craftspeople all over the world rely on the extensive OBO product range. OBO applies its slogan "Building Connections" to more than 30,000 high-quality branded electrical products and services to create application-oriented solutions for projects in industry, business and infrastructure facilities.

Reliable, safe, flexible

OBO's comprehensive product portfolio is organised into three main categories, namely Industrial installations, Building installations, and Safety and protection installations.

The Industrial installations area offers everything required for equipping industrial systems with electrical infrastructure. In the area of Safety and protection installations, fire, lightning and surge protection are of equal importance. The Building installation division offers products for cable management and device installation for administrative and functional buildings as well as architectural solutions. These products are not only characterised by their first-class functionality, but also meet the highest design standards.

DESIGNING THE FUTURE

Today, sustainability is a primary success factor on the marketplace – especially for architects and planners. As a family-run company, we at OBO Bettermann are naturally highly aware of economic, ecological and social values. This includes a commitment to regional locations in our global target markets, in order to shorten the logistical delivery chains, along with certified environmentally friendly production processes, resource-saving measures, innovative solutions as well as long-term economic action. Together with our employees, customers and partners, we continue to develop the globally networked world, shaping the electrical infrastructure of the future with them.

Thinking further. Acting for the long term.

We always act in a sustainable, performance-orientated and transparent manner. Integrity, fairness and diversity are fixed components of our corporate culture. One example: Many invitations to tender require EPDs. By offering Environmental Protection Declarations for individual OBO products, we provide reliable, transparent information on potential environmental impacts. This makes it easier for you to calculate your building's eco-balance, which in turn is required for sustainability certification.

For many of our products, such as cassettes or service outlets, we offer high-quality spare parts. If the need arises, this means it isn't necessary to replace the whole product. Result: The use of our systems is ensured virtually throughout the entire life cycle of the building.

Our premium solutions for surface-mounted installations are also particularly sustainable, as they follow the concept of circular construction. They simplify dismantling and can easily be reused when a building is repurposed.

ALWAYS AT YOUR SERVICE

From flawless logistics through to practical information – we can provide support at every level. Of course, this also includes effective planning aids, typicals and STP/DWG data sets as well as boilerplates that you can simply integrate into your invitation to tender. We can offer additional security through certificates on the conformity of our products with the most important standards and directives. If you have any questions about products, installation or planning, we are happy to provide you with in-person advice and competent support in every phase of the project. This means that you are always on the safe side with OBO.

To OBO Construct!

Smart planning at its finest

When planning electrical installations, time, budget and applicable standards must be taken into account. The OBO Construct planning software supports you with a total of four planning modules: Configure earthing systems, customise underfloor systems, plan fire protection systems that comply with standards and calculate cable assignments for support systems and underfloor ducts and trunking. The individual tools are combined into a central platform, meaning projects can be opened and edited at any time and anywhere – using a smartphone, tablet or desktop PC.

Visions become reality

BIM@OBO allows planners, architects and installation engineers to create BIM-compliant planning for electrical installations – quickly, easily and in a sustainable manner. As a user, you benefit from a completely new BIM offer, tailor-made for your requirements, which offers effective support throughout all the project phases of Building Information Modelling. In addition, the direct integration into your normal planning environment ensures efficient and reliable planning, no matter whether OBO-specific or manufacturer-neutral.

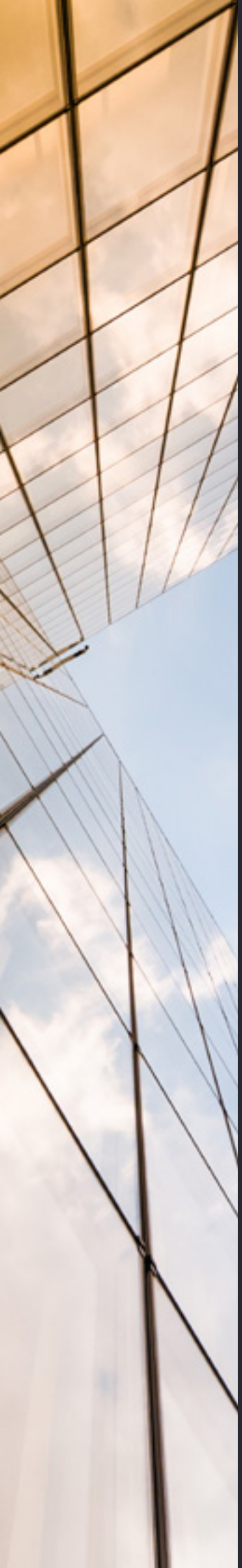
You'll find everything you need to know about BIM@OBO here.

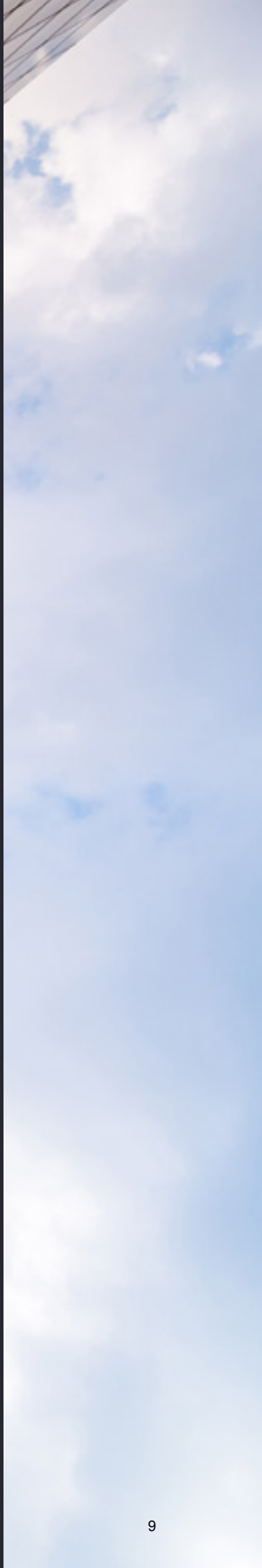
THERE FOR YOU, ACROSS THE GLOBE

The values of our company are supported by continuous proximity to our customers. For us, this means that whenever borders open and new markets are created, we will be there. This regional proximity has proved its worth. OBO operates a global network and employs more than 4,500 people in over 60 countries. The headquarters of the family company, which was founded in 1911, is located in Menden, Germany. In addition, more than 40 subsidiaries are present in markets on all continents.

Think global, act local

As an internationally orientated manufacturer, we offer you a wide range of high-quality products and systems that are not only suitable for use in different types of buildings, but that also meet different national standards and are tailored to the needs of different markets. You benefit from simplified planning of buildings, compliance with national regulations and efficient project realisation. In addition, from OBO you can expect a high degree of flexibility, fast response times for enquiries and the ability to provide large volumes. Practical training courses and technical support that helps you plan and implement projects round off our range of services.

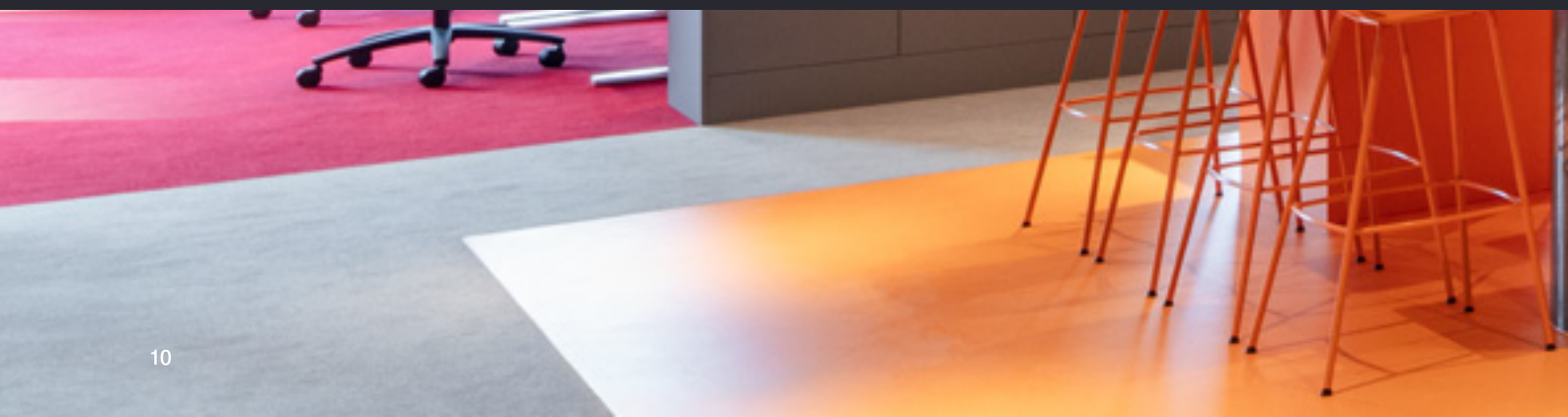




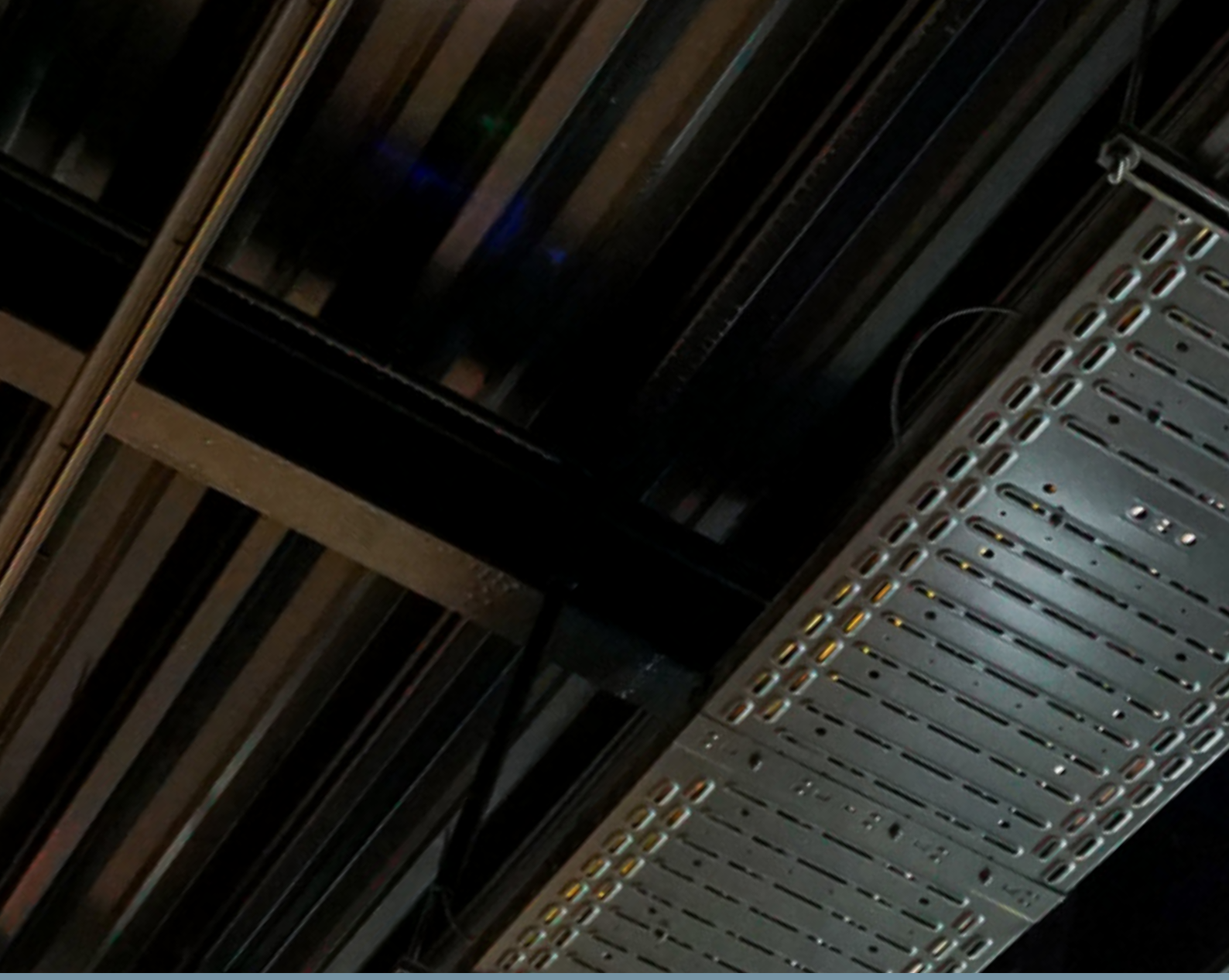
OBO BLACKLINE

HOMAGE TO BLACK

Elegant, refined, emotional: Black is an essential choice for architects. The light-absorbing non-colour shines in every environment, enhancing the ambiance of many different interiors. This use of black is popular particularly in more aesthetically challenging environments, such as exhibition spaces, sales halls or design-orientated offices. Frequently, installations are made on dark backgrounds, meaning that trunking in black, for example, can integrate itself perfectly into its installation environment.



Eclipse office tower, Düsseldorf



BLACKLINE

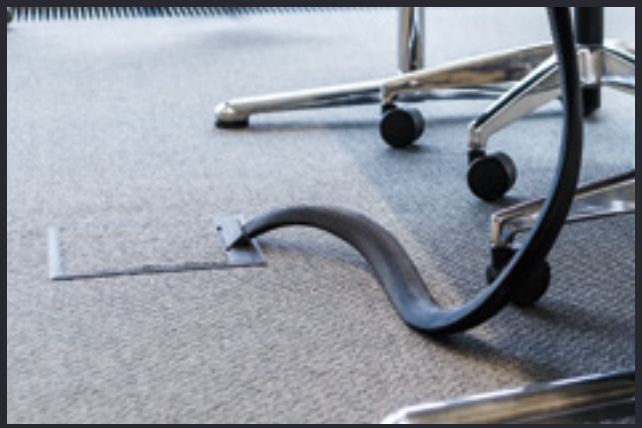
ELEGANT VARIETY

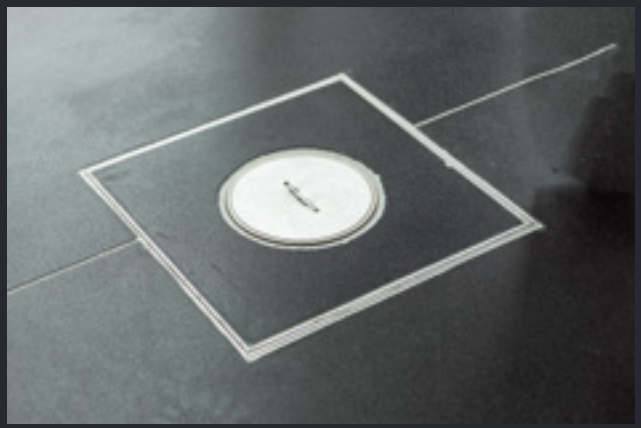
At OBO Bettermann, you'll find numerous system solutions for electrical installations in trendy black: for example, the RKS-Magic® cable tray systems – for even more application possibilities that meet the highest of design standards.

BVB FanWelt, Dortmund

UNDERFLOOR SYSTEMS

Underfloor systems provide installation space for power, data and multimedia connections in the floor structure. OBO offers underfloor systems for different building types and floor construction techniques, such as screed, raised floors, cavity floors and country-specific floor structures. Various solutions are available, depending on the application.

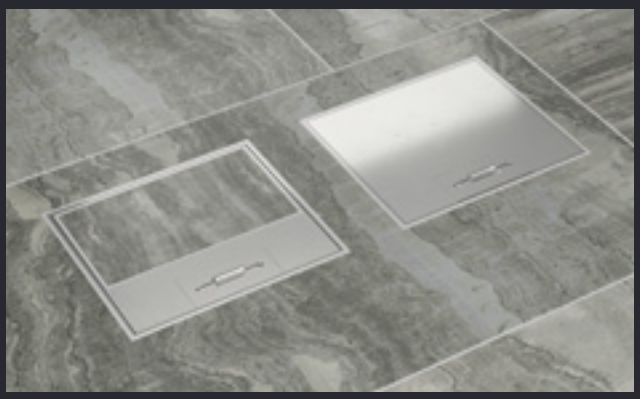




Solutions with trunking systems

Service outlets (GES)
The proven solution for office installations with carpeted floors: The GES service outlets are available in plastic or metal and possess countless intelligent details such as cable routing clips, carpet protection frames and a locking lid closure.

Cassettes
The compact cassettes can be adjusted to be flush with the height of the raw floor and, in a special version, can also be used with noise decoupling. They are particularly suitable for floor coverings such as tiles or parquet. There are various versions for dry, moist and wet-care floor coverings.



Solutions with protective cable pipes

Round floor sockets (GES R2)

The GES R2 are made from die-cast zinc. Nickel, old copper, chrome and old brass are available as a surface finish. They can be integrated into a wide range of high-quality floor areas.

Floor sockets and floor boxes
Square (UDHOME)
The UDHOME system can be mounted as a complete flush-mount unit, flush with any floor type. In the installed state, visible elements are reduced to fine, flush-floor edges and metallic surfaces.

	Variants						External dimension in mm	
	Decouplable	Height-adjust-able	Heavy duty	Wet care	Installation height	Number of devices	Round	Rectangular
GES	✓			✓	From 75 mm	3, 6, 9, 12	∅ 234 ∅ 294 ∅ 324	118 x 194 217 x 217 273 x 220 264 x 264
Cassettes	✓	✓	✓	✓	From 95 mm	6, 9, 12	∅ 214 ∅ 274 ∅ 304	199 x 199 243 x 243
GES R2	✓		✓	✓	From 85 mm	2	∅ 140	
UDHOME		✓	✓	✓	from 75/95 mm	2, 6, 12		140 x 140 199 x 199 143 x 243

Modul 45® devices

The Modul 45® series provides for maximum variety and flexibility in configuring underfloor systems. Depending on the requirements, sockets and data and multimedia technology can be installed in the floor box using locking technology.

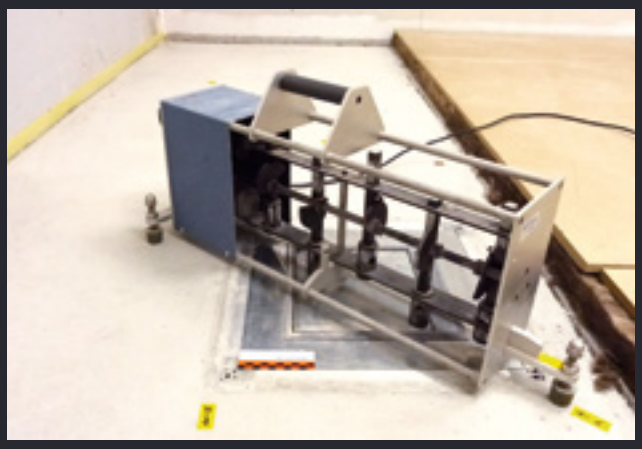
PROPERTIES OF UNDERFLOOR SYSTEMS

Load

DIN EN 50085-2-2 specifies the load requirements for underfloor systems in electrical installations. According to this standard, cassettes/service outlets may only bend by a maximum of 6 mm when subjected to a load. However, with harder floor coverings, such as stone or tiles, bending will lead to breakage. For this reason, OBO has increased its internal quality criteria and goes a step further with the OBO testing standard. The test results from the OBO BET Test Centre formed the basis for the development of the internal classification of heavy-duty classes SL1 and SL2. Products of heavy-duty class SL1 are suitable for loads of up to 10 kN, whilst products of heavy-duty class SL2 are even suitable for loads of up to 20 kN. This can prevent the breaking of hard and sensitive floor coverings such as stone or tiles.

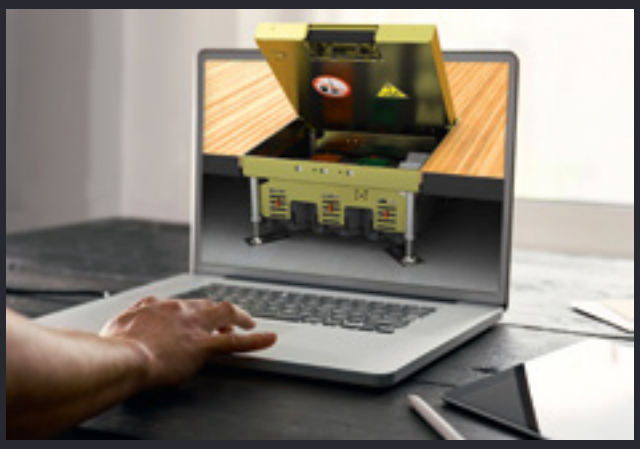
Wet care

All the device installation units for wet-care floors have a protection rating of at least IPX4 when closed, to fulfil the requirements of EN 50085-2-2 without restriction. Device installation units with tube body also protect the electrical installation against the ingress of water when used. The tube body extends 10 mm beyond the top edge of the floor covering, offering protection against the ingress of water into the internal electrical installation.



Noise protection

The underfloor systems from OBO are intended for installation in floating screeds. Normally, there are requirements for the transmission of air and footfall sound, both for vertical sound transmission, i.e. from storey to storey, and for horizontal sound transmission (from adjacent rooms). As the underfloor systems are also run under partitions, the question of the influence of the system on noise transmission is of high relevance. For this reason, the air and noise transmission for the EÜK duct and OKA and OKB trunking systems and UDHOME floor boxes were evaluated in qualified tests with the MÜLLER-BBM testing institute in Planegg, Munich.



Planning and selection of the correct underfloor system

The following floor structure requirements must be considered:

- Installation requirements
- Requirements from architectural construction planning
- Organisational requirements and user specifications
- Safety requirements

Accordingly, the correct selection of the duct or trunking system is of key significance for technical planning. Besides personal project advice, the OBO service also includes the OBO Construct software, offering a fast, targeted planning tool for underfloor systems.
(www.obo-construct.com).

Standards for underfloor systems

These can be divided into two categories: installation specifications and product standards. The installation engineer is primarily responsible for compliance with the installation specifications.

The product standard EN 50085-2-2 specifies the testing criteria for underfloor systems. The OBO Bettermann underfloor systems meet this standard and are VDE-certified.

Fire protection in underfloor systems

In Germany, the Master Cable Installation Guideline (MLAR) is significant for fire protection measures in cable systems and for underfloor systems. The Master System Floors Directive (MSysBöR) applies additionally. According to the requirements in these standards, OBO Bettermann underfloor systems can be run in escape and rescue routes and through fire walls. In so doing, special requirements need to be taken into account in the installation and system selection.

SERVICE OUTLETS (GES)

VERSATILE POWER SUPPORTS

Service outlets act as the installation space in the floor for devices such as sockets, data boxes and multimedia connections. As discreet, flexible solutions, they can be installed in system floors as well as in screed-flush and screed-covered underfloor systems. Versions made of plastic, aluminium and stainless steel can be installed in an accentuated or complementary manner in a range of floor coverings.

Haus der Zukunft – Futurium Berlin

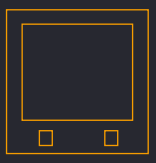
Gelsenwasser office

CHECK SERVICE OUTLETS (GES)

What are the basic types?

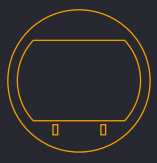
With floor covering recess

Rectangular with handle clamp



Rectangular with locking slider

Round with handle clamp



Round with locking slider

Round with tube body

With decorative cover

Round with tube body and structured lid

How many installation devices can be installed in service outlets?

3x Modul 45®
External dimension
118 x 194 mm

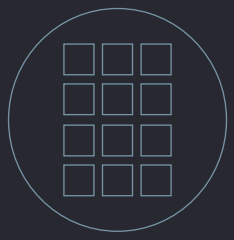
6x Modul 45®
External dimension
222 x 222 mm

9x Modul 45®
External dimension
297 x 221 mm

12x Modul 45®
External dimension
243 x 243 mm

6x Modul 45®
External dimension
∅ 234 mm

10x Modul 45®
External dimension
∅ 294 mm



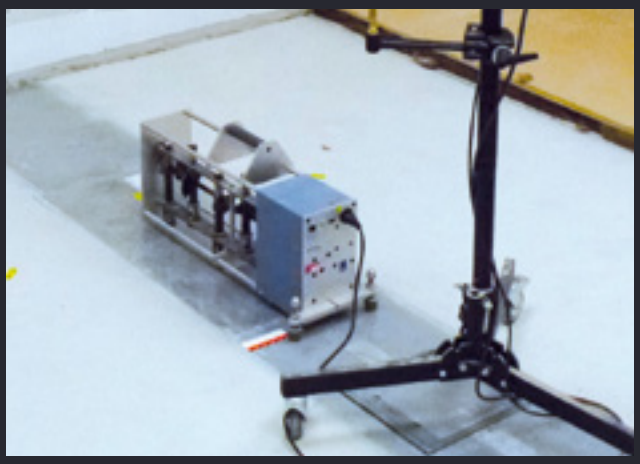
12x Modul 45®
External dimension
∅ 324 mm

How high must the floor structure be?

From 75 mm, GES service outlets can be installed with devices. Special GES service outlets also enable installation from floor heights of 55 mm. A limited number of sockets and data technology devices can be installed.

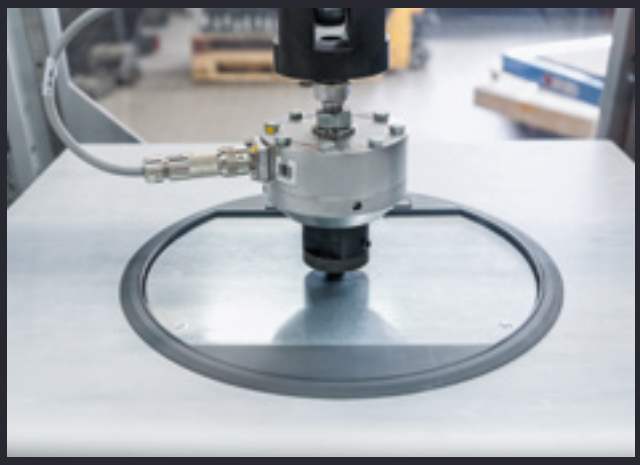
What types of floor care are possible?

The different construction types of the service outlets allow dry, moist or wet care. Products for wet care are also suitable for mechanical floor cleaning. With wet-care floor coverings, current requirements (from DIN EN 50085-2-2) mean that service outlets with tube body are to be used for device installation.



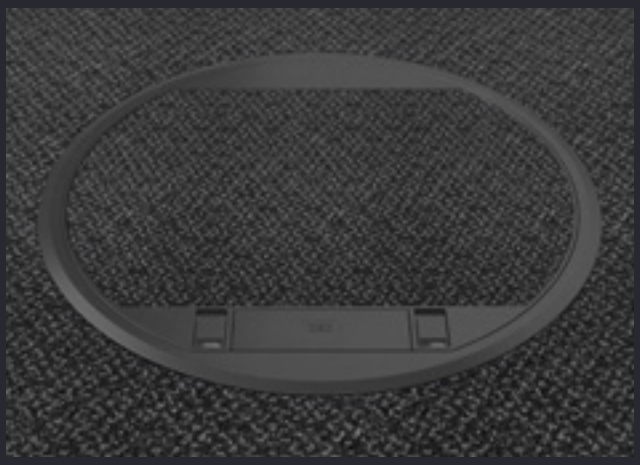
How do service outlets perform with regard to noise transmission in underfloor systems?

Basically, the noise transmission of service outlets in the overall underfloor system should be regarded in conjunction with the floor system, as they are one of many components. OBO underfloor systems are comprehensively investigated with regard to noise protection and do not impede the noise protection properties of a floor system if the noise protection measures recommended by OBO are implemented. Service outlets are installed in decouplable screed boxes to maintain the noise protection of the underfloor system in floating screed floors.



What are the load capacities of the service outlets?

For plastic service outlets, we recommend point loads up to 2,000 N (200 kg). For metal service outlets, we recommend point loads up to 3,000 N (300 kg).



Which floor covering is suitable for the product?

All types of carpet, plastic floor covering or thin floor covering requiring the protection of cut edges.

Car showroom, Gütersloh

CASSETTES

ROBUST ELEGANT, FLUSHFLOOR

No matter whether an office or event location, loft or showroom, the new generation of compact, flush-floor OBO cassettes offer solutions that are elegant yet robust for power, data and multimedia connections. They are the flexible and reliable premium system for underfloor installations in high-quality building construction.

Car showroom, Gütersloh

Car showroom, Gütersloh

CASSETTES

DISCREET ALL-ROUNDER

Joint-free floor areas, such as polished cement or poured asphalt screeds, are en vogue in modern interior architecture. As the sole provider on the market, OBO can offer a special underfloor solution, in order to integrate the access points to the electrical installation seamlessly into the floor area. Namely, the lined cassette body for polished screeds.

Haus der Zukunft – Futurium Berlin

EXCLUSIVE TO
OBO

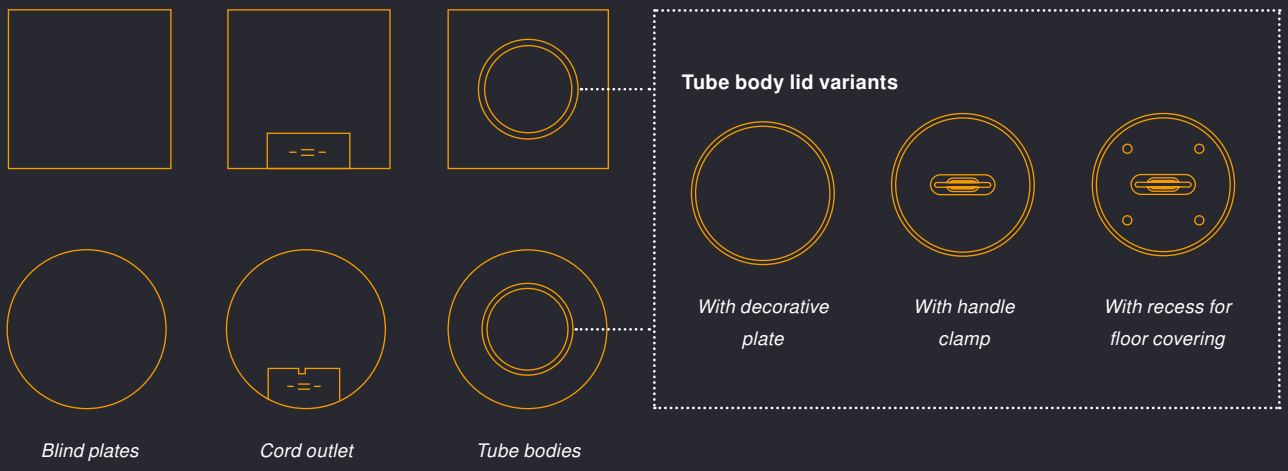
Sennheiser Foyer

Haus der Zukunft – Futurium Berlin

CHECK CASSETTES

What are the basic types?

With floor covering recess



How many installation devices can be installed in the cassettes?

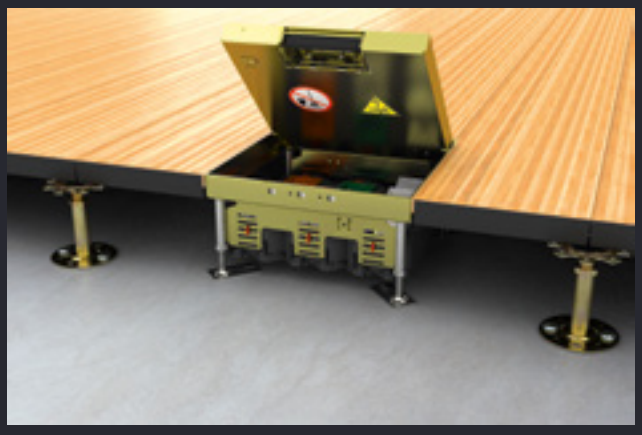
6x Modul 45®
External dimension
199 x 199 mm

12x Modul 45®
External dimension
243 x 243 mm

6x Modul 45®
External dimension
∅ 214 mm

10x Modul 45®
External dimension
∅ 274 mm

12x Modul 45®
External dimension
∅ 304 mm



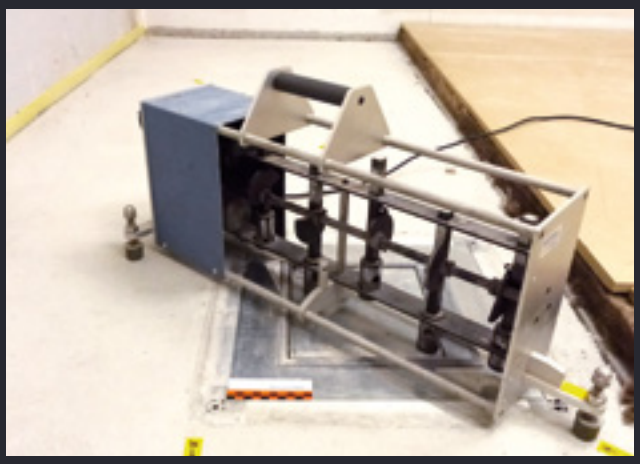
How high must the floor structure be?

Height-adjustable cassettes with device installation can be installed for floor heights from 105 mm. Inspection cassettes without device installation can be installed in a floor height of 100 mm or more.

Specially decoupled and height-adjustable cassettes for screed installation can be installed from floor heights of just 90 mm, including device installation.

What types of floor care are possible?

The different construction types of the cassettes allow dry, moist and wet care and are also suitable for floors requiring mechanical cleaning. With wet-care floor coverings, requirements (from the DIN EN 50085-2-2) mean that cassettes with tube body are to be used for device installation.



How do cassettes perform with regard to noise transmission in underfloor systems?

Decoupled, height-adjustable cassettes help to ensure that there is no worsening of noise transmission in insulated floor systems. They can be installed in screed floors or in system floors and wooden beam ceilings. Basically, the noise transmission of cassettes in the overall underfloor system should be regarded in conjunction with the floor system, as they are a system component of the floor construction. If cassettes are installed in screed sockets, then they should also be decoupled.

What are the load capacities of the cassettes?

Standard cassettes for use in buildings with normal load requirements are designed for traffic loads of up to 3,000 N – according to the requirements of EN 50085-2-2. For high load requirements, such as those in car dealerships, airports or railway stations, there are heavy-duty cassette solutions designed for loads up to 20 kN (2,000 kg). These values are tested according to the heavy-duty classification OBO SL.

Which floor covering is suitable for the product?

Stone, marble, tiles, parquet, wooden floorboards or other cut-resistant and thicker floor coverings. However, Terrazzo (ground) is also available in a special application. You will find more information on underfloor systems for jointless floors here:

ROUND FLOOR SOCKETS (GES R2)

SMALL ALL-ROUNDER

Sleek design, high-quality material, extreme load capacity: The GES R2 is used anywhere where only small, punctuated supply points are required in the floor. The modular structure of height-adjustable screed socket, installation socket and lid allows a variety of uses of the round floor socket, from private accommodation through to car dealerships.

Belgian car dealership, Joerssen Schoten

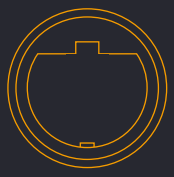
CHECK ROUND FLOOR SOCKETS (GES R2)

What are the basic types?

Hinged cover with locking slider
External dimension
∅ 140 mm

Tube body with handle clamp
External dimension
∅ 140 mm

Blind plates
External dimension
∅ 140 mm

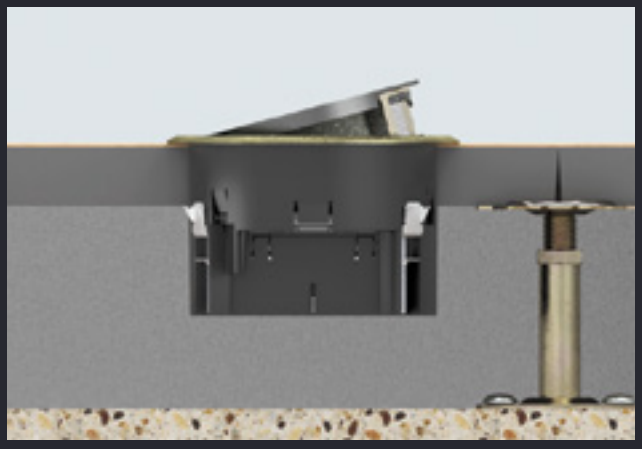


Hinged cover with cord outlet flap
External dimension
∅ 140 mm

Blind plates
External dimension
∅ 140 mm

How many installation devices can be installed in GES R2 service outlets?

2x Modul 45®
2x data technology



How high must the floor structure be?

The minimum installation height from the top edge of the floor is 85 mm. Installation can take place in screed constructions or in raised and cavity floors. The installation diameter for the round floor socket is 120 mm.

In screed constructions, installation takes place in a height-adjustable screed socket with a height-adjustment range of 85 to 130 mm via simple 3-point height adjustment. A further height increase with accessories is also possible.

What are the load capacities of the GES R2 service outlets?

They fulfil the EN 50085 2-2 standard and are designed for high load requirements of up to 20 kN.

What types of floor care are possible?

The tube body seals the closed installation space against the ingress of water, which occurs, for example, when the floor is cleaned. If the tube body cover for the cable outlet is open, it extends 10 mm beyond the top edge of the floor covering, offering protection against the ingress of water into the internal electrical installation. The GES R2 with tube body thus fulfils the requirements for service outlets in wet-care floors according to EN 50085-2-2. In addition, when completely closed, the GES R2 with hinged lid fulfils the requirements of EN 50085-2-2 for use in wet-care rooms.

Which floor covering is suitable round floor socket GES R2?

The GES R2 is suitable for all floor coverings. It is available in these finishes:

Metal variants

- Nickel
- Brass
- Chrome
- Copper
- Nickel-oxidised
- Black

Plastic variants

- Iron grey
- Graphite black

SQUARE FLOOR SOCKETS (UDHOME)

STRAIGHT-FORWARD AND DISCREET

In a museum, in a foyer, in an event room, even in high-quality private housing: UDHOME is at home everywhere. The system is characterised by a straight, discreet appearance. It can be installed flush with the finished floor. Six new contemporary decorative designs and an optional brush outlet now make it possible to match the installation of electrical systems even more harmoniously to existing floor coverings and individual room designs – even retrospectively!

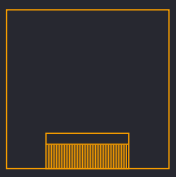
CHECK SQUARE FLOOR SOCKETS (UDHOME)

What are the basic types?

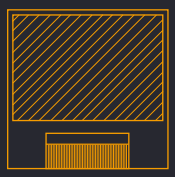
UDHOME-ONE & UDHOME2

Hinged cover with floor covering recess and cord outlet flap

Hinged cover with decorative plate and cord outlet flap



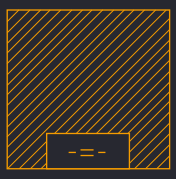
Hinged cover with decorative plate and brush cord outlet



Hinged cover with floor covering recess and brush cord outlet

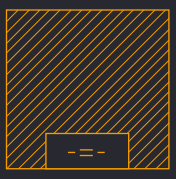
Decorative cover made of stainless steel with tube body outlet

UDHOME4



Cover with floor covering recess and cord outlet flap

UDHOME9



Cover with floor covering recess and cord outlet flap

How many installation devices can be installed in UDHOME?

UDHOME-ONE

1x Modul 45®
External dimension
140 x 140 mm

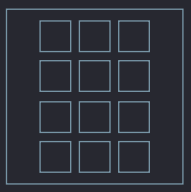
UDHOME2

2x Modul 45®
External dimension
140 x 140 mm

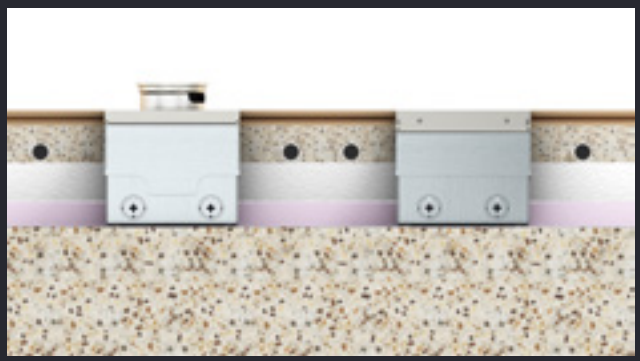
UDHOME4

6x Modul 45®
External dimension
199 x 199 mm

UDHOME9



12x Modul 45®
External dimension
243 x 243 mm



How high must the floor structure be?

The UDHOME-ONE floor sockets can be installed from a floor height of 75 mm. The UDHOME2 floor socket and the UDHOME4 and UDHOME9 floor boxes require a minimum floor height of 95 mm. All UDHOME variants have an internal height-adjustment unit (+30 mm). This enables them to be adjusted flush to the top edge of the floor. Height extensions for large floor heights are available as accessories.

What is the load capacity of the UDHOME?

The UDHOME2 with tube body is designed for high loads up to 15 kN and thus also suitable for heavy-duty applications. The UDHOME4 and UDHOME9 are designed for loads of up to 3 kN and can thus be used for all normal applications with plenty of reserve. All the UDHOME solutions fulfil the standards of EN 50085-2-2.

What types of floor care are possible?

The product spectrum runs for uses from dry to wet-care floors. The UDHOME2 as a tube body version with its IP protection is suitable for use in wet-care cavity and screed floors. The UDHOME4 and UDHOME9 are only suitable for dry and moist care.

DECORATIVE COVER VARIANTS

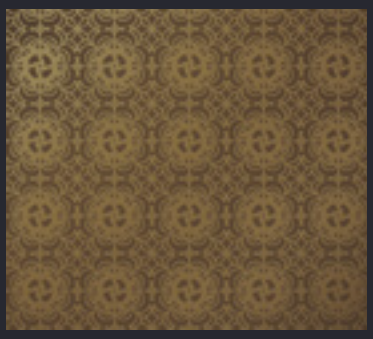
Stainless steel

Angelhair

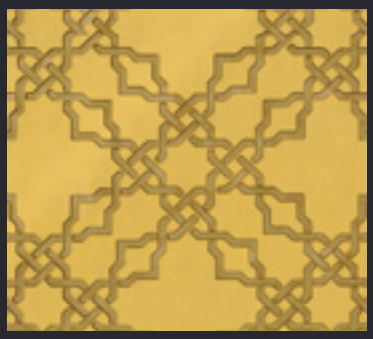
Spots

Cross hatch

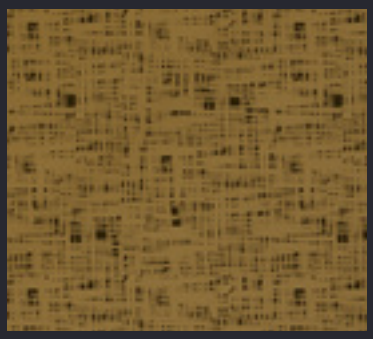
Brass



Marygold



Oriental



Hammer blow

Which floor covering is suitable for the UDHOME?

The products of the UDHOME series are suitable for all cut-resistant floor coverings, such as stone, tiles, parquet, wooden floorboards and also Terrazzo (ground) in special applications. The floor covering recesses in the cover of the UDHOME series allow for floor covering thicknesses up to 15 mm.

OPEN TRUNKING SYSTEM (OKA)

CAN BE ADJUSTED AT ANY TIME

The OKA open trunking system is a system installed flush with the floor for cable routing in the floor structure. The lockable trunking covers can also be opened and closed along the whole length – even when installed with a floor covering. This means that the electrical installation in the trunking can be adapted at any time. OKA trunking is suitable for the installation of various service outlets as outlet points for sockets and data connections. Thanks to their proven technology, they are ideal when it comes to flexibility in large office spaces and many data and power cables.

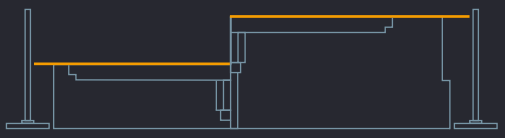
CHECK OPEN TRUNKING SYSTEM OKA

What are the basic types?

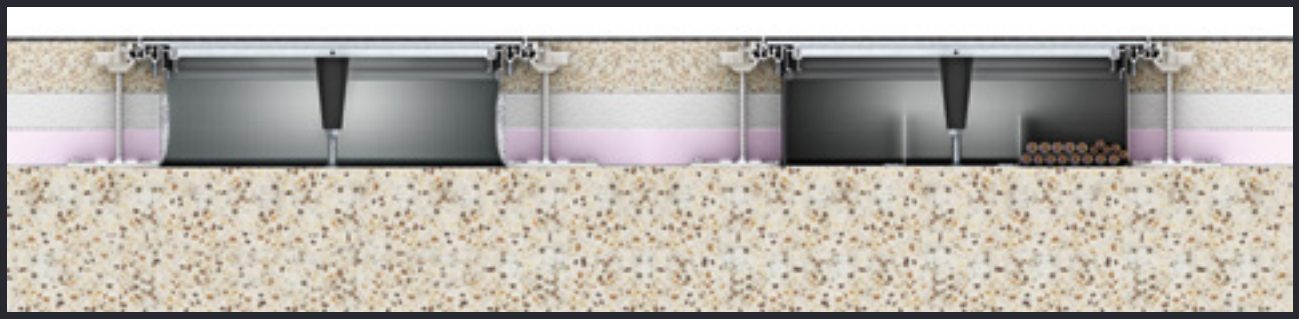
OKA-G

Dimensions
Trunking widths: 200, 300, 400, 500, 600 mm
Trunking height: 40–240 mm infinitely height-adjustable

OKA-W

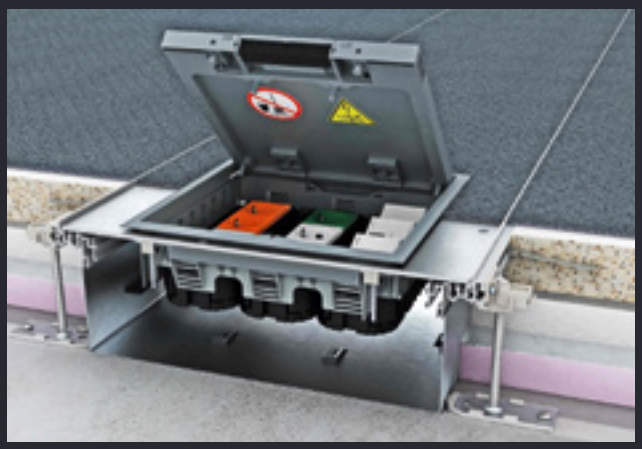


Dimensions
Trunking width: 200, 300, 400, 500, 600 mm
Trunking height: 40–70 mm; 60–110 mm; 100–150 mm



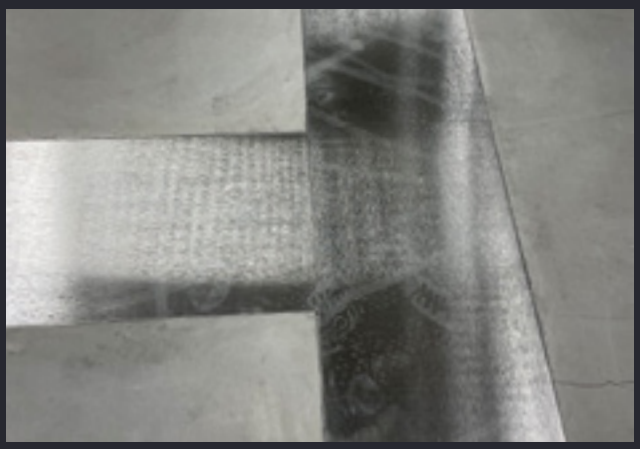
How is the trunking system routed?

The screed-flush trunking of the OKA system is mounted directly on the raw concrete and adjusted to the top edge of the finished screed. Two trunking variants are available and can be easily combined: The OKA-G with flexible side wall possesses metal mesh side walls. During mounting, they can be adapted easily to match the substrate and units crossing over. The OKA-W with metal floor trough possesses lockable separating retainers for structured, EMC-compatible cable routing.



How high must the floor structure be?

In thin-layered screed, OKA trunking installation for pure cable routing is possible from a screed height of 40 mm. From a floor structure of 75 mm, service outlets can be installed.



What types of floor care are possible?

The trunking system is suitable for dry, moist and wet-care floor coverings.

What are the load capacities of the flushfloor trunking?

The flushfloor trunking system is characterised by its high load capacity. All the covers have metal thicknesses of 4 mm. The trunking covers are additionally supported with struts at the joints preventing any significant bending even with large trunking widths. Installed flush with the floor, the trunking is designed for normal traffic loads in large office spaces (3.0 kN point load). However, special versions for traffic loads up to 15 kN are also possible.

Which floor covering is suitable for the trunking system?

The system is ideal for flexible floor coverings such as carpet, PVC or linoleum. For thicker floor coverings such as stone, tiles, wood or laminate, there are also trunking covers with cassette supports to accommodate these floor coverings.

How does the trunking system perform with regard to noise transmission?

The OKA trunking system fulfils the noise protection requirements for civil engineering. Should there be requirements for increased footfall sound protection, then noise protection insulation should be added to the system in the area of the partition.

Qualified tests to determine the transmission of air and footfall sound for the OKA trunking system were carried out together with the MÜLLER-BBM GmbH testing institute in Planegg, Munich.

What devices can be used in the trunking system?

The two trunking variants, OKA-W and OKA-G, are suitable for the installation of various service outlets. Depending on the furnishing plan and planned use, service outlets for the installation of six, nine or twelve individual devices from the Modul 45® series can be selected. This optimised system offers space for sockets, data boxes and multimedia connections, such as HDMI or USB.

BRUSH BAR TRUNKING SYSTEM (OKB)

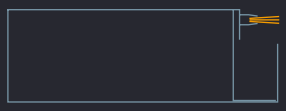
SEAMLESS SUPPLIERS

The OKB trunking system from OBO runs along the walls and can only be detected by a narrow, continuous brush bar, which is used as a cable outlet and enables device installation. As the trunking is mounted flush with the floor and the covers are covered directly by the floor covering, they fit discreetly and seamlessly into any interior.

CHECK BRUSH BAR TRUNKING SYSTEM OKB

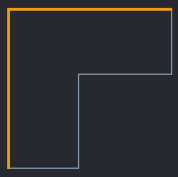
What are the basic types?

Trunking unit with brush bar



Side view
85 x 250 mm

Internal corner with brush bar

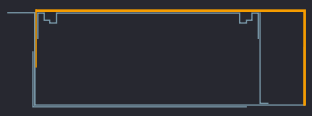


Top view
421 x 421 mm

External corner with brush bar

Top view
423 x 423 mm

Trunking unit with blanking lid



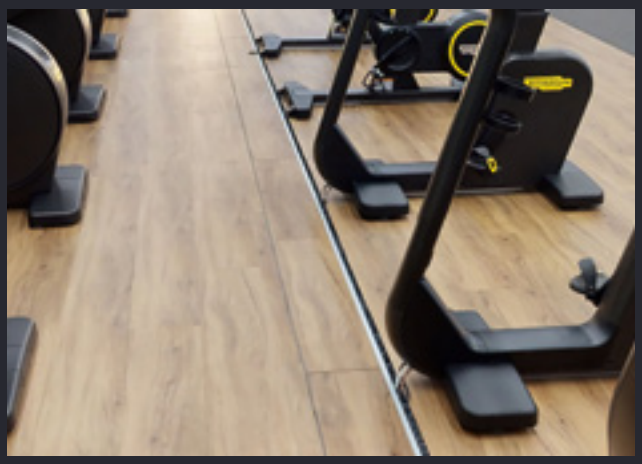
Side view
85 x 250 mm

How high must the floor structure be?

The floor structure from the top edge of the raw floor to the top edge of the finished screed must be at least 95 mm. The height setting is variable to max. 333 mm to the top edge of the finished screed. The floor covering can be up to 25 mm thick.

What types of floor care are possible?

The trunking system is suitable for dry or moist-care floor coverings.

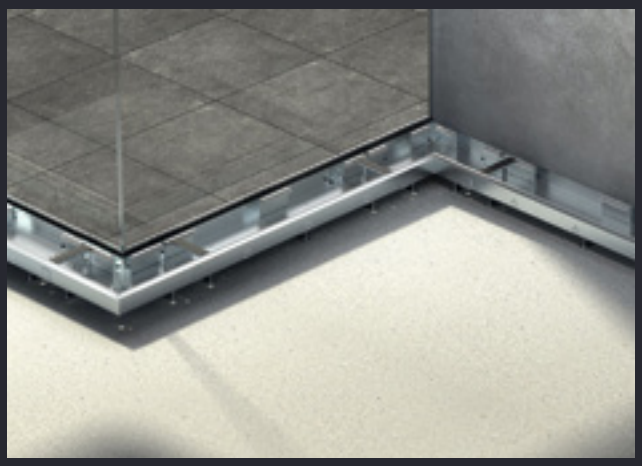


What are the load capacities of the brush bar trunking?

The trunking system has a point load capacity of up to 3,000 N (300 kg).

How does brush bar trunking perform with regard to noise transmission?

The screed-flush trunking with brush bar is installed at the edge of a side of the room. With regard to footfall noise transmission, the installation of this trunking leads to no worsening of the footfall noise properties in floating cement screed floors. In the case of wall penetrations through partitions with noise protection requirements, noise protection insulation should be installed as required. The air and footfall noise transmission for the OKB brush bar trunking system was tested in a qualified manner by the testing institute MÜLLER-BBM GmbH in Planegg, Munich.



When is the trunking system routed?

The OKB system is mounted on the raw concrete before the screed work. It runs along the walls for the entire length of the room. The practical fittings of the OKB system allow routing into any corner of the room. Appropriate prefabricated internal and external corners ensure uncomplicated mounting. The system can be adjusted exactly to the planned screed height using the height-adjustment feet.

Which floor covering is suitable for the product?

The trunking system is suitable for all cut-resistant floor coverings such as parquet and plastic coverings with thicknesses up to 25 mm.

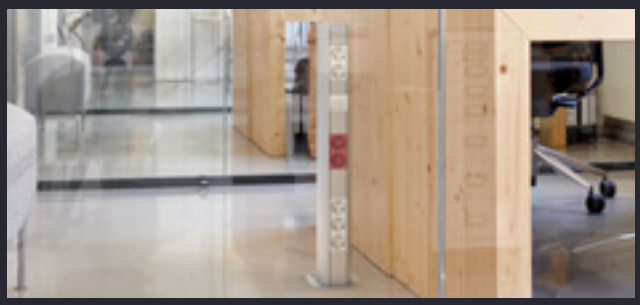
SERVICE POLES

WIDE RANGE OF USES

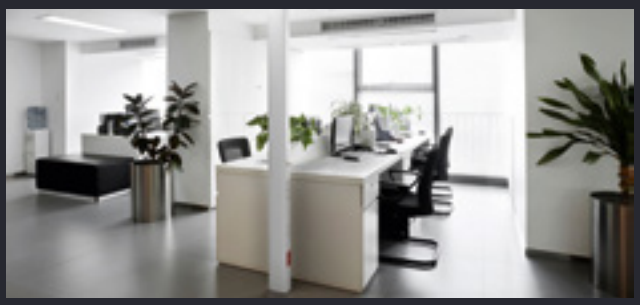
Optimal positioning of the supply is essential, not only in open-plan offices or in temporary set-ups. The floor-ceiling service pole system means that this is possible exactly where it is needed. The poles use the supply from the ceiling and can be freely positioned in the room using a simple clamping device or gland on the floor.

CHECK SERVICE POLES

What are the basic types?



Floor service pole



Floor-ceiling service pole

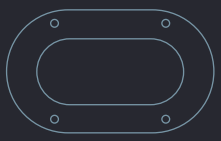
Which variants are available?

Floor service poles *

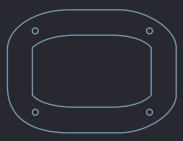
Square
212 x 212 x 680 mm

Rectangular
250 x 220 x 564 mm

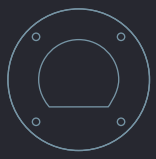
Rectangular
130 x 140 x 500 mm



Oval
146 x 65 x 675 mm



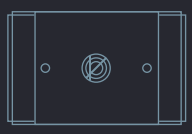
Oval
130 x 80 x 675 mm



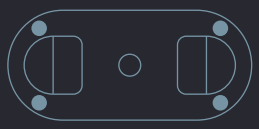
Round
∅ 70 x 675 mm

** All profiles are available in steel or aluminium.*

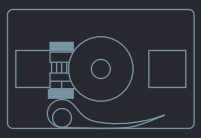
Floor-ceiling service poles *



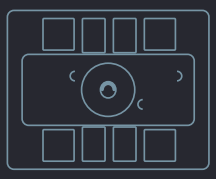
Rectangular
115 x 75 x 2,505 mm



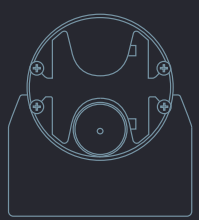
Oval
65 x 146 x 3,000 mm



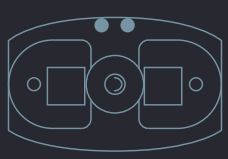
Rectangular
110 x 70 x 3,000 mm



Rectangular
140 x 110 x 3,000 mm



Round
Ø 80 x 2,300 mm



Oval
130 x 80 x 3,000 mm

Round
Ø 70 x 3,000 mm

** All profiles are available in steel or aluminium.*

How are floor-ceiling service poles fastened?

Floor-ceiling service poles with a clamping device are clamped between the floor and ceiling with a special spring tension device. This guarantees stability of the pole and torsion protection as required by the standard. Floor-ceiling poles with a hose to the ceiling have a plate-shaped, heavy-duty stand, which prevents the pole from tipping over through its large area and high dead weight. A hose to the ceiling feeds the pole with data and power cables and allows flexible movement of the pole.

Which materials are used to manufacture the service poles?

OBO service poles are manufactured from extruded 6,000 series aluminium. Also with functional interior elements, the tried-and-trusted material properties of aluminium are useful, such as its low weight with high resistance and long lifespan. However, haptics and design are also crucial. The service poles are therefore given an anodising layer, a surface method which achieves an even matt finish.

Which factors are important when selecting a service pole?

One decisive aspect is the option of supplying the pole. Especially in large offices, floor-ceiling service poles make use of their flexibility when they can be supplied from above through a false ceiling. A further criterion is the number of electrical services required. This determines the installation space required in the pole.

PSV stadium Eindhoven

CABLE TRAY SYSTEMS

INDUSTRIAL CHARM

Open ceilings, a raw industrial look – this is the home of the Magic® cable tray systems. Sleek, functional and incredibly robust, they make a contribution to a technically purist interior in modern cafés, studios or lofts. The special thing about the Magic® cable tray systems is their patented plug connections, which allow installation in the blink of an eye. The different surface properties of the RKS, MKS and SKS Magic® make these cable trays usable in all kinds of applications – both indoors and outdoors.

BrezelMuseum, Erdmannhausen

BVB FanWelt, Dortmund

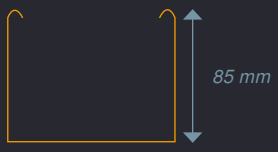
CHECK CABLE TRAY SYSTEMS

What are the basic types?

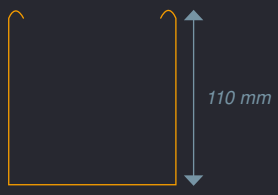
Perforated cable tray

RKSM 35

RKSM 60
MKSM 60
SKSM 60



MKSM 85
SKSM 85



MKSM 110
SKSM 110

Unperforated cable tray

MKSMU 60
SKSMU 60

MKSMU 85
SKSMU 85

MKSMU 110
SKSMU 110

RKS Efficient cable tray system

MKS Medium-duty cable tray system

SKS Heavy duty cable tray system

Which variants are available?

Type	Side height in mm	Width in mm							FS Strip galvanised	FT Hot-dip galvanised	A2 Stainless steel	A4 Stainless steel
		100	150	200	300	400	500	600				
RKSM	35	✓		✓	✓				✓			
	60	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
MKSM	60	✓	✓	✓	✓	✓	✓	✓	✓	✓		
	85	✓		✓	✓	✓	✓	✓	✓	✓		
	110	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*	
MKSMU	60	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*	
	85	✓		✓	✓	✓	✓	✓	✓	✓		
	110	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*	
SKSM	60	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*	✓*
	85	✓		✓	✓	✓	✓	✓	✓	✓		
	110	✓	✓	✓	✓	✓	✓	✓	✓	✓		
SKSMU	60	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓*	
	85	✓		✓	✓	✓	✓	✓	✓	✓		
	110	✓	✓	✓	✓	✓	✓	✓	✓	✓		

**Not available in the width 150 mm.*

What additional fittings exist?

RB 45
45° bend

RB 90
90° bend

RB W
Variable bend

RGBEV
Adjustable bend element

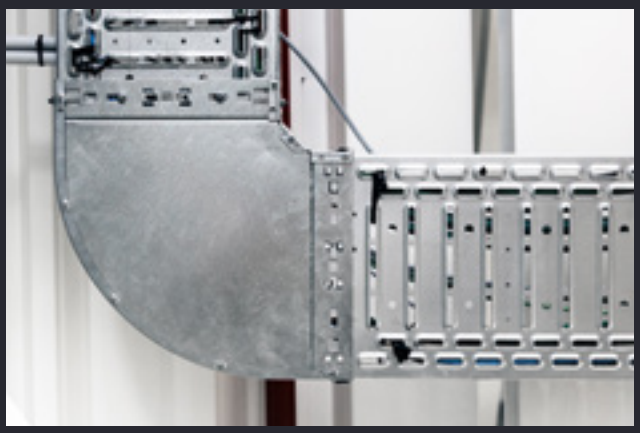
RAA
Add-on tee

RT
T piece

RK
Cross-over

Is powder coating possible?

Powder coating is possible in all RAL shades. Besides the visual accents through colour and structure, the appropriate coating can, depending on the powder, also provide increased corrosion protection and the best insulating properties.



How much safety is guaranteed?

Mechanical safety
A clean transition is guaranteed at the joints – also at maximum load, and in the case of high vibrations and knocks. The cable tray systems are subjected to load tests at our BET Test Centre. The basic principles for the tests of OBO cable support systems are DIN EN 61537 and DIN VDE 0639.

Electrical safety
Equipotential bonding is also permanently guaranteed without additional components. The cable trays are tested for EMC and impulse currents and are VDE-tested to DIN EN IEC 61537:2007.

Safety in the event of fire
The RKSM cable tray in the width of 100–400 mm is tested for the maintenance of electrical function in the event of a fire according to DIN 4102 Part 12. It can withstand fire for 90 minutes with a load bearing capacity of 20 kg/m cable weight.

What requirements do the cable tray systems meet?

Whether indoors or outdoors, in aggressive atmospheres or under special hygienic conditions: The cable tray systems can offer the perfect surface and materials for your cable support system, no matter what the requirements may be.

Cable trays, fittings and accessories are machined from high-quality sheet steel and are available with various surfaces. Different hardening or coating methods ensure tailor-made corrosion protection, specially tailored to the appropriate application.

HOVERCUBE

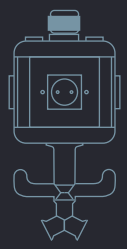
ROBUST DISTRIBUTORS

With the space-saving type VH and VHF HoverCubes, problematic extension cables and hoses are a thing of the past. The compact suspended distributors can be suspended from the ceiling and thus freely positioned in the room. They ensure flexible power and data supply, for example, and enable mobile, reliable and efficient working at virtually every workplace. The housings of the energy blocks are made of highly resistant polyamide and offer installation space for four to eight installation devices.

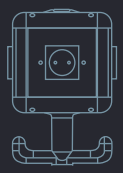
Photo studio Chaillou, France

CHECK HOVERCUBE

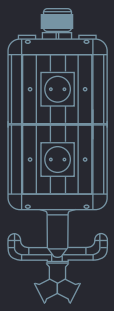
Which variants are available?



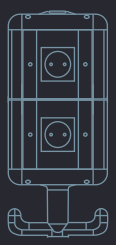
With compressed air, square design, dimensions for max. four devices



Without compressed air, square design, dimensions for max. four devices



With compressed air, rectangular design, dimensions for max. eight devices



Without compressed air, rectangular design, dimensions for max. eight devices

What devices can be used in the HoverCube?

Up to two devices from the OBO Modul 45® series can be installed on each connection side. Different circuits can be installed in the housing. The entire product range of international sockets is available. CEE 16 A and CEE 32 A sockets can be installed in the power supply units. The entire OBO Modul 45® range for data and multimedia technology is suitable for the network connection of machines and systems and in seminar and training rooms.

How are HoverCubes installed?

Cables are inserted in the HoverCube via penetration sleeves. Integrated strain relief options in the housing ensure standardised installation. Suspension takes place in a fixed manner with a chain, with a spring or ergonomically with the positioner.

Are HoverCubes available with increased IP protection?

The VHF8 HoverCube is specially designed for use in moist and wet areas. In the unused state, the housing equipment and the devices offer a protection rating of IP44 (protected against spray water).

SKIRTING TRUNKING

STRAIGHT DESIGN LANGUAGE

Practical, versatile, flexible – Rapid skirting trunking. Various versions and countless fittings bring all kinds of supply connections to the wall exactly where they are required. The two different sizes can be equipped as required with standard or Modul 45® sockets and adapted perfectly to the appropriate room requirements.

Depending on requirements, versions in plastic, aluminium or steel are available. The halogen-free and antibacterial variants are suitable for special safety requirements. The trunking made from metal can be powder-coated in all RAL shades.

CHECK SKIRTING TRUNKING

What are the basic types?

45 mm system opening

80 mm system opening

Which variants are available?

Rapid 45

1 Single-compartment 2 Two-compartment 3 Three-compartment

Material		Trunking height in mm	Trunking width in mm	RAL 9010 Pure white	RAL 7035 Light grey	Anodised	Special colour
Plastic	1	53	100	✓	✓		
Plastic	2	53	130	✓	✓		
		53	165	✓	✓		
Plastic	3	53	160	✓	✓		
Aluminium	1	53	100	✓		✓	✓
Aluminium	2	53	130	✓		✓	✓
		53	165	✓		✓	✓

Rapid 80

Material		Trunking height in mm	Trunking width in mm	RAL 9010 Pure white	RAL 9001 Cream white	RAL 7035 Light grey	RAL 7030 Stone grey	Anodised	Special colour
Plastic	1	70	110	✓	✓	✓	✓		
			130*	✓	✓	✓	✓		
			170*	✓	✓	✓	✓		
Sheet steel	1	70/90	110	✓					✓
			130	✓					✓
			170	✓					✓
			210	✓					✓
Sheet steel double trunking	2	70/90	170	✓					✓
			210	✓					✓
Aluminium	1	70	110	✓				✓	✓
			130	✓				✓	✓
		90	130	✓				✓	✓
		70	170	✓				✓	✓
Aluminium double trunking	2	90	210	✓				✓	✓

** Available in halogen-free version*

What additional fittings exist?

External corner Variable	*External corner*	*T piece adapter*	*End piece*	*Internal corner Variable*	*Internal corner*	*Flat angle*	*Flat angle cover*

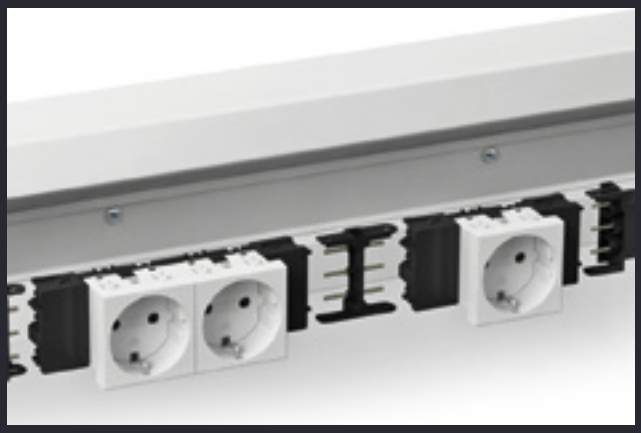
Matching fittings are available for all variants of the skirting trunking.

How can noise transmission be reduced?

In modern office buildings, device installation trunking is often run through office partitions, creating a connection between multiple offices. It is possible that noise may be carried through the trunking penetration. To prevent air conduction of noise, the free cross-section of the trunking remaining can filled with noise insulation after cabling, e.g. air noise barrier, type 7 LSB. The same applies to any gaps between the trunking and the adjoining wall. When used correctly, the air noise barrier, type 7 LSB, can achieve attenuation of up to 40 dB.

Why does OBO offer halogen-free skirting trunking?

From a fire protection perspective, halogen-free installation materials are a safe choice. Manufactured completely from halogen-free plastics, if there is a fire, they reduce the amount of toxic smoke gases and the formation of corrosive substances.



Connectable device installation for Rapid 45

Modul 45connect stands out through its innovative socket and adapter components and offers numerous application options. The connection adapter, with which sockets can be arranged easily, creates a high level of flexibility. Thus, it is possible to create multi-socket combinations without the need for additional wiring. Combinations with a maximum of two connection adapters are tested and VDE-approved. 4x to 9x socket combinations can be created easily.

COVERED SKIRTING TRUNKING

FORM AND FUNCTION IN HARMONY

Purist on the outside, spacious on the inside: The GAD Design device installation trunking hides connectors, cables and power supply units behind pure anodised aluminium. The covers are available in straight, convex and curved versions and can be locked in the opened state as required. LED strips can be applied to the trunking to create attractive effects. Whilst illumination of the interior simplifies the handling of cables and connectors, lighting mounted on the underside of the trunking can highlight the structure or colour of the wall.

CHECK COVERED SKIRTING TRUNKING

What are the basic types?

Style

Rectangular
Side view

Soft

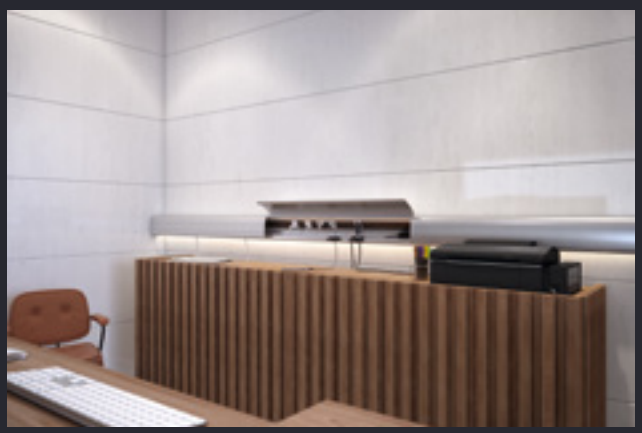
Convex
Side view

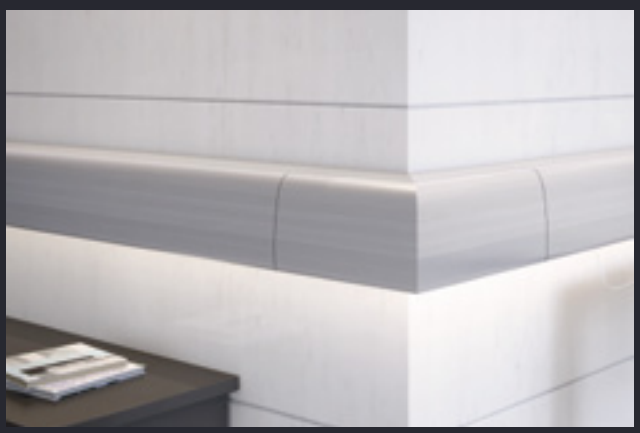
Swing

Curved
Side view

In which versions are they available?

Trunking height in mm	Trunking width in mm	Aluminium	Anodised
140	2,000	✓	✓





What are the advantages of the design?

The GAD Design device installation trunking permits cable routing and device installation in a high-quality environment. With this trunking system, requirements for electrical services can be fulfilled almost invisibly. Connectors, power units or data/network connections disappear behind a hinged cover. The cables are run out of the trunking system in bundled form using a cover adapter at the desired point.

What are the benefits of an anodised surface?

During anodising, metal surfaces are oxidised electrically. This creates a hard, scratch-resistant surface. Compared to other treatment methods, no outside material is used. The metallic character of the aluminium remains intact. In addition, the method offers reliable protection against corrosion.

ELECTRICAL INSTALLATION PIPES

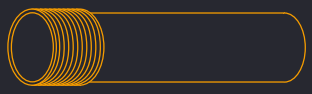
VERY SLEEK

From refineries to existing buildings, from the workshop to the office – installation pipes are sleek, versatile and robust. With their minimalist and technical charm, they ensure a different type of supply in modern facilities. Available in various colours, the precision-lasered pipes are suitable anywhere where a professional surface-mounted installation is required and space for design elements is given.

CHECK ELECTRICAL INSTALLATION PIPES

What components are available?

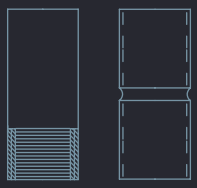
With thread



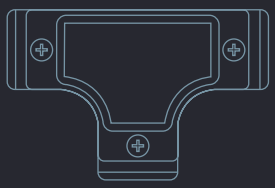
Without thread

Extension and connection pieces

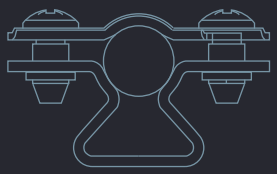
90° pipe bend
with and without thread



Sleeve with and
without thread
(Internal thread)



Control T piece with and
without thread (internal thread)
IP54 protection rating



Metal clips

Plastic clips

Which variants are available for the pipes?

Pipe diameter in mm							Length in mm*
16	20	25	32	40	50	63	3,000

**The length of the pipes can be shortened to fit exactly.*

Which surfaces are available?

The precision-lasered electrical installation pipes are available in various materials and with various surfaces. They are suitable for standardised surface-mounted installation, which meets all the statutory requirements for safe cable routing.

The following surfaces are available:

- Stainless steel
- Aluminium
- Steel, galvanised
- Steel, black powder-coated

Showroom in architect-designed house, Croatia

MODUL 45® DEVICES

TAILOR-MADE SOLUTIONS

The devices of the Modul 45® series, with an edge length of 45 x 45 mm, provide a large benefit in the smallest space. As connections for power, data and multimedia applications, they are compatible with all underfloor systems, service poles and wall trunking. These devices are also designed to enable installation flush with the surface. They are available in the colours white, grey, aluminium, black-grey, pure orange, signal red and mint green.

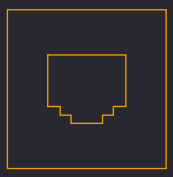
CHECK MODUL 45® DEVICES

Which variants are available?

Protective contact and earthing pin sockets

Country-specific sockets

Switching devices



Data technology

Multimedia technology

Which solutions does the system offer?

The Modul 45® devices offer the right solution for every application – no matter whether you're dealing with sockets, data or multimedia technology.

- Multiple sockets for economic device installation
- Sockets for international applications
- Modul 45®connect as a completely connectable variant of installation solutions
- Data technology supports for data modules of different manufacturers
- Multimedia connection solutions for data, video and audio transmission

Connectable connection technology Modul 45®connect

OBO Bettermann offers the connectable connection technology right through to the socket. This allows pre-terminated cables to be connected directly to the socket or via adapters. Whether directly or with conventionally connected adapters, the installation time can be made considerably shorter in the building. With changes of use, subsequent installation is possible in the building at any time using plug & play.

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Building Connections

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