


 CADRO 21

| Frame system



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CADRO

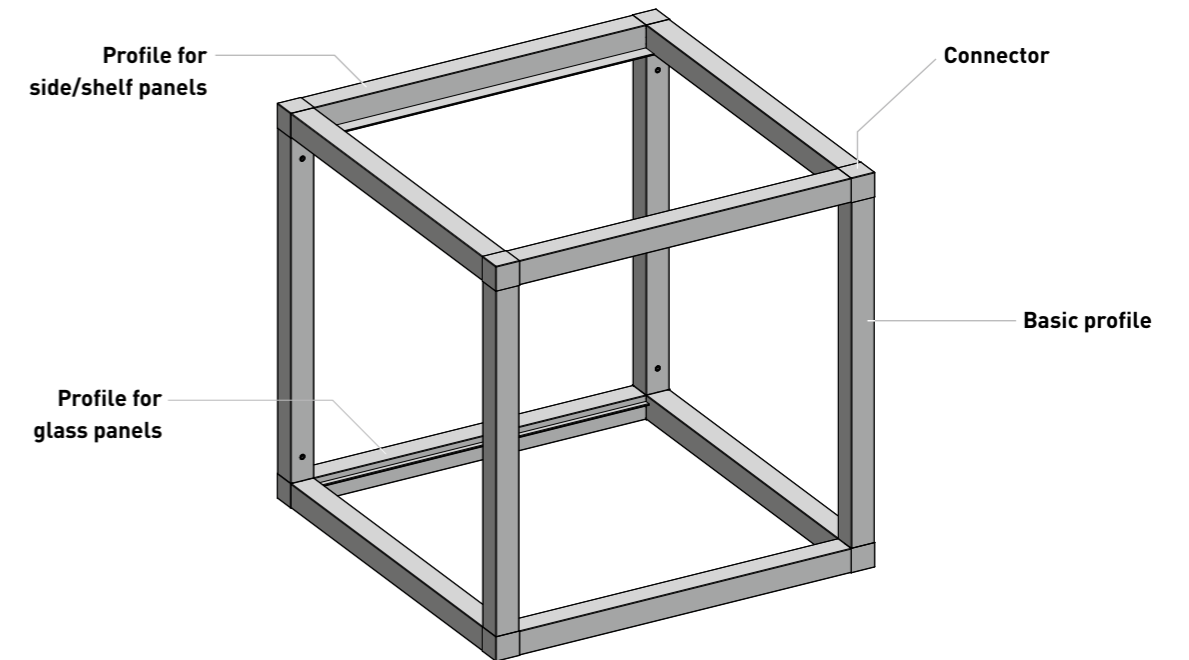
Creativity without compromise

With the CADRO 21 furniture frame system, you can create customised furniture exactly according to your ideas. The combination of smart connecting nodes and functional profiles – perfectly designed for 19 mm panel material – enables flexible applications, whether as an addition to existing furniture or as a standalone design piece.

From connections in all directions and invisible wall mounting to integrated LED lighting and easy integration of side panels and hinged doors, CADRO 21 impresses with maximum versatility and effortless handling.

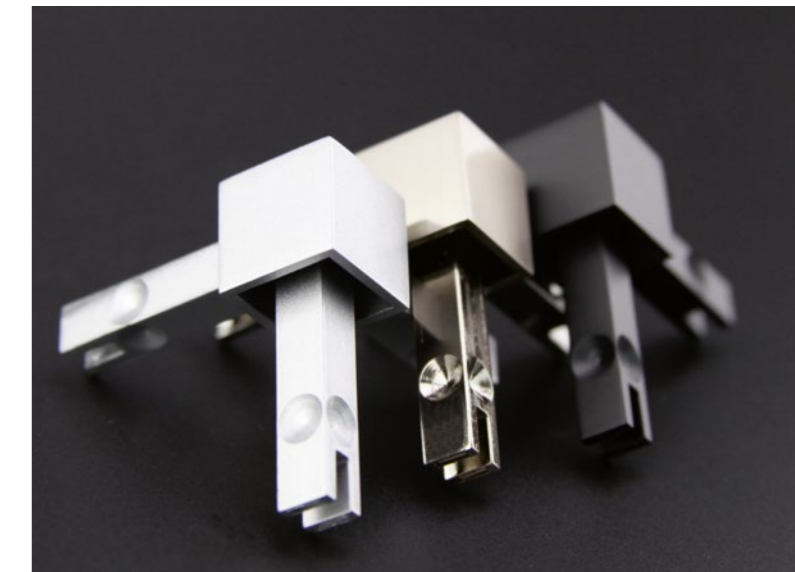
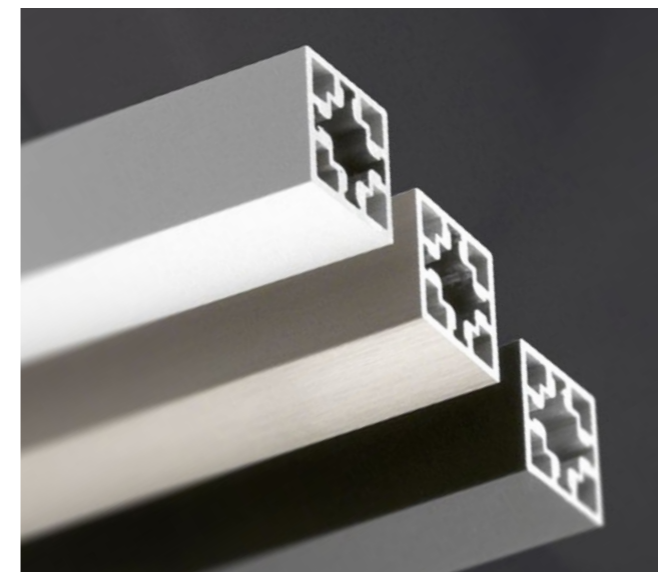


The structural principle of profiles and connectors



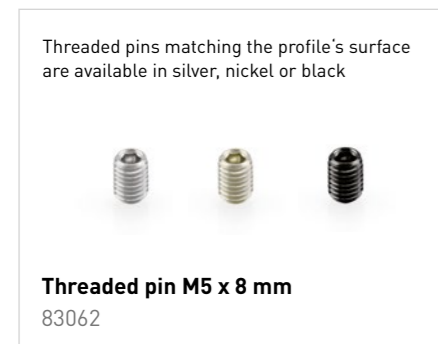
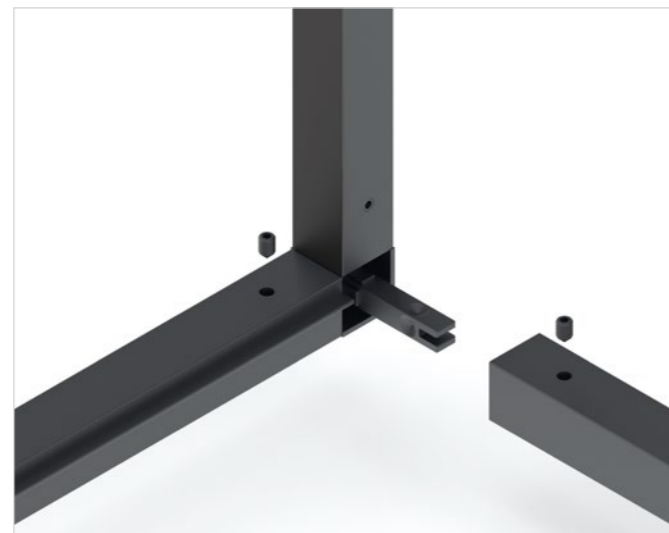
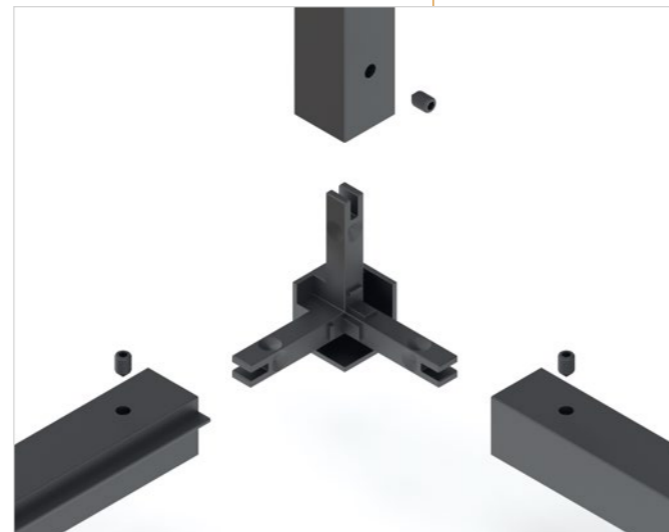
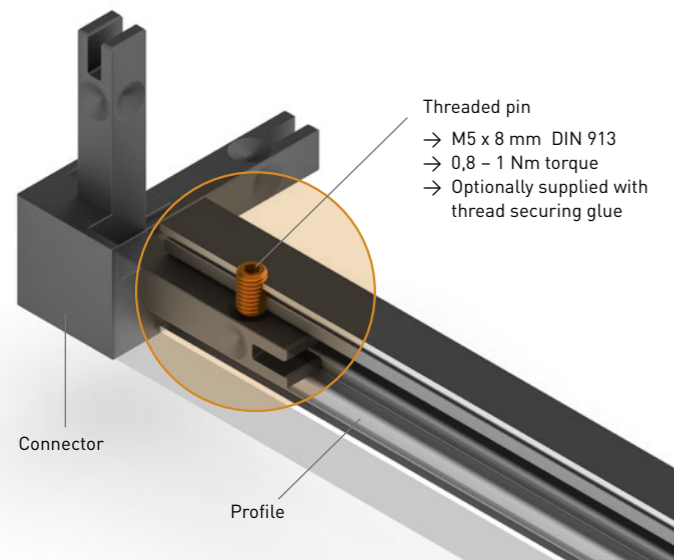
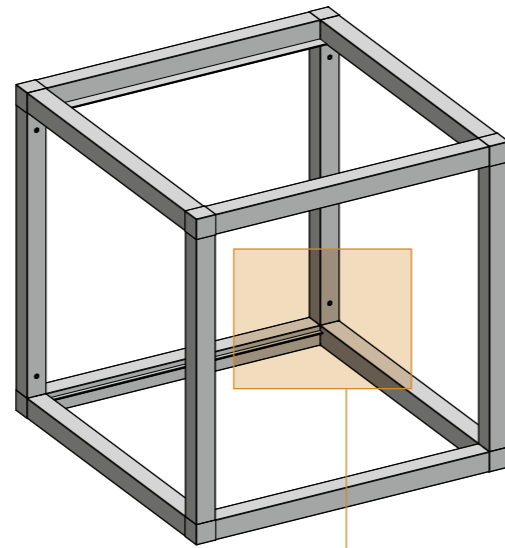
The system is based on connectors and profiles that can be used according to your creative ideas. Whether long or short, wide or narrow, open or closed, on the wall or on the floor, almost every piece of furniture is

possible. Our profiles and connectors are perfectly coordinated in colour. Our CADRO 21 basic components are available in the three standard colours black matt, silver matt and stainless steel matt brushed.



Safe connection

To ensure high stability, strength and safety, the profiles are connected by using threaded pins which are screwed into the connectors. The pins are optionally supplied with a thread securing glue and fastened with a 0,8 – 1 Nm torque. The M5 grub screws are fixed in the surrounding conical cavities in the connector's arms pulling together the connector and the profile without leaving any gaps. Due to the predetermined distance of the threaded hole, the connection gains its outstanding stability and security. This technology allows every user to creatively use the system with generous tolerances.

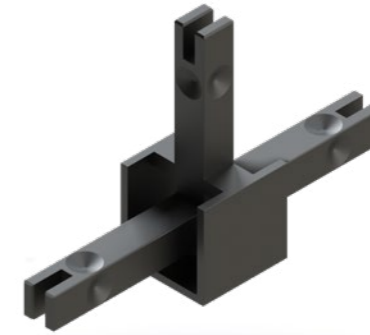


For more details regarding the thread hole see page 20.

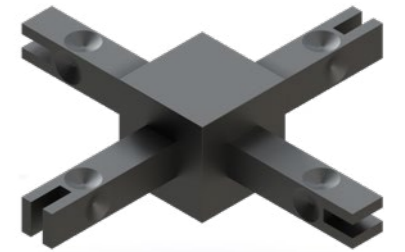
Basic connectors



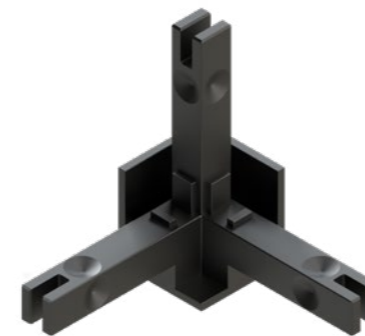
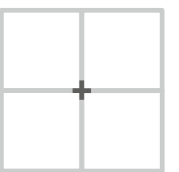
Double
83292



Triple-2D
83293



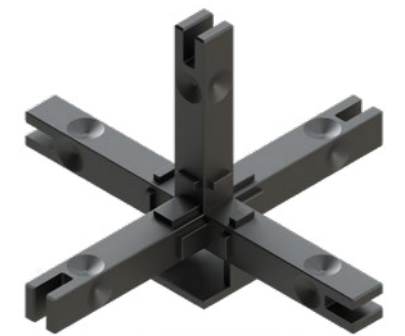
Quadruple-2D
83033



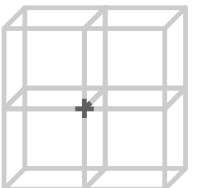
Triple-3D
83289



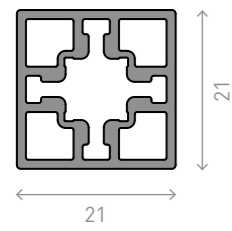
Quadruple
83290



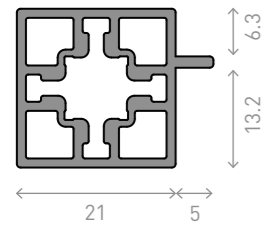
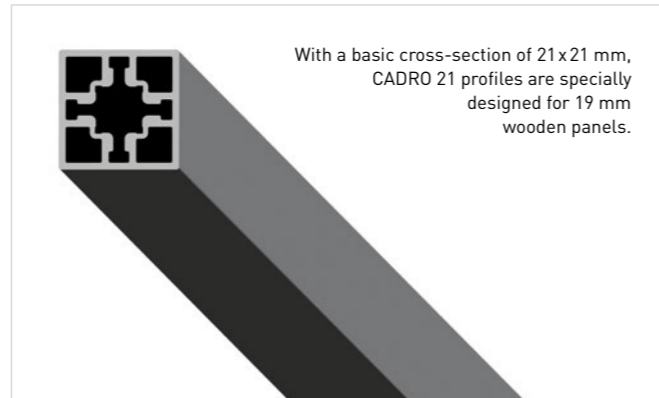
Quintuple
83291



Basic profiles



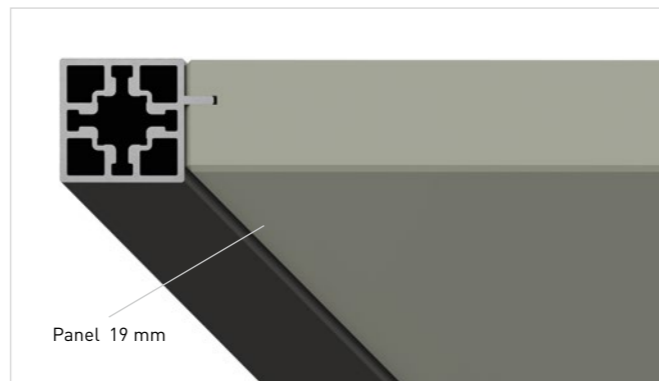
Basic profile
83272



Profile for glass panels
83273

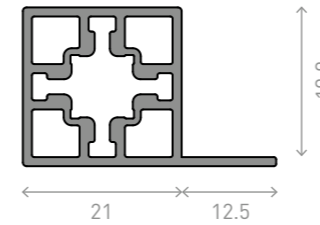
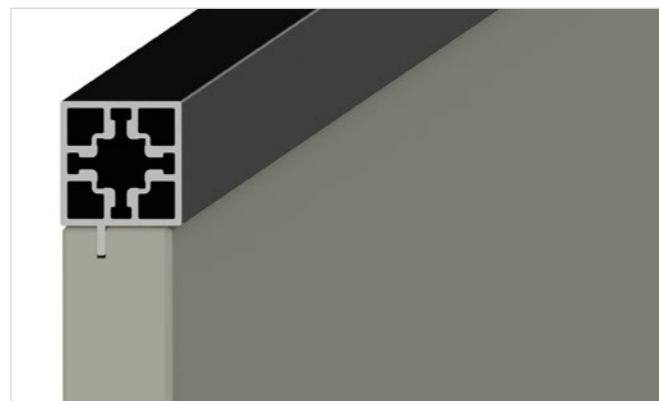


Can also be used for the assembly of 19 mm wooden panels with peripheral groove...



... or for the invisible fixing of side panels in the frame.

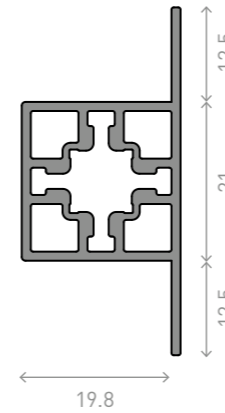
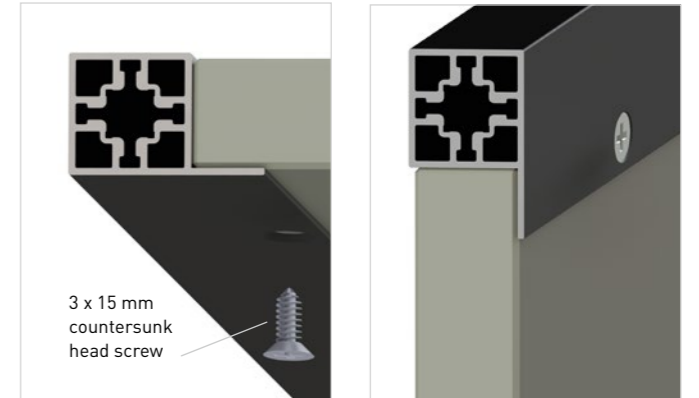
We recommend a groove width of 2 mm.



Profile for side/ shelf panels
83274

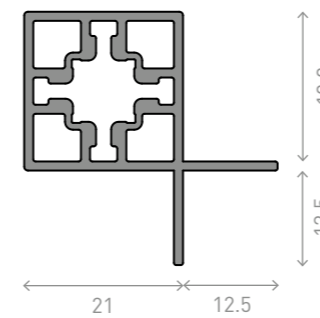
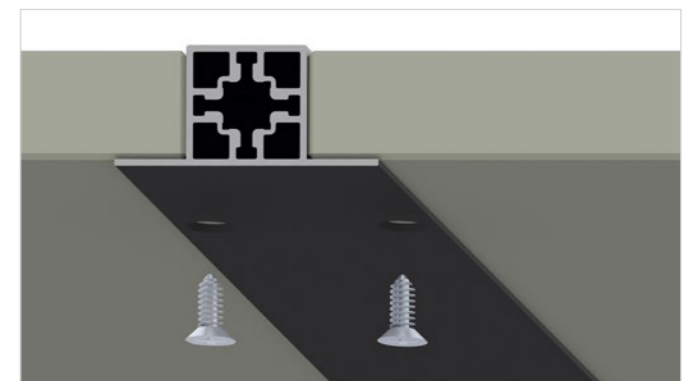
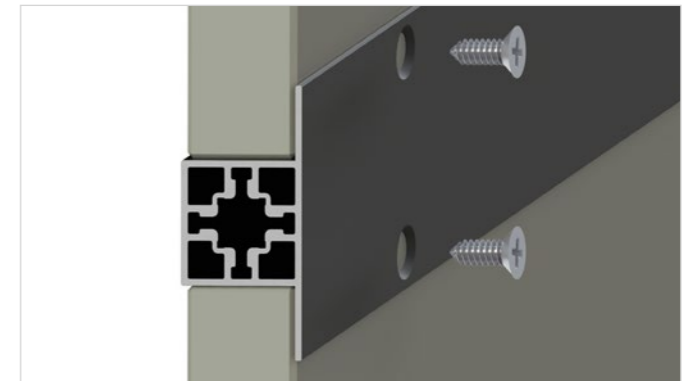
For horizontal or vertical positioning or screwing of 19 mm wooden panels in the frame.

E.g. with SPAX 3 x 15 mm countersunk head screws



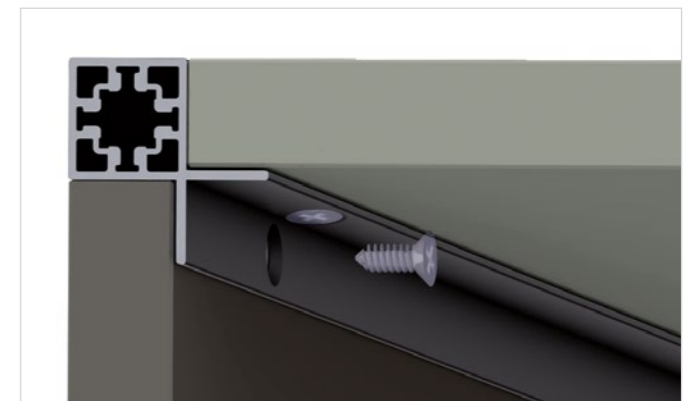
Profile for side/ shelf panels
83275

For laying or screwing 19 mm wooden panels on both sides.



Profile for side/ shelf panels
83276

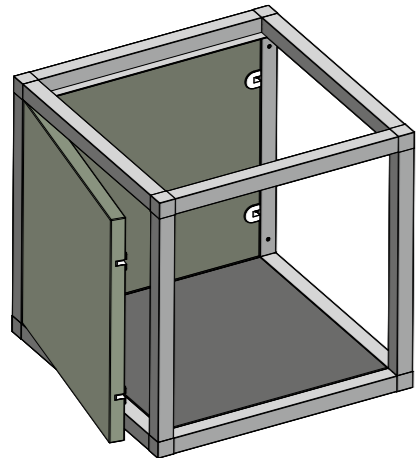
For screwing 19 mm wooden panels over-corner.



Side panels and back panels

Eccentric system

Eccentric systems offer another option to assemble chipboards. This fastening solution is visible from only one side, ensuring that the aesthetics of the furniture element is not disturbed. All commercially available eccentric systems can be used for this.



Ball spring plungers

A very elegant solution is the use of ball spring plungers to fix side or rear panels. Simply pre-drill the required holes in the edges of the panels and insert the ball spring plungers. For the CADRO 21 profile, you can use the holes of the threaded pins you already drilled for the connecting notes.



Thanks to an integrated metal spring beneath the ball, the side or rear panels simply can be „clicked in“. Thus, the fixing system remains invisible from the outside as well as from the inside.

Note: Not suitable for load-bearing walls or panels.

Doors

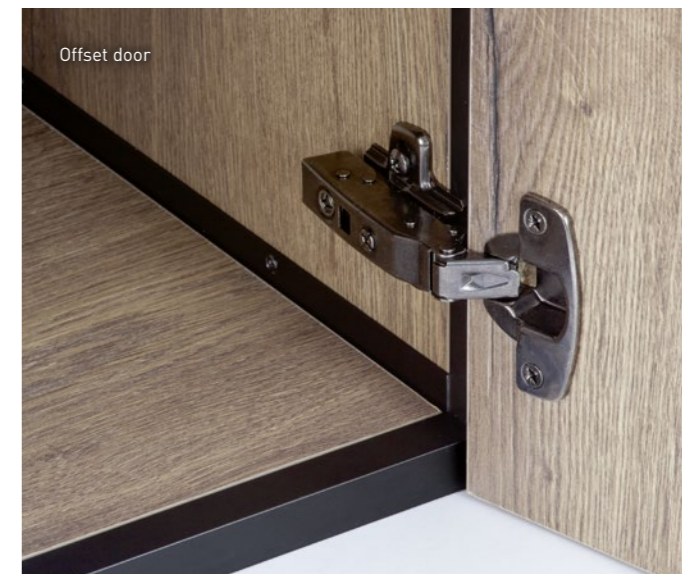
Another possibility to create your individual piece of furniture is by using hinge systems such as those from Hettich. Besides the attachment of doors inside the frame, it is also possible to fix offset doors. Thus, it is also possible to create completely closed pieces of furniture.

Hinge recommendation

Hettich Sensys hinges **for inset doors** (base B-4) in combination with Sensys cross mounting plates. The choice of the mounting plate depends on the individual application, e.g. joint 1 mm / cup distance C=4 mm: Sensys 110° hinge for inset doors + cross mounting plate distance 3 mm.

Hettich Sensys hinges **for offset doors** (base 12,5 mm) in combination with Sensys screwable cross mounting plates (being fixed with countersunk head screws, diam. 5,4 x 18 mm), The choice of the mounting plate depends on the individual application, e.g. overlay 17 mm / joint 1 mm / cup distance C=4,5 mm: Sensys 110° hinge for offset doors + cross mounting plate distance 0 mm.

In some cases it may be necessary to reinforce the mounting plates.



Door stop

Our rubber-damped door stop is ideal for inset doors. It can be used for single doors or in the centre for double doors.



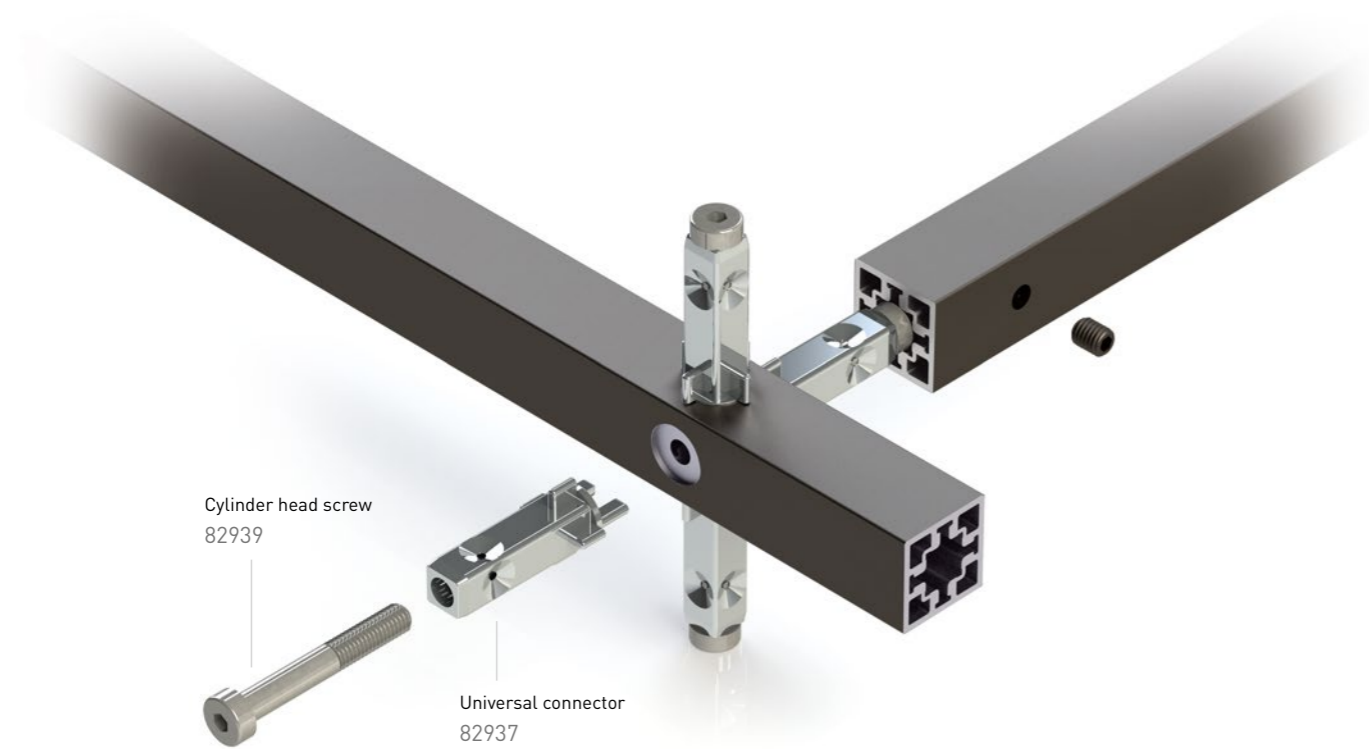
Alternative profile attachment

Universal connector

Another possibility to connect the profiles without connectors is the use of the universal connector. It can be screwed through two holes on each flat side of the profile and is therefore suitable for a wide range of applications.



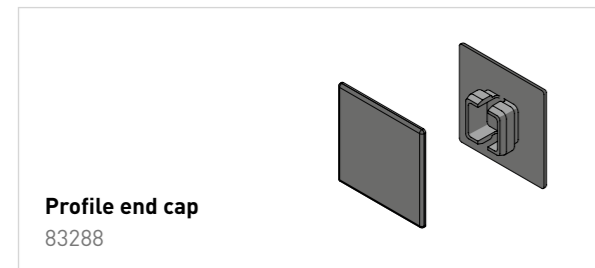
Universal connector
82937



Cylinder head screw
82939

Universal connector
82937

Combined with the profile end cap 83288 it is now possible to create closed corner connections. The very flat cap is simply pressed into the open end of the profile, providing a secure and clean finish.



Profile end cap
83288

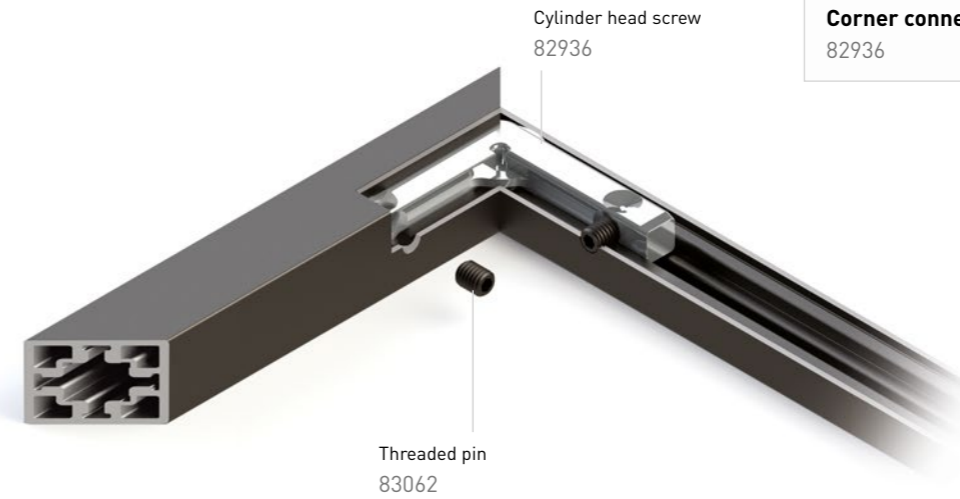


Corner connector

By using the corner connector, the CADRO 21 profiles can be assembled at right angles without nodes. The profile ends are mitre-cut, the corner connector is inserted and then firmly fixed with the threaded pins. Thus, it is very easy to create mirrors or various kinds of frames.



Corner connector
82936

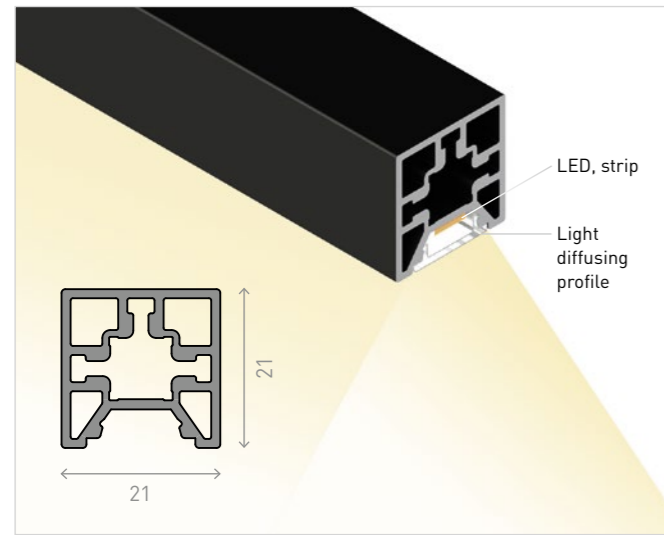


Cylinder head screw
82936

Threaded pin
83062



Lighting profiles

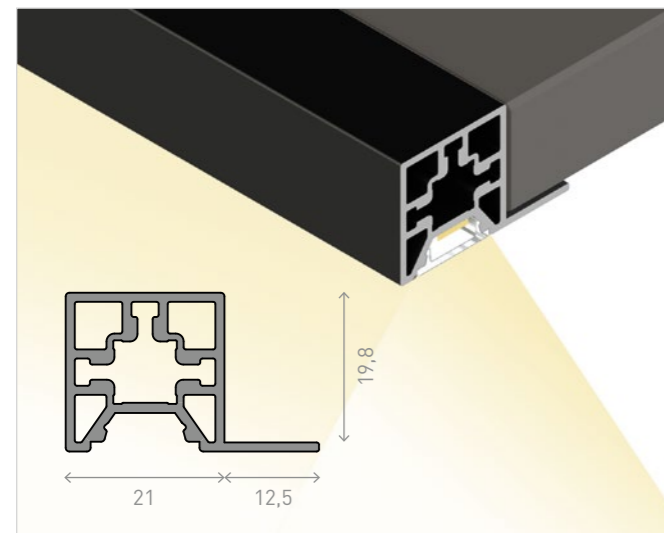


Basic lighting profile

In the living room, kitchen area or for shop fitting purposes: our specially designed lighting profiles put everything in the right light!

The basic lighting profile can be used for all applications where no shelf panels or back panels are required. In open shelf systems it can be mounted at the top, bottom, front, rear or vertical position in order to create completely new lighting accents.

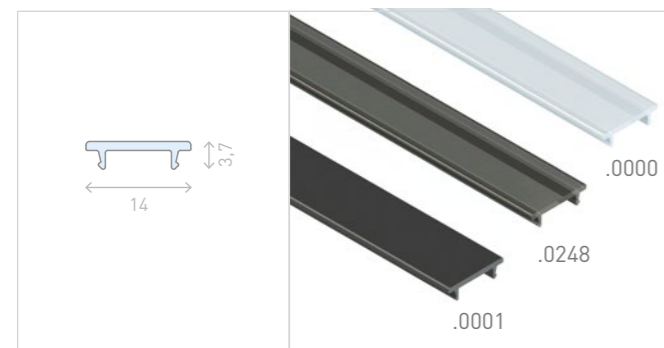
Basic lighting profile 83284



Lighting profile for shelf panels

The lighting profile for shelf panels is equipped with an additional small bar to fix 16 mm shelf or back panels. Similar to the basic lighting profile, all light diffusing profiles can be used. The interior structure remains the same. Thanks to the two lighting profiles it is possible to create a large variety of lighting ideas and accents.

Lighting profile for shelf panels 83285



Light diffusing profile / cable cover

The profile 82903 is available in translucent, translucent black and matt black. It is simply clicked onto the light profile in the desired length and diffuses or dims the light of the inserted LED strip. In matt black, it serves as a cover for power supply cables.

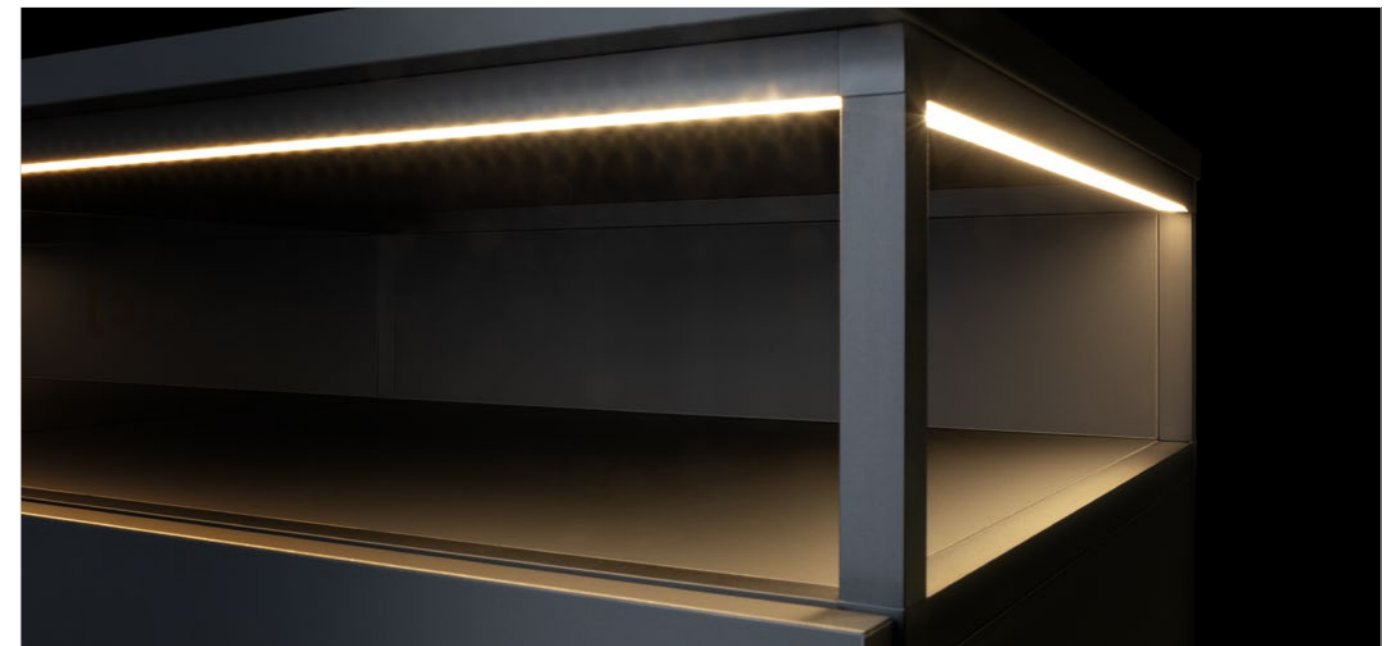
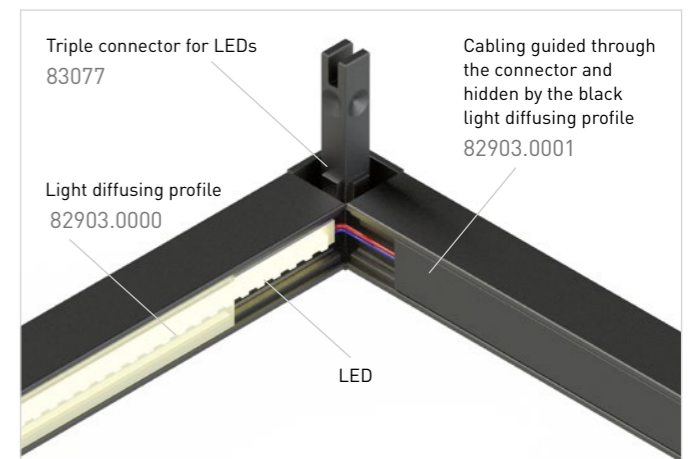
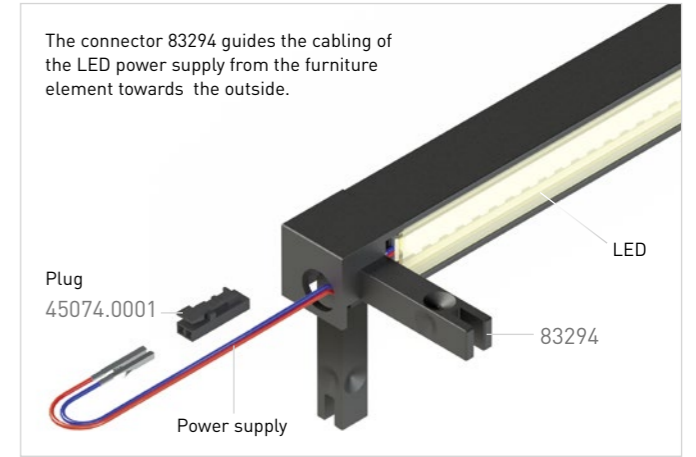
Light diffusing profile / cable cover 82903

Connector for power supply



Triple for power supply 83294

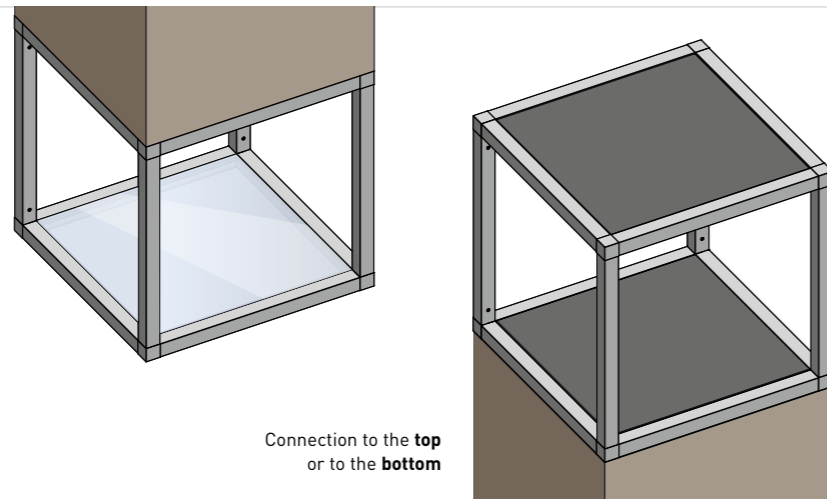
Connector 83294 is used to guide the power supply cable into the CADRO 21 frame.



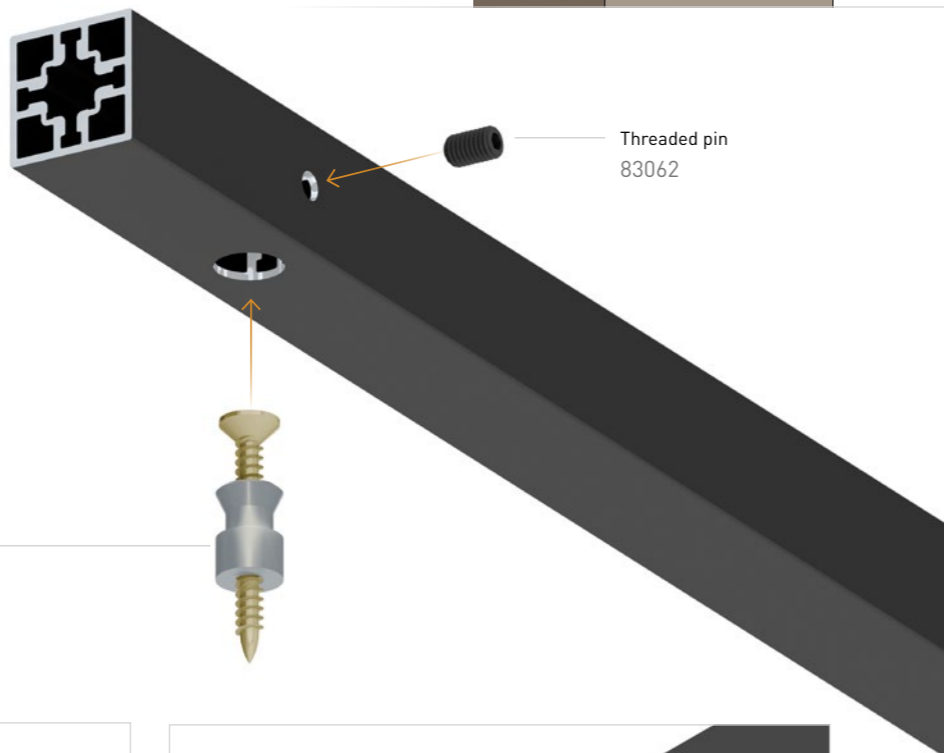
Perfect connection

In order to offer a discreet and stable solution to integrate the system into existing furniture elements, we have developed a fastening insert that is as simple as it is efficient.

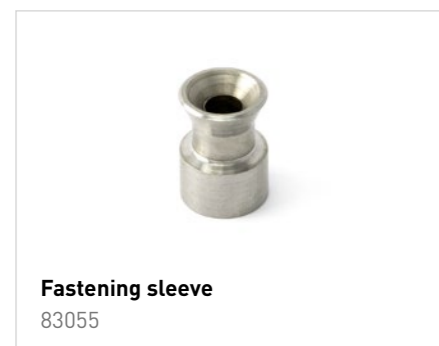
The connection using the fastening sleeve is screwed into the existing furniture element either at the top or at the bottom. Then simply place the predrilled CADRO 21 profile in the required position and secure it with a threaded pin... and that's it!



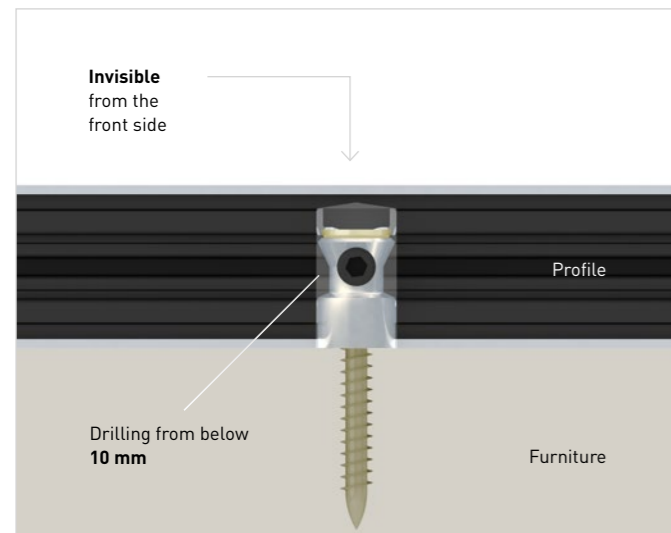
Connection to the **top**
or to the **bottom**



Threaded pin
83062



Fastening sleeve
83055

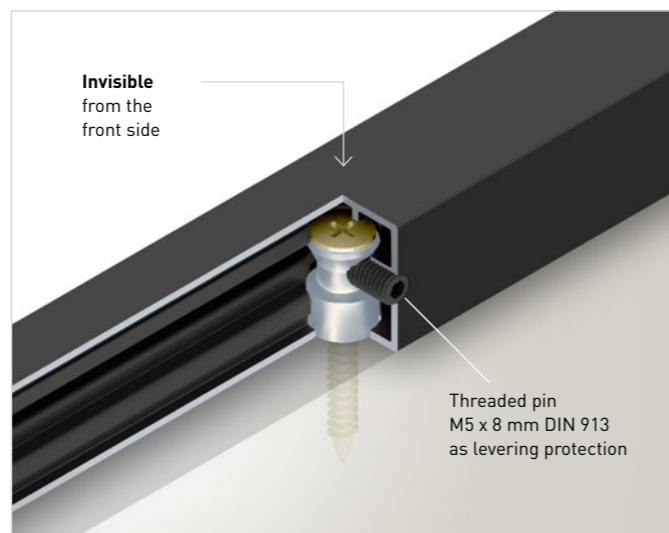


Invisible
from the
front side

Drilling from below
10 mm

Furniture

Profile



Invisible
from the
front side

Threaded pin
M5 x 8 mm DIN 913
as levering protection

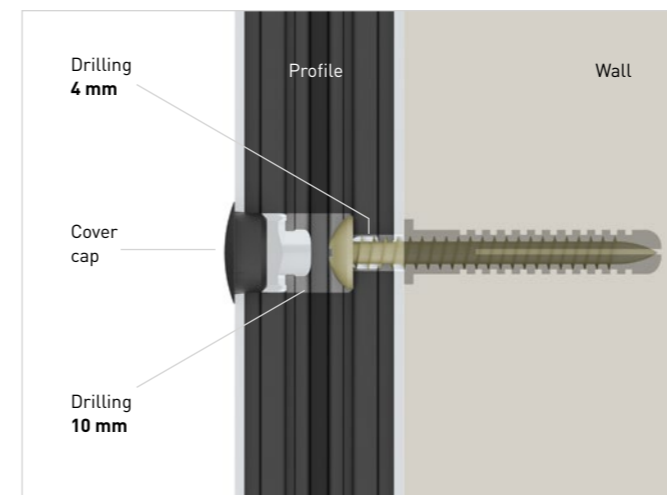


Simple alternative

Alternatively, the frame profile can simply be attached to the furniture or the wall with a countersunk flat-head screw. The hole is then sealed with a cover cap.



Cover cap
82922



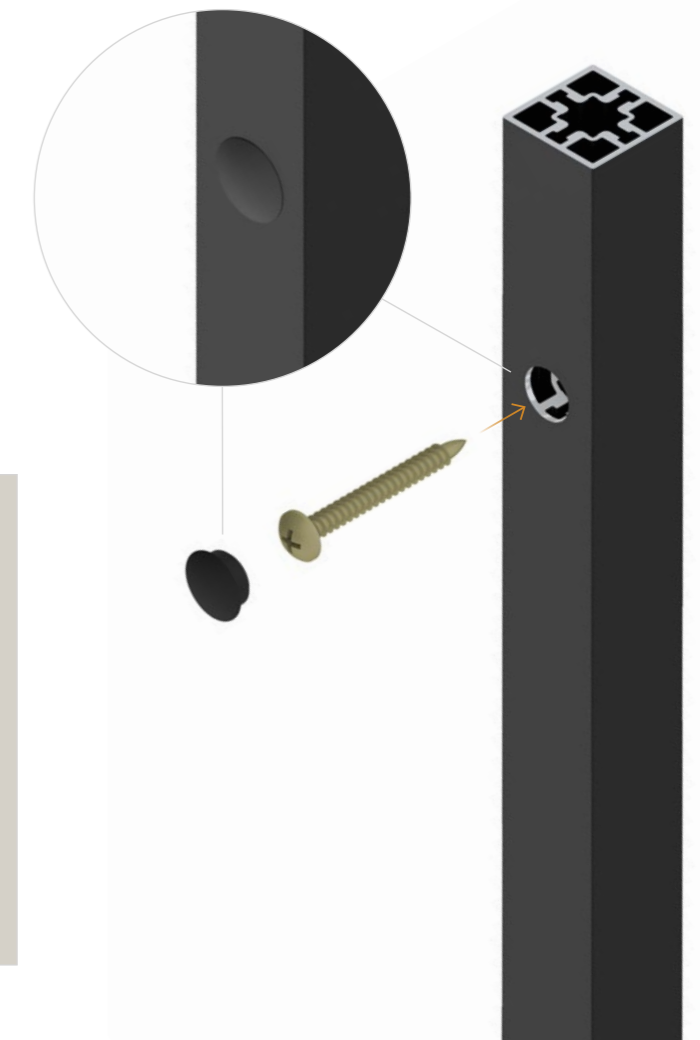
Drilling
4 mm

Profile

Wall

Cover cap

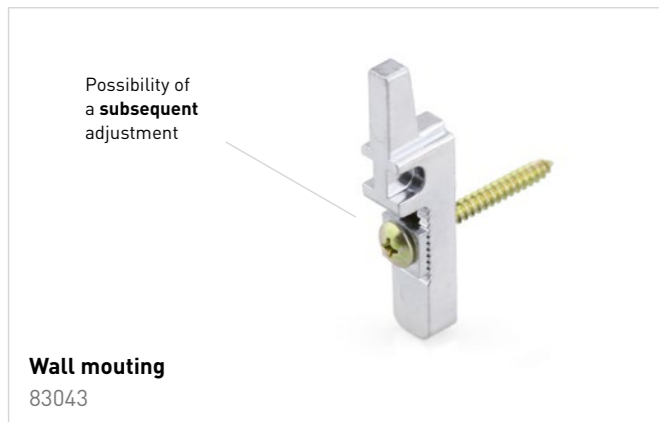
Drilling
10 mm



Invisible wall mounting system

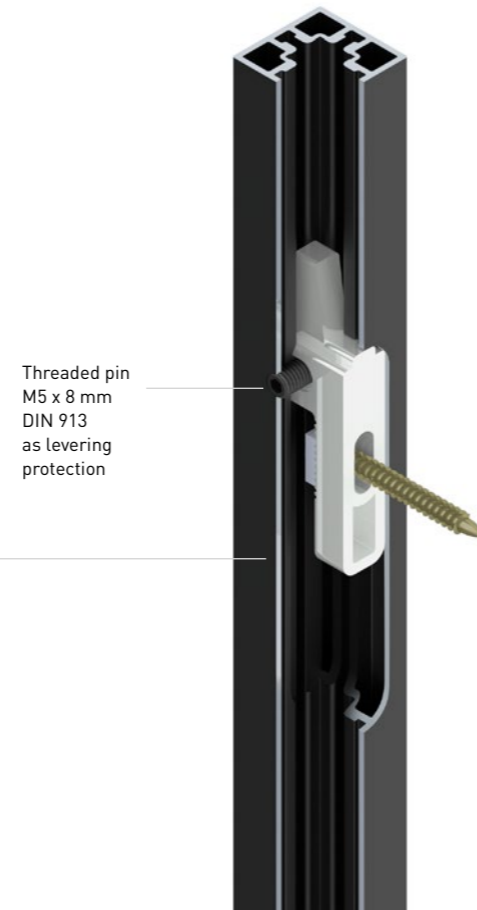
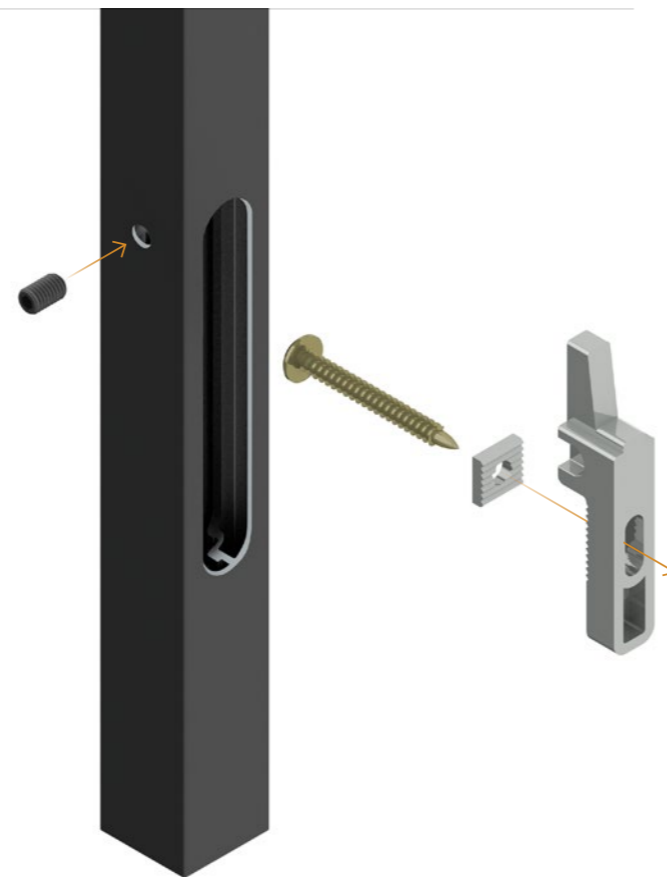
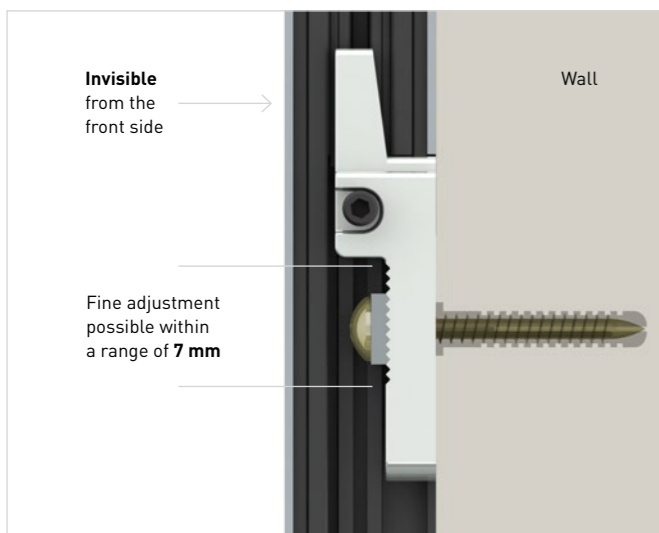
Our idea: an elegant system needs an elegant and discreet fixing solution. The result is simple but unbeatable in its function:

A supporting system that is fastened to the wall on which the furniture element can be hung, fixed and adjusted afterwards. The system allows an easy and precise adjustment of height even after mounting. The result: the wall mounting system is not visible from the front side and the furniture element is safely and firmly fixed.



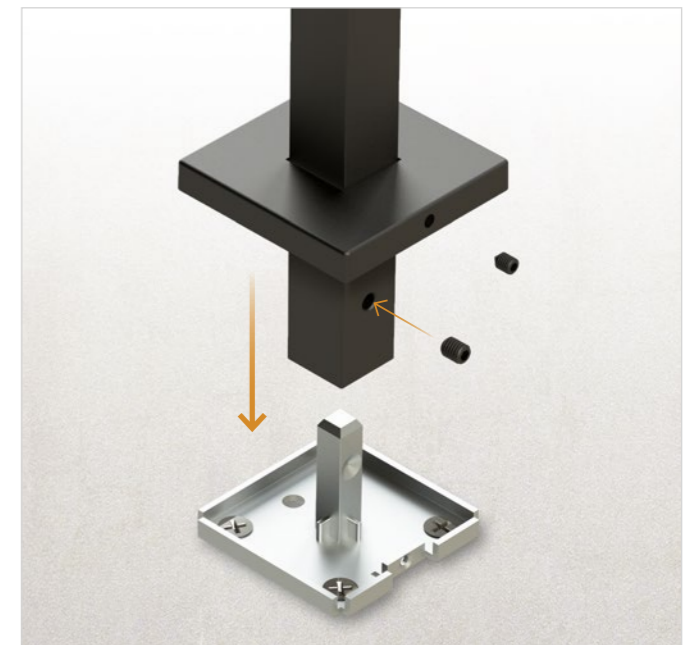
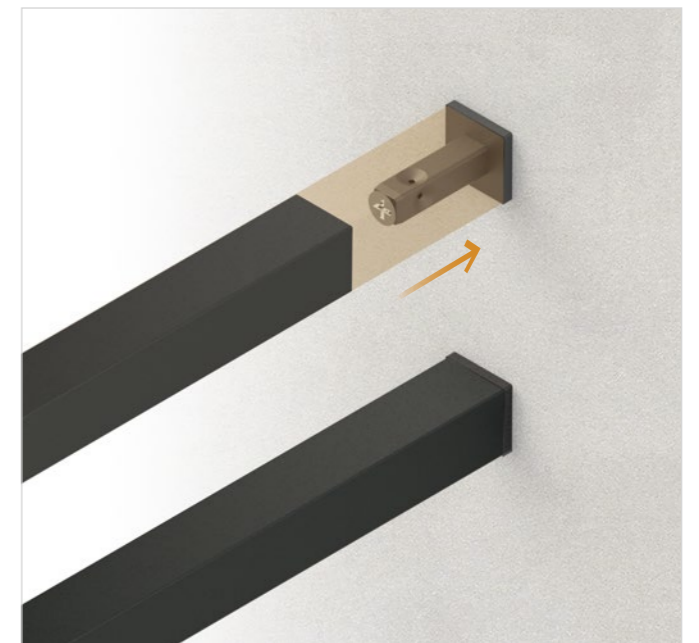
The wall mounting system is supplied as a complete kit consisting of supporting system, threaded pin in 3 colours and flat head screw with spacer for the fine adjustment.

For more details regarding the cutout and the thread hole see page 22.



Connecting elements

The connecting elements specially developed for the CADRO 21 product range stand for an easy and secure fixation of objects within the room, on walls, floors and ceilings. At the same time they perfectly match the CADRO 21 design.



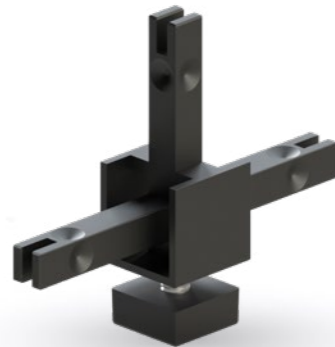
Connectors with height-adjustable stand

For pieces of furniture that rest on the floor with their connectors and profile elements, a height-adjustable foot is indispensable. For exactly this kind of furniture we have developed additional connectors with adjustable stands.

These connectors offer a height-adjustable range from 0–5 mm.



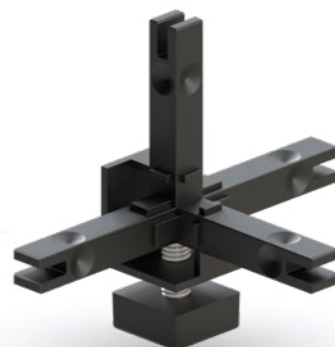
Double with stand
83317



Triple-2D with stand
83318



Triple-3D with stand
83314



Quadruple with stand
83315



Quintuple with stand
83316

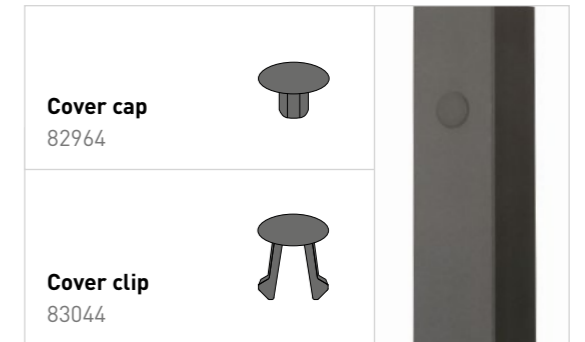
Accessories

Cover cap for M5 threaded pin

This specially developed, very discreet cap 82964 is used to cover screwed-in threaded pins and gives your piece of furniture an even more uniform look.

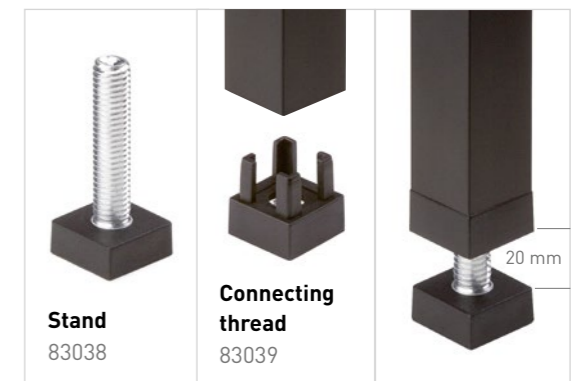
Cover clip for 4-6 mm drilling holes

The cover clip 83044 is used to cover Ø 4–6 mm drill holes and thus gives your piece of furniture a more uniform appearance.



Adjustable foot and connecting thread

A flexible height adjustment of the furniture leg is very important in furniture design. Our version offers an adjustable range of height from 0 to 20 mm. The foot is simply screwed into the profile's end with the help of our connecting thread 83039. This offers an optimal and quick solution to create height-adjustable furniture feet: saw the profile to the required length, insert the connecting thread and screw in the furniture foot, finished!



Self-adhesive felt pads

If your piece of furniture touches the floor with its side profiles and connecting nodes, we recommend the use of our custom-fit felt pads to protect your furniture and your floor from being scratched.



Castors

As for furniture elements that have to be mobile (e.g. tea trolleys, TV stands, etc.), the use of castors is an option. There are many versions available on the market, such as versions with or without brake, which are compatible with our CADRO 21 system. The castors should be provided with an M8 or M10 thread. As for M8 threads, a rivet nut has to be used. M10 threads can directly be cut into the profile.



Processing and technology

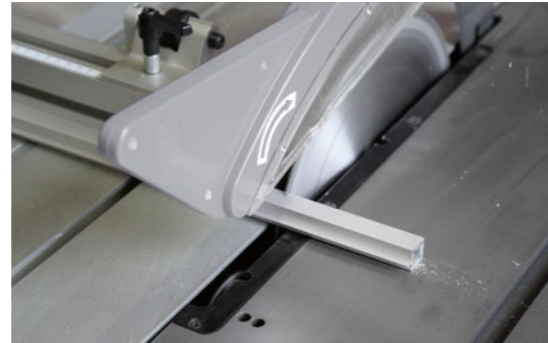
Technically simple and easy to handle

Whether you assemble your furniture completely by yourself, use custom-made predrilled and/or premilled profiles, or order the fully assembled furniture element – the choice is yours.

Working steps illustrated by the example of smaller manufacturers:

Sawing

Each profile can be cut to its required length using a standard table saw with an aluminium resistant saw blade.



Drilling and threading

Afterwards the holes for the threads are drilled at standard distance to the profile's end. These are used to fasten the nodes.

The hole is being drilled with a standard 4.5 mm drill. Afterwards screw in the M5 threaded screw using a cordless screwdriver. By doing this, the threaded pin cuts its own thread into the aluminum profile.

Thanks to generous tolerances processing is easy for everyone.



Milling

For the invisible wall mounting a cutout is made on the back of the furniture element. This can be done with any commercially available milling machine. It is also possible to place our manufacturing aid on a milling machine for all manufacturing steps.

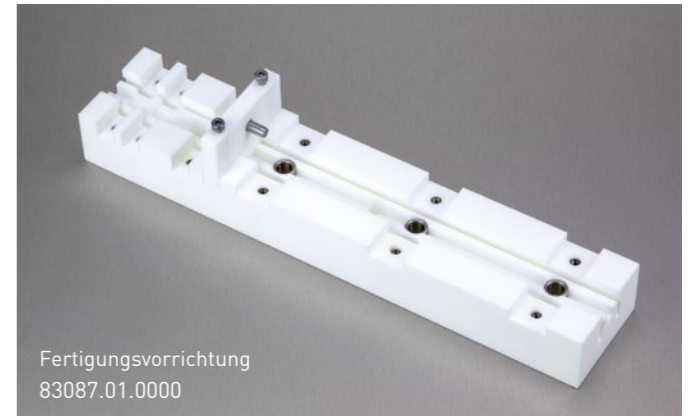
Done! With this, the basic concept of the CADRO 21 system has been explained – now there are no limits to your creativity.



Tools

Manufacturing aid

This device provides a technical solution for precise drilling of holes and threading. It offers the fastest and easiest way to drill and mill accurate holes and cutouts. The dimensions of this extremely solid plastic block are perfectly matched to the CADRO 21 system profiles with a base of 21 x 21 mm.



Pillar drilling machine

As a working tool, we recommend a pillar drilling machine which allows you to easily carry out all drilling and threading work required for the CADRO 21 system.









Do not hesitate to contact us, we will be glad to answer any further questions you may have regarding the CADRO 21 frame system.



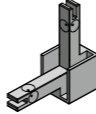
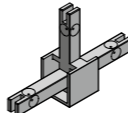
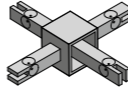
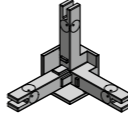
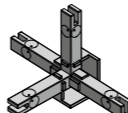
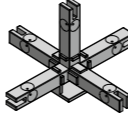
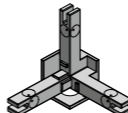
Alternatively...

... we offer to deliver your order made to measure with predrilled and premilled profiles. Or you can order your furniture components according to your specifications, and we will supply the fully assembled frame – tailor-made to meet your requirements.

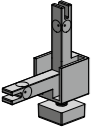
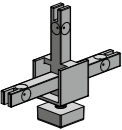
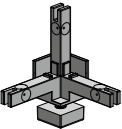
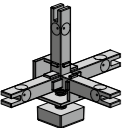
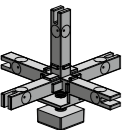
Profiles

Art. No.	Description	PU	Material	Colour
Basic profiles				
	83272 Basic profile (2360 mm length)	10	Aluminium	.0170 .0098 .0180
	83273 Profile for glass panels (for 6 mm glass panels) (2360 mm length)	10	Aluminium	.0170 .0098 .0180
	83274 Profile for side/shelf panels (for 19 mm profiles, screw-connected) (2360 mm length)	10	Aluminium	.0170 .0098 .0180
	83275 Profile for double side/shelf panels (for 19 mm panels, screwable) (2360 mm length)	10	Aluminium	.0170 .0098 .0180
	83276 Profile for side/shelf panels (for 19 mm panels, screwable over the corner) (2360 mm length)	10	Aluminium	.0170 .0098 .0180
Lighting profiles				
	83284 Basic lighting profile (2360 mm Länge)	10	Aluminium	.0170 .0098 .0180
	83285 Lighting profile for shelf panels (for 19 mm panels) (2360 mm length)	10	Aluminium	.0170 .0098 .0180
	82903 Diffusing profile/cable cover (2360 mm length)	10	PC	.0000 .0248 .0001







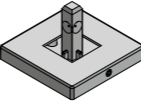
Connectors

Art. No.	Description	PU	Material	Colour
Basic / lighting connectors				
	83292 Double	48	Zamac	.0033 .0067 .0174
	83293 Triple-2D	48	Zamac	.0033 .0067 .0174
	83033 Quadruple-2D	48	Zamac	.0033 .0067 .0174
	83289 Triple-3D	48	Zamac	.0033 .0067 .0174
	83290 Quadruple-3D	48	Zamac	.0033 .0067 .0174
	83291 Quintuple	48	Zamac	.0033 .0067 .0174
	83294 Triple for power supply	48	Zamac	.0033 .0067 .0174










Connectors

Art. No.	Description	PU	Material	Colour
Connectors with stand				
	83317 Double (including adjustable stand, 5 mm height adjustment)	48	Zamac, steel, plastic	.0033 .0067 .0174
	83318 Triple-2D (including adjustable stand, 5 mm height adjustment)	48	Zamac, steel, plastic	.0033 .0067 .0174
	83314 Triple-3D (including adjustable stand, 5 mm height adjustment)	48	Zamac, steel, plastic	.0033 .0067 .0174
	83315 Quadruple (including adjustable stand, 5 mm height adjustment)	48	Zamac, steel, plastic	.0033 .0067 .0174
	83316 Quintuple (including adjustable stand, 5 mm height adjustment)	48	Zamac, steel, plastic	.0033 .0067 .0174



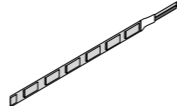

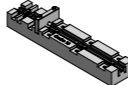

Connection and fastening

Art. No.	Description	PU	Material	Colour
Connectors and fastening elements				
	82936 Corner connector (invisible)	48	Zamac	.0091
	82937 Universal connector (invisible)	48	Zamac	.0091
	82939 Cylinder head screw with hexagon socket, M5 x 35 mm DIN 4762	200	Steel	.0000
	83043 Wall mounting, 1 Set = 2 pcs. (including main fastening system, adjustment plate, screw, dowel, threaded pin in silver, stainless steel, black)	20	Zamac, steel	.0000 Zinc-plated
	83055 Fastening sleeve, 1 Set = 2 pcs. (to fix shelf panels at the bottom)	100	SUS 201	.0090
	83295 Wall / floor attachment	48	Zamac	.0033 .0067 .0174
	83296 Wall / floor attachment	48	Zamac	.0033 .0067 .0174






















Accessories

	Art. No.	Description	PU	Material	Colour
Accessories					
	83288	End cap for basic profile (to cover a profile, thin version)	100	ABS	.0001 .0067
	83038	Stand, 20 mm height adjustment, 1 Set = 2 pcs.	10	Steel, PA 6	.0000 Black
	83039	Connecting thread, M8, 1 Set = 2 pcs.	10	PA 6	.0000 Black
	82922	Cover cap, 1 Set = 2 pcs. (for 10 mm drill holes)	100	ABS	.0001 .0007
	82964	Cover cap (for 10 mm drill holes)	1000	PP	.0001 .0007 .0225
	83044	Cover clip (for 4-6 mm drilling holes)	1000	PP	.0001
	83062	Threaded pin, M5 x 8 mm DIN 913	200	Steel	.0186 .0091 .0090
	83063	Threaded pin with secure glue, M5 x 8 mm DIN 913	200	Steel	.0186 .0091 .0090
	82942	Ball spring plunger	200	Steel	.0000

Accessories

	Art. No.	Description	PU	Material	Colour
Accessories					
	82935	Felt pads, 1 Set = 25 pcs.	1	Felt	.0000
	83048	Door stop, 1 Set = 2 pcs.	100	Plastic	.0001 .0230
LED ribbons – self-adhesive					
	45070 45069 45071 45072	LED ribbon, warm white, 12 V, power cable length 1,5 m 340 mm length, 2,6 W (for 400 mm CADRO furniture width 1 set = 5 pcs.) 540 mm length, 4,5 W (for 600 mm CADRO furniture width 1 set = 5 pcs.) 840 mm length, 6,5 W (for 900 mm CADRO furniture width 1 set = 4 pcs.) 1140 mm length, 9 W (for 1200 mm CADRO furniture width 1 set = 3 pcs.)	1		.3001
	45074	Mini AMP plug	100	Plastic	.0001
Tools					
	83087.01	Manufacturing aid	1	PA	.0000
	82927.00	Pillar drilling machine	1		.0000

Surfaces

Material	Surface	Colour	Material	Surface	Colour
Profiles			Connectors and accessories		
Aluminium	 Black matt anodized	.0170	Zamac/ plastic	 Black supermatt painted	.0033
	 Silver matt anodized	.0098		 Silver matt painted	.0067
	 Stainless steel matt brushed anodized	.0180		 Stainless steel matt brushed painted	.0174
Plastic (clip profiles)	 Plain black	.0001	Plastic	 A2 Stainless steel	.0090
	 Black matt embossed	.0233		 Steel bright, black	.0186
	 Silver matt embossed	.0235		 Zinc-plated	.0091
	 Stainless steel matt embossed	.0234		 Grey RAL 7035	.0007
Plastic (light diffusing profiles)	 Translucent	.0000	Other materials and surfaces	 Grey RAL 7045	.0230
	 Translucent black	.0248		 White aluminium RAL 9006	.0225
	 Black matt coated	.0239			
	 Silver matt coated	.0240			
	 Stainless steel matt coated	.0241			

Additional colours available on demand. Please be aware that anodized surfaces may show slight colour discrepancies which are due to technical reasons.



Imagine new colours

Moro, Oro and Aspasia – each matt anodised and matt brushed – as well as matt white powder-coated. We are expanding our standard colour range with these warm and elegant finishes.

However, there are virtually no limits when it comes to powder-coated colours. All profiles and connectors can be powder-coated in any colour you desire.

Just ask us about your preferred colour.

