

item

**MB Building Kit System
Profiles St 8**

New Products 09/2006



Resistant to corrosion and high temperatures.

Special tasks require special materials. Corrosion-resistant stainless steel, as used in the tried and tested Profiles 8 of the item MB Building Kit System, opens up a whole range of new applications for the construction of production facilities. Line St 8 Profiles combine the universality of the building kit with a new material quality.

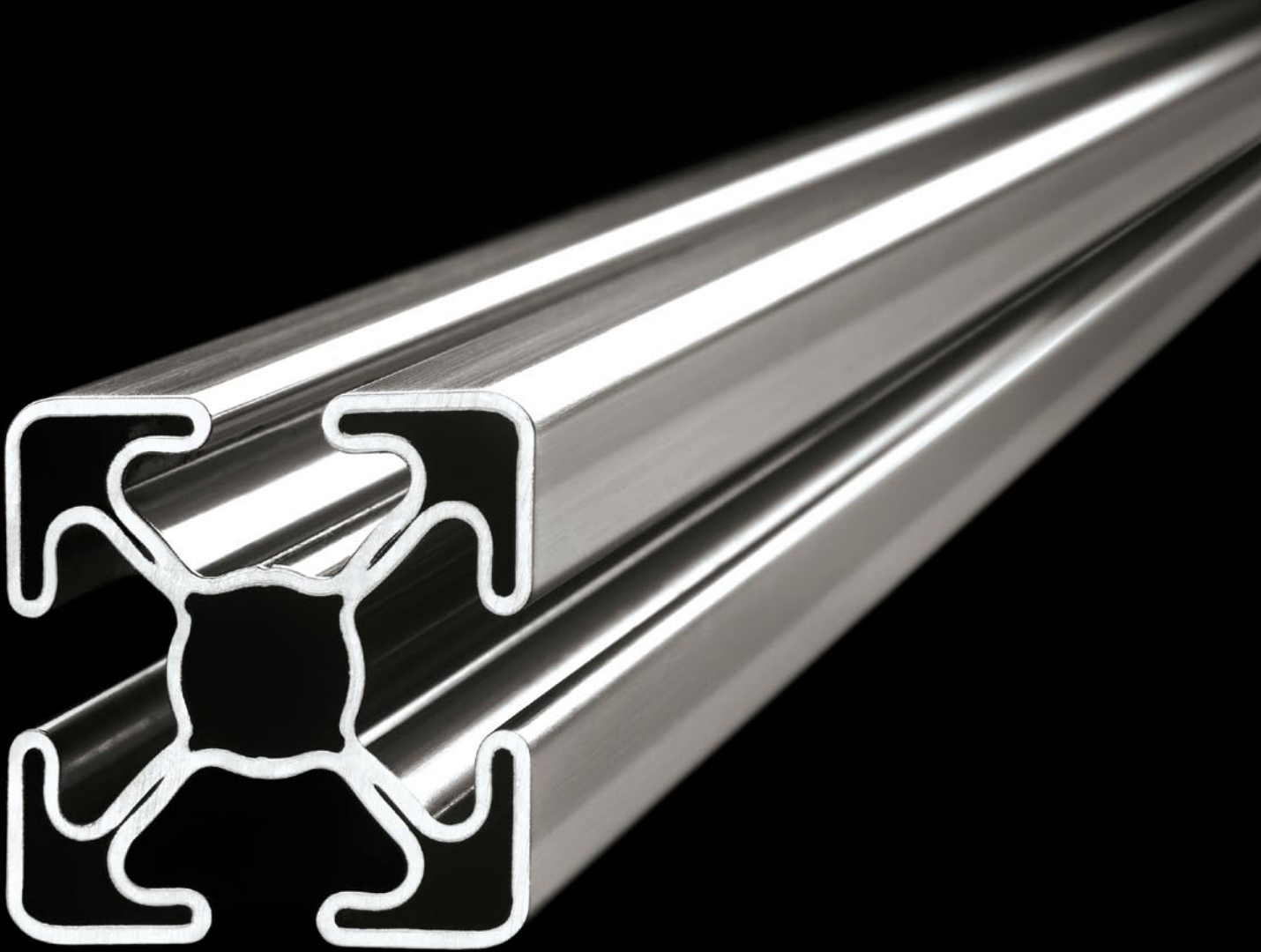
The stainless steel (V2A) used in Profiles St 8 is resistant to acids and chemicals. It is also physiologically safe and can therefore be used for items coming into contact with foodstuffs. The steel's high-grade, smooth surfaces are also easy to clean. And even temperatures of 200°C and above do not affect the rigidity of the Profiles and fastening elements.

Conductive profile connections with tried and tested fastening technology.

The building kit principle is used to great advantage. In just a short time, it is possible to create even complex structures without any special knowledge or tools.

The fastening techniques are easy to learn and quick and reliable in use. Conductive materials and surfaces reduce the amount of work involved for earthing and ESD. And the fact that all parts are available quickly minimises warehousing requirements.





Strong and vibration-resistant.

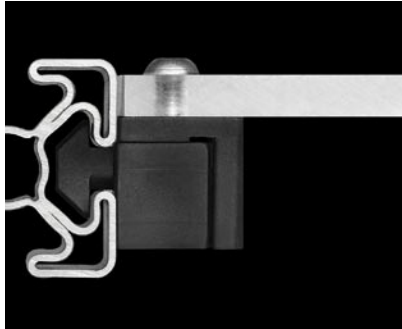
Steel is amazingly tough under peak loads. Its high tensile strength offers additional security against rupture.

It also withstands even long-term vibration without showing any signs of fatigue.

Fully compatible with the elements of the item MB Building Kit System.

Profiles St 8 are a further addition to the comprehensive MB Building Kit System. When designing these new Profiles, particular attention was paid to ensuring their compatibility with the kit's modular elements. For example, all major proven components in Line 8, such as multiblocks, can be used without any restrictions whatsoever.

Special accessories for Profiles St 8 increase the number of applications still further. In terms of material selection and load-carrying capacity, they provide a perfect match for the features of stainless steel profiles. The focus is thus on corrosion resistance and mechanical properties.

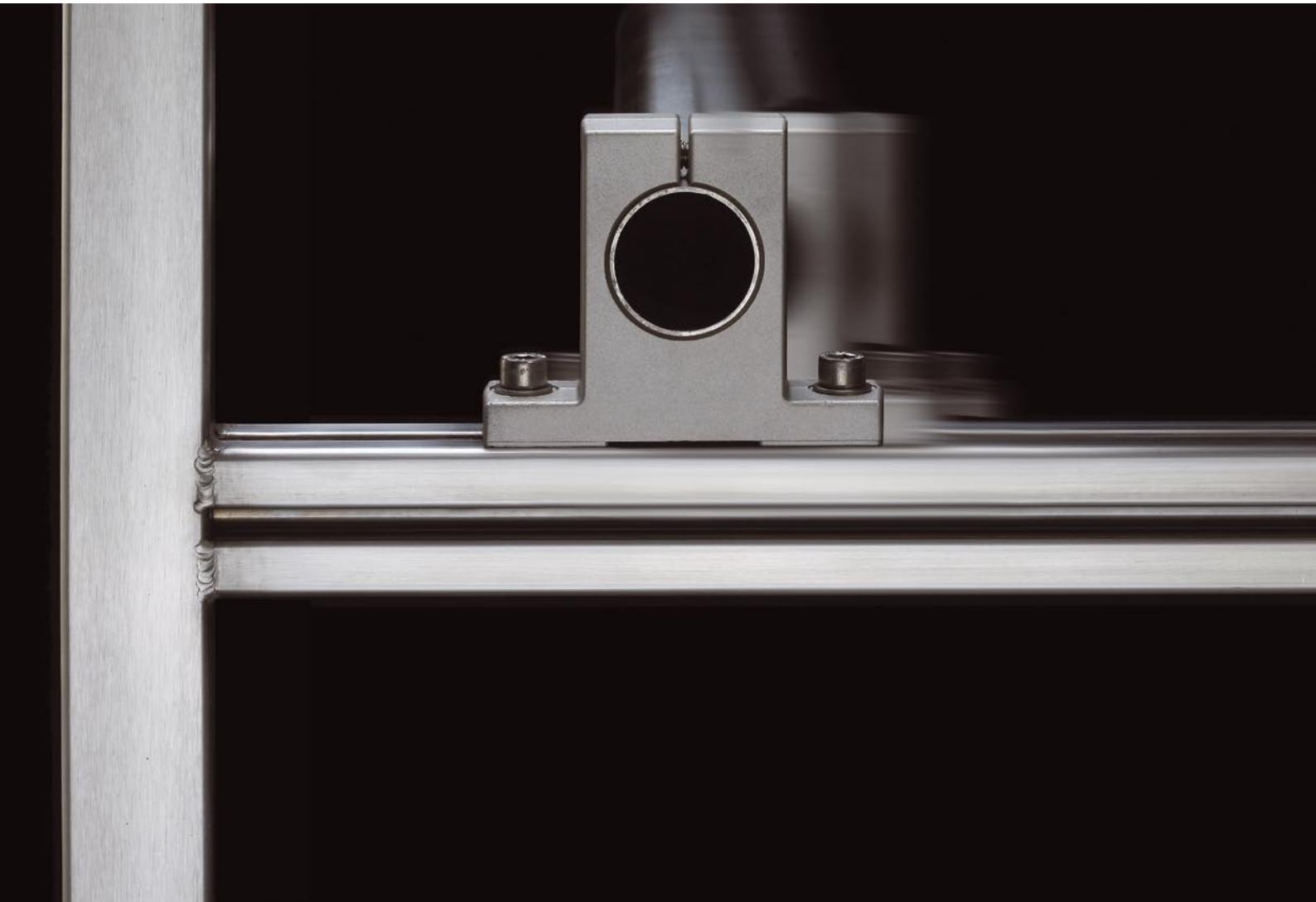


Can also be welded for special applications.

An additional plus of Profiles St 8 is the fact that they are easy to weld. When necessary, they can be welded firmly and permanently together or to other frame elements. This creates load-bearing composite steel and profile structures. The profile groove forms a universal slot, significantly increasing the flexibility of the entire structure – during both assembly and subsequent operation.

Existing screw connections can also be welded afterwards, increasing their load-carrying capacity and ensuring that any definitive position arrived at through adjustment can be maintained on a permanent basis.

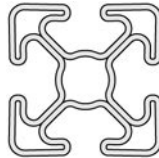




Profile St 8 40x40



The basic Line 8 profile made from corrosion-resistant steel (1.4301) is suitable for all kinds of structures requiring a particularly high load-carrying capacity and fatigue resistance.



Profile St 8 40x40
St

A = 4.64 cm² I = 7.44 cm⁴
m = 3.65 kg/m W = 3.72 cm³

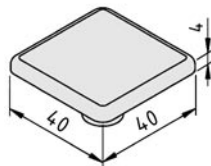
stainless, cut-off max. 6000 mm

0.0.603.16

Cap (Profile St) 8



Cap to cover the end faces of Profile St 8 40x40. Easy to assemble thanks to a press fit in the Profile's central cavity.



Cap (Profile St) 8 40x40

PA-GF
m = 6 g

black, 1 pce.

0.0.494.33

Fastening Elements



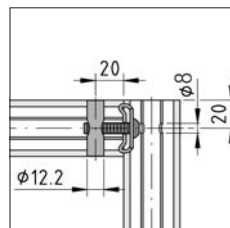
The fastening elements for Profiles St 8 work in the same way as the tried and tested Standard-Fastening Set and Universal-Fastening Set but have been adapted to the specific requirements applying to use in stainless steel profiles.

The main adjustment is in simplifying profile machining, which has been limited to the introduction of cross-holes. A special drill which is suitable for both fastening sets avoids mix-ups and simplifies tool availability.

Standard-Fastening Set (Profile St) 8

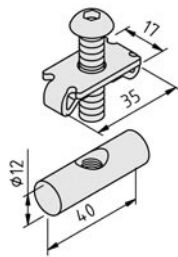


Standard-Fastening Set Profile St 8 creates a strong, right-angled power-lock profile connection requiring minimal machining. The standard connecting plate applies optimal clamping force and ensures that the Profiles are fixed in the correct position.



The fastener's counterpart takes the form of a pin with threaded bore which is inserted in one of the cross-holes (\varnothing 12.2 mm) in the Profile.

Access to the head of the fastener is provided by a correctly positioned through hole (\varnothing 8 mm).



Standard-Fastening Set (Profile St) 8

St
 Standard connecting plate 8
 Button-Head Screw ISO 7380-M8x35, tin-plated
 Threaded bolt D12x40 M8
 M = 20 Nm
 m = 59 g

stainless, 1 set

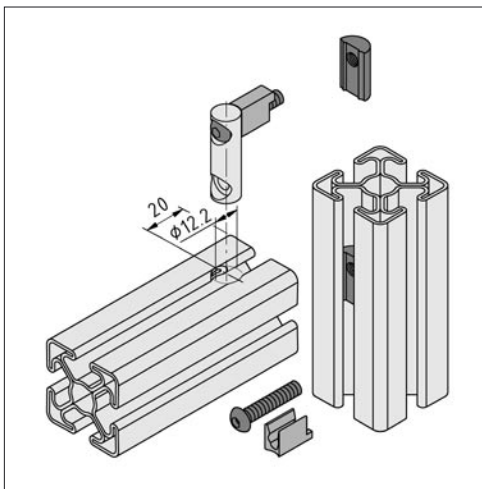
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Universal-Fastening Set (Profile St) 8 40



The Universal-Fastening Set (Profile St) 8 40 creates a right-angled profile connection for Profiles St 8 with the option of subsequent movement along the profile groove or subsequent insertion of struts in profile frames that are already closed.

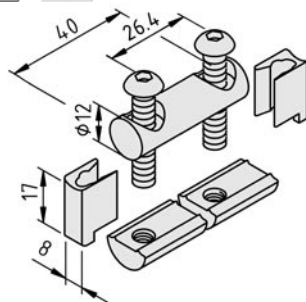
This means that it is not necessary to determine the position of the fastening point in advance.



The pre-tensioning force of the Universal-Fastening Set St 8 is applied by two screws which are tightened from the profile groove. They are screwed into T-Slot Nuts Profile St 8 M6, which are inserted in the opposite profile groove.

The fastener's counterpart takes the form of a pin with two through holes, which is inserted in one of the cross-holes ($\phi 12.2$ mm) in the Profile.

The caps are also used to fix the positions of the screws during assembly.



Universal-Fastening Set (Profile St) 8 40

St
 Connecting pin D12x40 2D6
 2 Button-Head Screws ISO 7380-M6x32, tin-plated
 2 T-Slot Nuts Profile St 8 M6
 2 Caps, PA black
 M = 8 Nm
 m = 65 g

stainless, 1 set

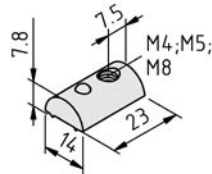
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T-Slot Nuts (Profile St) 8



T-Slot Nuts (Profile St) 8 are adapted to suit the special shape of the profile groove of Profiles St 8. They can be inserted into the grooves at any location and are fixed in place using a ball thrust piece.

A rear anti-torsion feature simplifies the process of moving the T-Slot Nut and stops it slipping out of the profile groove.



T-Slot Nut (Profile St) 8 M4

St
m = 14 g
stainless, 1 pce.

0.0.494.38

T-Slot Nut (Profile St) 8 M5

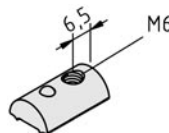
St
m = 13 g
stainless, 1 pce.

0.0.494.37

T-Slot Nut (Profile St) 8 M8

St
m = 12 g
stainless, 1 pce.

0.0.494.28



T-Slot Nut (Profile St) 8 M6

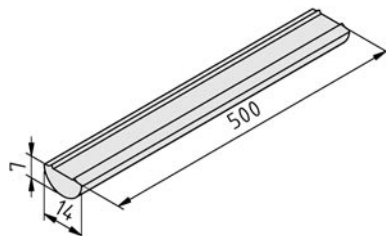
St
m = 13 g
stainless, 1 pce.

0.0.494.36

Profile Bar St 8



Profile Bar St 8 is used to prepare individual T-Slot Nuts for special applications, e.g. for assembly of complete modules. Like T-Slot Nuts St 8, Profile Bar St 8 can also be flipped into the profile groove.



Profile Bar Profile St 8

St
m = 313 g
stainless, 1 pce., length 500+1 mm

0.0.495.11

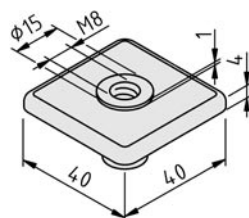
Footplate (Profile St) 8 40x40 M8



Footplate (Profile St) 8 40x40 is intended for attaching Knuckle Feet with a central M8 thread. The Footplate is press-fitted in the end face of Profiles St 8. The threaded bore engages with the spindle of the height-adjustable Knuckle Foot. Knuckle Foot D40, M8x60 stainless (Art. No. 0.0.475.41, see Comprehensive Catalogue Section. 2.1 Floor Elements) is particularly recommended.

Note: Footplate (Profile St) 8 40x40 is only intended to absorb compressive forces!

$F_{max} = 350 \text{ N}$



Footplate (Profile St) 8 40x40 M8

GD-Zn
m = 36 g

black, 1 pce.

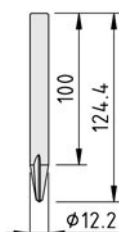
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Drill D12.2



Drill D12.2 is a special drill for working on Profiles St 8. It is used to drill the through hole ($\varnothing 12.2 \text{ mm}$) for the pins of Standard-Fastening and Universal-Fastening Sets Profile St 8.

An appropriate Drill Paste (Art. No. 1.0.002.91) must be used to lubricate the Drill when drilling the Profiles.



Drill D12.2

High-performance, high-speed steel
m = 81 g

1 pce.

0.0.602.12

Services



Saw Cut for Steel, Small Cross-Sections

1 pce. 0.0.603.79

Connection Processing Profile St, Drilled Hole D8

1 pce. 0.0.603.80

Connection Processing Profile St, Drilled Hole D12.2

1 pce. 0.0.603.81

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Conditions of use

The products in the item MB Building Kit System are suitable for use in dry conditions and over the temperature range -20°C to +70°C. item must be consulted where products are to be used for applications outside these limits.

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