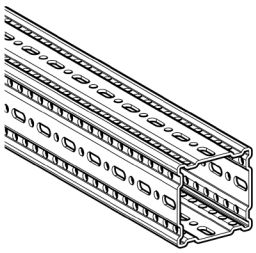
Beam Section TP F 100



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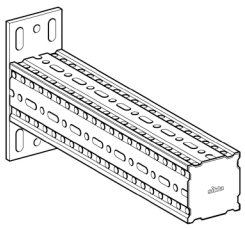
Cantilever Bracket AK F 100



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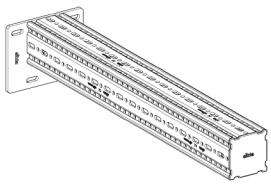
Cantilever Bracket AK F 160-100-E



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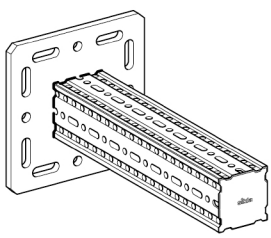
Beam Bracket TKO F 100



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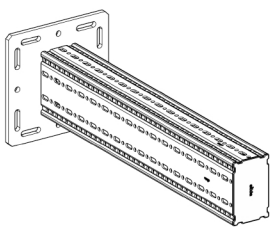
Beam Bracket TKO F 100/160



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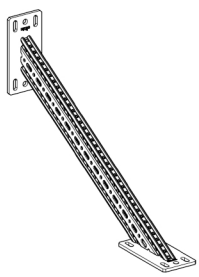
Bracing Arm SKO F 100



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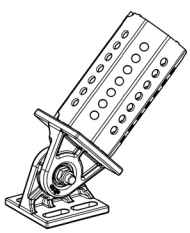
Pivot Joint GE F 100



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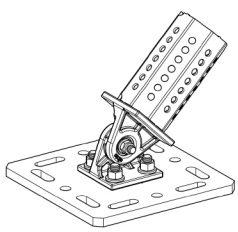
Pivot Joint GE F - ST F 100



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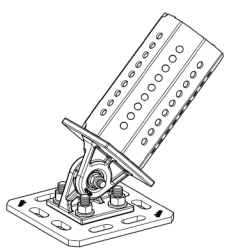
Pivot Joint GE F 100/160



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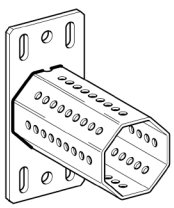
End Support STA F 100



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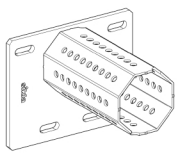
End Support STA F 160-100-E



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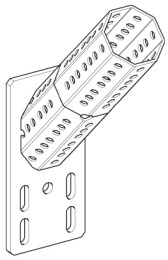
End Support STA F 100-80-E 45°



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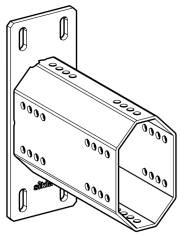
End Support STA F 100 - 100/160



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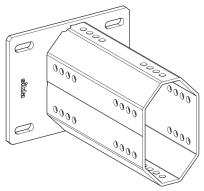
End Support STA F 160-Q



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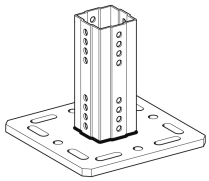
End Support WBD F 100



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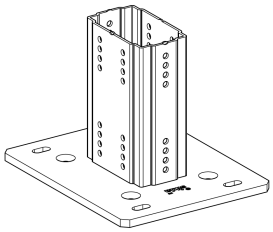
End Support WBD F 100/160



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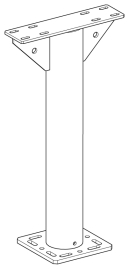
Roof duct DF AH



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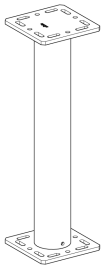
Roof duct DF AV



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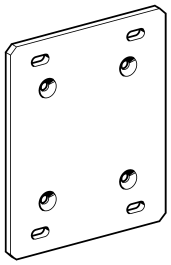
Joining Plate AP



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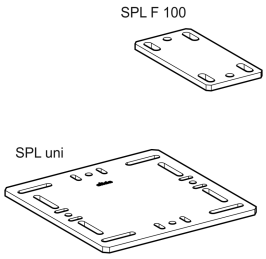
Welding Plate SPL



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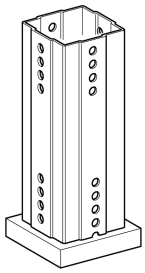
Welding Adapter ASA F 100 GPL Square



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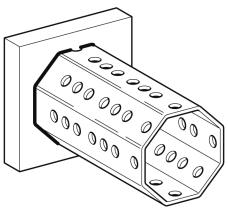
Welding Adapter ASA F 100 Octagon



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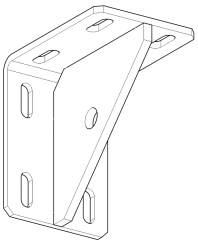
Corner Bracket WD F 100



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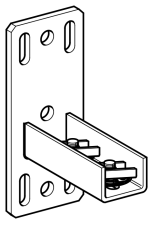
Channel Adapter SA F 100



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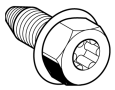
Self Forming Screw FLS F



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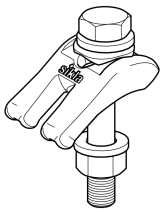
Assembly Set MS 5P



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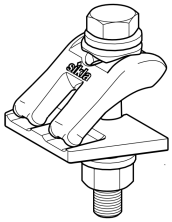
Assembly Set MS 5P MA



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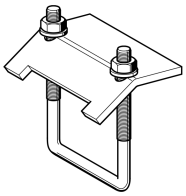
U-Holder SB F 100



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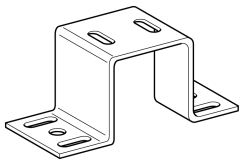
Beam Section Holder TPH F 100



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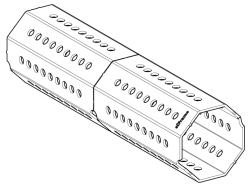
Octagonal Coupling PK F 100 8kt HCP



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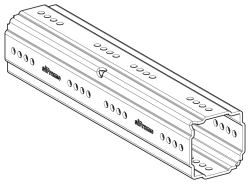
Square Coupling PK F 100 4kt HCP



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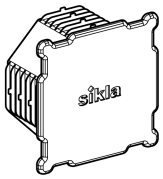
End Cap ADK F 100



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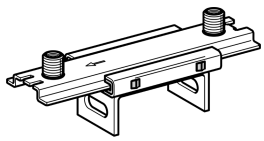
Slide Set GS F 100 2G



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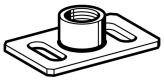
Mounting Plate GPL F 100



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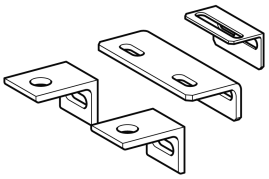
U Bolt Fastening UB F



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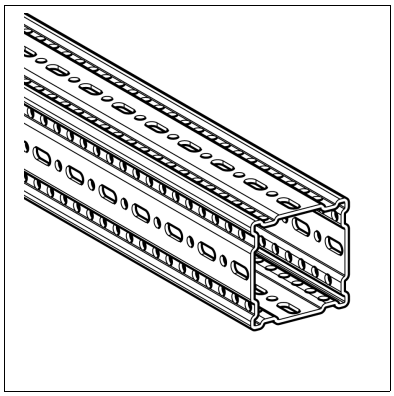

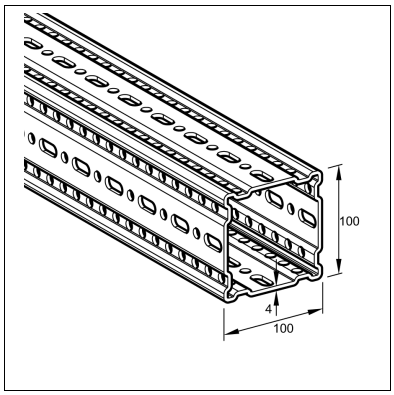

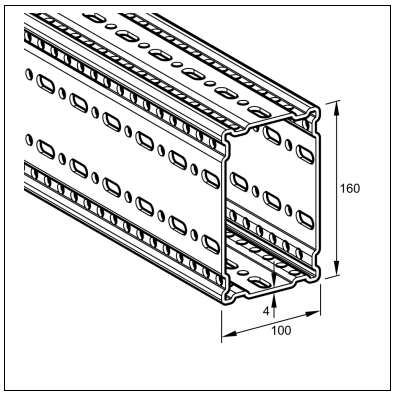

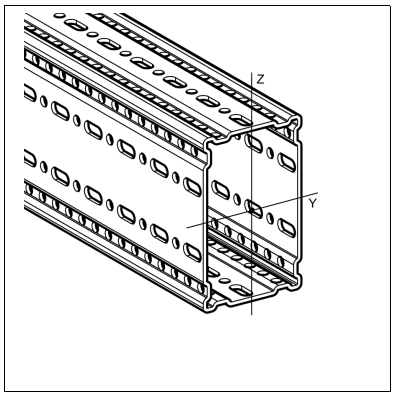

Beam Section TP F 100

Group: A810

Application

Galvanised hollow-box-section for fabrication of steel frames. Designed for both simple two-dimensional supports and complex volumetric arrangements. Holes designed to receive Self Forming Screw FLS in conjunction with the relevant component.

Technical Data

Type	Section modulus [cm^3]	Moment of inertia [cm^4]	Radius of inertia [cm]	Torsional moment It [cm^4]	Cross section A [cm^2]
TP F 100	Wy: 36.93 Wz: 36.93	Iy: 179.85 Iz: 179.85	iy: 4.80 iz: 4.80	135,00	7.80
TP F 100/160	Wy: 75.52 Wz: 46.26	Iy: 559.42 Iz: 280.34	iy: 6.16 iz: 4.36	193.00	14.74

Mechanical properties shown above take into account perforations.

The specific values are effective values established by tests, geometrical quantities (analytically determined) can be significantly higher.

Material: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

epd

NEPD-4539-3797-EN

Type	Weight [kg/m]	Qty. [m]	Part number
TP F 100	10.8	6	**112904**
TP F 100/160	14.3	6	**112905**

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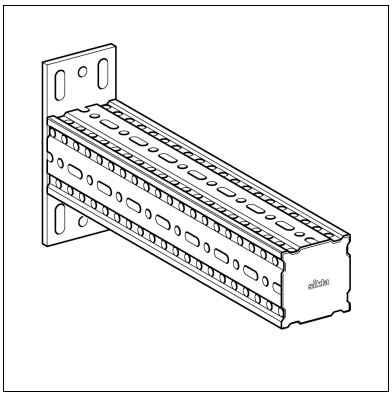


Cantilever Bracket AK F 100

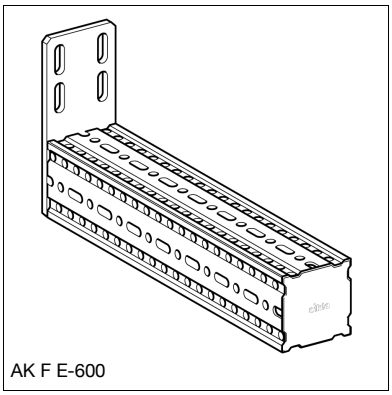
Group: A820

Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA and 4 x Self Forming Screw FLS. By means of the round holes in the base plate a direct connection to excisting cast-in channels is possible. With the types F 100-80 and F 100-80-E a combination of Beam Section F 100 with F 80/80 is possible.

Installation

With 4 x Self Forming Screw FLS when fixed to another siFramo hollow-box-section. Alternatively with two suitable wall anchors through holes “A” when fixed directly to building structure.



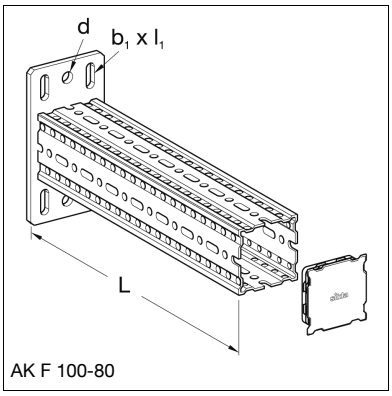
AK F E-600

Technical Data

Type	Dimensions of base plate [mm]	L [mm]	d [mm]	b_1 x l_1 [mm]
AK F 100-400	210 x 100 x 8	400	14	11 x 20
AK F 100-800	210 x 100 x 8	800	14	11 x 20
AK F 100-1200	210 x 100 x 8	1200	14	11 x 20
AK F 100-E - 600	185 x 100 x 8	600	-	11 x 20
AK F 100-80 - 400	190 x 100 x 8	400	14	11 x 20
AK F 100-80 - 800	190 x 100 x 8	800	14	11 x 20
AK F 100-80-E - 600	170 x 100 x 8	600	-	11 x 20

Configuration: Plate welded to Beam Section TP F 100 AK F 100-80 with Beam Section F 80

Material: Steel, HCP



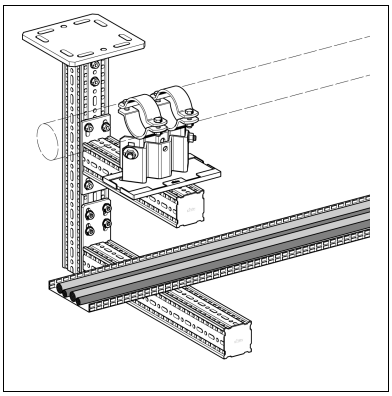
AK F 100-80

Approvals / Conformity

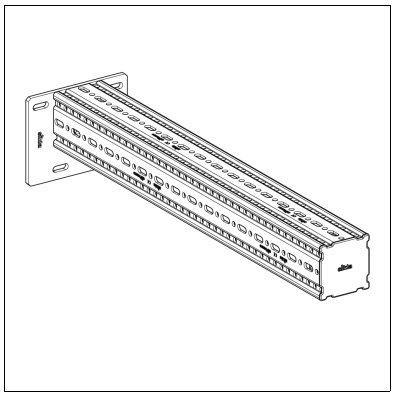
CE mark (Declaration of performance see www.sikla.com/downloads)

epd

NEPD-4539-3797-EN

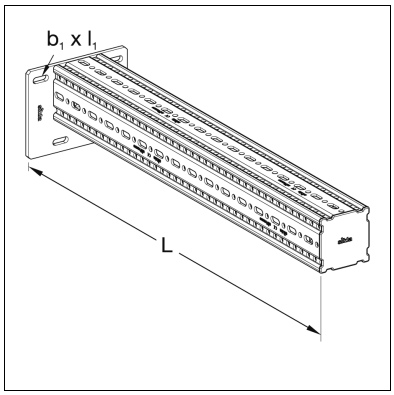


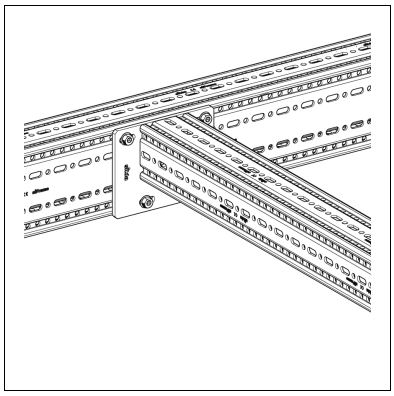
Type	W [kg]	Quantity [pack]	Part number
AK F 100-400	5.7	1	**113068**
AK F 100-800	10.1	1	**113069**
AK F 100-1200	14.7	1	**113419**
AK F 100-E-600	7.8	1	**113070**
AK F 100-80 - 400	3.6	1	**117143**
AK F 100-80 - 800	6.0	1	**117144**
AK F 100-80-E - 600	4.7	1	**117254**



Cantilever Bracket AK F 160-100-E

Group: A820





Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm for Beam Section TP F 100/160 (flange side 160) or Beam Bracket TKO F 100/160.

Installation

With 4 x Self Forming Screw FLS when fixed to another siFramo 100/160 (flange side 160) hollow- box- section. Fixing to walls and ceilings with suitable wall anchors M10.

Technical Data

Type	Dimensions of base plate [mm]	L [mm]	b_1 x l_1 [mm]
AK F 160-100-E-800	160 x 200	800	11 x 20
AK F 160-100-E-1200	160 x 200	1200	11 x 20

Configuration: Plate welded with Beam Section F 100
Material: Steel, HCP

Approvals / Conformity

CE-mark (Declaration of performance see www.sikla.com/downloads)

Type	W [kg]	Quantity [pack]	Part number
AK F 160-100-E-800	10.9	1	**117145**
AK F 160-100-E-1200	15.4	1	**117146**

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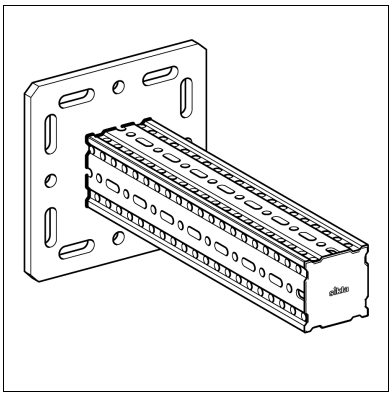

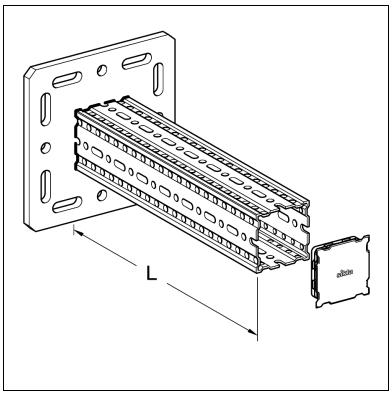

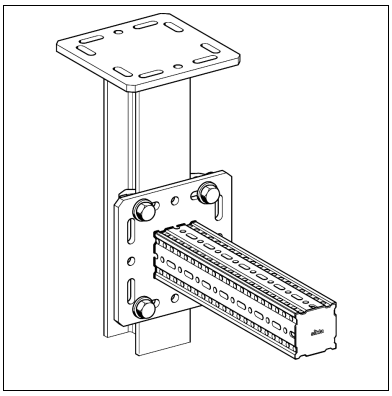

Beam Bracket TKO F 100

Group: A823

Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA/End Support WBD and 4 x Self Forming Screw FLS.

Scope of delivery

With pre-assembled End Cap ADK F100

Installation

Depending on the situation, different options are recommended:

a) Directly to building structure: 4x suitable wall anchors.
b) To traditional steel beams between 80 - 120 mm flange dimensions: with Assembly Set 5P M12 S.
c) To traditional steel beams > 120 flange dimension: with on-demand Adaptor Plate (tbc)
d) To Sikla Simotec Steel Beams 100/120: with Bracket Plates FV 100/120 when positive mechanical connection required.

Technical Data

Type	L [mm]	Dimensions of base plate [mm]	Slots in base plate for
TKO F 100-400	400	220 x 220 x 12	M12
TKO F 100-800	800	220 x 220 x 12	M12
TKO F 100-1200	1200	220 x 220 x 12	M12

Configuration: Base plate welded to Beam Section TP F 100
Material:
Plate: Steel, HCP
Beam Section: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

epd

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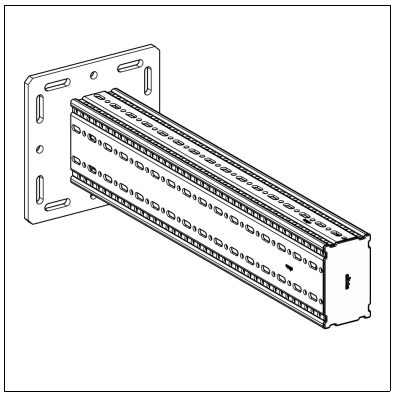
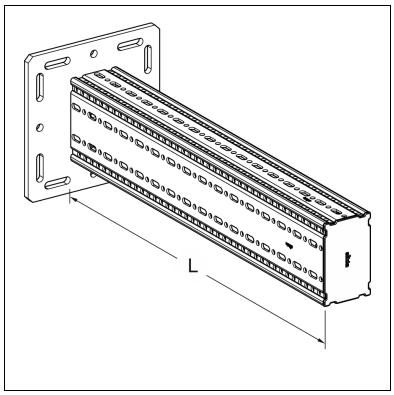
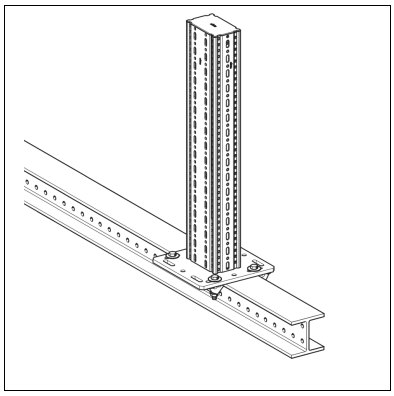
Type	W [kg]	Quantity [pack]	Part number
TKO F 100-400	8.6	1	**113071**
TKO F 100-800	12.8	1	**113072**
TKO F 100-1200	17.5	1	**113421**







Beam Bracket TKO F 100/160

Group: A823

Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA/End Support WBD and 4 x Self Forming Screw FLS.

Scope of delivery

With pre-assembled End Cap ADK F100

Installation

Depending on the situation, different options are recommended:

a) Directly to building structure: 4x suitable wall anchors.

b) To traditional steel beams between 100 - 180 mm flange dimensions: with Assmebly Set 5P M12 S.

Technical Data

Type	L [mm]	Dimensions of base plate [mm]	Slots in base plate for
TKO F 100/160-800	800	280 x 280 x 12	M12
TKO F 100/160-1200	1200	280 x 280 x 12	M12

Configuration: Base plate welded to Beam Section TP F 100/160
Material:
Base plate: Steel, HCP
Beam Section: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

epd

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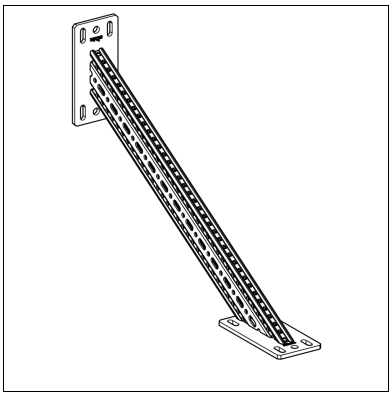
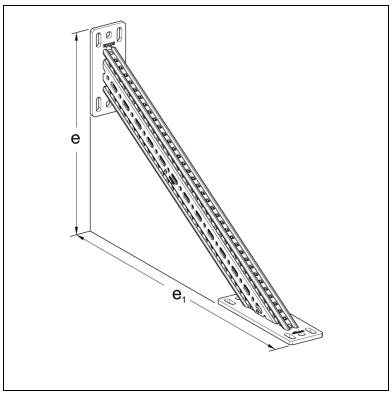
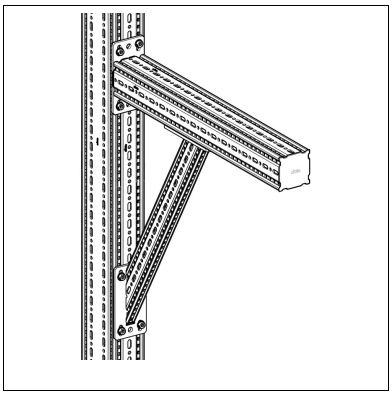
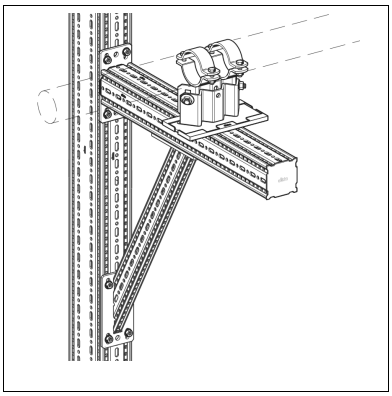
Type	W [kg]	Quantity [pack]	Part number
TKO F 100/160-800	18.5	1	**113097**
TKO F 100/160-1200	24.5	1	**113420**









Bracing Arm SKO F 100

Group: A823

Application

Bracing arm for reinforcement of frames made from Beam Section TP F100 and/or Cantilever Bracket AK F100.

Installation

- With 2x4 Self Forming Screw FLS when used inside a corner of two F100 size hollow-box sections.
- With 4x Self Forming Screw FLS and 2x suitable wall anchors/fixings when used to connect between one F 100 size hollow-box section and the building structure.

Technical Data

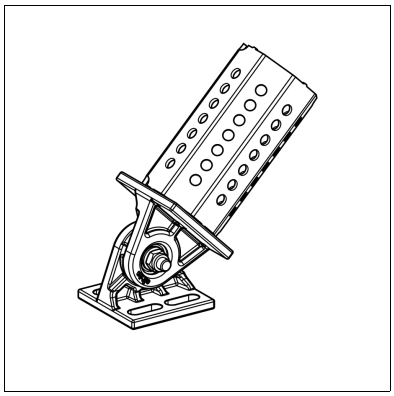
Type	Dimensions of Base plate [mm]	e [mm]	e_1 [mm]
SKO F 100	210 x 100 x 8	450	710

Material: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

Type	W [kg]	Quantity [pack]	Part number
SKO F 100	5.5	1	**113096**



Pivot Joint GE F 100

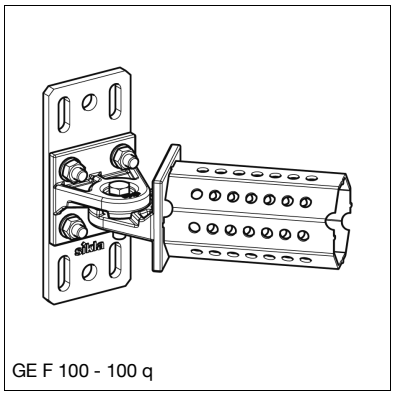
Group: A437

Application

Applicable as a bracing element for single-arm cantilevers in conjunction with siFramo 100 section, and for the knee-brace reinforcing of siFramo frame constructions. The pivot can be installed with angles from 25° to 155°.

Installation

Attachment of the Joints to Beam Section TP F 100 by means of 4 Self Forming Screws FLS F at the base plate. The support profile TP F 80 or TP F 100 (depending on joint type) plugged onto the octagon is also attached by means of 4 Self Forming Screws, so 8 Self Forming Screws are necessary in total. After installation at the desired angle the screws have to be tightened with 40 Nm.



GE F 100 - 100 q

Technical Data

Type	Height H [mm]	Length L [mm]	Width B [mm]	Angle α	Dimensions of base plate [mm]
GE F 100 - 80	140	100	100	25° - 155°	-
GE F 100 - 80 q	140	100	80	25° - 155°	210 x 100 x 8
GE F 100 - 100	180	100	100	25° - 155°	-
GE F 100 - 100 q	180	100	100	25° - 155°	210 x 100 x 8

Material: Steel, HCP

Approvals / Conformity

epd

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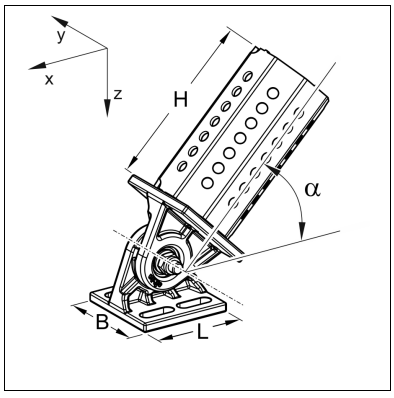
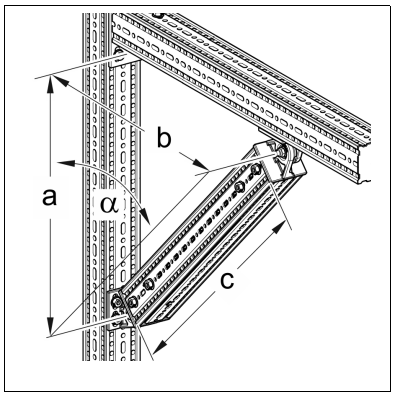
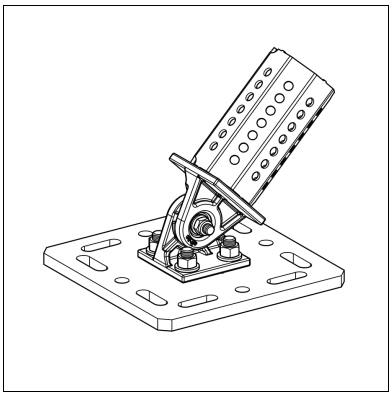
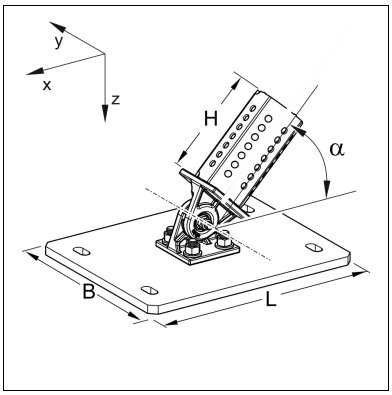
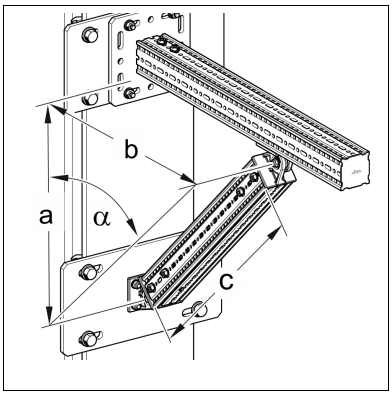


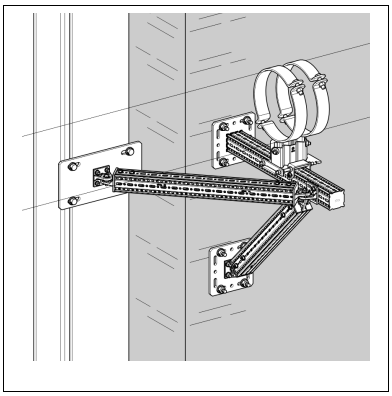
Type	W [kg]	Quantity [pack]	Part number
GE F 100 - 80	2.3	1	**113838**
GE F 100 - 100	3.0	1	**113837**
GE F 100 - 80 q	3.4	1	**113032**
GE F 100 - 100 q	4.1	1	**113836**











Pivot Joint GE F - ST F 100

Group: A437

Application

Applicable as a bracing element for single-arm cantilevers supported from primary steelwork or concrete surfaces, also for the knee-brace reinforcing of all siFramo 100 frame constructions. The pivot can be installed with angles from 25° to 155°.

Scope of delivery

Pivot Joint GE F - ST F 100 with pre-attached base plate

Installation

Attachment of the Joints to steel structure by means of Assembly Set MS 5P M12 S while connecting the base plate. From Type 161/200 on an Assembly Set MS 5P M16 S is used. Another option is to fix the Joint to concrete walls by means of 4 heavy-duty anchors M12. The support profile TP F 100 plugged onto the octagon is attached by means of 4 Self Forming Screws.
After installation at the desired angle the screws have to be tightened with 40 Nm.

By loosening the screw connection between Joint and Joining Plate it is possible to rotate the Joint by 90° and to use it for a cross member then (see figure 4).

Technical Data

Type	Height H [mm]	Length L [mm]	Width B [mm]	Angle α
GE F 80/120 - 100	180	220	220	25° - 155°
GE F 121/160 - 100 - 1	180	320	260	25° - 155°
GE F 161/200 - 100 - 1	180	320	310	25° - 155°
GE F 201/310 - 100 - 1	180	220	420	25° - 155°

Material: Steel, HCP

Approvals / Conformity

epd

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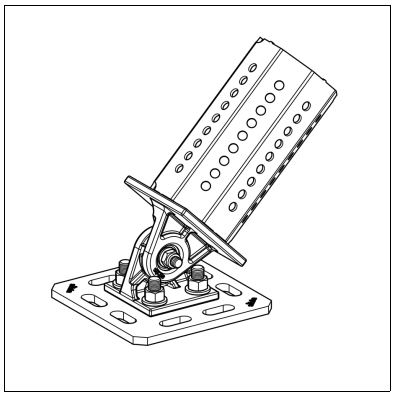
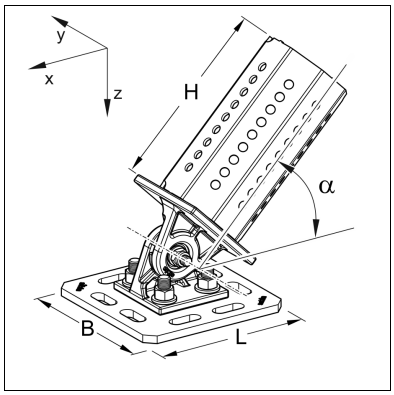
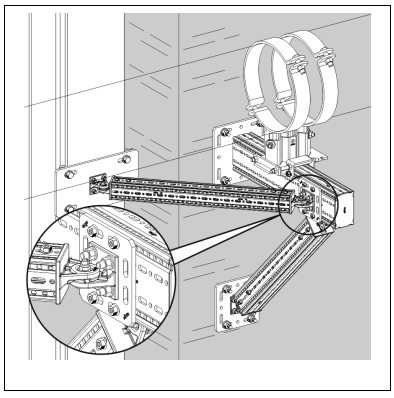
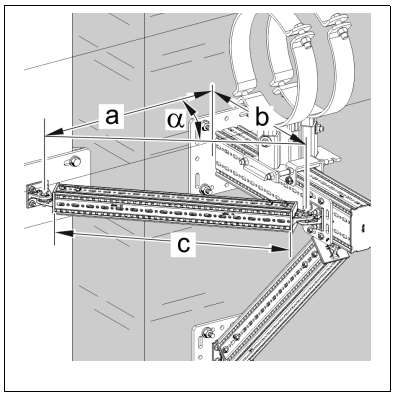
* in stock

Type	W [kg]	Quantity [pack]	Part number
GE F 80/120 - 100 *	6.9	1	**115863**
GE F 121/160 - 100 - 1	10.5	1	**115864**
GE F 161/200 - 100 - 1	11.9	1	**115866**
GE F 201/310 - 100 - 1	11.1	1	**115868**









Pivot Joint GE F 100/160

Group: A437

Application

Applicable as a bracing element for single-arm cantilevers in conjunction with siFramo 100/160 section, and for the knee-brace reinforcing of all frame constructions. The pivot can be installed with angles from 25° to 155°.

Scope of delivery

Pivot Joint GE F 100/160 with pre-attached 100/160 joining plate

Installation

Attachment of the Joints to the 160 mm face of Beam Section TP F 100/160 by means of 4 Self Forming Screws FLS F at the base plate. The support profile TP F 80 or TP F 100 (depending on joint type) plugged onto the octagon is also attached by means of 4 Self Forming Screws, so 8 Self Forming Screws are necessary in total.
After installation at the desired angle the screws have to be tightened with 40 Nm.

Technical Data

Typ	Height H [mm]	Length L [mm]	Width B [mm]	Angle α
GE F 160 - 80	140	160	160	25° - 155°
GE F 160 - 100	180	160	160	25° - 155°

Material: Steel, HCP

Approvals / Conformity

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Type	W [kg]	Quantity [pack]	Part number
GE F 160 - 80	3.6	1	**115854**
GE F 160 - 100	4.3	1	**115855**

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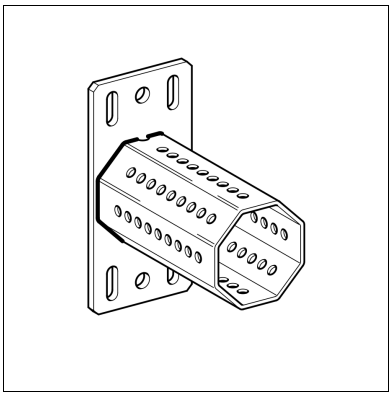
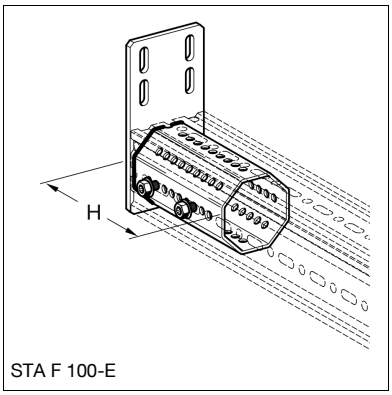
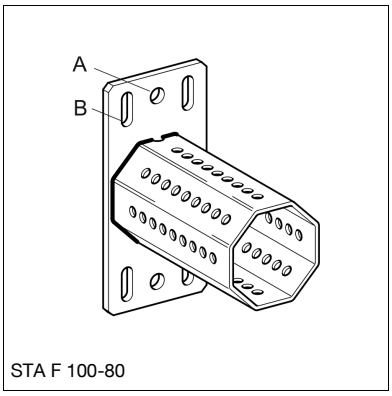
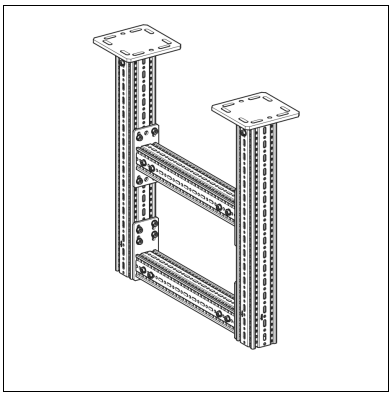




STA F 100-E



STA F 100-80



End Support STA F 100

Group: A822

Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F 100 or a Cantilever bracket AK F 100. Variation types F 100-80 (E) are designed to combine F 100 with F 80 beam sections. Octagonal insert allows full utilisation of beam section within the space required by the End Support STA itself.

Installation

Depending on the situation, different options are recommended:

a) With 2x4 Self Forming Screws FLS when used to connect 2 Beam Sections.

b) With 4 Self Forming Screws FLS applied to the octagonal insert and 2 suitable wall anchors/fixings when connected to the building structure.

The Beam Section TP F 100/100 connected to the End Support STA F 100 has to be screwed with 4 Self Forming Screws FLS F. On each of the opposite sides 2 Self Forming Screws FLS F are necessary.

Technical Data

Type	Dimensions of base plate [mm]	A [mm]	B [mm]	H [mm]
STA F 100	210 x 100 x 8	14	20 x 11	188
STA F 100-E	185 x 100 x 8	-	20 x 11	188
STA F 100-80	210 x 100 x 8	14	20 x 11	148
STA F 100-80-E	185 x 100 x 8	-	20 x 11	148

Configuration: Base plate welded to Octagon F 100 or F 80
Material:
Base plate: Steel, HCP
Octagon: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/downloads)

epd

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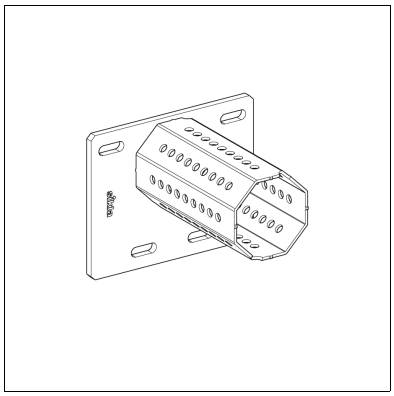
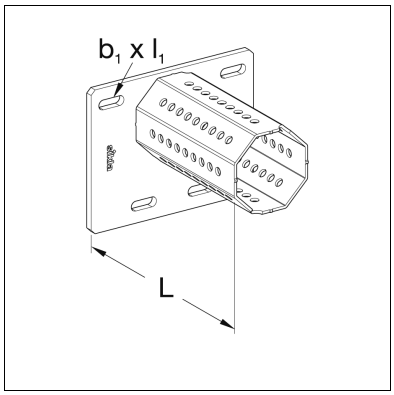
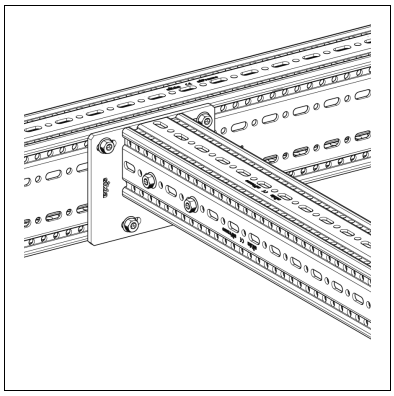
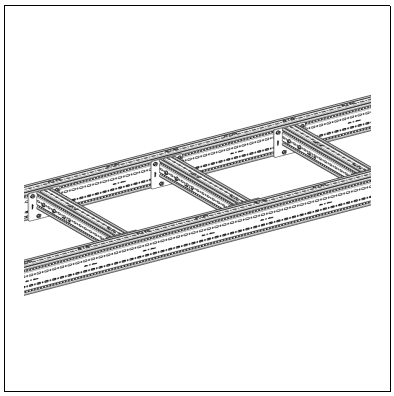
Type	W [kg]	Quantity [pack]	Part number
STA F 100	2.4	1	**113073**
STA F 100-E	2.2	1	**113074**
STA F 100-80	2.0	1	**113337**
STA F 100-80-E	1.8	1	**113481**









End Support STA F 160-100-E

Group: A822

Application

Plug-in component designed to create an end plate at the open end of a Beam Section TP F 100/160.

Installation

For the connection to Beam Section TP F 100/160 (flange side 160) 4 Self Forming Screws FLS F are necessary. The Beam Section TP F 100 connected to the End Support STA F 160-100-E has to be screwed with 4 Self Forming Screws FLS F. On each of the broader sides 2 Self Forming Screws FLS F are necessary. Fixing to walls and ceilings with suitable wall anchors M10.

Technical Data

Type	Dimensions of base plate [mm]	L [mm]	b_1 x l_1 [mm]
STA F 160-100-E	160 x 200	180	11 x 20

Configuration: Base plate welded to octagonal F 100
Material: Steel, HCP

Approvals / Conformity

CE-mark (Declaration of performance see www.sikla.com/downloads)

epd

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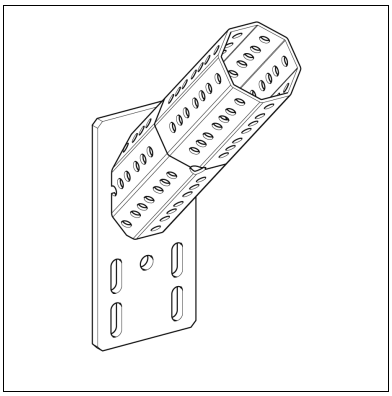
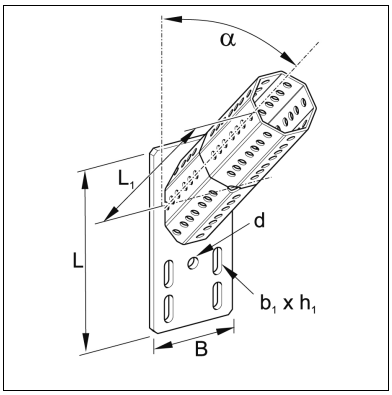
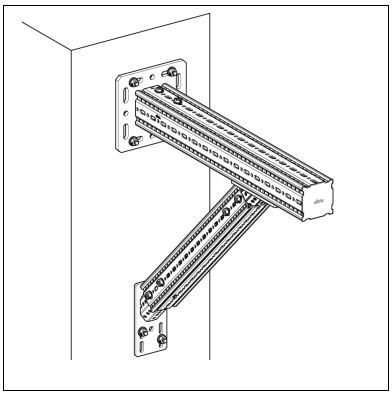
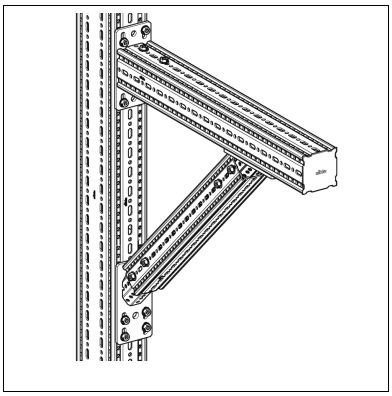
Type	W [kg]	Quantity [pack]	Part number
STA F 160-100-E	3.1	1	**116875**









End Support STA F 100-80-E 45°

Group: A822

Application

The End Support STA F 100-80-E 45° is designed to generate a 45° bracing element in combination with F100 Beam Sections or F100 Cantilever Brackets.

Installation

Depending on the situation on site there are two options to use this product:

a) Connection within the siFramo system by connecting with 4 FLS screws to each beam section F100.

b) Connection to building fabric by using 2 suitable wall anchors in diagonal configuration.

Technical Data

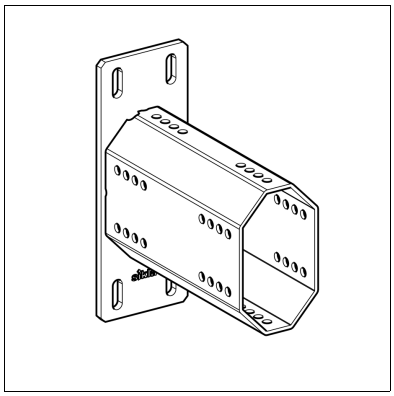
Type	L [mm]	B [mm]	L_1 [mm]	d [mm]	b_1 [mm]	h_1 [mm]	α [°]
STA F 100-80-E 45°	210	100	244.5	14	11	20	45

Configuration: Base Plate welded to octagonal F 80
Material: Steel, HCP

Approvals / Conformity

CE-mark (Declaration of performance www.sikla.com/downloads)

Type	W [kg]	Quantity [pack]	Part number
STA F 100-80-E 45°	2.4	1	**406002**



End Support STA F 100 - 100/160

Group: A822

Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F 100 and TP F 100/160 or a Cantilever bracket AK F 100.

Installation

For the connection to Beam Section TP F 100 or TP F 100/160 (flange side 100) 4 Self Forming Screws FLS F are necessary. The Beam Section TP F 100/160 connected to the End Support STA F 100 - 100/160 has to be screwed with 8 Self Forming Screws FLS F. On each of the broader sides 4 Self Forming Screws FLS F are necessary.

Technical Data

Type	Dimensions of base plate [mm]	Slotting in base plate for	H [mm]
STA F 100 - 100/160	270 x 100 x 8	M10	238
STA F 100 - 100/160 E	245 x 100 x 8	M10	238

Configuration: Base plate welded to Octagon F 100/160
Material:
Plate: Steel, HCP
Octagon: Steel, HCP

Approvals / Conformity

CE-mark (Declaration of performance www.sikla.com/downloads)

epd

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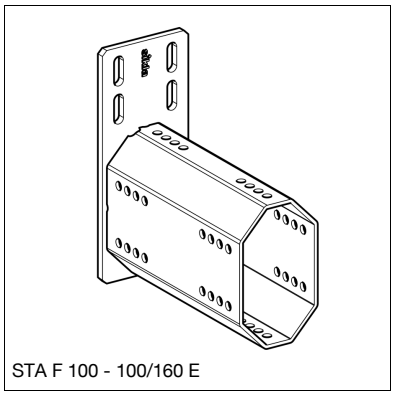
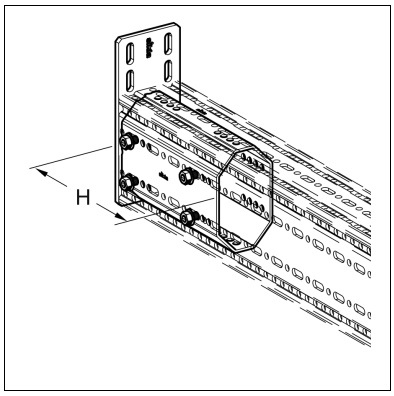
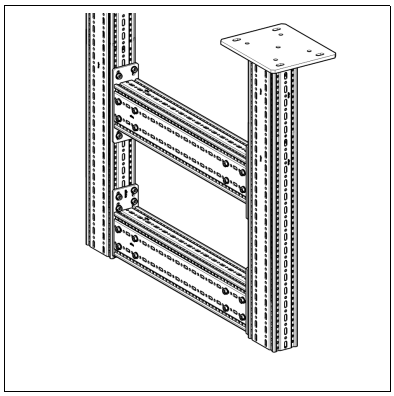
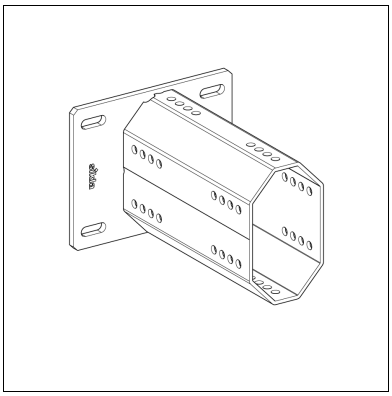


STA F 100 - 100/160 E



Type	W [kg]	Quantity [pack]	Part number
STA F 100 - 100/160	4.4	1	**114878**
STA F 100 - 100/160 E	4.2	1	**114879**





End Support STA F 160-Q

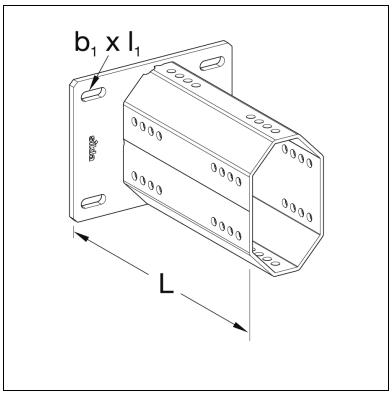
Group: A822

Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F 100/160.

Installation

For the connection to Beam Section TP F 100/160 (flange side 160) 4 Self Forming Screws FLS F are necessary. The Beam Section TP F 100/160 connected to the End Support STA F 160-Q has to be screwed with 8 Self Forming Screws FLS F. On each of the broader sides 4 Self Forming Screws FLS F are necessary. Fixing to walls and ceilings with suitable wall anchors M10.



Technical Data

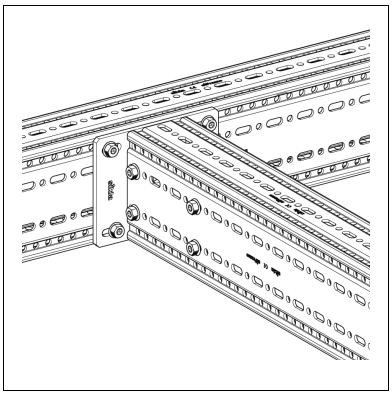
Type	Dimensions of base plate [mm]	L [mm]	b_1 x l_1 [mm]
STA F 160-Q	160 x 200	230	11 x 20

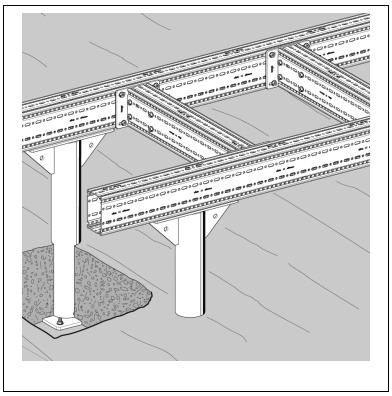
Configuration: Base plate welded to octagonal F 100/160
Material: Steel, HCP

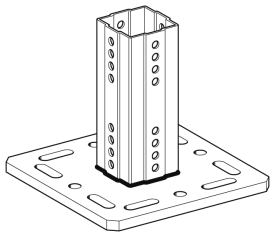
Approvals / Conformity

CE-mark (Declaration of performance see www.sikla.com/downloads)

Type	W [kg]	Quantity [pack]	Part number
STA F 160-Q	4.8	1	**117147**

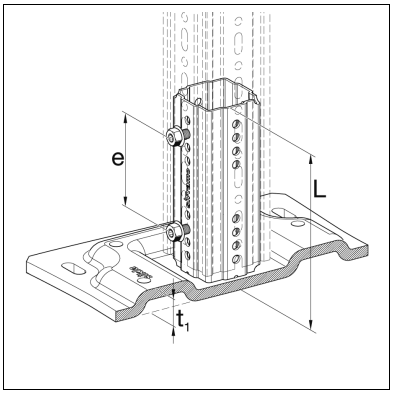


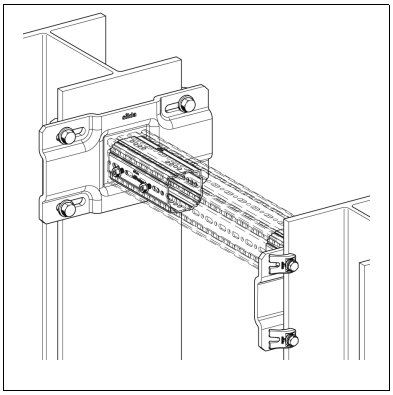




WBD F 100-80/120

WBD F 80 / 100-T





End Support WBD F 100

Group: A821

Application

Plug-in component designed to create a square end plate at the open end of a Beam Section TP F 100 or a Beam Bracket/Cantilever bracket AK F 100. Variation "T" with octagonal insert allows full utilisation of beam section within the space required by the End Support WBD itself.

Installation

Depending on the situation, different options are recommended:

a) Directly to building structure: 4 x suitable wall anchors and 4 Self Forming Screws FLS applied to the square/octagonal insert

b) To traditional steel beams between 80 – 310 mm flange dimensions: 1x Assembly Set 5P M12 S, M16 S and 4 Self Forming Screws FLS applied to the square/octagonal insert

c) To Sikla Simotec steel beams 100/120: with Bracket Plates FV 100/120 when positive mechanical connection required

The Beam Section TP F 100 connected to the End Support WBD F 100 has to be screwed with 4 Self Forming Screws FLS F. On each of the opposite sides 2 Self Forming Screws FLS F are necessary. The permissible distance between base plate WBD and profile must not exceed 30 mm.

Technical Data

Type	Base plate finish	for flange width [mm]	Dimensions of base plate	Slots in base plate [l x b]
WBD F 100-80/120	flat	80 - 120	220 x 220 x 12	30 x 14
WBD-P F 100-121/160	corrugated	121 - 160	320 x 260 x 12	20 x 14
WBD-P F 100-161/200	corrugated	161 - 200	320 x 310 x 12	20 x 18
WBD-P F 100-201/310	corrugated	201 - 310	420 x 220 x 12	55 x 18
WBD F 100-T	flat	80 - 120	220 x 220 x 12	30 x 14

Type	e [mm]	L [mm]	t_1 [mm]	Slots in base plate for
WBD F 100-80/120	max. mögl. Abstand	232	-	M12
WBD-P F 100-121/160	max. mögl. Abstand	232	27	M12
WBD-P F 100-161/200	max. mögl. Abstand	232	27	M16
WBD-P F 100-201/310	max. mögl. Abstand	232	27	M16
WBD F 100-T	max. mögl. Abstand	192	-	M12

configuration: Plate welded to square F 100 resp. octagonal element F 100 (only WBD F 100-T)

material: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

epd

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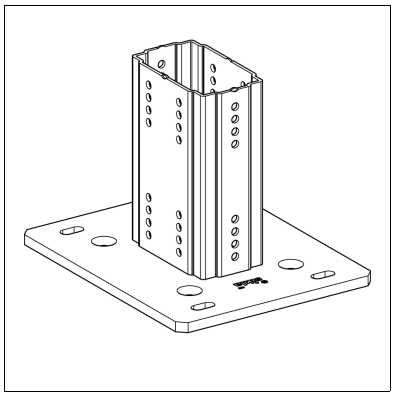
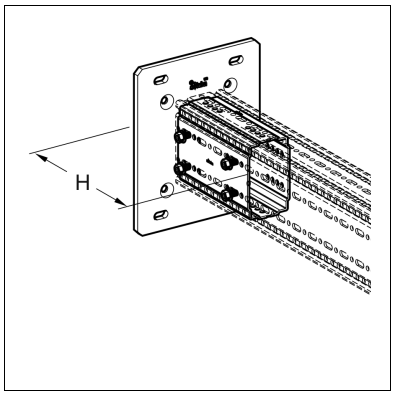
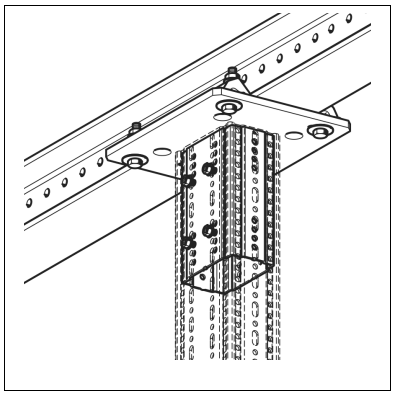
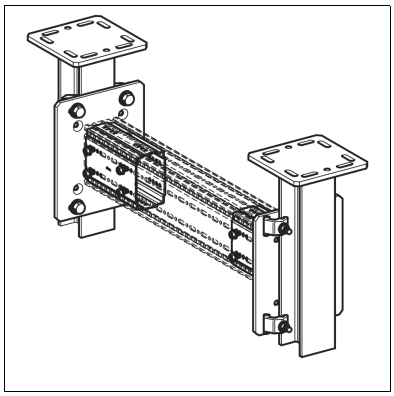
Type	W [kg]	Quantity [pack]	Part number
WBD F 100-80/120	6.1	1	**113075**
WBD-P F 100-121/160	9.7	1	**117167**
WBD-P F 100-161/200	11.2	1	**117168**
WBD-P F 100-201/310	10.3	1	**117169**
WBD F 100-T	5.3	1	**113079**









End Support WBD F 100/160

Group: A821

Application

Plug-in component designed to create a square endplate at the open end of a Beam Section TP F100 or a Beam Bracket.

Installation

Depending on the situation, different options are recommended:

a) Directly to building structure: 4 x suitable wall anchors and 4 Self Forming Screws FLS applied to the square/octagonal insert.

b) To traditional steel beams between 80 – 300 mm flange dimensions: 1x Assembly Set 5P M12 S, M16 S and 4 Self Forming Screws FLS applied to the square/octagonal insert.

The Beam Section TP F 100/160 connected to the End Support WBD F 100/160 has to be screwed with 8 Self Forming Screws FLS F. On each of the broader sides 4 Self Forming Screws FLS F are necessary.

Technical Data

Type	For flange width [mm]	Dimensions of base plate [mm]	Slots in base plate for	H [mm]
WBD F 100/160-121/160	121 - 160	320 x 260 x 12	M12	232
WBD F 100/160-161/200	161 - 200	320 x 310 x 12	M16	232
WBD F 100/160-201/300	201 - 300	420 x 220 x 12	M16	232

Configuration: Base plate welded to square F 100/60
Material:
Plate: Steel, HCP
Square F 100: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

epd

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Type	W [kg]	Quantity [pack]	Part number
WBD F100/160-121/160	10.53	1	**113098**
WBD F100/160-161/200	11.95	1	**113099**
WBD F100/160-201/300	11.14	1	**113100**

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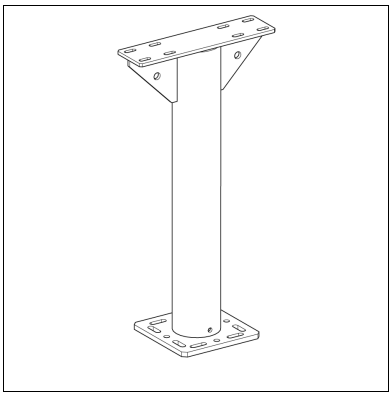
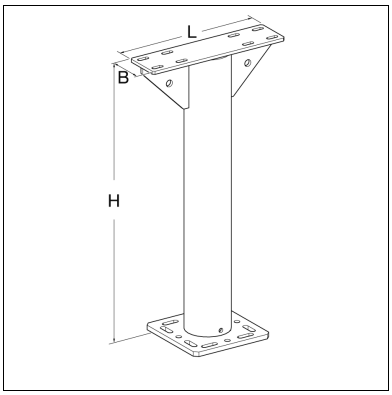
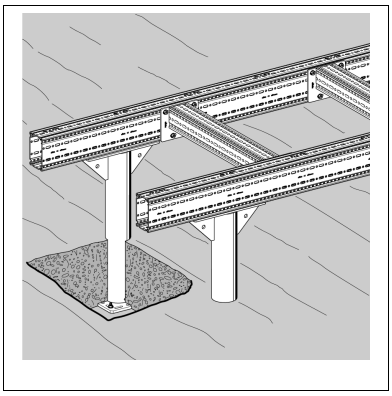






Roof duct DF AH

Group: A442

Application

Enables direct connection of TP F 100 and TP F 100/160 support profiles on various roof types.

Installation

Connection of support profiles TP F 100 and TP F 100/160 by means of 8 Formlock screws FLS F.
Fastening to roofs and concrete using heavy-duty anchors M12.
Important: The zinc drain holes in the support tube must be sealed after installation. If insulation is required in the support tube, it can be provided by the customer, e.g. by foaming.

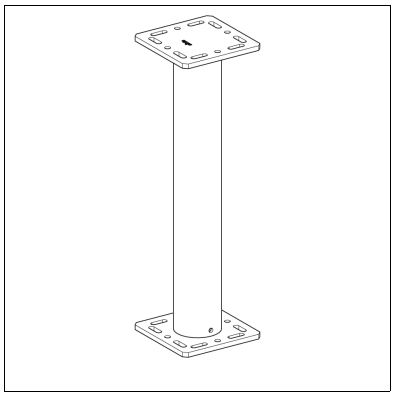
Technical Data

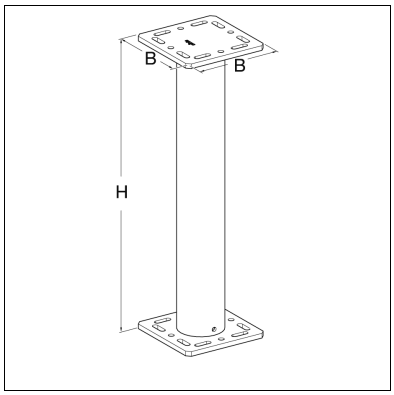
B [mm]	L [mm]	H [mm]
100	383	746

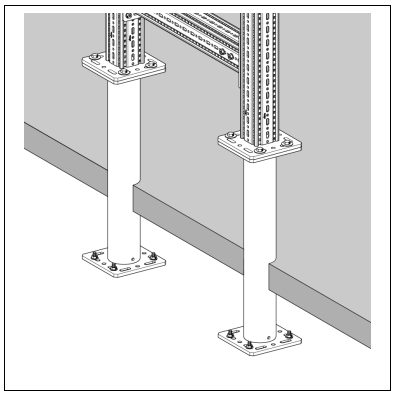
Hole pattern for	Base plate dimensions B x B x t [mm]	Perforation for anchor
F 100 and F 100/160	220 x 220 x 12	M12

Material: Steel, HCP

Type	W [kg]	Quantity [pack]	Part number
DF AH	20.0	1	**117171**







Roof duct DF AV

Group: A442

Application

Enables direct connection of constructions with siFramo using WBD brackets F 80/100 of size 80/120 or girder brackets F 80/100 on various roof types.

Installation

Connection of WBD brackets F 80/100 - 80/120 and TKO F 80/100 by means of 4 hexagon bolts M12 and suitable washers and nuts.
Fastening on roofs and on concrete by means of heavy-duty anchors M12.
Important: The zinc drain holes in the support tube must be sealed after installation. If insulation is required in the support tube, it can be provided by the customer, e.g. by foaming.

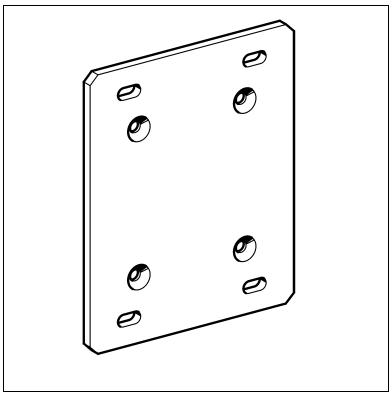
Technical Data

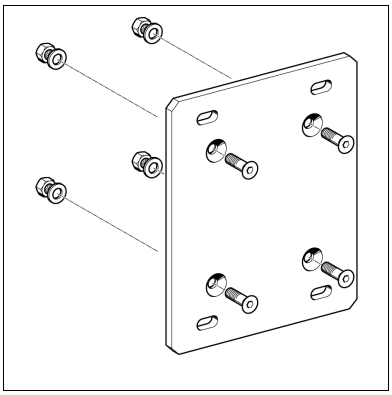
B [mm]	H [mm]
220	750

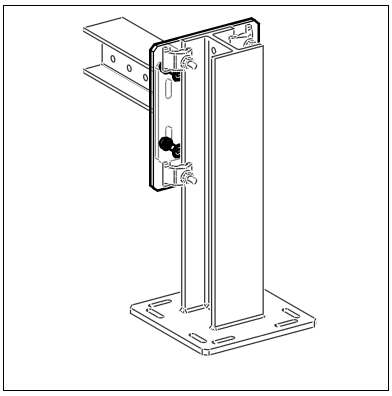
Base plate dimensions B x B x t [mm]	Perforation for anchor
220 x 220 x 12	M12

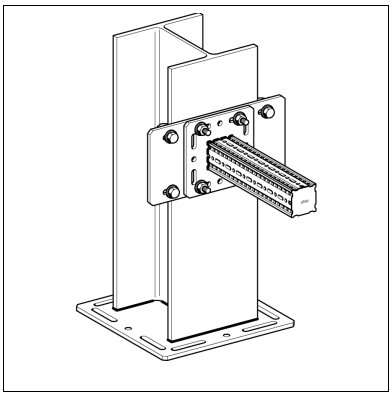
Material: Steel, HCP

Type	W [kg]	Quantity [pack]	Part number
DF AV	20.5	1	**117170**









Joining Plate AP

Group: A630

Application

Interface element to enable the connection of standard endplates of Beam Brackets TKO F80 or F100, TKO 100 or 120 to primary steel with flange width >120 mm.

Scope of delivery

Joining Plate AP
4 Countersink Screws M12 x 40
4 Hexagon Nuts M12
4 Sicherungsscheiben

Installation

Connect the Joining Plate AP to the Beam Bracket TKO's end plate by using the accessories above. Then continue with either heavy-duty anchors or Assembly Set 5P/Beam Clips as required by the building structure.

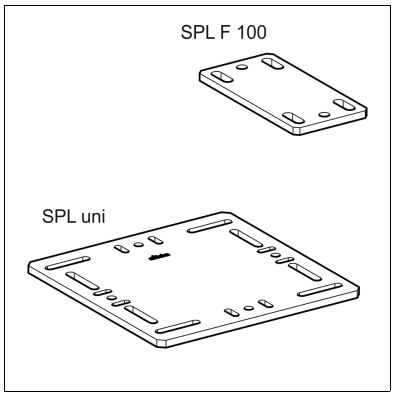
Technical Data

Type	Dimension of Base Plate L x B [mm]	Perforation for	Connection to flange width [mm]
AP 121/160	320 x 260 x 12	M12	121 - 160
AP 161/200	320 x 310 x 12	M16	161 - 200
AP 201/240	320 x 360 x 12	M16	201 - 240
AP 241/310	420 x 220 x 12	M16	241 - 310

Material:

Joining Plate:	Steel, HCP
Bolts:	Steel DIN EN ISO 10642, class 8.8, HCP
Nuts:	Steel, class 8, HCP
Washers:	Steel, HCP

Type	W [kg]	Quantity [pack]	Part number
AP 121/160	7.7	1	**183953**
AP 161/200	9.3	1	**183962**
AP 201/240	10.4	1	**116534**
AP 241/310	8.4	1	**117767**

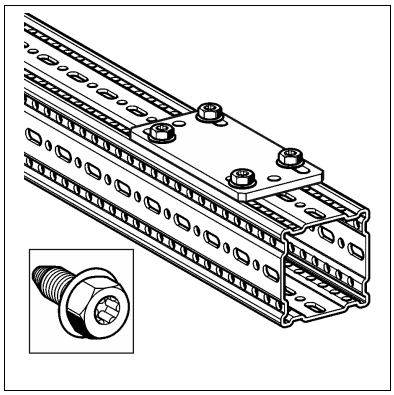


Welding Plate SPL

Group: A430

Application

Interface element to enable a welded connection of load chains, spring hangers etc. to Beam Section TP F. Our type "SPL universal" enables a welded connection to primary steel with flange width up to 300 mm. At the same time it's possible to install type "SPL universal" to Beam Section TP F if a larger installation surface is needed.
The welding plate can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the siFramo section and the health and safety requirements of the welding process.



Installation

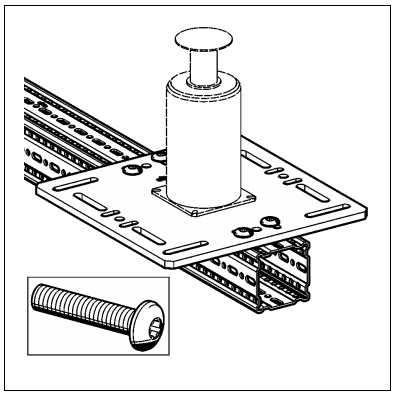
Depending on the type, different installation methods are recommended:

a) Installation of SPL F 80 or 100 with 4 Self Forming Screws FLS to Beam Section TP F.
b) Installation of SPL universal with Flange Screws SCR FLA TT M10 x 30 (part no. 116479) to Beam Section TP F.
c) Installation of SPL universal by means of 1 Assembly Set 5P M12 S to primary steel with flange width between 100 and 300 mm.

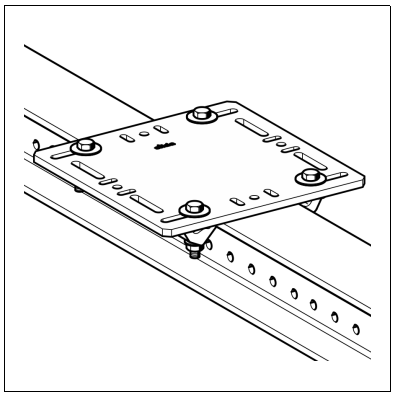
Technical Data

Type	Installation surface [mm]	Mounting Plate size [mm]
SPL F 80	90 x 70	190 x 80 x 8
SPL F 100	110 x 90	210 x 100 x 8
SPL universal	220 x 220	370 x 370 x 12

Material: Steel, HCP



Type	W [kg]	Quantity [pack]	Part number
SPL F 80	0.9	1	**117833**
SPL F 100	1.3	1	**117834**
SPL universal	11.9	1	**113636**



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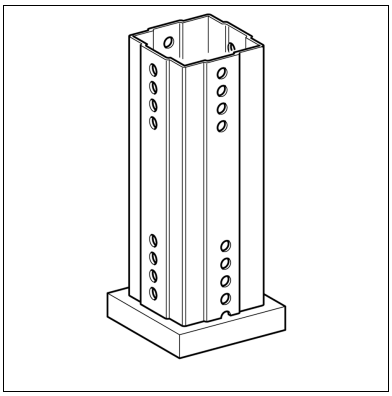

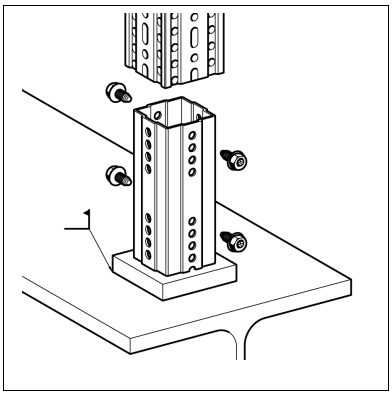

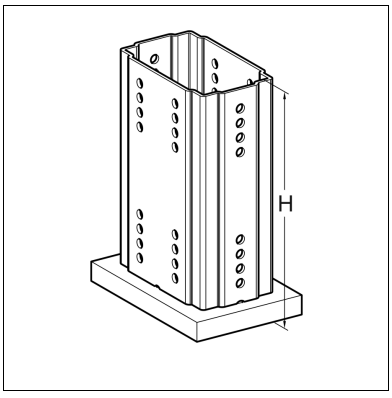

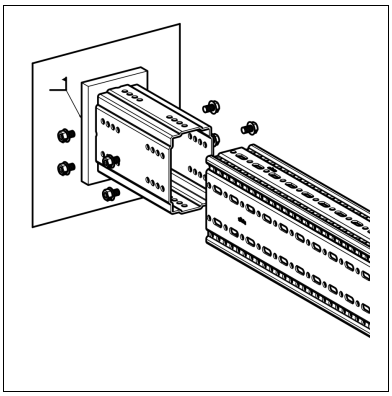

Welding Adapter ASA F 100 GPL Square

Group: A828

Application

Welding plate with square insert to receive siFramo section. May be implemented into the structural steel design in anticipation of siFramo-frames or used in situ as a connection element when clamping is not an option but hot works are permitted.

Scope of delivery

Mounting Plate 100 with welded on square joint.

Installation

The welding plate of the ASA can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the siFramo section and the health and safety requirements of the welding process. Once the ASA adapter has been connected, the coating may also receive paint without previous treatment. The siFramo section must be connected to the Welding Adapter ASA with 4 x Self Forming Screw FLS. 8 pieces of Self Forming Screws are to be used for the Beam Section TP F 100/160, whereas 4 Self Forming Screws have to be screwed together on the flat flanks' opposite sides.

Technical Data

Type	Adapter size H [mm]	Mounting Plate size [mm]
ASA F 100 GPL 4kt	240	120 x 120 x 20
ASA F 100/160 GPL 4kt	240	180 x 120 x 20

Material: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/downloads)

epd

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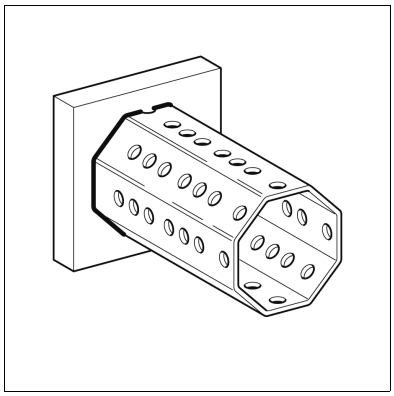
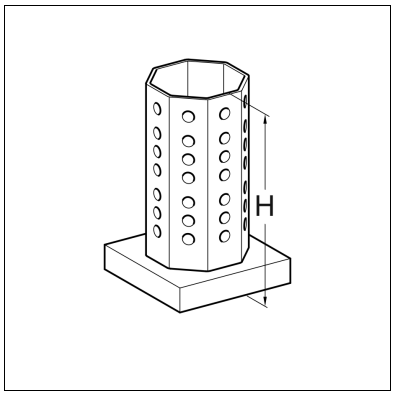
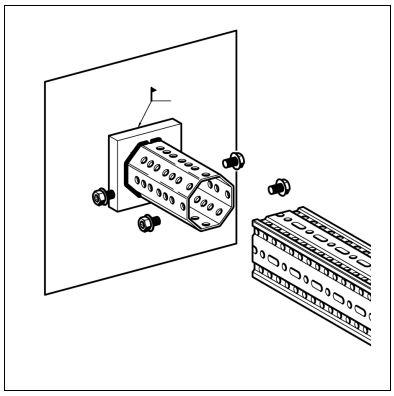
Type	W [kg]	Quantity [pack]	Part number
ASA F 100 GPL 4kt	4.4	1	**113339**
ASA F 100/160 GPL 4kt	6.5	1	**113410**







Welding Adapter ASA F 100 Octagon

Group: A828

Application

Welding plate with octagonal insert to receive siFramo section. May be implemented into the structural steel design in anticipation of siFramo-frames or used in situ as a connection element when clamping is not an option but hot works are permitted. The octagonal insert allows for full utilisation of beam section within the space required by the Welding Adapter ASA itself.

Scope of delivery

Mounting Plate 100 with welded on octagonal joint.

Installation

The welding plate of the ASA can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the siFramo section and the health and safety requirements of the welding process. Once the ASA adapter has been connected, the coating may also receive paint without previous treatment. The siFramo section must be connected to the Welding Adapter ASA with 4 x Self Forming Screw FLS.

Technical Data

Type	Adapter size H [mm]	Mounting Plate size [mm]
ASA F 100 GPL 8kt	200	120 x 120 x 20

Material: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

epd

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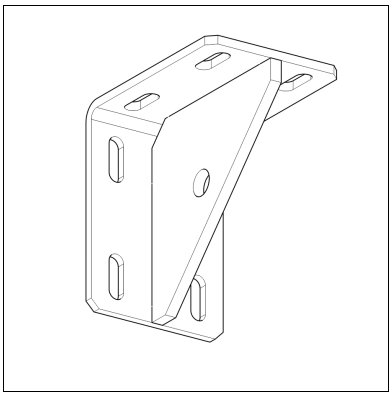
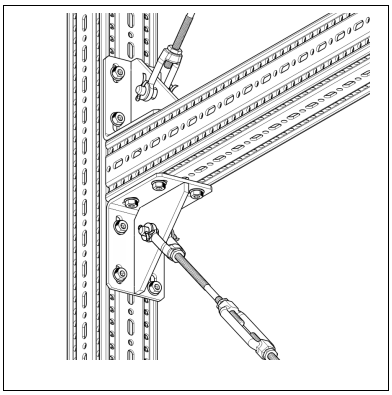
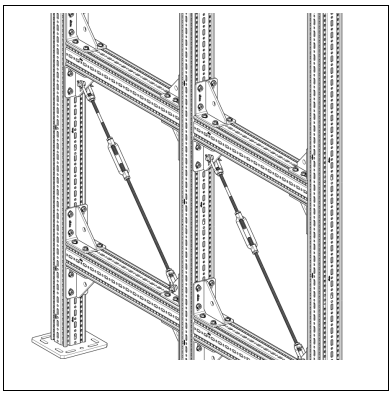
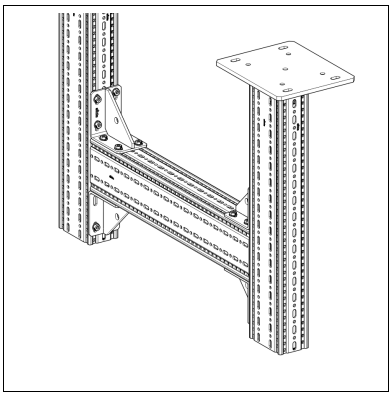
Type	W [kg]	Quantity [pack]	Part number
ASA F 100 GPL 8kt	3.3	1	**113080**









Corner Bracket WD F 100

Group: A430

Application

Component to be used for connections between two F100 or F100/160 sections when the structural design requires an alternative to the End Support STA F 100 as the default solution.
Connections with the Corner Bracket WD F 100 allow flexible constrcutions and provide a high load capacity at the same time.
Using the bracket hole (Ø 18mm) additional bracings can be installed and comprehensive solutions can be realized.

Installation

To be used in pairs only. 8 pieces of Self Forming Screw FLS are necessary for one Corner Bracket.

Technical Data

Type	perm. tensile load bracket hole [kN]
WD F 100 140/140	45,3

Material: Steel, HCP

Approvals / Conformity

CE mark (Declaration of performance see www.sikla.com/service/downloads)

epd

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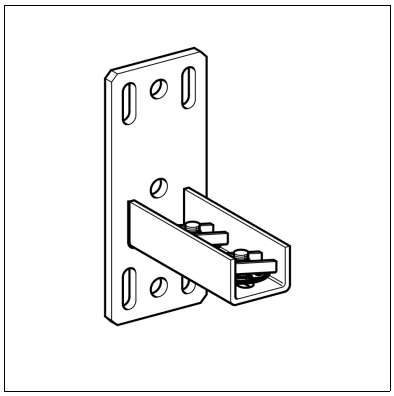
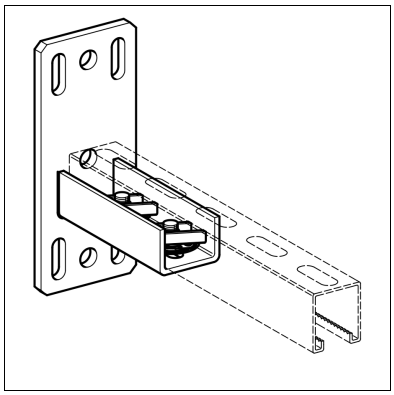
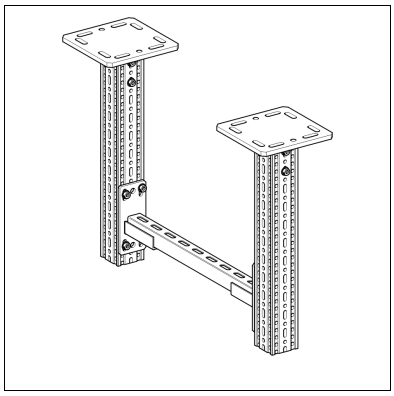
Type	W [kg]	Quantity [pack]	Part number
WD F 100 140/140	1.9	1	**113095**







Channel Adapter SA F 100

Group: A827

Application

Interface element to enable a stiff and solid connection between the siFramo profile and strut channel of the international 41/41 mm standard. The 41/41 Channel Adapter SA F100 is equipped with automatically locking spring nuts which means that no accessories from the strut channel's range are required in order to make the connection.

Installation

The Channel Adapter SA F100-41 requires 4 x Self Forming Screw FLS in order to be connected to the siFramo profile. The strut channel must be inserted with the slot first whilst pressing the two bolt's heads triggering an automatic 90°-locking operation of the two channel spring nuts. The strut channel is now securely held and can be adjusted. Finally the two screws must be tightened with the appropriate torque for the strut channel used.

Technical Data

Type	Dimension of base plate [mm]	Slotted holes [mm]	Round holes [mm]
SA F 100-41	210 x 100 x 8	20 x 11	14

Material: Steel, HCP

Type	W [kg]	Quantity [pack]	Part number
SA F 100-41	1.8	1	**113081**

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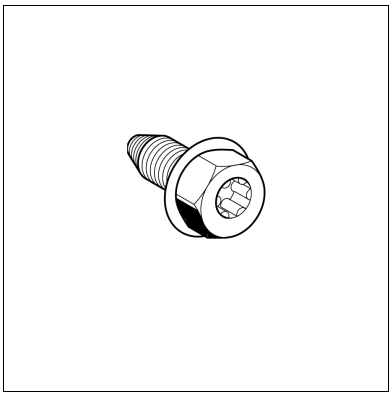

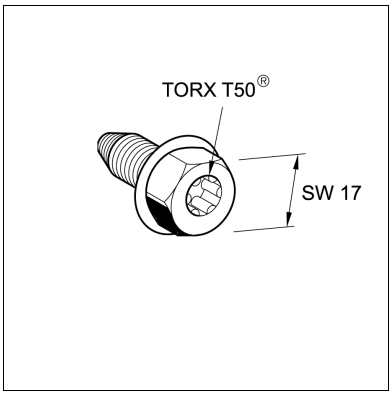

Self Forming Screw FLS F

Group: A430

Application

The Self Forming Screw FLS creates its own thread inside the wall of the siFramo pilot hole. During the screw-driving operation, the base steel is re-shaped and hardened to form an air-tight seal between the threads of the screw and the surrounding steel, making it exceptionally resistant to vibrational loosening and increasing fastening strength.

Technical Data

Application	Tightening torque [Nm]
System siFramo	60
Connection to Channels MS 41	35

Material: Steel, HCP

Warning notice:
The Hilti Group recently launched a thread-forming screw under the product name "MT-TFB OC". This product is visually hard to distinguish from the Sikla original screw "FLS-F", and we would like to notify our customers that the Hilti screw is not compatible with our system. The use of this screw in conjunction with the Sikla system compromises the validity of published load data, declarations of performance and practical stability of installations. In the event of uncertainty on the supply source of thread-forming screws, please contact Sikla customer service.

Approvals / Conformity

epd

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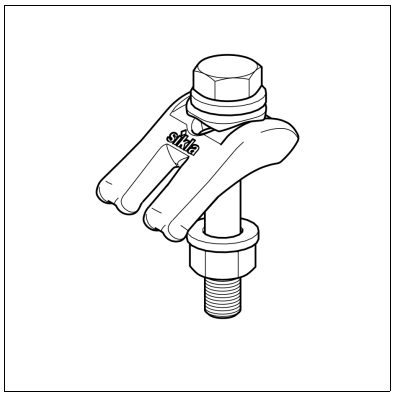
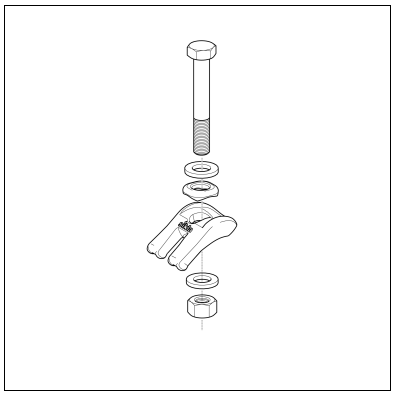
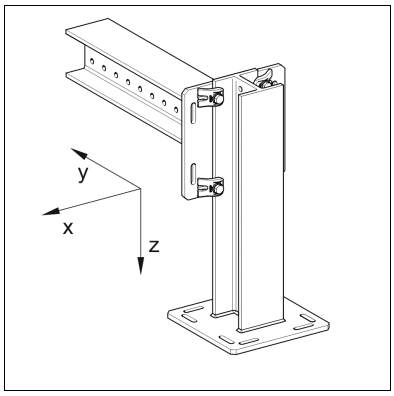
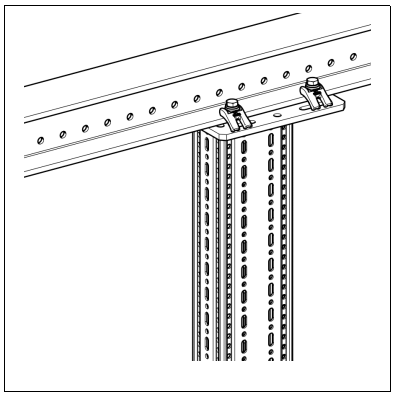
Type	W [kg]	Quantity [pack]	Part number
FLS F	0.03	100	**192512**









Assembly Set MS 5P

Group: A640

Application

Element for connecting Beam Bracket TKO, Angled Beam Bracket SKO, End Support WBD or Pivot Joint GE F to a beam section.

Scope of delivery

Type	Beam Clip [Quantity]	Support plate [Quantity]	HR trimming * [Quantity]
M12 S	4 x M12	4 x M12	4 x M12 x 80
M16 S	4 x M16	4 x M16	4 x M16 x 100
M12 S2	2 x M12	2 x M12	2 x M12 x 80

* HR trimming according EN 14399-3 consisting of: Hexagon bolt M12 or M16, 2 washers, 1 hexagon nut

Installation

1. Position Beam Clip with the split end on beam section.
2. Install support plate and HR trimming and tighten accordingly.

The support plate secures a rectangular assembly of the bolt and prevents its shifting or bending stress. In conjunction with the HR trimming a continuous and predictable preload force is guaranteed.

Technical Data

Type	Size range [mm]	Tightening torque M_A [Nm] / plus 90° revolution	F_y permitted per Beam Clip [kN]	Shear force load capacity F_z per set = 4 Beam Clips [kN]
M12 S	1 - 30	60 / 90°	26,3	12,0 *
M16 S	4 - 40	140 / 90°	32,0	13,6 *

* The specified data relate to the worst case with flange thicknesses 30 mnm (M12) or 40 mm (M16) as well as a coefficient of adhesion $\mu_{adhesion}$ = 0,20.
A possibly operating tensile force F_y isn't included.

Material: Steel, HCP

Type	W [kg]	Qty. [set]	Part number
M12 S	1.2	10	**115843**
M16 S	2.2	10	**115844**
M12 S2	0.6	10	**115845**

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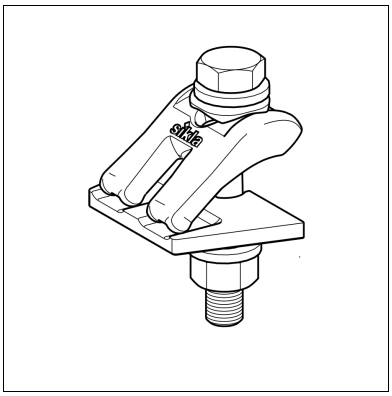
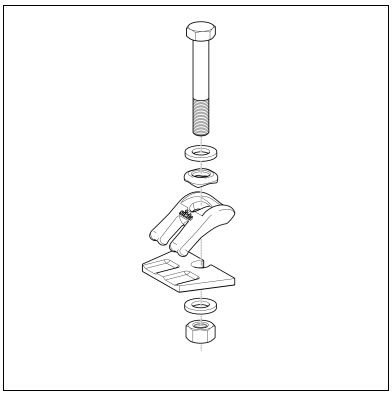
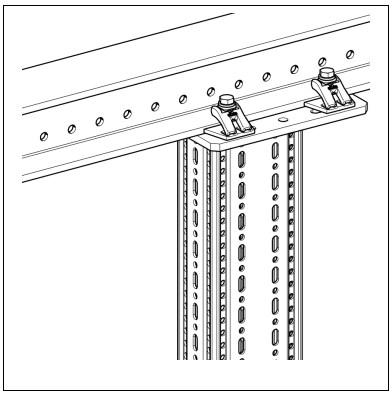
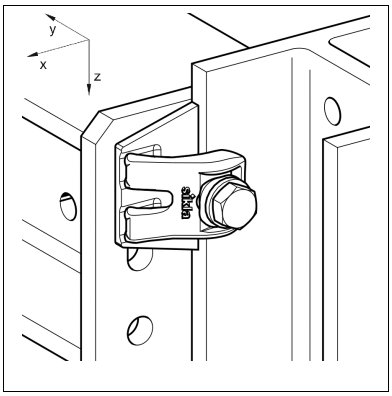








Assembly Set MS 5P MA

Group: A640

Application

Element for connecting Beam Bracket TKO, Angled Beam Bracket SKO, End Support WBD or Pivot Joint GE F to a beam section.

Scope of delivery

Type	Beam Clip [Quantity]	Support plate [Quantity]	Stop plate [Quantity]	HR trimming * [Quantity]
M12 MA S	4 x M12	4 x M12	4 x M12	4 x M12 x 80
M16 MA S	4 x M16	4 x M16	4 x M16	4 x M16 x 100

* HR trimming according EN 14399-3 consisting of: Hexagon bolt M12 or M16, 2 washers, 1 hexagon nut

Installation

1. Position stop plate on component to be mounted.
2. Position the Beam Clip with the slit side into the indentations of the stop plate and with the lug on the steel girder.
3. Install support plate and HR trimming and tighten accordingly.

The support plate secures a rectangular assembly of the bolt and prevents its shifting or bending stress. In conjunction with the HR trimming a continuous and predictable preload force is guaranteed. The stop plate ensures a tight fit of the Beam Clip.

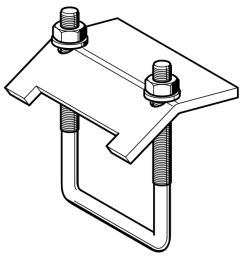
Technical Data

Type	Size range [mm]	Tightening torque M_A [Nm] / plus 90° revolution	F_y permitted per Beam Clip [kN]	Shear force load capacity F_z per Set = 4 Beam Clips [kN]
M12 MA S	1 - 30	60 / 90°	32.9	15.1 *
M16 MA S	4 - 40	140 / 90°	39.1	16.7 *

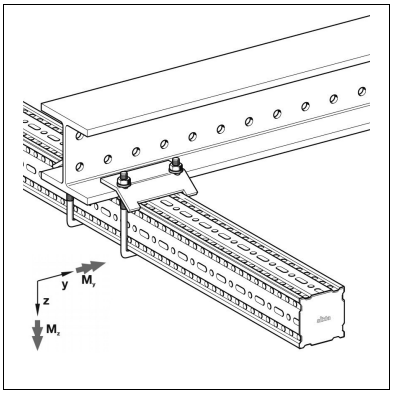
* The specified data relate to the worst case with flange thicknesses 30 mm (M12) or 40 mm (M16) as well as a coefficient of adhesion $\mu_{adhesion}$ = 0.20.
A possibly operating tensile force F_y isn't included.

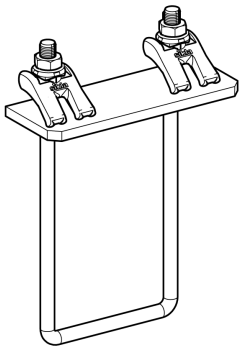
Material: Steel, HCP

Type	W [kg]	Qty. [set]	Part number
M12 MA S	1.6	10	**114886**
M16 MA S	2.8	10	**114887**

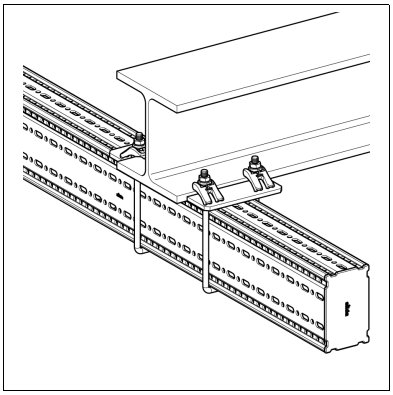


SB F 100-16





SB F 100-40, 100/160-40



U-Holder SB F 100

Group: A839

Application
Pre-assembled component to clamp Beam Section F100 to the flange side of traditional steel sections.

Scope of delivery
Type SB F 100-16:
Holder with thread M10
Plate
2 Hexagon nuts M10
2 Washers

Type SB F 100-40 and 100/160-40
Holder with thread M12
Plate
2 Beam Clips SPA 5P AU
2 Hexagon nuts M12

Installation
U-Holder to be used in pairs.
Type 16 up to flange thickness 16 mm
Type 40 up to flange thickness 40 mm

Technical Data

Type	Thread	Tightening torque [Nm]	F_z per U-Holder [kN]	F_y [kN]	M_y [kNm]	M_z [kNm]
SB F 100-16	M10	40	9,5	*	*	*
SB F 100-40	M12	85	16	*	*	*
SB F 100/160-40	M12	85	16	*	*	*

* Please compare the suitable type's dimensions by means of the Simotec user guideline to get the permissible lateral forces and torques.

Material: Steel, FK 8.8, HCP

Approvals / Conformity

epd

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Type	W [kg]	Quantity [pack]	Part number
SB F 100-16	0.7	20	**113082**
SB F 100-40	1.6	10	**113083**
SB F 100/160-40	1.7	10	**113101**

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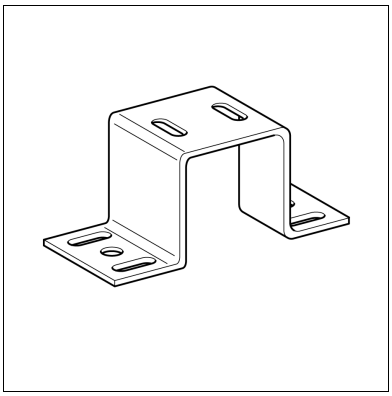

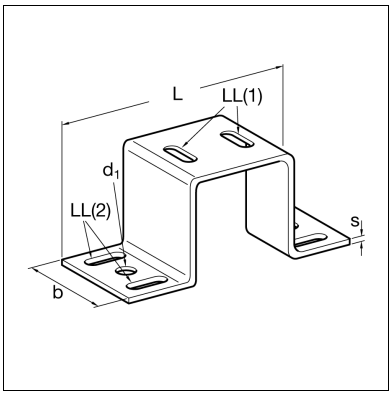

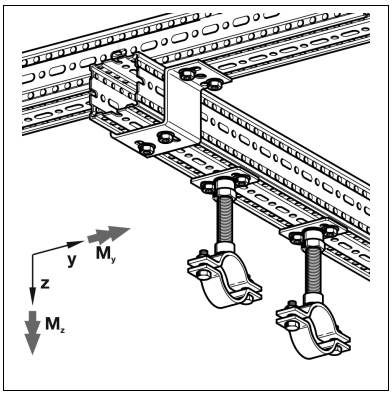

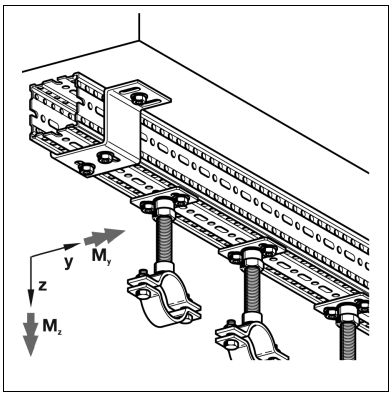

Beam Section Holder TPH F 100

Group: A825

Application

Interface element to connect 90° intersecting Beam Sections F100. Alternatively the Beam Section Holder TPH may be used to connect only one beam section to an even surface with suitable wall anchors or with cast-in channel accessories.

Installation

Connecting one Beam Section F100 90° to another one by using 6 x Self Forming Screw FLS applied through all elongated holes. Connecting to any other surface or member by using 2 x Self Forming Screws FLS through the two elongated holes on the top of the Beam Section Holder TPH F100 plus 2 appropriate fixing elements up to M12 through the two holes “d1”.

Technical Data

Type	L x b x s [mm]	Ø d_1 [mm]	Elongated hole LL1 d x a [mm]	Elongated hole LL2 d x a [mm]
TPH F 100 C	219 x 100 x 4	14	11 x 20	11 x 20
TPH F 100/80 C	199 x 100 x 4	14	11 x 20	11 x 20

Type	F_x [kN]	F_y [kN]	F_z [kN]	M_y [kNm]	M_z [kNm]
TPH F 100 C	6.2	12.7	12.3	0.6	0.5
TPH F 100/80 C	6.2	12.7	12.3	0.6	0.5

The specified load values are permissible loads and contain the partial safety factors γ_{M2} = 1,25 (DIN EN 1993-1-8:2010-12, chart 2.1) and γ_G = 1,35 (DIN EN 1990:2010-12, chart A1.2(B)) for permanent actions.

Material: Steel, HCP

Approvals / Conformity

epd

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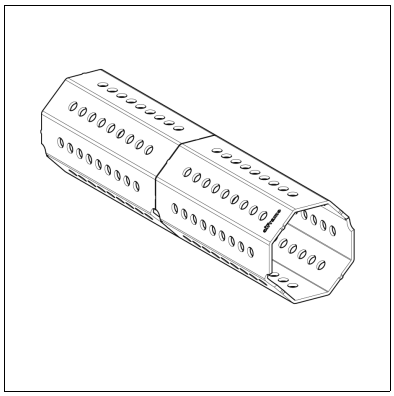
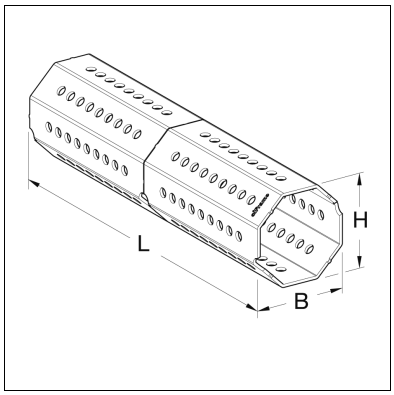
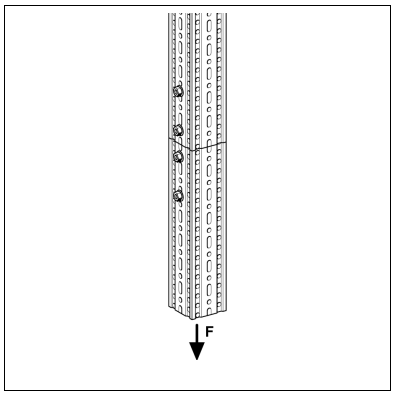
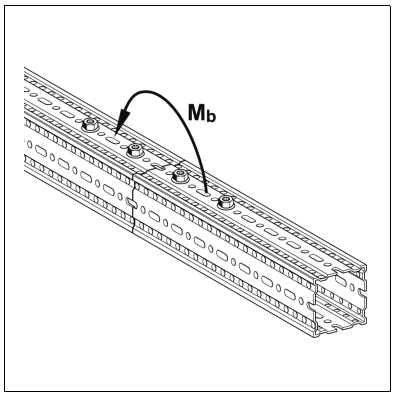
Type	W [kg]	Quantity [pack]	Part number
TPH F 100 C	1.2	10	**113084**
TPH F 100/80 C	1.0	10	**113085**









Octagonal Coupling PK F 100 8kt HCP

Group: A430

Application

Internal splice connecting element for TP F 100 Beam Section, particularly suitable for vertical extension. Should the component be used for horizontal application, the bending moment needs to be considered. This particular connection element allows rotation of the siFramo TP F 100 Beam Section by 45°.

Installation

To be fastened with 2 x 4 FLS F Self Forming Screws. For optimal bending moment, distance between screws to be as far from each other as possible.

Note:
Self Forming Screw FLS F to be fastened on two sides with a distance of minimum of 50 mm and to be fastened symmetrically. To optimise the bending moment the FLS F should be installed to maintain the pipe weight of the effective flow - i.e. screws are located top and bottom for horizontal cross bars not sideways.

Technical Data

Type	L [mm]	H [mm]	B [mm]	F_{max} [kN]	Mb_{max} [kNm]
PK F 100 8kt	360	90	90	10.0	0.25

Material: Steel, HCP

Approvals / Conformity

epd

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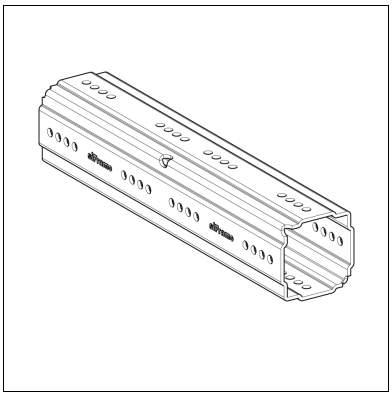
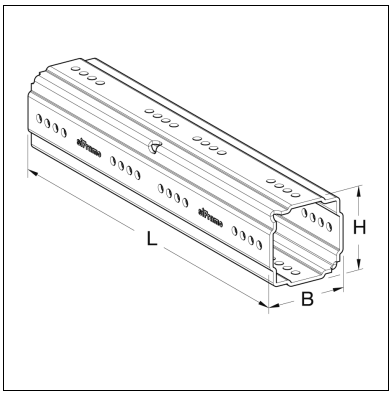
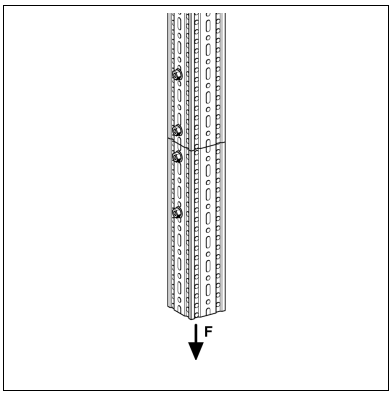
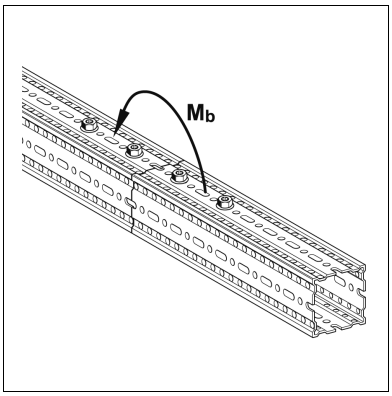
Type	W [kg]	Quantity [pack]	Part number
PK F 100 8kt	2.3	1	**400389**









Square Coupling PK F 100 4kt HCP

Group: A430

Application

Internal splice connecting element for TP F 100 Beam Section, particularly suitable for vertical extension. Should the component be used for horizontal application, the bending moment needs to be considered.

Installation

To be fastened with 2 x 4 FLS F Self Forming Screws. For optimal bending moment, distance between screws to be as far from each other as possible.

Note:
Self Forming Screw FLS F to be fastened on two sides with a distance of minimum of 100mm and to be fastened symmetrically.
To optimise the bending moment the FLS F should be installed to maintain the pipe weight of the effective flow - i.e. screws are located top and bottom for horizontal cross bars not sideways.

Technical Data

Type	L [mm]	H [mm]	B [mm]	F_{max} [kN]	Mb_{max} [kNm]
PK F 100 4kt	442.5	90	90	10.0	0.5

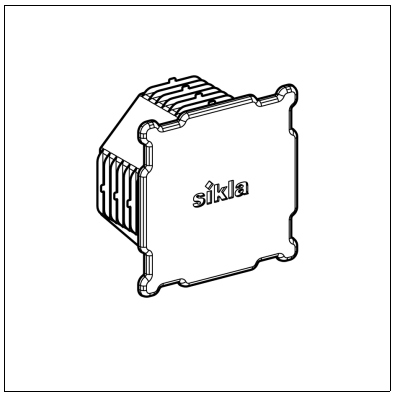
Material: Steel, HCP

Approvals / Conformity

epd

NEPD-4539-3797-EN

Type	W [kg]	Quantity [pack]	Part number
PK F 100 4kt	3.4	1	**400390**



End Cap ADK F 100

Group: A430

Application

Plastic end cap to close cut ends of Beam Section F100 to meet both visual and health & safety requirements. Standard Cantilever- and Beam Brackets (AK F100 and TKO F100) already include this end cap.

Technical Data

Material: PP, colour yellow, bedingt witterungsbeständig

Approvals / Conformity

epd

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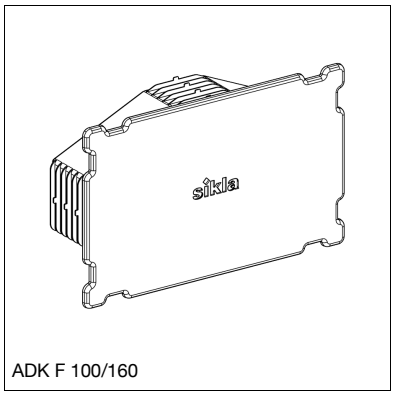
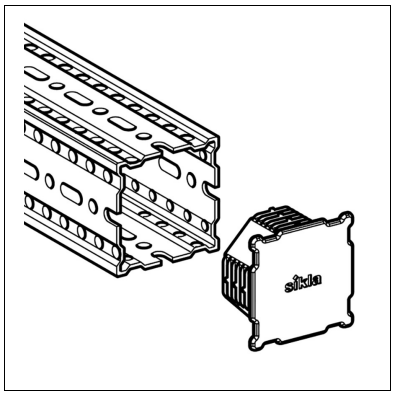
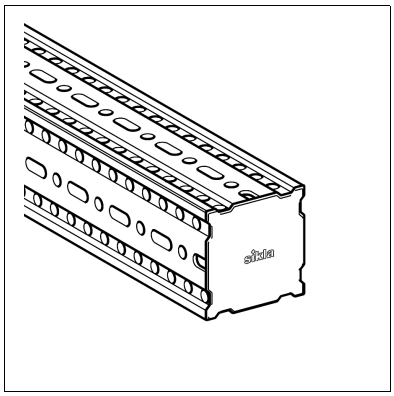
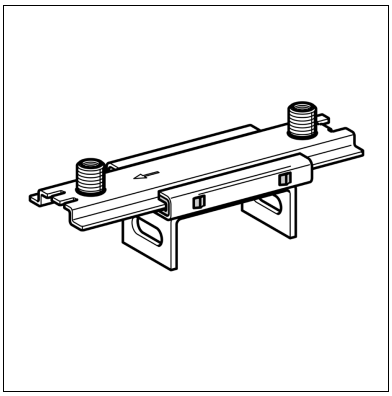


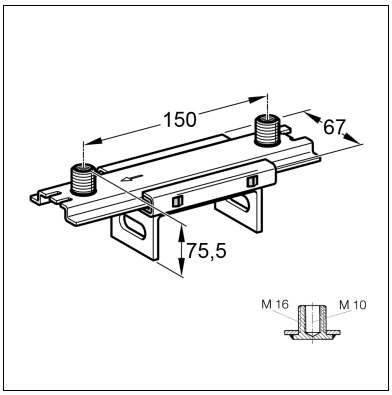
ADK F 100/160

Type	W [kg]	Quantity [pack]	Part number
ADK F 100	0.05	25	**113086**
ADK F 100/160	0.08	25	**113102**









Slide Set GS F 100 2G

Group: A436

Application

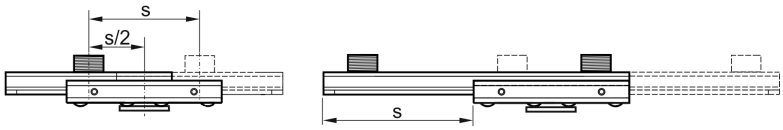
Pipe guide for twin-clamp connection designed to clutch the Beam Section F100 fixed by 2 x Self Forming Screws FLS.

Installation

Pipe clamp connection points “2G” receive M10 studs or M16 by adapter connection.

Technical Data

Type	a [mm]	b [mm]	c [mm]
GS F 80 2G2	150	67	70
GS F 100 2G2	150	67	75,5

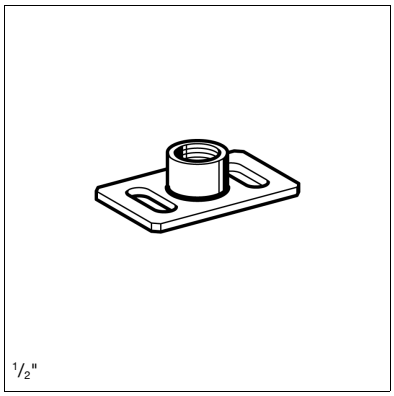


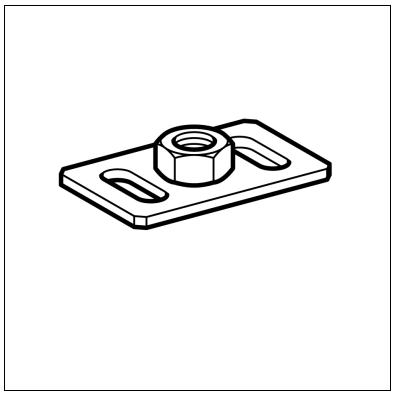
Type	Max. lever arm[mm]	Max. glide path s [mm]
GS F 80 2G	150	100
GS F 80 2G2	150	135
GS F 100 2G2	150	135

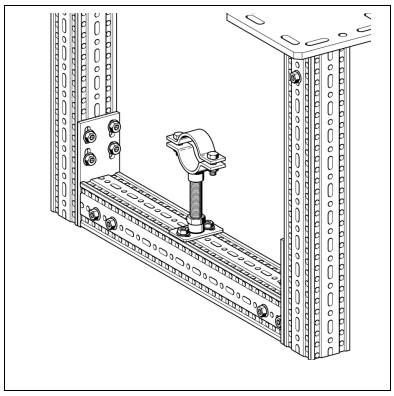
Perm. load support:	1,2 kN
Perm. load suspended:	0,6 kN
Permanent temperature range:	130° C
Static friction coefficient μ_0:	0,20
Sliding friction coefficient μ:	0,15

Material:	
Slide element:	Steel, HCP
Slide bars:	Polyamide (glass-fibre reinforced)
Retaining plate:	Steel, HCP

Type	W [kg]	Quantity [pack]	Part number
GS F 100 2G2	0.8	10	**113093**







Mounting Plate GPL F 100

Group: A838

Application

Interface component to connect threaded bar and threaded tube to Beam Section F100.

Installation

Requires 2 x Self Forming Screw FLS per Mounting Plate GPL.

Technical Data

Type	Tension [kN]	Lateral force [kN]	Perm. bending moment [Nm]
GPL F 80-1/2"	8,0	13,0	53
GPL F 80-M10	8,0	13,0	15
GPL F 80-M12	8,0	13,0	26
GPL F 80-M16	8,0	13,0	62
GPL F 100-1/2"	8,0	13,0	53
GPL F 100-M10	8,0	13,0	15
GPL F 100-M12	8,0	13,0	26
GPL F 100-M16	8,0	13,0	62

Dimensions of Base plate: 100 x 50 x 4 mm
Material: Steel, HCP

Type	W [kg]	Quantity [pack]	Part number
GPL F 100-1/2"	0.2	50	**113089**
GPL F 100-M10	0.2	50	**113338**
GPL F 100-M12	0.2	50	**113646**
GPL F 100-M16	0.2	50	**113090**

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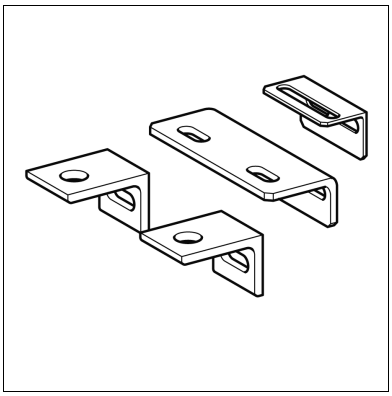

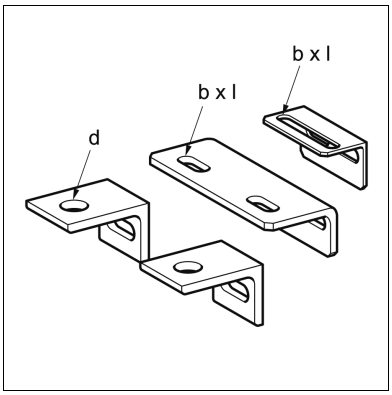

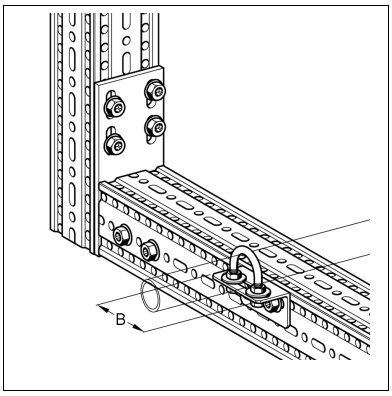

U Bolt Fastening UB F

Group: A430

Application

U Bolt Fastening to connect standard U-Bolts required for pipework to the supporting Beam Sections, Cantilever Brackets and Beam Brackets F80 or F100.

Scope of delivery

For U-bolts ≥ 4" always 2 U-bolt fastenings F are needed.

Technical Data

Typ	d [mm]	b x l [mm]	B [mm]
UB F 1/2" - 1 1/2"	-	65 x 11	85
UB F 2" - 3"	-	20 x 13	165
UB F 4" - 6"	17	-	45
UB F 8" - 12"	22	-	45
UB F 378 - 530	26	-	45

Material: Steel, HCP or hot-dipped galvanised

Type	W [kg]	Quantity [pack]	Part number
UB F 1/2" - 1 1/2"	0.13	25	**192931**
UB F 2" - 3"	0.44	10	**196212**
UB F 4" - 6"	0.18	20	**113124**
UB F 8" - 12"	0.18	20	**113125**
UB F 378 - 530	0.18	20	**113126**

Modular Mechanical Supports
A Division of Eberl Iron Works, Inc.
128 Sycamore St
Buffalo, NY 14204
1 (800) 285-3056
mms@eberliron.com

modularmechanicalsupports.com