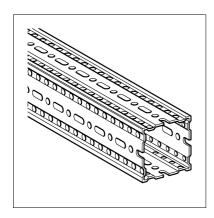


Page **1**-42



Pad U-UB F 80





Beam Section TP F 80 Group: A410

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 [cm³]	Moment of inertia [cm ⁴]	Radius of inertia [cm]	Torsional moment It [cm ⁴]	Cross section A [cm²]
TP F 80	Wy: 15.83 Wz: 15.83	ly: 62.47 lz: 62.47	iy: 3.58 iz: 3.58	48.40	4.85
TP F 80/30	Wy: 10.38 Wz: 4.78	ly: 35.40 lz: 6.74	iy: 3.63 iz: 1.58	8.58	2.69

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.

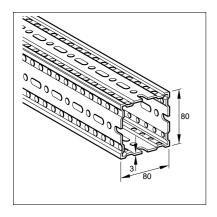
Material: Steel, hcp

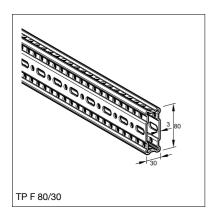


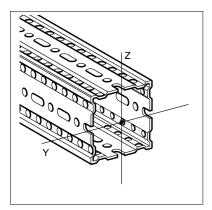
CE mark (Declaration of performance see www.sikla.com/service/downloads)



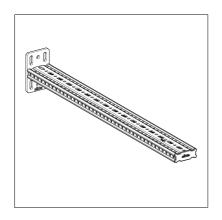
Туре	Weight [kg/m]	Qty. [m]	Part number
TP F 80	6.4	6	192539
TP F 80/30	4.3	6	113407











Cantilever Bracket AK F 80/30

Group: A420

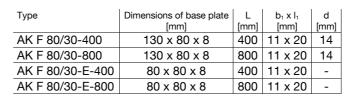
Application

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 \times Self Forming Screw FLS.

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.

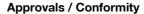




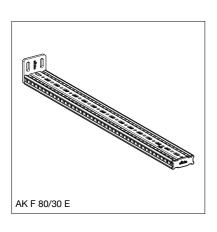
Configuration: Plate welded with Beam Section F 80/30

Material:

Plate: Steel, HCP Beam section: Steel, HCP

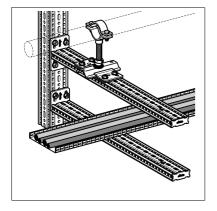


CE mark (Declaration of performance see www.sikla.com/service/downloads)

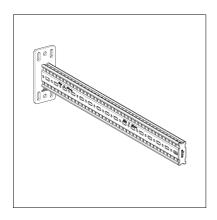




Type	W	Quantity	Part
	[kg]	[pack]	number
AK F 80/30-400	2.4	1	113064
AK F 80/30-800	4.2	1	113065
AK F 80/30-E-400	2.2	1	113625
AK F 80/30-E-800	4.0	1	113626







Cantilever Bracket AK F 80/30-Q

Group: A420

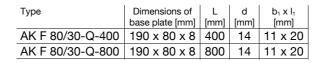
Application

Galvanised box-section with welded end-plate to serve as cantilever arm for Beam Section TP F 80 or Beam Bracket TKO F 80. Solid cantilevers e.g. for cable containment when fixed to walls with suitable wall anchors M12.

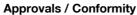
Installation

With 4 x Self Forming Screw FLS when fixed to another siFramo hollowbox-section. Fixing to walls and ceilings with suitable wall anchors M12.



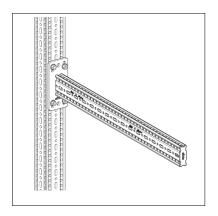


Material: Steel, HCP

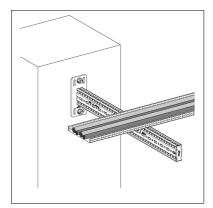


CE-mark (Declaration of performance see www.sikla.com/downloads)

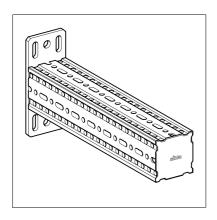




Туре	W [kg]	Quantity [pack]	Part number
AK F 80/30-Q-400	2.5	1	117292
AK F 80/30-Q-800	4.3	1	117293







Cantilever Bracket AK F 80

Group: A420

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 \times Self Forming Screw FLS. By means of the round holes in the base plate a direct connection to excisting cast-in channels is possible.

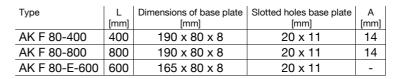
Scope of delivery

With pre-assembled End Cap ADK F 80

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.





Configuration: Plate welded to Beam Section TP F 80

Material:

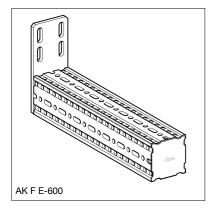
Plate: Steel, HCP Beam Section: Steel, HCP

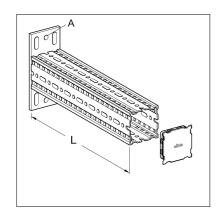
Approvals / Conformity

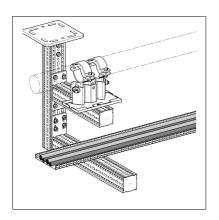
CE mark (Declaration of performance see www.sikla.com/downloads)



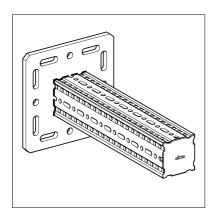
Туре	W [kg]	Quantity [pack]	Part number
AK F 80-400	3.4	1	192764
AK F 80-800	5.8	1	192771
AK F 80-E-600	4.5	1	110370

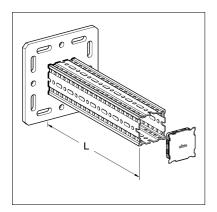


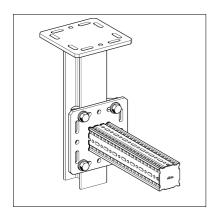












Beam Bracket TKO F 80

Group: A423

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 F 80.

Installation

Depending on the situation, different options are recommended:

- a) Directly to building structure: 4 x suitable wall anchors
- To traditional steel beams between 80 120 mm flange dimensions:
 1x 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 F80-400	400	220 x 220 x 12	M12
TKO F80-800	800	220 x 220 x 12	M12

Configuration Base plate welded to Beam Section TP F 80

Material:

Base plate: Steel, HCP Beam Section: Steel, HCP

Approvals / Conformity

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



epd

Туре	W [kg]	Quantity [pack]	Part number
TKO F 80-400	6.6	1	192788
TKO F 80-800	9.2	1	192795





Bracing Arm SKO F 80

Group: A423

Application

Bracing arm for reinforcement of frames made from Beam Section TP F 80 and/or Cantilever Bracket AK F 80.

Installation

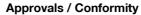
With 2 x 4 Self Forming Screw FLS when used inside a corner of two F 80 size box-sections.

With 4 x Self Forming Screw FLS and 2 x suitable M12 wall anchors/fixings when used to connect between one F 80 size box-section and the building structure.



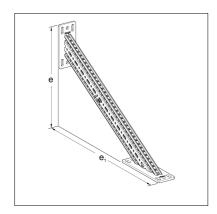
Type	Dimensions of base plate [mm]	е	e ₁
	base plate [mm]	[mm]	[mm]
SKO F 80	265 x 80 x 8	438	719

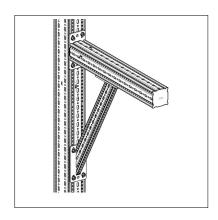
Material: Steel, HCP

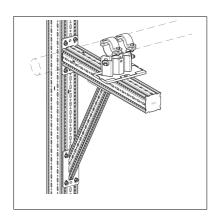


CE-mark (Declaration of performance see www.sikla.com/downloads)

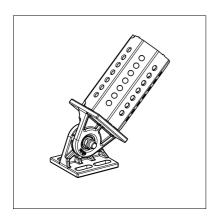
Туре	W	Quantity	Part
	[kg]	[pack]	number
SKO F 80	5.1	1	117152











Pivot Joint GE F 80

Group: A437

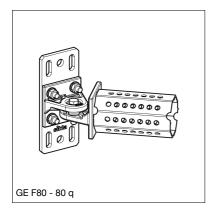
Application

Applicable as a bracing element for single-arm cantilevers in conjunction with siFramo 80 section, and for the knee-brace reinforcing of siFramo 80 frame constructions. The pivot can be installed with angles from 25° to 155°.

Installation

Attachment of Joint GE F 80 to Beam Section TP F 80 by means of 4 Self Forming Screws FLS F at the base plate. The support profile TP F 80 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

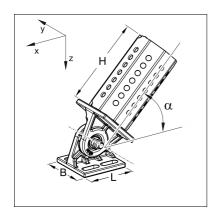
Туре	Height H [mm]	Length L [mm]	Width B [mm]	Angle α	Dimensions of base plate [mm]
GE F 80 - 80	140	80	80	25° - 155°	-
GE F 80 - 80 q	140	80	80	25° - 155°	190 x 80 x 8

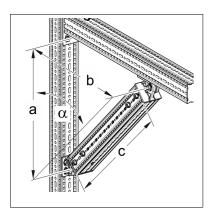
Material: Steel, HCP

Approvals / Conformity

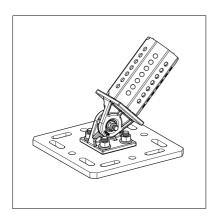


Туре	W [kg]	Quantity [pack]	Part number
GE F 80 - 80	2.1	1	113835
GE F 80 - 80 q	3.0	1	113834









Pivot Joint GE F - ST F 80

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 80 frame constructions. The pivot can be installed with angles from 25° to 155°.

Scope of delivery

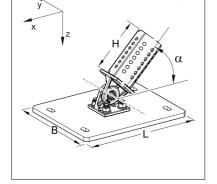
Pivot Joint GE F - ST F 80 with pre-attached base plate

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. The support profile TP F 80 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

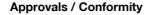
By loosening the screw connection between Joint and Joining Plate it is possible to rotate the Joint by 90° and to use it for a cross member then (see figure 4).



Technical Data

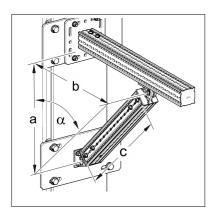
Туре	Height H [mm]	Length L [mm]	Width B [mm]	Angle α
GE F 80/120 - 80	140	220	220	25° - 155°
GE F 121/160 - 80 - 1	140	320	260	25° - 155°
GE F 161/200 - 80 - 1	140	320	310	25° - 155°
GE F 201/310 - 80 - 1	140	220	420	25° - 155°

Material: Steel, HCP

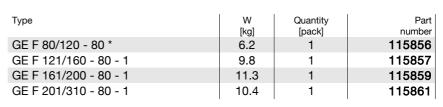


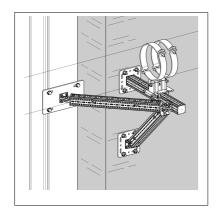


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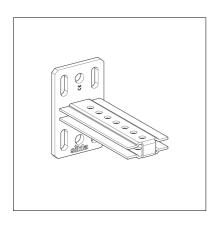


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End Support STA F 80/30

Group: A422

Application

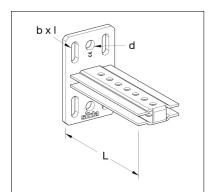
Plug-in component designed to create an endplate at the open end of a Beam Section TP F 80 or TP F 80/30. A connection to Cantilever brackets AK F 80 or AK F 80/30 can also be realised.

Installation

Depending on the situation, different options are recommended:

a) With 2 x 4 Self Forming Screws FLS when used to connect 2 Beam Sections.

b) With 4 Self Forming Screws FLS applied to the insert and 2 suitable M12 wall anchors/fixings when connected to the building structure.



Technical Data

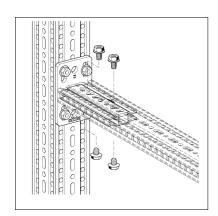
Туре	Dimensions of	L	d	b ₁ x l ₁
	base plate [mm]	[mm]	[mm]	[mm]
STA F 80/30	130 x 80 x 8	169	14	11 x 20

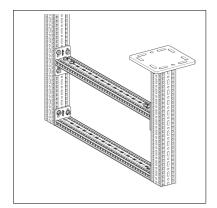
Material: Steel, HCP

Approvals / Conformity

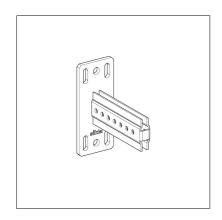
CE-mark (Declaration of performance see www.sikla.com/downloads)

Туре	W	Quantity	Part
	[kg]	[pack]	number
STA F 80/30	1.1	1	117160









End Support STA F 80/30-Q

Group: A422

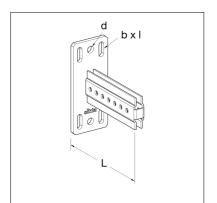
Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F 80 or TP F 80/30. A connection to Cantilever brackets AK F 80 or AK F 80/30 can also be realised e.g. for cable trays and downpipes.

Installation

Depending on the situation, different options are recommended:

- a) With 2 x 4 Self Forming Screws FLS when used to connect 2 Beam Sections
- b) With 4 Self Forming Screws FLS applied to the insert and 2 suitable M12 wall anchors/fixings when connected to the building structure.



Technical Data

Туре	Dimensions of	L	d	b ₁ x l ₁
	base plate [mm]	[mm]	[mm]	[mm]
STA F 80/30	190 x 80 x 8	169	14	11 x 20

Material: Steel, HCP

Approvals / Conformity

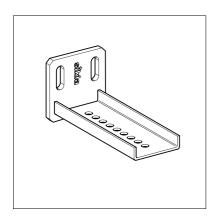
CE-mark (Declaration of performance see www.sikla.com/downloads)



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Type	W	Quantity	Part
	[kg]	[pack]	number
STA F 80/30-Q	1.4	1	117294





End Support STA F 80/30 E

Group: A422

Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F80/30 a Cantilever bracket AK F80/30.

Installation

The Beam Section TP F 80/30 connected to the End Support STA F 80/30 E has to be screwed with 2 Self Forming Screws FLS F.

Technical Data

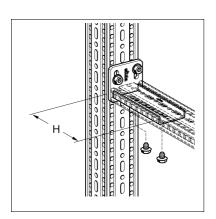
Туре	Dimensions of Base plate	Slots in	Н
	[mm]	Base plate for	[mm]
STA F 80/30-80-E	80 x 80 x 8	M10	178

Material: Steel, HCP

Approvals / Conformity

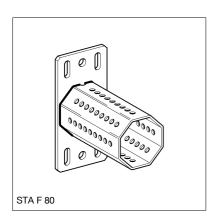
CE mark (Declaration of performance see www.sikla.com/service/downloads)

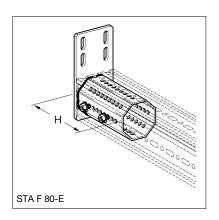


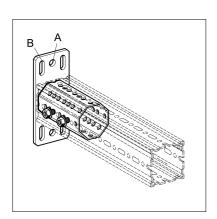


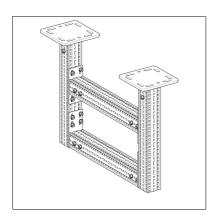
Type	W	Quantity	Part
	[kg]	[pack]	number
STA F 80/30-80-E	0.8	1	113066











End Support STA F 80

Group: A422

Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F80 or a Cantilever bracket AK F80. By means of the round holes in the base plate a direct connection to excisting cast-in channels is possible.

Installation

Depending on the version, following mountings solutions are possible:

- 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 80/80 connected to the End Support STA F 80 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

Туре	Dimensions of Base plate [mm]	A [mm]	B [mm]	H [mm]
STA F 80	190 x 80 x 8	14	20 x 11	148
STA F 80-E	165 x 80 x 8	-	20 x 11	148

Configuration: Base plate welded to octagonal element F 80

Material:

Plate: Steel, HCP Octagonal element: Steel, HCP

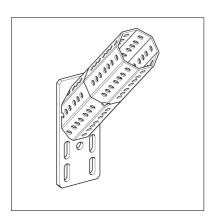
Approvals / Conformity

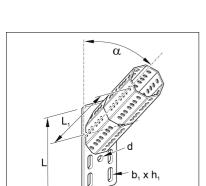
CE mark (Declaration of performance see www.sikla.com/downloads)

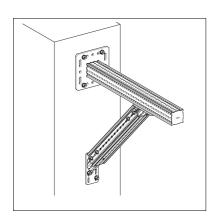


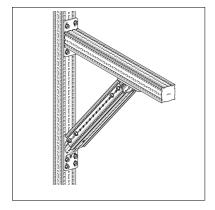
Туре	W [kg]	Quantity [pack]	Part number
STA F 80	1.6	1	192856
STA F 80-E	1.5	1	192863











End Support STA F80-E 45°

Group: A422

Application

The End Support STA F80-E 45° is designed to generate a 45° bracing element in

combination with F80 beam sections or F80 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 F80.
- b) Connection to building fabric by using 2 suitable wall anchors in diagonal configuration.

Technical Data

Туре	, L	В	L₁ [mm]	, d	b ₁	h ₁	α
	[mm]	[mm]	[mm]	[mm]	[mm]	[mm]	[[]
STA F 80-E 45°	190	80	244.5	14	11	20	45

Configuration: Base plate welded to octagonal element F 80

Material: Steel, HCP

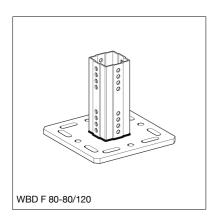
Approvals / Conformity

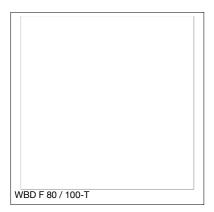
CE-mark (Declaration of performance see www.sikla.com/downloads)

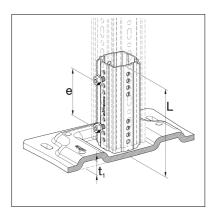


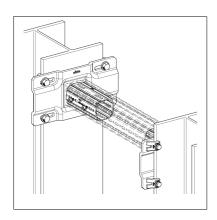
Type	W	Quantity	Part
	[kg]	[pack]	number
STA F 80-E 45°	2.0	1	406001











End Support WBD F 80

Group: A421

Application

Plug-in component designed to create a square end plate at the open end of a Beam Section TP F80 or a Beam Bracket/Cantilever bracket AK F80. 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:

- 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: 1 x 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 80 connected to the End Support WBD F 80 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

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

Type	е	L	t ₁	Slots in base
	[mm]	[mm]	[mm]	plate for
WBD F 80-80/120	max. distance	202	-	M12
WBD-P F 80-121/160	max. distance	202	27	M12
WBD-P F 80-161/200	max. distance	202	27	M16
WBD-P F 80-201/310	max. distance	202	27	M16
WBD F 80-T	max. distance	152	-	M12

Configuration: Plate welded to square F 80 resp. octagonal element F 80

(only WBD F 80-T)

Material: Steel, HCP

Approvals / Conformity

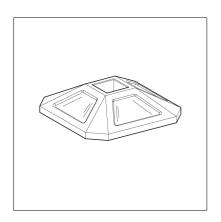
CE mark (Declaration of performance see www.sikla.com/service/downloads)





Туре	W [kg]	Quantity [pack]	Part number
WBD F 80-80/120	5.2	1	192801
WBD-P F 80-121/160	8.7	1	117164
WBD-P F 80-161/200	10.2	1	117165
WBD-P F 80-201/310	9.4	1	117166
WBD F 80-T	4.8	1	192849





Insulated Foot SHB SQF F 80

Group: A440

Application

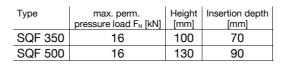
Comprehensive solution out of synthetic rubber for flat roofs and central energy supply centers with coated floor. In combination with the Sikla Assembly System siFramo 80 any structures can quickly and simply be realised. The water permeable rubber allows a secure and reliable support with constant load distribution. Particularly suitable for the fixation of aggregates, pipings, ventilation ducts and walkways.

The Beam Section TP F 80 can be mounted to the Insulated Foot SHB SQF F 80.

Installation

Insert the Beam Section TP F 80 into the Insulated Foot's slot.

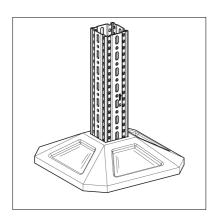


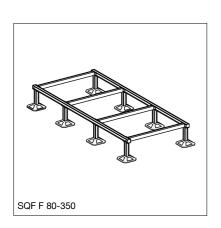


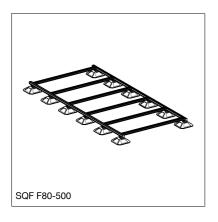
Die systembedingte Haftreibung ist bauseits zu ermitteln. Abhängig von der verwendeten Dachfolie wird der Einsatz einer zusätzlichen Trennschicht empfohlen. Die Lasteinleitung ins Bauwerk ist bauseits zu prüfen.

Material: Styrene butadiene rubber

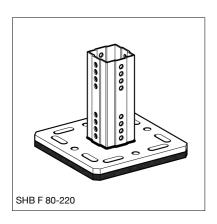
Туре	Plate dimensions [mm]	W [kg]	Quantity [pack]	Part number
SHB SQF F 80-350	350 x 350	5.4	1	218865
SHB SQF F 80-500	500 x 500	15.6	1	218868

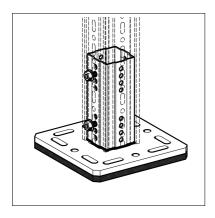


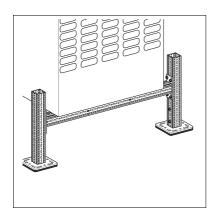












Insulated Foot Plate SHB F 80

Group: A440

Application

Integrated footplate and permeable rubber compound mat to provide a solution for the support of building services, without the need for penetrative supports. In combination with the Sikla siFramo TP F 80 section, any frame structure may be built up from the footplates.

Especially suitable for maintaining the thermal and waterproofing integrity of a roof or basement floor as no penetrative fixings are required to secure the footplates for service supports.

Installation

Assembly to Beam Section TP F 80 by means of 4 Self Forming Screws FLS F.

Technical Data

Compression set:

Statical E-module: According to 0.8 - 0.9 N/mm² DIN 53513

Dynamical E-module: According to 0.6 - 2.2 N/mm²

DIN 53513

DIN 53572 approx. 4.0 % measured 30 min.

after release at 50 % compression / 23°C after 72 Std.

Tensile strength: DIN 53571 0.40 N/mm² min.
Ultimate elongation: DIN 53571 70 % minimum value
Tear strength: DIN 53515 3.4 N/mm² minimum value

Fire resistance: DIN 4102 B2

Die systembedingte Haftreibung ist bauseits zu ermitteln. Abhängig von der verwendeten Dachfolie wird der Einsatz einer zusätzlichen Trennschicht empfohlen. Die Lasteinleitung ins Bauwerk ist bauseits zu prüfen.

Further dimensions of SHB F 80-220 see End Support WBD F 80.

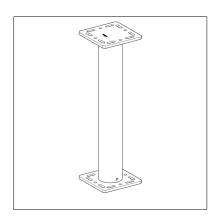
Material: Steel, HCP, rubber-compound material

Approvals / Conformity



Туре	Plate	W	Quantity	Part
	dimensions [mm]	[kg]	[pack]	number
SHB F 80-220	220 x 220	5.7	1	198926





Roof duct DF AV

Group: A442

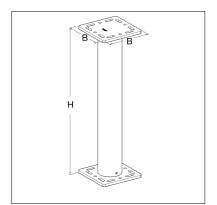
Application

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.



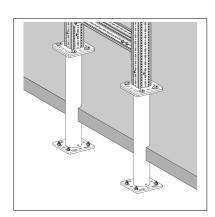
Technical Data

В	Н
[mm]	[mm]
220	750

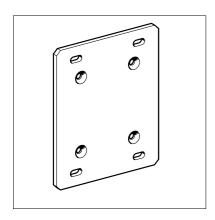
Base plate dimensions B x B x t [mm]	Perforation for anchor
220 x 220 x 12	M12

Material: Steel, HCP

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







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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

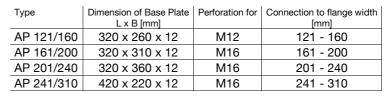
Joining Plate AP

- 4 Countersink Screws M12 x 40
- 4 Hexagon Nuts M12
- 4 Sicherungsscheiben



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.





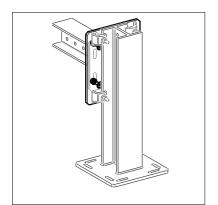


Joining Plate: Steel, HCP

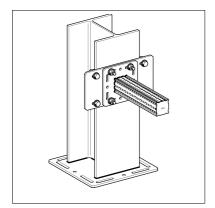
Bolts: Steel DIN EN ISO 10642, class 8.8, HCP

Nuts: Steel, class 8, HCP

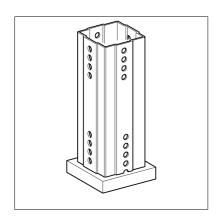
Washers: Steel, HCP

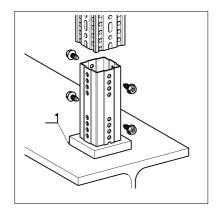


Туре	W [kg]	Quantity [pack]	Part number
AP 121/160	7.7	1	183953
AP 161/200	9.3	1	183962
AP 201/240	10.4	1	116534
AP 241/310	8.4	1	117767









Welding Adapter ASA F 80 GPL Square

Group: A428

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 80 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.

Technical Data

Туре	Adapter size H [mm]	Mounting Plate size [mm]
ASA F 80 GPL 4kt	210	100 x 100 x 20

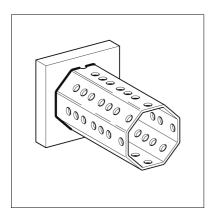
Material: Steel, HCP

Approvals / Conformity

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

Туре	W	Quantity	Part
	[kg]	[pack]	number
ASA F 80 GPL 4kt	2.4	1	111741





000 000

Welding Adapter ASA F 80 Octagon

Group: A428

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.

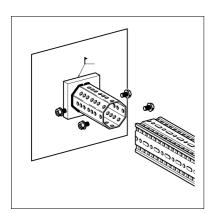


Туре	Adapter size H [mm]	Mounting Plate size [mm]
ASA F 80 GPL 8kt	160	100 x 100 x 20

Material: Steel, HCP



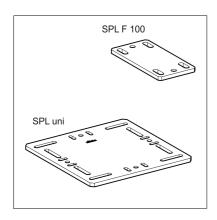
CE mark (Declaration of performance see www.sikla.com/service/downloads)





Туре	W	Quantity	Part
	[kg]	[pack]	number
ASA F 80 GPL 8kt	2.2	1	112212







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.



Depending on the type, different installation methods are recommended:

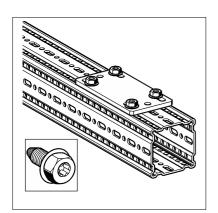
- Installation of SPL F 80 or 100 with 4 Self Forming Screws FLS to Beam Section TP F.
- b) Installation of SPL universal with Flange Screws SCR FLA TT M10 x 30 (part no. 116479) to Beam Section TP F.
- c) Installation of SPL universal by means of 1 Assembly Set 5P M12 S to primary steel with flange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

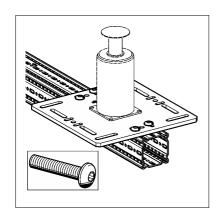


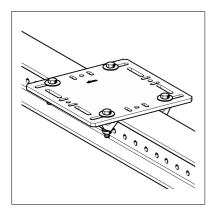
Туре	Installation surface [mm]	Mounting Plate size [mm]
SPL F 80	90 x 70	190 x 80 x 8
SPL F 100	110 x 90	210 x 100 x 8
SPL universal	220 x 220	370 x 370 x 12

Material: Steel, HCP

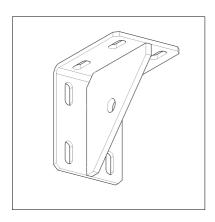
Туре	W [kg]	Quantity [pack]	Part number
SPL F 80	0.9	1	117833
SPL F 100	1.3	1	117834
SPL universal	11.9	1	113636











Corner Bracket WD F 80

Group: A430

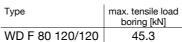
Application

Component to be used for connections between two F 80 sections when the structural design requires an alternative to the End Support STA F 80 as the default solution. Connections with the Corner Bracket WD F 80 allow flexible constructions and provide a high load capacity at the same time. The central hole allows for the integration of diagonal cross-bracing allowing more complex structures to be made.

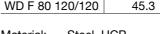
Installation

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





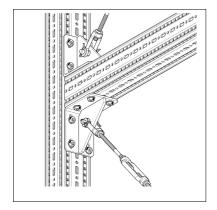
Steel, HCP Material:

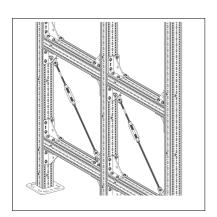


Approvals / Conformity

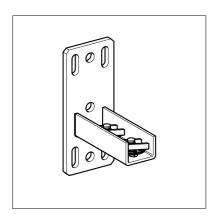
CE-mark (Declaration of performance see www.sikla.com/downloads)

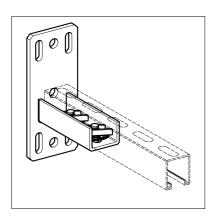
Туре	W	Quantity	Part
	[kg]	[pack]	number
WD F 80 120/120	1.5	1	117153

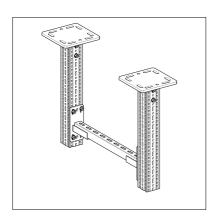












Channel Adapter SA F 80

Group: A427

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 F80 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 F 80-41 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

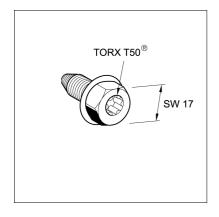
Туре	Dimension of base plate [mm]	Slotted holes [mm]	Round holes [mm]
SA F 80-41	190 x 80 x 8	20 x 11	14

Material: Steel, HCP

Type	W	Quantity	Part
	[kg]	[pack]	number
SA F 80-41	1.4	1	192887







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 reshaped 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:

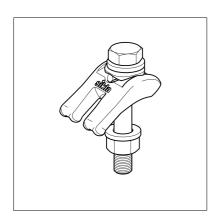
The Hilti Group recently launched a thread-forming screw under the product name "MT-TFB OC". This product is visually hard to distinguish from the Sikla original screw "FLS-F", and we would like to notify our customers that the Hilti screw is not compatible with our system. The use of this screw in conjunction 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



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







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

Туре	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



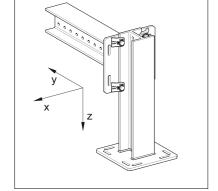
- 1. Position Beam Clip with the split end on beam section.
- 2. Install support plate and HR trimming and tighten accordingly.

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.



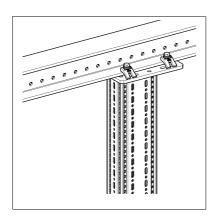
Type	Size range	Tightening torque MA	F _y permitted	Shear force load capacity Fz
	[mm]	[Nm] /	per Beam Clip	per set = 4 Beam Clips
		plus 90° revolution	[kN]	[kN]
M12 S	1 - 30	60 / 90°	26,3	12,0 *
M16 S	4 - 40	140 / 90°	32,0	13,6 *

 * 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.

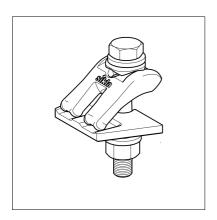


Material: Steel, HCP

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









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

Туре	Beam Clip [Quantity]	Support 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



- 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.

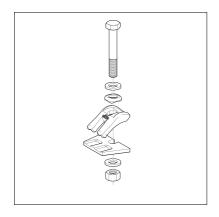


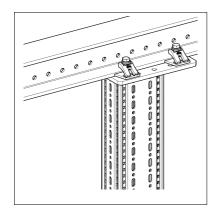
Type	Size range [mm]	Tightening torque M _A [Nm] /	F _y permitted per Beam Clip	Shear force load capacity F _z per Set = 4 Beam Clips
	[11111]	plus 90° revolution	[kN]	[kN]
-				
M12 MA S	1 - 30	60 / 90°	32.9	15.1 *
M16 MA S	4 - 40	140 / 90°	39.1	16.7 *

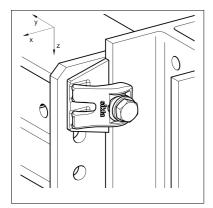
* The specified data relate to the worst case with flange thicknesses 30 mm (M12) or 40 mm (M16) as well as a coefficient of adhesion $\mu_{adhesion} = 0.20$. A possibly operating tensile force F_y isn't included.



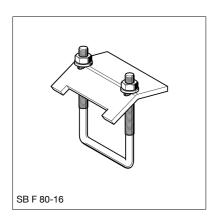
Туре	W [kg]	Qty. [set]	Part number
M12 MA S	1.6	10	114886
M16 MA S	2.8	10	114887

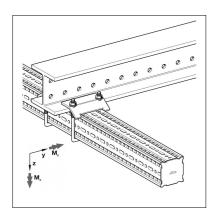


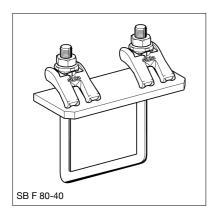


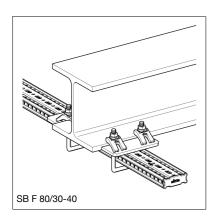












U-Holder SB F 80

Group: A439

Application

Pre-assembled component to clamp Beam Section F 80 to the flange side of traditional steel sections.

Scope of delivery

Type SB F 80-16: Holder with thread M10 Plate 2 Hexagon nuts M10 2 Washers

Type SB F 80-40: 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 80-16	M10	40	9.5	*	*	*
SB F 80-40	M12	85	16	*	*	*
SB F 80/30-16	M10	40	9.5	*	*	*
SB F 80/30-40	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.

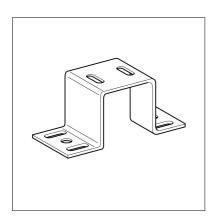
Material: Steel, FK 8.8, HCP

Approvals / Conformity



Туре	W [kg]	Quantity [pack]	Part number
SB F 80-16	0.6	20	192683
SB F 80-40	1.4	10	194010
SB F 80/30-16	0.5	20	115840
SB F 80/30-40	1.4	10	115839





Beam Section Holder TPH F 80

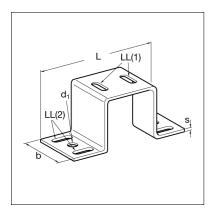
Group: A425

Application

Interface element to connect 90° intersecting Beam Sections F80 or F 80/30. 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

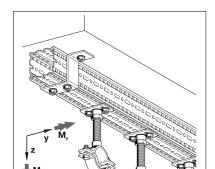
Connecting one Beam Section F80 or F 80/30 90° to another one by using 6 x Self Forming Screw FLS applied through all elongated holes. Connecting to any other surface or member by using 2 x Self Forming Screws FLS through the two elongated holes on the top of the Beam Section Holder TPH F80 plus 2 appropriate fixing elements up to M12 through the two holes "d1".



Technical Data

Туре	L x w x th [mm]	Ø d₁ [mm]	Elongated hole LL1 d x a [mm]	Elongated hole LL2 d x a [mm]
TPH F 80/30	181 x 50 x 4	13	11 x 20	-
TPH F 80/30 C	199 x 80 x 4	14	11 x 20	11 x 20
TPH F 80	181 x 50 x 4	13	11 x 20	-
TPH F 80 C	199 x 80 x 4	14	11 x 20	11 x 20

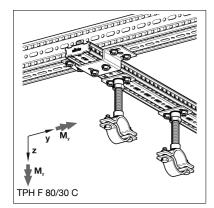
Туре	F _x [kN]	F _y [kN]	F _z [kN]	M _y [kNm]	M _z [kNm]
TPH F 80/30	6.2	20.8	13.6	0.9	0.9
TPH F 80/30 C	6.2	12.7	12.3	0.6	0.5
TPH F 80	6.2	20.8	13.6	0.9	0.9
TPH F 80 C	6.2	12.7	12.3	0.6	0.5



The specified load values are permissible loads and contain the partial safety factors $y_{MZ} = 1,25$ (DIN EN 1993-1-8:2010-12, chart 2.1) and $y_{G} = 1,35$ (DIN EN 1990:2010-12, chart A1.2(B)) for permanent actions. Material: Steel, HCP or hot dipped galvanised

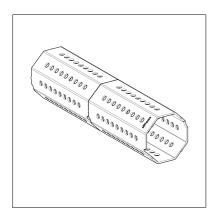
Approvals / Conformity





Type W [kg]	Quantity Part Part number
TPH F 80/30 0.4	10 116672
TPH F 80/30 C 0.5	10 116673
TPH F 80 0.5	10 195765
TPH F 80 C 0.8	10 111732





Octagonal Coupling PK F 80 HCP

Application

Internal splice connecting element for TP F 80 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 Beam Section

TP F 80 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.

Self Forming Screw FLS F to be fastened on two sides with a distance of minimum of 50 mm and to be fastened symmetrically.

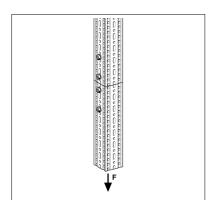
To optimise the bending moment the FLS F should be installed to maintain the pipe weight of the effective flow - i.e. screws are located top and bottom for horizontal cross bars not sideways.



Type	L	Н	В	F _{max}	Mb _{max}
	[mm]	[mm]	[mm]	[kN]	[kNm]
PK F 80 8kt	280	72,5	72,5	10,0	0,25

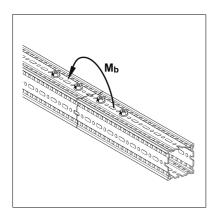
Material: Steel, HCP

Approvals / Conformity

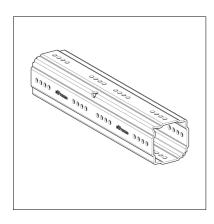




Type	Н	L	W	Quantity	Part
	[mm]	[mm]	[kg]	[pack]	number
PK F 80 8kt	73	280	1.4	1	111446







Square Coupling PK F 80 HCP

Application

Internal splice connecting element for Beam Section TP F 80, 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.

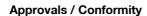
Notice:

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.



Туре	L	H	B	F _{max}	Mb _{max}
	[mm]	[mm]	[mm]	[kN]	[kNm]
PK F 80 4kt	382	73	73	10.0	0.5

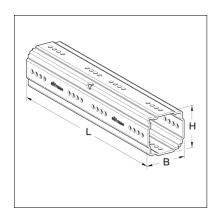
Material: Steel, HCP

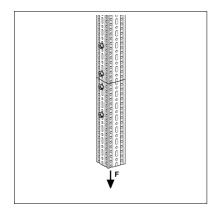


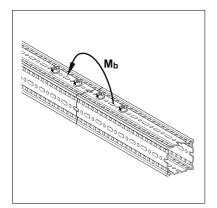


ebo

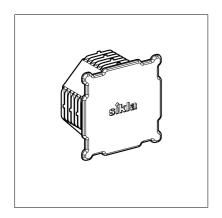
Туре	W [kg]	Quantity [pack]	Part number
PK F 80 4kt	2.1	1	111445











End Cap ADK F 80 Group: A430

Application

Plastic end cap to close cut ends of Beam Section F80 to meet both visual and health & safety requirements. Standard Cantilever- and Beam Brackets (AK F80 and TKO F80) already include this end cap.

Technical Data

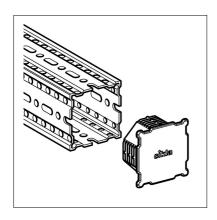
PP, yellow, bedingt witterungsbeständig Material:

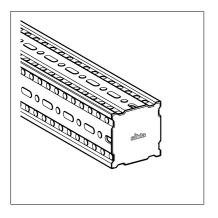
Approvals / Conformity



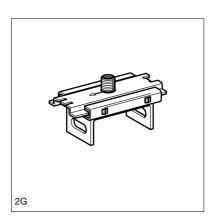
Туре	W [kg]	Quantity [pack]	Part number
ADK F 80	0.03	25	192674
ADK F 80/30	0.02	25	113067











Slide Set GS F 80 2G

Group: A436

Application

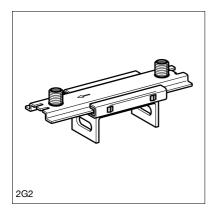
Pipe guide for twin-clamp connection designed to clutch the Beam Section F80 fixed by 2 x Self Forming Screws FLS.

Installation

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

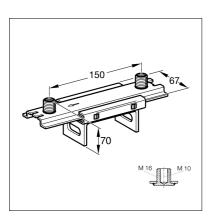
Technical Data

Туре	а	b	С
	[mm]	[mm]	[mm]
GS F 80 2G2	150	67	70,0
GS F 100 2G2	150	67	75,5



s/2_				
0 0		0	• ≡	
<u> </u>	S		9	

Туре	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



 $\begin{array}{lll} \mbox{Perm. load elevated position:} & 1,2 \ kN \\ \mbox{Perm. load suspended position:} & 0,6 \ kN \\ \mbox{Permanent temperature range:} & 130^{\circ} \ C \\ \mbox{Static friction coefficient } \mu_{0:} & 0,20 \\ \mbox{Sliding friction coefficient } \mu: & 0,15 \\ \end{array}$

Material:

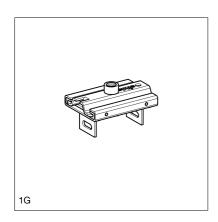
Slide element: Steel, HCP

Slide bar: Polyamide (glass-fibre reinforced)

Retaining plate: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
GS F 80 2G	0.6	10	196700
GS F 80 2G2	0.7	10	196717





Slide Set GS F 1G

Group: A436

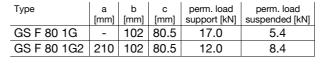
Application

Slide Set in solid construction for installation on top of siFramo Beam Sections TP F. $^{1}/_{2}$ " thread connection allows direct connection to pipe clamp Stabil I $^{-1}/_{2}$ " by means of threaded tube without further adaption parts.

Installation

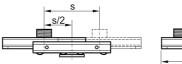
Installation on top of Beam Section TP F with two Self Forming Screws FLS F.

Technical Data



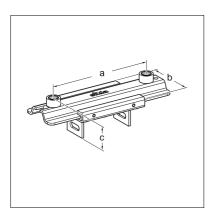
The perm. loads have been determined by load tests following DIN EN 13480-3 annex J.

The pipe clamp and the possibly used $^{1}/_{2}$ " threaded tube have to be verified seperately.





Type		max. glide path s
	[mm]	[mm]
GS F 80 1G	200	100
GS F 80 1G2	300	135



1G2

Temperature range (permanent exposure): 130°C Static friction coefficient μ_0 : 0,20 Sliding friction coefficient μ : 0,15

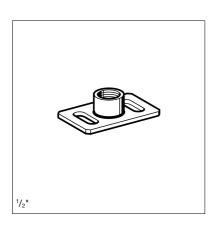
Material:

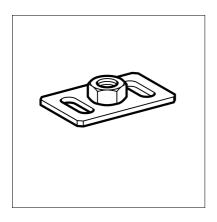
Metal components: Steel, HCP

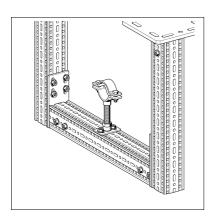
Slide bar: Polyamide, glass fibre reinforced

Туре	W [kg]	Quantity [pack]	Part number
GS F 80 1G	1.3	10	113885
GS F 80 1G2	1.7	10	113886









Mounting Plate GPL F 80 Group: A838

Application

Interface component to connect threaded bar and threaded tube to Beam Section F80.

Installation

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

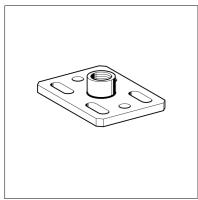
Technical Data

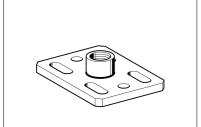
Туре	Tension [kN]	Lateral force [kN]	Perm. bending moment [Nm]
GPL F 80-1/2"	8,0	13,0	53
GPL F 80-M10	8,0	13,0	15
GPL F 80-M12	8,0	13,0	26
GPL F 80-M16	8,0	13,0	62
GPL F 100-1/2"	8,0	13,0	53
GPL F 100-M10	8,0	13,0	15
GPL F 100-M12	8,0	13,0	26
GPL F 100-M16	8,0	13,0	62

Dimensions of base plate: 80 x 50 x 4 mm Material: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
GPL F 80-1/2"	0.1	50	192900
GPL F 80-M10	0.1	50	113004
GPL F 80-M12	0.1	50	112911
GPL F 80-M16	0.1	50	195833







Mounting Plate GPL F 80 Stabil

Group: 1227

Application

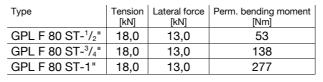
Adapter plate for installing pipe clamps to Beam Section TP F80 or Channel System by means of threaded tube 1/2".

Installation

Connection to the Channel System by means of Speed Nut CC41 and Hexagon Bolts. The two drilled holes in the Adapter Plate mean that the Plate may also be installed to concrete.

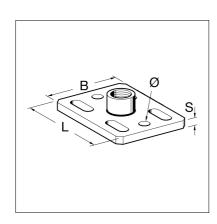
Technical Data

Permissible bending moment of the Threaded Tube $^{1\!/}_{2}{}^{\text{\tiny{II}}}$ $MB_{\text{\tiny{max}},}$ should not be exceeded. Any lateral loads on the pipe clamp also need to be considered.

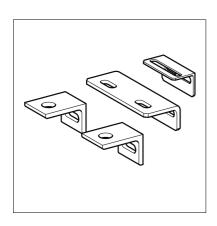


Material: Steel, electro-galvanised

Туре	Dimension L x W x Th [mm]	Elongated hole d x a [mm]	Ø [mm]	W [kg]	Quantity [pack]	Part number
GPL F 80 ST-1/2"	110 x 80 x 8	11 x 20	11	0.50	25	451280
GPL F 80 ST-3/4"	110 x 80 x 8	11 x 20	11	0.50	25	451281
GPL F 80 ST-1"	110 x 80 x 8	11 x 20	11	0.50	25	451282







U Bolt Fastening UB F

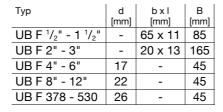
Group: A430

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.

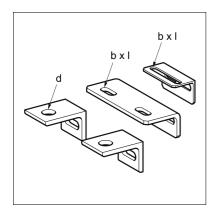
Scope of delivery For U-bolts \geq 4" always 2 U-bolt fastenings F are needed.

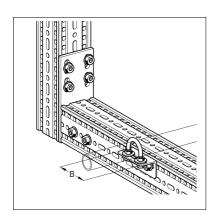
Technical Data



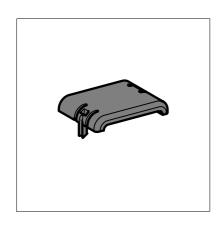
Material: Steel, HCP or hot-dipped galvanised

Туре	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









Pad U-UB F 80

Group: A430

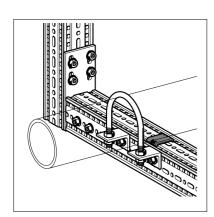
Application

Insulation and surface protection pad to be used on demand when a pipes' expansion and contraction occurs directly on the F80 section.

Technical Data

Material: Polyamide PA 6.0
Range of temperature: -20° up to +130° C

Туре	W	Quantity	Part
	[kg]	[pack]	number
U-UB F 80	0.01	50	198797







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