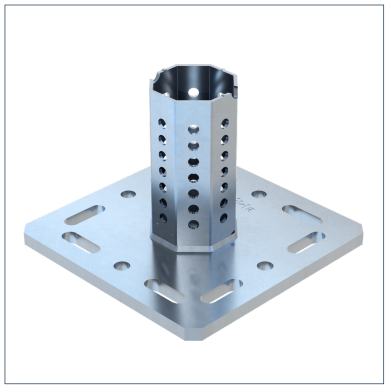
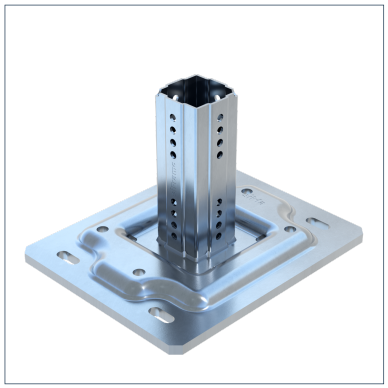
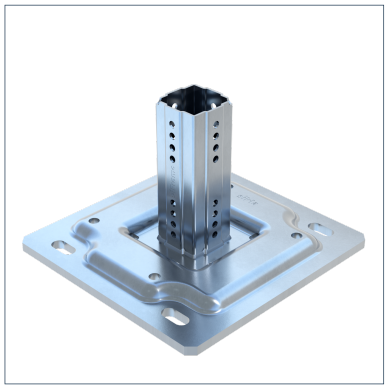
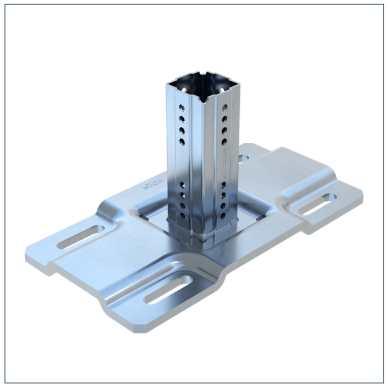
End Support WBD F 80 HCP









General Information

Plug-in component designed to create a square end plate at the open end of a Beam Section TP F 80 or a Beam Bracket/Cantilever bracket AK F 80. The "T" variation with octagonal insert allows full use of the beam section, permitting screwed connections anywhere along the length without internal screw clashes.

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: 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.

Base plate finish:

Type	Base plate finish
WBD F 80-80/120	flat
WBD-P F 80-121/160	corrugated
WBD-P F 80-161/200	corrugated
WBD-P F 80-201/310	corrugated
WBD F 80-T	flat

Material Properties

Halogen-free	0
UV-resistant	0

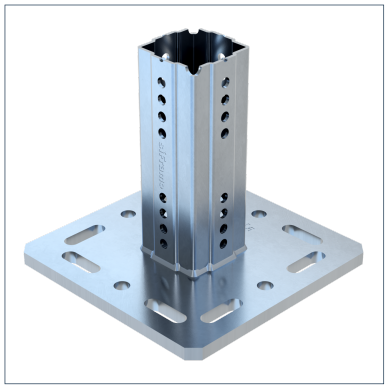
Material

Primary element material	steel
Surface finish	HCP
Corrosion protection class	C4

Forces

Type	-V{X,Rd}	V{X,Rd}	-V{Y,Rd}	V{Y,Rd}	-V{Z,Rd}	V{Z,Rd}
WBD-P-4KT 121/160-F 80 HCP	50.3 kN	50.3 kN	72.1 kN	72.1 kN	71.8 kN	71.8 kN
WBD-P-4KT 161/200-F 80 HCP	37.2 kN	37.2 kN	85.5 kN	85.5 kN	89.2 kN	89.2 kN
WBD-P-4KT 201/310-F 80 HCP	37.2 kN	37.2 kN	110.4 kN	110.4 kN	81.5 kN	81.5 kN

End Support WBD F 80 HCP



Type	-V{X,Rd}	V{X,Rd}	-V{Y,Rd}	V{Y,Rd}	-V{Z,Rd}	V{Z,Rd}
WBD-4KT 80/120-F 80 HCP	34.6 kN	34.6 kN	64.3 kN	64.3 kN	64.3 kN	64.3 kN
WBD-8KT 80/120-F 80 HCP	47 kN	47 kN	56.8 kN	56.8 kN	56.8 kN	56.8 kN

Moments

Type	-M{X,Rd}	M{X,Rd}	-M{Y,Rd}	M{Y,Rd}	-M{Z,Rd}	M{Z,Rd}
WBD-P-4KT 121/160-F 80 HCP	3.7 kNm	3.7 kNm	4.8 kNm	4.8 kNm	4.5 kNm	4.5 kNm
WBD-P-4KT 161/200-F 80 HCP	3.6 kNm	3.6 kNm	4.8 kNm	4.8 kNm	4.7 kNm	4.7 kNm
WBD-P-4KT 201/310-F 80 HCP	3.6 kNm	3.6 kNm	4.5 kNm	4.5 kNm	4.5 kNm	4.5 kNm
WBD-4KT 80/120-F 80 HCP	3.7 kNm	3.7 kNm	5.2 kNm	5.2 kNm	5.2 kNm	5.2 kNm
WBD-8KT 80/120-F 80 HCP	2.1 kNm	2.1 kNm	3.4 kNm	3.4 kNm	3.4 kNm	3.4 kNm

Note on loadings

The specified load values are design loads Rd and include a partial safety factor $\gamma M2 = 1.25$ (DIN EN 1993-1-8:2025-04, Table 4.1)
A partial safety factor of $\gamma G = 1.35$ (DIN EN 1990:2021-10, Table A1.2(B)) must be taken into account for permanent loads.

Additional information

Also available with DualShield for high corrosion protection within C5H environments.

Types

Type	Min. flange width	Weight	Quantity	Part number
WBD-P-4KT 121/160-F 80 HCP	121.00 mm	8.700 kg/pcs.	1 pcs.	117164
WBD-P-4KT 161/200-F 80 HCP	161.00 mm	10.200 kg/pcs.	1 pcs.	117165
WBD-P-4KT 201/310-F 80 HCP	201.00 mm	9.400 kg/pcs.	1 pcs.	117166
WBD-4KT 80/120-F 80 HCP	80.00 mm	5.200 kg/pcs.	1 pcs.	192801
WBD-8KT 80/120-F 80 HCP	80.00 mm	4.800 kg/pcs.	1 pcs.	192849

Dimensions

Type	BP	BP1	BP2	bP	dP	HP	HP1	lzP	LG	tP	tP1
WBD-P-4KT 121/160-F 80 HCP	260 mm	155 mm		14 mm		320 mm	260 mm	20 mm	203 mm	12 mm	27 mm
WBD-P-4KT 161/200-F 80 HCP	310 mm	200 mm		18 mm		320 mm	260 mm	20 mm	203 mm	12 mm	27 mm
WBD-P-4KT 201/310-F 80 HCP	420 mm	275 mm		18 mm		220 mm	160 mm	55 mm	203 mm	12 mm	27 mm
WBD-4KT 80/120-F 80 HCP	220 mm	170 mm	105 mm	14 mm	14 mm	220 mm	170 mm	30 mm	203 mm	12 mm	
WBD-8KT 80/120-F 80 HCP	220 mm	170 mm	105 mm	14 mm	14 mm	220 mm	170 mm	30 mm	153 mm	12 mm	

Certification

CE mark (Declaration of performance see downloads)
ETA-24/0471

Documents

siFramo - ETA-24/0471

Static Guideline - siFramo & siMotec