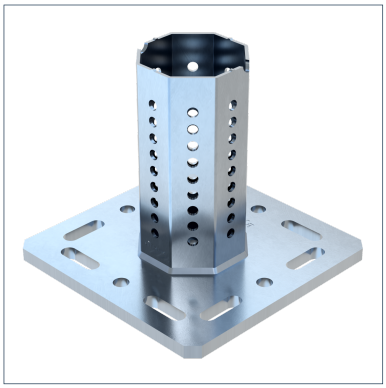
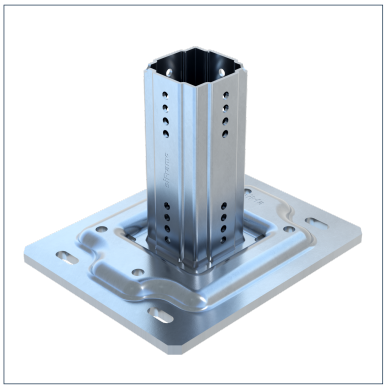
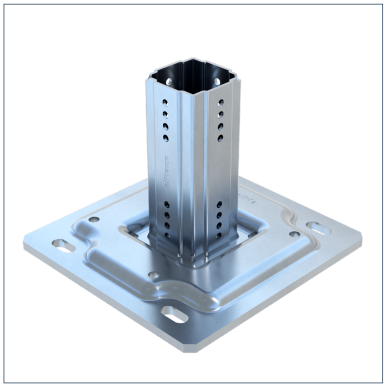
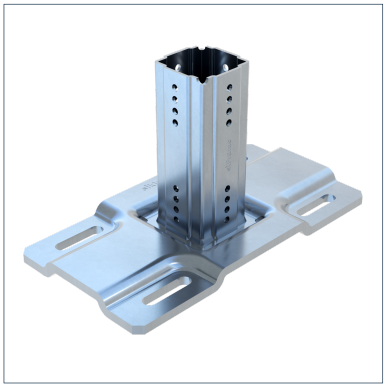
End Support WBD F100 HCP









General Information

Plug-in component designed to create a square end plate at the open end of a Beam Section TP F100 or a Beam Bracket/Cantilever bracket AK F100. 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:

Types F100:

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.

Types 100/160

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.

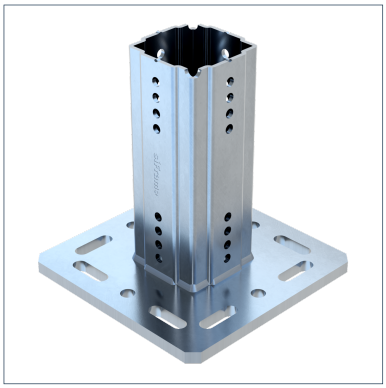
Base plate finish:

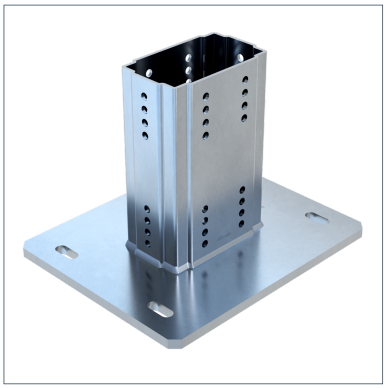
Type	Base plate finish
WBD F 100-80/120	flat
WBD-P F 100-121/160	corrugated
WBD-P F 100-161/200	corrugated
WBD-P F 100-201/310	corrugated
WBD F 100-T	flat
WBD F 100/160-121/160	flat
WBD F 100/160-161/200	flat
WBD F 100/160-201/300	flat

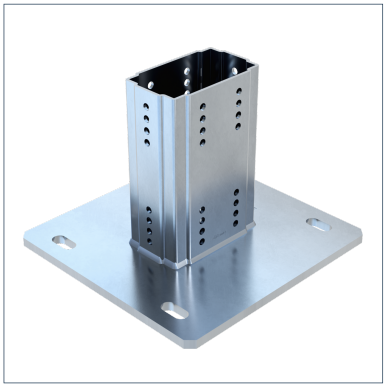
Material Properties

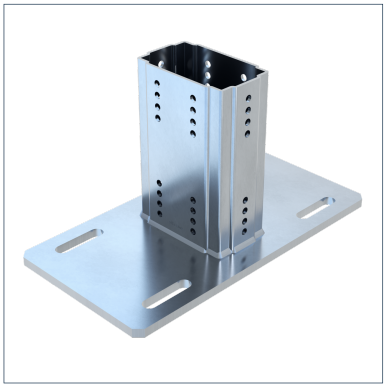
Halogen-free	0
UV-resistant	0

End Support WBD F100 HCP









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-4KT 80/120-F100 HCP	39,4 kN	39,4 kN	58,9 kN	58,9 kN	58,9 kN	58,9 kN
WBD-8KT 80/120-F100 HCP	26,6 kN	26,6 kN	43,6 kN	43,6 kN	43,6 kN	43,6 kN
WBD-P-4KT 121/160-F100 HCP			68 kN	68 kN	64,4 kN	64,4 kN
WBD-P-4KT 161/200-F100 HCP	52,1 kN	52,1 kN	119,4 kN	119,4 kN	123 kN	123 kN
WBD-P-4KT 201/310-F100 HCP	64 kN	64 kN	115,6 kN	115,6 kN	126,5 kN	126,5 kN
WBD-4KT 121/160-F100/160 HCP	68,2 kN	68,2 kN	67,9 kN	67,9 kN	79,2 kN	79,2 kN

Moments

Type	-M{X,Rd}	M{X,Rd}	-M{Y,Rd}	M{Y,Rd}	-M{Z,Rd}	M{Z,Rd}
WBD-4KT 80/120-F100 HCP	7,1 kNm	7,1 kNm	8,5 kNm	8,5 kNm	8,5 kNm	8,5 kNm
WBD-8KT 80/120-F100 HCP	3,3 kNm	3,3 kNm	5,4 kNm	5,4 kNm	5,4 kNm	5,4 kNm
WBD-P-4KT 121/160-F100 HCP	6,1 kNm	6,1 kNm	8,1 kNm			
WBD-P-4KT 161/200-F100 HCP	6,2 kNm	6,2 kNm	13,1 kNm	13,1 kNm	8,6 kNm	8,6 kNm
WBD-P-4KT 201/310-F100 HCP	6,2 kNm	6,2 kNm	5,7 kNm	5,7 kNm	6,4 kNm	6,4 kNm
WBD-4KT 121/160-F100/160 HCP	11,3 kNm	11,3 kNm	13,1 kNm	13,1 kNm	8,6 kNm	8,6 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-4KT 80/120-F100 HCP	80,00 mm	6,196 kg/pcs.	1 pcs.	113075
WBD-8KT 80/120-F100 HCP	80,00 mm	5,280 kg/pcs.	1 pcs.	113079
WBD-P-4KT 121/160-F100 HCP	121,00 mm	9,700 kg/pcs.	1 pcs.	117167
WBD-P-4KT 161/200-F100 HCP	161,00 mm	11,200 kg/pcs.	1 pcs.	117168
WBD-P-4KT 201/310-F100 HCP	201,00 mm	10,300 kg/pcs.	1 pcs.	117169

End Support WBD F100 HCP

Type	Min. flange width	Weight	Quantity	Part number
WBD-4KT 121/160-F100/160 HCP	121,00 mm	10,537 kg/pcs.	1 pcs.	113098
WBD-4KT 161/200-F100/160 HCP	161,00 mm	11,950 kg/pcs.	1 pcs.	113099
WBD-4KT 201/300-F100/160 HCP	201,00 mm	11,140 kg/pcs.	1 pcs.	113100

Dimensions

Type	BP	BP1	BP2	bP	dP	HP	HP1	LG	tP	tP1
WBD-4KT 80/120-F100 HCP	220 mm	170 mm	105 mm	14 mm	14 mm	220 mm	170 mm	233 mm	12 mm	
WBD-8KT 80/120-F100 HCP	220 mm	170 mm	105 mm	14 mm	14 mm	220 mm	170 mm	193 mm	12 mm	
WBD-P-4KT 121/160-F100 HCP	260 mm	155 mm		14 mm		320 mm	260 mm	233 mm	12 mm	27 mm
WBD-P-4KT 161/200-F100 HCP	310 mm	200 mm		18 mm		320 mm	260 mm	233 mm	12 mm	27 mm
WBD-P-4KT 201/310-F100 HCP	420 mm	275 mm		18 mm		220 mm	160 mm	233 mm	12 mm	27 mm
WBD-4KT 121/160-F100/160 HCP	260 mm	155 mm		14 mm		320 mm	260 mm	233,5 mm	12 mm	
WBD-4KT 161/200-F100/160 HCP	310 mm	200 mm		18 mm		320 mm	260 mm	233,5 mm	12 mm	
WBD-4KT 201/300-F100/160 HCP	420 mm	275 mm		18 mm		220 mm	160 mm	233,5 mm	12 mm	

Certification

Stahl

ETA-24/0471

epd-global

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

Documents

siFramo - ETA-24/0471

Static Guideline - siFramo & siMotec