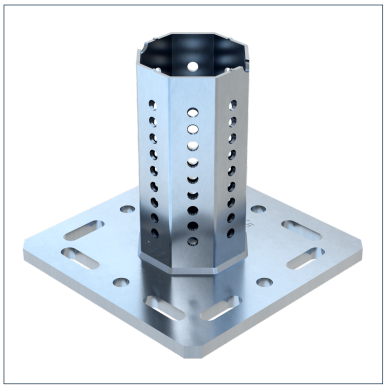
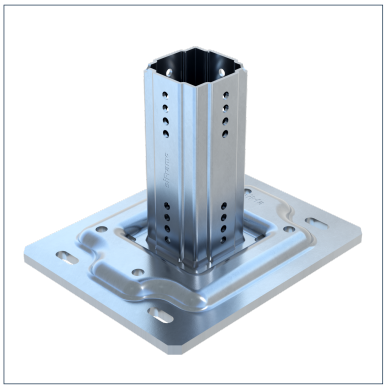
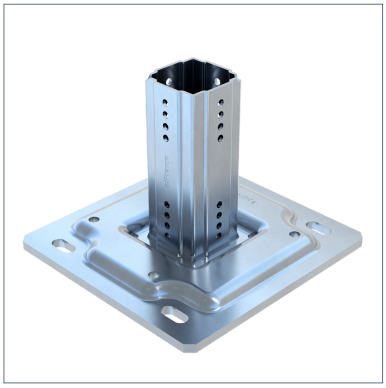
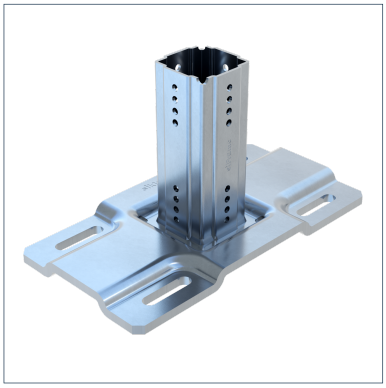
# End Support WBD F100 HCP









## 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.

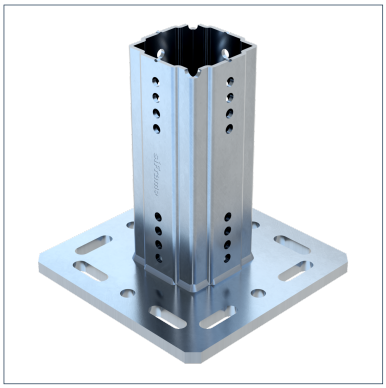
Base plate finish:

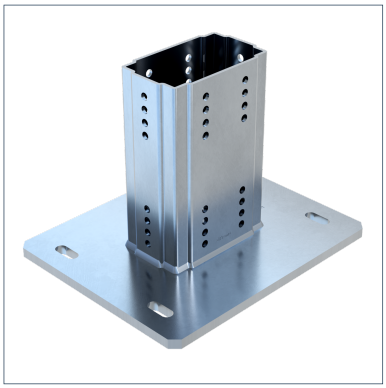
| Type | Base plate finish |
|---|---|
| WBD F 100-80/120 | flat |
| WBD-P F 100-121/160 | corrugated |
| WBD-P F 100-161/200 | corrugated |
| WBD-P F 100-201/310 | corrugated |
| WBD F 100-T | flat |
| WBD F 100/160-121/160 | flat |
| WBD F 100/160-161/200 | flat |
| WBD F 100/160-201/300 | flat |

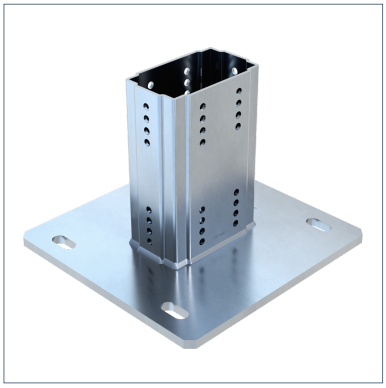
## Material Properties

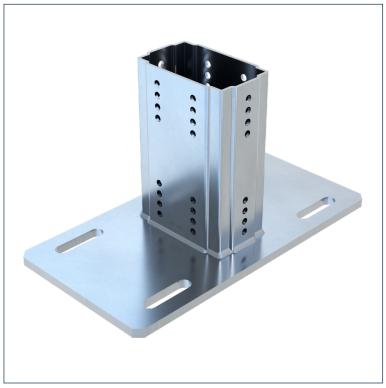
| | |
|---|---|
| Halogen-free | 0 |
| UV-resistant | 0 |

# 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