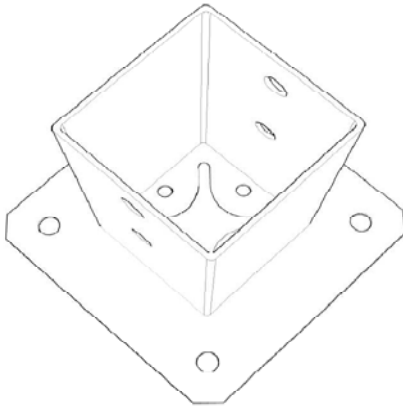


## Data sheet post base Type F10

**Name of the manufacturer:** Rotho Blaas srl - Via dell'Adige 2/1 - 39040 Cortaccia (BZ) Italy  
**Number of the European Technical Approval:** ETA 10/0422  
**Number of the ETA Guideline:** ETAG 015  
**Name of product:** F10\_1, F10\_2

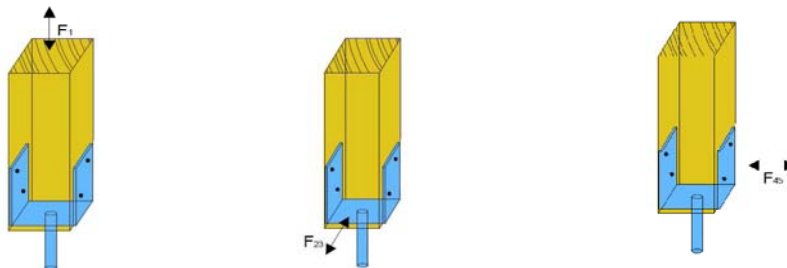


### Product details and definitions

Post base		Metal Fasteners	Distances [mm]		
Type	Dimension	Type	max. a	e <sub>F2/F3</sub>	e <sub>F4/F5</sub>
F10_1	71x71	2x HBS+ 8x60mm	-	77	77
F10_2	91x91	4x HBS+ 8x40mm	-	77	77

### Definition of forces, their direction and eccentricity

Force  $F_1$ : tensile or compression load  
 Force  $F_2$ /  $F_3$ : horizontal load parallel to the side plates of post base  
 Force  $F_4$ /  $F_5$ : horizontal load perpendicular to the side plates of post base



### Acting forces

$F_1$  axial force (tension or compression) acting along the central axis of the joint  
 $F_2$  and  $F_3$  horizontal force parallel to the side plates of the post base acting with the lever arm  $e_{F2/F3}$  above the foundation  
 $F_4$  and  $F_5$  horizontal force perpendicular to the side plates of the post base acting with the lever arm  $e_{F4/F5}$  above the foundation

### Combined forces

$\sum F_{i,d} / R_{i,d} \leq 1$  The forces  $F_2$  and  $F_3$  or  $F_4$  and  $F_5$  are forces with opposite direction.  $F_4$  or  $F_5$ , respectively, is able to act simultaneously with  $F_1$ .

### Safety principles and partial factors

The design value of the load-carrying capacity is the smaller value of all load-carrying capacities:

$$F_{Rd} = \min \left\{ \frac{k_{mod} \cdot F_{Rk,H}}{\gamma_{M,H}}; \frac{F_{Rk,S}}{\gamma_{M1,S}}; \frac{F_{Rk,B}}{\gamma_{R1,B}} \right\}$$

$F_{Rk,H}$  timber failure or failure of the metal fasteners (EN 1995-1-1)  
 $F_{Rk,S}$  steel failure (EN 1993-1-1)  
 $F_{Rk,B}$  foundation failure (EN 1997-1)

### Characteristic load-carrying capacities

Type	F <sub>1</sub> (Compression) [KN]			F <sub>1</sub> (Tension) [KN]			F <sub>23</sub> [KN]			F <sub>45</sub> [KN]		
	Timber	Steel		Timber	Steel		Timber	Steel		Timber	Steel	
F10_1	50,8	-	-	6,2	4,3	-	5,0	4,5	-	7,6	9,5	-
F10_2	84,8	-	-	8,2	3,8	-	9,9	4,7	-	13,3	10,2	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	$\gamma_m$			$\gamma_m$	$\gamma_{m,0}$		$\gamma_m$	$\gamma_{m,0}$		$\gamma_m$	$\gamma_{m,0}$	

Technical drawings of the F10 post base. The top view shows a square base with dimensions B<sub>1</sub> and B<sub>2</sub>, and a central square with dimensions b<sub>1</sub> and b<sub>2</sub>. The base has four mounting holes with diameter Ø11-12 and a central hole with diameter Ø8. The side view shows the height H<sub>1</sub> and H<sub>2</sub>, and the length L<sub>m</sub> of the post. The 3D perspective view shows the base with a post inserted.

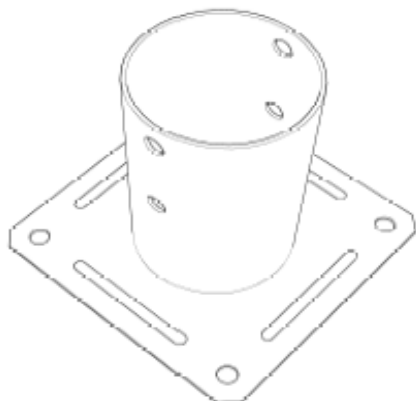
Typ	B <sub>1</sub>	B <sub>2</sub>	S	b <sub>1</sub>	b <sub>2</sub>	H <sub>1</sub>	H <sub>2</sub>	P <sub>1</sub>	P <sub>2</sub>	P <sub>3</sub>	L <sub>m</sub>	S <sub>m</sub>	L <sub>wh</sub>	S <sub>wh</sub>
F10_1	150	150	2,0	71	71	152	150	20	50	20	30	2,5	80	2,0
F10_2	150	150	2,0	91	91	152	150	20	50	15	30	2,5	80	2,0

**rothoblaas.com**  
 Rotho Blaas srl - GmbH  
 Via Dell'Adige 2/1 - Spicchiag  
 I-39040 Cortaccia - Karlstadt (BZ)  
 Tel. +39 0471 81 84 00  
 Fax. +39 0471 81 84 84  
[www.rothoblaas.com](http://www.rothoblaas.com)  
[info@rothoblaas.com](mailto:info@rothoblaas.com)

Product: **Typ F10**  
Post base:

## Data sheet post base Type F20

**Name of the manufacturer:** Rotho Blaas srl - Via dell'Adige 2/1 - 39040 Cortaccia (BZ) Italy  
**Number of the European Technical Approval:** ETA 10/0422  
**Number of the ETA Guideline:** ETAG 015  
**Name of product:** F20\_1, F20\_2, F20\_3, F20\_4

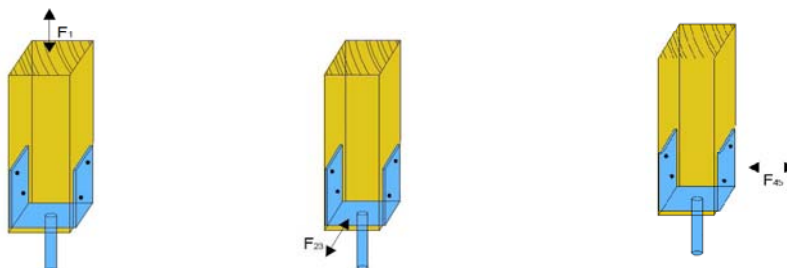


### Product details and definitions

Post base		Metal Fasteners	Distances [mm]		
Type	Dimension	Type	max. a	e <sub>F2/F3</sub>	e <sub>F4/F5</sub>
F20_1	81	4x HBS+ 8x40mm	-	77	77
F20_2	101	4x HBS+ 8x40mm	-	77	77
F20_3	121	4x HBS+ 8x60mm	-	77	77
F20_4	141	4x HBS+ 8x60mm	-	77	77

### Definition of forces, their direction and eccentricity

Force F<sub>1</sub>: tensile or compression load  
 Force F<sub>2</sub>/ F<sub>3</sub>: horizontal load parallel to the side plates of post base  
 Force F<sub>4</sub>/ F<sub>5</sub>: horizontal load perpendicular to the side plates of post base



### Acting forces

F<sub>1</sub> axial force (tension or compression) acting along the central axis of the joint  
 F<sub>2</sub> and F<sub>3</sub> horizontal force parallel to the side plates of the post base acting with the lever arm e<sub>F2/F3</sub> above the foundation  
 F<sub>4</sub> and F<sub>5</sub> horizontal force perpendicular to the side plates of the post base acting with the lever arm e<sub>F4/F5</sub> above the foundation

### Combined forces

$\sum F_{i,d} / R_{i,d} \leq 1$  The forces F<sub>2</sub> and F<sub>3</sub> or F<sub>4</sub> and F<sub>5</sub> are forces with opposite direction. F<sub>4</sub> or F<sub>5</sub>, respectively, is able to act simultaneously with F<sub>1</sub>.

### Safety principles and partial factors

The design value of the load-carrying capacity is the smaller value of all load-carrying capacities:

$$F_{Rd} = \min \left\{ \frac{k_{mod} \cdot F_{Rk,H}}{\gamma_{M,H}}; \frac{F_{Rk,S}}{\gamma_{M,S}}; \frac{F_{Rk,B}}{\gamma_{Rl,B}} \right\}$$

F<sub>Rk,H</sub> timber failure or failure of the metal fasteners (EN 1995-1-1)  
 F<sub>Rk,S</sub> steel failure (EN 1993-1-1)  
 F<sub>Rk,B</sub> foundation failure (EN 1997-1)

### Characteristic load-carrying capacities

Type	F <sub>1</sub> (Compression) [kN]			F <sub>1</sub> (Tension) [kN]			F <sub>23</sub> [kN]			F <sub>45</sub> [kN]		
	Timber	Steel		Timber	Steel		Timber	Steel		Timber	Steel	
F20_1	17,2	-	-	7,4	4,1	-	6,5	2,4	-	8,1	3,1	-
F20_2	62,5	-	-	7,4	8,8	-	3,2	6,6	-	12,8	8,4	-
F20_3	99,1	-	-	11	10	-	9,9	8,9	-	18,4	11,4	-
F20_4	142,3	-	-	11	11,1	-	9,9	11,5	-	25,3	14,7	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	$\gamma_m$			$\gamma_m$	$\gamma_{m,0}$		$\gamma_m$	$\gamma_{m,0}$		$\gamma_m$	$\gamma_{m,0}$	

Technical drawings of the F20 post base, showing side and top views with dimensions and a 3D perspective view.

Typ	B <sub>1</sub>	B <sub>2</sub>	S	b <sub>1</sub>	b <sub>2</sub>	H <sub>1</sub>	H <sub>2</sub>	P <sub>1</sub>	P <sub>2</sub>	P <sub>3</sub>	L <sub>WH</sub>	S <sub>WH</sub>	L <sub>WH</sub>	S <sub>WH</sub>
F20_1	160	160	2.0	81	81	152	150	20	50	20	25	2.5	30	2.5
F20_2	160	160	2.0	101	101	152	150	20	50	20	30	2.5	30	2.5
F20_3	180	180	2.0	121	121	152	150	20	50	20	35	2.5	30	2.5
F20_4	200	200	2.0	141	141	152	150	20	50	20	40	2.5	30	2.5

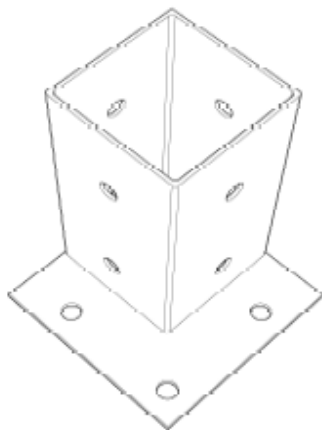
**rothoblaas.com**  
 Rotho Blaas Srl - GmbH  
 Via Dell'Adige 2/1 - Etschweg  
 I-39040 Cortaccia - Kurtatsch (BZ)  
 Tel. +39 0471 81 84 00  
 Fax. +39 0471 81 84 84  
[www.rothoblaas.com](http://www.rothoblaas.com)  
[info@rothoblaas.com](mailto:info@rothoblaas.com)

Product:

**Typ F20**  
Post base

## Data sheet post base Type F30

**Name of the manufacturer:** Rotho Blaas srl - Via dell'Adige 2/1 - 39040 Cortaccia (BZ) Italy  
**Number of the European Technical Approval:** ETA 10/0422  
**Number of the ETA Guideline:** ETAG 015  
**Name of product:** F30\_1, F30\_2

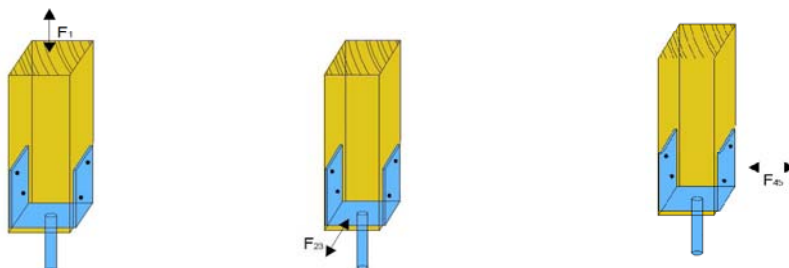


### Product details and definitions

Post base		Metal Fasteners	Distances [mm]		
Type	Dimension	Type	max. a	e <sub>F2/F3</sub>	e <sub>F4/F5</sub>
F30_1	71x71	4x HBS+ 8x60mm	-	122	122
F30_2	91x91	4x HBS+ 8x40mm	-	122	122

### Definition of forces, their direction and eccentricity

Force  $F_1$ : tensile or compression load  
 Force  $F_2$ /  $F_3$ : horizontal load parallel to the side plates of post base  
 Force  $F_4$ /  $F_5$ : horizontal load perpendicular to the side plates of post base



### Acting forces

$F_1$  axial force (tension or compression) acting along the central axis of the joint  
 $F_2$  and  $F_3$  horizontal force parallel to the side plates of the post base acting with the lever arm  $e_{F2/F3}$  above the foundation  
 $F_4$  and  $F_5$  horizontal force perpendicular to the side plates of the post base acting with the lever arm  $e_{F4/F5}$  above the foundation

### Combined forces

$\sum F_{i,d} / R_{i,d} \leq 1$  The forces  $F_2$  and  $F_3$  or  $F_4$  and  $F_5$  are forces with opposite direction.  $F_4$  or  $F_5$ , respectively, is able to act simultaneously with  $F_1$ .

### Safety principles and partial factors

The design value of the load-carrying capacity is the smaller value of all load-carrying capacities:

$$F_{Rd} = \min \left\{ \frac{k_{mod} \cdot F_{Rk,H}}{\gamma_{M,H}}; \frac{F_{Rk,S}}{\gamma_{M1,S}}; \frac{F_{Rk,B}}{\gamma_{R1,B}} \right\}$$

$F_{Rk,H}$  timber failure or failure of the metal fasteners (EN 1995-1-1)  
 $F_{Rk,S}$  steel failure (EN 1993-1-1)  
 $F_{Rk,B}$  foundation failure (EN 1997-1)

### Characteristic load-carrying capacities

Type	F <sub>1</sub> (Compression) [KN]			F <sub>1</sub> (Tension) [KN]			F <sub>23</sub> [KN]			F <sub>45</sub> [KN]		
	Timber	Steel		Timber	Steel		Timber	Steel		Timber	Steel	
F30_1	50,8	-	-	7,1	6,5	-	7,6	2,9	-	7,6	2,9	-
F30_2	84,8	-	-	9,5	13	-	7,6	2,9	-	7,6	2,9	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	$\gamma_m$			$\gamma_m$	$\gamma_{m,0}$		$\gamma_m$	$\gamma_{m,0}$		$\gamma_m$	$\gamma_{m,0}$	

Technical drawings of the Typ F30 post base. The top view shows dimensions B<sub>1</sub>, B<sub>2</sub>, S, b<sub>1</sub>, b<sub>2</sub>, P<sub>1</sub>, P<sub>2</sub>, P<sub>3</sub>, P<sub>4</sub>, P<sub>5</sub>, L<sub>WH</sub>, S<sub>WH</sub>, and Ø11-12. The side views show heights H<sub>1</sub> and H<sub>2</sub>, and dimensions L<sub>WH</sub> and S<sub>WH</sub>. The perspective view shows the 3D structure of the post base.

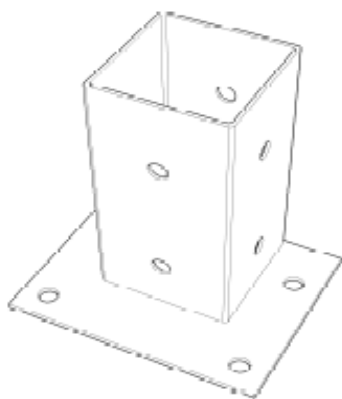
Typ	B <sub>1</sub>	B <sub>2</sub>	S	b <sub>1</sub>	b <sub>2</sub>	H <sub>1</sub>	H <sub>2</sub>	P <sub>1</sub>	P <sub>2</sub>	P <sub>3</sub>	P <sub>4</sub>	P <sub>5</sub>	L <sub>WH</sub>	S <sub>WH</sub>	L <sub>WH</sub>	S <sub>WH</sub>
F30_1	114	114	2.0	71	71	153	150	45	75	30	15	30	20	2.5	70	2
F30_2	134	134	2.0	91	91	153	150	45	75	30	15	30	20	2.5	70	2

**rothoblaas.com**  
 Rotho Blaas Srl - GmbH  
 Via Dell'Adige 2/1 Elbischlag  
 I-39040 Cortaccia - Kurtatsch (BZ)  
 Tel. +39 0471 81 84 00  
 Fax. +39 0471 81 84 84  
[www.rothoblaas.com](http://www.rothoblaas.com)  
[info@rothoblaas.com](mailto:info@rothoblaas.com)

Product: **Typ F30**  
Post base

## Data sheet post base Type F40

**Name of the manufacturer:** Rotho Blaas srl - Via dell'Adige 2/1 - 39040 Cortaccia (BZ) Italy  
**Number of the European Technical Approval:** ETA 10/0422  
**Number of the ETA Guideline:** ETAG 015  
**Name of product:** F40\_1, F40\_2

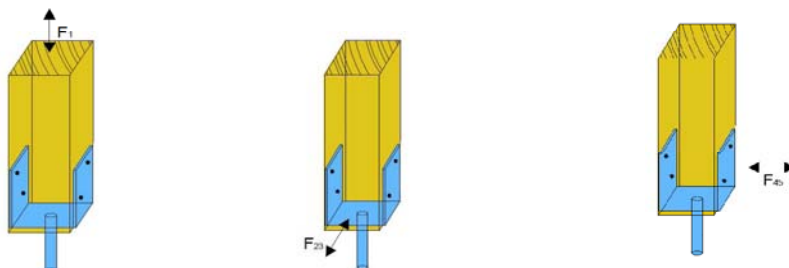


### Product details and definitions

Post base		Metal Fasteners	Distances [mm]		
Type	Dimension	Type	max. a	e <sub>F2/F3</sub>	e <sub>F4/F5</sub>
F40_1	71x71	4x HBS+ 8x60mm	-	122	122
F40_2	91x91	4x HBS+ 8x40mm	-	122	122

### Definition of forces, their direction and eccentricity

Force F<sub>1</sub>: tensile or compression load  
 Force F<sub>2</sub>/ F<sub>3</sub>: horizontal load parallel to the side plates of post base  
 Force F<sub>4</sub>/ F<sub>5</sub>: horizontal load perpendicular to the side plates of post base



### Acting forces

F<sub>1</sub> axial force (tension or compression) acting along the central axis of the joint  
 F<sub>2</sub> and F<sub>3</sub> horizontal force parallel to the side plates of the post base acting with the lever arm e<sub>F2/F3</sub> above the foundation  
 F<sub>4</sub> and F<sub>5</sub> horizontal force perpendicular to the side plates of the post base acting with the lever arm e<sub>F4/F5</sub> above the foundation

### Combined forces

$\sum F_{i,d} / R_{i,d} \leq 1$  The forces F<sub>2</sub> and F<sub>3</sub> or F<sub>4</sub> and F<sub>5</sub> are forces with opposite direction. F<sub>4</sub> or F<sub>5</sub>, respectively, is able to act simultaneously with F<sub>1</sub>.

### Safety principles and partial factors

The design value of the load-carrying capacity is the smaller value of all load-carrying capacities:

$$F_{Rd} = \min \left\{ \frac{k_{mod} \cdot F_{Rk,H}}{\gamma_{M,H}}; \frac{F_{Rk,S}}{\gamma_{M,S}}; \frac{F_{Rk,B}}{\gamma_{Rl,B}} \right\}$$

F<sub>Rk,H</sub> timber failure or failure of the metal fasteners (EN 1995-1-1)  
 F<sub>Rk,S</sub> steel failure (EN 1993-1-1)  
 F<sub>Rk,B</sub> foundation failure (EN 1997-1)

### Characteristic load-carrying capacities

Type	F <sub>1</sub> (Compression) [kN]			F <sub>1</sub> (Tension) [kN]			F <sub>23</sub> [kN]			F <sub>45</sub> [kN]		
	Timber	Steel		Timber	Steel		Timber	Steel		Timber	Steel	
F40_1	50,8	-	-	7,1	7,7	-	7,6	5,4	-	7,6	5,4	-
F40_2	84,8	-	-	9,5	21,8	-	13,3	7,9	-	13,3	7,9	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	-	-	-	-	-	-	-	-	-	-	-	-
	γ <sub>m</sub>			γ <sub>m</sub>	γ <sub>m,0</sub>		γ <sub>m</sub>	γ <sub>m,0</sub>		γ <sub>m</sub>	γ <sub>m,0</sub>	

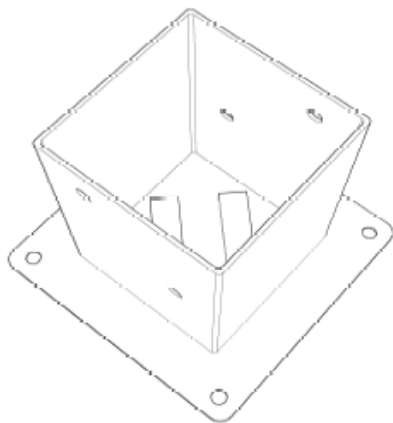
Typ	B <sub>1</sub>	B <sub>2</sub>	S	b <sub>1</sub>	b <sub>2</sub>	H <sub>1</sub>	H <sub>2</sub>	P <sub>1</sub>	P <sub>2</sub>	P <sub>3</sub>	P <sub>4</sub>	P <sub>5</sub>	L <sub>w</sub>	S <sub>w</sub>	L <sub>wh</sub>	S <sub>w</sub>
F40_1	143	114	2	71	71	153	150	45	75	30	15	30	20	2.5	70	2.5
F40_2	163	134	2	91	91	153	150	45	75	30	15	30	20	2.5	70	2.5

 Rotho Blaas Srl - GmbH Via Dell'Adige 2/1 Etschweg I-39040 Cortaccia - Kurteloch (BZ) Tel. +39 0471 81 84 00 Fax. +39 0471 81 84 84 www.rothoblaas.com info@rothoblaas.com	Product:	Typ F40 Post base



## Data sheet post base Type F50

**Name of the manufacturer:** Rotho Blaas srl - Via dell'Adige 2/1 - 39040 Cortaccia (BZ) Italy  
**Number of the European Technical Approval:** ETA 10/0422  
**Number of the ETA Guideline:** ETAG 015  
**Name of product:** F50\_1, F50\_2, F50\_3, F50\_4, F50\_5, F50\_6

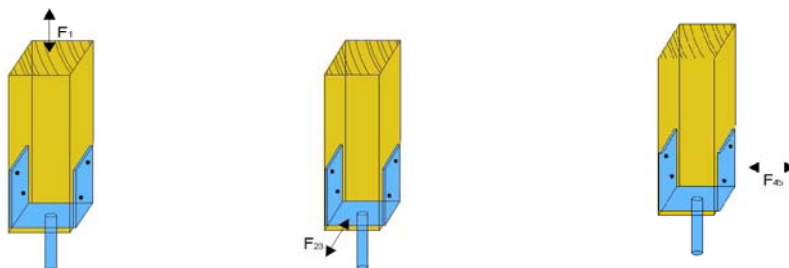


### Product details and definitions

Post base		Metal Fasteners Type	Distances [mm]		
Type	Dimension		max. a	e <sub>F2/F3</sub>	e <sub>F4/F5</sub>
F50_1	101x101	4x HBS+ 8x60mm	-	83	83
F50_2	121x121	4x HBS+ 8x60mm	-	83	83
F50_3	141x141	4x HBS+ 8x60mm	-	83	83
F50_4	161x161	4x HBS+ 8x60mm	-	108	108
F50_5	181x181	4x HBS+ 8x60mm	-	108	108
F50_6	201x201	4x HBS+ 8x60mm	-	108	108

### Definition of forces, their direction and eccentricity

Force  $F_1$ : tensile or compression load  
 Force  $F_2$ /  $F_3$ : horizontal load parallel to the side plates of post base  
 Force  $F_4$ /  $F_5$ : horizontal load perpendicular to the side plates of post base



### Acting forces

$F_1$  axial force (tension or compression) acting along the central axis of the joint  
 $F_2$  and  $F_3$  horizontal force parallel to the side plates of the post base acting with the lever arm  $e_{F2/F3}$  above the foundation  
 $F_4$  and  $F_5$  horizontal force perpendicular to the side plates of the post base acting with the lever arm  $e_{F4/F5}$  above the foundation

### Combined forces

$\sum F_{i,d} / R_{i,d} \leq 1$  The forces  $F_2$  and  $F_3$  or  $F_4$  and  $F_5$  are forces with opposite direction.  $F_4$  or  $F_5$ , respectively, is able to act simultaneously with  $F_1$ .

### Safety principles and partial factors

The design value of the load-carrying capacity is the smaller value of all load-carrying capacities:

$$F_{Rd} = \min \left\{ \frac{k_{mod} \cdot F_{Rk,H}}{\gamma_{M,H}}; \frac{F_{Rk,S}}{\gamma_{M1,S}}; \frac{F_{Rk,B}}{\gamma_{R1,B}} \right\}$$

$F_{Rk,H}$  timber failure or failure of the metal fasteners (EN 1995-1-1)  
 $F_{Rk,S}$  steel failure (EN 1993-1-1)  
 $F_{Rk,B}$  foundation failure (EN 1997-1)

### Characteristic load-carrying capacities

Type	F <sub>1</sub> (Compression) [kN]			F <sub>1</sub> (Tension) [kN]			F <sub>23</sub> [kN]			F <sub>45</sub> [kN]		
	Timber	Steel		Timber	Steel		Timber	Steel		Timber	Steel	
F50_1	29,4	29,1	-	7,1	-	-	17,2	9	-	17,2	9	-
F50_2	33,6	33,3	-	7,1	11,5	-	17,2	8,7	-	17,2	8,7	-
F50_3	42	41,6	-	7,1	-	-	17,2	11,9	-	17,2	11,9	-
F50_4	42	41,6	-	7,1	13,8	-	20,4	10,6	-	20,4	10,6	-
F50_5	42	41,6	-	7,1	16,1	-	20,4	13,9	-	20,4	13,9	-
F50_6	46,2	45,7	-	7,1	17,3	-	21	14,4	-	21	14,4	-
	$\gamma_m$	$\gamma_{m,0}$		$\gamma_m$	$\gamma_{m,0}$		$\gamma_m$	$\gamma_{m,0}$		$\gamma_m$	$\gamma_{m,0}$	

Typ	B <sub>1</sub>	B <sub>2</sub>	S	b <sub>1</sub>	b <sub>2</sub>	H <sub>1</sub>	H <sub>2</sub>	P <sub>1</sub>	P <sub>2</sub>	P <sub>3</sub>	P <sub>4</sub>	L <sub>m</sub>	S <sub>w</sub>	L <sub>wh</sub>	S <sub>wh</sub>	L <sub>wh</sub>
F50_1	150	150	2.5	101	101	152.5	150	30	70	30	15	20	2.5	70	2.5	70
F50_2	200	200	2.5	121	121	152.5	150	30	70	35	15	25	2.5	70	2.5	80
F50_3	200	200	2.5	141	141	152.5	150	30	70	40	15	30	2.5	70	2.5	100
F50_4	240	240	2.5	161	161	202.5	200	50	100	45	15	30	2.5	70	2.5	100
F50_5	280	280	2.5	181	181	202.5	200	50	100	50	25	40	2.5	70	2.5	100
F50_6	300	300	2.5	201	201	202.5	200	50	100	55	25	40	2.5	75	2.5	110

Rotho Blaas Srl - GmbH  
 Via Dell'Adige 2/1 - Etschweg  
 I-39040 Cortaccia - Kurnatloch (BZ)  
 Tel. +39 0471 81 84 00  
 Fax. +39 0471 81 84 04  
[www.rothoblaas.com](http://www.rothoblaas.com)  
[info@rothoblaas.com](mailto:info@rothoblaas.com)

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**Typ F50**  
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