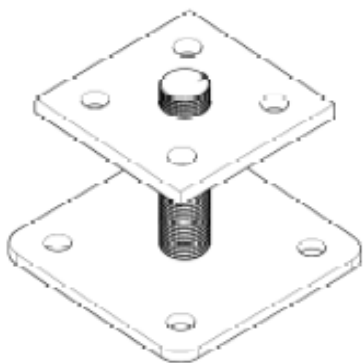


## Data sheet post base Type R40

**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:** R40\_1, R40\_2, R40\_3, R40\_4

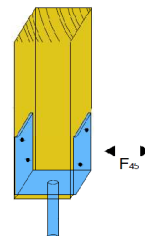
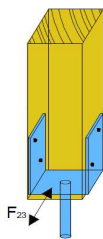
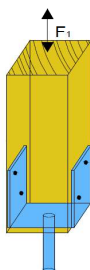


### Product details and definitions

| Post base |           | Metal Fasteners | Distances [mm] |                    |                    |
|-----------|-----------|-----------------|----------------|--------------------|--------------------|
| Type      | Dimension | Type            | max. a         | e <sub>F2/F3</sub> | e <sub>F4/F5</sub> |
| R40_1     | 105       | 4x HBS+ 8x60mm  | 105            | -                  | -                  |
| R40_2     | 97        | 4x HBS+ 8x60mm  | 97             | -                  | -                  |
| R40_3     | 150       | 4x HBS+ 8x60mm  | 150            | -                  | -                  |
| R40_4     | 250       | 4x HBS+ 8x60mm  | 250            | -                  | -                  |
|           |           |                 |                |                    |                    |
|           |           |                 |                |                    |                    |

### 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

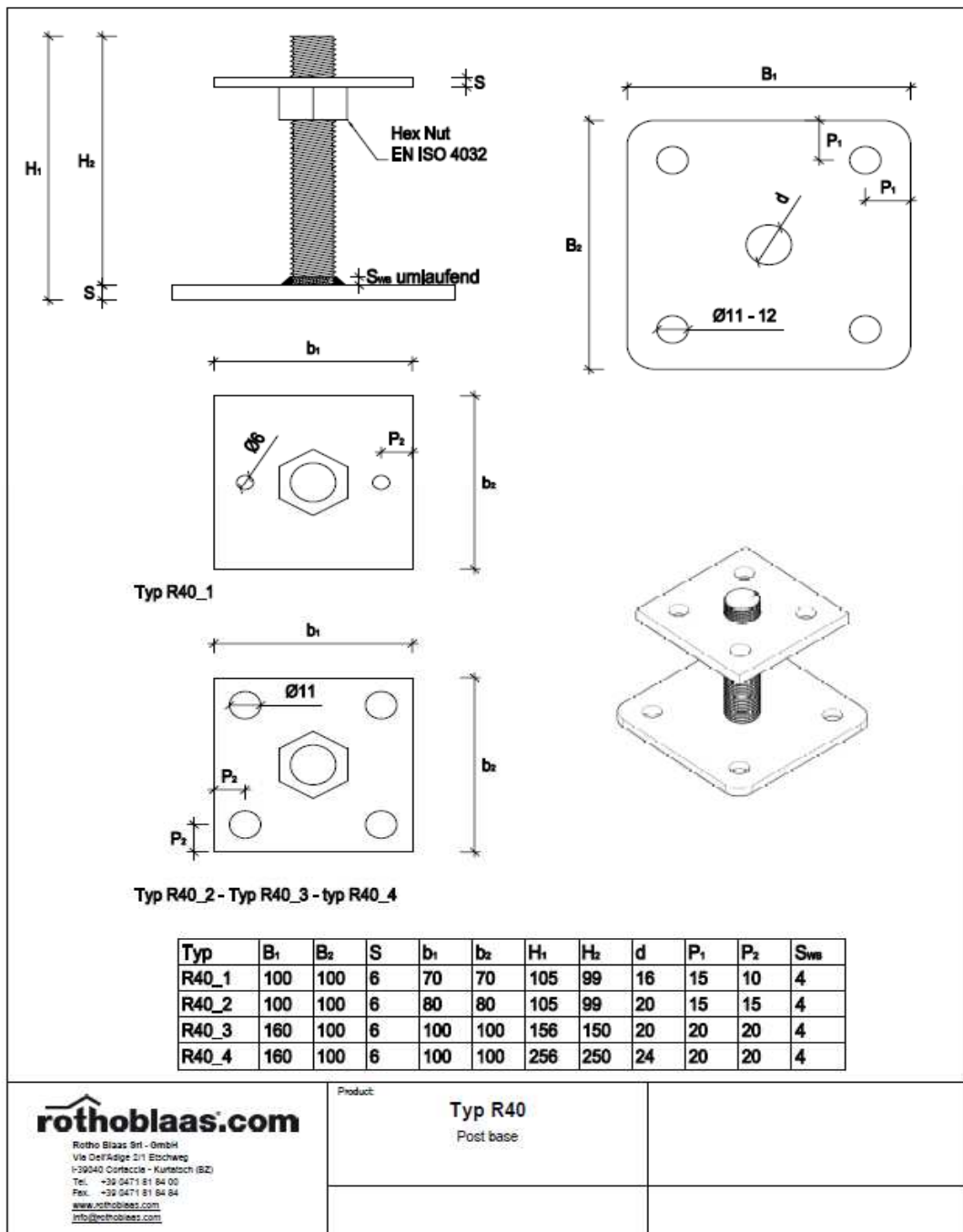
The design value of the load-carrying capacity is the smaller value of all load-carrying capacities:

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

$F_{Rk,H}$  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)

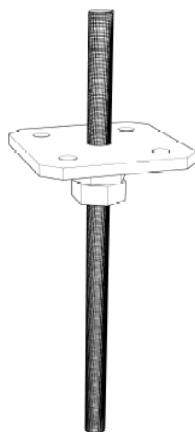
## Characteristic load-carrying capacities

| Type  | $F_1$ (Compression) [kN] |                |                | $F_1$ (Tension) [kN] |       |   | $F_{23}$ [kN] |       |   | $F_{45}$ [kN] |       |   |
|-------|--------------------------|----------------|----------------|----------------------|-------|---|---------------|-------|---|---------------|-------|---|
|       | Timber                   | Steel          |                | Timber               | Steel |   | Timber        | Steel |   | Timber        | Steel |   |
| R40_1 | 50,7                     | 23,3           | 39,6           | -                    | -     | - | -             | -     | - | -             | -     | - |
| R40_2 | 64                       | 38,1           | 100,6          | -                    | -     | - | -             | -     | - | -             | -     | - |
| R40_3 | 99,9                     | 41,9           | 57,1           | -                    | -     | - | -             | -     | - | -             | -     | - |
| R40_4 | 100,2                    | 50,7           | 65,3           | -                    | -     | - | -             | -     | - | -             | -     | - |
|       | -                        | -              | -              | -                    | -     | - | -             | -     | - | -             | -     | - |
|       | -                        | -              | -              | -                    | -     | - | -             | -     | - | -             | -     | - |
|       | $\gamma_m$               | $\gamma_{m,0}$ | $\gamma_{m,1}$ |                      |       |   |               |       |   |               |       |   |



## Data sheet post base Type R70

**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:** R70\_1, R70\_2, R70\_3

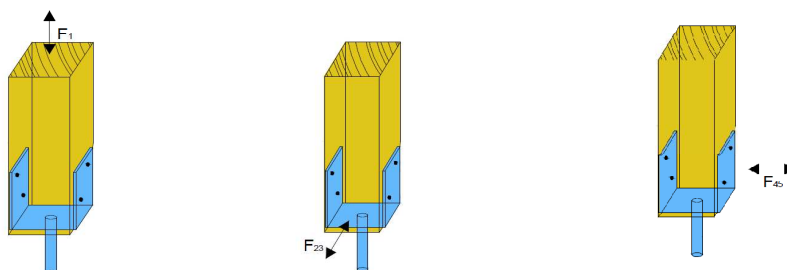


### Product details and definitions

| Post base |            | Metal Fasteners | Distances [mm] |                    |                    |
|-----------|------------|-----------------|----------------|--------------------|--------------------|
| Type      | Dimension  | Type            | max. a         | e <sub>F2/F3</sub> | e <sub>F4/F5</sub> |
| R70_1     | 100x350x20 | 4x HBS+ 8x60mm  | 100            | -                  | -                  |
| R70_2     | 140x450x24 | 4x HBS+ 8x60mm  | 100            | -                  | -                  |
| R70_3     | 100x350x16 | 4x HBS+ 8x60mm  | 100            | -                  | -                  |
|           |            |                 |                |                    |                    |
|           |            |                 |                |                    |                    |
|           |            |                 |                |                    |                    |

### 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

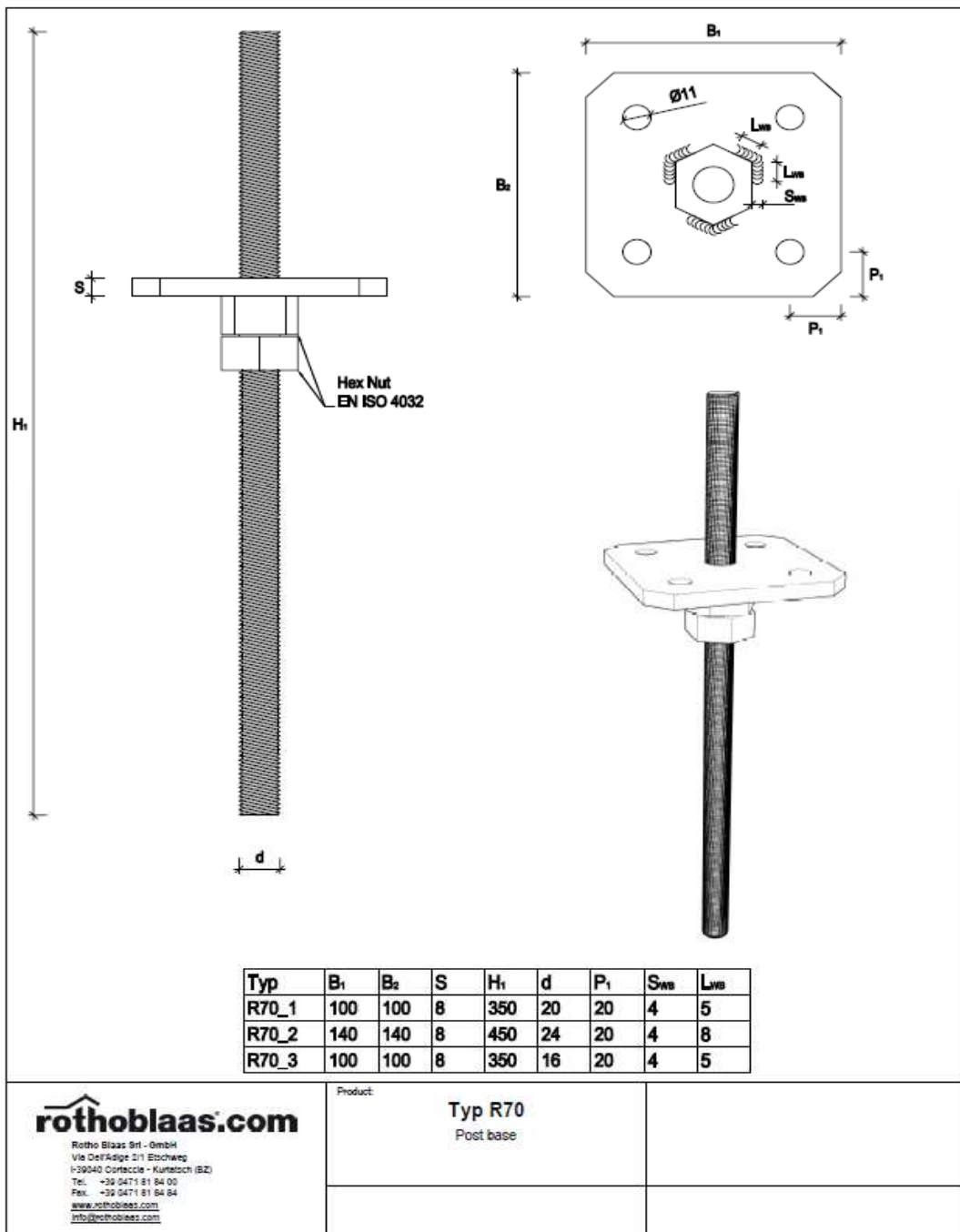
The design value of the load-carrying capacity is the smaller value of all load-carrying capacities:

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

$F_{Rk,H}$  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)

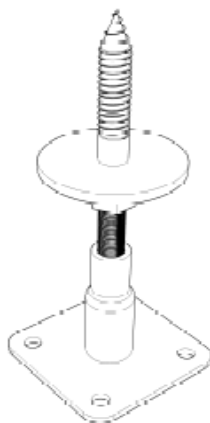
## Characteristic load-carrying capacities

| 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 |   |
| R70_1 | 108,4                             | 66,9           | 66,4           | -                             | -     | - | -                    | -     | - | -                    | -     | - |
| R70_2 | 210,6                             | 79,5           | 99,8           | -                             | -     | - | -                    | -     | - | -                    | -     | - |
| R70_3 | 106,2                             | 54             | 39,6           | -                             | -     | - | -                    | -     | - | -                    | -     | - |
|       | -                                 | -              | -              | -                             | -     | - | -                    | -     | - | -                    | -     | - |
|       | -                                 | -              | -              | -                             | -     | - | -                    | -     | - | -                    | -     | - |
|       | -                                 | -              | -              | -                             | -     | - | -                    | -     | - | -                    | -     | - |
|       | $\gamma_m$                        | $\gamma_{m,0}$ | $\gamma_{m,1}$ |                               |       |   |                      |       |   |                      |       |   |



## Data sheet post base Type R90

**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:** R90\_1

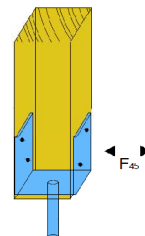
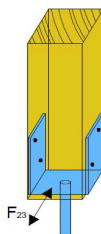
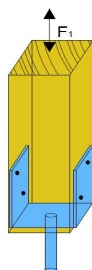


### Product details and definitions

| Post base |           | Metal Fasteners | Distances [mm] |                    |                    |
|-----------|-----------|-----------------|----------------|--------------------|--------------------|
| Type      | Dimension | Type            | max. a         | e <sub>F2/F3</sub> | e <sub>F4/F5</sub> |
| R90_1     | 100x100   | 4x HBS+ 8x60mm  | 164            | -                  | -                  |
|           |           |                 |                |                    |                    |
|           |           |                 |                |                    |                    |
|           |           |                 |                |                    |                    |
|           |           |                 |                |                    |                    |
|           |           |                 |                |                    |                    |

### 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

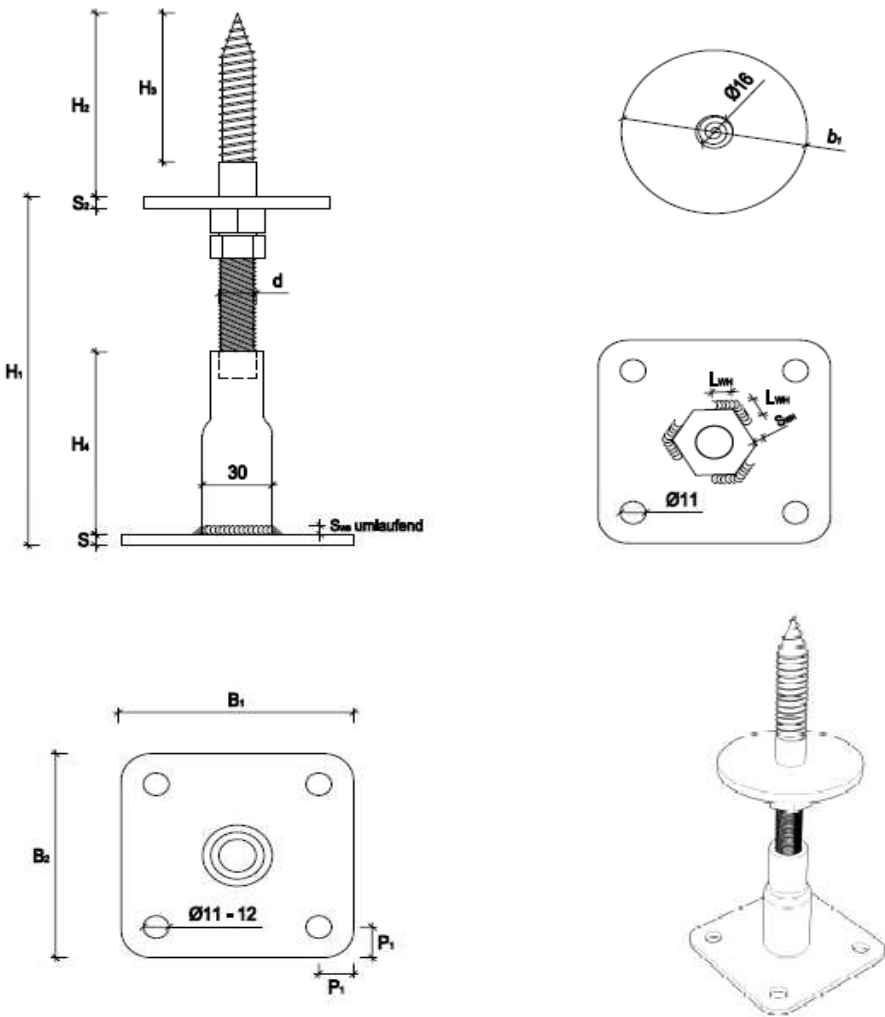
The design value of the load-carrying capacity is the smaller value of all load-carrying capacities:

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

$F_{Rk,H}$  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  | $F_1$ (Compression) [kN] |                |                | $F_1$ (Tension) [kN] |                |   | $F_{23}$ [kN] |       |   | $F_{45}$ [kN] |       |   |
|-------|--------------------------|----------------|----------------|----------------------|----------------|---|---------------|-------|---|---------------|-------|---|
|       | Timber                   | Steel          |                | Timber               | Steel          |   | Timber        | Steel |   | Timber        | Steel |   |
| R90_1 | 71,6                     | 42,6           | 39,7           | -                    | -              | - | -             | -     | - | -             | -     | - |
|       | -                        | -              | -              | -                    | -              | - | -             | -     | - | -             | -     | - |
|       | -                        | -              | -              | -                    | -              | - | -             | -     | - | -             | -     | - |
|       | -                        | -              | -              | -                    | -              | - | -             | -     | - | -             | -     | - |
|       | -                        | -              | -              | -                    | -              | - | -             | -     | - | -             | -     | - |
|       | -                        | -              | -              | -                    | -              | - | -             | -     | - | -             | -     | - |
|       | $\gamma_m$               | $\gamma_{m,0}$ | $\gamma_{m,1}$ | $\gamma_m$           | $\gamma_{m,0}$ |   |               |       |   |               |       |   |



| Typ   | B <sub>1</sub> | B <sub>2</sub> | S | S <sub>2</sub> | b <sub>1</sub> | H <sub>1</sub> | H <sub>2</sub> | H <sub>3</sub> | H <sub>4</sub> | d  | P <sub>1</sub> | S <sub>WS</sub> | S <sub>WH</sub> | L <sub>WH</sub> |
|-------|----------------|----------------|---|----------------|----------------|----------------|----------------|----------------|----------------|----|----------------|-----------------|-----------------|-----------------|
| R90_1 | 100            | 100            | 5 | 6              | 80             | 130/170        | 90             | 70             | 90             | 16 | 15             | 4               | 4               | 8               |



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Product:

**Typ R90**  
Post base