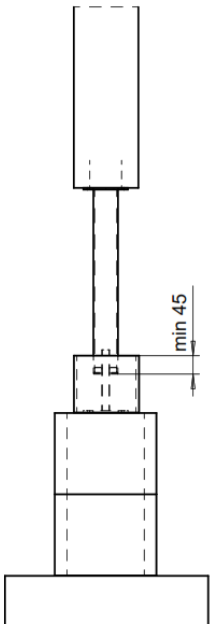
MITEK STEEL COLUMN

product numbers: 401472, 401473, 401474, 401475



Protective cast with concrete mortar S30.
Distance to threaded rod min 50mm.
Casting mold ie d=160 PVC pipe.

GENERAL

Pipe column legs are used in wooden structures as a foundation connection for vertical loads, so that the adjustable lower end of the tubular column leg is fastened to the concrete foundation with wedge anchors, for example, and the upper end is fastened with screws or nails to the wooden column or horizontal wood. Wood parts can be lumber, glulam, LVL, CLT or planer, lamella, or round log. In the case of a horizontal log, the surface of the log must be straightened so that the end plate of the column leg or the bottom flange of the support iron rests on the wood over its entire surface. If necessary, round logs are notched or ridges are removed from the profiled log.

Pipe column legs can be used in Eurocode 5 wooden structures in use classes 1,2 and 3. If the structure is long-term in conditions where the corrosion stress is higher than ISO 9223 class C1 (EC5 use class 2-3), the threaded rod parts of the lower end of the pipe column legs must be completely poured into the concrete with a protection distance of 50 mm. If the threaded rods are hot-dip galvanized, protective casting is not required.

When attaching pressure-impregnated timber, the connectors must be made of stainless steel.

INSTALLATION

The tubular column legs are mounted vertically so that the adjusting foot is at the lower end of the tubular column leg. The upper end of the pipe column leg must be supported horizontally in all directions. The end plates of the pipe column legs are fastened to the wooden parts centrally from all holes in the plate with screws or nails.
The length of the pipe column leg is adjusted so that a maximum of 90 mm of the threaded rod is visible.

DIMENSIONS OF COMPRESSION RESISTANCE OF STEEL COLUMN FOOT JOINT

Dimensioning is performed in accordance with Eurocode 5 (EN 1995-1-1). In the case of a wooden column, it is checked that the design value of the compressive strength is not exceeded. In the case of a horizontal beam, it is also checked that the support pressure resistance of the wood is sufficient.

The characteristic value of the compressive strength Rc, k of the pipe column legs is 71 kN.
The characteristic value applies to products with a support pipe length of 245 - 600mm, ie MiTek pipe column legs with article numbers 401472, 401473, 401474, 401475

In the dimensioning of the pipe column leg, the following condition must be fulfilled

$$F_{c,d} \leq \frac{R_{c,k}}{\gamma_{M2}}$$

where

$F_{c,d}$ is the design value of the compressive force on the column leg

γ_{M2} is the partial safety factor for steel fittings in accordance with the national annex to EN 1993-1-8, in Finland γM2 = 1,25

$R_{c,k}$ is a characteristic value of the compressive strength of a column leg

The capacities of the pipe column legs are based on VTT's statement no. VTT-S-06107-14.

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