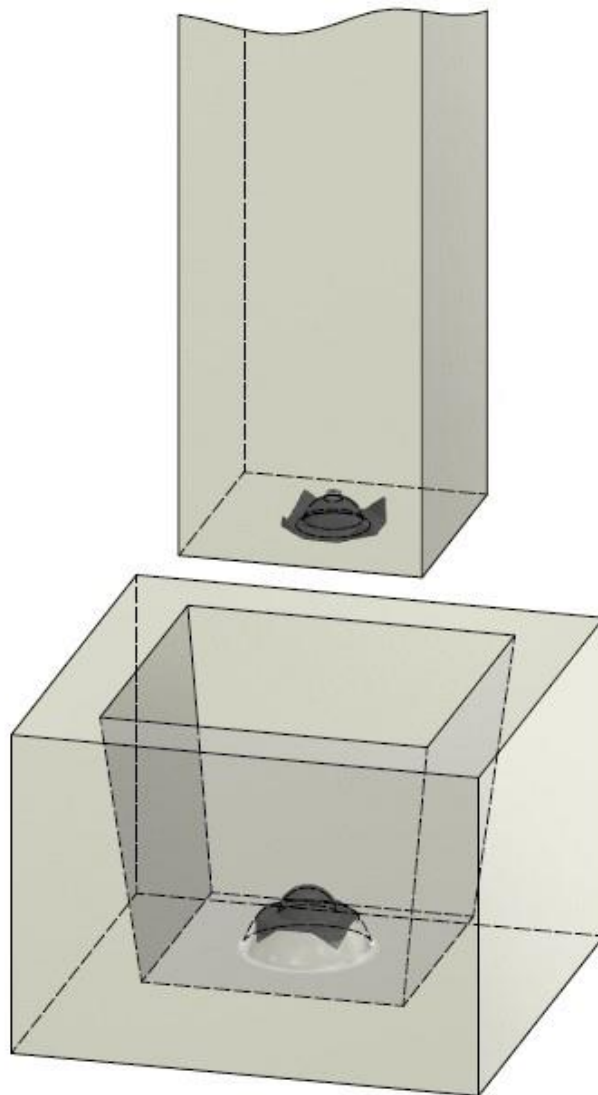


## TECHNICAL DOCUMENTATION



### PRECAST CONCRETE SYSTEMS | **COLUMN CENTRALIZER**



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## GENERAL PRESENTATION

The Terwa centralizing fixing connector is an optimum solution for fastening concrete columns, facilitating the installation on site, saving time and ensuring a correct position of the concrete columns in foundation.

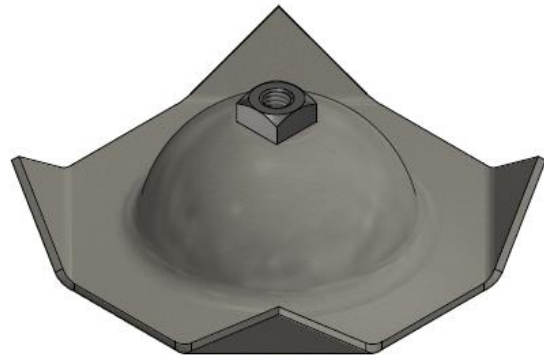
The system consists of two spherical connectors made from sheet steel, with a radius of 30.5 mm.

The two connectors are embedded in the column and in the foundation block, ensuring a joint between the two elements. For this reason, we recommend ordering these connectors in pairs.

The connectors have four bent corners that are specially designed for good embedment in concrete and can be seen in the picture below. The design ensures a good position in the concrete element and an easy installation.



**Foundation connector**



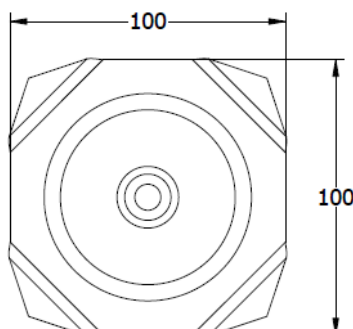
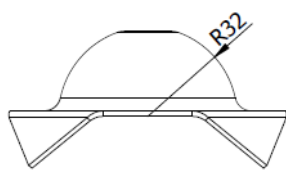
**Column connector**

## THE MAIN ADVANTAGES OF THIS SYSTEM

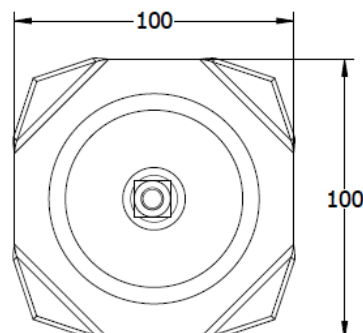
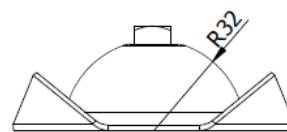
- These products are simple solutions for the installation of precast concrete columns on site.
- They are cheap and easy to use
- Easily fixed to the formwork – a threaded bar and two wing nuts.
- The design of connectors prevents changing shape during use

## PRODUCTION PROCESS

The fixing and centralizing connectors are made of sheet metal by cutting and cold pressing operations. The column connector has a square nut, welded, necessary for fixing it to the formwork and for easy centring with the pair connector.



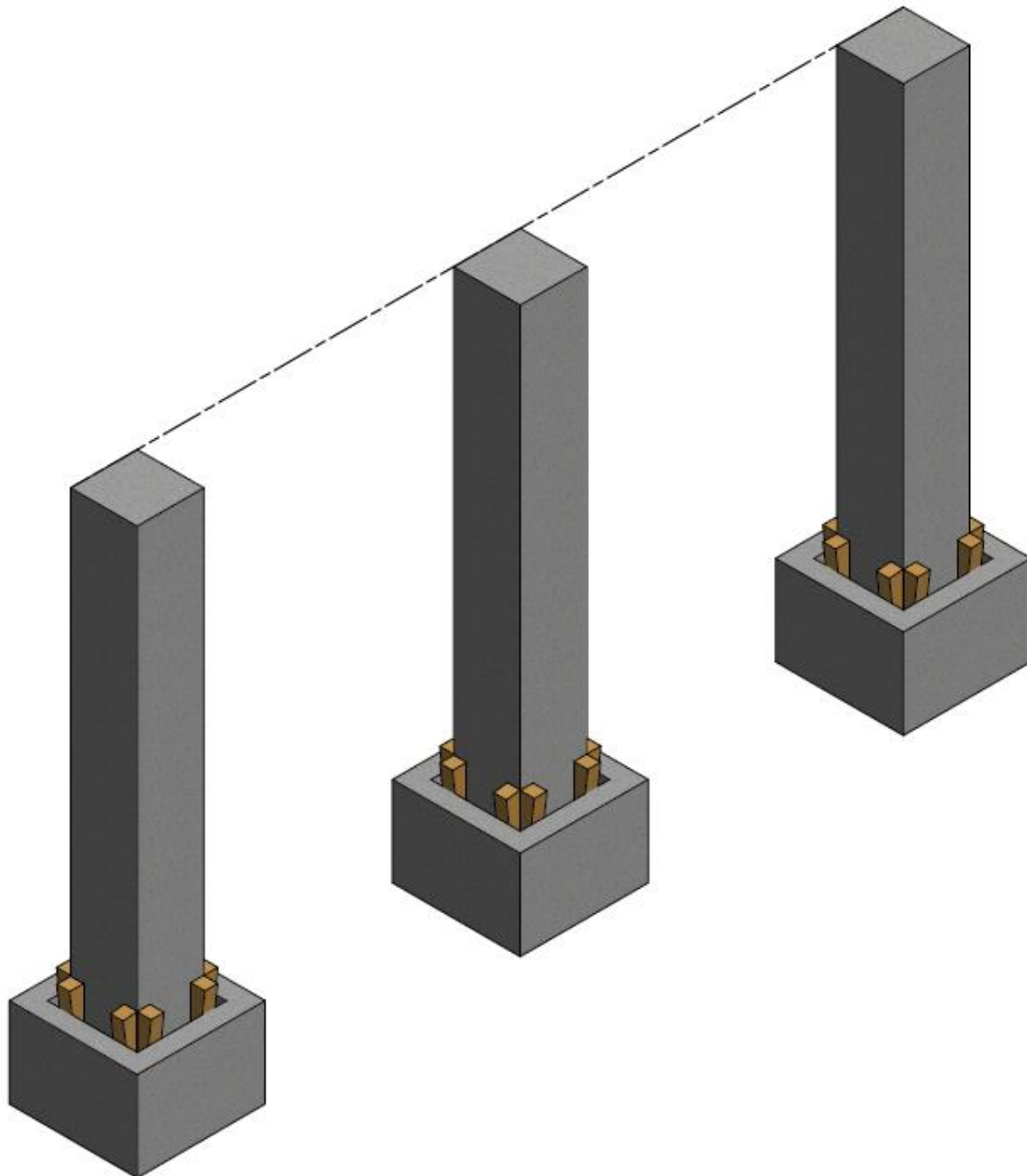
**Article number 46164  
 Foundation connector**



**Article number 46165  
 Column connector**

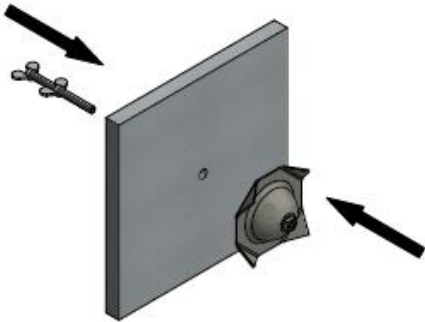
## APPLICATION

The fixing connectors are used exclusively for centring and aligning the precast columns on the site, during the installation process.

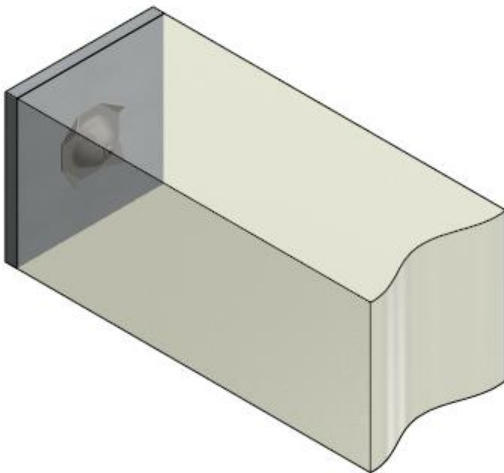


## INSTALLATION INSTRUCTIONS

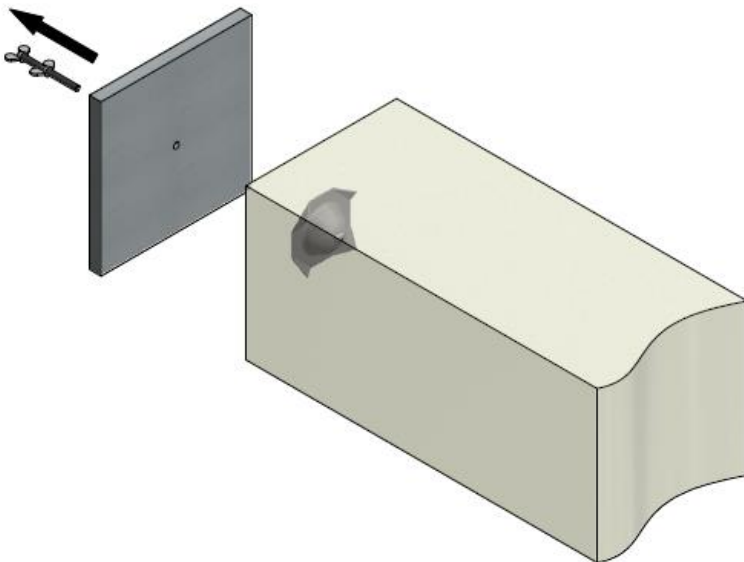
### COLUMN CONNECTOR INSTALLATION



The column connector is fixed to formwork using a threaded bar and two wing nuts.  
 Drill the formwork and insert the TDV into the hole and screw the column connector. Tighten using the second nut.



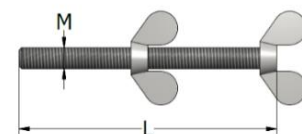
After the column connector is firmly fixed to the formwork, pour the concrete.

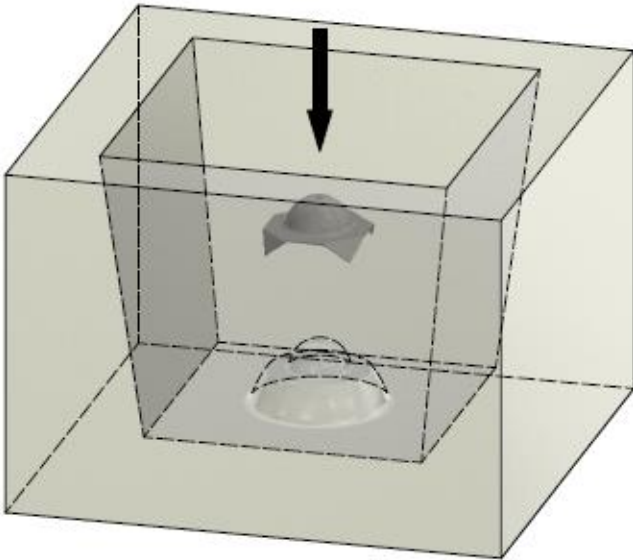


At the end, after the concrete has hardened, the threaded bar is unscrewed, and the formwork can be removed.

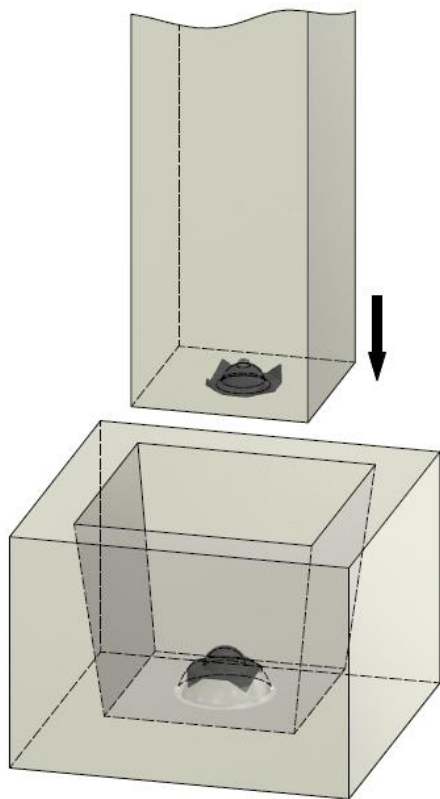


TDV		Thread	L
Description	Product no.	[mm]	[mm]
TDV-3D-013	44589	M8	110



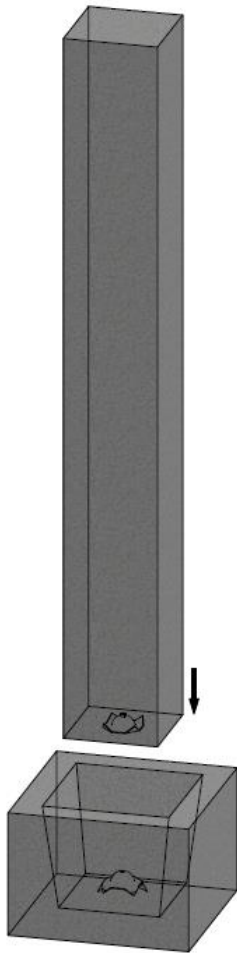
**FOUNDATION CONNECTOR INSTALLATION**

The prefabricated foundation blocks are primarily installed on site. Sufficient mortar is placed in the middle of the bottom of the cavity which the foundation connector is embedded. Make sure the exterior spherical surface remains clean.

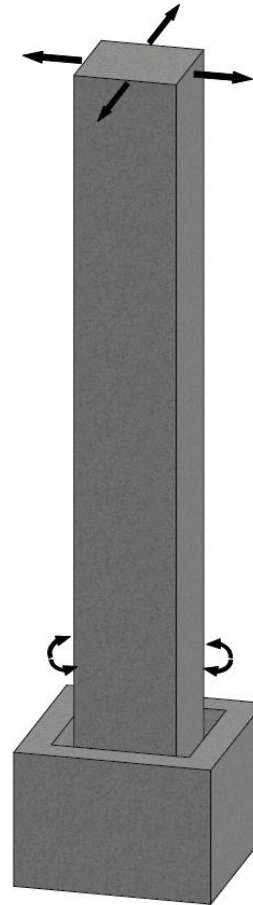


After the mortar is hardened around the foundation connector, the column can be installed.

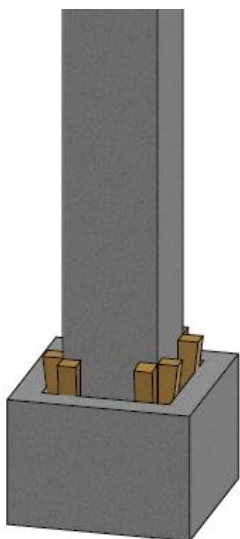
### COLUMN INSTALLATION



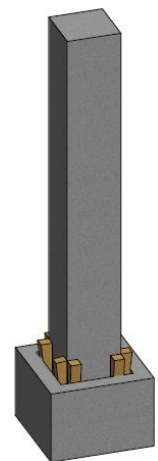
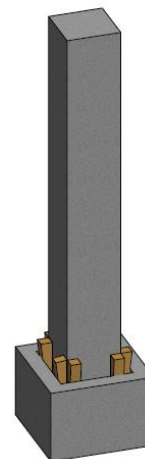
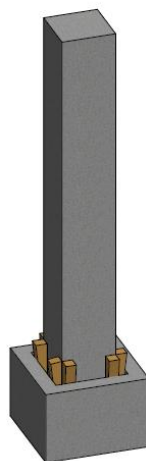
The foundation blocks aligned and installed on site, with the foundation connector embedded can now be used. The columns are lowered in the foundation block cavity.



The connectors permit the column to pivot and maintain a fixed contact point.  
**Make sure to keep the column fixed in the crane cable until the column is fixed.**



After the position was established, the wooden wedges are used to temporarily fix the columns. The wooden wedges will also help to make more positioning adjustments before in order to fill with concrete and permanent fixing.





## CONTACT



TERWA is the global supplier for precast and construction solutions with multiple offices around the world. With all our staff, partners and agents, we are happy to provide all construction and precast companies who work in the building industry with full service and 100% support.

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