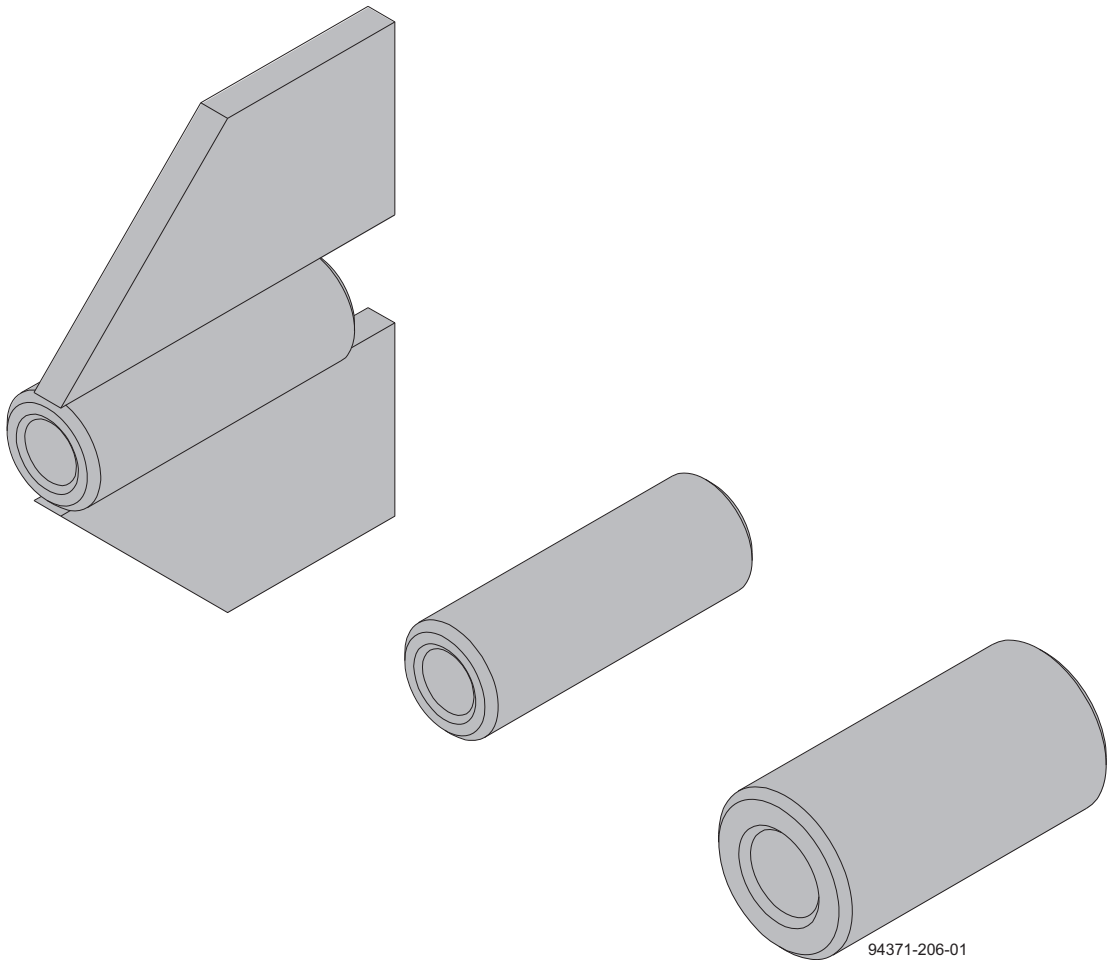


The Formwork Experts.

# Weldable couplers

## Fitting instructions



## Weldable coupler 15.0 and 20.0

### Product description

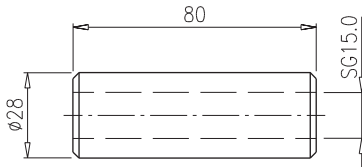
The Weldable couplers 15.0 and 20.0 are used for anchoring Tie-rods 15.0 and 20.0 to steel components.

#### **WARNING**

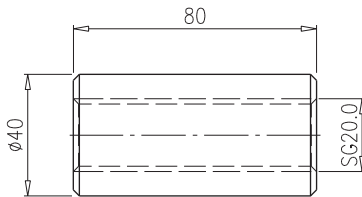
- ▶ The Weldable couplers are not suitable for joining the tie-rods themselves.

### Product presentation

#### Weldable coupler 15.0 Art.n° 581691000



#### Weldable coupler 20.0 Art.n° 581474000



### Attachment with full load capacity of the tie-rod

#### **WARNING**

- ▶ Ensure that the coupler is welded on centrally, so that no moments are created in the joint.
- ▶ The parts to which the couplers are to be connected must be suitably dimensioned.
- ▶ Observe all the standards and regulations applying to on-site welding work!
- ▶ Do not weld the couplers if they have tie rods screwed into them – this would risk fracturing them!

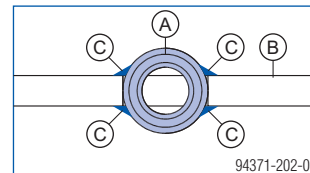
#### Weldable coupler 15.0:

- Permitted capacity to DIN 18216: 90 kN
- Permitted capacity, allowing a 1.6 : 1 factor of safety against failure: 120 kN

#### Weldable coupler 20.0:

- Permitted capacity to DIN 18216: 160 kN
- Permitted capacity, allowing a 1.6 : 1 factor of safety against failure: 220 kN

- ▶ To achieve the required permitted capacity, it is necessary to weld 2 fillet welds on each side of the weldable coupler, along its entire length.



Weldable coupler	Capacity (kN)	Fillet welds		
		Quantity	Thickness 'a' [mm]	Length 'a' [mm]
15.0	90	4	3	60
	120	4	3	80
20.0	150	4	4	80
	220	4	5	80

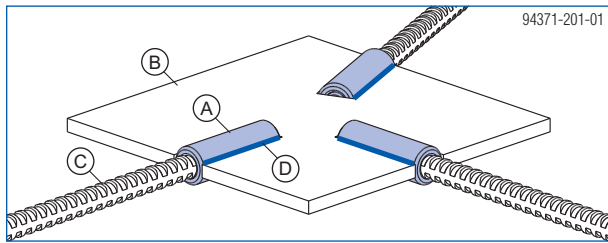
**A** Weldable coupler 15.0 and 20.0

**B** Steel component

**C** Fillet weld

- ▶ Completely screw in the tie rod, regardless of the required load capacity.

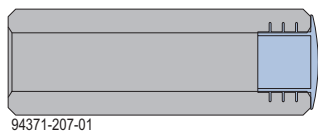
## Practical example



- A Weldable coupler
- B Slotted anchor plate
- C Tie rod
- D Fillet weld



If the tie-rod is not yet screwed into the coupler, the opening in the coupler can be closed for example with a Frami frame-hole plug (art. n° 588444000) or adhesive tape to prevent concrete from getting into the coupler.



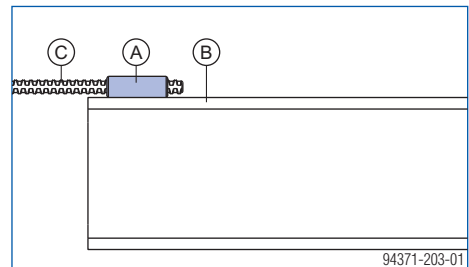
## Practical examples of situations with reduced load capacity



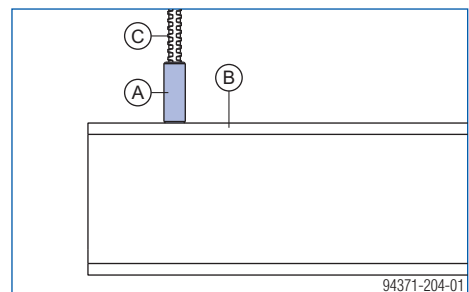
### WARNING

▶ All connections must be statically dimensioned and designed, especially the load capacity of the welds and of the base metal.

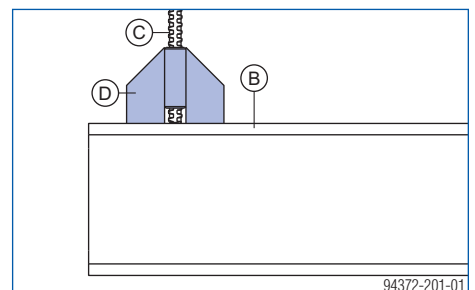
### Welded onto I section



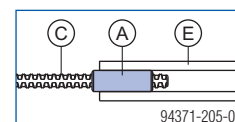
### End face welded onto I section



Instead of welding Weldable couplers 15.0 to I sections by their end faces, we recommend using 'Weldable couplers 15.0 for sheet wall'.



### Welded onto reinforcement rod



- A Weldable coupler
- B I section
- C Tie-rod
- D Weldable coupler 15.0 for sheet wall
- E Reinforcement rod

# Weldable coupler 15.0 for sheet wall

## Product description

The 'Weldable coupler 15.0 for sheet wall' is used for anchoring Tie rods 15.0 to a steel component.

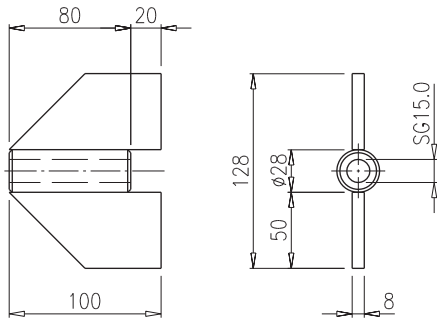


### WARNING

- ▶ The Weldable coupler 15.0 for sheet wall is not suitable for joining the tie-rods themselves.

## Product presentation

### Weldable coupler 15.0 for sheet wall Art.n° 581693000



## How to attach:

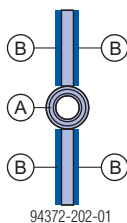


### WARNING

- ▶ Check with the site to determine whether the wall thickness and quality of the steel walls are suitable for transferring the expected forces.
- ▶ Observe all the standards and regulations applying to on-site welding work!
- ▶ Do not weld the couplers if they have tie rods screwed into them – this would risk fracturing them!

- Permitted capacity to DIN 18216: 90 kN
- Permitted capacity, allowing a 1.6 : 1 factor of safety against failure: 120 kN

- ▶ To achieve the required permitted capacity, it is necessary to weld a fillet weld along the entire length of the plate, on both sides.



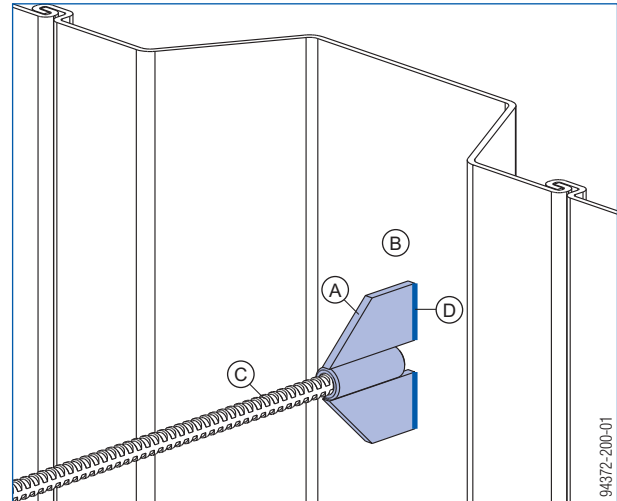
94372-202-01

- A Weldable coupler 15.0 for sheet wall
- B Fillet weld (a = 5 mm, l = 50 mm)

- ▶ Completely screw in the tie rod, regardless of the required load capacity.

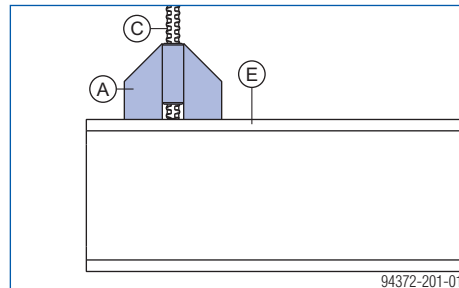
## Practical examples

### Welded onto sheet-pile wall



94372-200-01

### Welded onto I section

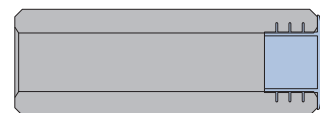


94372-201-01

- A Weldable coupler 15.0 for sheet wall
- B Sheeting wall
- C Tie rod 15.0
- D Fillet weld
- E I-section



If the tie-rod is not yet screwed into the coupler, the opening in the coupler can be closed for example with a Frami frame-hole plug (art. n° 588444000) or adhesive tape to prevent concrete from getting into the coupler.



94371-207-01