

## Installation instructions

### Seismic Pan Joint E3



## 1. General information

Please check prior to starting with the installation to make sure that the supplied material is complete and undamaged. Any damages or missing components must be reported to MIGUA without delay.

Check whether the material and the on-site characteristics correspond to the technical data detailed in the data sheet. Pay particular attention to the existing expansion joint width. It may not be larger than the maximum expansion joint width specified in the technical data of the cover.

Check the previous work carried out by other workers to ensure correct and fault-free execution. Check that the surface is capable of bearing weight and is free of cracks, and that the expansion joint edges do not show any ruptures.

The concrete surface must be capable of carrying the payload, clean, dry and free of dust. The pressure resistance of the reinforced concrete must be equivalent to at least that of a C20/25 (DIN EN 206-1). If the conditions for assembly are unsuitable, you may not start assembly.

If a moisture barrier or fire protection is required for the expansion joint system, the work must be mutually agreed. In this instance, the fire protection and moisture barrier need to be assembled before the seismic pan joint.

## 2. Preparation

Familiarise yourself with these instructions and working drawings.

Check the progress of the existing construction joint carefully throughout the entire process. These generally have tolerances and are not always exactly even.

Check to see that the maximum and minimum permitted expansion joint widths for the cover have not been exceeded or do not fall short anywhere, even taking into account any unevenness throughout the expansion joint. Chiselling or putty may be required at some points in order to achieve the desired expansion joint width.

Check the evenness of the wall. Minor bumps of up to 3mm can be offset with compressed tape (not included) between the E3 wall attachment (3.4) and the wall. Larger bumps must be smoothed out.

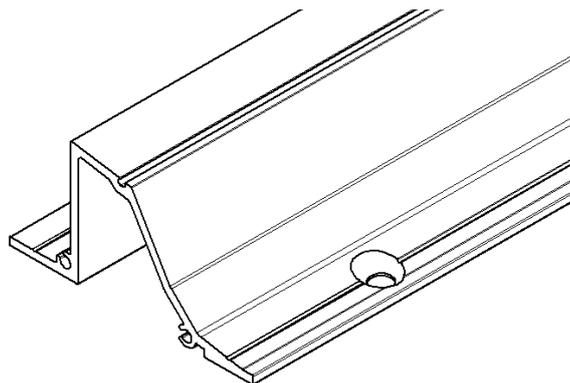
Determine the upper edge of the complete and installed cover with the construction management on site, so that it is flush with the upper side to be installed later.

## 3. Units

At the beginning of these instructions, we would like you to get to know the individual units and components of the seismic pan joint, and their functions.

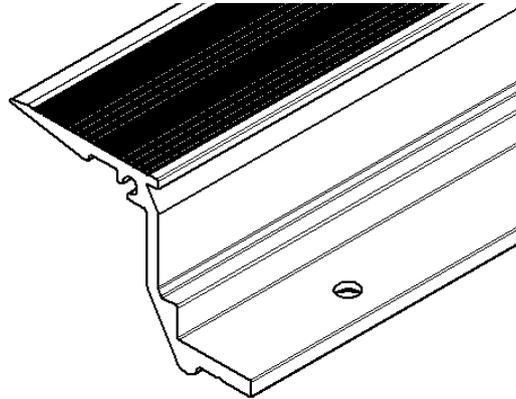
### 3.1 External side part

The external side parts receive the centre pans. If an earthquake occurs, the centre pans are pushed upwards along the ramps during major expansion joint movements.



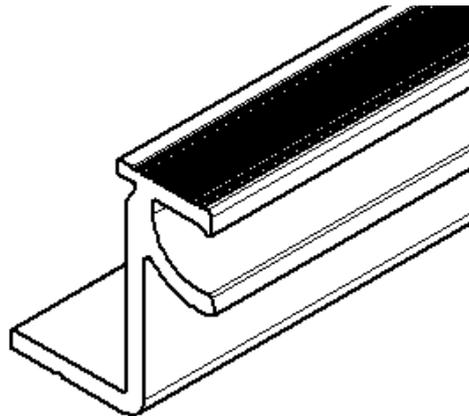
## 3.2 Internal side part

The internal side parts create the side borders of the centre pan, which later receives the floor covering.



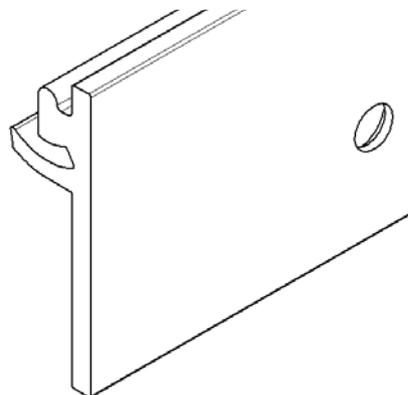
## 3.3 E3 side part

The internal side parts create the side borders of the centre pan, which later receives the floor covering.



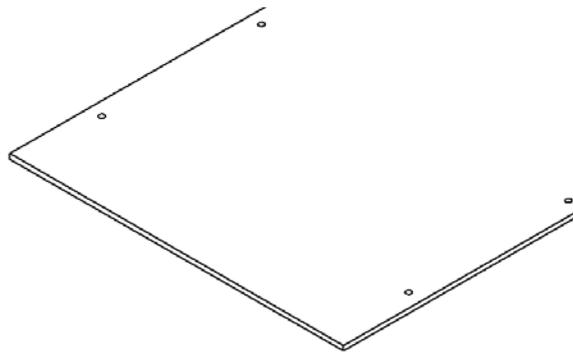
## 3.4 E3 wall attachment

The internal side parts create the side borders of the centre pan, which later receives the floor covering.



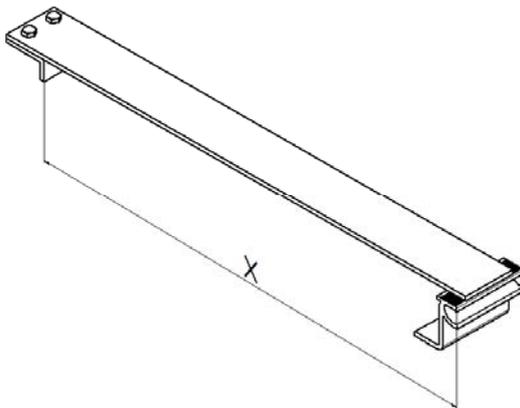
### 3.5 Mittelplatten

Die Mittelplatten bilden den Boden für die Mittelpfannen.



### 3.6 Abstandhalter

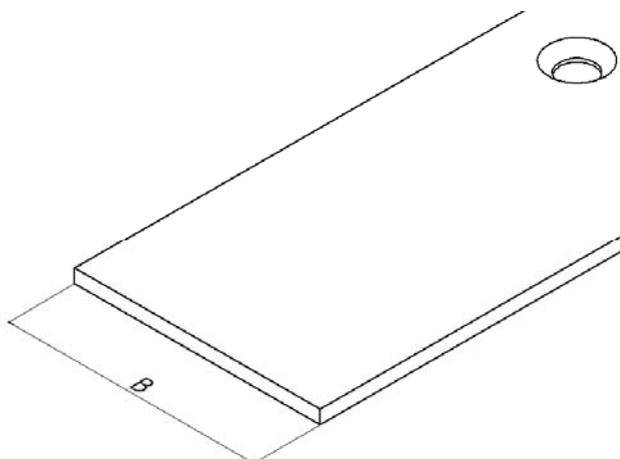
Wir liefern zu unseren Fugensystemen die passenden Einbaulehren (3.4) und Abstandhalter, um die Montage zu erleichtern. Die Abstandhalter sorgen dafür, dass die Linearführungen bei der Montage den richtigen Abstand zueinander haben.



SPJ 100	X=248mm
SPJ 200	X=348mm
SPJ 300	X=448mm
SPJ 400	X=548mm
SPJ 500	X=678mm
SPJ 600	X=803mm

### 3.7 Sliding plates

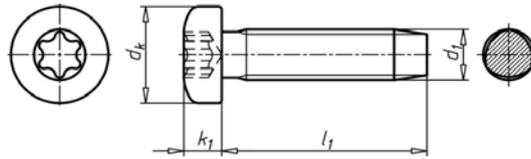
The sliding plates are mounted near the external side parts and help the centre pans to slide onto them during an earthquake.



SPJ 100	B=70mm
SPJ 200	B=70mm
SPJ 300	B=70mm
SPJ 400	B=90mm
SPJ 500	B=120mm
SPJ 600	B=150mm

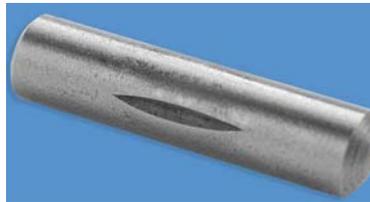
### 3.8 M6—DIN 7500 M Torx

The self-tapping screws are used to connect the centre plates with the internal side parts. M6x12 are used for 5mm thick plates, and M6x16 for thicker plates.



### 3.9 Connecting pins

The connecting pins are used to connect the linear guide and the side parts at the correct height and alignment.



### 3.10 Round Rubber Cord, 3mm

The round cord is used in the external side parts, and prevents any noise being generated by stress.



### 3.11 MMS-F 7.5x80/25 (not included)

Concrete screws for anchoring to the floor. A sub-surface capable of bearing loads, with a concrete quality of min. C20/25, is a prerequisite. If you are using different screws, check that these have a similar load-bearing capacity and that the countersunk heads fit the holes in the covers.

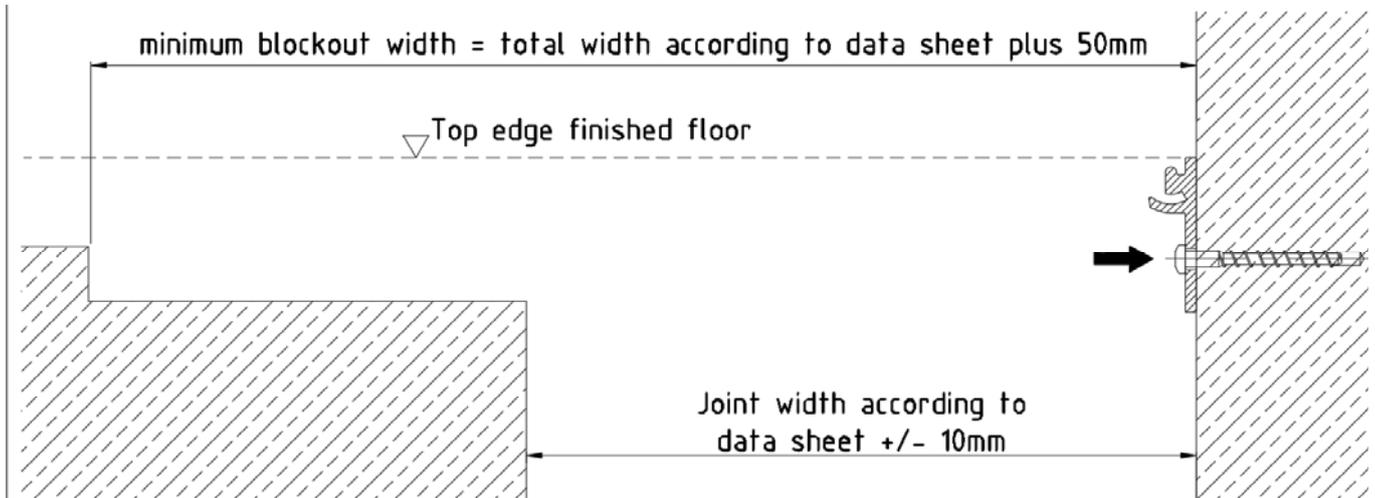


## 4. Assembly

When you have familiarised yourself with the components and checked to make sure the materials are complete, you are ready to start assembly.

### 4.1 Assembling the E3 wall attachments

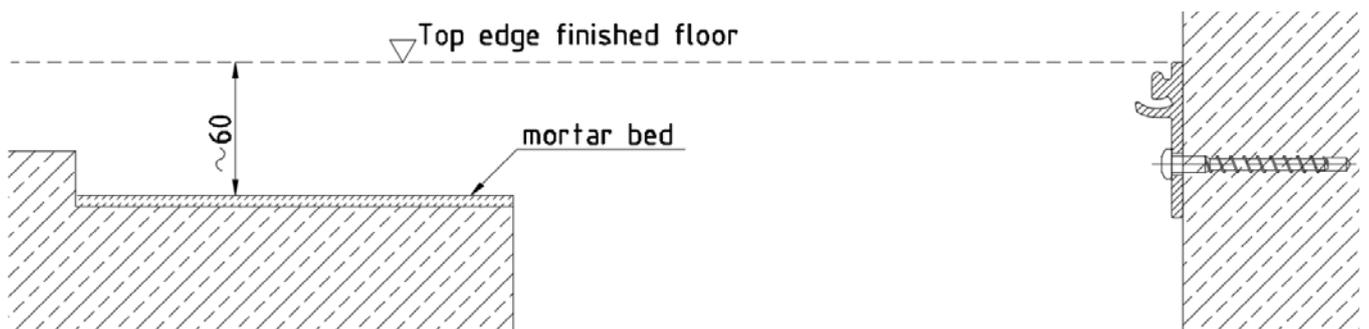
Mark the upper edge of the complete flooring on the wall with a pen. Anchor the E3 wall attachments to the wall with suitable fastenings (not included).



### 4.2 Creating the mortar bed

In order to level any unevenness in the raw concrete surface, smoothing material must be applied to both sides of the expansion joint. The width of the material must be at least the width of the cover edge. A highly durable and loss-free PCC mortar, epoxy resin mortar or similar material must be used. The selection of the mortar is carried out in accordance with the on-site situation. Pay attention to the processing notes provided by the manufacturer.

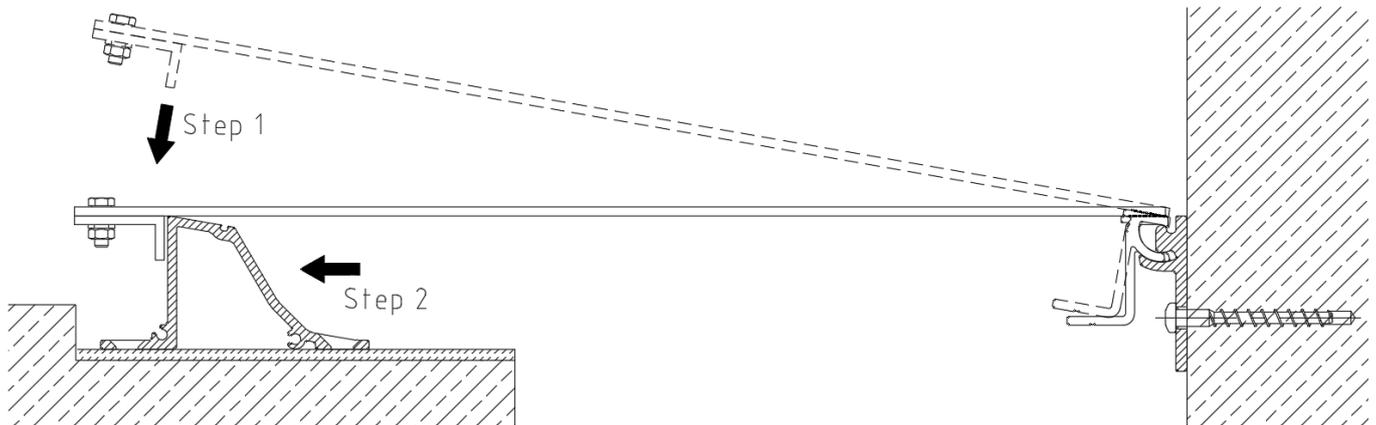
The upper edge of the mortar bed should be about 60mm below the upper edge of the floor to be finished later. The mortar bed must be absolutely even.



## 4.3 Placing the external side parts

Now place the external side parts in the fresh mortar bed. Hook four spacers into the E3 wall attachments, distributed evenly over its length, and fold these downwards. Next, slide the external side parts onto the brackets of the spacers. The correct distance from the wall has now been set. The side parts must now be pressed carefully into the mortar bed until the upper edge is flush with the level of the completed flooring. You can use a spirit level on the spacers to check this.

Make sure that there are no cavities under the fitting sections of the side parts.



## 4.4 Assembling the sliding plates

Now press the sliding plates into the fresh mortar bed. Make sure that they are absolutely even, and that the counter bore is pointing upwards.



## 4.5 Anchoring the covers

After the mortar has hardened, the fixture edges of the cover are anchored laterally to the expansion joint into the raw concrete surface. Use MMS-F 7.5x80/25 concrete screws for this. The regulations set out by the screw manufacturer are to be observed. The clamping strengths and installation depths of the anchor manufacturer must be maintained.

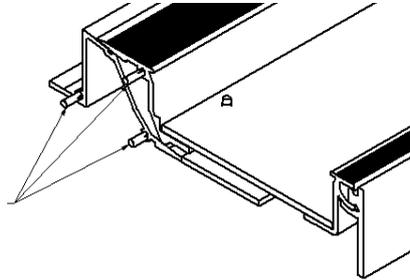


## 4.6 Next Frame

Assemble the next frame as set out in 4.1.

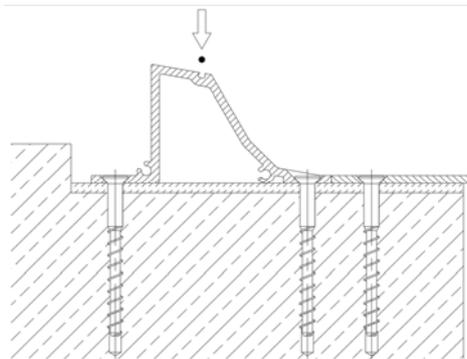
## 4.7 Connecting pins

Attach the individual frames at the correct height and alignment for the connecting pins to be placed in the appropriate pin holes.



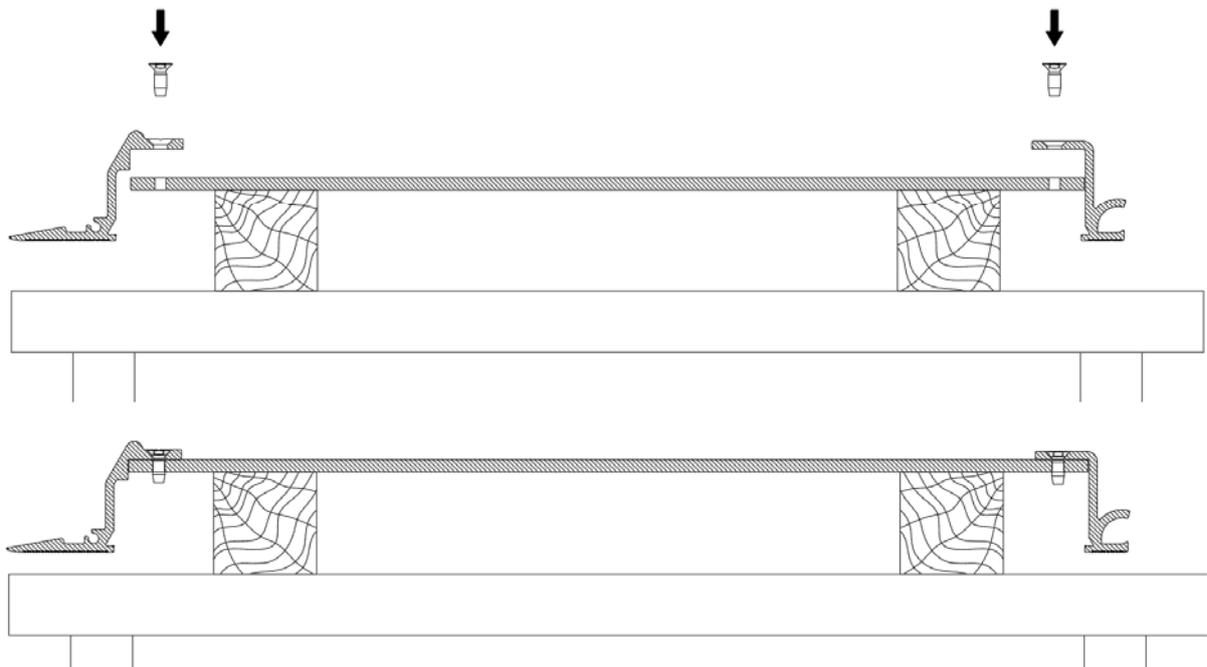
## 4.8 Pushing in the Round Cords

Push the round cords continuously through the entire length of the aluminium cover, into the relevant nut. Make sure any existing dirt has been cleaned from the nut beforehand.



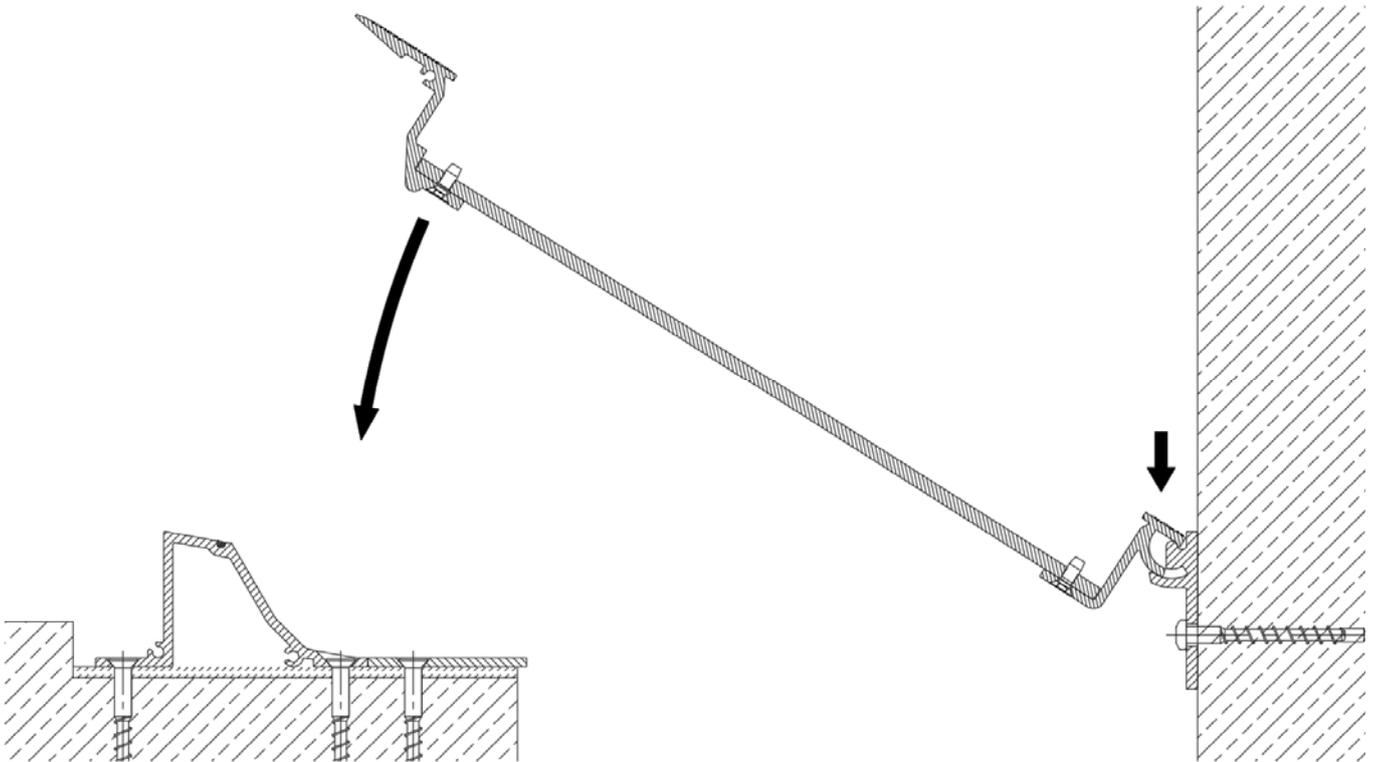
## 4.9 Preassembling the centre pans

Lay the centre plates on the trestles. Underpin the plates with squared timbers or similar, so that you can fasten the side parts. Use self-tapping M6—DIN 7500 screws for this.



## 4.10 Assembling the Centre Pans

Release the centre pans into the E3 wall attachment from above, with the side part diagonal, and then fold the centre pans downwards in an arc.

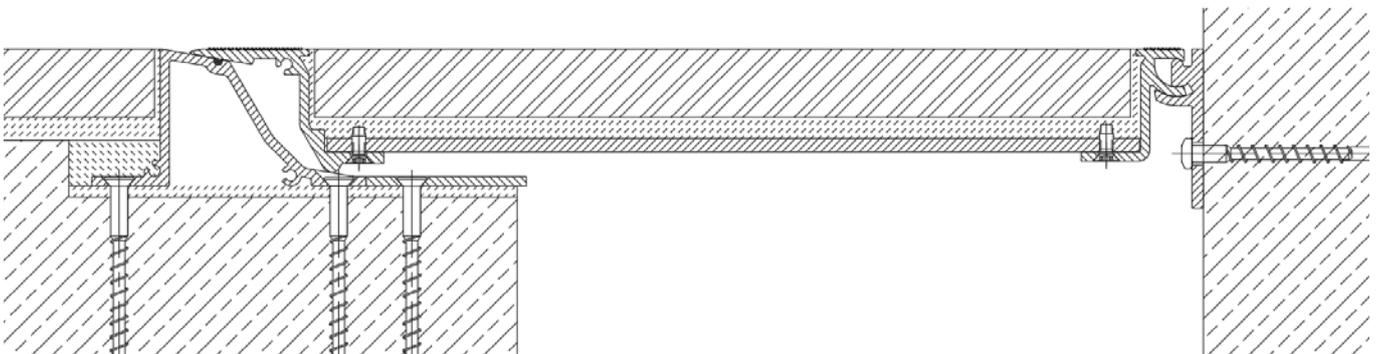


## 4.14 Finishing

Now work on flooring can be carried out, and the centre pans filled. Mask the surfaces of the covers with protective film to prevent soiling with mortar during work.

You must clean and grease the metal in order for the mortar to adhere well to the aluminium. Prime the covers with epoxy resin and sand with glass sand.

You will need to clarify with the mortar manufacturers whether their product is suited to this specific type



## 5. Acceptance

Remove the protective film and dispose of the packaging material. Clean the cover and protect it from damage until it has been accepted by the architects.