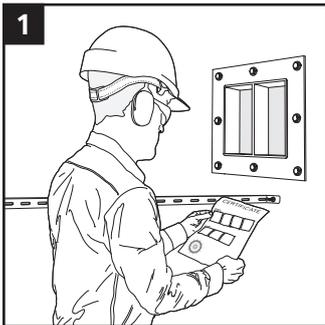


# Installation instructions

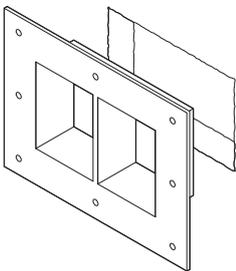
## Mounting of bolted frames and sleeves

### General information

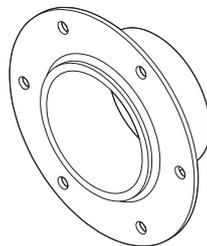


Rectangular frames and round sleeves come in many different designs. The application and structure decide what frame and gasket to use. Consult Roxtec for guidance or visit [roxtec.com](http://roxtec.com) for more information.

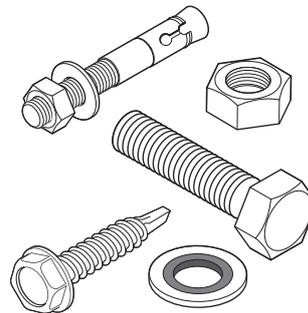
### Components



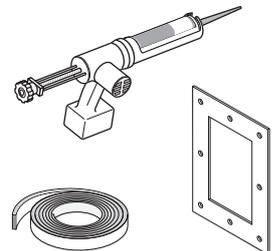
Rectangular frame



Round sleeve

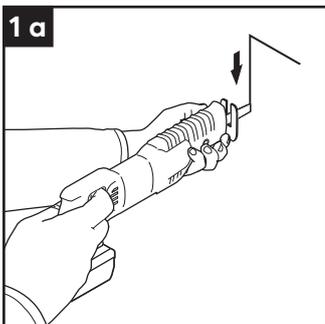


Fasteners with Ø8 are recommended

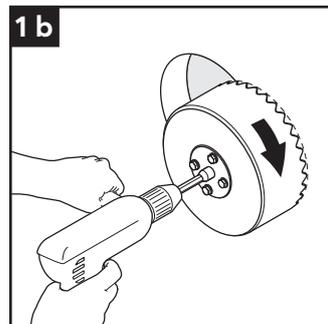


Sealing methods

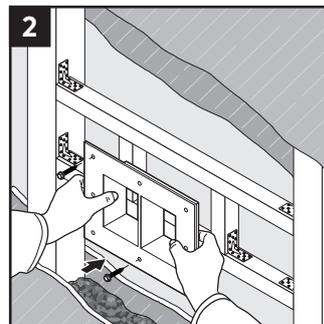
### Make an aperture



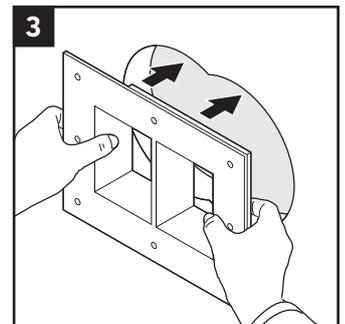
Use a suitable tool to make the aperture. Aperture dimensions can be found on [roxtec.com](http://roxtec.com).



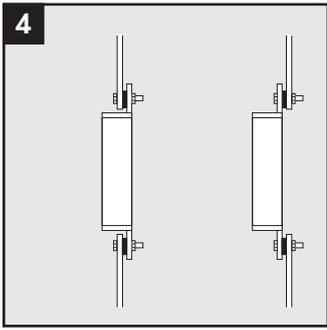
Alternatively, use a hole saw for the aperture.



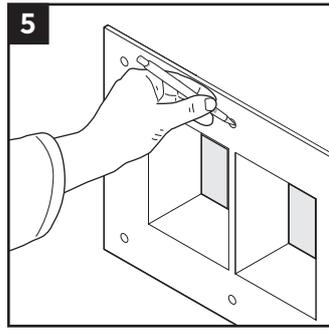
For gypsum or other non load-bearing structure, add additional aperture framing structure of steel or timber.



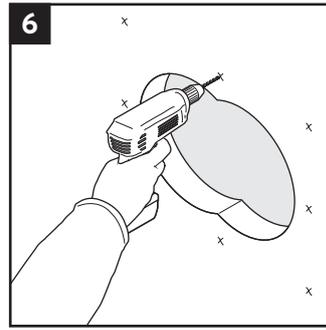
Insert the frame/sleeve into the aperture.



Alternative frame/sleeve installation positions.



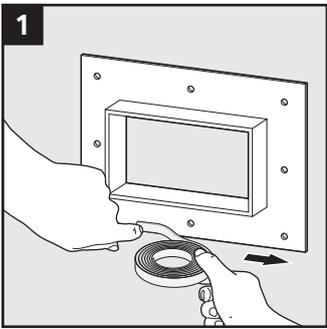
Center the frame in the aperture and use it as template for the flange hole pattern.



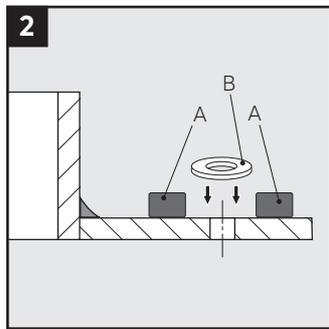
Remove the frame and drill the holes for the bolts. Continue according to your selected sealing method and fasteners.

## Using sealing strips

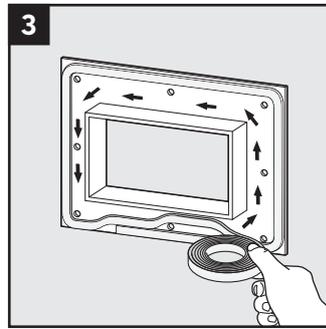
Suitable for flat surfaces, such as smooth concrete, steel or boards.



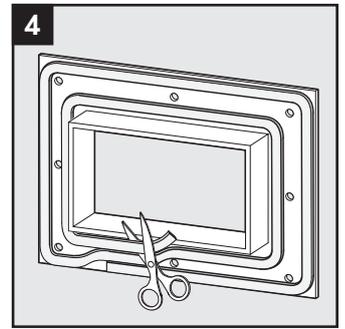
Attach the end of the sealing strip to the frame.



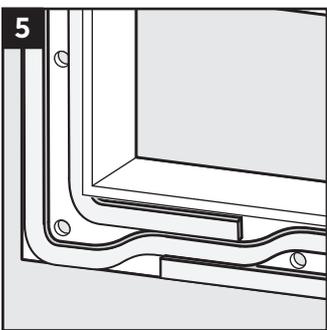
If a compression stop (B) is required, make sure the sealing strip (A) is clear of the compression stop.



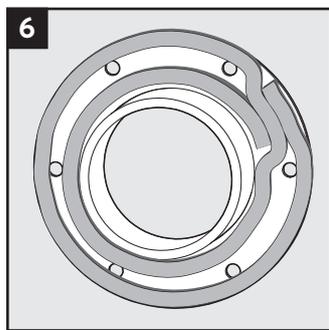
Apply two rounds of sealing strip.



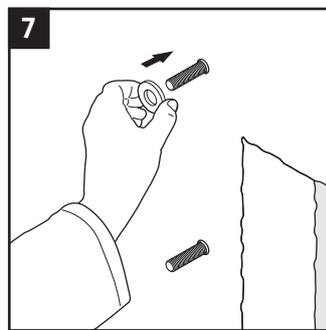
Cut the excessive sealing strip so that it overlaps as shown in the picture.



Make sure the sealing strip parts are mounted tightly against each other in the overlap section.



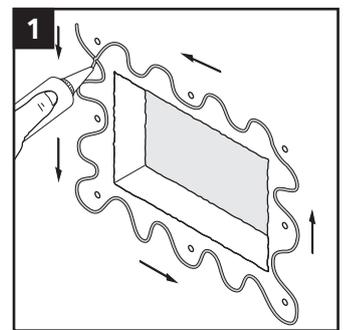
Sealing strip mounted on sleeve.



Attach washers or similar behind the flange to create a compression stop of 2 mm for the sealing strip.

## Using sealant

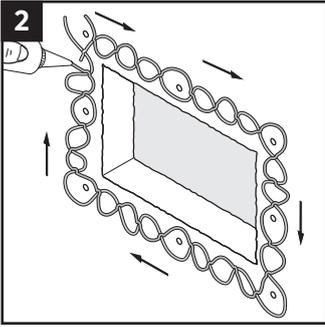
Suitable for rough surfaces, such as concrete.



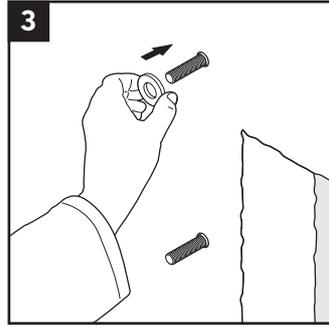
Apply sealant to the structure with a thickness of minimum 6 mm.

## Using pre-punched gasket

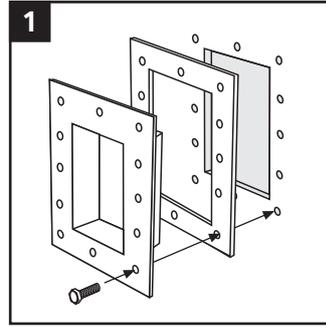
Suitable for flat surfaces, such as steel.



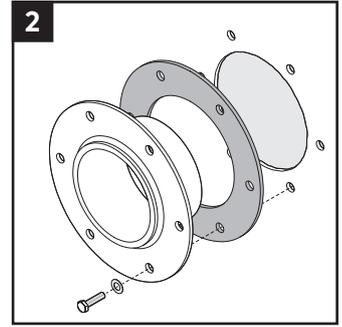
A second string of sealant isolates the holes.



Attach 2 mm washers or similar behind the flange to ensure a 2 mm gap between the frame flange and the structure.

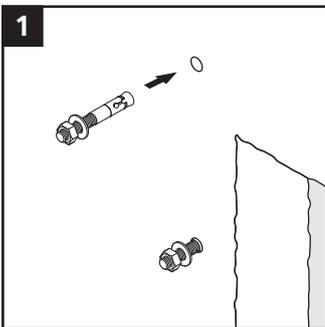


Place the pre-punched gasket between the frame and the structure.

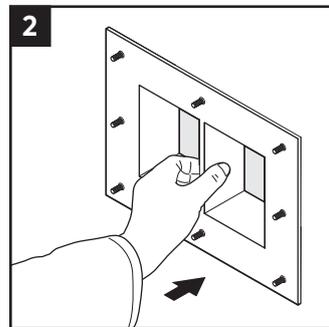


Round sleeve with pre-punched gasket.

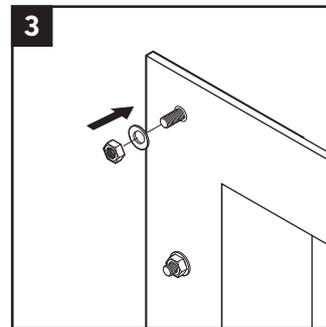
## Installation with expansion bolts



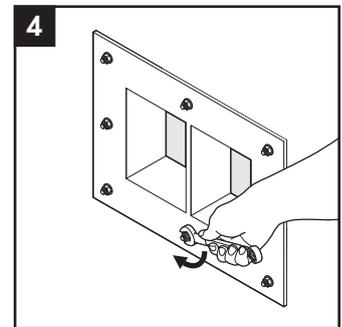
Insert the expansion bolts in the drilled holes.



Attach the frame to the bolts.

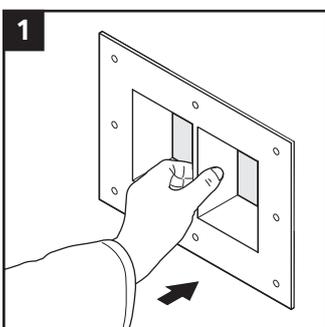


Attach washers and nuts to the expansion bolts. Those are recommended to be of the same material type as the frame.

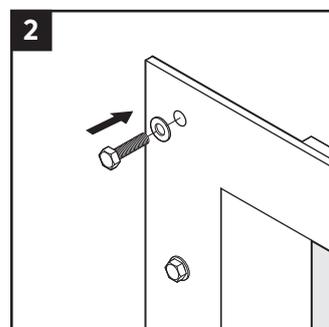


To complete the installation, tighten the nuts crosswise in small steps according to your selected fasteners.

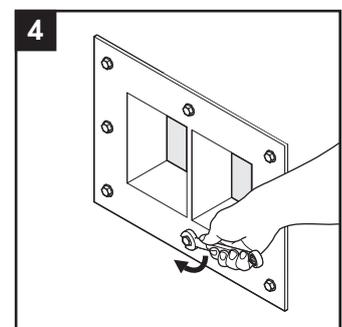
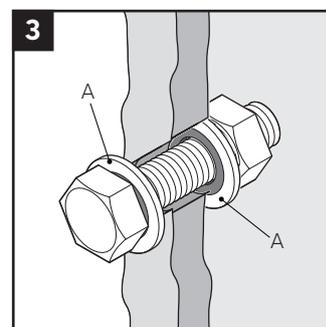
## Installation with bolts, nuts and washers



Insert the frame into the aperture.

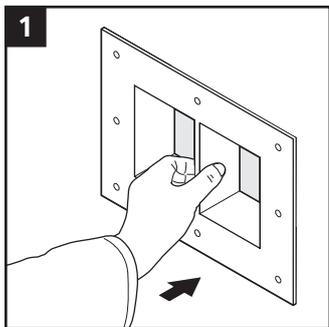


Attach the frame using bolts, nuts and washers. Through-holes must be sealed using sealant or sealing washers (A).

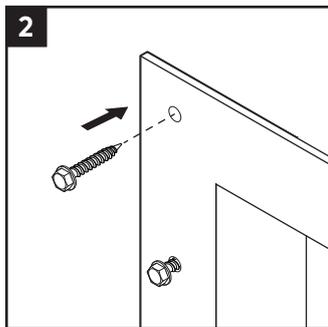


To complete the installation, tighten the nuts crosswise according to your selected fasteners.

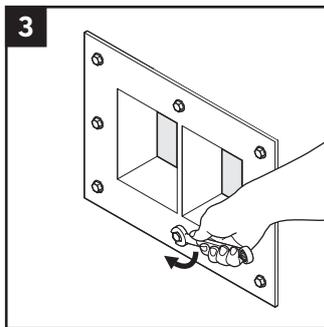
## Installation with wood screws



Insert the frame into the structure.

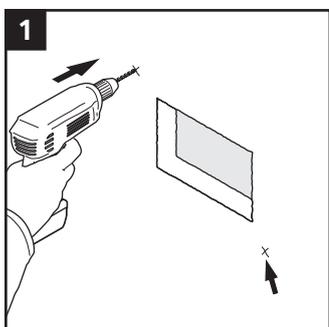


Attach the frame using wood screws.

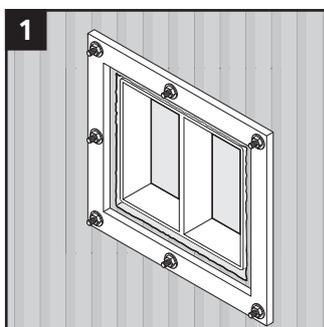
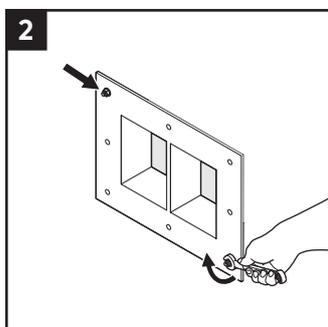


To complete the installation, tighten the nuts crosswise in small steps according to your selected fasteners.

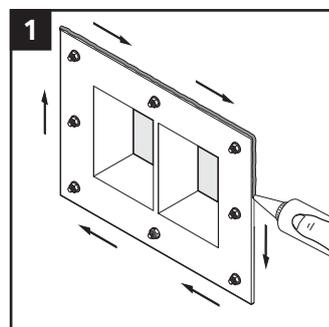
## Arrangements



For large frames, simplify the installation by attaching two bolts first. Then drill the remaining holes with the frame in place.



For stability, a counter frame can be added to the back side.



For increased resistance against crevice corrosion and frost wedging, apply a string of sealant around the flange.

## Note

- Additional sealing components are required for a complete solution. Follow the corresponding installation instructions.
- When mounting expansion bolts in concrete, the edge distance should be at least 60 mm.
- The structure and chosen sealing method have significant effect on the rating and type approval. Consult your local Roxtec representative.
- Systems using Roxtec sealing modules of ES type require conductive gaskets. Consult your local Roxtec representative.
- The TSL 15x6 sealing strip does not need a compression stop.
- Approvals or certificates may include amendments or limitations related to this application.
- The latest version of this and related documents are found at [roxtec.com](http://roxtec.com).

## Disclaimer

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(b) Installation shall be carried out in accordance with Roxtec installation instructions in effect from time to time.

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