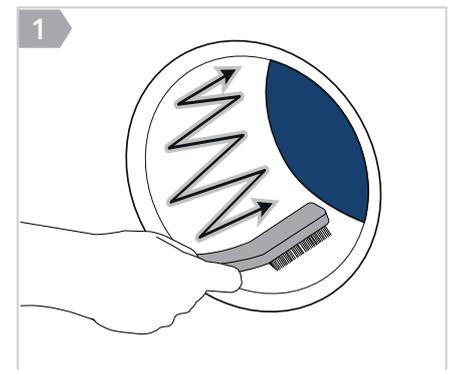


RGP E-INS-2025-Rev. A

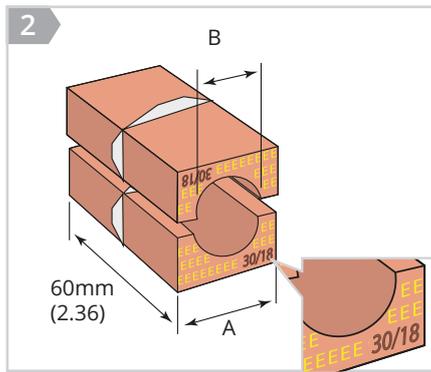
A

Dimensions for pipes and drilled holes			
RGP type	RGP ID mm	RGP type	RGP ID Inches
RGP 50	50-51	RGP 2"	1.97-2.01"
RGP 70	70-71	RGP3"	3-3.04"
RGP 100	100-102	RGP 4"	4-4.08"
RGP 125	125-127	RGP 5"	5-5.08"
RGP 150	150-152	RGP 6"	6-6.08"
RGP 200	200-202	RGP 8"	8-8.08"
RGP 300	301.5-304	RGP 11.8"	11.87"-11.96"

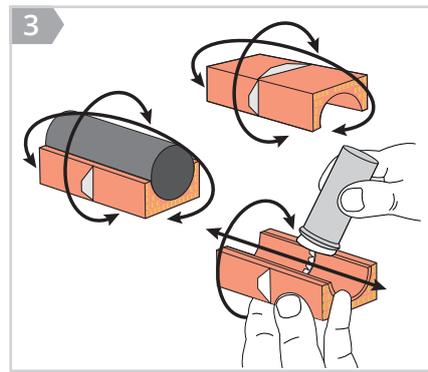
Measure the opening and check that the measurement is within the tolerance range in the table.



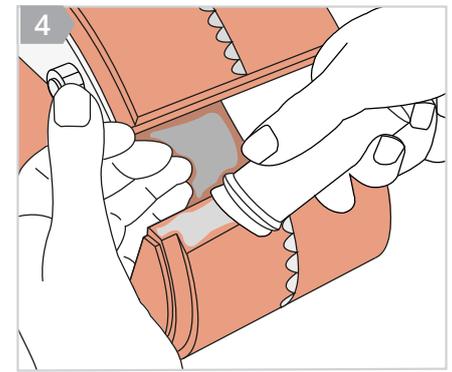
Clean the aperture.



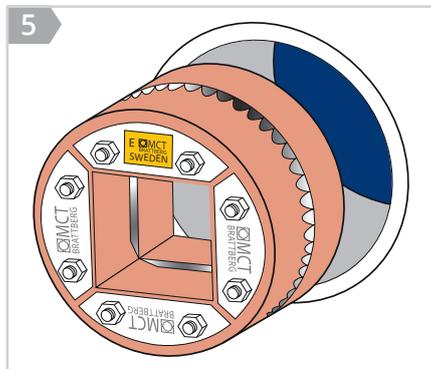
Insert Blocks are identified by their width (A) and hole diameter (B).



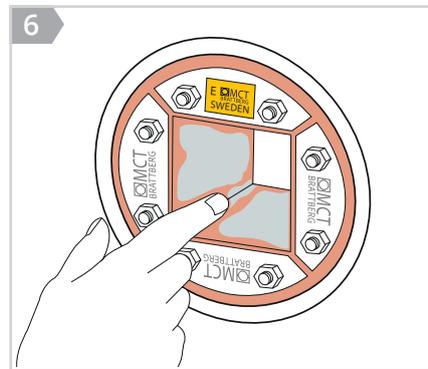
Lubricate all sealing surfaces on the Insert Blocks.



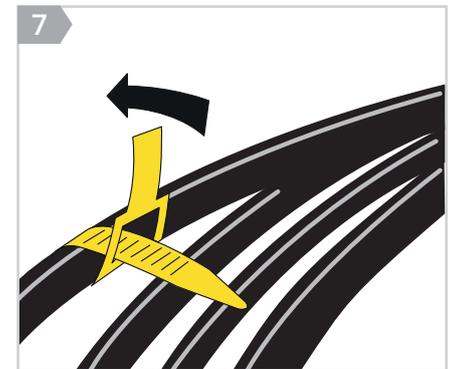
Lubricate inside the cut of the RGP thoroughly.



Insert the RGP frame in the opening. No lubricant should be applied to the hole or to the outside of the RGP.



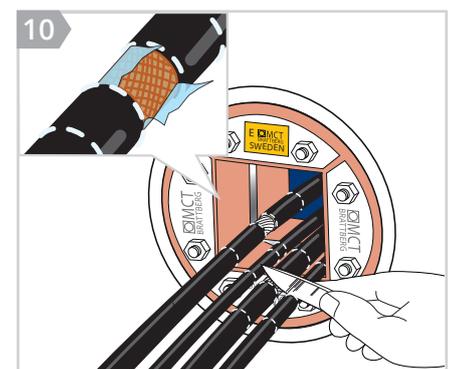
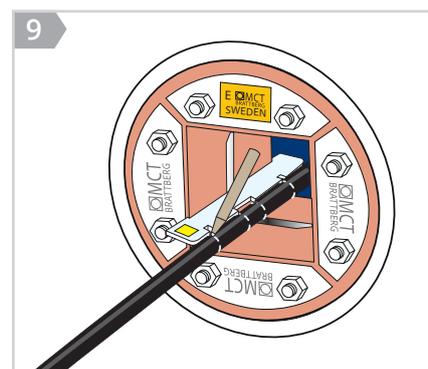
Lubricate the inside of the RGP thoroughly, especially into the corners.



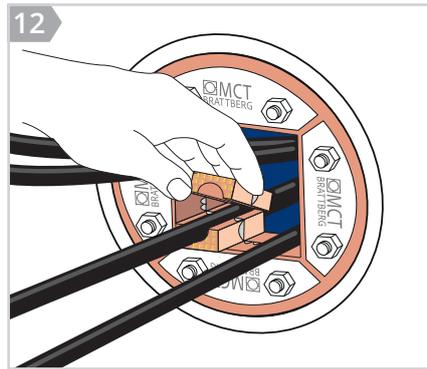
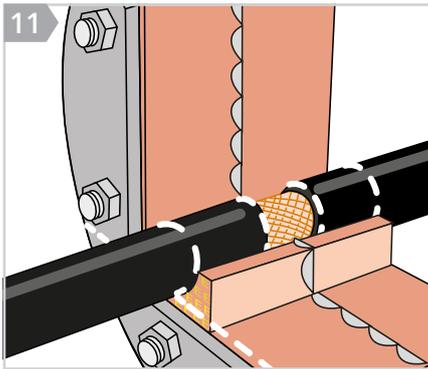
Measure the diameter of the cables and choose suitable blocks.



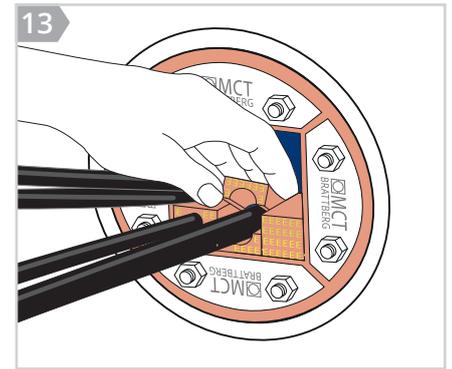
Route the cables/pipes through.



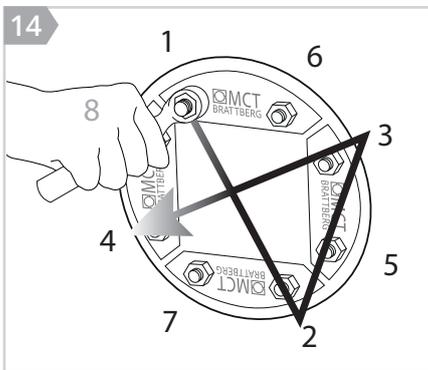
MCT Round transit



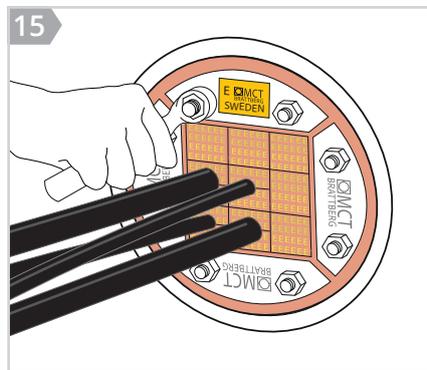
Insert the blocks according to your packing plan. The cables/pipes shall be parallel to the RGP.



Continue to fill the transit considering your RGPlan.



Tighten the nuts in diagonal order.

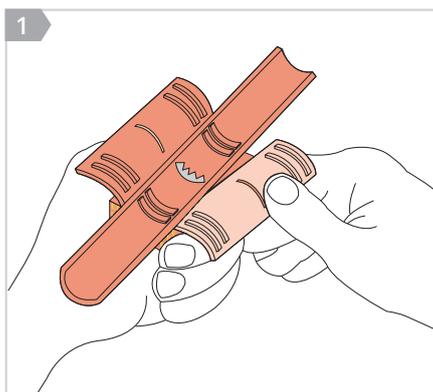


Tighten until 10-12 mm (0,39"-0,47") of thread is visible.

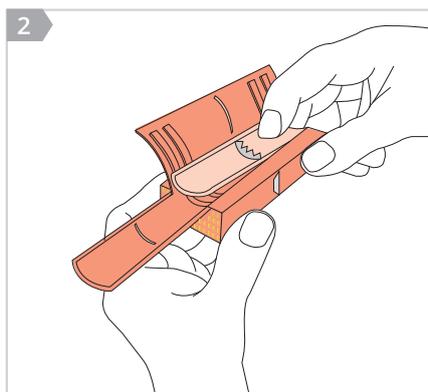
Disclaimer - pressure & watertight installation

Some cables have a transparent plastic film layer between the shield and the outer shell. If the installer is not aware of this, it is very easy to forget the plastic film, which causes absolute 0 dB attenuation through the penetration, also affecting other cables in the same penetration. Please see page 9 for disclaimers.

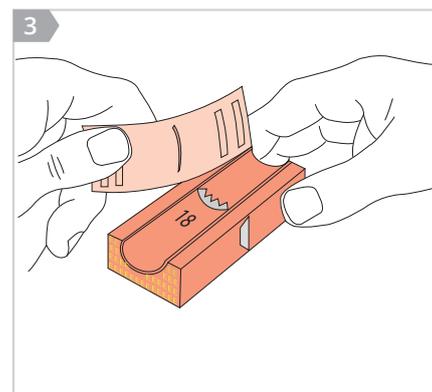
AddBlock



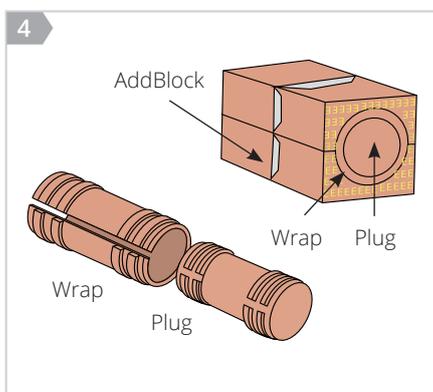
1 Tear off attached sheet to fit the dimension selected.



2 Place sheet into centre slot and affix it with the unique locking device.

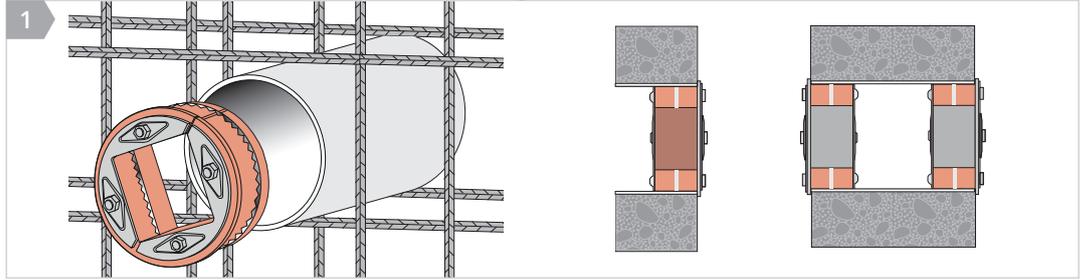
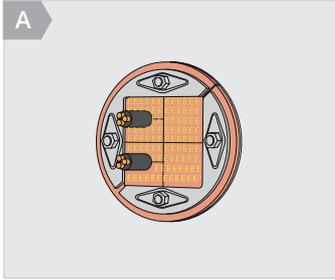


3 Tear off superfluous sheets.



4 Plugs and Wraps are only for use in Grounding and Bonding applications, or when radiated EMI is not a threat.

Installation Cast in

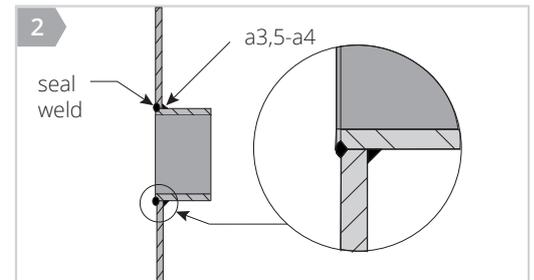
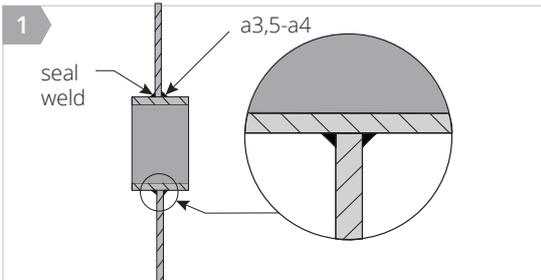
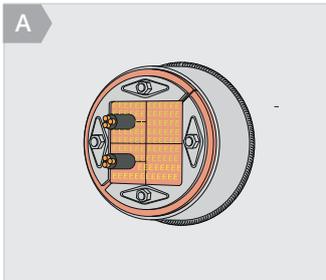


RGP can be installed in core drilled or cast holes, or in a pipe that is cast in or bolted.

Casting is made easier if MCT Brattberg casting forms are used.

For EMC performance and electrical continuity through the entire system, the sleeve or the reinforcement connected to the cast-in frame must be properly grounded. This ensures a continuous metallic path between the frame, sleeve, and the surrounding structure, allowing electromagnetic interference to be safely diverted to ground. Without grounding, the EMC frame becomes electrically isolated in the concrete and the shielding will not work.

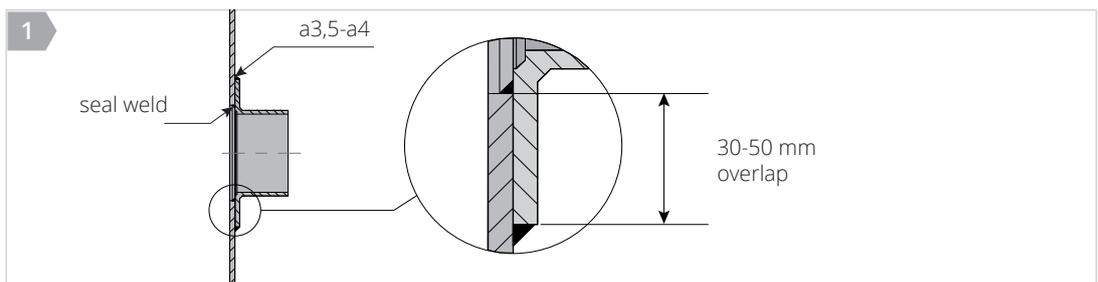
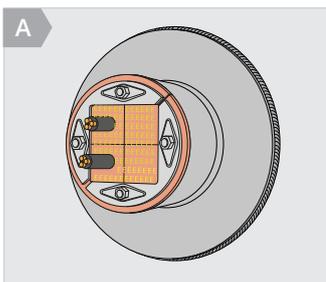
Installation S Sleeves



1. Position the S-type sleeve into the plate, maximum allowed root gap is 2 mm.
2. Tack weld in four places or every 100 mm around the sleeve.

3. Weld around the front side of the sleeve.
4. Complete by seal welding around the rear side of the sleeve.

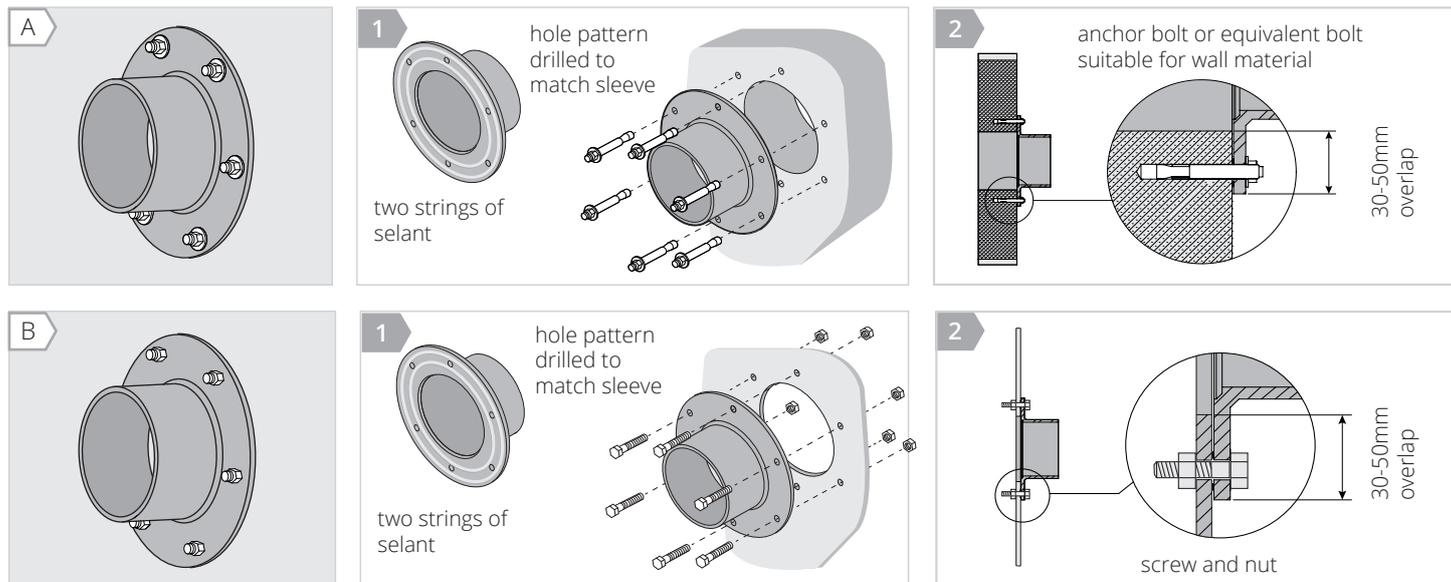
Installation SFR Sleeves



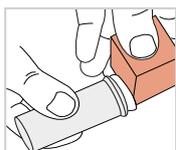
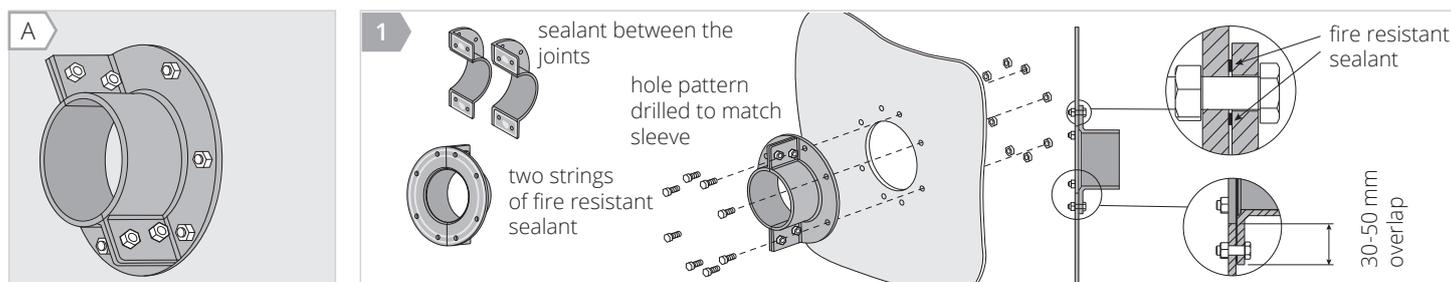
1. Center and position the SFR flange flat to the plate.
2. Tack weld on the front side of the SFR in four places or every 100 mm around the periphery.

3. Continue welding around the front side of the SFR.
4. Complete by seal welding around the rear side of the SFR.

Installation SFRB Sleeves



Installation SFRBO Sleeves



Disclaimer - pressure & watertight installation RGP

- All contact surfaces between the pipe and the RGP plug must be cleaned carefully prior to installation. Do not use any lubricant on these surfaces.
- All blocks and all the inside corners of the RGP must be lubricated carefully with **MCT Brattberg lubricant**.
- The penetration must not be subjected to pressure for at least **48 hours** after installation. This is to allow the pressure to equalise throughout the penetration.
- It will take more time for the pressure to equalise at temperatures below 20°C.
- Installation/testing of transits should only be performed by MCT Brattberg trained installers.
- Note: If the installation is subjected to pressure, all components must be replaced after removal and refitting.

After installation inspection

- Are the screws tightened evenly?
- Verify that the RGP is suitable for the application by checking its certification and type-approvals.

Disclaimer:

This instruction guide may be subject to revision and changes due to development and changes of the material and products. The data is derived from tests and experience. If not stated as minimum values, the data is average data and should be treated as such. Calculations should be verified by actual tests. The data is furnished without liability for the company and does not constitute a warranty or representation in respect of the material or its use.

The company reserves the right to release new instruction guides in replacement.

! MCT Brattberg shall not be held responsible for any errors or consequences resulting from the use of incorrect geometric dimensions or cut-outs. In case of any uncertainty, the customer is required to consult MCT Brattberg. All details must always be verified against the official information drawings provided by MCT Brattberg.

! Our products are type-approved, and when installed in accordance with our instructions, they are designed and tested to maintain fire- and pressure-tight integrity under catastrophic conditions. If verification after installation is required, the BTB arrangement may be used; otherwise, please contact MCT Brattberg for further guidance.

! MCT Brattberg offers training either on-site or at one of our facilities. We consider it important to provide training for installers to ensure safety. Depending on the arrangement, such training is usually provided free of charge.

! If the transit needs to be reinstalled, the insert blocks may be reused. However, this entirely depends on whether the blocks are in a condition that allows them to seal the transit correctly, considering their age or any environmental impact. The installer is responsible for making this assessment. If the installer feels that a qualified assessment cannot be made, we recommend replacing all insert blocks in the rows above the modification, and all insert blocks in the affected row must also be replaced.

! For assistance regarding product adaptation and use, please contact MCT Brattberg via switchboard +46 455 37 52 00.

! MCT Brattberg is not responsible for the environment in which the transit is installed.

! Never use unshielded cables with E-blocks. Unshielded cables must be EMC-protected using filters or scrubbers – do not mix shielded and unshielded cables. Pipes act as an outer shield – MCT Brattberg provides solutions for this when using fibre optics.

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! Some cables have a transparent plastic film layer between the shield and the outer shell. If the installer is not aware of this, it is very easy to forget the plastic film, which causes absolute 0 dB attenuation through the penetration, also affecting other cables in the same penetration.

! Installation limitations, such as maximum cable or pipe sizes and applicable configurations, are defined in the relevant Type Approval Certificate (TAC). These instructions and drawings shall be read in conjunction with the applicable certificate to ensure compliance with all applicable approval certificates, rules, and project-specific requirements.

Paint:

We do not have any official requirements. Any suitable paint may be applied, and the thickness can vary. If applied too thickly, it may make the system harder to fit, but it will not compromise safety. We recommend no more than 100 Microns inside the frame / sleeve. For EMC we have earlier recommended to leave 30mm in the frame, as below.



Note:

There are cases user is forced to mix modules with the condition of a pressure limitation of 3 Bar, a mix of different size modules beside a large module up to module size 90. This is for situations where it is not possible to use Stayplate due to packing space or design.

Contact MCT Brattberg for more information.