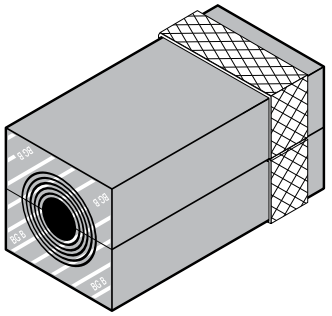
Safety information

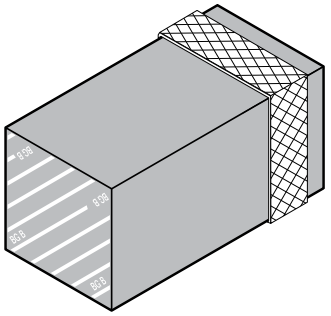
Roxtec recommends that all installations are performed without facility operation. Follow national regulations and installation codes. Any action affecting the routed service should be performed according to manufacturer recommendations.

Installation instructions Roxtec RM BG™ B systems

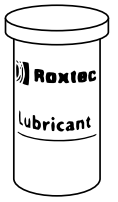
Components



Roxtec RM BG™ B module



Roxtec RM BG™ B solid module



Roxtec Lubricant

Roxtec RM BG™ B modules

measures in millimeters (mm)

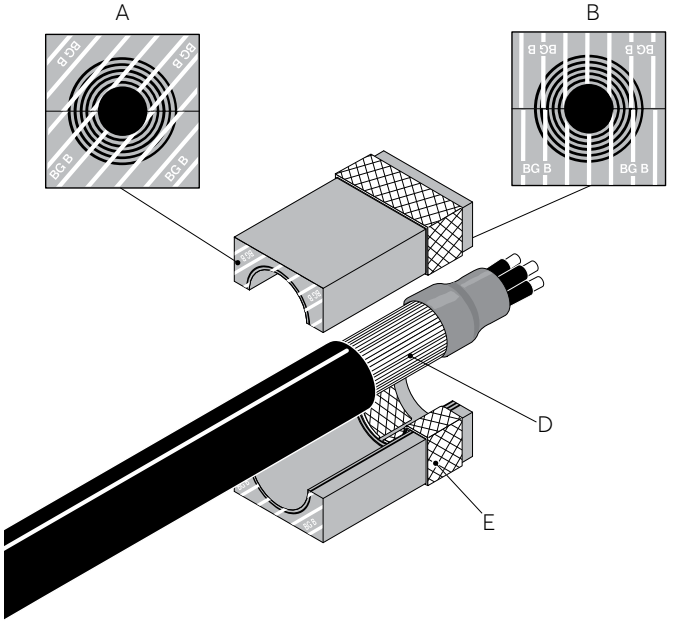
Module size	For cable outer diameter min–max
RM 20 BG B	4–14.5
RM 20w40 BG B	3.5–16.5
RM 30 BG B	10–25
RM 30H90 BG B	10–25
RM 40 10–32 BG B	9.5–32.5
RM 40 BG B	21.5–34.5
RM 40H80 BG B	21.5–34.5
RM 60 24–54 BG B	24–54
RM 60 BG B	28–54
RM 80 BG B	48–71
RM 90 BG B	48–71
RM 120 BG B	67.5–99

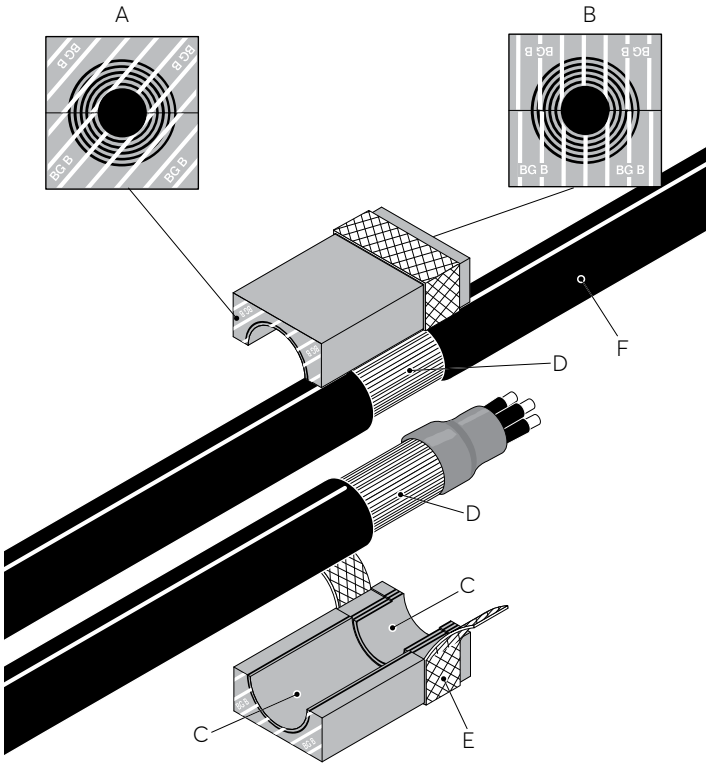
Roxtec RM BG™ B solid modules

Module size
RM 20/0 BG B
RM 30/0 BG B
RM 40/0 BG B
RM 60/0 BG B
RM 30H90/0 BG B
RM 40H80/0 BG B
RM 10w120/0 BG B

Note:
The range of the modules indicates the smallest diameter of the exposed cable screen to the largest diameter of the cable jacket. Modules with core can be used as spare parts.

Roxtec RM BG™ B module

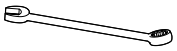




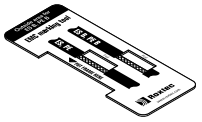
A: Environmental side
B: Termination/interior side
C: Removable layers
D: Cable armor
E: Module braid
F: Cable jacket

Recommended tools

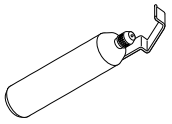
(not included)



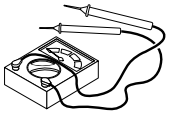
13 mm spanner



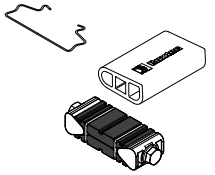
EMC marking tool



Cable stripper tool.
Recommended by the cable manufacturer

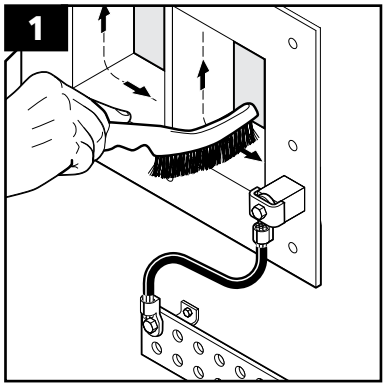


Continuity tester

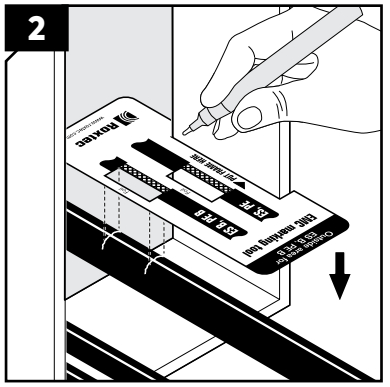


Roxtec
installation tools

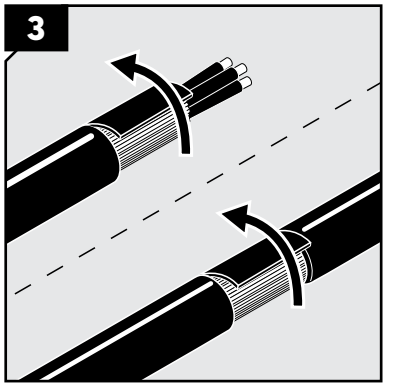
Installation



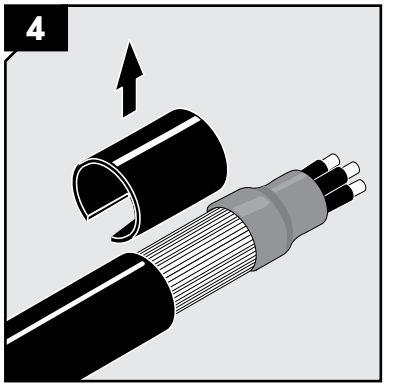
All BG frames must be clean and have electrical contact with protective earth. National regulations apply.



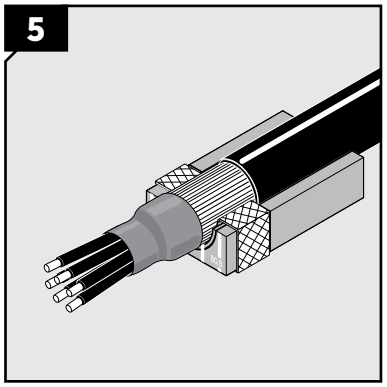
Hold the cable in its final position. Use the guide to mark where the cable jacket is to be removed.



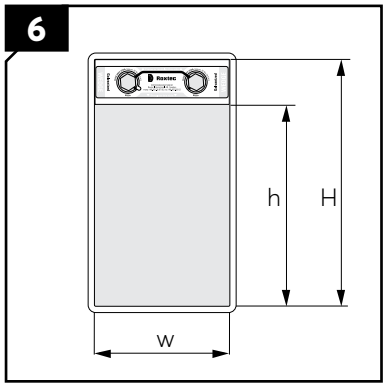
Remove the outer jacket and any plastic foil. The cable armor shall be clean and conductive.



Secure the end of the cable armor. Suggestions for cable preparations are available on www.roxtec.com.



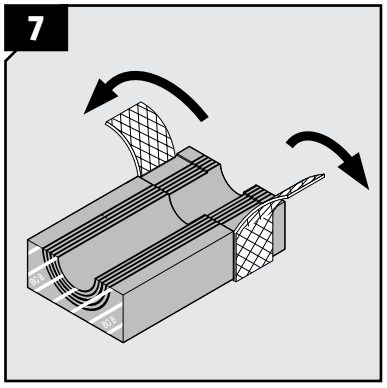
Correct placement of a cable in a RM BG B module. The cable armor shall be visible outside the module.



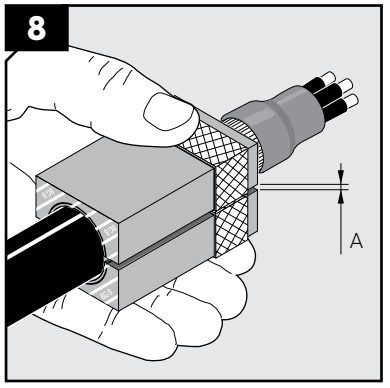
Measure your frame height (H) and check the corresponding packing height (h) in the table. Consider your packing height when inserting the modules.

Packing space

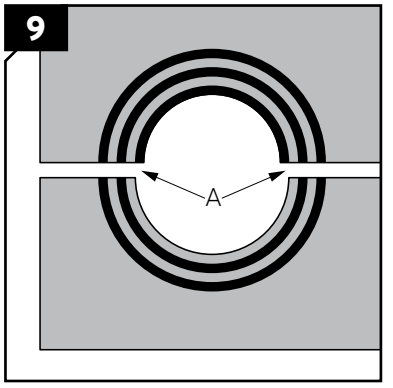
Frame size	Frame height (H)	Frame width (w)	Packing height (h)
1	101	60	60
2	101	120	60
3	160	60	120
4	160	120	120
5	218	60	180
6	218	120	180
7	278	60	240
8	278	120	240



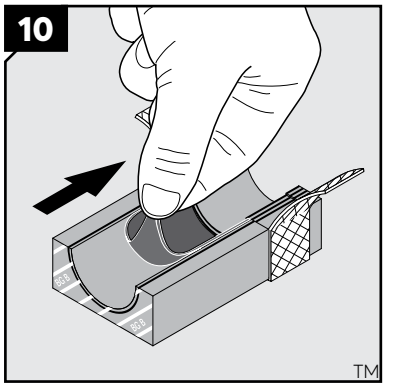
Remove the core and fold out the braid.



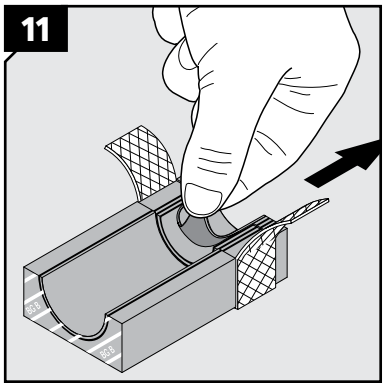
Achieve a gap of 0.1-1.0 mm (A) between the module halves by peeling off layers. The cable armor shall be in contact with the braid.



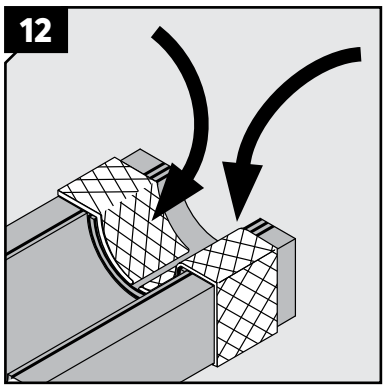
The number of layers may not differ (A) by more than one between the corresponding module halves.



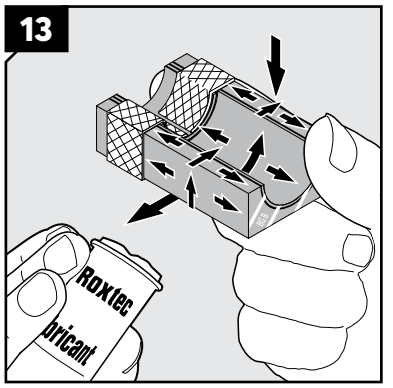
Adapt the layers that are in contact with the cable jacket.



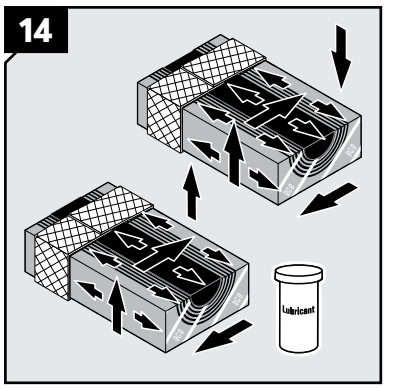
Adapt the layers that are in contact with the cable armor.



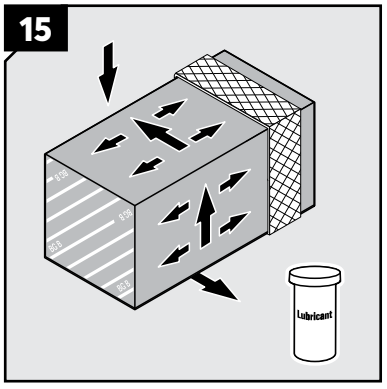
Fold the braid tightly inside the module half.



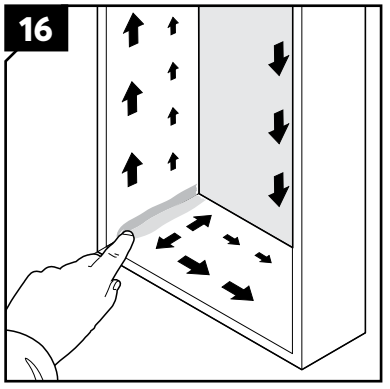
Lubricate the sealing surfaces of all modules. Avoid excess lubricant on the braid.



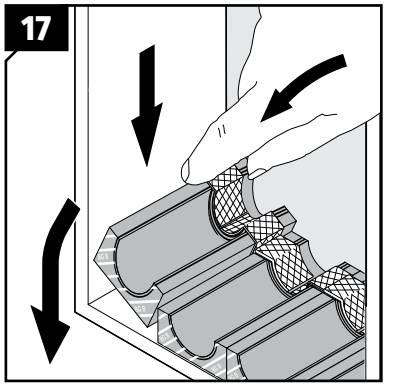
Lubricate the sealing surfaces of the spare modules. Do not remove the core.



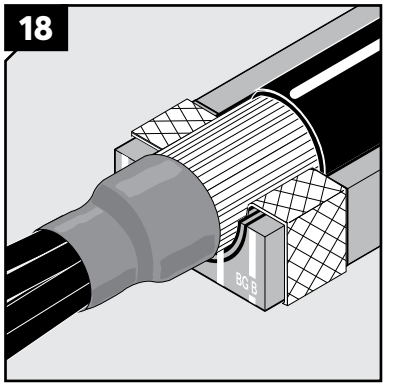
Lubricate the sealing surfaces of the solid modules.



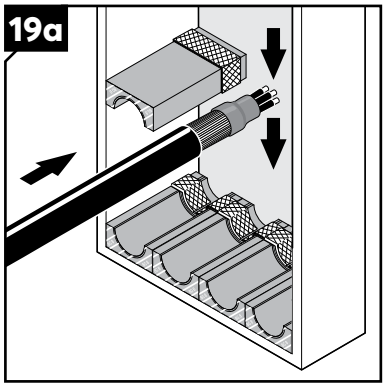
Lubricate the inside surfaces of the frame and especially its corners. Lubricate the area that will be in contact with the braid sparsely.



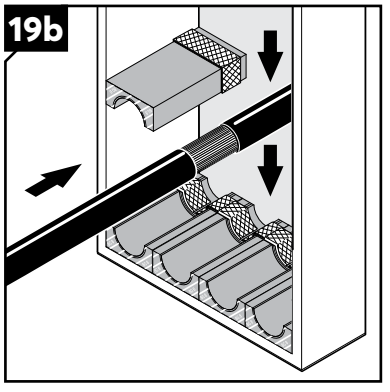
Place modules according to your packing plan.



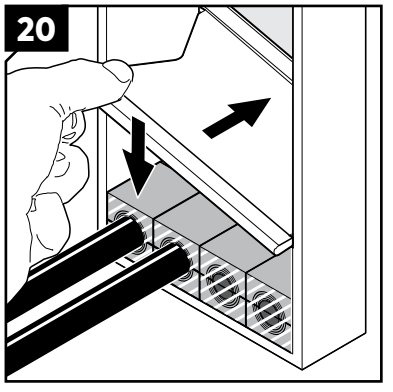
When placing cables in modules, the cable armor shall be visible outside the module at the termination side.



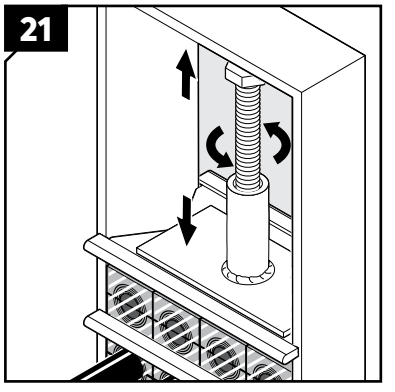
Place cables and the corresponding module halves on top.



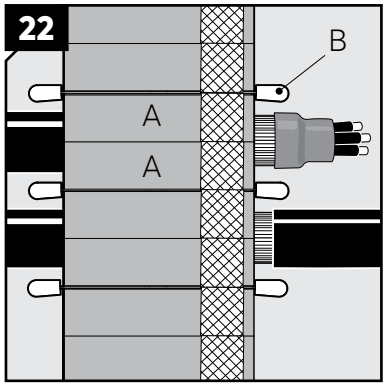
For pass-through cables, cable armor shall be visible on the termination side.



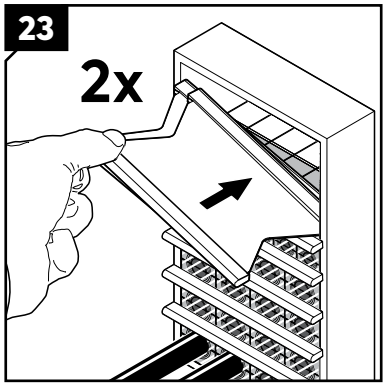
Insert a stayplate on top of every finished row of modules. The stayplate shall be clean and conductive.



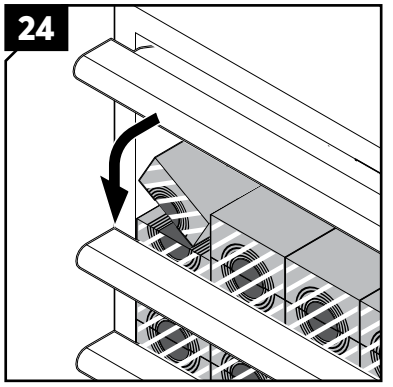
To simplify installation, the use of a pre-compression tool on every second module row is recommended.



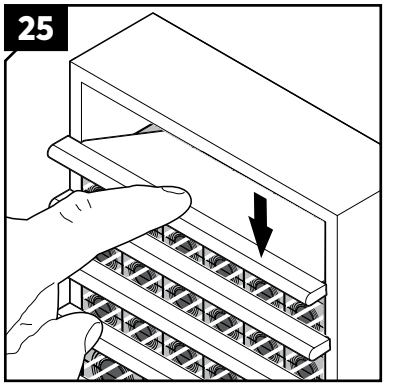
Ensure that the modules (A) are secured within the stayplate (B) edges.



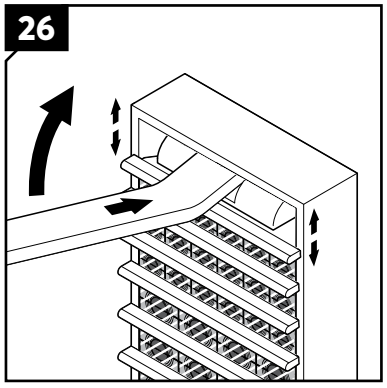
Before inserting the final row of modules, insert two stayplates.



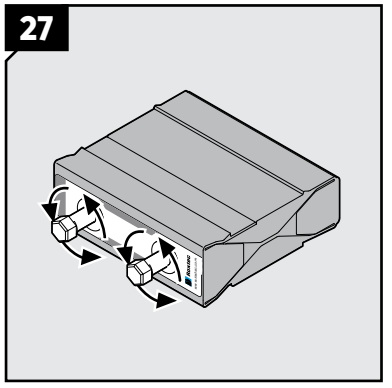
Separate the two stayplates and insert the final row of modules between the stayplates.



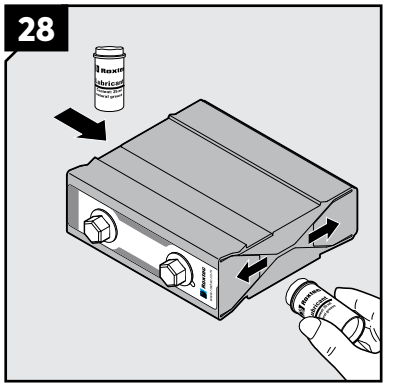
Place the upper stayplate on top of the modules.



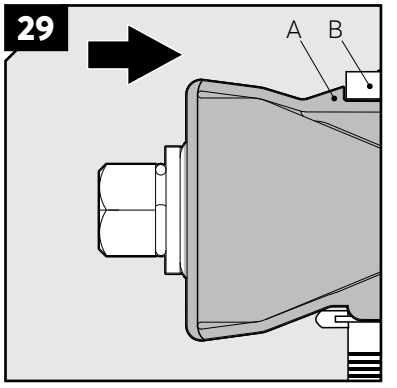
Use a Roxtec pre-compression tool to make space for the compression unit if required.



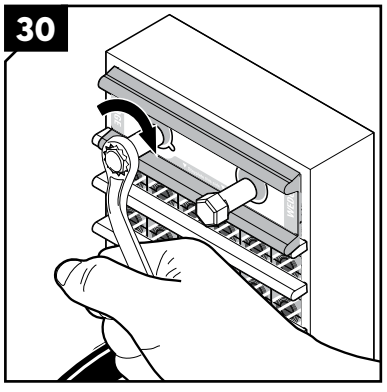
Turn the screws of the wedge counter clock-wise to full stop before inserting it.



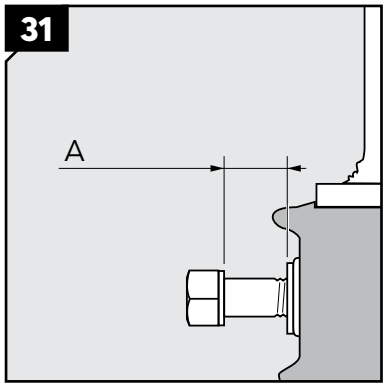
Lubricate both short sides of the wedge.



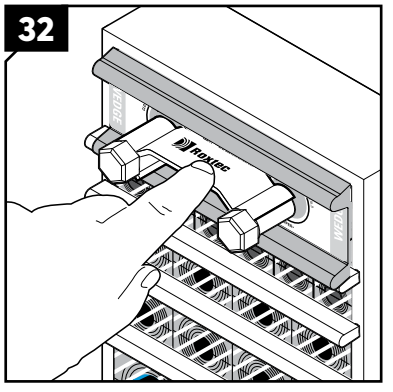
Insert the wedge so the stop flange (A) is in contact with the frame (B).



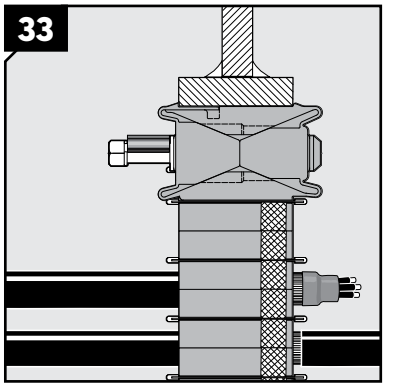
Tighten the screws alternately until full mechanical stop, approx. 20 full revolutions per screw. Do not exceed 20 Nm.



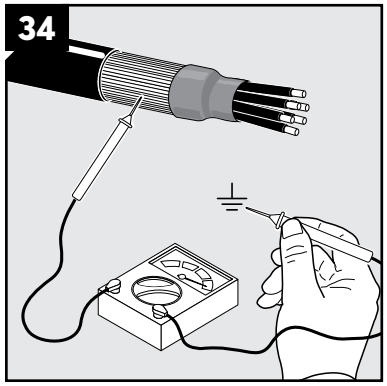
25 mm (A) of the screws shall be exposed.



Attach the wedge clip to the wedge screws to complete the installation.

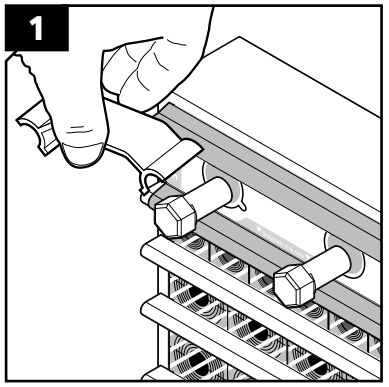


Completed installation.

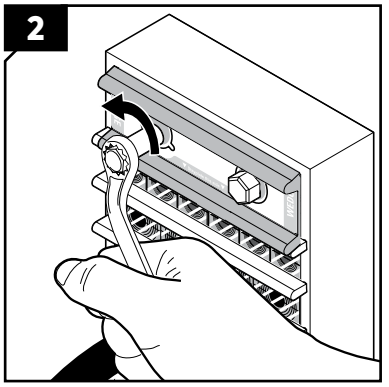


Optional: Verify earth continuity from each cable armor to earth. Use a suitable instrument.

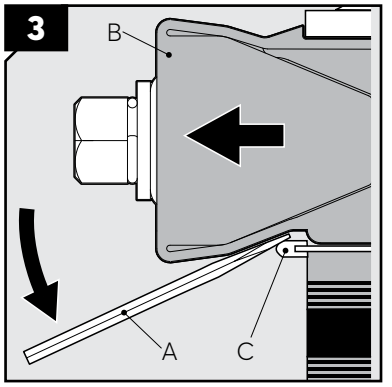
Disassembly and reinstallation



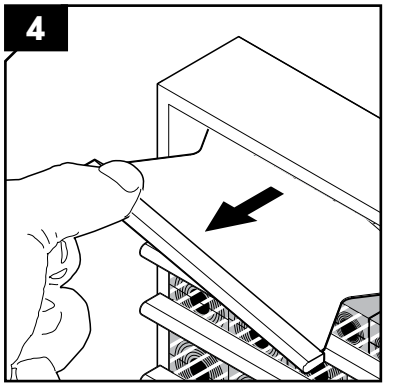
Remove the wedge clip from the wedge.



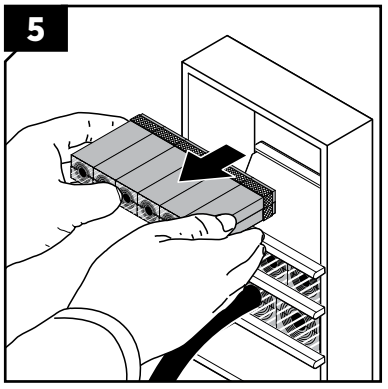
Loosen the screws alternately to full stop. Do not exceed 20 Nm.



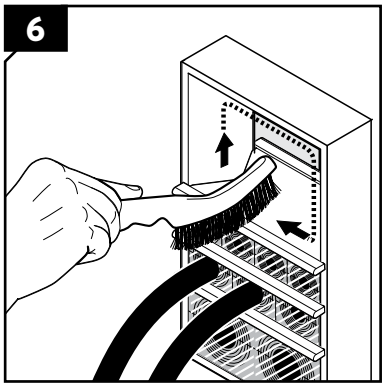
Insert a flat tool (A) between the wedge (B) and the stayplate (C) to simplify removal of the wedge. Roxtec tools are available.



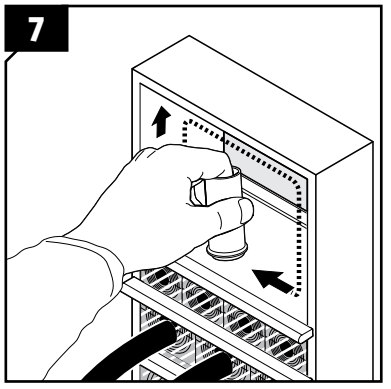
Remove modules and stayplates.



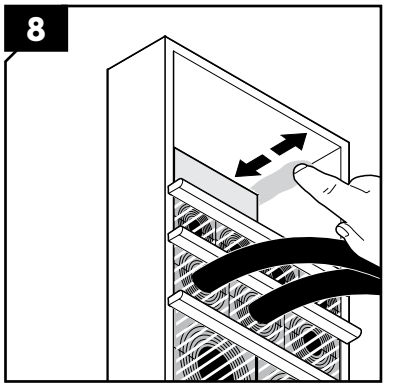
Note: Keep the rows sorted until it is time for reinstallation. If a module is damaged or replaced, all modules in that row must be replaced.



The inside surfaces of the exposed packing space shall be clean and conductive.



Lubricate the inside surfaces. Lubricate the area that will be in contact with the braid sparsely.



Lubricate all corners carefully. Continue the reinstallation.

Roxtec RM BG™ B modules

Braid conductor properties

Module size	Total braid cross–section mm²	Approximately equivalent AWG
RM 20 BG B	8	8
RM 20w40 BG B	4*	11
RM 30 BG B	13	6
RM 30H90 BG B	21	4
RM 40 10–32 BG B	21	4
RM 40 BG B	21	4
RM 40H80 BG B	42	1
RM 60 24–54 BG B	42	1
RM 60 BG B	42	1
RM 80 BG B	42	1
RM 90 BG B	42	1
RM 120 BG B	42	1

* Per cable

Note

- Integrated environmental sealing system for bonding and grounding applications. For use with armored cables.
- For optimum reliability, wait 24 hours or longer after installation before exposing the cables or pipes to strain or pressure.
- Corrosion preventing primer must be removed to achieve electrical conductivity, where applicable.
- Cables shall go straight through the frame.
- 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.

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