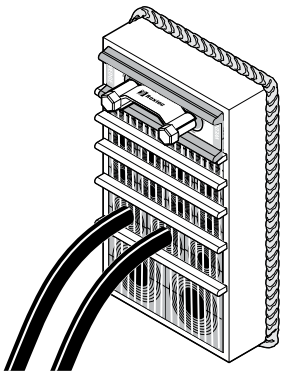
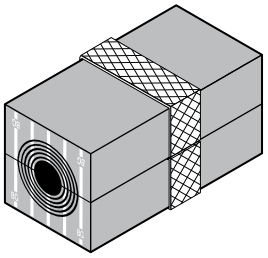
Installation instructions
Roxtec RM BG™ systems



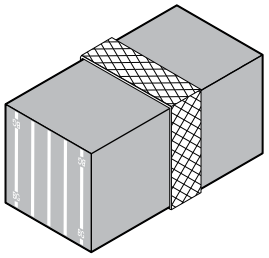
Safety information

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.

Components



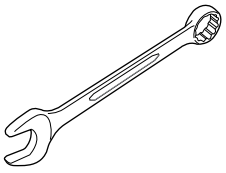
Roxtec RM BG module



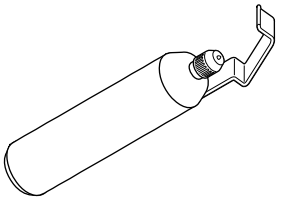
Roxtec RM BG solid module

Roxtec Lubricant

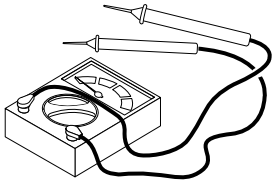
Tools



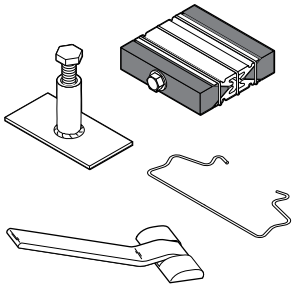
13 mm spanner
(not included)



Cable stripper tool.
Recommended by the cable manufacturer
(not included)



Continuity tester
(not included)



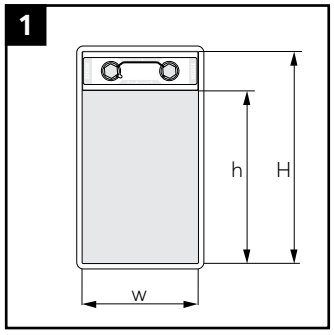
Roxtec tools
(not included)

Technical data

Name	External dimensions WxHxD (mm)	For cable/pipe Ø (mm)	Braid cross-section/ cable (mm^2)	Approximately equivalent AWG
RM 20 BG	20 x 20 x 60	4 – 14.5	8	8
RM 20w40 BG	40 x 20 x 60	3.5 – 16.5	4	11
RM 30 BG	30 x 30 x 60	10 – 25	13	6
RM 30H90 BG	30 x 90 x 60	10 – 25	21	4
RM 40 BG	40 x 40 x 60	21.5 – 34.5	21	4
RM 40 10–32 BG	40 x 40 x 60	9.5 – 32.5	21	4
RM 40H80 BG	40 x 80 x 60	21.5 – 34.5	42	1
RM 60 BG	60 x 60 x 60	28 – 54	42	1
RM 60 24–54 BG	60 x 60 x 60	24 – 54	42	1
RM 80 BG	80 x 80 x 60	48 – 71	42	1
RM 90 BG	90 x 90 x 60	48 – 71	42	1
RM 120 BG	120 x 120 x 60	67.5 – 99	42	1
RM 10w120/0 BG	120 x 10 x 60	0	–	–
RM 20/0 BG	20 x 20 x 60	0	–	–
RM 30/0 BG	30 x 30 x 60	0	–	–
RM 30H90/0 BG	30 x 90 x 60	0	–	–
RM 40/0 BG	40 x 40 x 60	0	–	–
RM 40H80/0 BG	40 x 80 x 60	0	–	–
RM 60/0 BG	60 x 60 x 60	0	–	–

The diameter range of the modules indicates the smallest diameter of the exposed cable armor to the largest diameter of the cable jacket. Modules with core are spare capacity.

Packing space

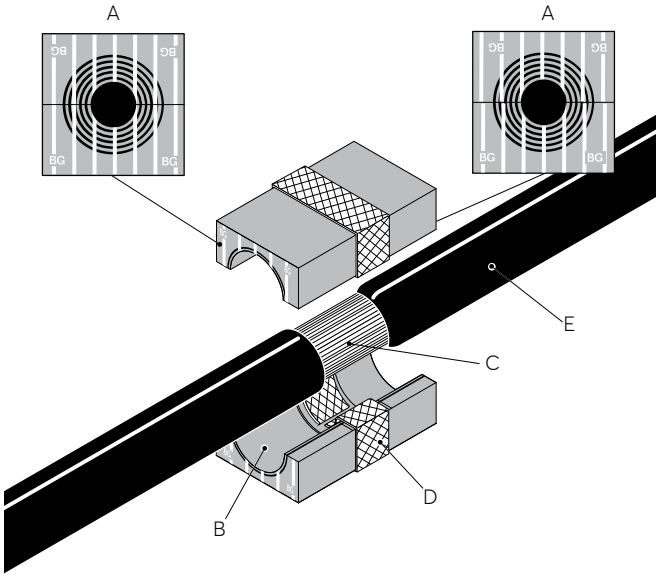


S	H	w	h
1	101	60	60
2	101	120	60
3	160	60	120
4	160	120	120
5	218	60	180
6	218	120	180
7	278	60	240
8	278	120	240

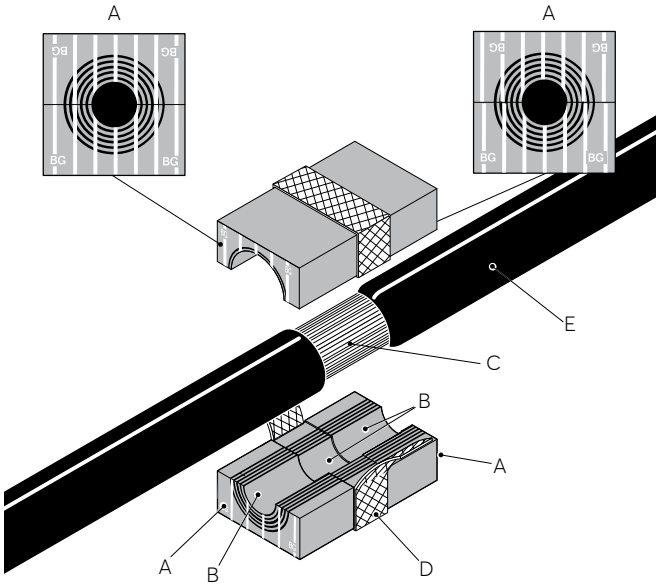
Measure your frame height (H) and check the corresponding packing height (h) in the table. Consider your packing height when inserting the modules.

Cable placement in module

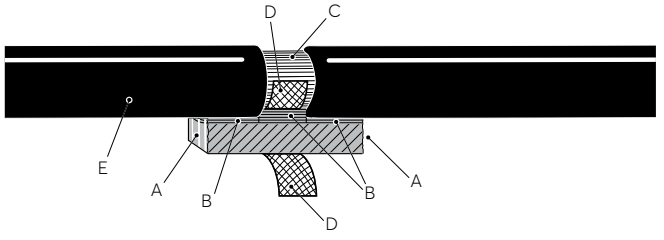
A: Environmental side
B: Removable layers
C: Cable armor
D: Module braid
E: Cable jacket



The braid is folded in.

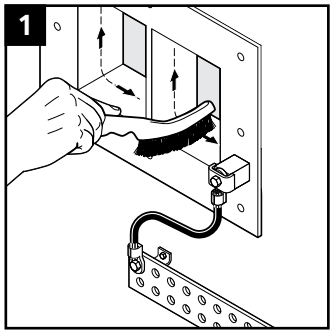


The braid is folded out.

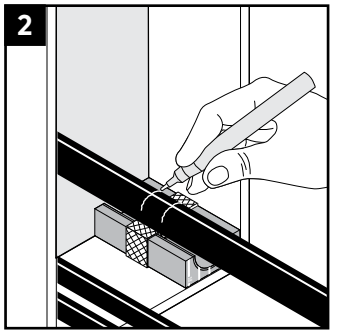


Cable placement in module half.

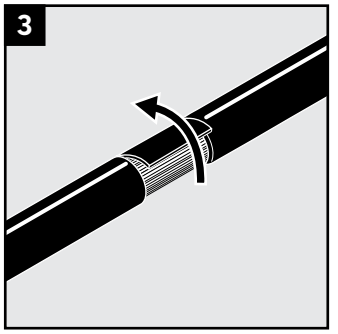
Installation



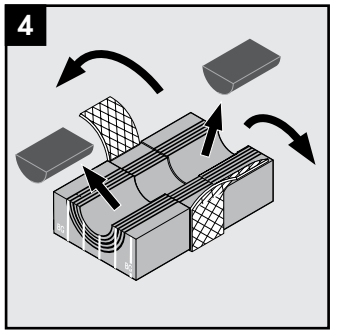
Clean the frame. Ensure electrical contact with protective earth. National regulations apply.



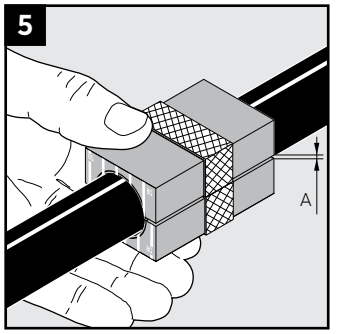
Hold the cable in its final position. Use a module half to mark where the cable jacket is to be removed.



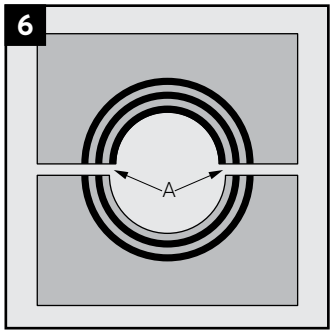
Remove the outer jacket and any plastic foil. The cable armor shall be clean and conductive.



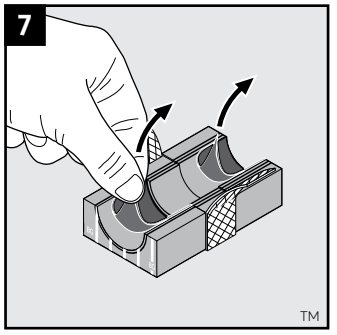
Remove the cores and fold out the braid on all modules except spares.



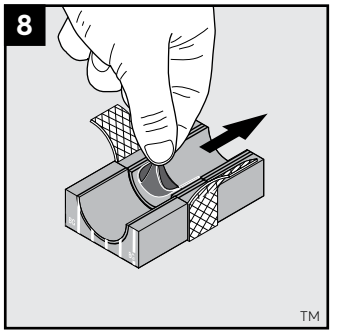
Achieve a gap of 0.1-1.0 mm (A) between the module halves by peeling off layers.



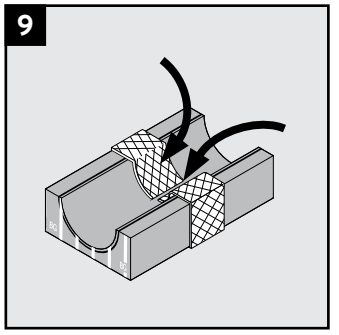
The number of layers may not differ (A) by more than one between the corresponding module halves.



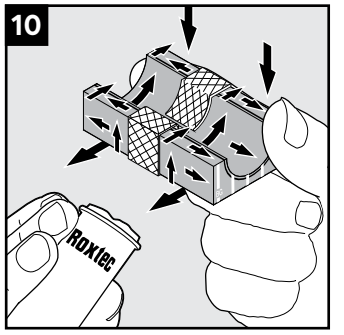
Adapt the layers that are in contact with the cable jacket.



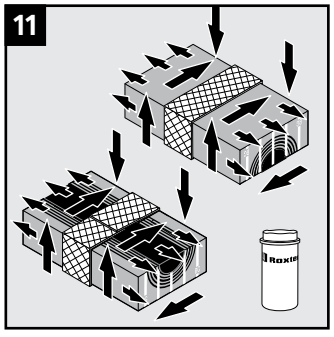
Adapt the layers that are in contact with the cable armor.



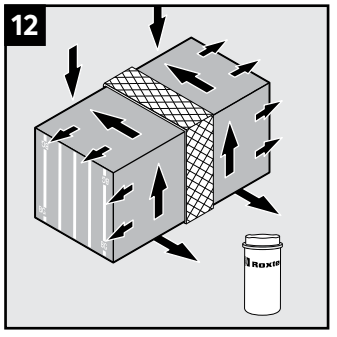
Fold the braid tightly inside the module half.



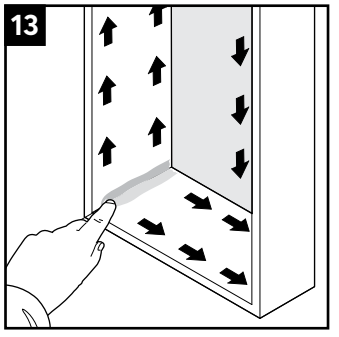
Lubricate the sealing surfaces of all modules. Avoid excess lubricant on the braid.



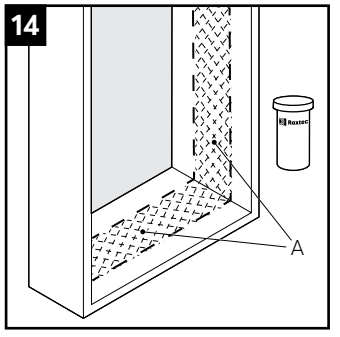
Lubricate the sealing surfaces of the spare module halves. Do not remove the core.



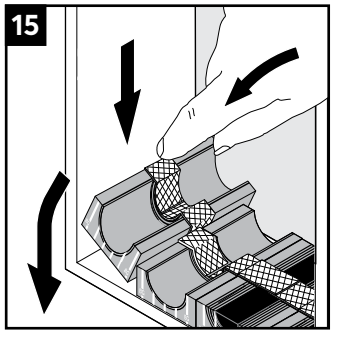
Lubricate the sealing surfaces of the solid modules.



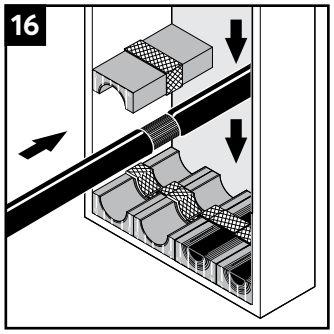
Lubricate the inside surfaces of the frame and especially its corners.



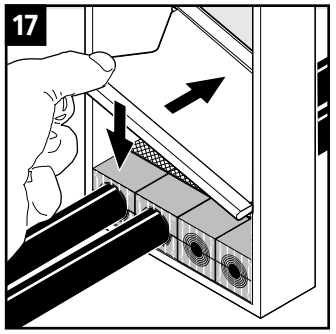
Lubricate the area (A) that will be in contact with the braid sparsely.



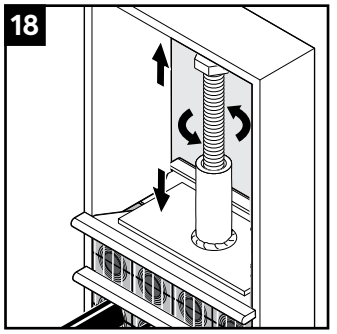
Place modules according to your packing plan.



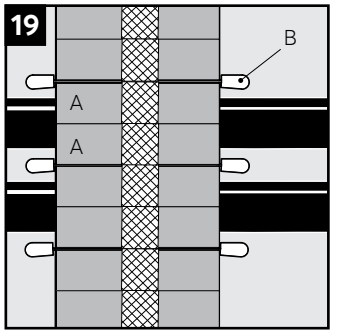
Place cables and the corresponding module halves on top.



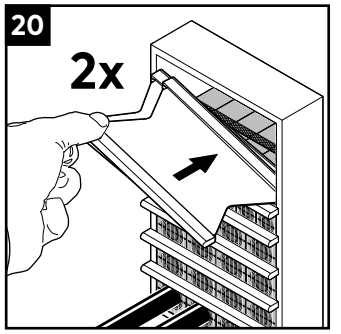
Insert a stayplate on top of every finished row of modules.



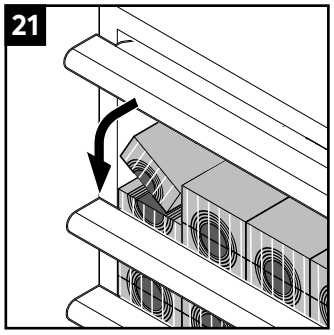
To simplify installation, the use of a pre-compression tool is recommended.



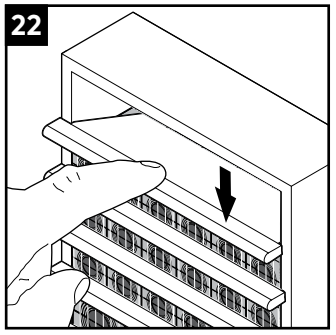
Ensure that the modules (A) are secured within the stayplate (B) edges.



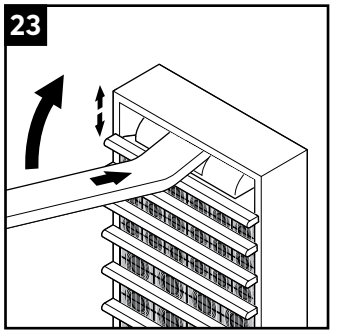
Before inserting the final row of modules, insert two stayplates.



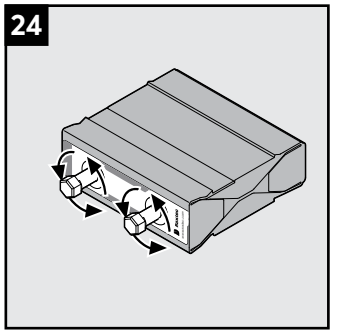
Separate the two stayplates and insert the final row of modules between the stayplates.



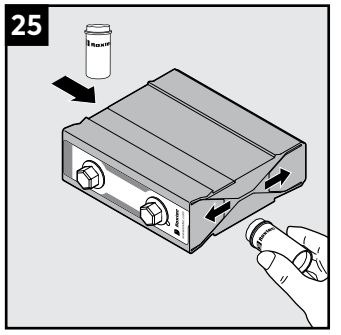
Place the upper stayplate on top of the modules.



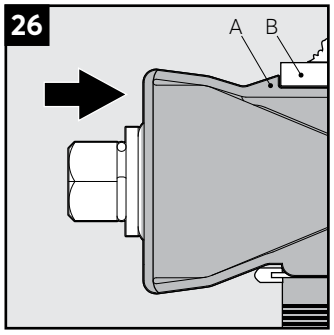
The use of a pre-compression tool is recommended.



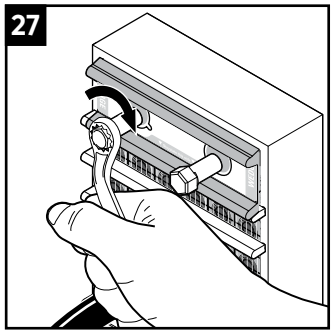
Turn the screws of the wedge counter clock-wise to full stop before inserting it.



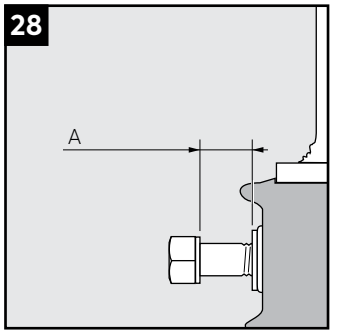
Lubricate the marked areas of the wedge.



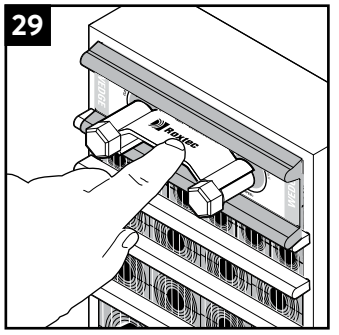
Insert the wedge so the stop flange (A) is in contact with the frame (B).



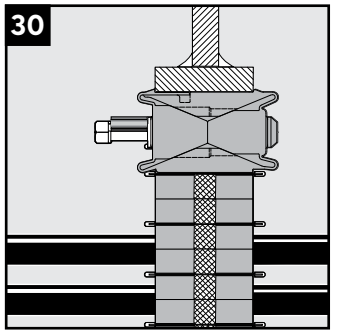
Tighten the screws alternately until full mechanical stop, max 20 Nm.



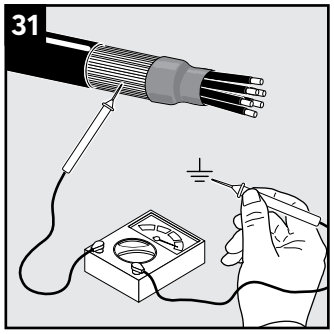
25 mm (A) of the screws shall be exposed.



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



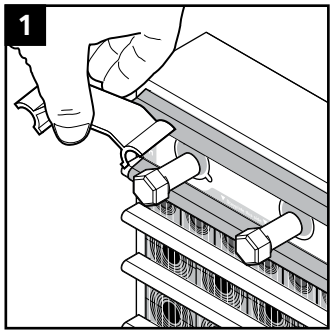
Completed installation.



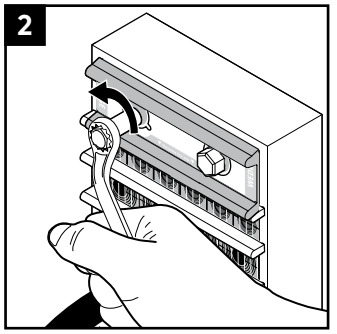
Electrical continuity testing is recommended.

Check additional documentation, if applicable.

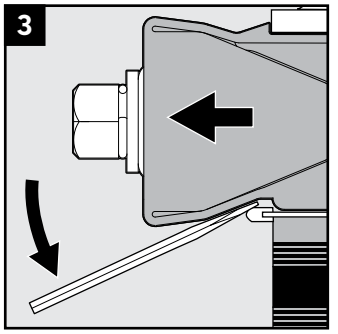
Disassembly



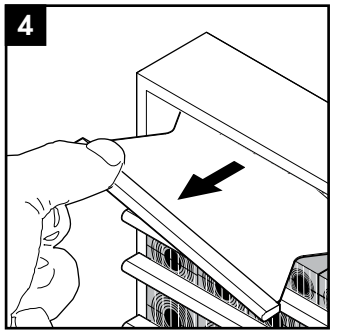
Remove the wedge clip from the wedge.



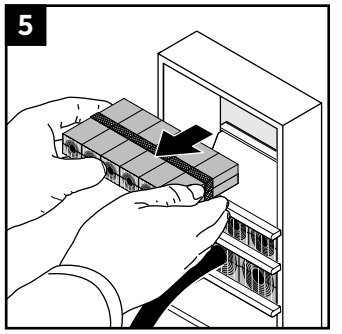
Loosen the screws alternately to full stop. Do not exceed 20 Nm.



Lift the wedge over the stop flange. Roxtec tools are available.

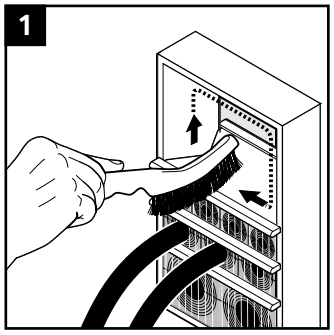


Remove modules and stayplates.

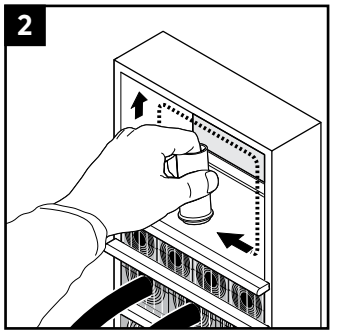


Keep the rows sorted. If a module is damaged or replaced, all modules in that row must be replaced.

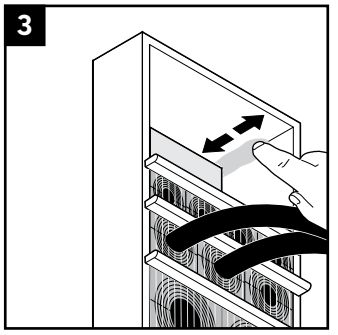
Reinstallation



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.

Note

- Integrated environmental sealing system for bonding and grounding applications. For use with armored cables.
- To be used with Roxtec RM BG modules.
- An incorrectly adapted module shall be replaced (layers shall not be reused).
- 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.
- Cable/pipe with a considerable weight needs to be supported.
- Partially installed openings shall be compressed if left unattended.
- 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.

Art No: ASS2011002401 Doc No: ASS2011002401 rev. D

Disclaimer

Roxtec International AB
Box 540, 371 23 Karlskrona, SWEDEN
+46 455 36 67 00, info@roxtec.com
www.roxtec.com