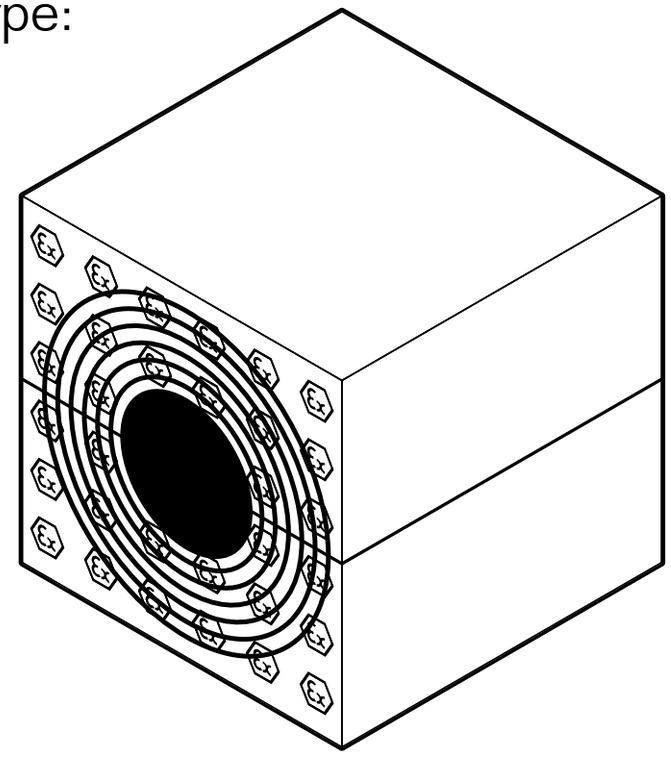
Roxtec

Installation instructions Roxtec RM Ex and Roxtec RM Ex EMC modules

Valid for frames of type:

B...B Ex
B...C Ex
G Ex
G...W Ex
G BG Ex
S Ex
S...S0 Ex
SF Ex
SF...W Ex
SF BG Ex
S...WM Ex



Version D

Contents

General information

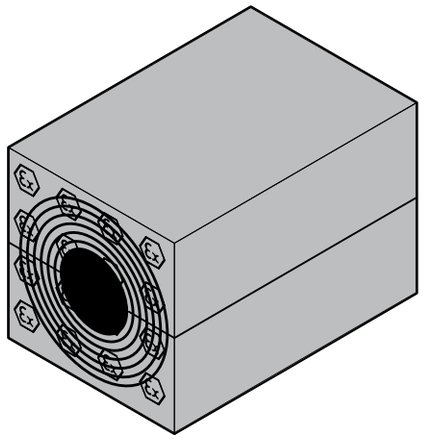
Installation and maintenance:
For European member countries of GENELEC shall standard EN 60079-14 and EN 60079-17 be considered. For countries members of IECEx shall standard IEC 60079-14 and IEC 60079-17 be considered. For other countries shall applicable national regulations be considered.
The products fulfill the following standards:
EN 60079-0:2012, EN 60079-31:2009, IEC 60079-0:2011, IEC 60079-31:2008

The cable transit devices are intended for use with permanently installed circular cross-section cables, with or without armoring or braided screen. Cable transit devices of types G, S, S...WM, S...SO, SF, SF...W and G...W may also be used with permanently installed cables of types TECK90 according to standard C22.2 No. 131-07, ACWU according to standard UL4, MC according to standard UL1569 and ACIC cables according to CSA C22.1-06 CEC UL444, UL1685, UL13, UL2250, IEC61158-2.

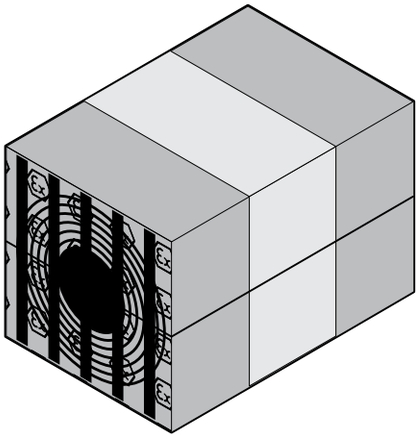
For installation of Ex frames, see installation instructions art. no. 120164.

Marking of modules approved for Ex and/or EMC use.

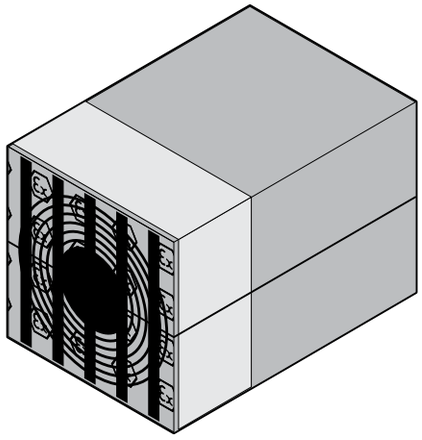
These installation instructions are valid for the following types of modules



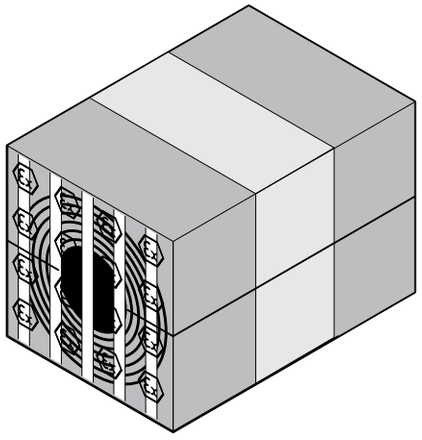
RM Ex



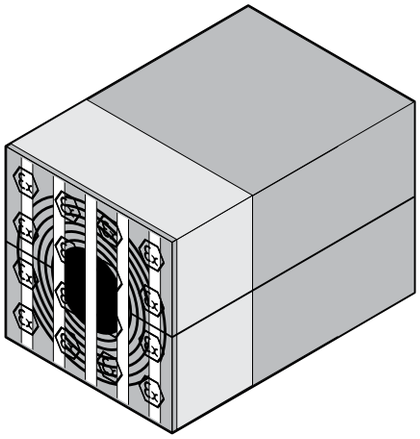
RM PE Ex



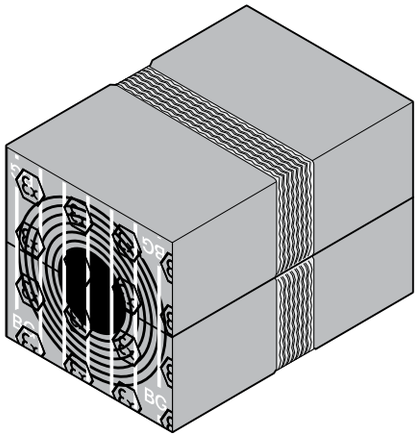
RM PE B Ex



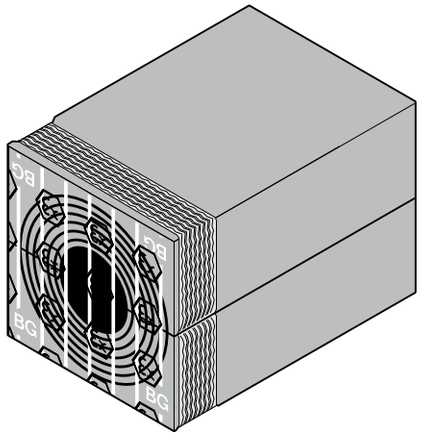
RM ES Ex



RM ES B Ex



RM BG Ex



RM BG B Ex

Ex module selection guide

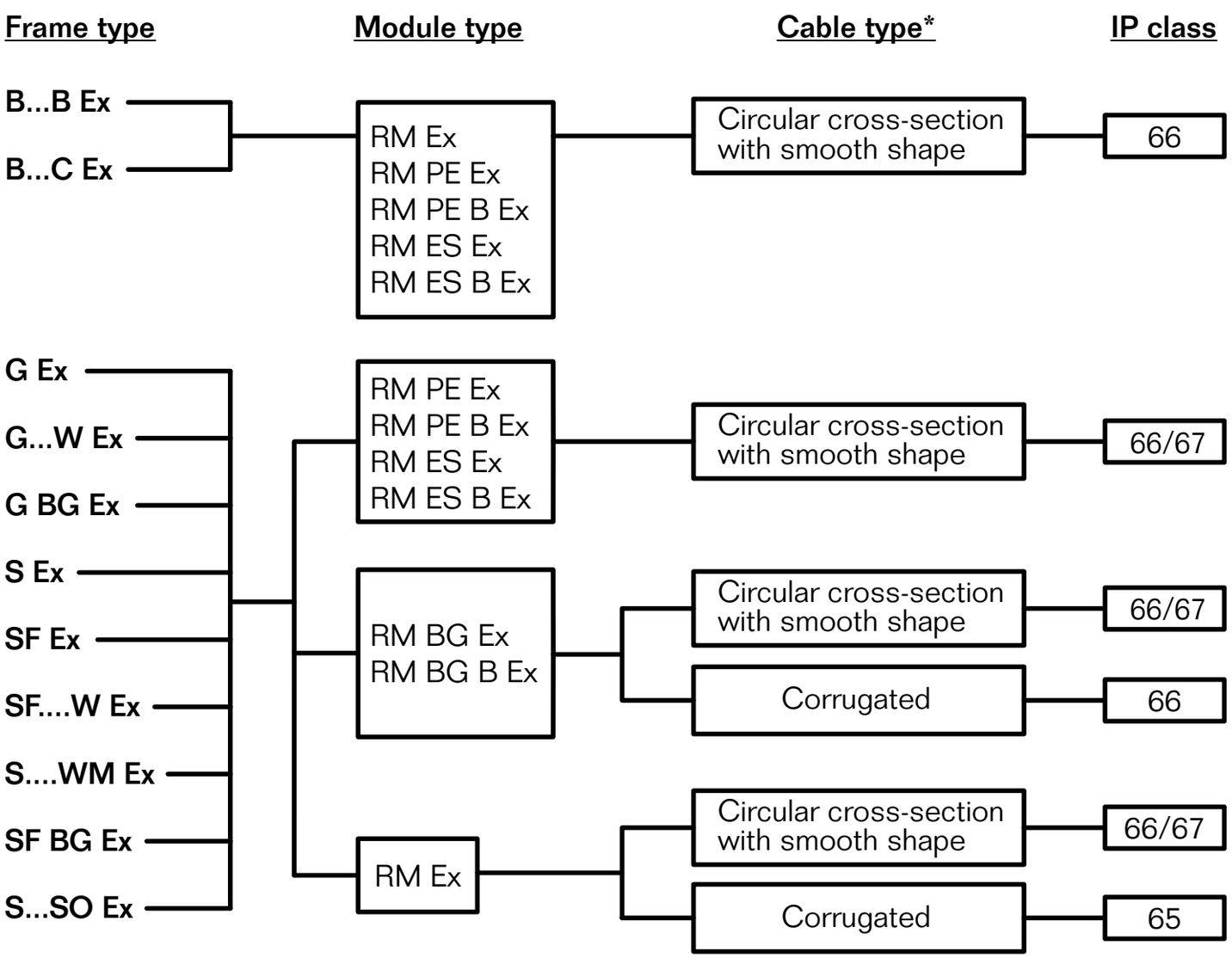
Frame type	Module type						
	RM Ex	RM PE Ex	RM PE B Ex	RM ES Ex	RM ES B Ex	RM BG Ex	RM BG B Ex
B...B Ex [1,2]	✓	✓	✓[5]	✓[4]	✓[4]		
B...C Ex [1]	✓	✓	✓	✓[5]	✓[5]		
G Ex [1,2]	✓	✓	✓	✓[4]	✓[4]	✓	✓
G...W Ex [1,3]	✓	✓	✓	✓	✓	✓	✓
G BG Ex [2]	✓	✓	✓	✓[4]	✓[4]	✓	✓
S Ex [1,3]	✓	✓	✓	✓	✓	✓	✓
SF Ex [1,2]	✓	✓	✓	✓[4]	✓[4]	✓	✓
SF...W Ex [1,3]	✓	✓	✓	✓	✓	✓	✓
S...WM Ex [1,3]	✓	✓	✓	✓	✓	✓	✓
SF BG Ex [2]	✓	✓	✓	✓[4]	✓[4]	✓	✓

1. Supplied without ground lug
2. Conductive gasket not included
3. Welded to grounded structure
4. Reduced shielding performance
5. Not recommended.

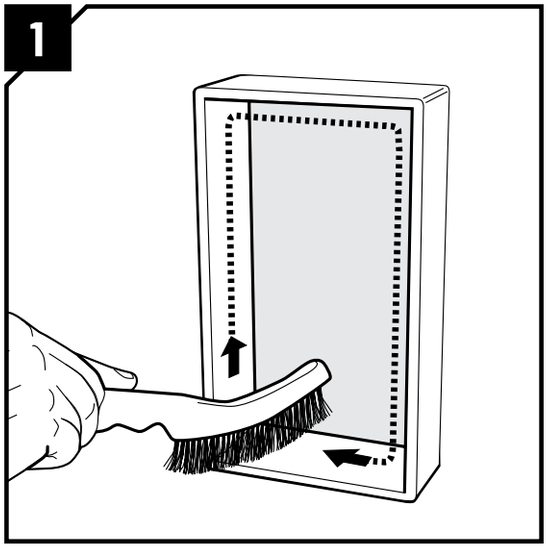
= EMC modules
All installations with EMC modules require that frames are connected to earth/ground.

Ingress protection

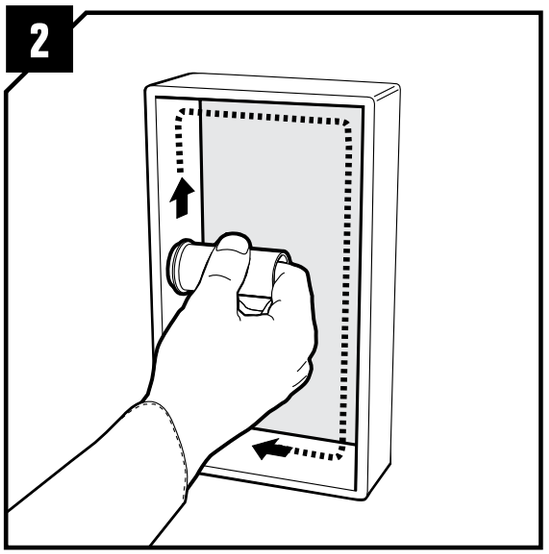
The ingress protection of the Cable Transit Device varies depending on frame type, module type and type of cable according to the flow chart.



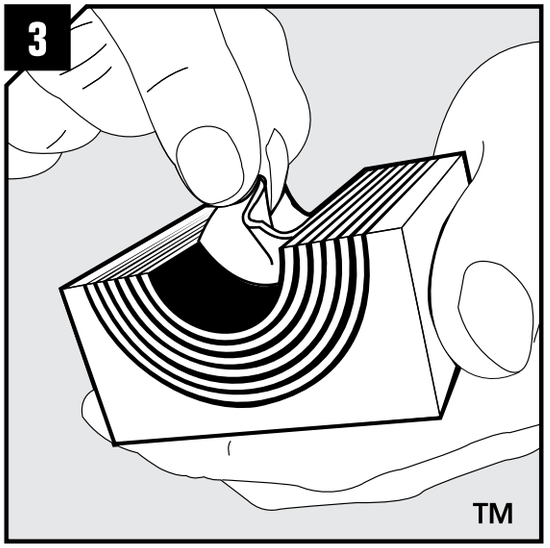
* See general information on page 2.



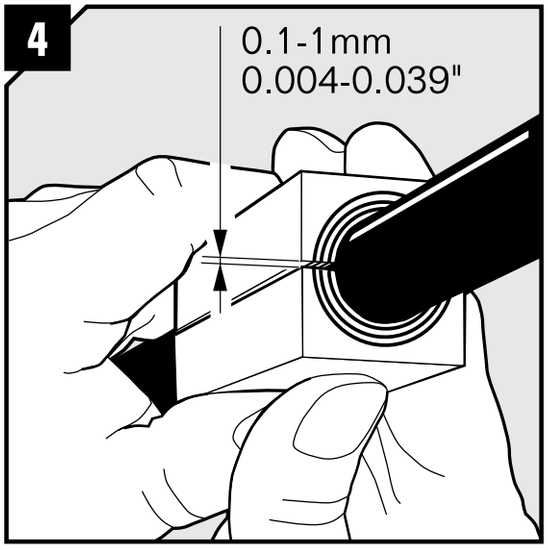
Clean the frame.



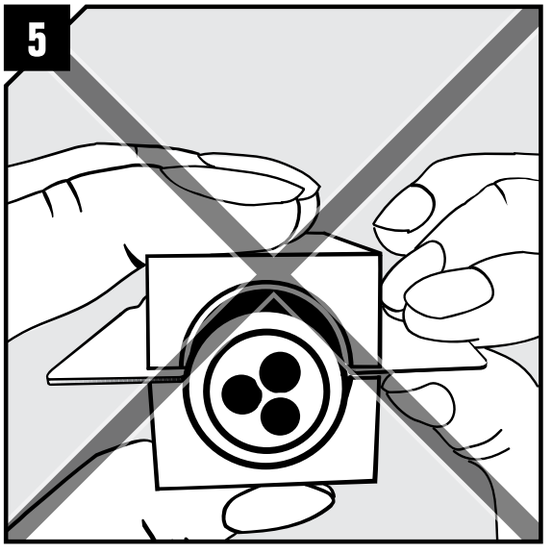
Lubricate the inside faces of the frame with Roxtec lubricant. Make sure to lubricate into the corners.



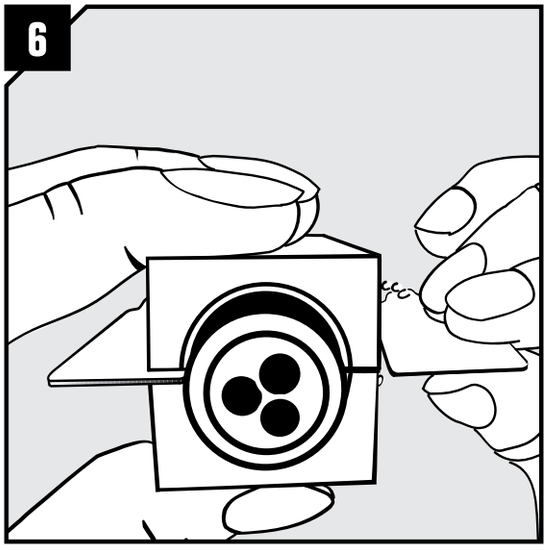
Adapt modules which are to hold cables or pipes by peeling off layers. The halves may not differ by more than one layer.



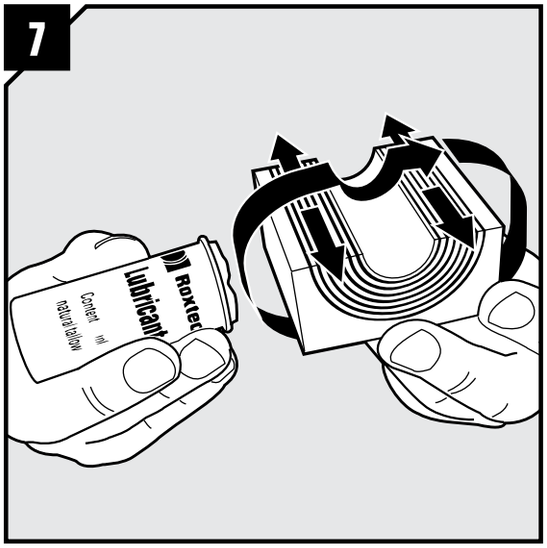
Try to achieve a 0.1–1 mm gap between the two halves when held against the cable/pipe. Use the Ex Gap Gauge.



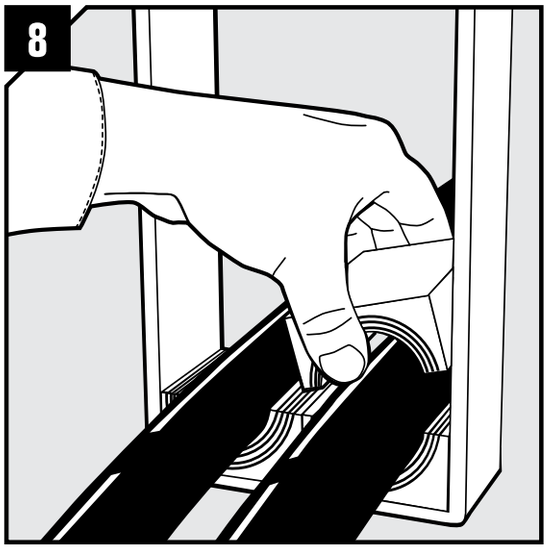
If the gap is too big, the gauge will slip in easily.



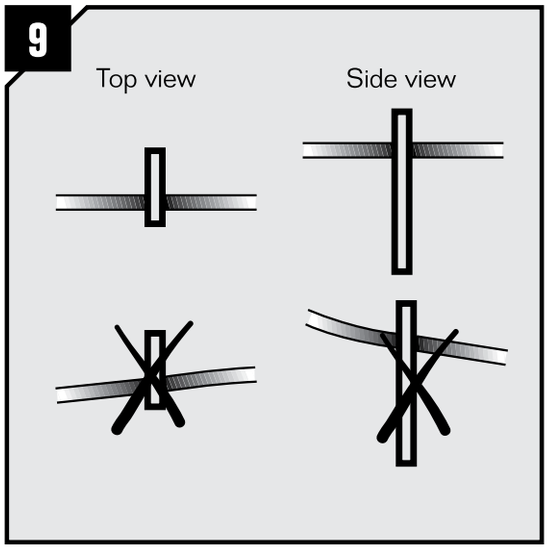
If the gap is correct, there will be no room for blade two.



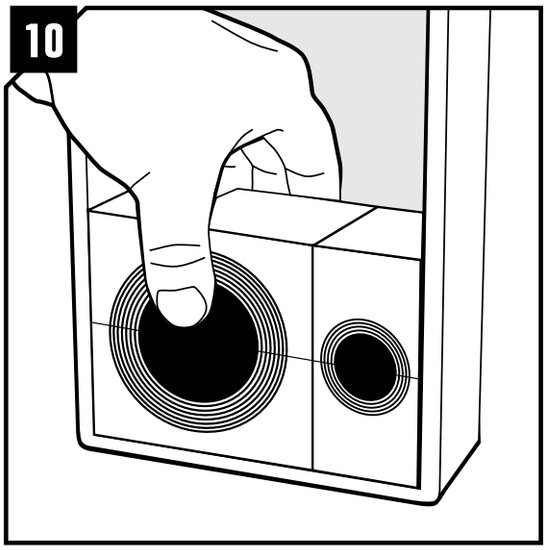
Lubricate the modules thoroughly with Roxtec Lubricant, both the inside and outside faces.

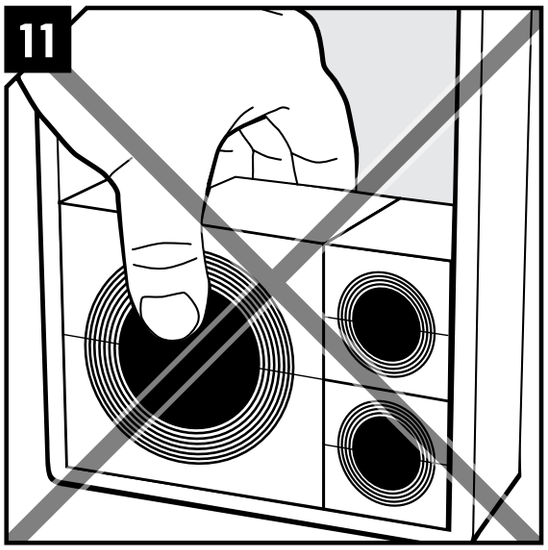


Insert the modules according to your transit plan. Start with the largest modules.

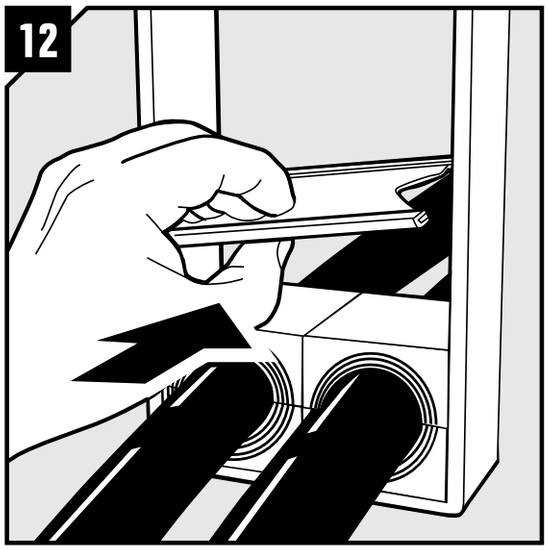


Note that cables shall go straight through the frame.

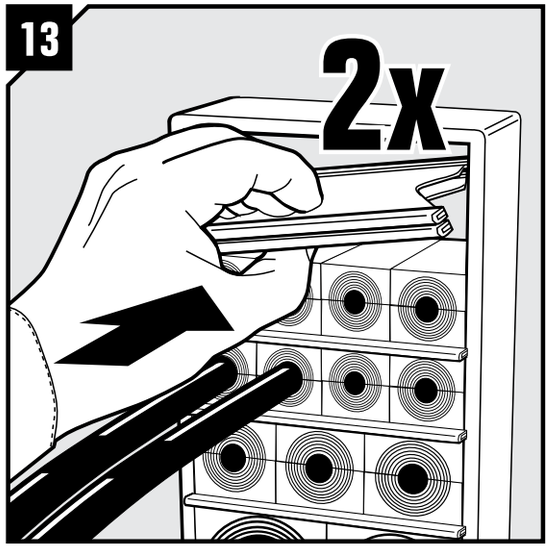




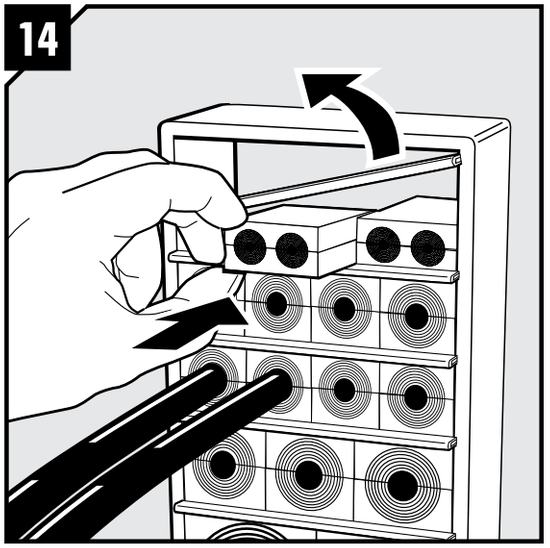
When inserting larger modules, pay attention so that every row of modules is separated by a stayplate. It is not permitted to stack smaller modules on top of each other.



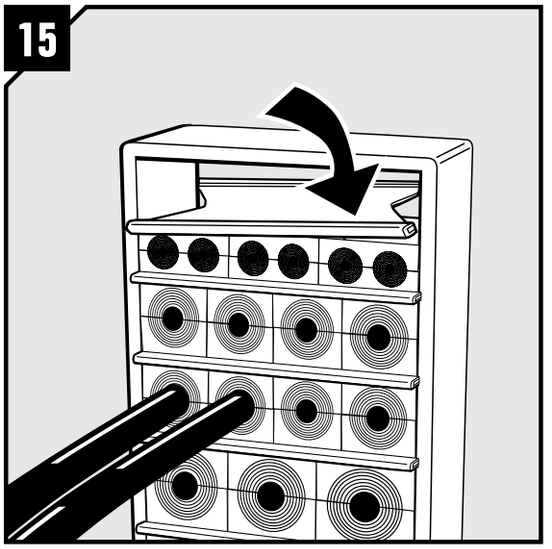
Insert a stayplate on top of every finished row of modules.



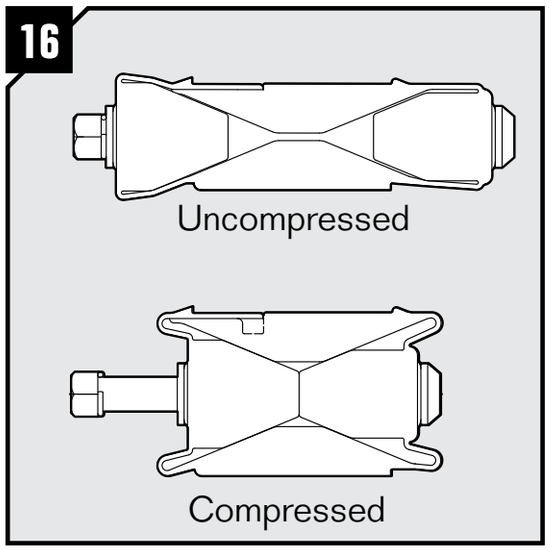
Before inserting the final row of modules, insert two stayplates.



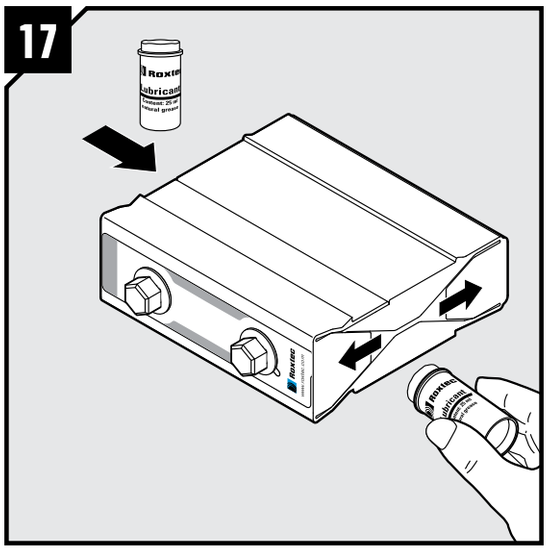
Separate the two stayplates and insert the final row of modules between the stayplates.



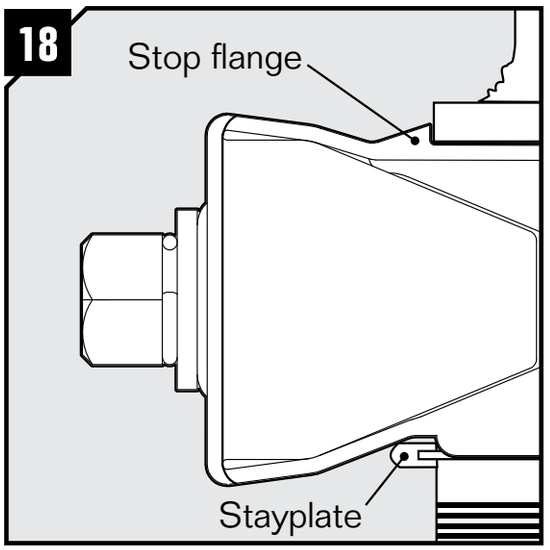
Drop the upper stayplate on top of the modules.



Ensure that the wedge is fully uncompressed by untightening the screws of the wedge before inserting it.

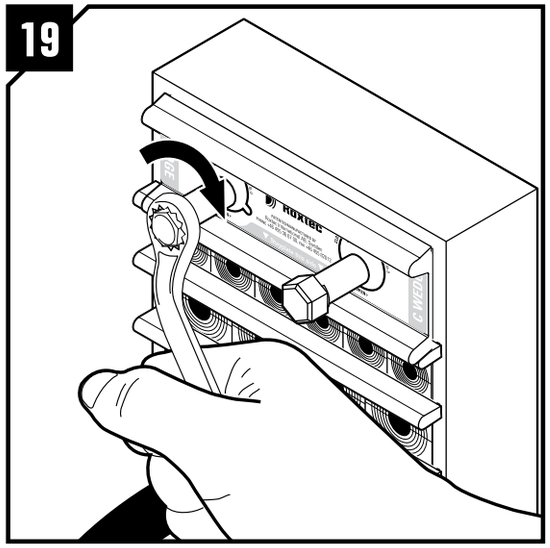


Lubricate the short sides of the wedge.



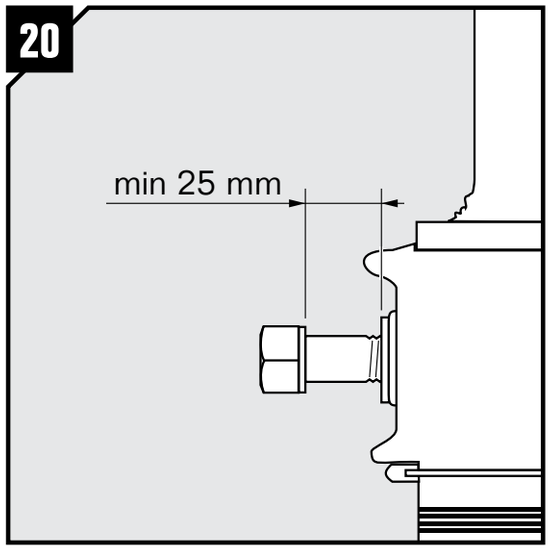
Orientate the wedge so the face marked “Stayplate this side” faces a stayplate. Insert the wedge to the stop flange. Ensure that the wedge is accommodated and secured by the stayplate.

19



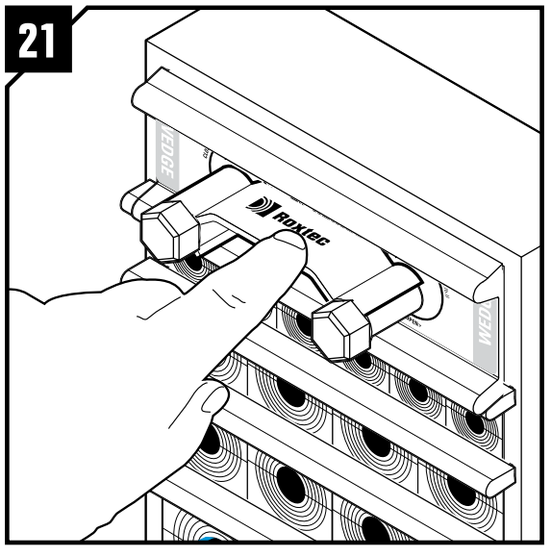
Tighten the screws alternately until full mechanical stop, approx 20 full revolutions per screw. Do not exceed 20 Nm (15 ft.lb.).

20



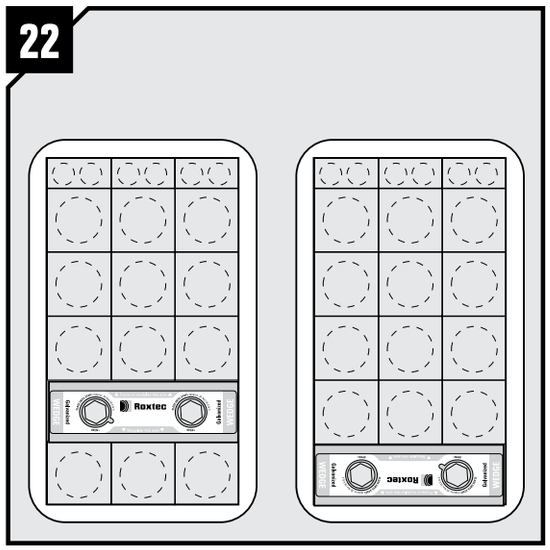
25 mm of the screws shall be exposed.

21



Attach the Wedge Clip to the wedge screws to complete the installation.

22



Optional wedge positions (anywhere in frame).

Adaptable Roxtec RM Ex modules

Module	Number of cables/pipes	For cable/pipe diameter a-b (mm)	a-b (in)
RM 15 Ex	1	0+3.0-11.0	0+0.118-0.433
RM 15w40 Ex	3	0+3.5-10.5	0+0.138-0.413
RM 20 Ex	1	0+4.0-14.5	0+0.157-0.571
RM 20w40 Ex	2	0+3.5-16.5	0+0.138-0.650
RM 30 Ex	1	0+10.0-25.0	0+0.394-0.984
RM 30H90 Ex	1	0+10.0-25.0	0+0.394-0.984
RM 40 Ex	1	0+21.5-34.5	0+0.846-1.358
RM 40 10-32 Ex	1	0+9.5-32.5	0+0.374-1.280
RM 40H80 Ex	1	0+21.5-34.5	0+0.846-1.358
RM 60 Ex	1	0+28.0-54.0	0+1.102-2.126
RM 60 24-54 Ex	1	0+24.0-54.0	0+0.945-2.126
RM 80 Ex	1	0+48.0-71.0	0+1.890-2.795
RM 90 Ex	1	0+48.0-71.0	0+1.890-2.795
RM 120 Ex	1	0+67.5-99.0	0+2.657-3.898
RM 60 Ex woc	1	28.0-54.0	1.102-2.216
RM 80 Ex woc	1	48.0-71.0	1.890-2.795
RM 90 Ex woc	1	48.0-71.0	1.890-2.795
RM 120 Ex woc	1	67.5-99.0	2.657-3.898

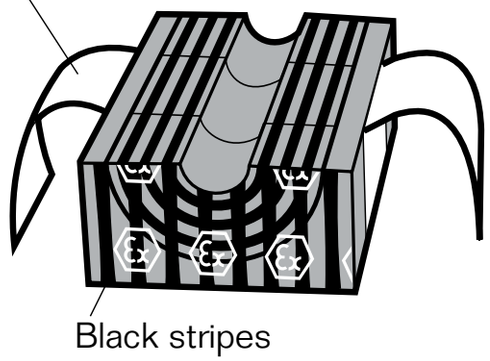
woc = without core

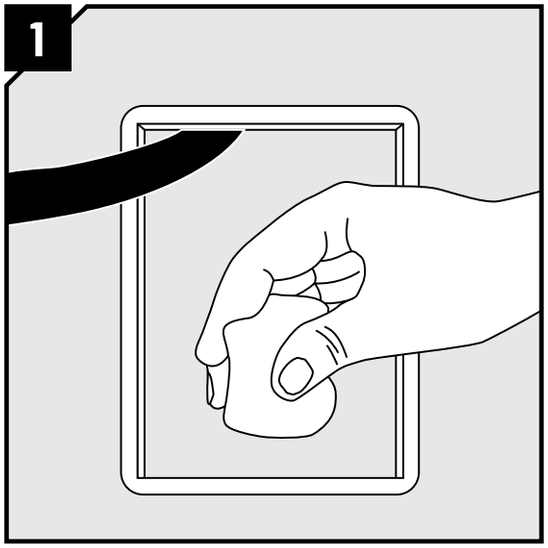
Solid compensation Roxtec RM Ex modules

Module
RM 5/0x24 Ex
RM 10/0x12 Ex
RM 15/0 Ex
RM 20/0 Ex
RM 30/0 Ex
RM 30H90/0 Ex
RM 40/0 Ex
RM 40H80/0 Ex
RM 60/0 Ex

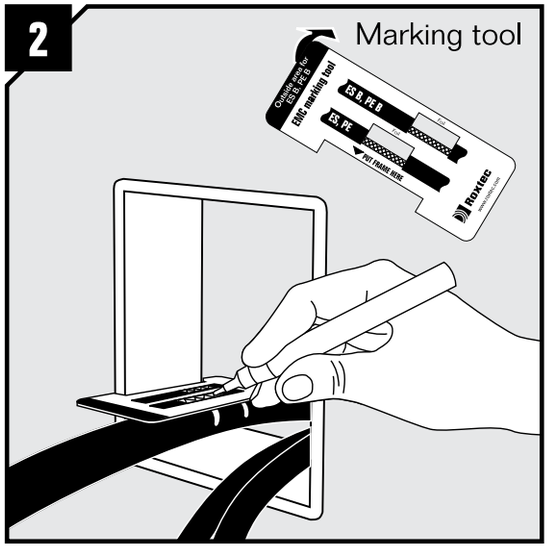
Single diameter Roxtec RM Ex modules

Module
RM 20/14 Ex
RM 20/15 Ex
RM 20/16 Ex
RM 30/24 Ex
RM 30/26 Ex
RM 40/34 Ex
RM 40/36 Ex
RM 60/52 Ex
RM 60/54 Ex

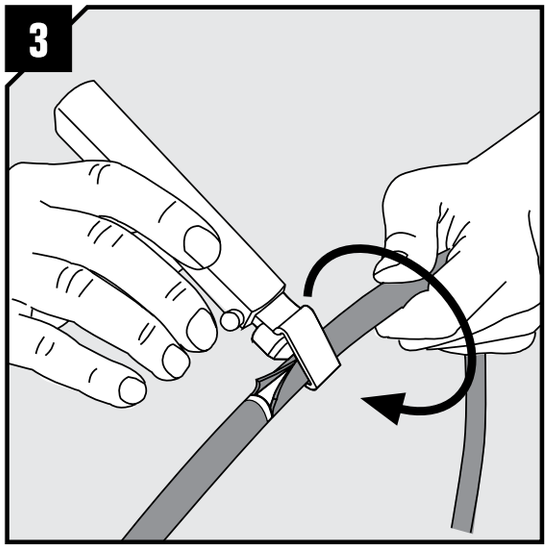




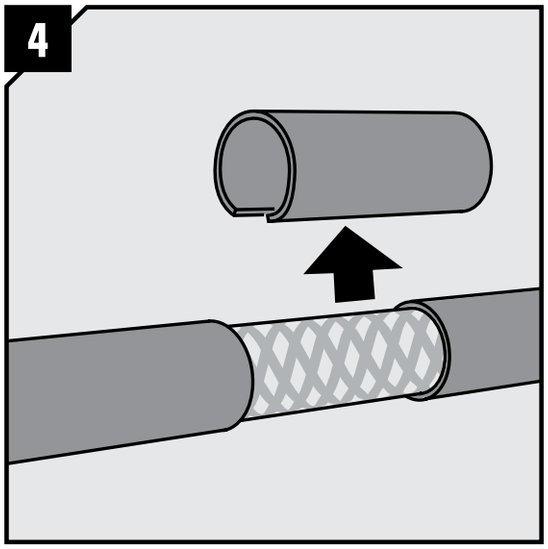
Clean the empty frame from paint, dirt, etc. to secure good electrical conductivity.



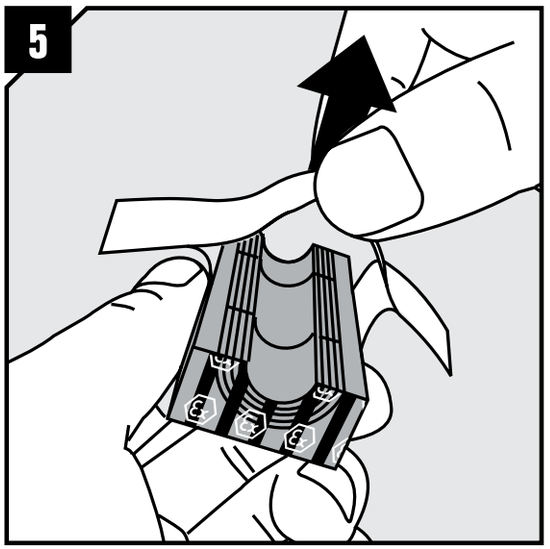
On the cable, mark the module position and where the outer sheath is to be removed.



Cut the outer sheath with a tool of your choice. Make sure not to damage the cable screen.



Remove the outer sheath and any plastic foil. Make sure the cable screen is clean.



Remove the protection paper from the modules and fold back the tape.

Fig 1

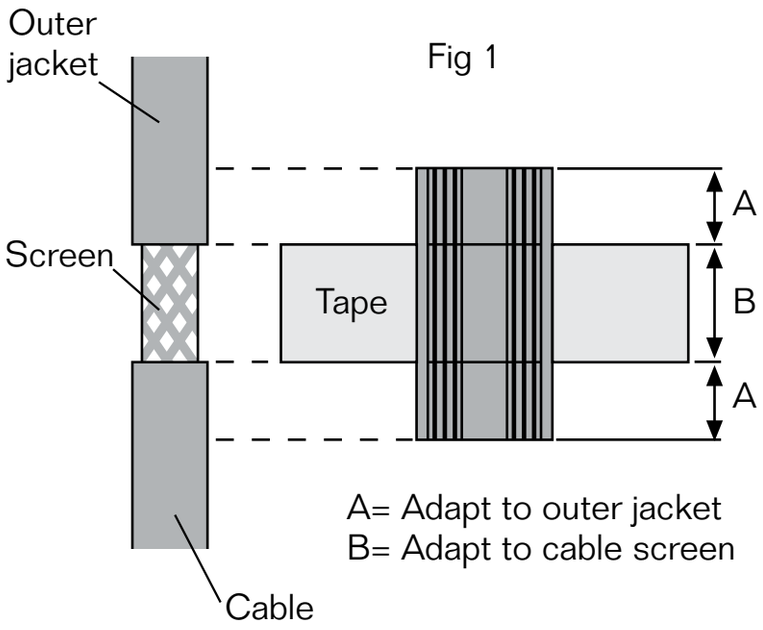
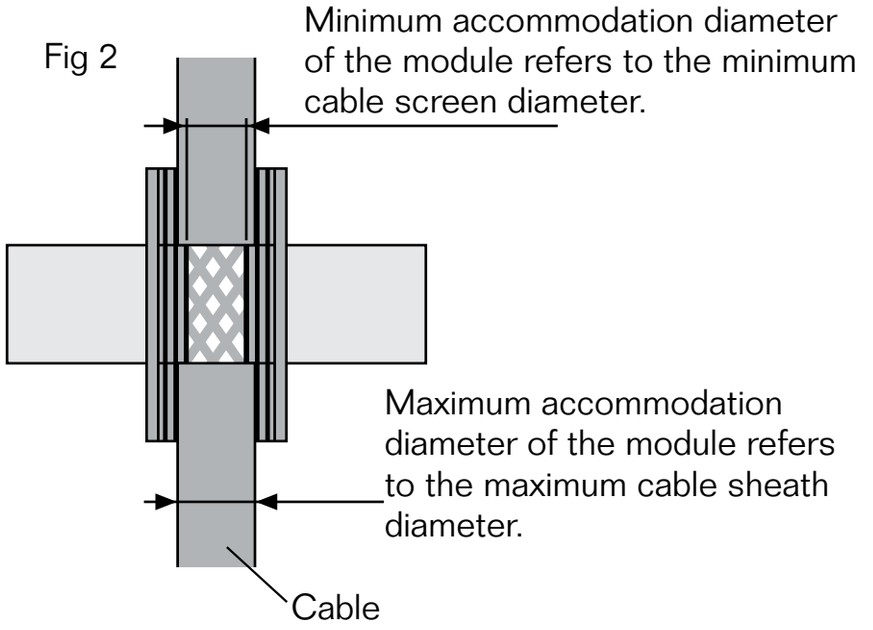
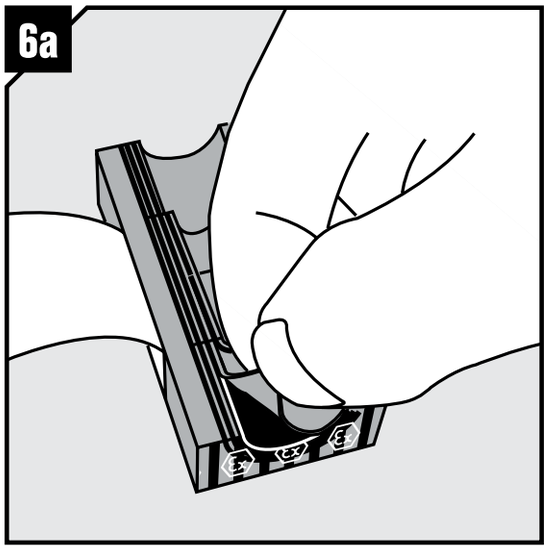
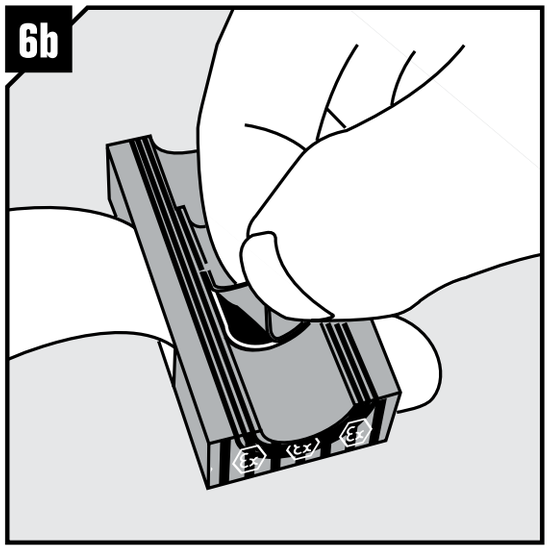


Fig 2

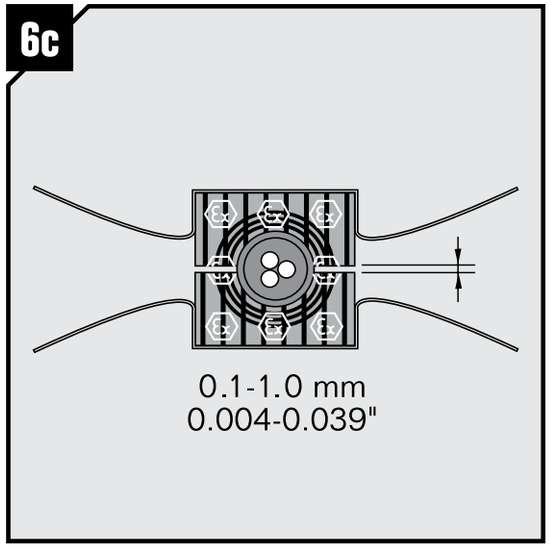




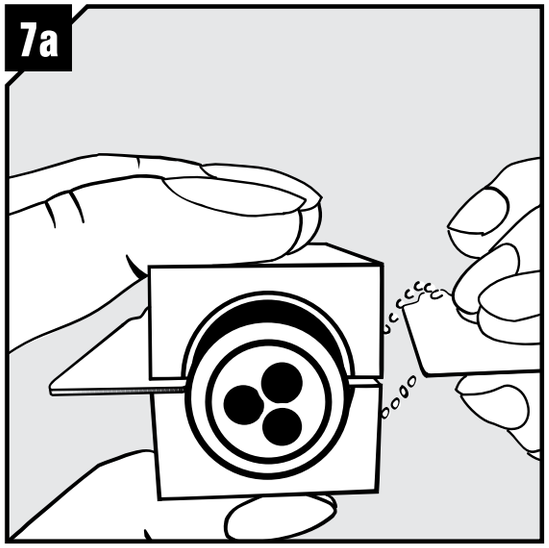
Adapt layers to fit outer jacket. (Fig 1 section A).



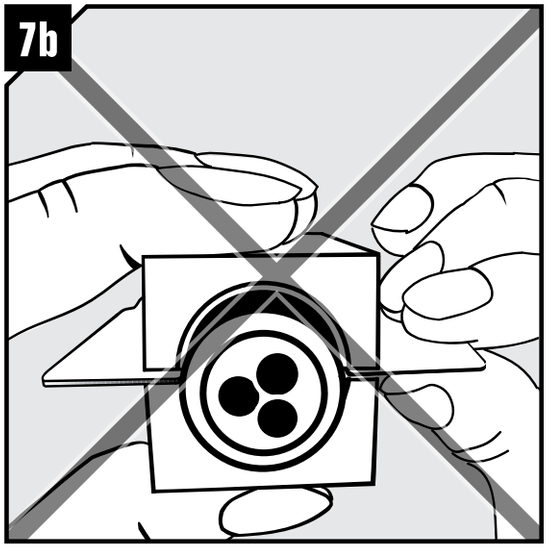
Adapt layers to fit cable screen. (Fig 1section B).



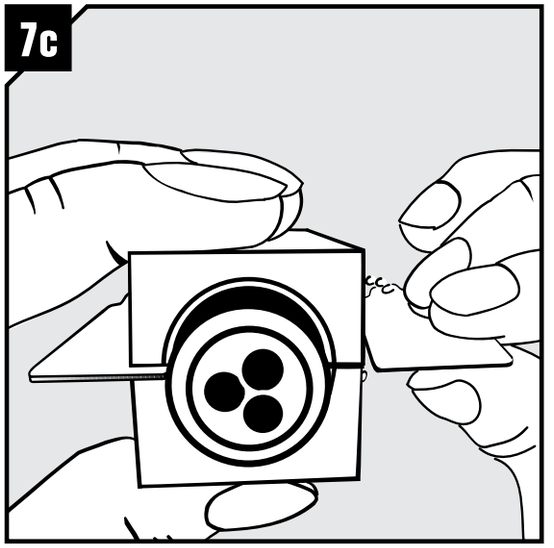
When checking without the gauges there shall be a gap of 0.1-1.0 mm (0.004”-0.039”). If not, repeat 6a-b. The halves may not differ by more than one layer. Make sure the screen is in good contact with the module.



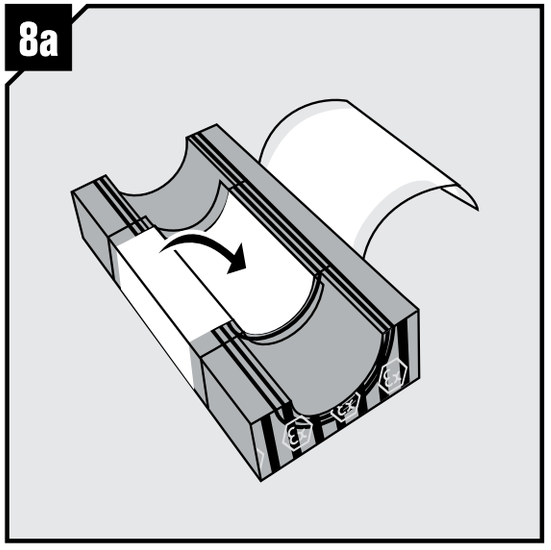
Measure the gap with the Ex Gap Gauge by holding blade one in one gap and checking the other with blade two.



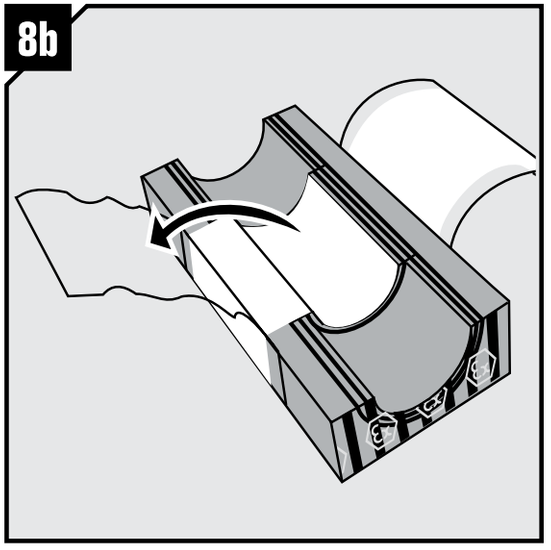
If the gap is too big, the gauge will slip in easily.



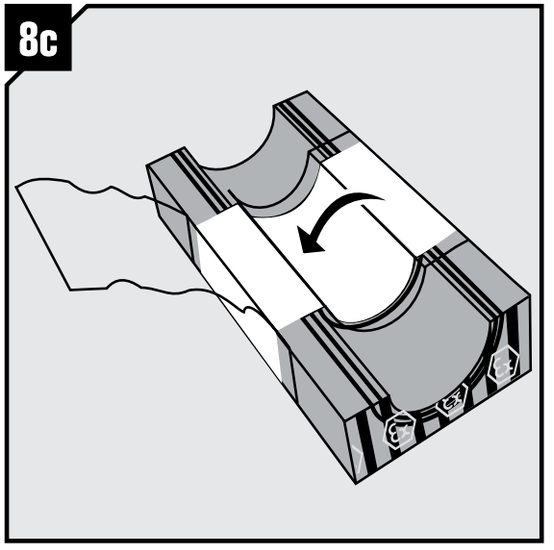
If the gap is correct, there will be no room for blade two.



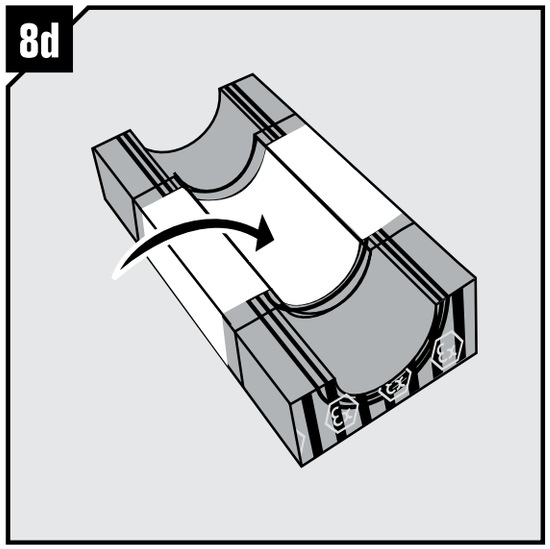
Fold the adhesive tape tightly inside the module half from one side along the inner layers.



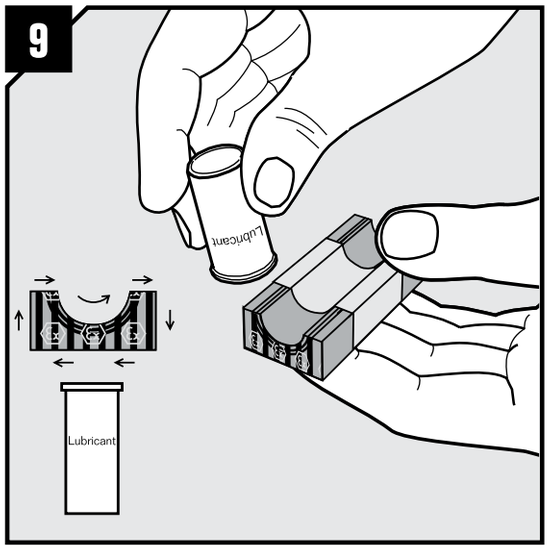
Lift the plastic film from the folded side.



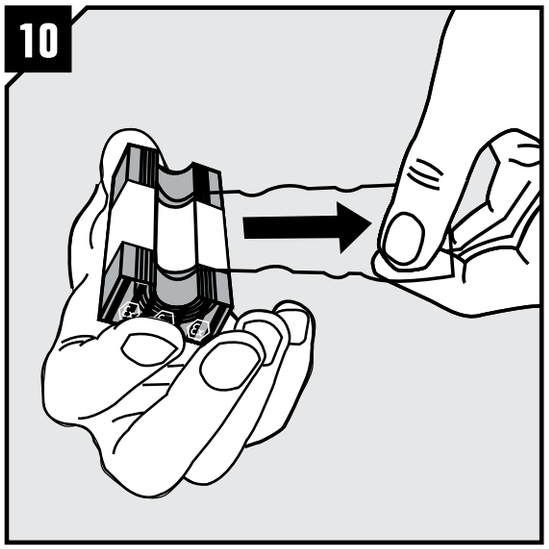
Fold the tape on the other side tightly inside the module half. There must be no air-pockets.



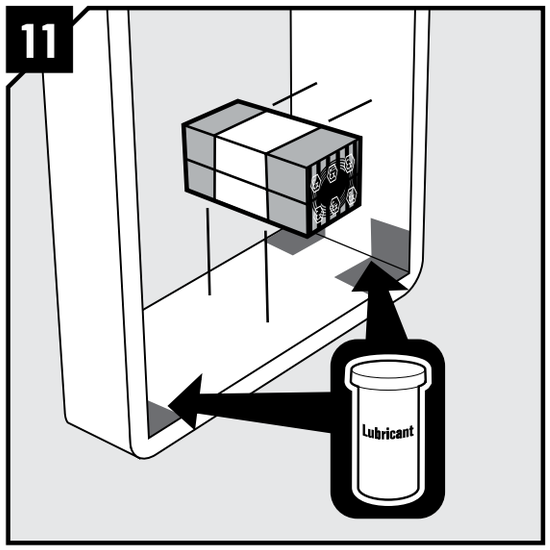
Fold the plastic film back inside the module half.



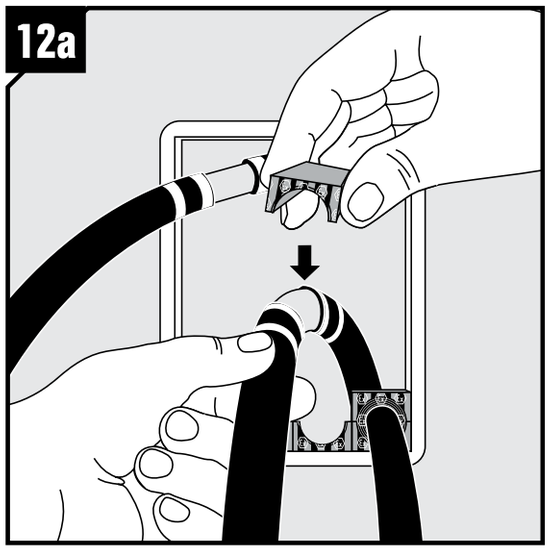
Lubricate all modules sparsely with Roxtec Lubricant on inside and outside rubber surfaces only. Do not lubricate the film.



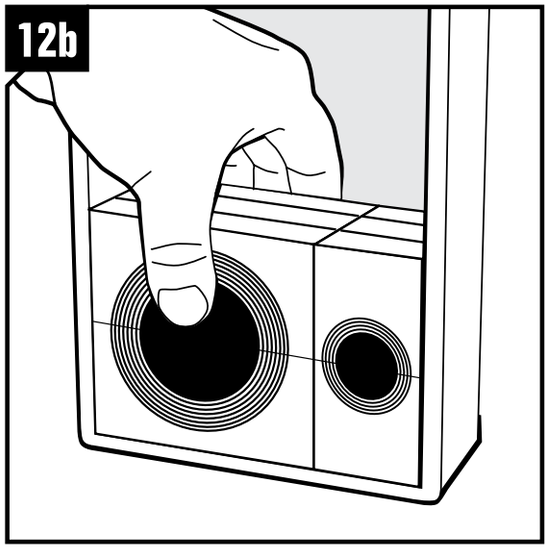
Remove the plastic film! Keep the tape clean. **Note:** Plastic and paper must be removed on spares and solid modules.

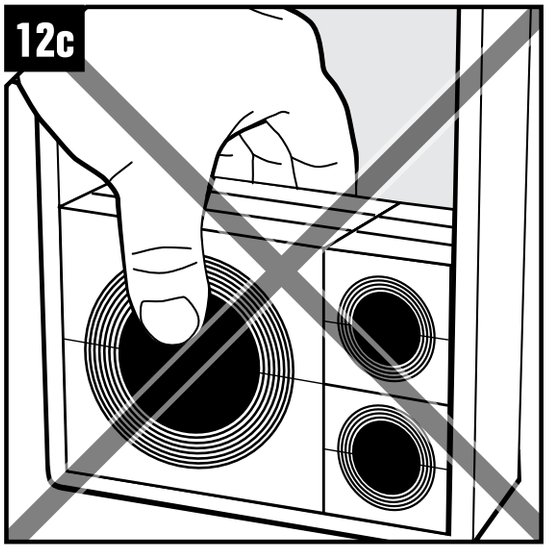


Lubricate the frame and its corners on the areas that will be in contact with the rubber of the modules. Do not lubricate the areas that will be in contact with the tape.

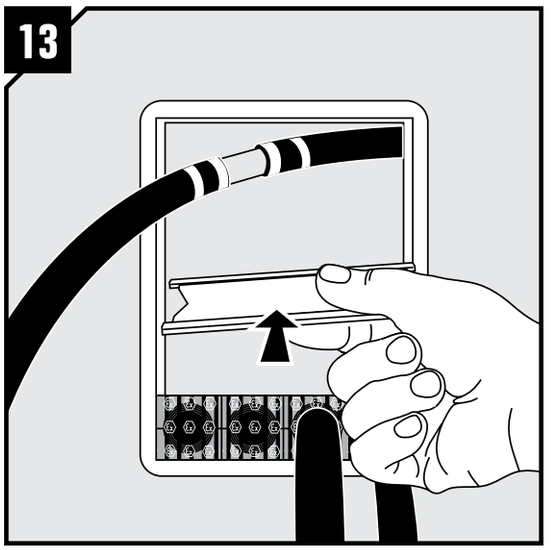


Place cables, according to your transit plan, in the module halves. Place corresponding module half directly on top. Do not slide them in.

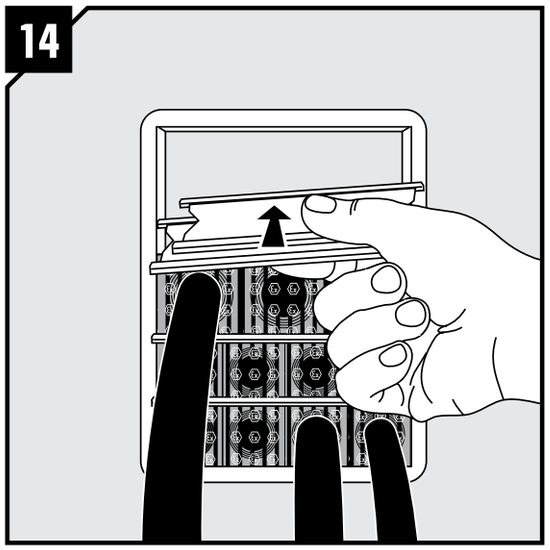




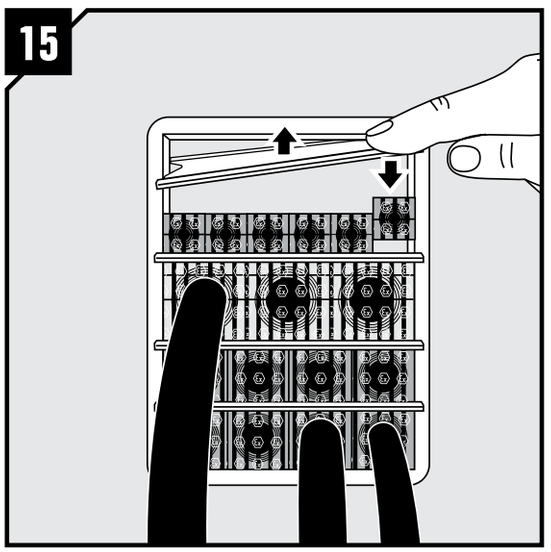
When inserting larger modules, pay attention so that every row of modules is separated by a stayplate. It is not permitted to stack smaller modules on top of each other.



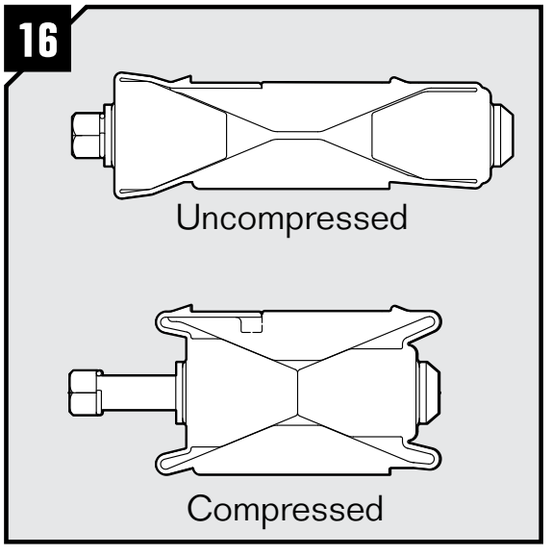
Insert a stayplate on top of every finished row of modules. Make sure the stayplate is clean.



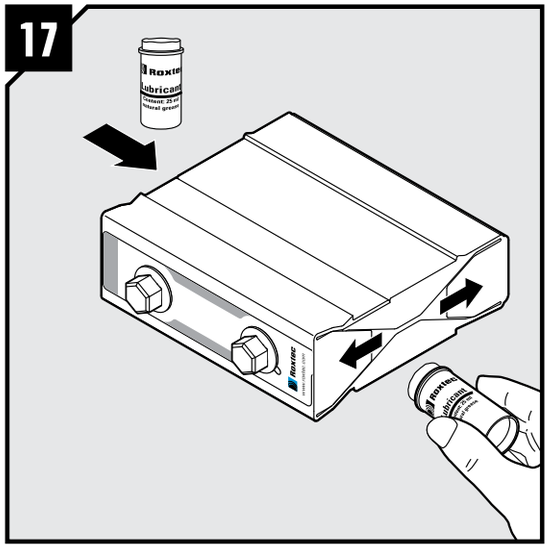
Before inserting the final row of modules, insert two stayplates together.



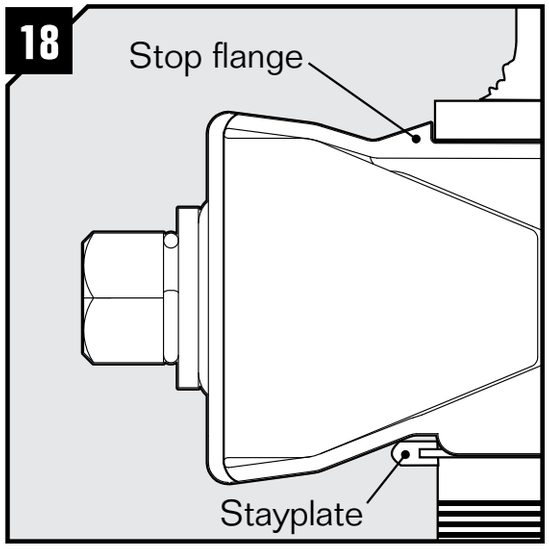
Separate the two stayplates and insert the final row of modules between the stayplates.



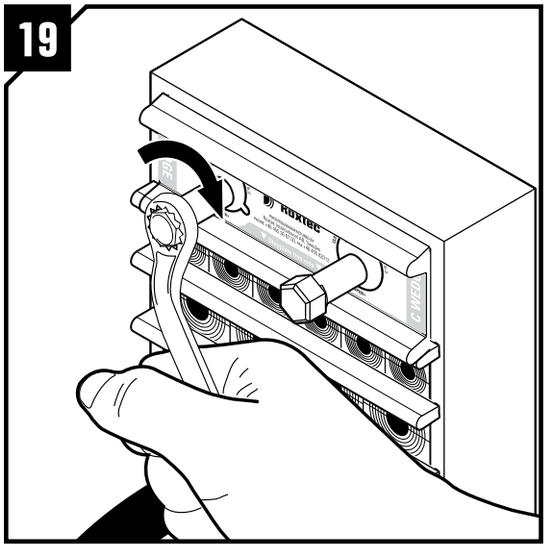
Ensure that the wedge is fully uncompressed by untightening the screws of the wedge before inserting it.



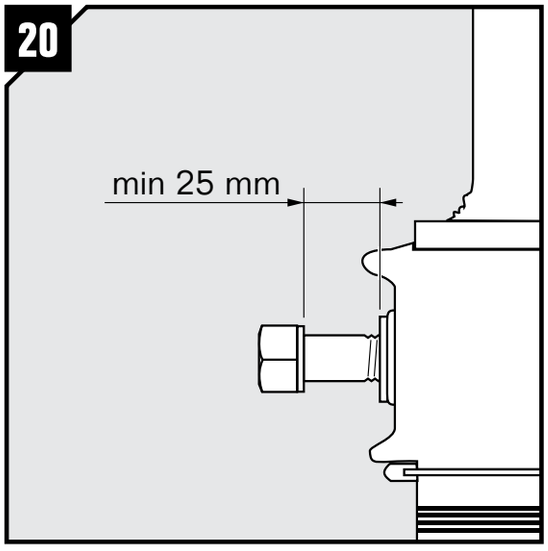
Lubricate the short sides of the wedge.



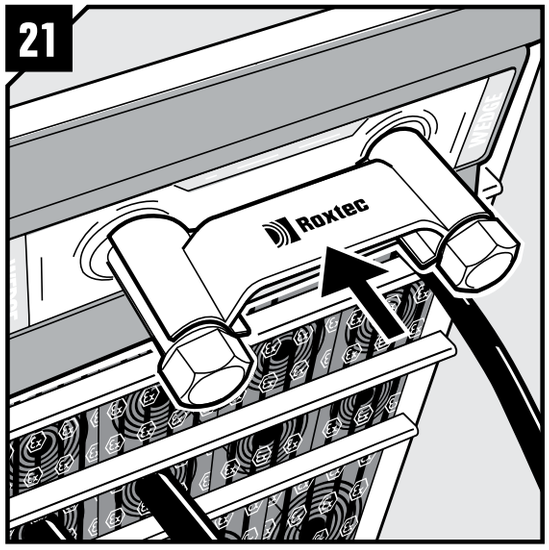
Orientate the wedge so the face marked “Stayplate this side” faces a stayplate. Insert the wedge to the stop flange. Ensure that the wedge is accommodated and secured by the stayplate.



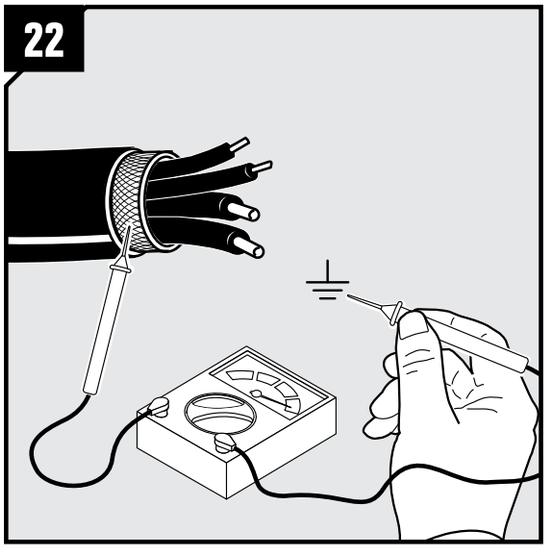
Tighten the screws alternately until full mechanical stop, approx 20 full revolutions per screw. Do not exceed 20 Nm (15 ft.lb.).



25 mm of the screws shall be exposed.



Attach the Wedge Clip to the wedge screws to complete the installation.



Verify earth continuity from each cable armor/screen to earth. Use a suitable instrument.

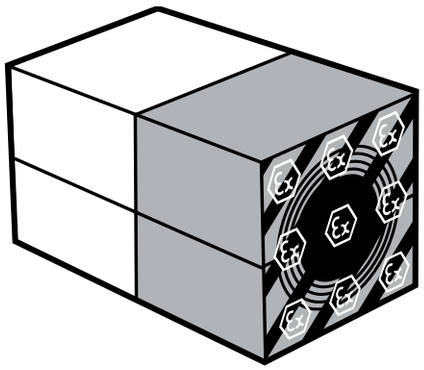
Adaptable Roxtec RM PE Ex modules

Module	Number of cables/pipes	For cable/pipe diameter a-b (mm)	a-b (in)
RM 15 PE Ex	1	0+ 3.0-11.0	0+0.118-0.433
RM 15w40 PE Ex	3	0+ 3.5-10.5	0+0.138-0.413
RM 20 PE Ex	1	0+ 4.0-14.5	0+0.157-0.571
RM 20w40 PE Ex	2	0+ 3.5-16.5	0+0.138-0.650
RM 30 PE Ex	1	0+ 10.0-25.0	0+0.394-0.984
RM 30H90 PE Ex	1	0+ 10.0-25.0	0+0.394-0.984
RM 40 PE Ex	1	0+ 21.5-34.5	0+0.846-1.358
RM 40 10-32 PE Ex	1	0+ 9.5-32.5	0+0.374-1.280
RM 40H80 PE Ex	1	0+ 21.5-34.5	0+0.846-1.358
RM 40 10-32 H80 PE Ex	1	0+ 9.5-32.5	0+0.374-1.280
RM 60 PE Ex	1	0+ 28.0-54.0	0+1.102-2.126
RM 60 24-54 PE Ex	1	0+ 24.0-54.0	0+0.945-2.126
RM 80 PE Ex	1	0+ 48.0-71.0	0+1.890-2.795
RM 90 PE Ex	1	0+ 48.0-71.0	0+1.890-2.795
RM 120 PE Ex	1	0+ 67.5-99.0	0+2.657-3.898
RM 60 PE Ex woc	1	28.0-54.0	1.102-2.216
RM 80 PE Ex woc	1	48.0-71.0	1.890-2.795
RM 90 PE Ex woc	1	48.0-71.0	1.890-2.795
RM 120 PE Ex woc	1	67.5-99.0	2.657-3.898

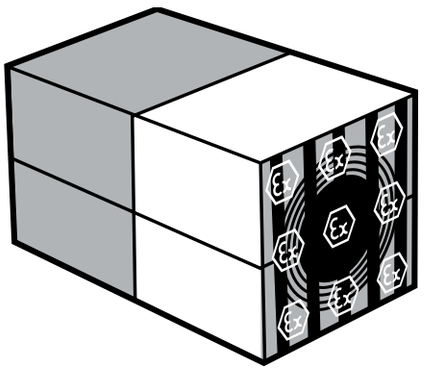
woc = without core

Solid compensation Roxtec RM PE Ex modules

Module
RM 5/0x24 PE Ex
RM 10/0x12 PE Ex
RM 15/0 PE Ex
RM 20/0 PE Ex
RM 30/0 PE Ex
RM 30H90/0 PE Ex
RM 40/0 PE Ex
RM 40H80/0 PE Ex
RM 60/0 PE Ex

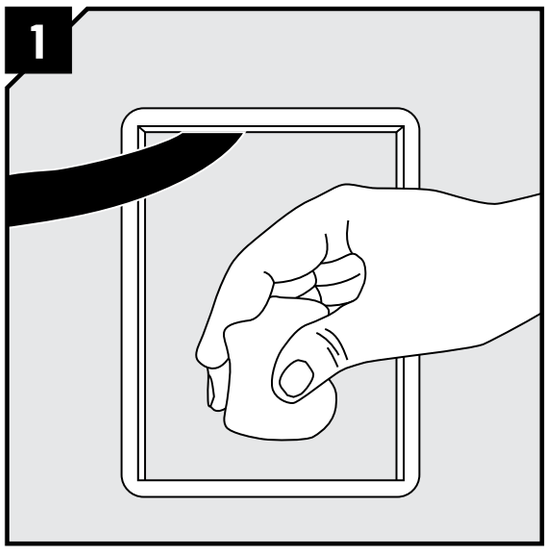


Black and diagonal stripes
Environmental side

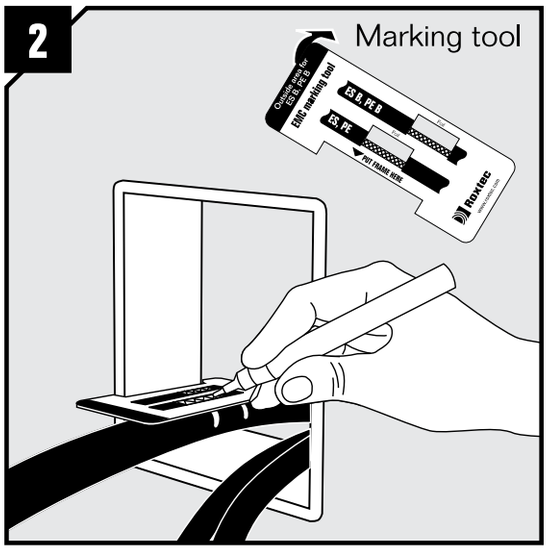


Black and vertical stripes
EMC side

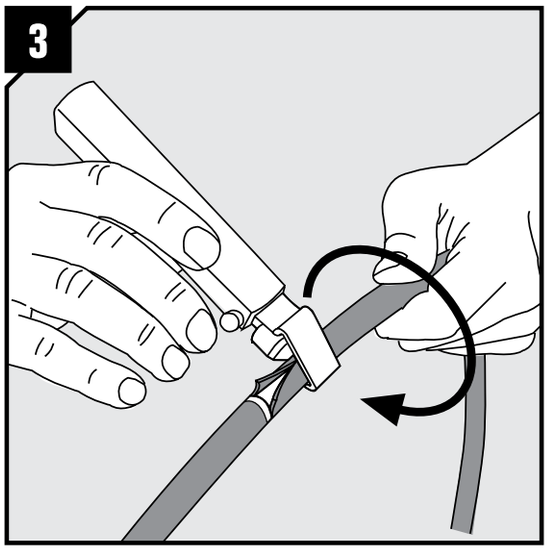
An RM PE B Ex module provides EMC protection at one end and environmental protection at the other.



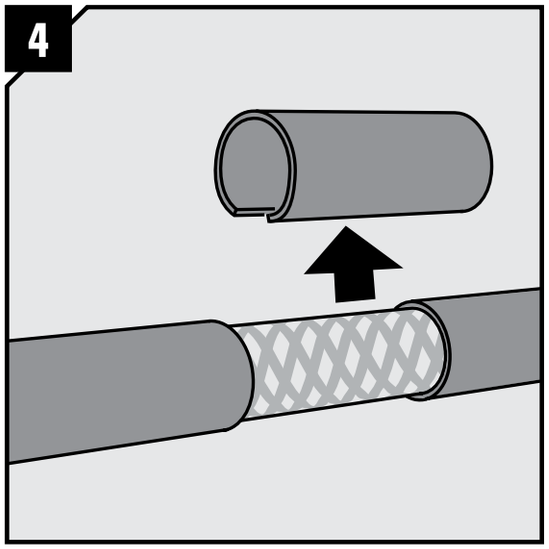
Clean the empty frame from paint, dirt, etc. to secure good electrical conductivity.



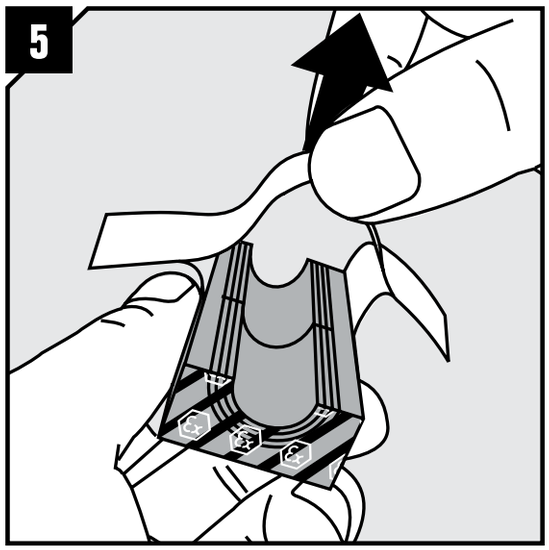
On the cable, mark the module position and where the outer sheath is to be removed.



Cut the outer sheath with a tool of your choice. Make sure not to damage the cable screen.



Remove the outer sheath and any plastic foil. Make sure cable screen is clean.



Remove the protection paper from the modules and fold back the tape. It is not necessary to remove the paper from spare modules.

Fig 1

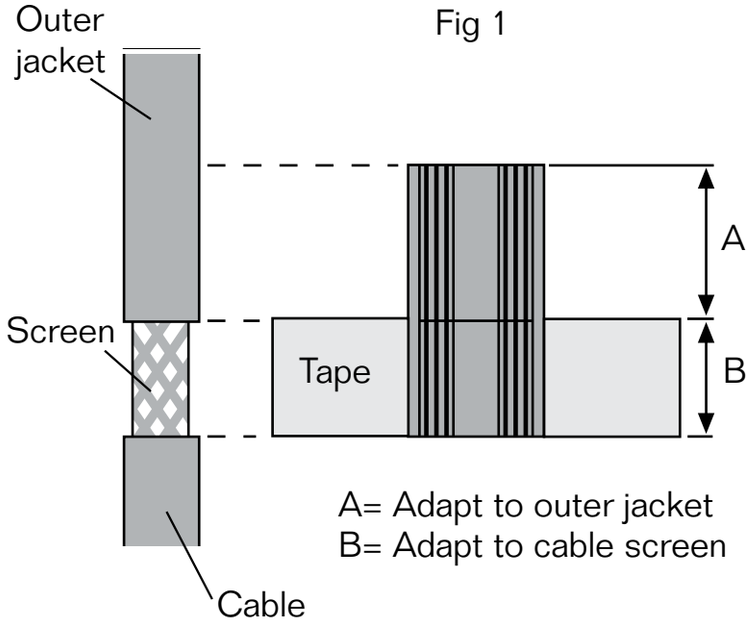
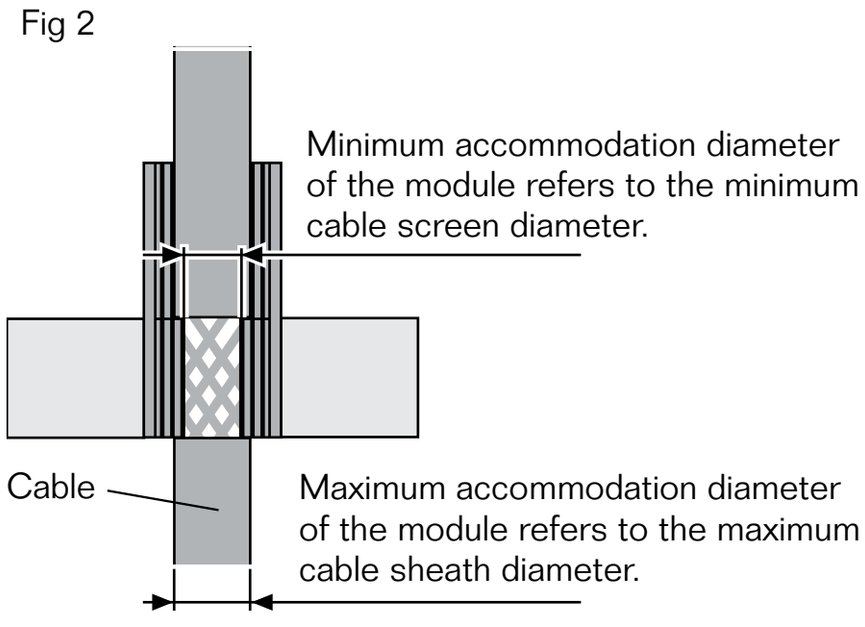
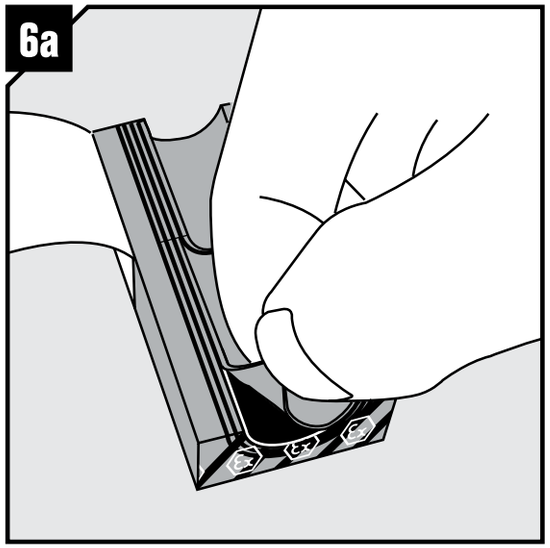
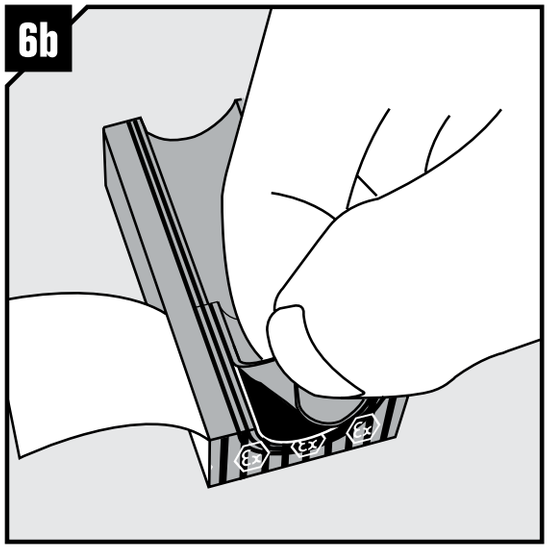


Fig 2

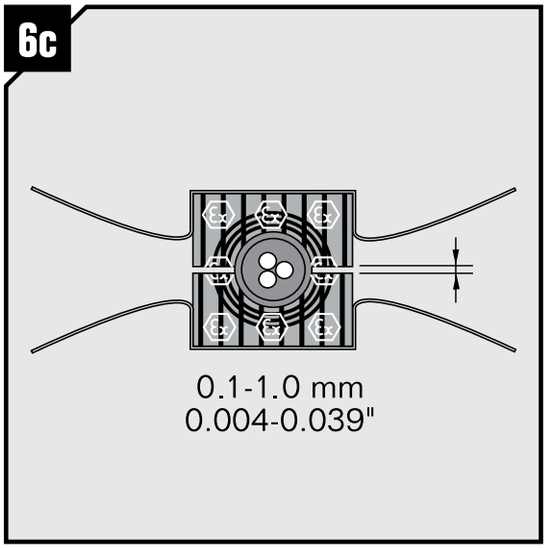




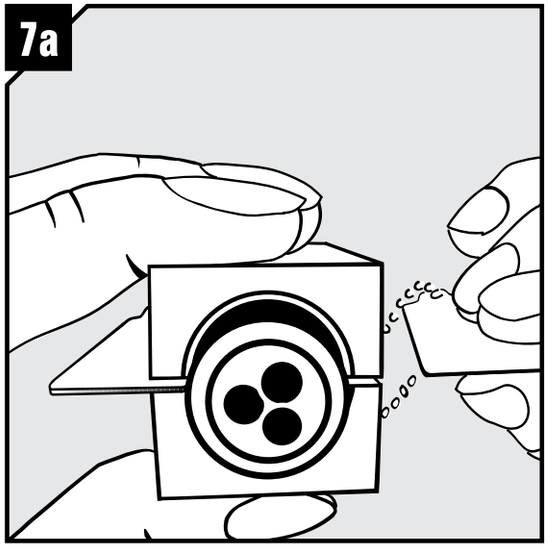
Adapt layers to fit outer jacket. (Fig 1:A).



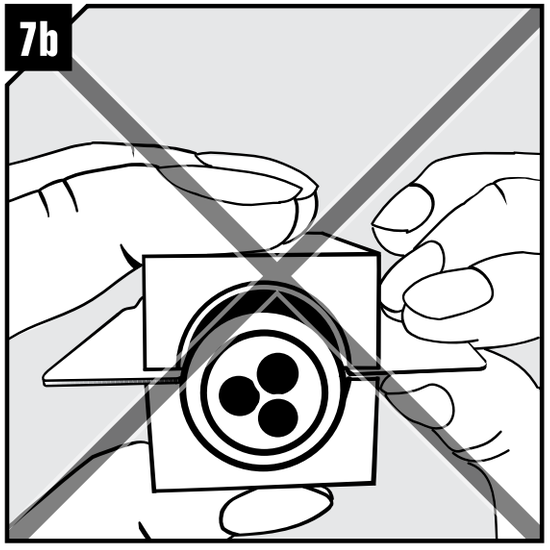
Adapt layers to fit cable screen. (Fig 1:B).



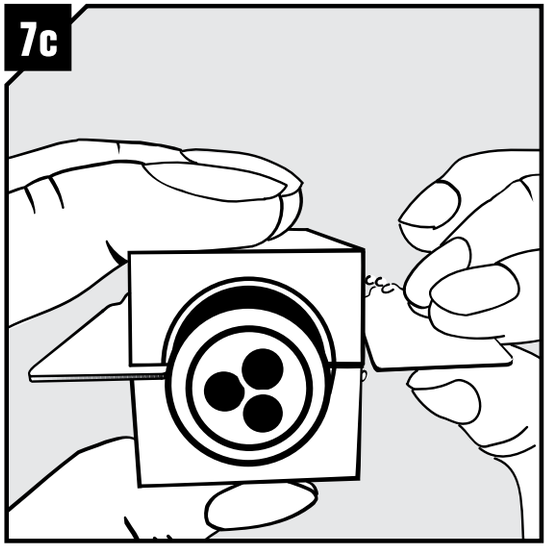
When checking without the gauges there shall be a gap of 0.1-1.0 mm (0.004”-0.039”). If not, repeat 6a-b. The halves may not differ by more than one layer. Make sure the screen is in good contact with the module.



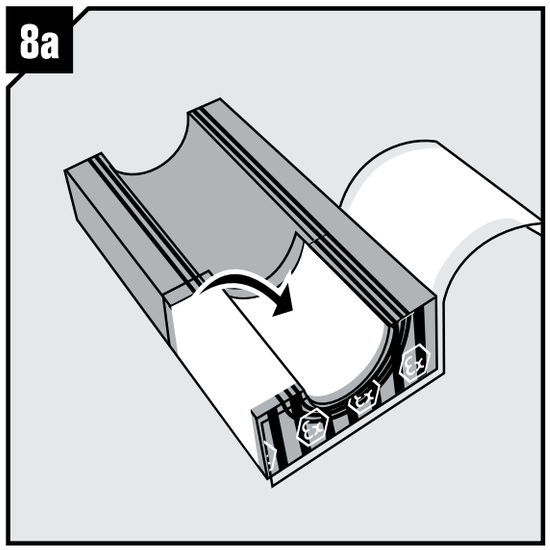
Measure the gap with the Ex Gap Gauge by holding blade one in one gap and checking the other with blade two.



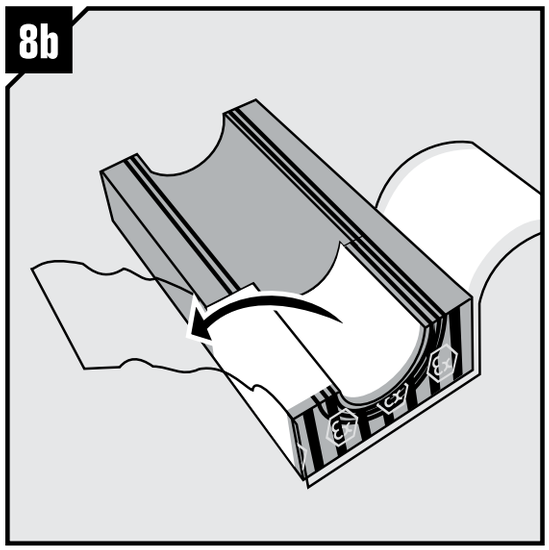
If the gap is too big, the gauge will slip in easily.



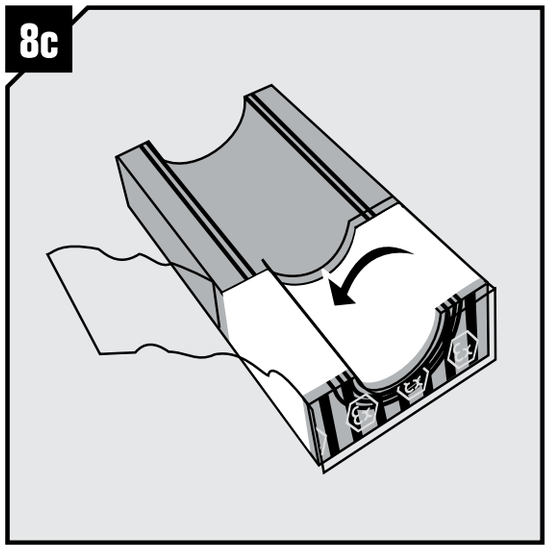
If the gap is correct, there will be no room for blade two.



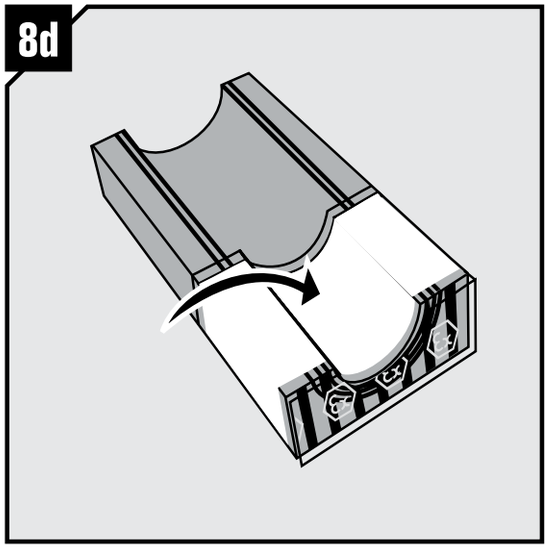
Fold the adhesive tape tightly inside the module half from one side along the inner layers.



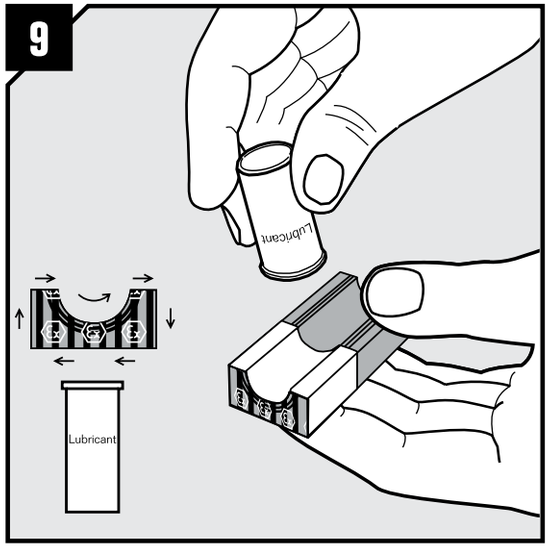
Lift the plastic film from the folded side.



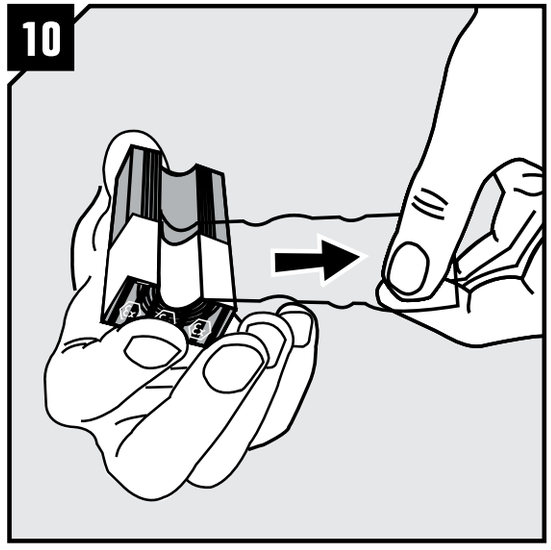
Fold the tape on the other side tightly inside the module half. There must be no air-pockets.



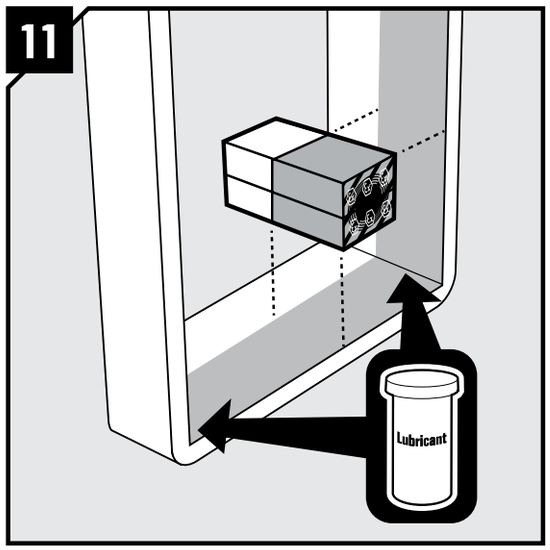
Fold the plastic film back inside the module half.



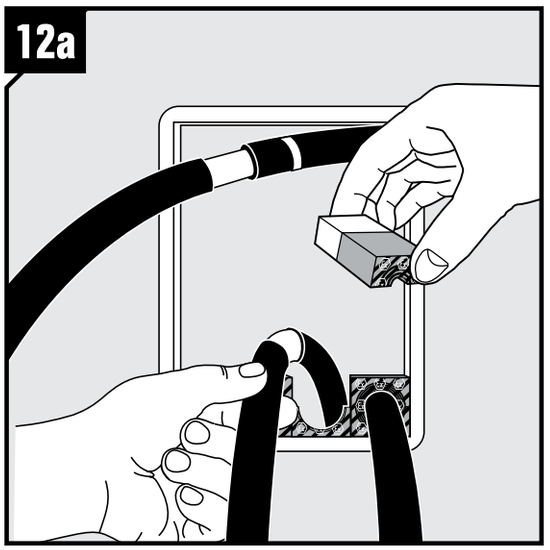
Lubricate all modules sparsely with Roxtec Lubricant on inside and outside rubber surfaces only. Do not lubricate the film.



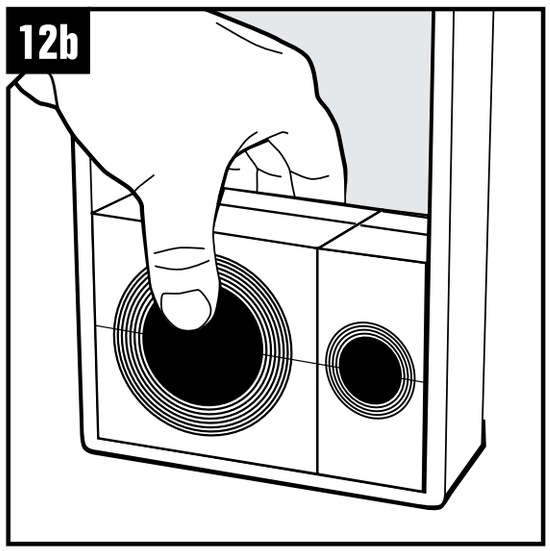
Remove the plastic film! Keep the tape clean. **Note:** Plastic and paper must be removed on spares and solid modules.

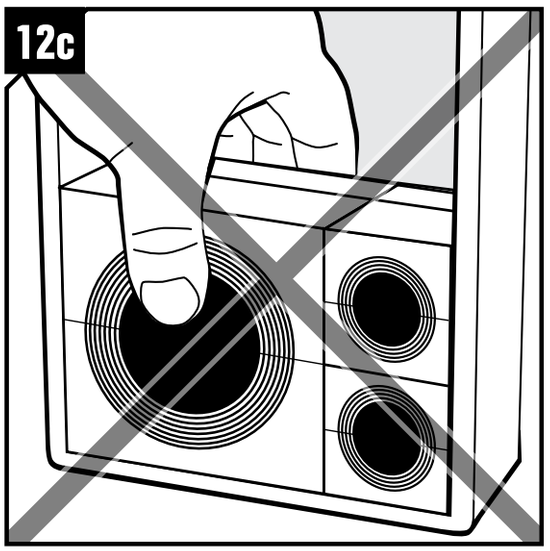


Lubricate the frame and its corners on the areas that will be in contact with the rubber of the modules. Do not lubricate the areas that will be in contact with the tape.

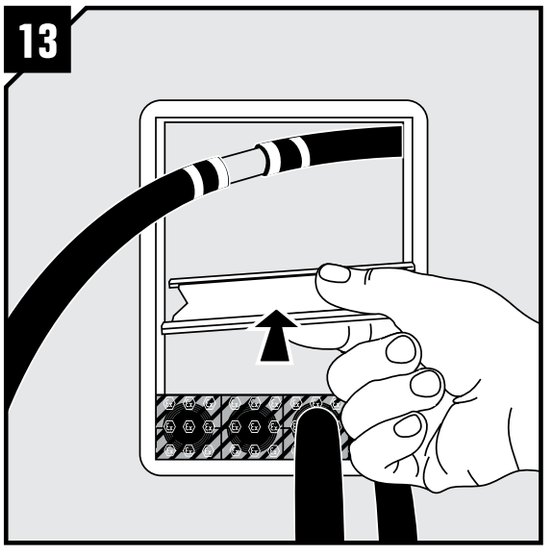


Place cables, according to your transit plan, in the module halves. Place corresponding module half directly on top. Do not slide them in.



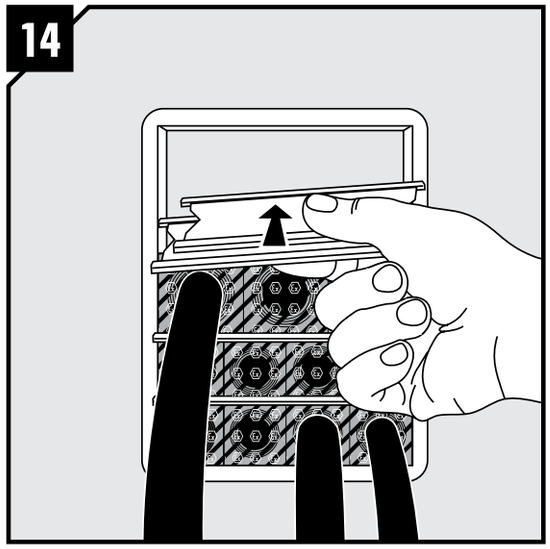


When inserting larger modules, pay attention so that every row of modules is separated by a stayplate. It is not permitted to stack smaller modules on top of each other.



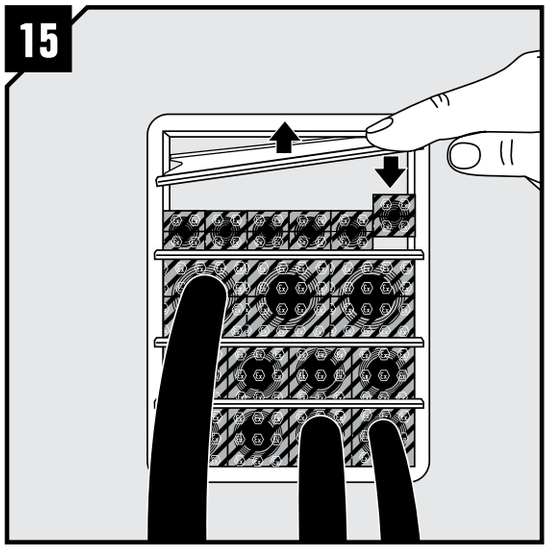
Insert a stayplate on top of every finished row of modules. Make sure the stayplate is clean.

14



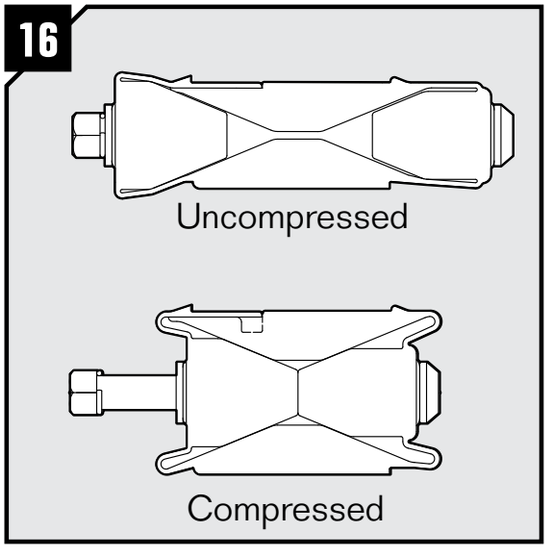
Before inserting the final row of modules, insert two stayplates together.

15



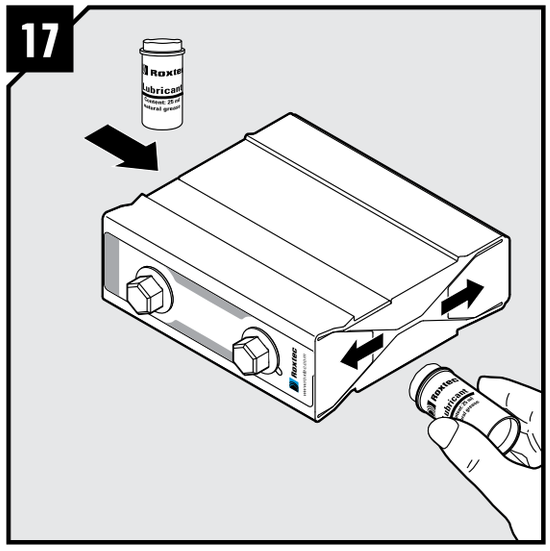
Separate the two stayplates and insert the final row of modules between the stayplates.

16



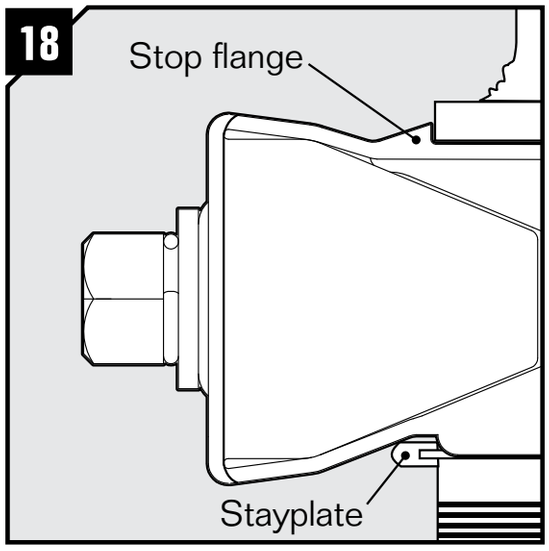
Ensure that the wedge is fully uncompressed by untightening the screws of the wedge before inserting it.

17



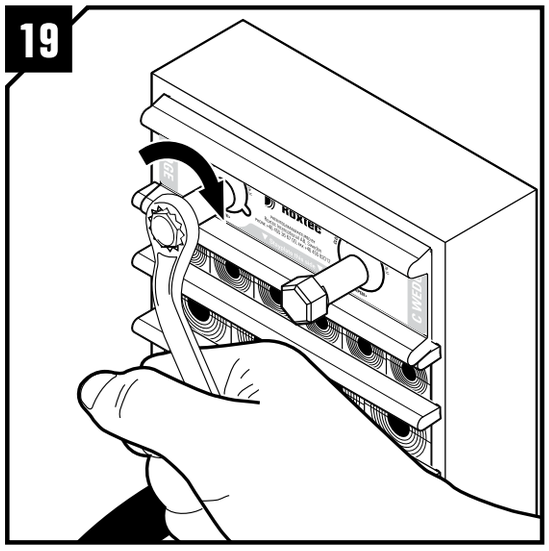
Lubricate the short sides of the wedge.

18

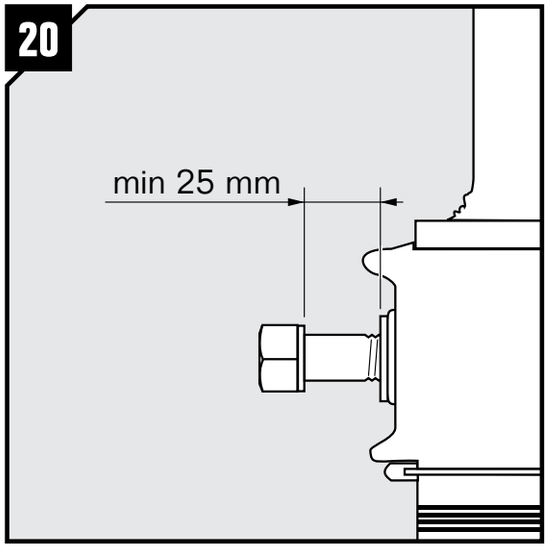


Orientate the wedge so the face marked “Stayplate this side” faces a stayplate. Insert the wedge to the stop flange. Ensure that the wedge is accommodated and secured by the stayplate.

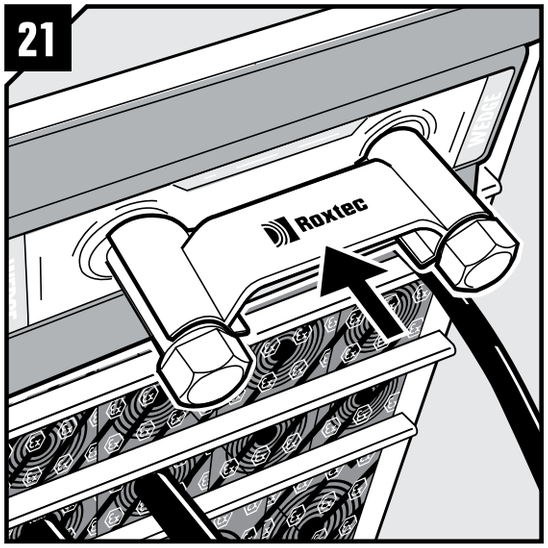
19



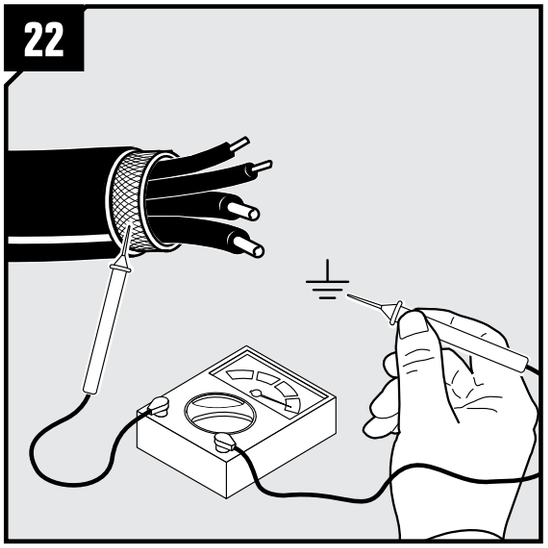
Tighten the screws alternately until full mechanical stop, approx 20 full revolutions per screw. Do not exceed 20 Nm (15 ft.lb.).



25 mm of the screws shall be exposed.



Attach the Wedge Clip to the wedge screws to complete the installation.



Verify earth continuity from each cable armor/screen to earth. Use a suitable instrument.

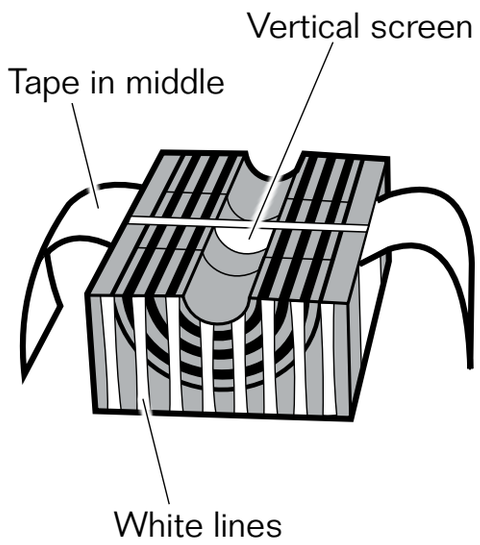
Adaptable Roxtec RM PE B Ex modules

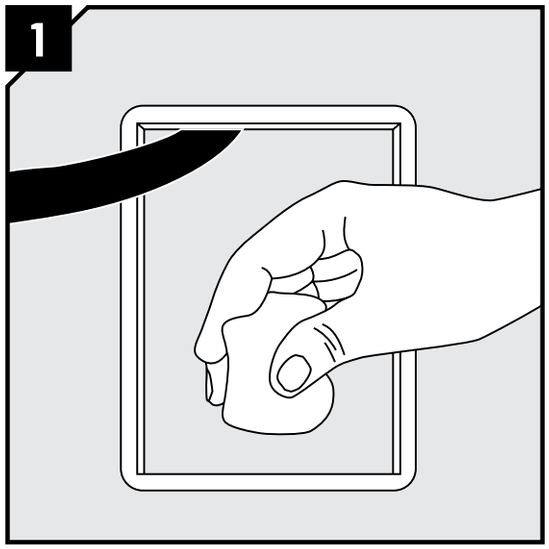
Module	Number of cables/pipes	For cable/pipe diameter a-b (mm)	a-b (in)
RM 15 PE B Ex	1	0+3.0-11.0	0+0.118-0.433
RM 15w40 PE B Ex	3	0+3.5-10.5	0+0.138-0.413
RM 20 PE B Ex	1	0+4.0-14.5	0+0.157-0.571
RM 20w40 PE B Ex	2	0+3.5-16.5	0+0.138-0.650
RM 30 PE B Ex	1	0+10.0-25.0	0+0.394-0.984
RM 30H90 PE B Ex	1	0+10.0-25.0	0+0.394-0.984
RM 40 PE B Ex	1	0+21.5-34.5	0+0.846-1.358
RM 40H80 PE B Ex	1	0+21.5-34.5	0+0.846-1.358
RM 40 10-32 H80 PE B Ex	1	0+9.5-32.5	0+0.374-1.280
RM 40 10-32 PE B Ex	1	0+9.5-32.5	0+0.374-1.280
RM 60 PE B Ex	1	0+28.0-54.0	0+1.102-2.126
RM 60 24-54 PE B Ex	1	0+24.0-54.0	0+0.945-2.126
RM 80 PE B Ex	1	0+48.0-71.0	0+1.890-2.795
RM 90 PE B Ex	1	0+48.0-71.0	0+1.890-2.795
RM 120 PE B Ex	1	0+67.5-99.0	0+2.657-3.898
RM 60 PE B Ex woc	1	28.0-54.0	1.102-2.216
RM 80 PE B Ex woc	1	48.0-71.0	1.890-2.795
RM 90 PE B Ex woc	1	48.0-71.0	1.890-2.795
RM 120 PE B Ex woc	1	67.5-99.0	2.657-3.898

woc = without core

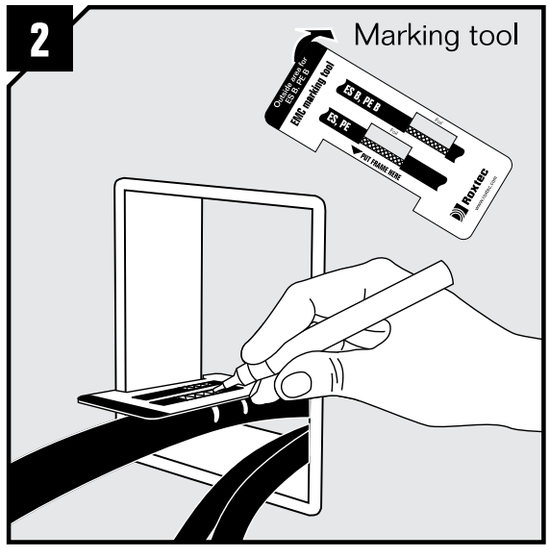
Solid compensation Roxtec RM PE B Ex modules

Module
RM 5/0x24 PE B Ex
RM 10/0x12 PE B Ex
RM 15/0 PE B Ex
RM 20/0 PE B Ex
RM 30/0 PE B Ex
RM 30H90/0 PE B Ex
RM 40/0 PE B Ex
RM 40H80/0 PE B Ex
RM 60/0 PE B Ex

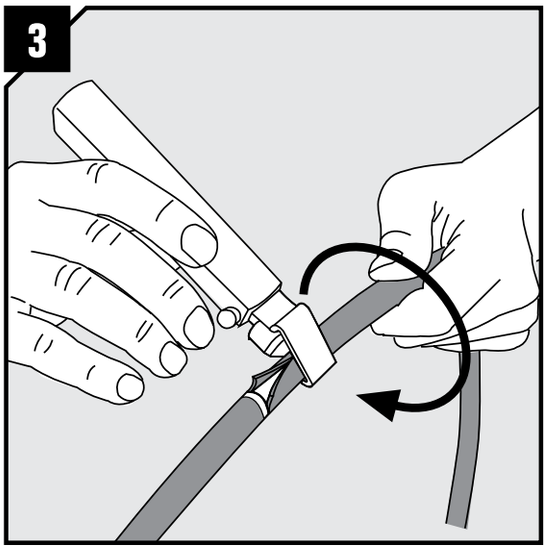




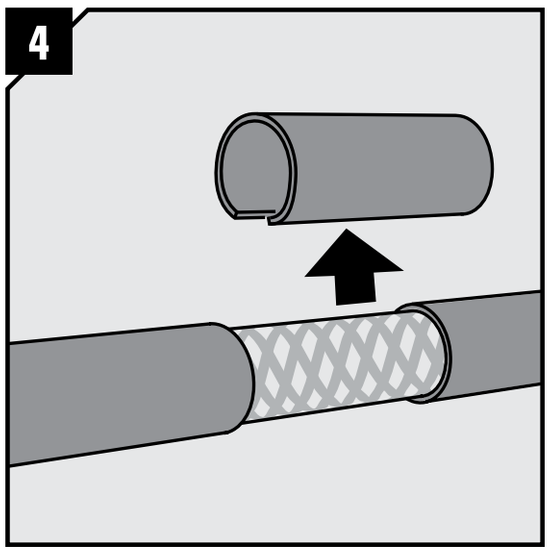
Clean the empty frame from paint, dirt, etc. to secure good electrical conductivity.



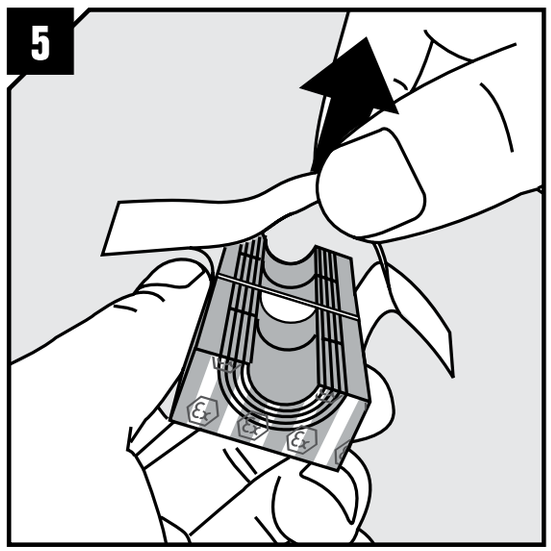
On the cable, mark the module position and where the outer sheath is to be removed.



Cut the outer sheath with a tool of your choice. Make sure not to damage the cable screen.

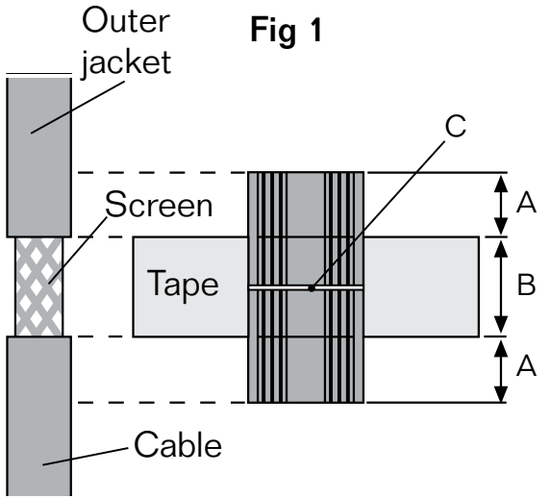


Remove the outer sheath and any plastic foil. Make sure cable screen is clean.



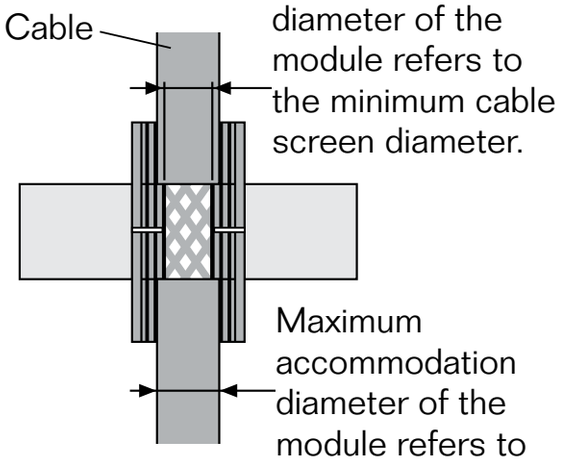
Remove the protection paper from the modules and fold back the tape.

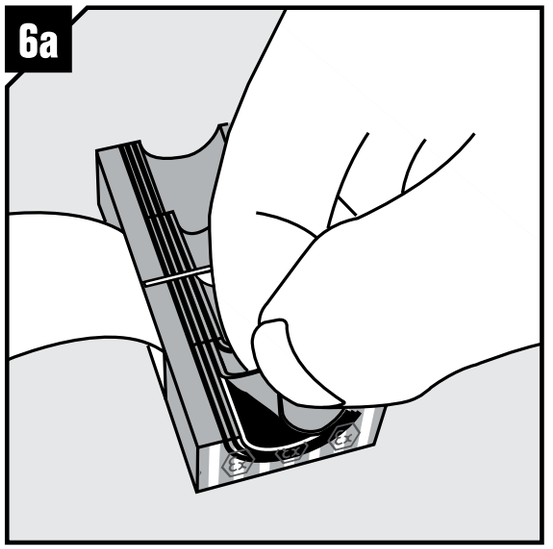
Fig 1



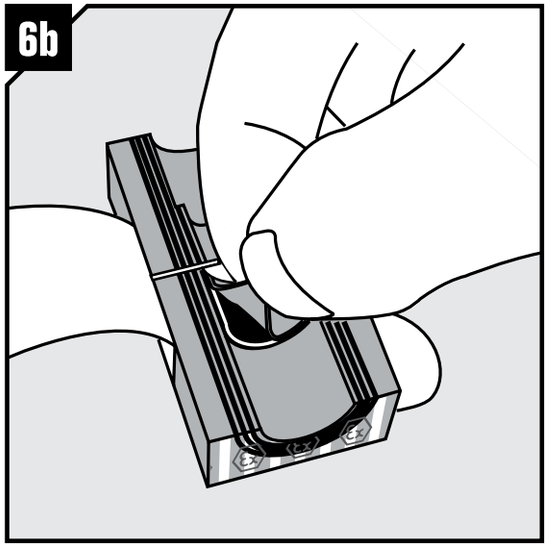
A= Adapt to outer jacket
B= Adapt to cable screen
C= Adapt to cable screen

Fig 2

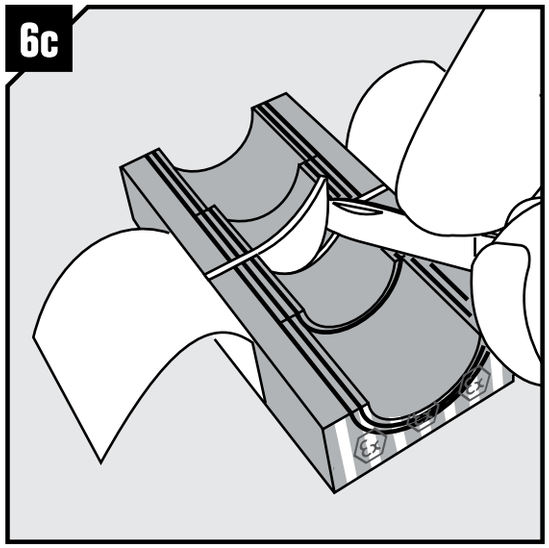




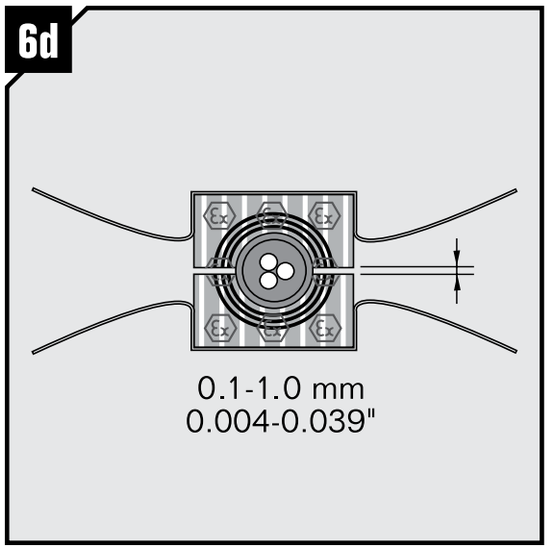
Adapt layers to fit outer jacket. (Fig 1 section A).



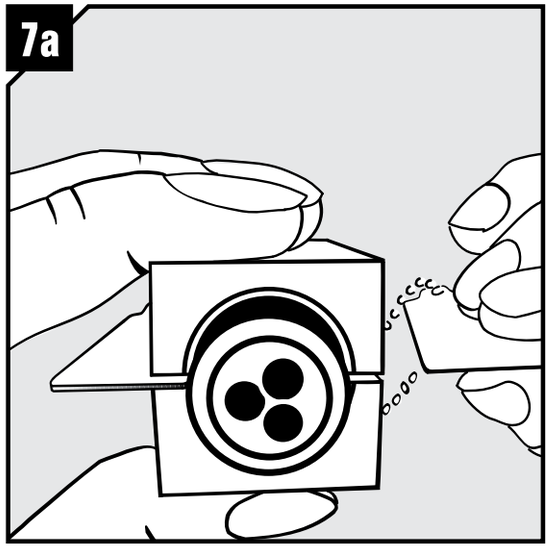
Adapt layers to fit cable screen. (Fig 1section B).



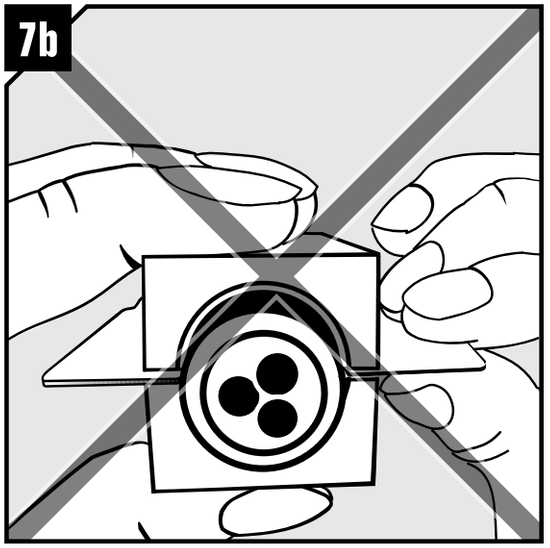
Adapt vertical screen to cable screen. (Fig 1:C).



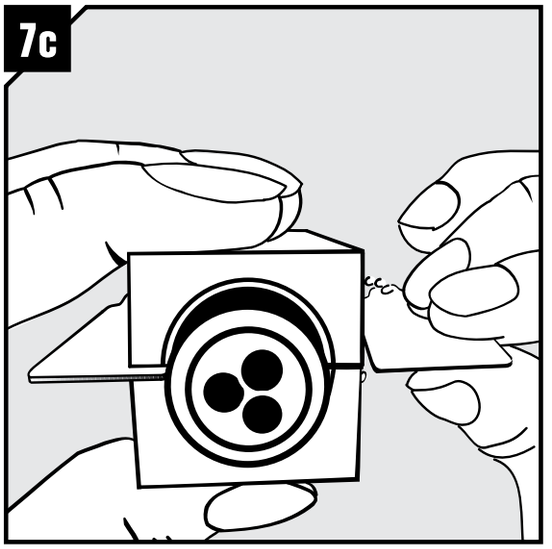
When checking without the gauges there shall be a gap of 0.1-1.0 mm (0.004”-0.039”). If not, repeat 6a-b. The halves may not differ by more than one layer. Make sure the screen is in good contact with the module.



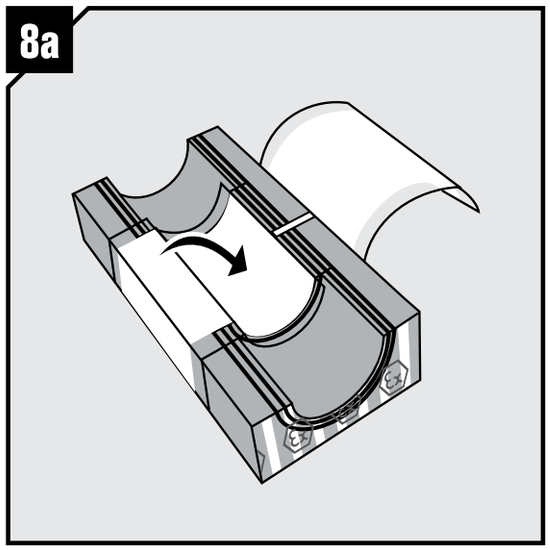
Measure the gap with the Ex Gap Gauge by holding blade one in one gap and checking the other with blade two.



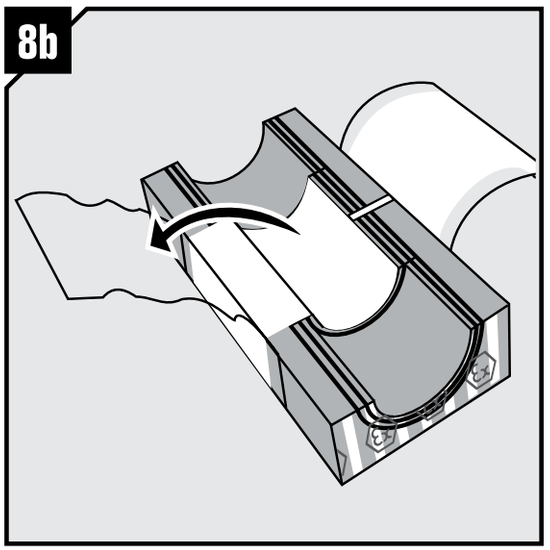
If the gap is too big, the gauge will slip in easily.



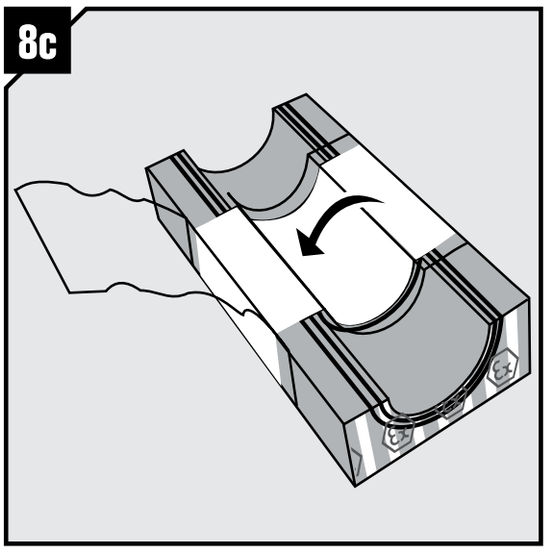
If the gap is correct, there will be no room for blade two.



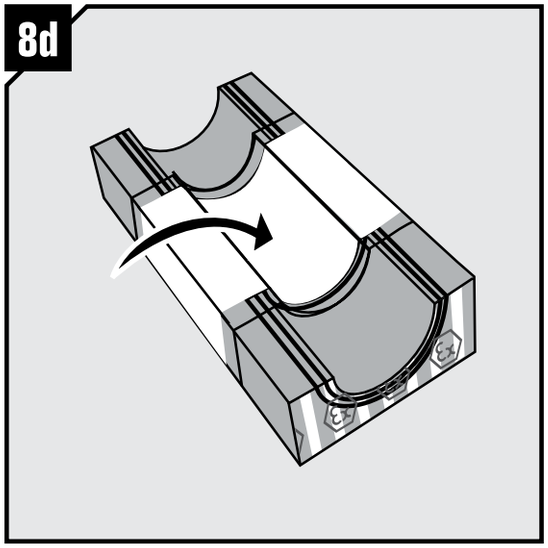
Fold the adhesive tape tightly inside the module half from one side along the inner layers.



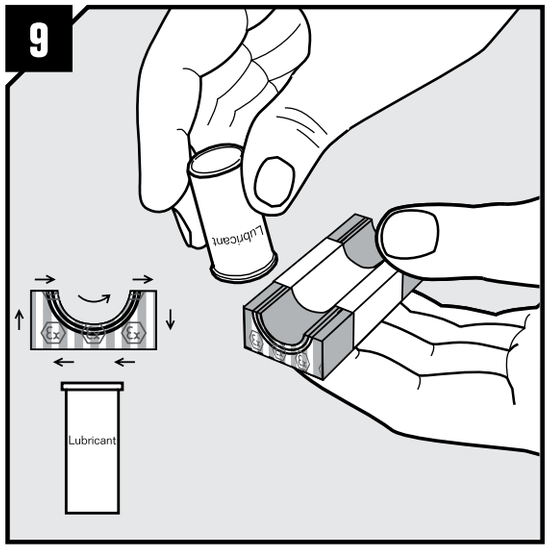
Lift the plastic film from the folded side.



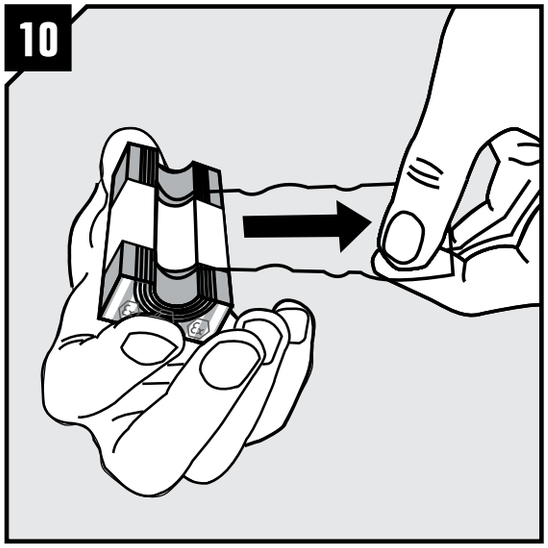
Fold the tape on the other side tightly inside the module half. There must be no air-pockets.



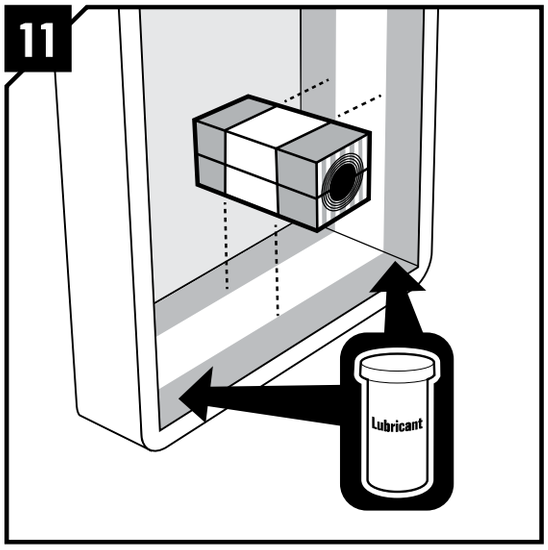
Fold the plastic film back inside the module half.



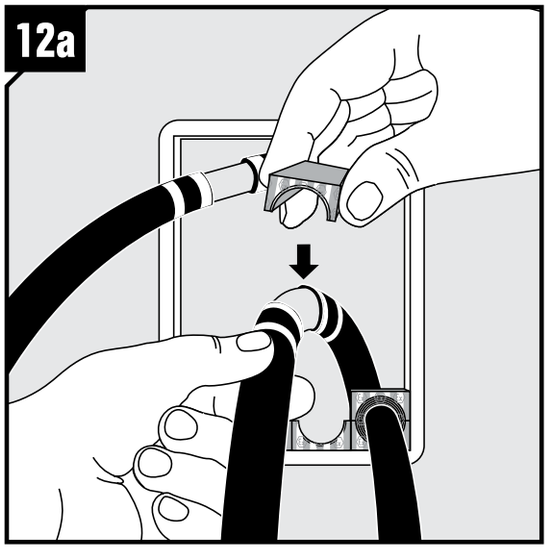
Lubricate all modules sparsely with Roxtec Lubricant on inside and outside rubber surfaces only. Do not lubricate the film.



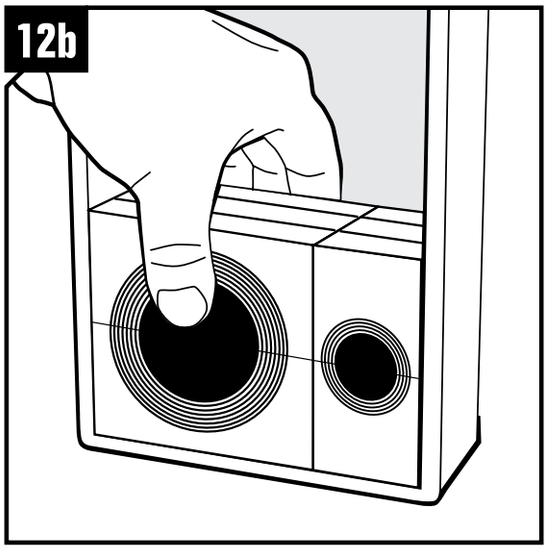
Remove the plastic film! Keep the tape clean. **Note:** Plastic must be removed on spares as well.



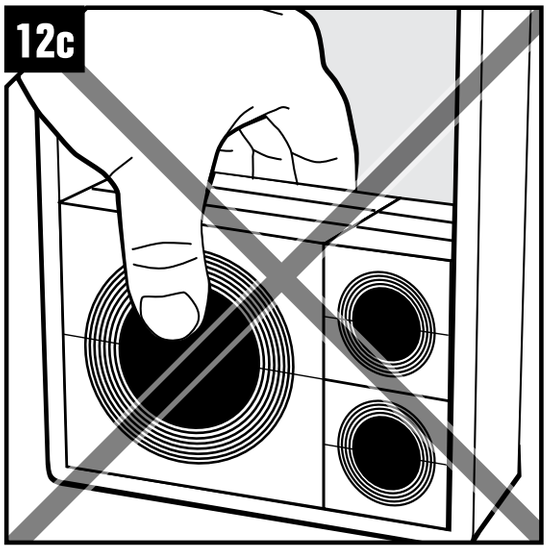
Lubricate the frame and its corners on the areas that will be in contact with the rubber of the modules. Do not lubricate the areas that will be in contact with the tape.



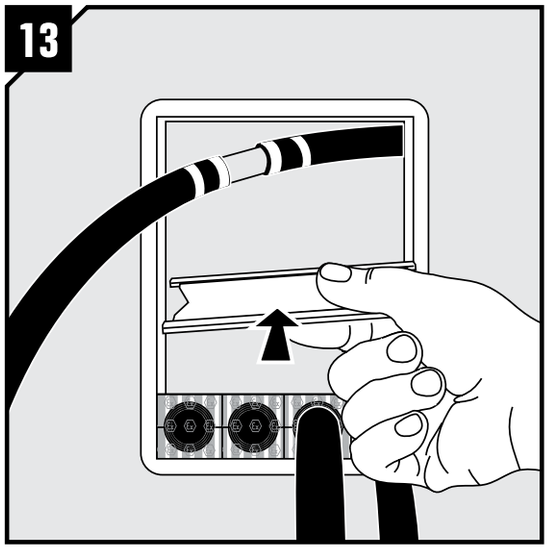
Place cables, according to your transit plan, in the module halves. Place corresponding module half directly on top. Do not slide them in.



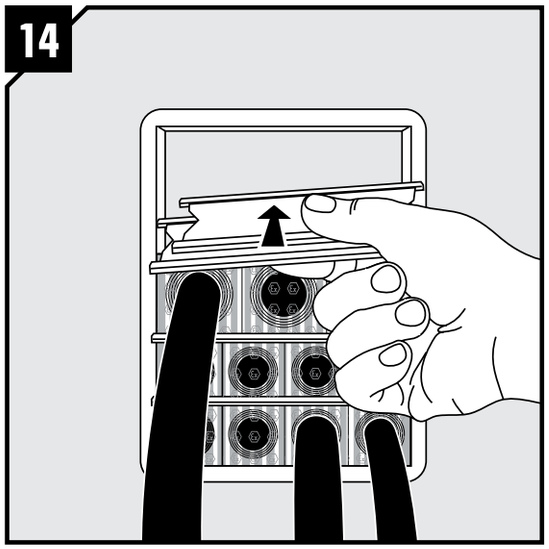
When inserting larger modules, pay attention so that every row of modules is separated by a stayplate.



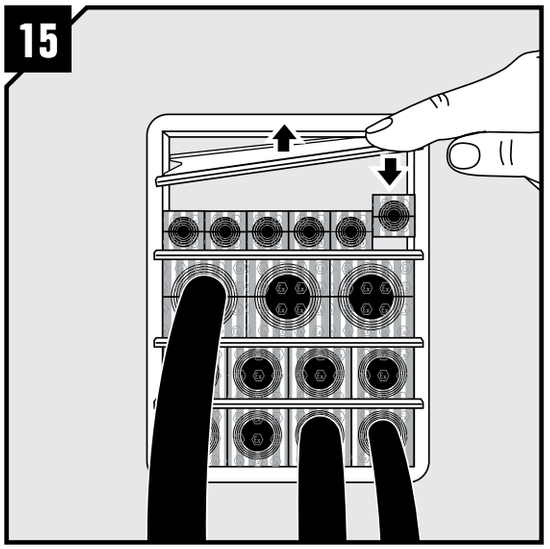
It is not permitted to stack smaller modules on top of each other.



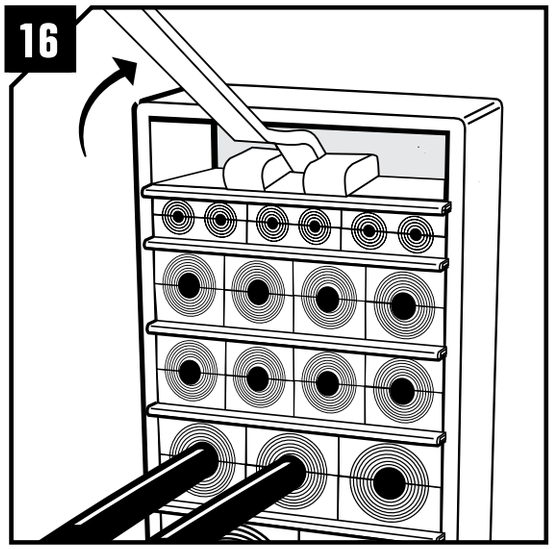
Insert a stayplate on top of every finished row of modules. Make sure the stayplate is clean.



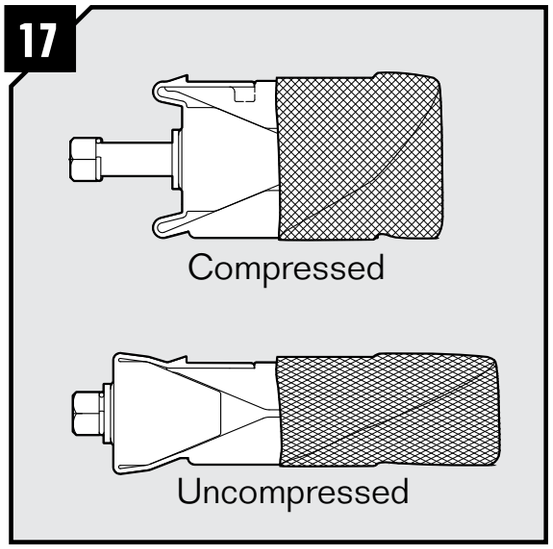
Before inserting the final row of modules, insert two stayplates together.



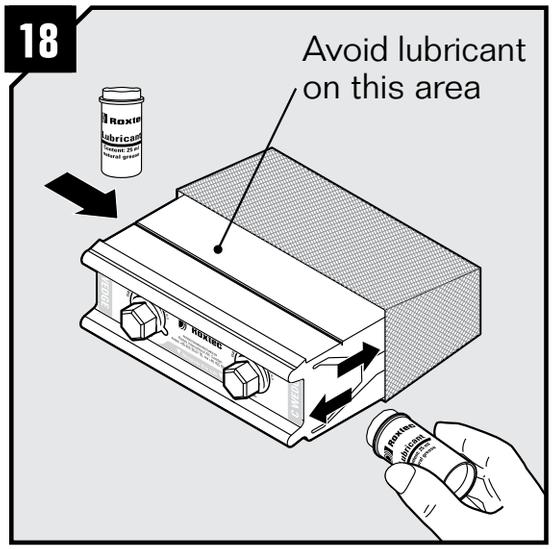
Separate the two stayplates and insert the final row of modules between the stayplates.



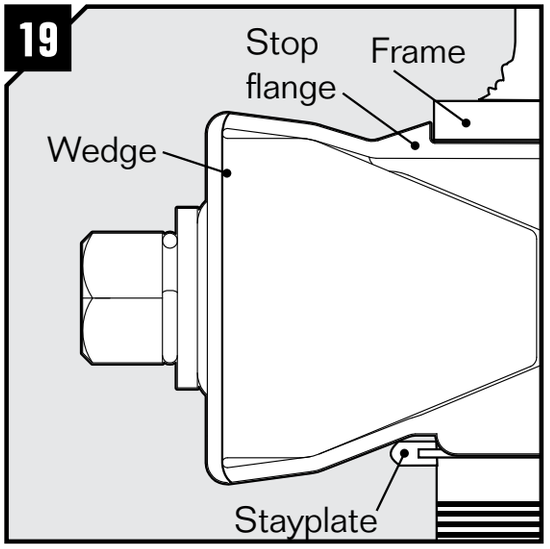
If there is not enough room for the EMC wedge, insert the optional Roxtec pre-compression tool.



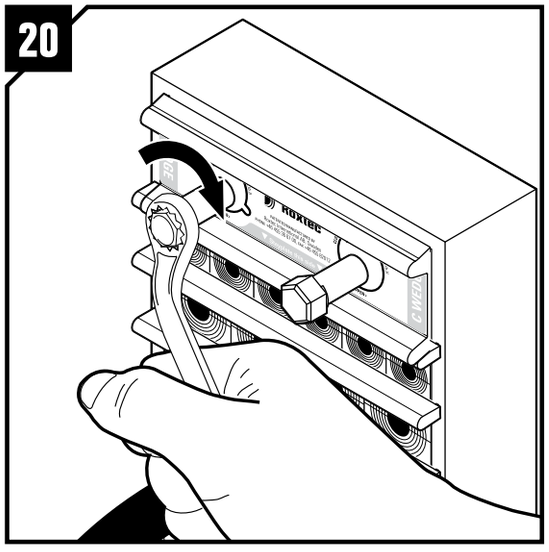
Ensure that the EMC wedge is fully uncompressed by untightening the screws of the wedge before inserting it.



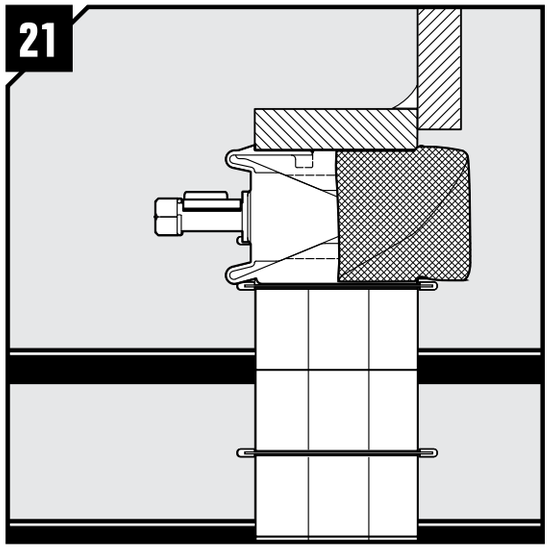
Lubricate the short sides of the EMC wedge only.

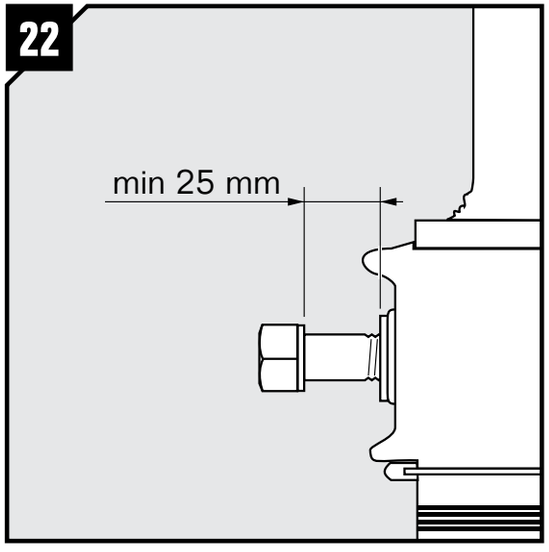


Orientate the EMC wedge so the face marked “Stayplate this side” faces a stayplate. Insert the wedge to the stop flange. Ensure that the wedge is accommodated and secured by the stayplate.

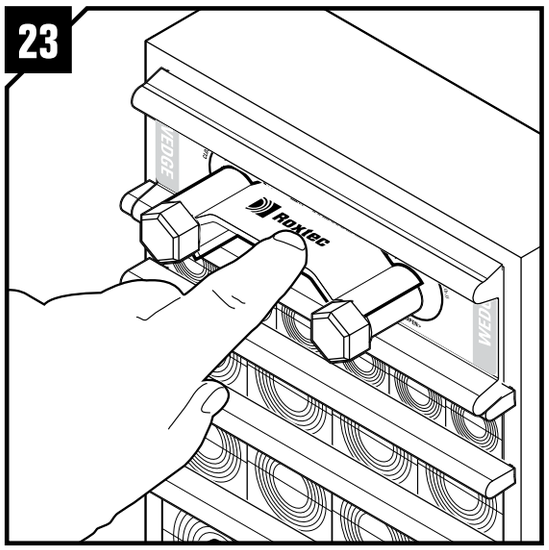


Tighten the screws alternately until full stop, approx 20 Nm (15 ft.lb.).

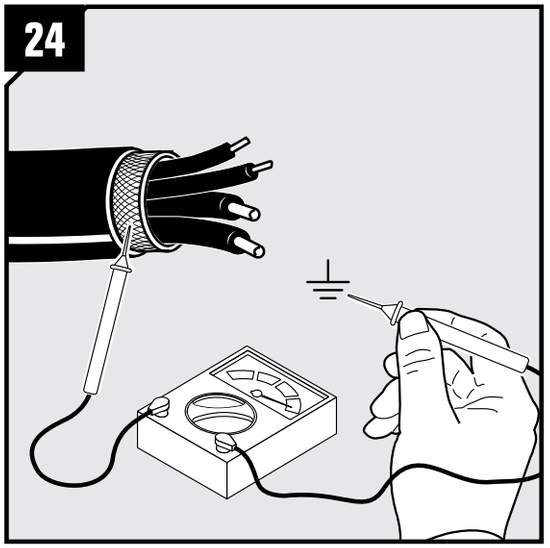




25 mm of the screws shall be exposed.



Attach the Wedge Clip to the EMC wedge screws to complete the installation.



Verify earth continuity from each cable armor/screen to earth. Use a suitable instrument.

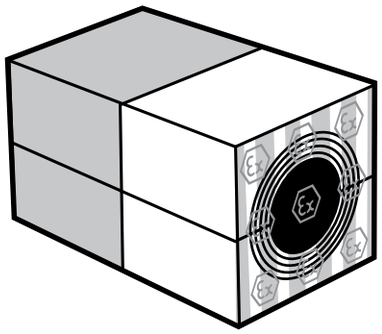
Adaptable Roxtec RM ES Ex modules

Module	Number of cables/pipes	For cable/pipe diameter a-b (mm)	a-b (in)
RM 15 ES Ex	1	0+3.0-11.0	0+0.118-0.433
RM 15w40 ES Ex	3	0+3.5-10.5	0+0.138-0.413
RM 20 ES Ex	1	0+4.0-14.5	0+0.157-0.571
RM 20w40 ES Ex	2	0+3.5-16.5	0+0.138-0.650
RM 30 ES Ex	1	0+10.0-25.0	0+0.394-0.984
RM 30H90 ES Ex	1	0+10.0-25.0	0+0.394-0.984
RM 40 ES Ex	1	0+21.5-34.5	0+0.846-1.358
RM 40 10-32 ES Ex	1	0+9.5-32.5	0+0.374-1.280
RM 40H80 ES Ex	1	0+21.5-34.5	0+0.846-1.358
RM 40 10-32 H80 ES Ex	1	0+9.5-32.5	0+0.374-1.280
RM 60 ES Ex	1	0+28.0-54.0	0+1.102-2.126
RM 60 24-54 ES Ex	1	0+24.0-54.0	0+0.945-2.126
RM 80 ES Ex	1	0+48.0-71.0	0+1.890-2.795
RM 90 ES Ex	1	0+48.0-71.0	0+1.890-2.795
RM 120 ES Ex	1	0+67.5-99.0	0+2.657-3.898
RM 60 ES Ex woc	1	28.0-54.0	1.102-2.216
RM 90 ES Ex woc	1	48.0-71.0	1.890-2.795
RM 120 ES Ex woc	1	67.5-99.0	2.657-3.898

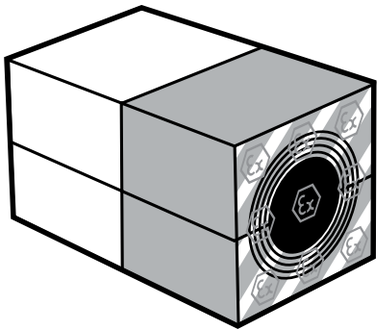
woc = without core

Solid compensation Roxtec RM ES Ex modules

Module
RM 5/0x24 ES Ex
RM 10/0x12 ES Ex
RM 15/0 ES Ex
RM 20/0 ES Ex
RM 30/0 ES Ex
RM 30H90/0 ES Ex
RM 40/0 ES Ex
RM 40H80/0 ES Ex
RM 60/0 ES Ex

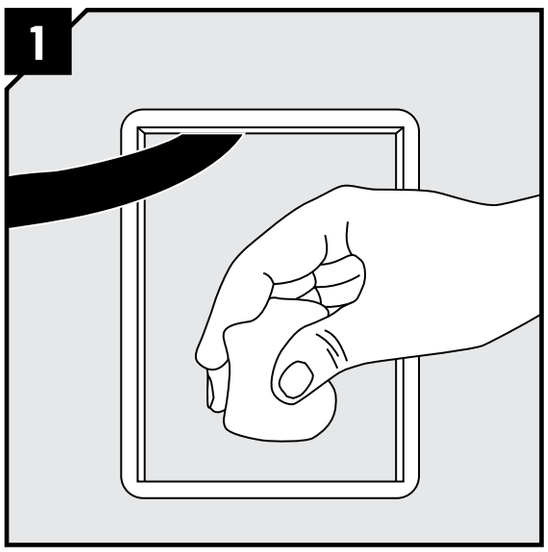


White vertical stripes
EMC side

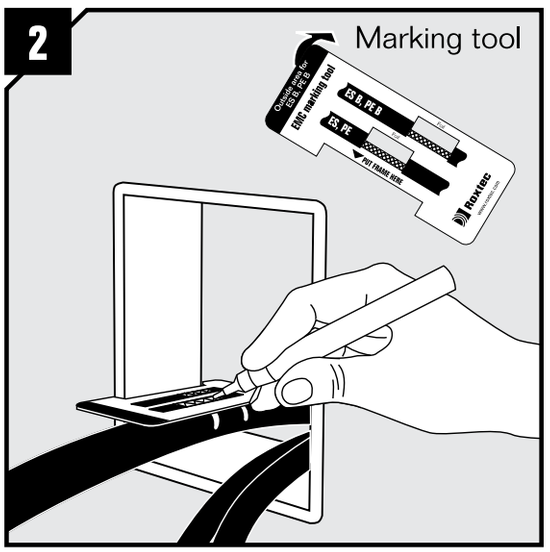


White diagonal stripes
Environmental side

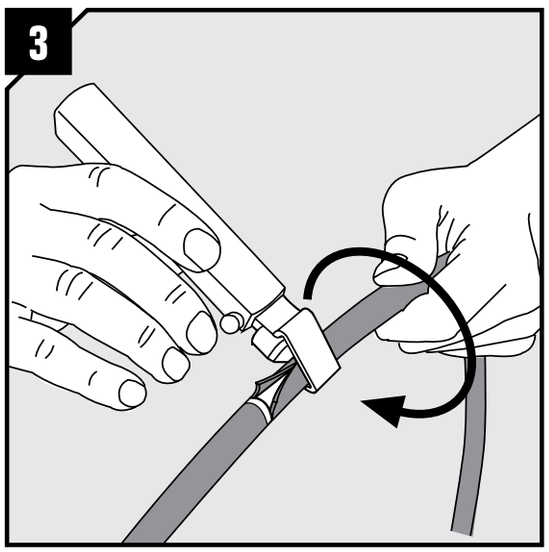
An RM ES B Ex module provides EMC protection at one end and environmental protection at the other.



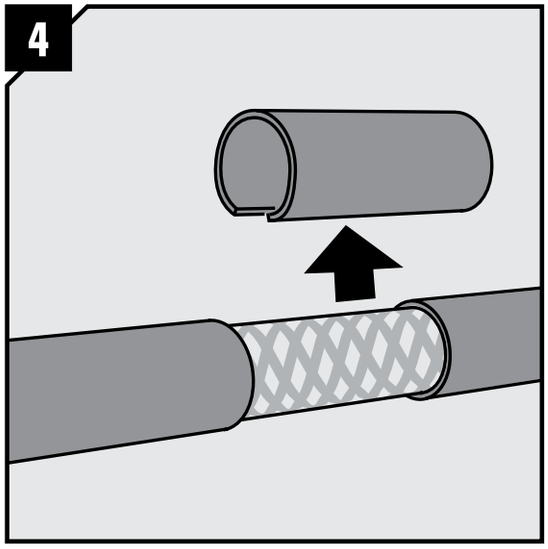
Clean the empty frame from paint, dirt, etc. to secure good electrical conductivity.



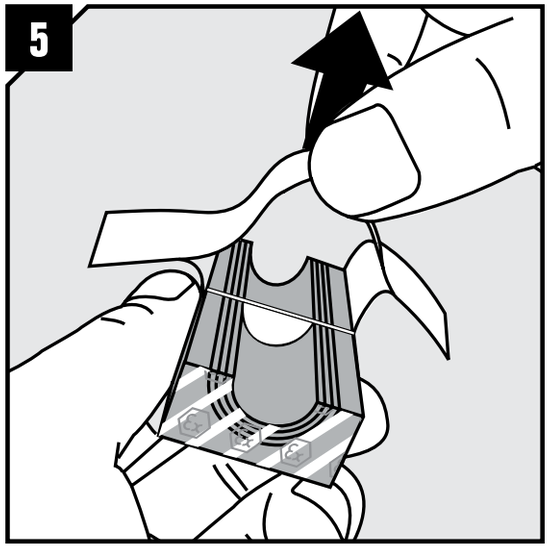
On the cable, mark the module position and where the outer sheath is to be removed.



Cut the outer sheath with a tool of your choice. Make sure not to damage the cable screen.



Remove the outer sheath and any plastic foil. Make sure cable screen is clean.



Remove the protection paper from the modules and fold back the tape. It is not necessary to remove the paper from spare modules.

Fig 1

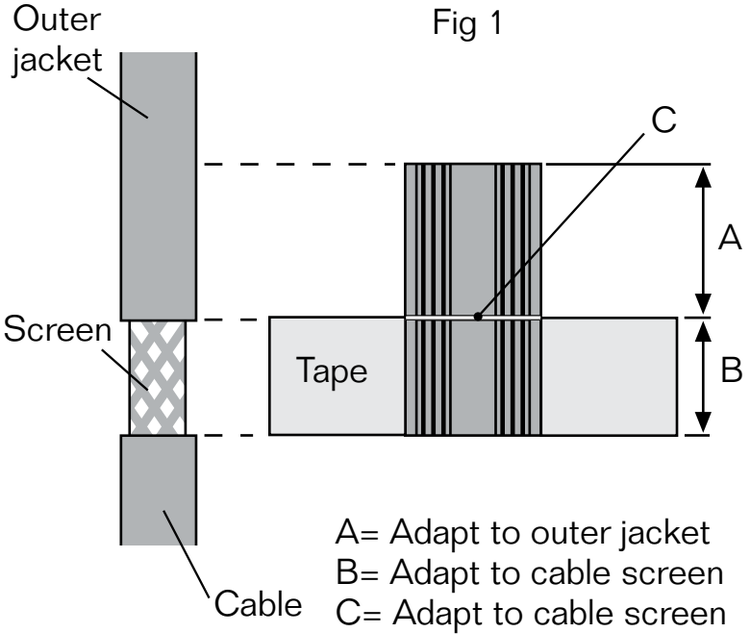
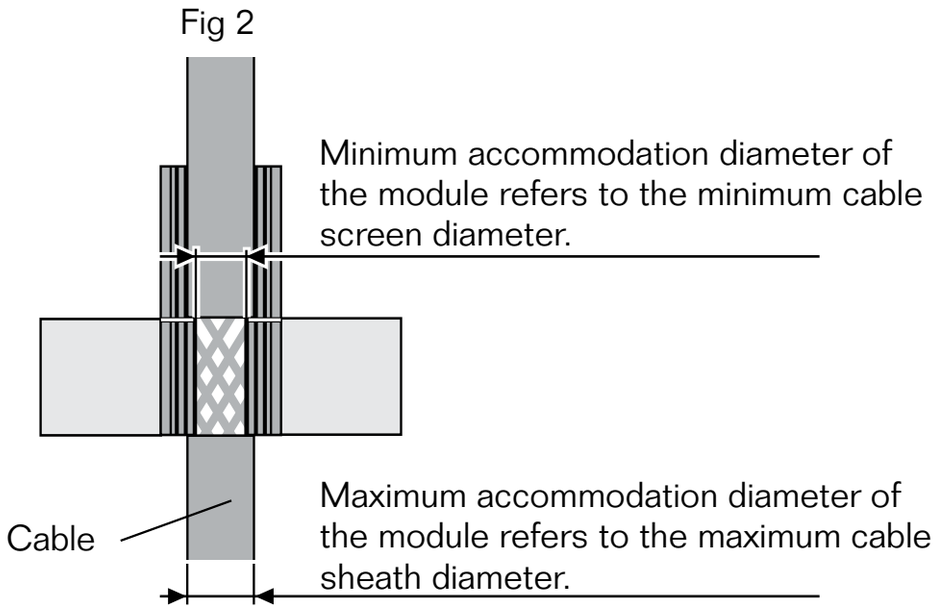
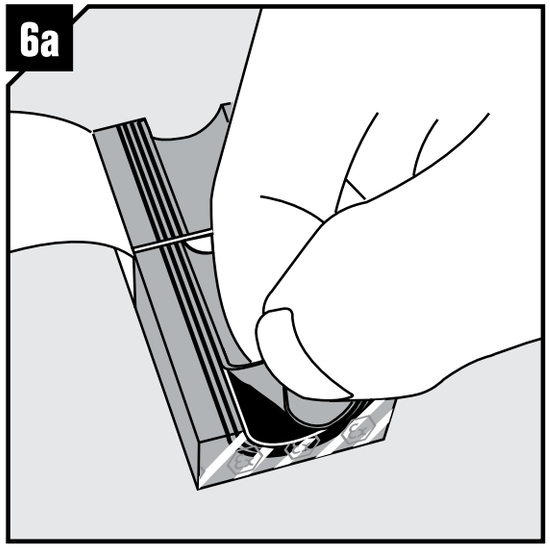
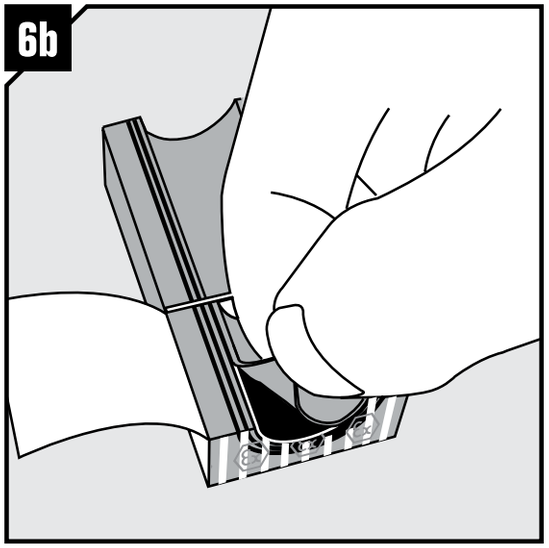


Fig 2

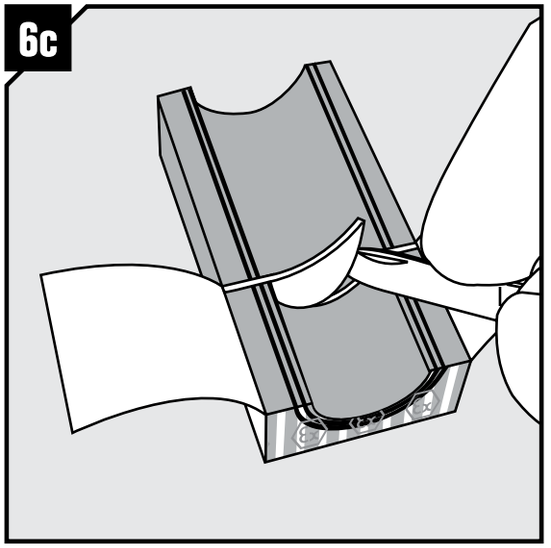




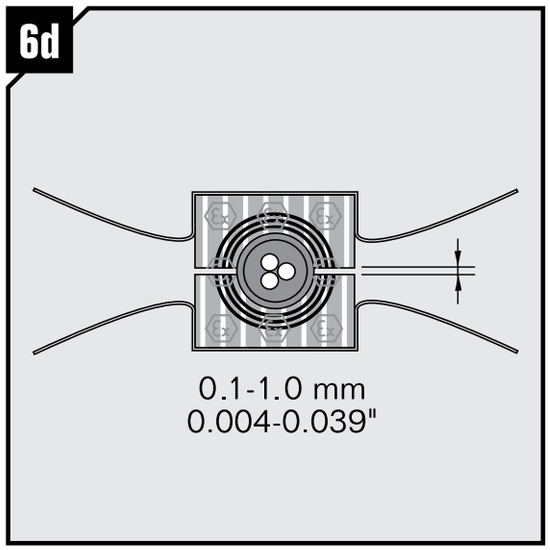
Adapt layers to fit outer jacket. (Fig 1:A).



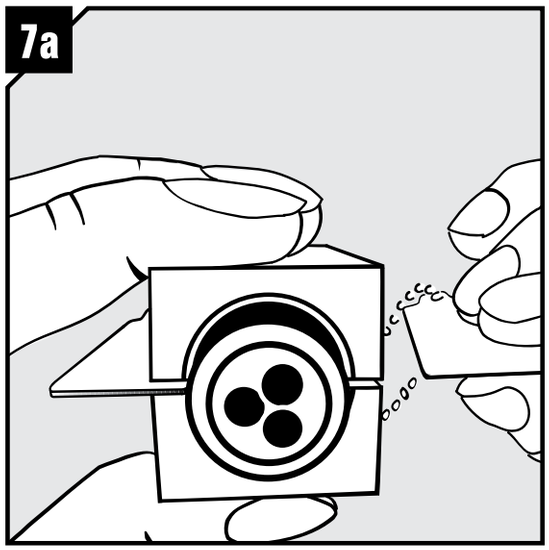
Adapt layers to fit cable screen. (Fig 1:B).



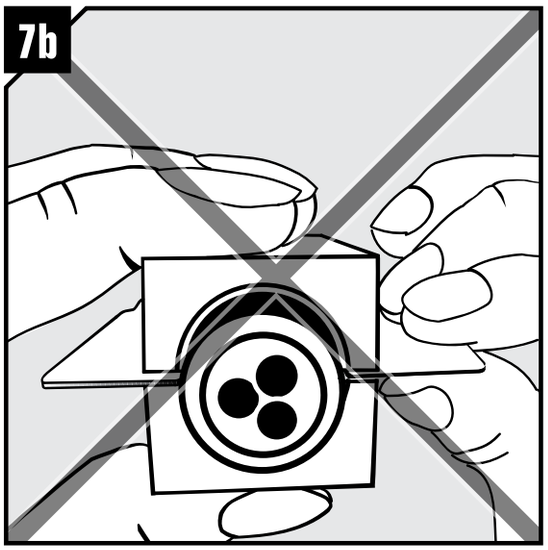
Adapt vertical screen to fit cable screen. (Fig 1:C).



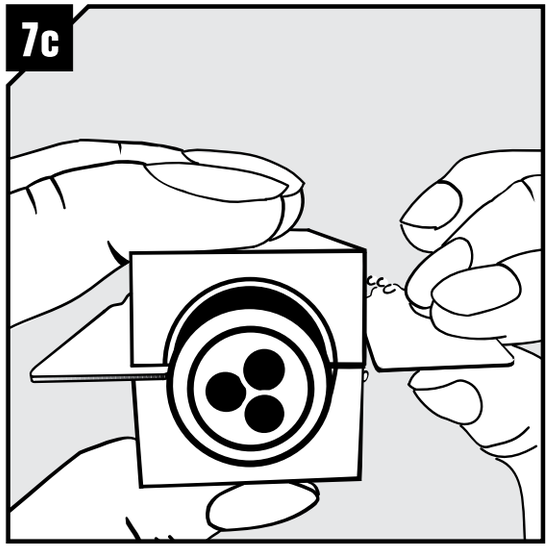
When checking without the gauges there shall be a gap of 0.1-1.0 mm (0.004”-0.039”). If not, repeat 6a-c. The halves may not differ by more than one layer. Make sure the screen is in good contact with the module.



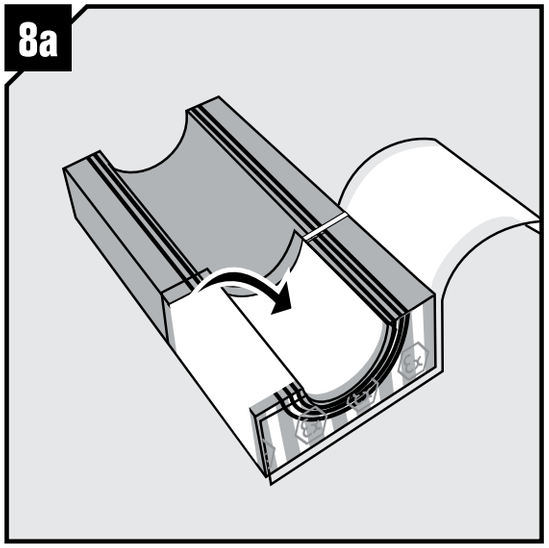
Measure the gap with the Ex Gap Gauge by holding blade one in one gap and checking the other with blade two.



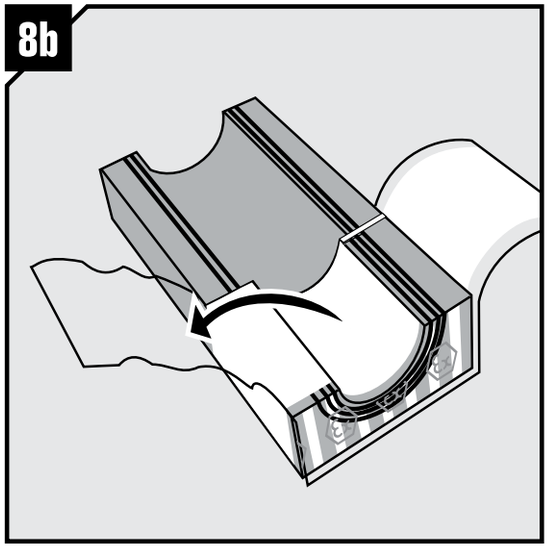
If the gap is too big, the gauge will slip in easily.



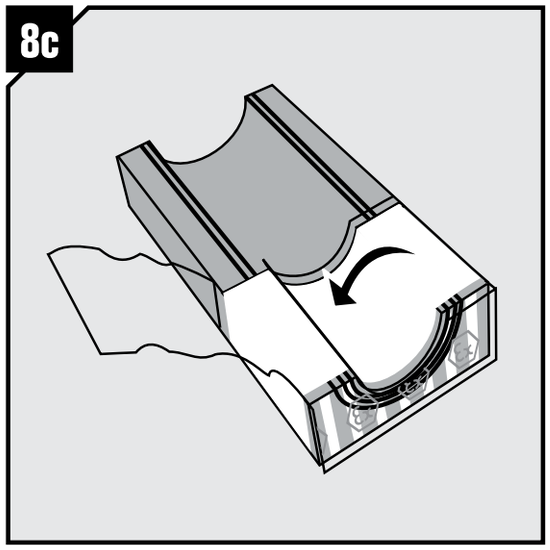
If the gap is correct, there will be no room for blade two.



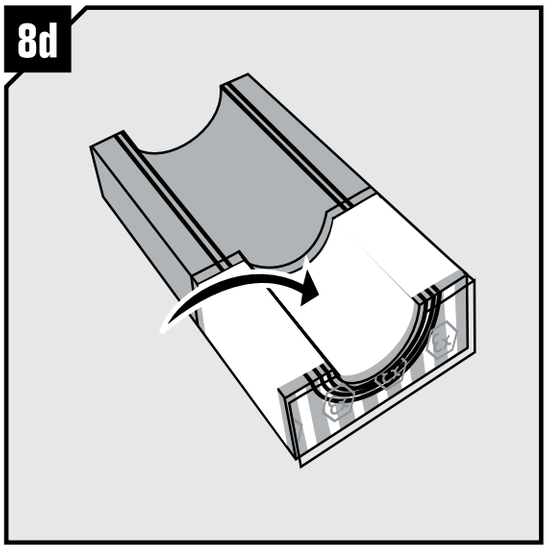
Fold the adhesive tape tightly inside the module half from one side along the inner layers.



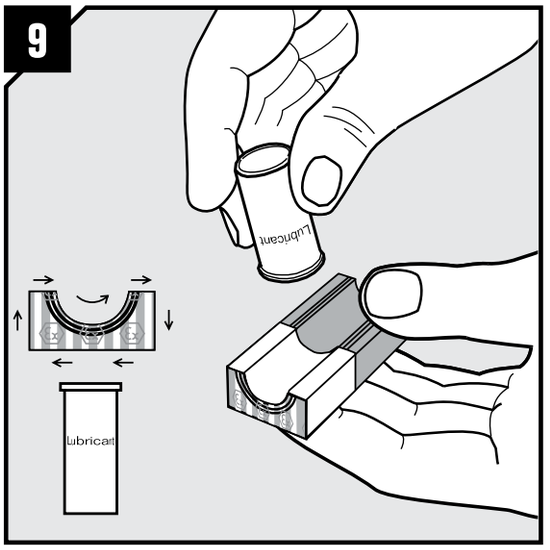
Lift the plastic film from the folded side.



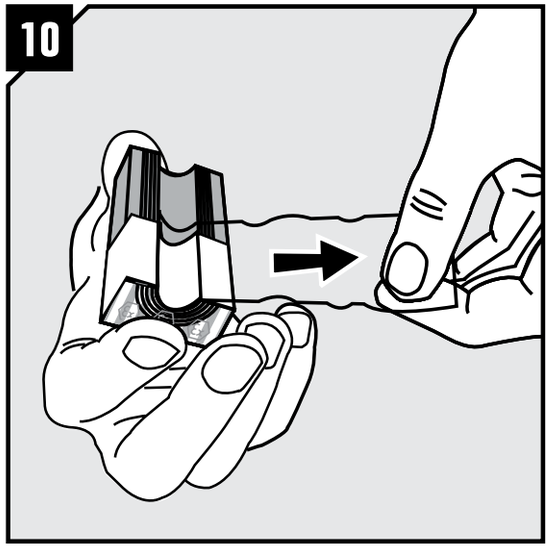
Fold the tape on the other side tightly inside the module half. There must be no air-pockets.



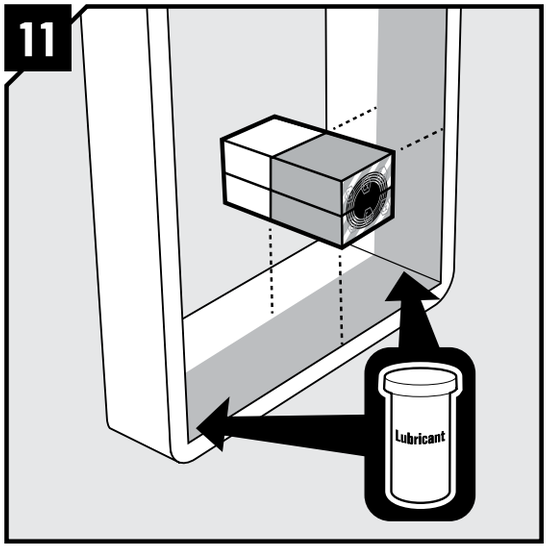
Fold the plastic film back inside the module half.



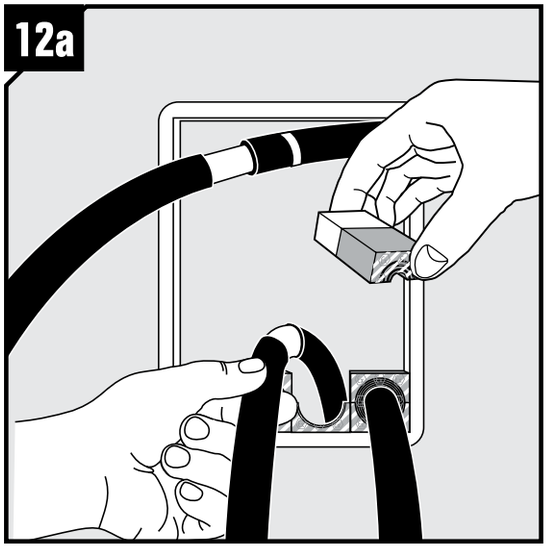
Lubricate all modules sparsely with Roxtec Lubricant on inside and outside rubber surfaces only. Do not lubricate the film.



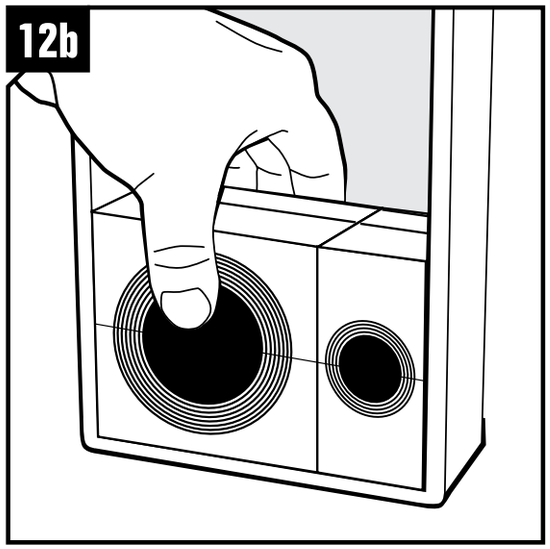
Remove the plastic film! Keep the tape clean. **Note:** Plastic film and paper must be removed on spares and solid modules.

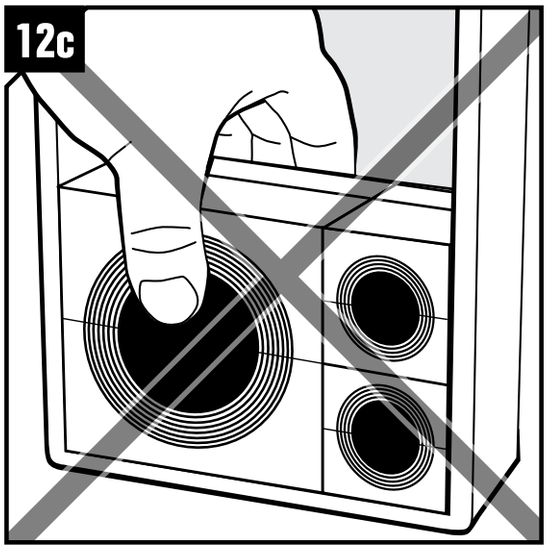


Lubricate the frame and its corners on the areas that will be in contact with the rubber of the modules. Do not lubricate the areas that will be in contact with the tape.

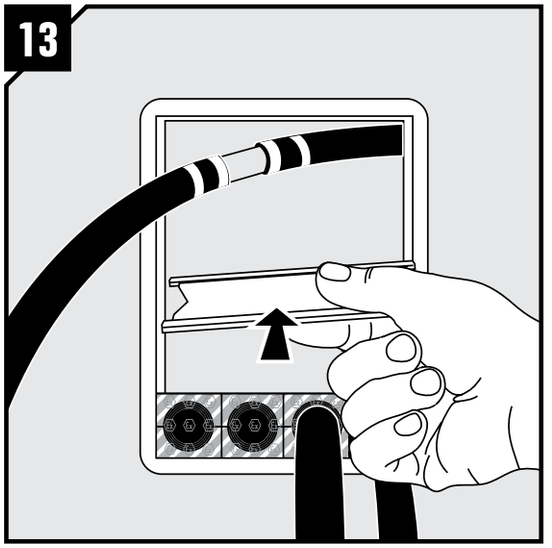


Place cables, according to your transit plan, in the module halves. Place corresponding module half directly on top. Do not slide them in.



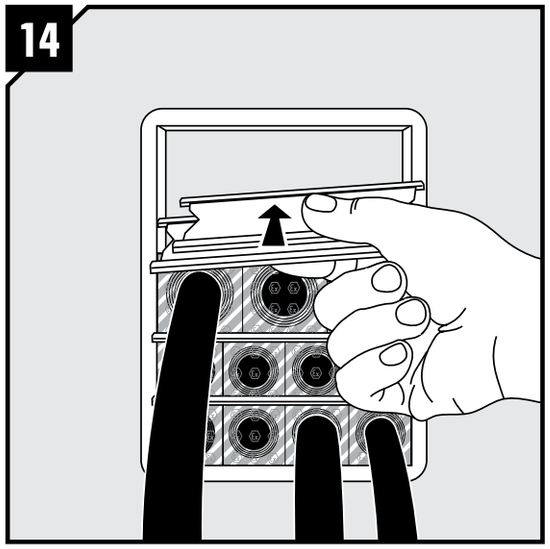


When inserting larger modules, pay attention so that every row of modules is separated by a stayplate. It is not permitted to stack smaller modules on top of each other.



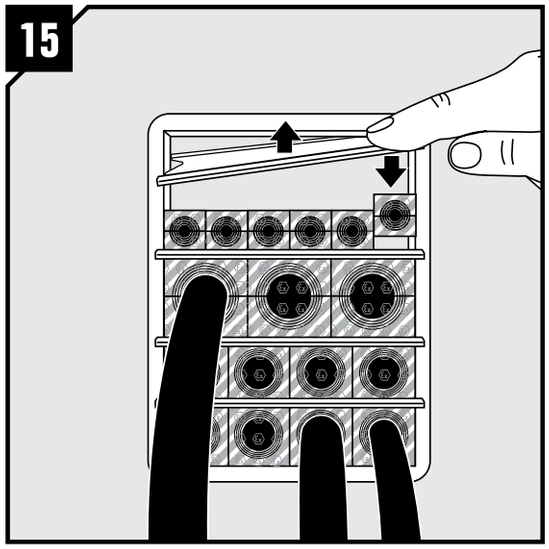
Insert a stayplate on top of every finished row of modules. Make sure the stayplate is clean.

14



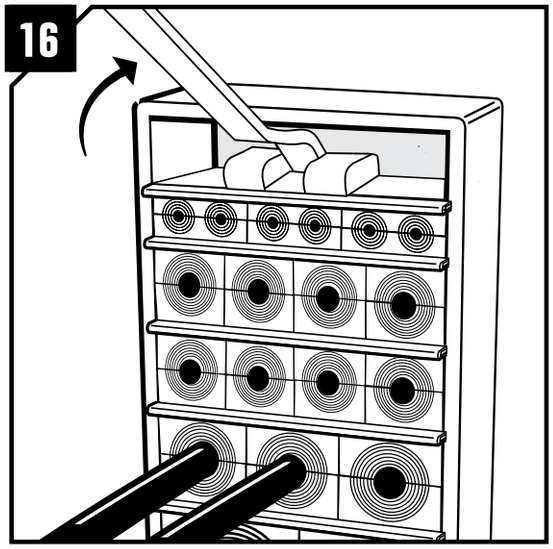
Before inserting the final row of modules, insert two stayplates together.

15



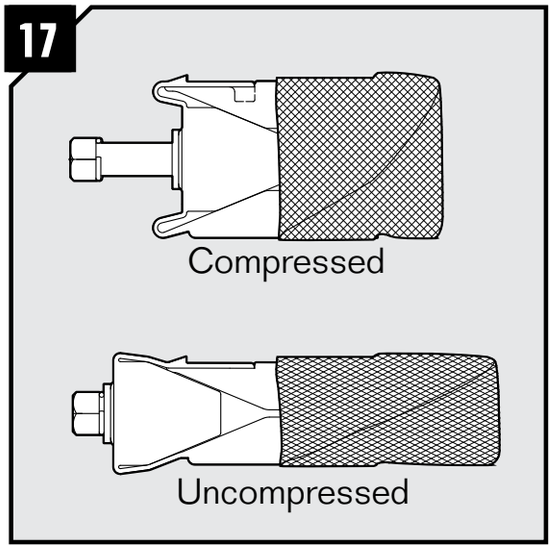
Separate the two stayplates and insert the final row of modules between the stayplates.

16



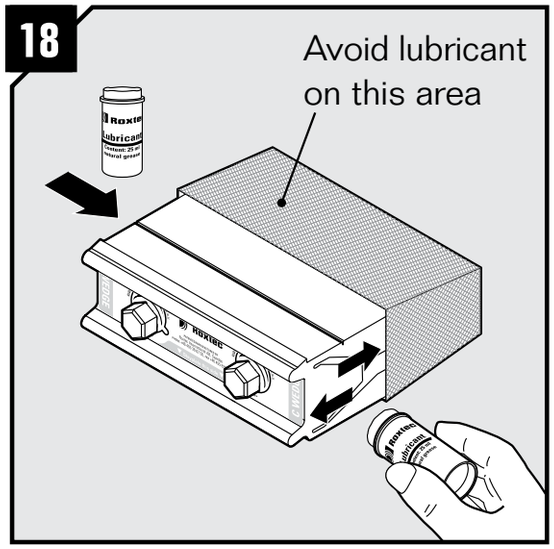
If there is not enough room for the EMC wedge, insert the optional Roxtec pre-compression tool.

17



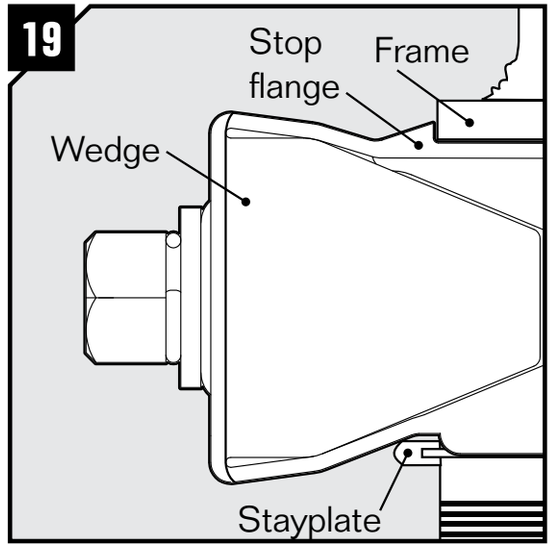
Ensure that the EMC wedge is fully uncompressed by untightening the screws of the wedge before inserting it.

18

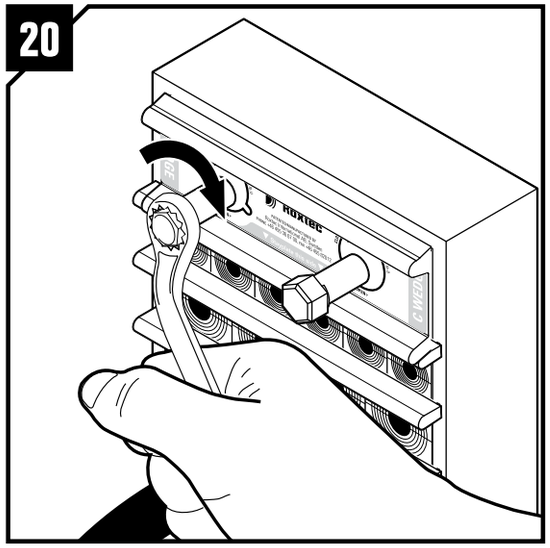


Lubricate the short sides of the EMC wedge only.

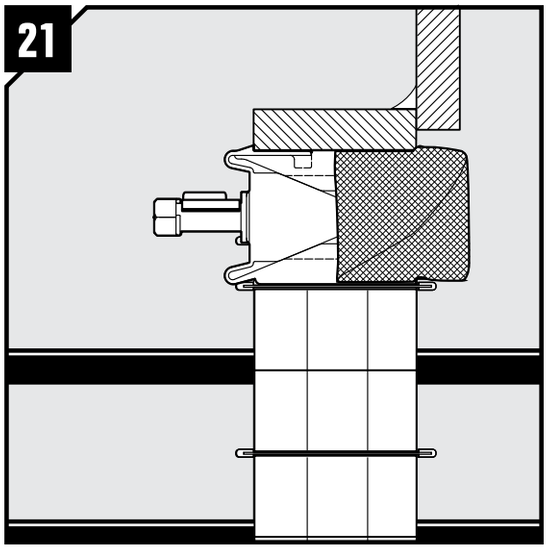
19

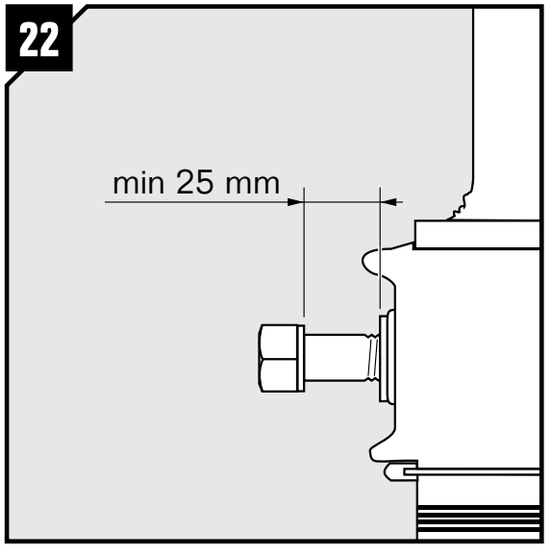


Orientate the EMC wedge so the face marked “Stayplate this side”faces a stayplate. Insert the wedge to the stop flange. Ensure that the wedge is accommodated and secured by the stayplate.

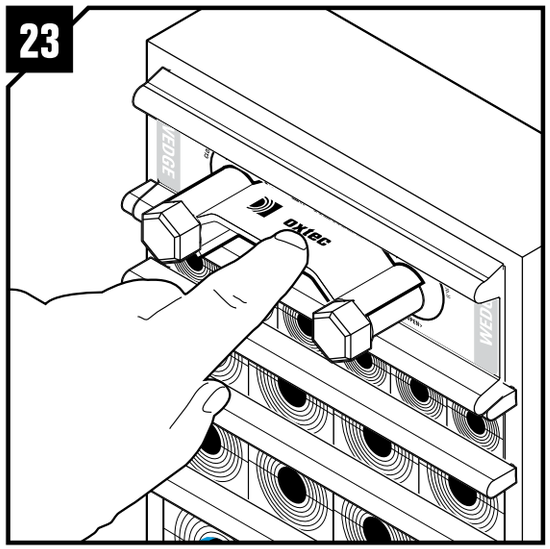


Tighten the screws alternately until full stop, approx 20 Nm (15 ft.lb.).

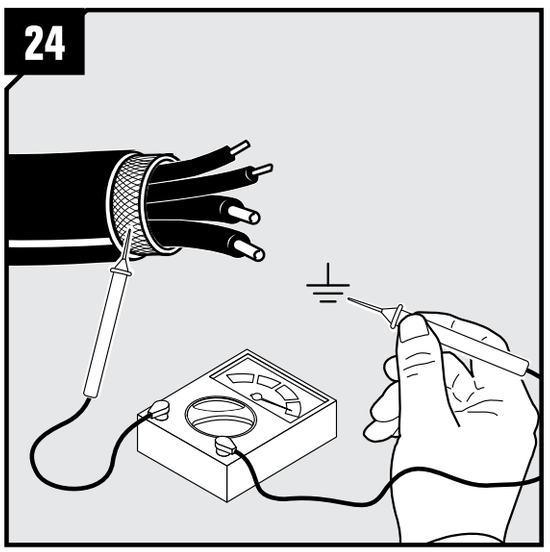




25 mm of the screws shall be exposed.



Attach the Wedge Clip to the EMC wedge screws to complete the installation.



Verify earth continuity from each cable armor/screen to earth. Use a suitable instrument.

Adaptable Roxtec RM ES B Ex modules

Module	Number of cables/pipes	For cable/pipe diameter a-b (mm)	a-b (in)
RM 15 ES B Ex	1	0+3.0-11.0	0+0.118-0.433
RM 15w40 ES B Ex	3	0+3.5-10.5	0+0.138-0.413
RM 20 ES B Ex	1	0+4.0-14.5	0+0.157-0.571
RM 20w40 ES B Ex	2	0+3.5-16.5	0+0.138-0.650
RM 30 ES B Ex	1	0+10.0-25.0	0+0.394-0.984
RM 30H90 ES B Ex	1	0+10.0-25.0	0+0.394-0.984
RM 40 ES B Ex	1	0+21.5-34.5	0+0.846-1.358
RM 40 10-32 ES B Ex	1	0+9.5-32.5	0+0.374-1.280
RM 40H80 ES B Ex	1	0+21.5-34.5	0+0.846-1.358
RM 40 10-32 H80 ES B Ex	1	0+9.5-32.5	0+0.374-1.280
RM 60 ES B Ex	1	0+28.0-54.0	0+1.102-2.126
RM 60 24-54 ES B Ex	1	0+24.0-54.0	0+0.945-2.126
RM 80 ES B Ex	1	0+48.0-71.0	0+1.890-2.795
RM 90 ES B Ex	1	0+48.0-71.0	0+1.890-2.795
RM 120 ES B Ex	1	0+67.5-99.0	0+2.657-3.898
RM 60 ES B Ex woc	1	28.0-54.0	1.102-2.216
RM 80 ES B Ex woc	1	48.0-71.0	1.890-2.795
RM 90 ES B Ex woc	1	48.0-71.0	1.890-2.795
RM 120 ES B Ex woc	1	67.5-99.0	2.657-3.898

woc = without core

Solid compensation Roxtec RM ES B Ex modules

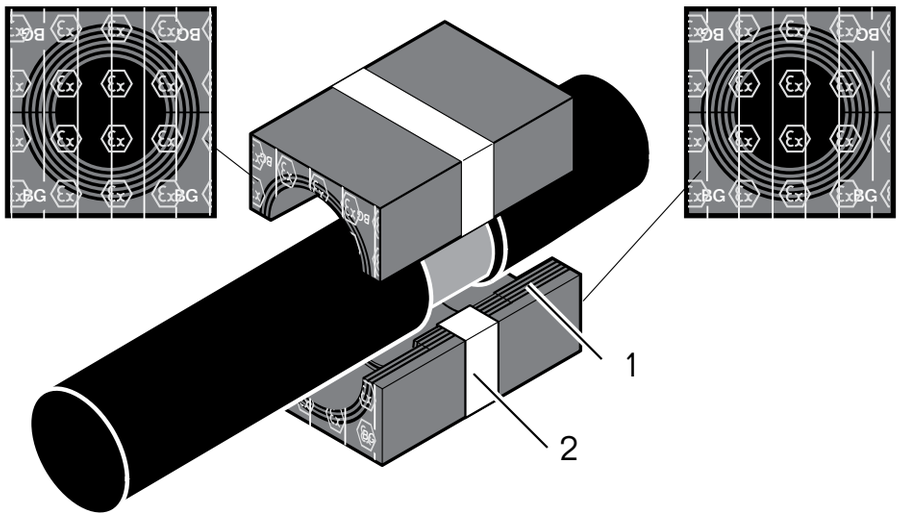
Module
RM 5/0x24 ES B Ex
RM 10/0x12 ES B Ex
RM 15/0 ES B Ex
RM 20/0 ES B Ex
RM 30/0 ES B Ex
RM 30H90/0 ES B Ex
RM 40/0 ES B Ex
RM 40H80/0 ES B Ex
RM 60/0 ES B Ex

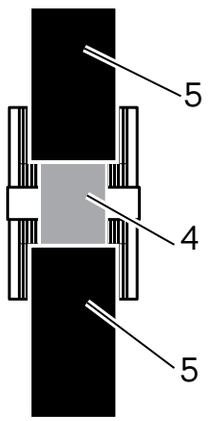
Integrated environmental sealing system for bonding and grounding applications. For use with armored/ shielded jacketed cables including smooth and corrugated cables such as interlocked and continuous welded metal clad cables or wired and braided cables.
In hazardous areas where the ATEX directive or IECEx scheme is applied, sealing modules of type Roxtec RM BG™ Ex are approved for use within cable transit devices of types S-, G-, G...W-, SF-, SF...W-, S...WM-, G BG-, SF BG Ex.

Cable positions in a Roxtec RM BG™ Ex module

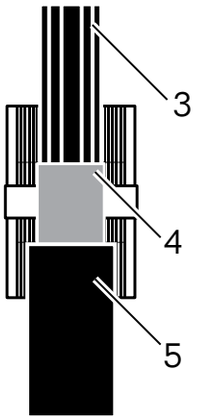
Environmental/ termination side

Environmental/ termination side



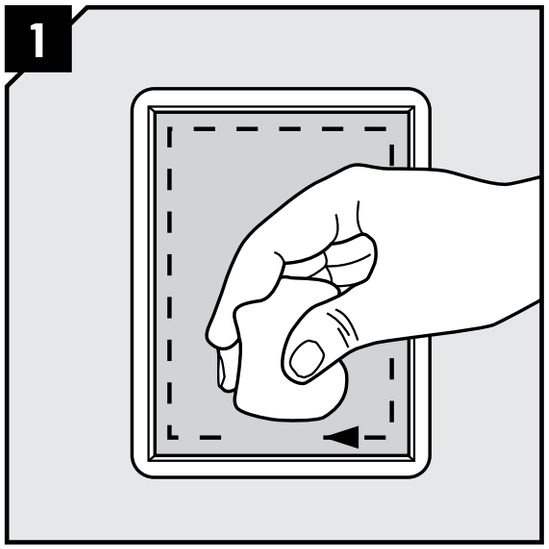


Alternative 1

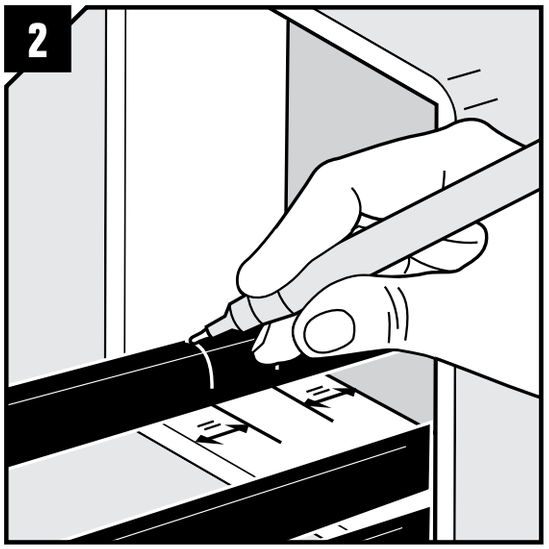


Alternative 2

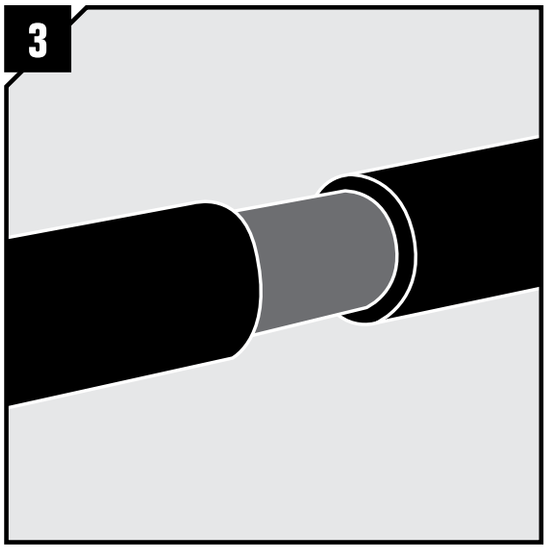
1. Multidiameter™ – adapts to cables and pipes of different sizes through removable layers
2. Bonding/grounding braid
3. Conductors
4. Cable armor/shield
5. Outer jacket



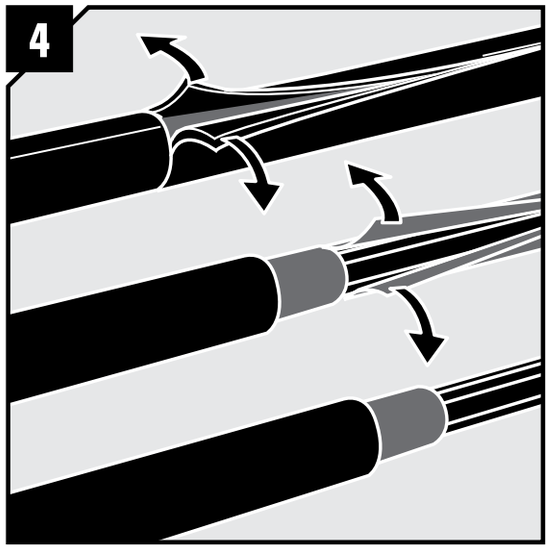
Clean the empty frame from paint, dirt, etc, to secure good electrical conductivity.



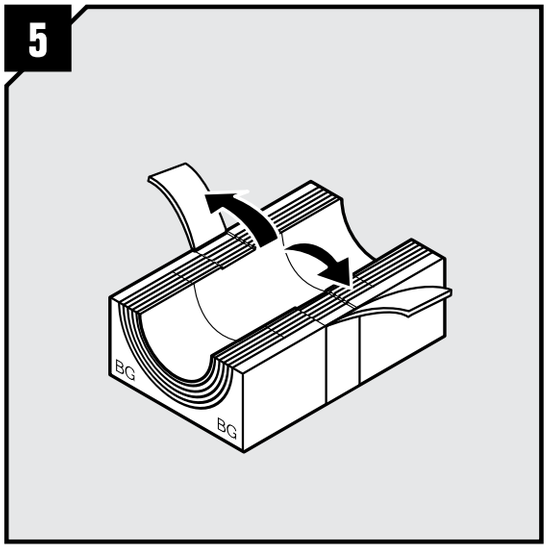
On the cable, mark where outer jacket and armor, if applicable, are to be removed (see alternatives 1 or 2).



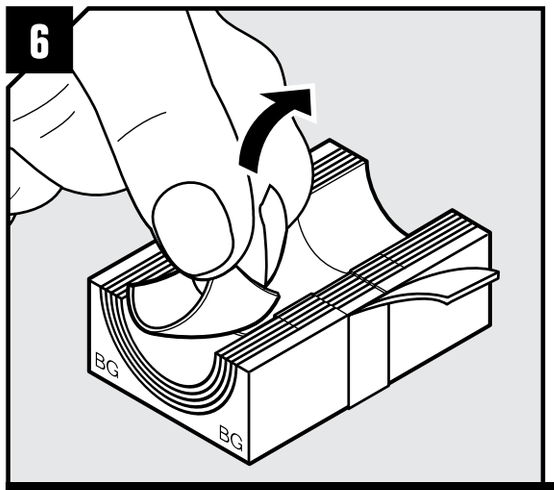
Alternative 1: Remove a length of outer jacket to accommodate the module braid to ensure full conductivity. Remove any protection tape or plastic if applicable.



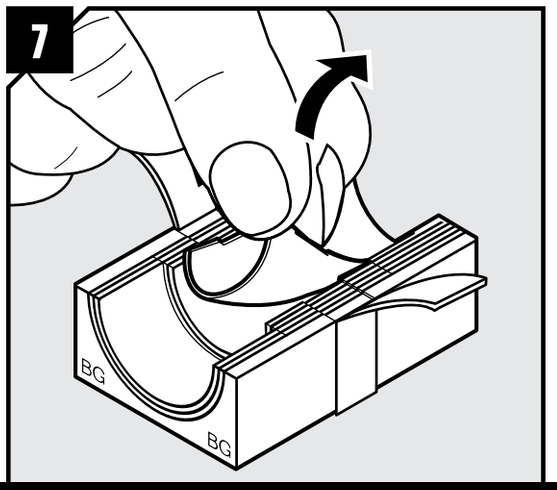
Alternative 2: Remove a length of outer jacket to accommodate the module braid to ensure full conductivity. Remove any protection tape or plastic if applicable.



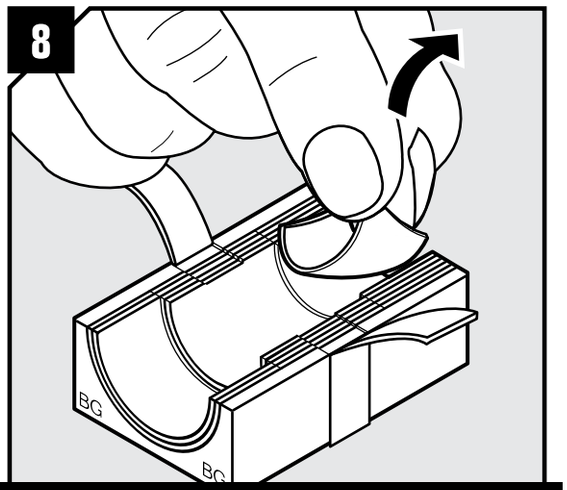
Remove the core and fold back the braid on modules.



Adapt layers on both module halves to fit outer jacket.

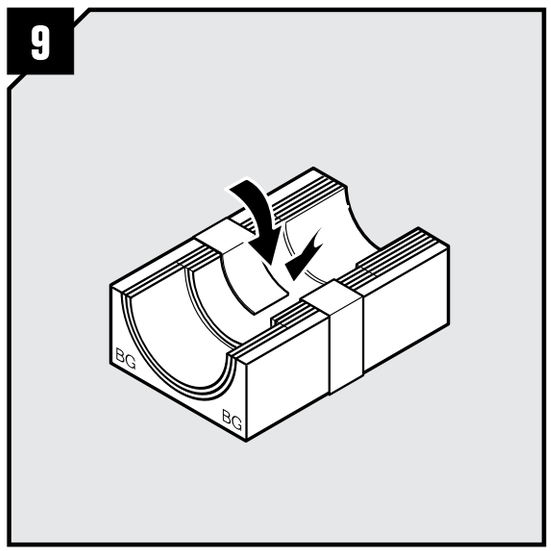


Adapt layers on both module halves to fit cable screen/armor.

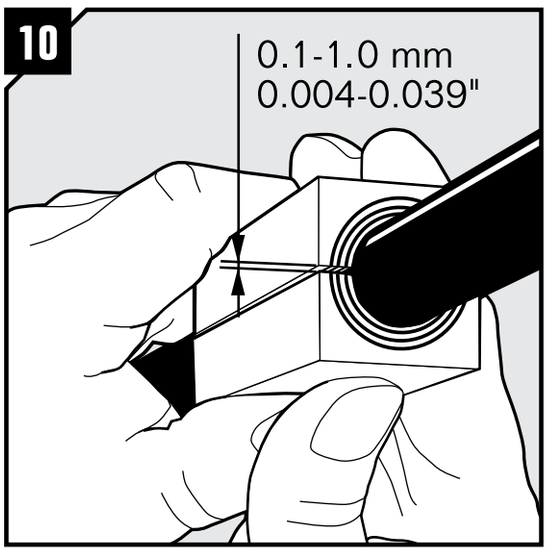


For alternative 1: Adapt layers on both module halves to fit outer jacket.
For alternative 2: Adapt layers on both module halves to fit inner conductors.

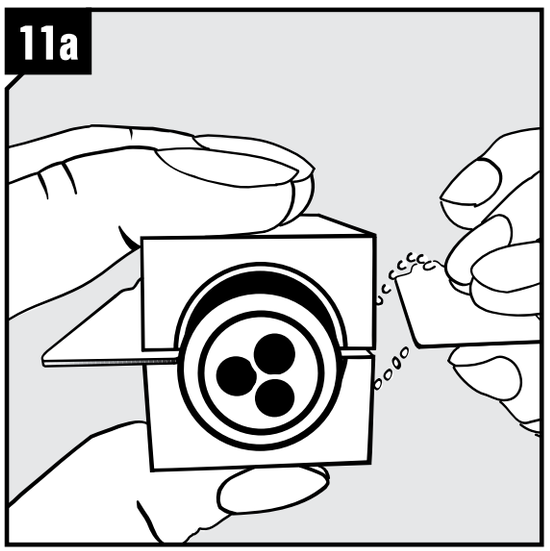
NOTE: The halves may not differ by more than one layer.



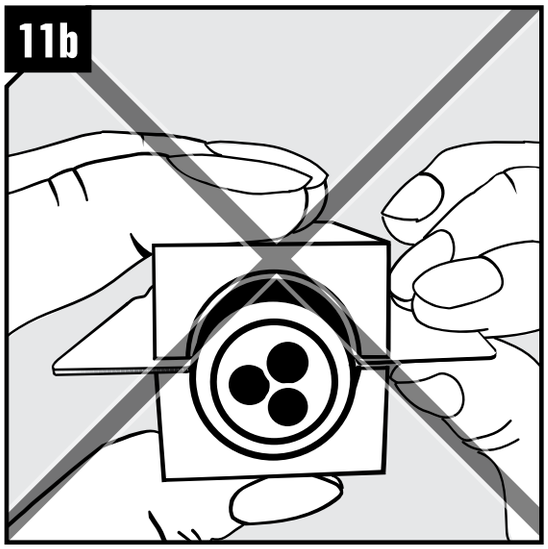
Fold the braid tightly inside the module.



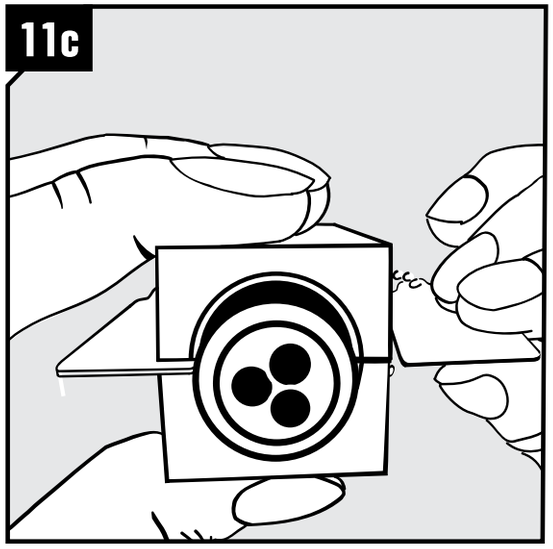
Achieve a 0.1-1.0 mm gap between the two halves when held against the cable/pipe.



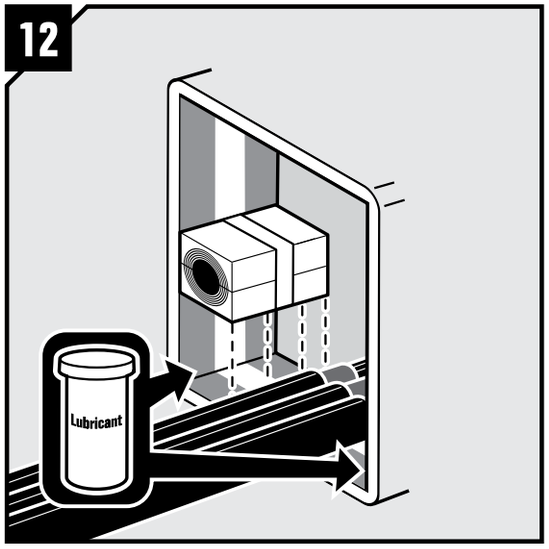
Measure the gap with the Ex Gap Gauge by holding blade one in one gap and checking the other with blade two.



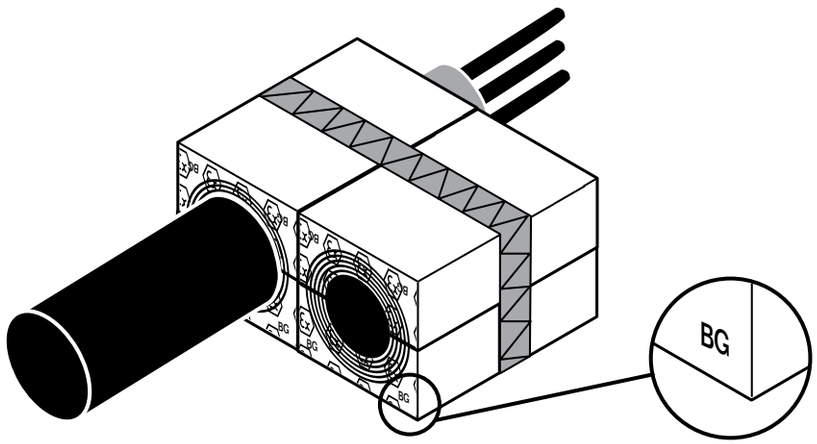
If the gap is too big, the Gauge will slip in easily.



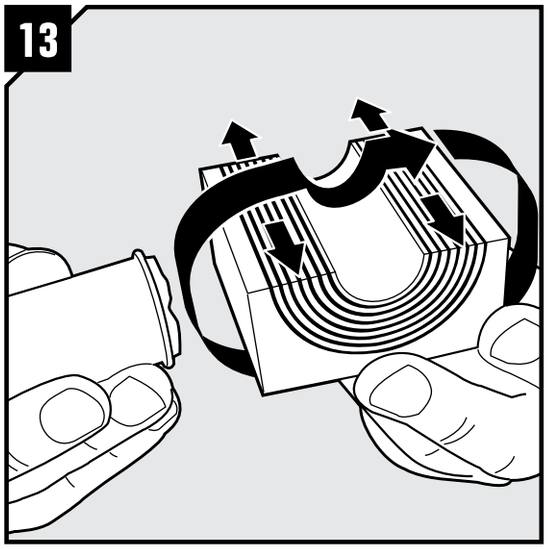
If the gap is correct, there will be no room for blade two.



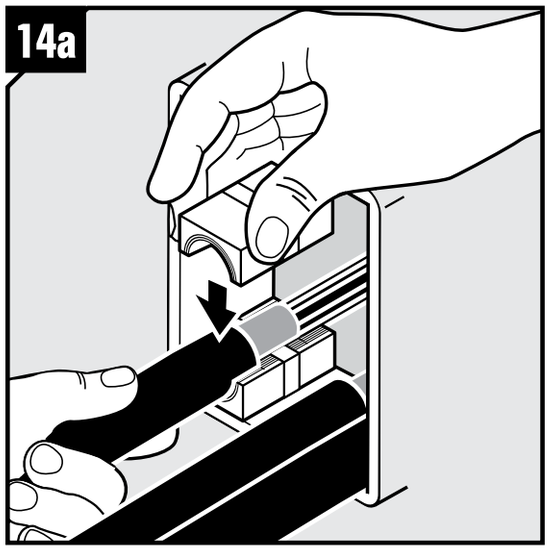
Lubricate the frame and the areas that will be in contact with the rubber of the modules. Avoid excess lubricant on areas in contact with the braid.



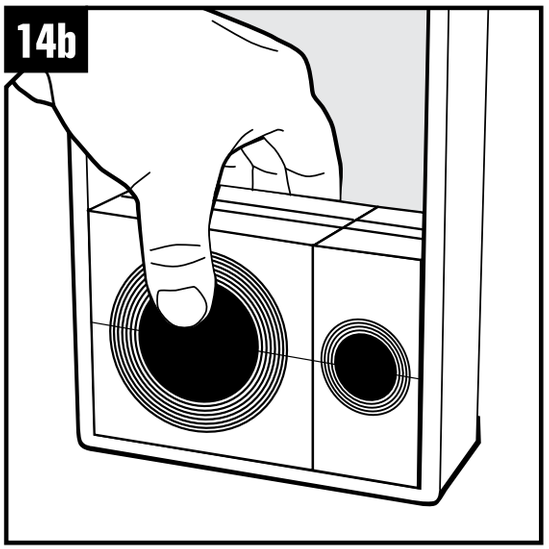
All modules should be of the same type, Roxtec RM BG Ex, in each opening. Please note the markings on the module end.

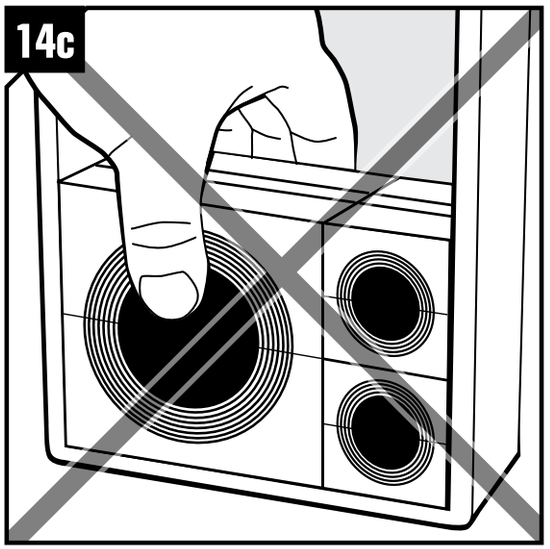


Lubricate all modules for the frame thoroughly, both the inside and the outside surfaces. Avoid excess lubricant on the braid.

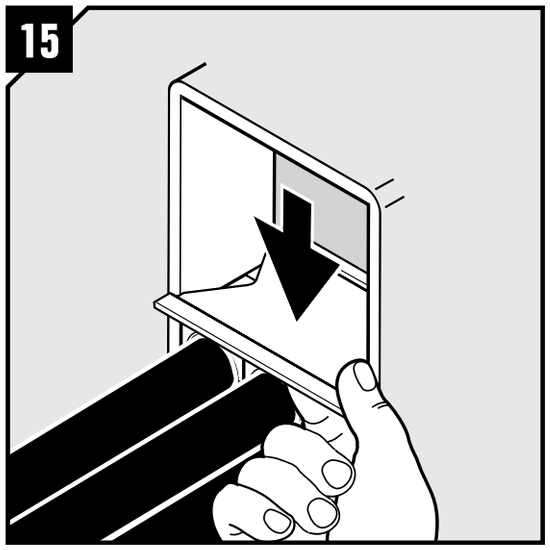


Insert the module halves directly under and on top of the cables. Do not slide them in.

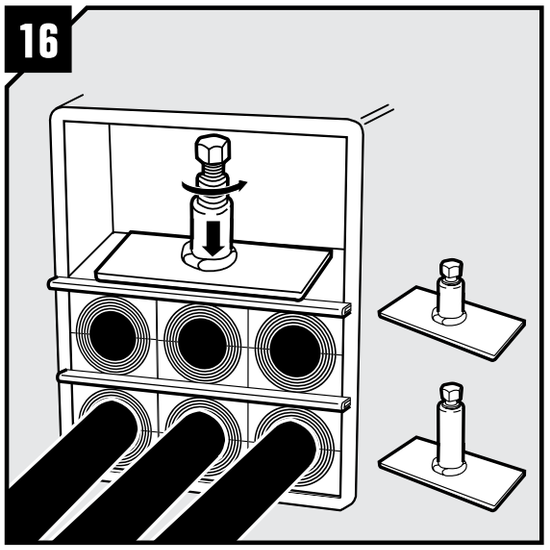




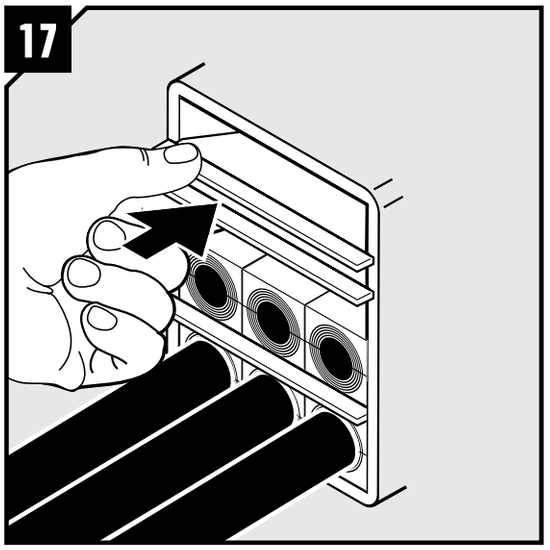
When inserting larger modules, pay attention so that every row of modules is separated by a stayplate. It is not permitted to stack smaller modules on top of each other.



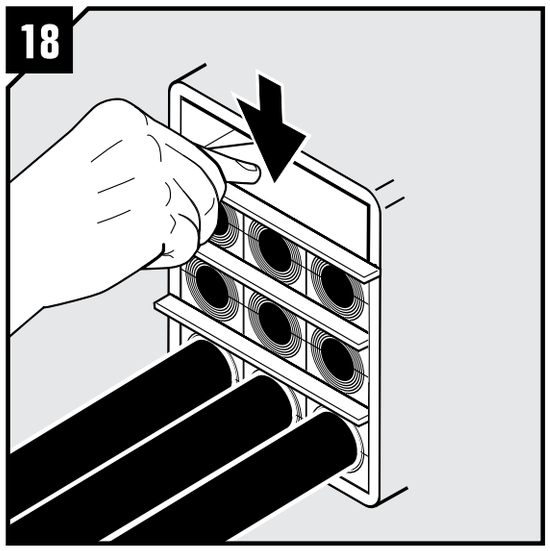
Insert a stayplate on top of every finished row of modules. Make sure the stayplate is clean.



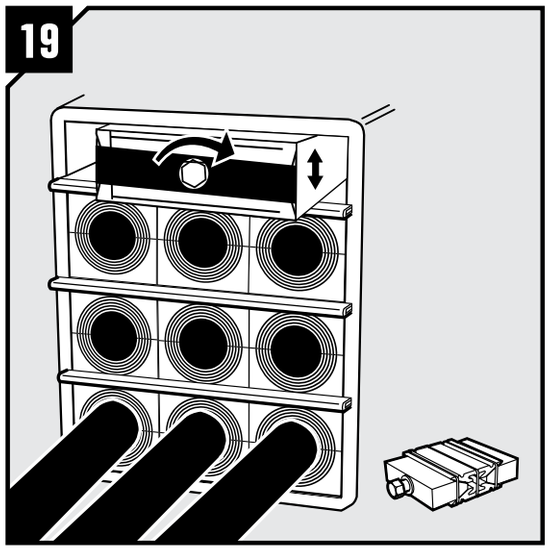
During installation, you can use the pre-compression S or L tool to make room.



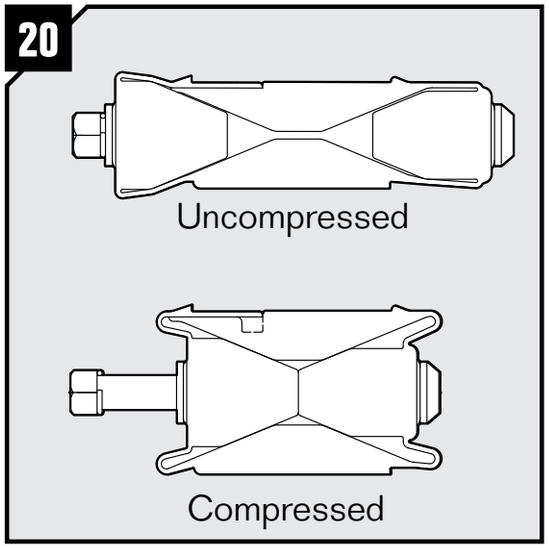
Before inserting the final row of modules, insert two stayplates together.



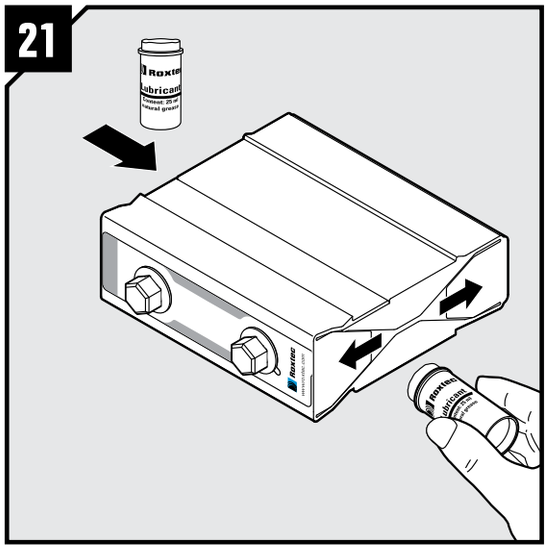
Separate the two stayplates and insert the final row of modules between the stayplates. Drop the upper stayplate on top of the modules.



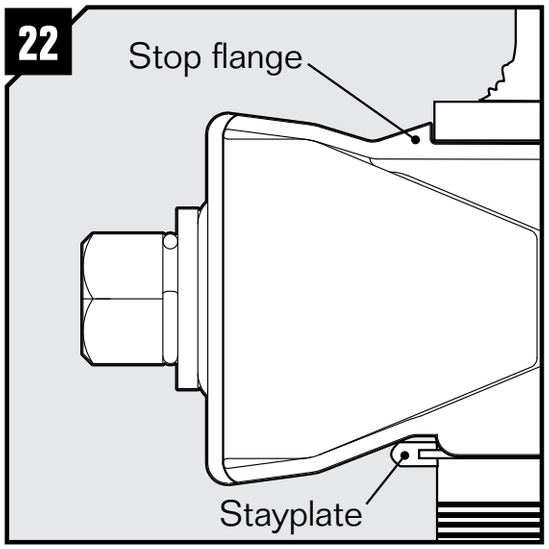
Pre-compress by using Roxtec pre-compression wedge.



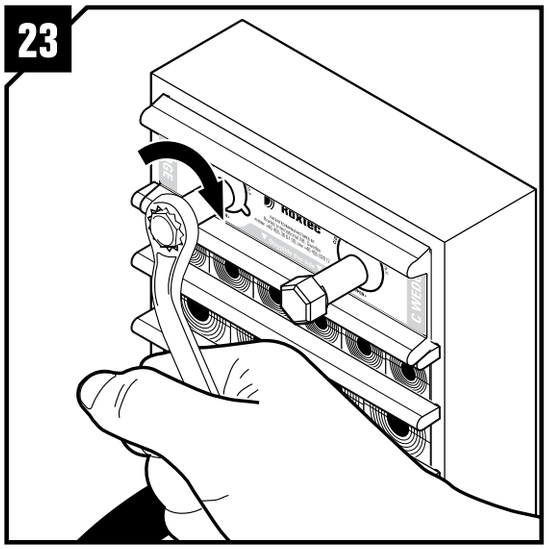
Ensure that the wedge is fully uncompressed by untightening the screws of the wedge before inserting it.



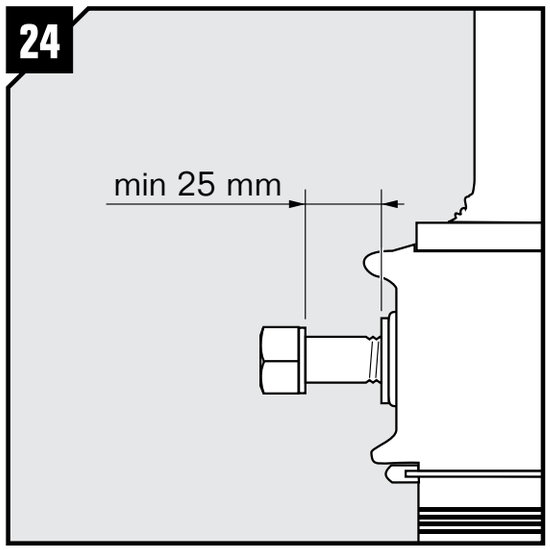
Lubricate the short sides of the wedge.



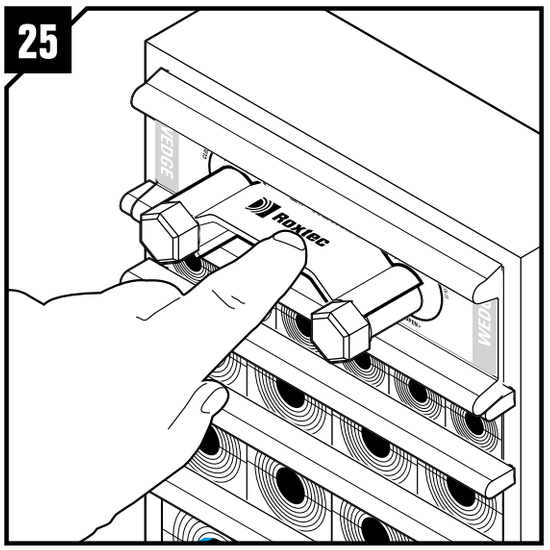
Orientate the wedge so the face marked “Stayplate this side” faces a stayplate. Insert the wedge to the stop flange. Ensure that the wedge is accommodated and secured by the stayplate.



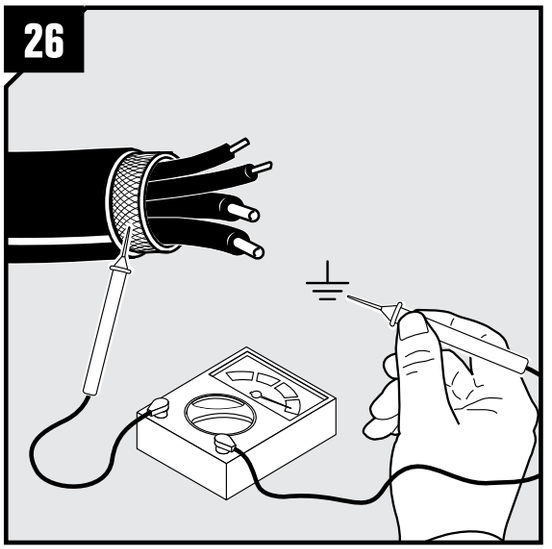
Tighten the screws alternately until full mechanical stop, approx 20 full revolutions per screw. Do not exceed 20 Nm (15 ft.lb.).



25 mm of the screws shall be exposed.



Attach the Wedge Clip to the wedge screws to complete the installation.



Verify earth continuity from each cable armor/screen to earth. Use a suitable instrument.

Adaptable Roxtec RM BG™ Ex modules/sizing chart

Module	For cable/pipe diameter a-b (mm)	For cable/pipe diameter a-b (in)	Approx. total braid cross-section sq mm	Approx. eqv. AWG	Number of cables/pipes
RM 15 BG Ex	0+3.0-11.0	0+0.118-0.433	6	9	1
RM 15w40 BG Ex	0+3.5-10.5	0+0.138-0.413	3*	12*	3
RM 20 BG Ex	0+4.0-14.5	0+0.157-0.571	8	8	1
RM 20w40 BG Ex	0+3.5-16.5	0+0.138-0.650	4*	11*	2
RM 30 BG Ex	0+10.0-25.0	0+0.394-0.984	13	6	1
RM 30H90 BG Ex	0+10.0-25.0	0+0.394-0.984	13	6	1
RM 40 BG Ex	0+21.5-34.5	0+0.846-1.358	21	4	1
RM 40 10-32 BG Ex	0+9.5-32.5	0+0.374-1.280	21	4	1
RM 40H80 BG Ex	0+21.5-34.5	0+0.846-1.358	42	1	1
RM 60 BG Ex	0+28.0-54.0	0+1.102-2.126	42	1	1
RM 60 BG Ex woc	28.0-54.0	1.102-2.216	42	1	1
RM 60 24-54 BG Ex	0+24.0-54.0	0+0.945-2.126	42	1	1
RM 80 BG Ex	0+48.0-71.0	0+1.890-2.795	42	1	1
RM 80 BG Ex woc	48.0-71.0	1.890-2.795	42	1	1
RM 90 BG Ex	0+48.0-71.0	0+1.890-2.795	42	1	1
RM 90 BG Ex woc	48.0-71.0	1.890-2.795	42	1	1
RM 120 BG Ex	0+67.5-99.0	0+2.657-3.898	42	1	1
RM 120 BG Ex woc	67.5-99.0	2.657-3.898	42	1	1

woc = without core * Per cable.

Solid compensation Roxtec RM BG™ Ex modules

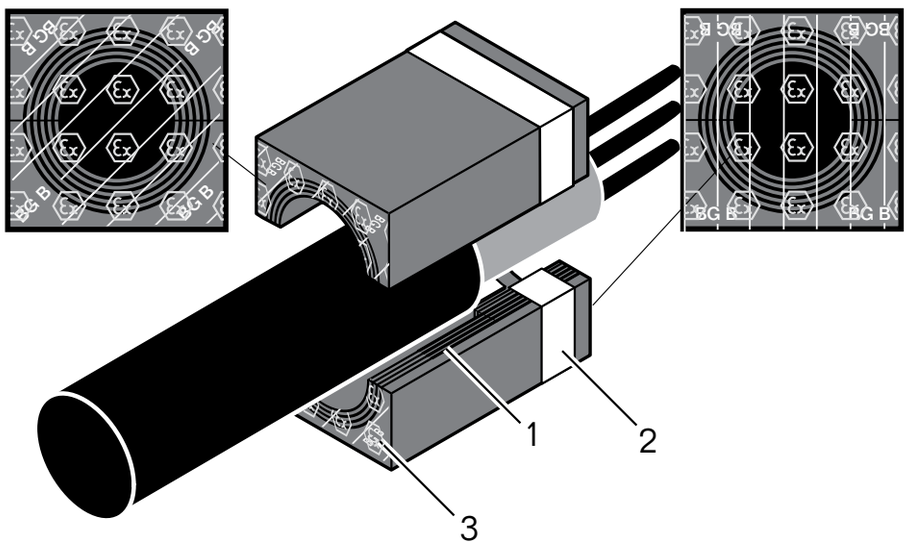
Module	Total braid cross-section sq mm	Approx. eqv. AWG	Number of cables/pipes
RM 5w120/0 BG Ex	8	8	-
RM 10w120/0 BG Ex	8	8	-
RM 15/0 BG Ex	6	9	-
RM 20/0 BG Ex	8	8	-
RM 30/0 BG Ex	13	6	-
RM 30H90/0 BG Ex	42	1	-
RM 40/0 BG Ex	21	4	-
RM 40H80/0 BG Ex	42	1	-
RM 60/0 BG Ex	42	1	-

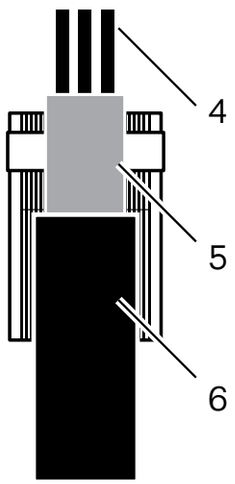
Integrated environmental sealing system for bonding and grounding applications. For use with armored/ shielded jacketed cables including smooth and corrugated cables such as interlocked and continuous welded metal clad cables or wired and braided cables.
In hazardous areas where the ATEX directive or the IECEx scheme is applied, sealing modules of type Roxtec RM BG B Ex are approved for use within cable transit devices of types S-, G-, G...W-, SF-, SF...W Ex.

Cable position in a Roxtec RM BG™ B Ex module

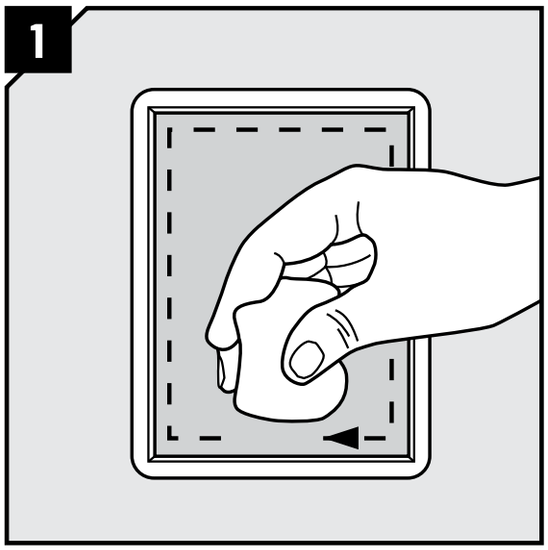
Environmental side

Termination/interior side

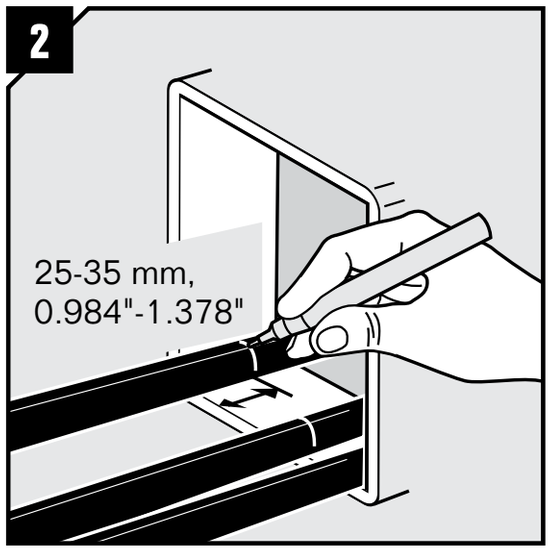




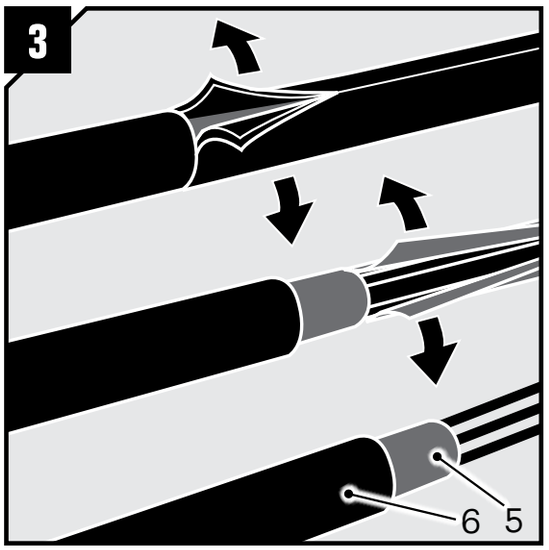
1. Multidiameter™ – adapts to cables and pipes of different sizes through removable layers
2. Bonding/grounding braid
3. Environmental side
4. Conductors
5. Cable armor/shield
6. Outer jacket



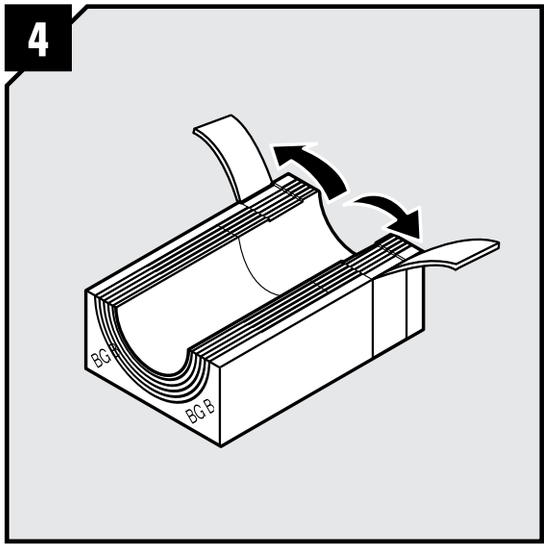
Clean the empty frame from paint, dirt, etc, to secure good electrical conductivity.



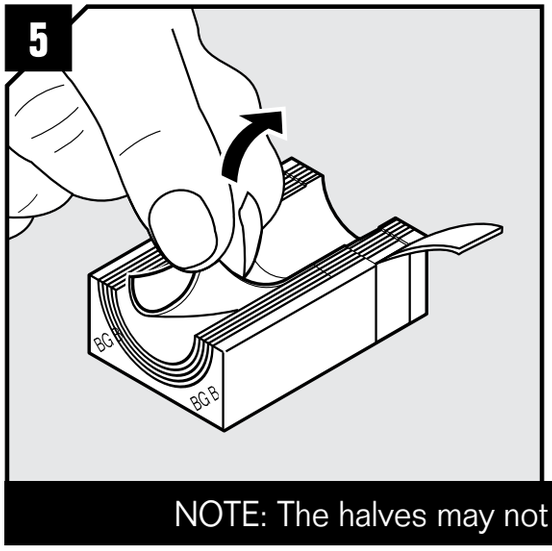
On the cable, mark where outer sheath and armor, if applicable, are to be removed.



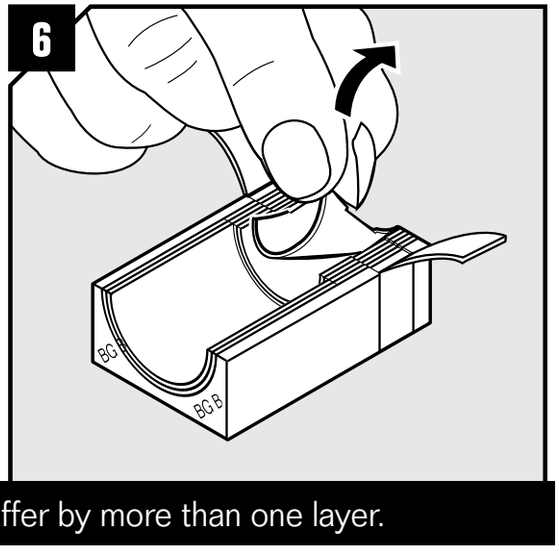
Remove a length of outer jacket to accommodate the module braid to ensure full conductivity. Remove any protection tape or plastic if applicable.



Remove the core and fold back the braid on modules.

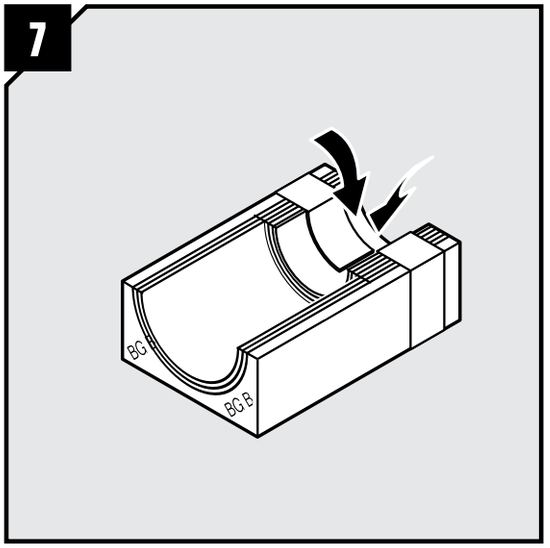


Adapt layers on both module halves to fit outer jacket.

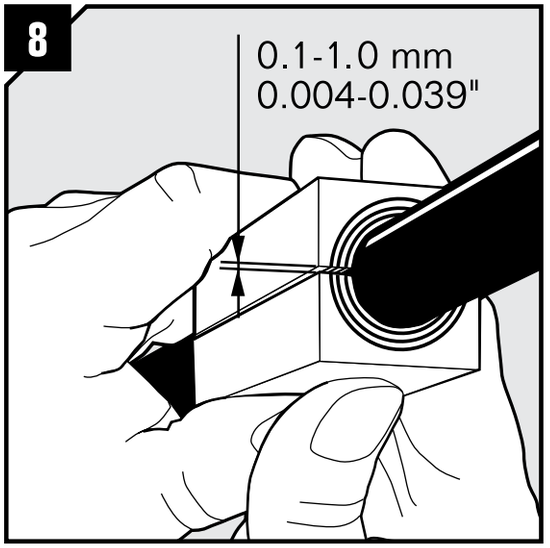


Adapt layers on both module halves to fit cable screen/armor.

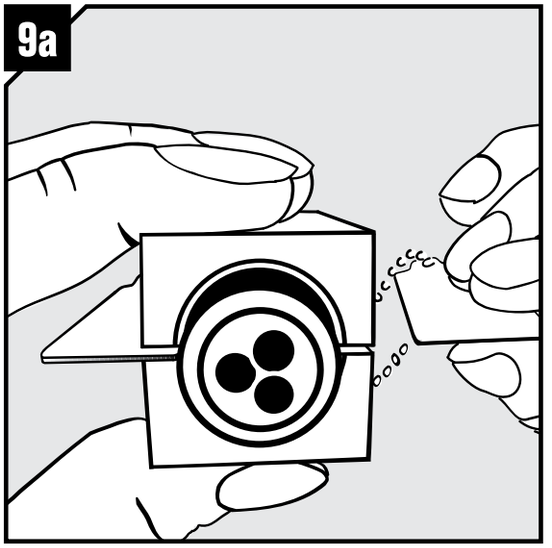
NOTE: The halves may not differ by more than one layer.



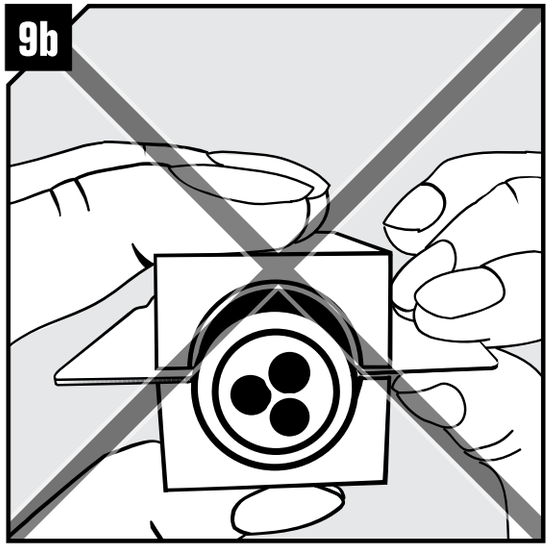
Fold the braid tightly inside the module.



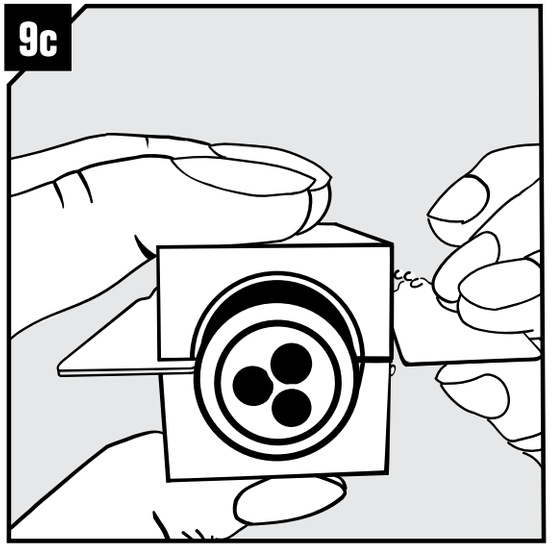
Achieve a 0.1-1.0 mm gap between the two halves when held against the cable/pipe.



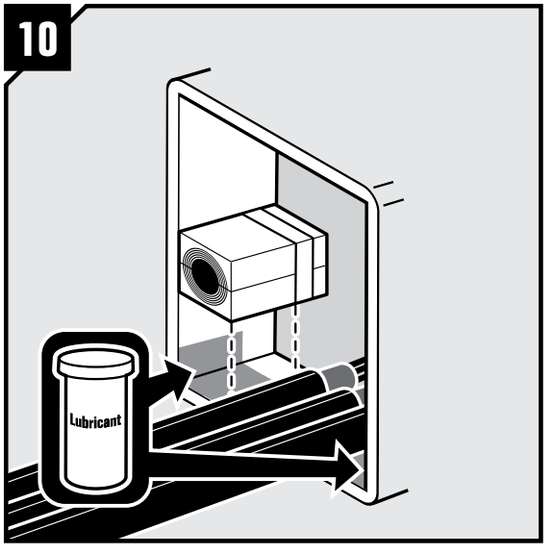
Measure the gap with the Ex Gap Gauge by holding blade one in one gap and checking the other with blade two.



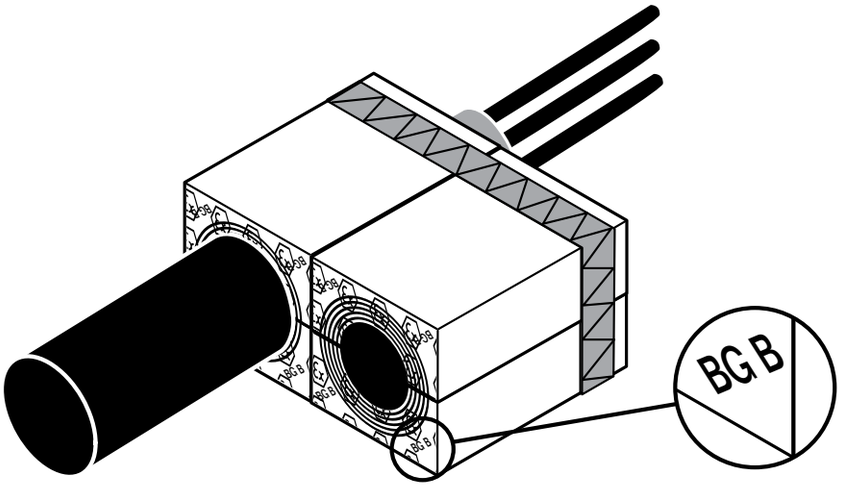
If the gap is too big, the Gauge will slip in easily.



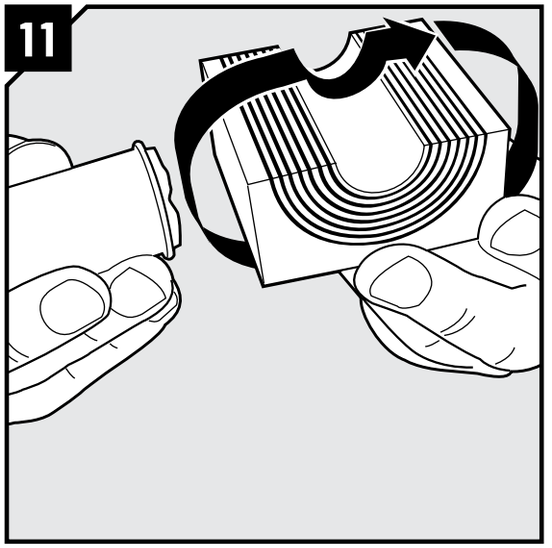
If the gap is correct, there will be no room for blade two.



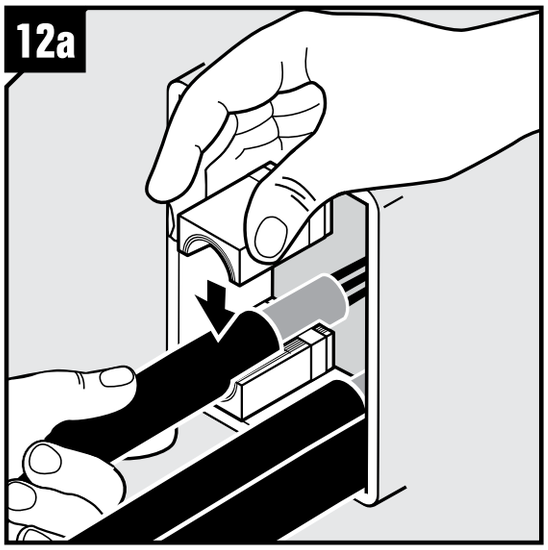
Lubricate the frame on the areas that will be in contact with the rubber of the modules. Avoid excess lubricant on areas in contact with the braid.



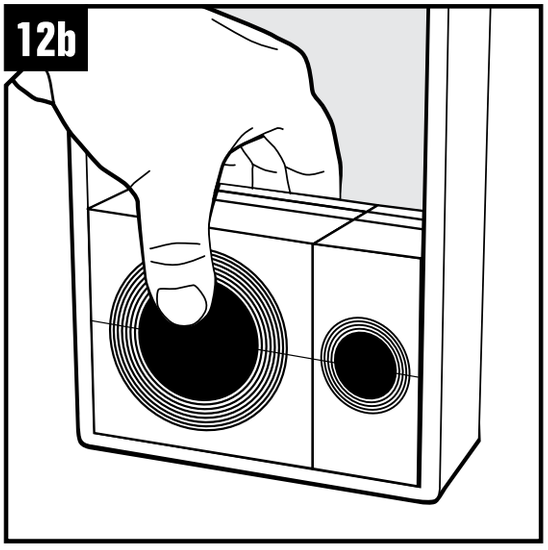
All modules should be of the same type, Roxtec RM BG B Ex, in each opening and placed in the same direction. Please note the markings on the module end.

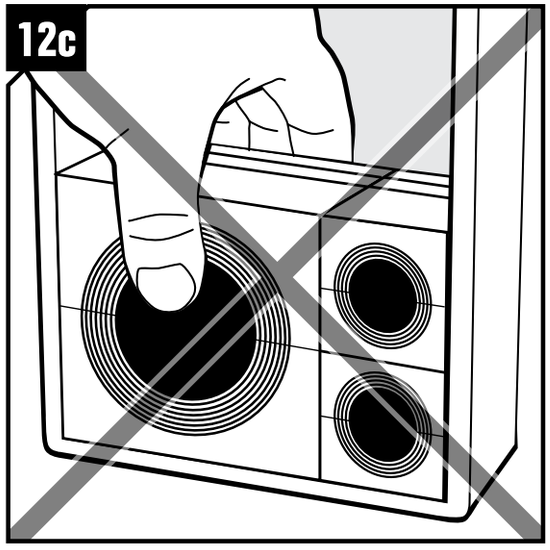


Lubricate all modules for the frame thoroughly, both the inside and the outside surfaces. Avoid excess lubricant on the braid.



Insert the module halves directly under and on top of the cables. Do not slide them in.





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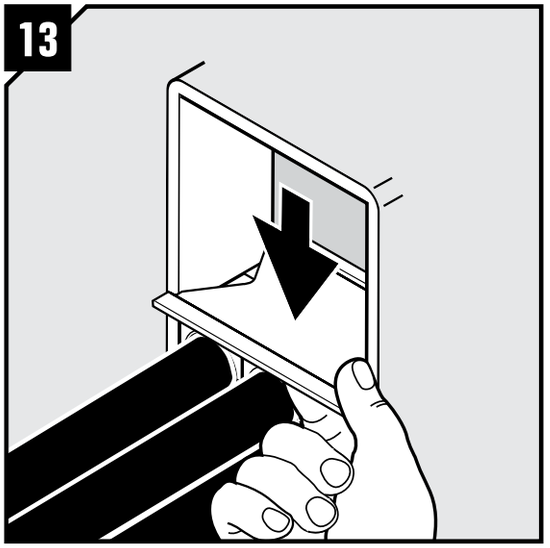
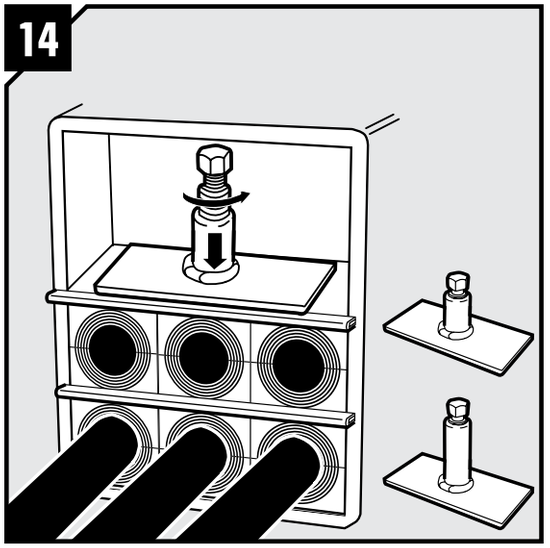


Insert a stayplate on top of every finished row of modules. Make sure the stayplate is clean.



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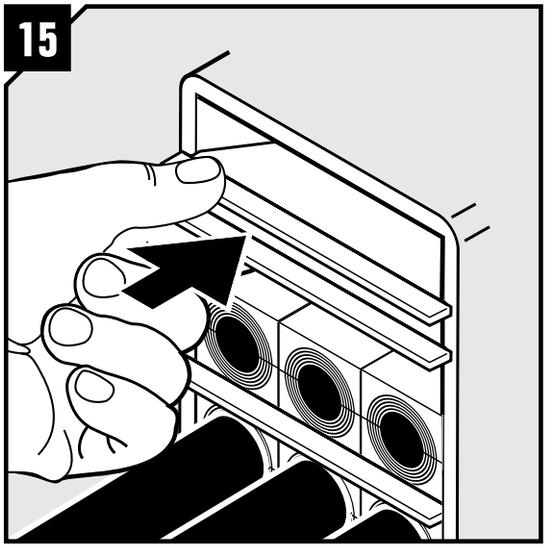

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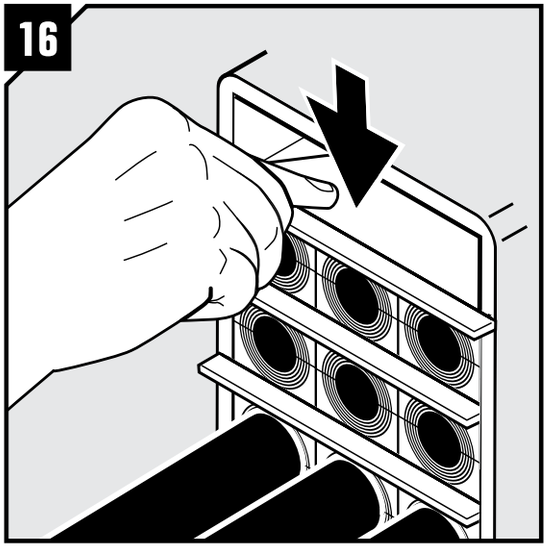
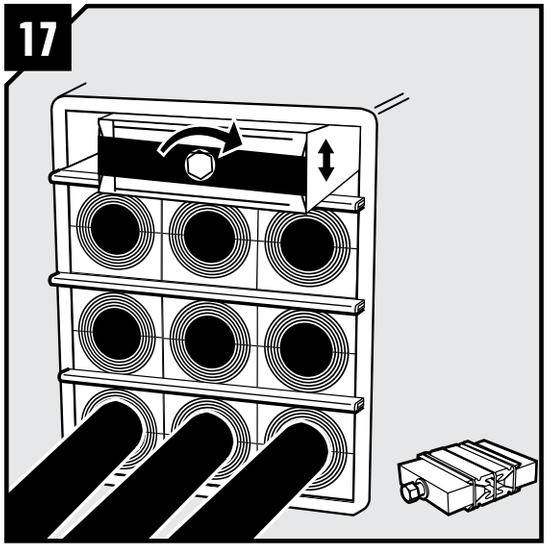
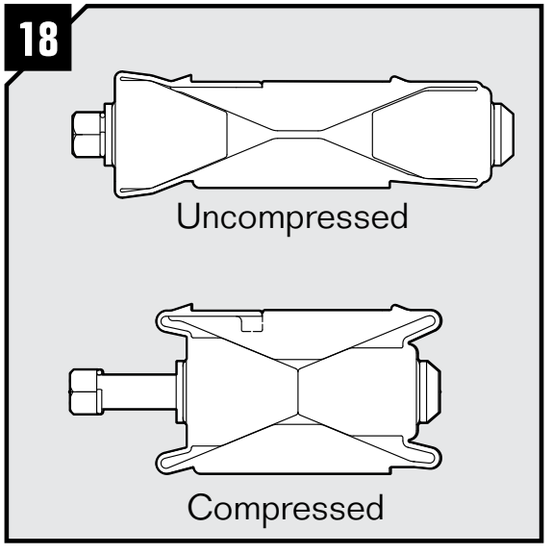


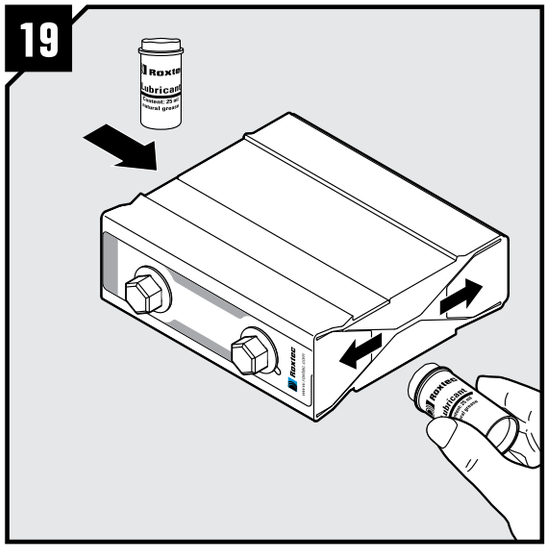
Separate the two stayplates and insert the final row of modules between the stayplates. Drop the upper stayplate on top of the modules.



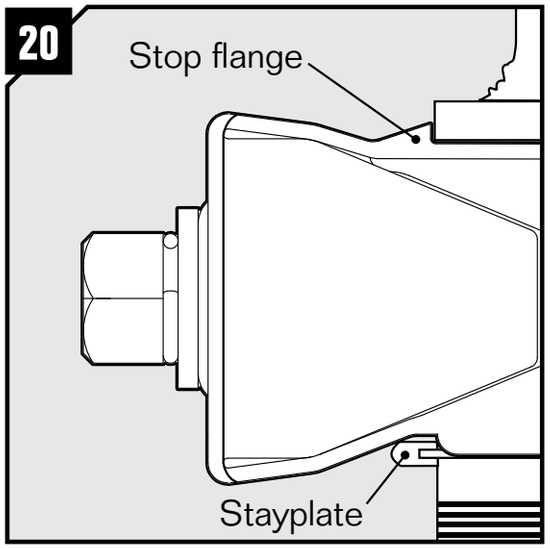
Pre-compress by using Roxtec pre-compression wedge.



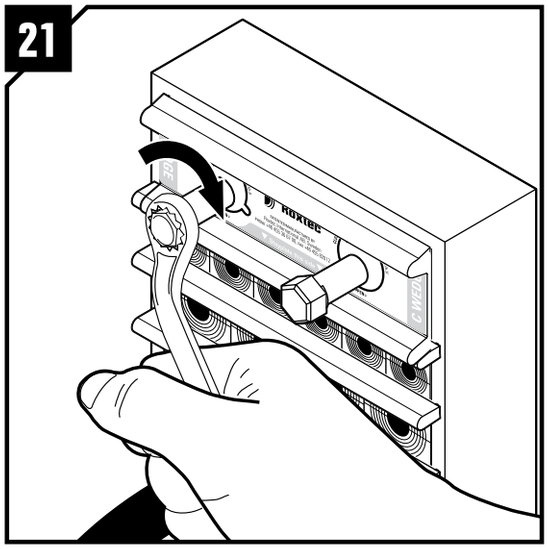
Ensure that the wedge is fully uncompressed by untightening the screws of the wedge before inserting it.



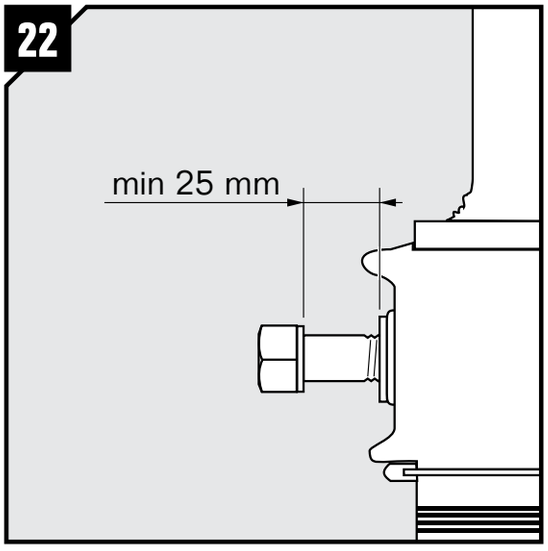
Lubricate the short sides of the wedge.



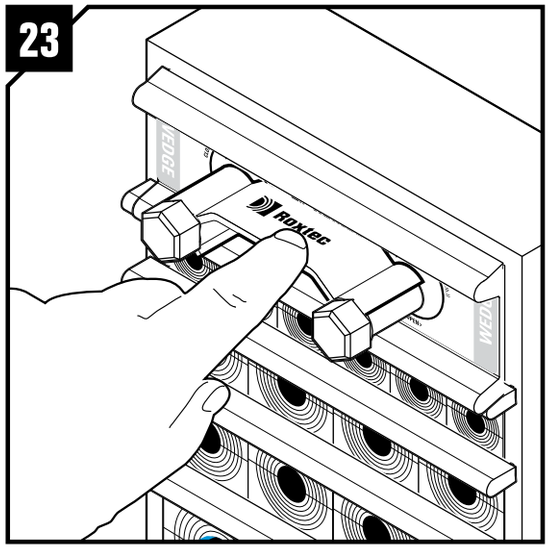
Orientate the wedge so the face marked “Stayplate this side”faces a stayplate. Insert the wedge to the stop flange. Ensure that the wedge is accommodated and secured by the stayplate.



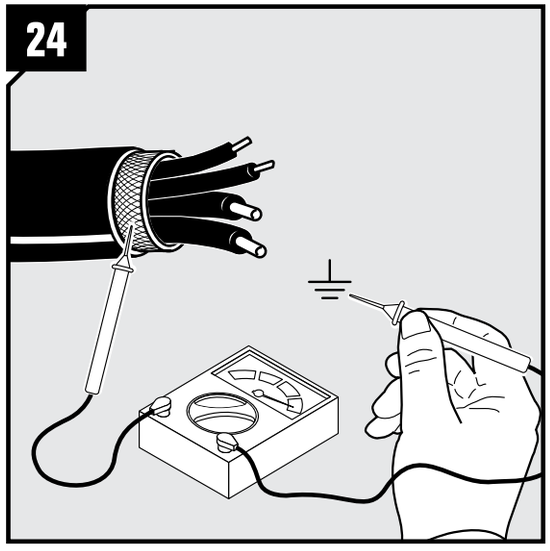
Tighten the screws alternately until full mechanical stop, approx 20 full revolutions per screw. Do not exceed 20 Nm (15 ft.lb.).



25 mm of the screws shall be exposed.



Attach the Wedge Clip to the wedge screws to complete the installation.



Verify earth continuity from each cable armor/screen to earth. Use a suitable instrument.

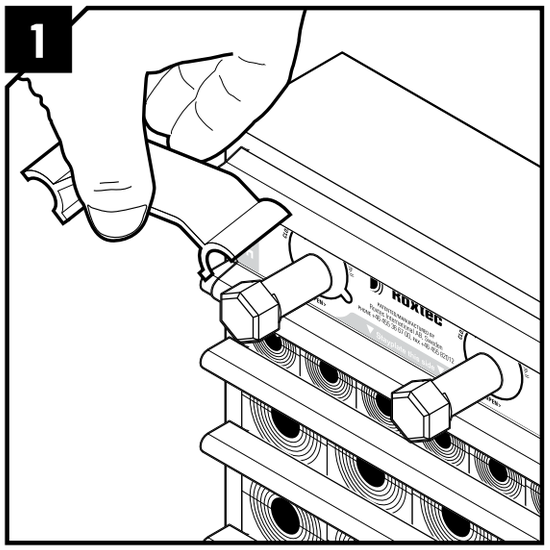
Adaptable Roxtec RM BG™ B Ex modules/sizing chart

Module	For cable diameter a-b (mm)	For cable diameter a-b (in)	Approx. total braid cross-section sq mm	Approx. eqv. AWG	Number of cables
RM 15 BG B Ex	0+3.0-11.0	0+0.118-0.433	6	9	1
RM 15w40 BG B Ex	0+3.5-10.5	0+0.138-0.413	3*	12*	3
RM 20 BG B Ex	0+4.0-14.5	0+0.157-0.571	8	8	1
RM 20w40 BG B Ex	0+3.5-16.5	0+0.138-0.650	4*	11*	2
RM 30 BG B Ex	0+10.0-25.0	0+0.394-0.984	13	6	1
RM 30H90 BG B Ex	0+10.0-25.0	0+0.394-0.984	13	6	1
RM 40 BG B Ex	0+21.5-34.5	0+0.846-1.358	21	4	1
RM 40 10-32 BG B Ex	0+9.5-32.5	0+0.374-1.280	21	4	1
RM 40H80 BG B Ex	0+21.5-34.5	0+0.846-1.358	42	1	1
RM 60 BG B Ex	0+28.0-54.0	0+1.102-2.126	42	1	1
RM 60 BG B Ex woc	28.0-54.0	1.102-2.216	42	1	1
RM 60 24-54 BG B Ex	0+24.0-54.0	0+0.945-2.126	42	1	1
RM 80 BG B Ex	0+48.0-71.0	0+1.890-2.795	42	1	1
RM 80 BG B Ex woc	48.0-71.0	1.890-2.795	42	1	1
RM 90 BG B Ex	0+48.0-71.0	0+1.890-2.795	42	1	1
RM 90 BG B Ex woc	48.0-71.0	1.890-2.795	42	1	1
RM 120 BG B Ex	0+67.5-99.0	0+2.657-3.898	42	1	1
RM 120 BG B Ex woc	67.5-99.0	2.657-3.898	42	1	1

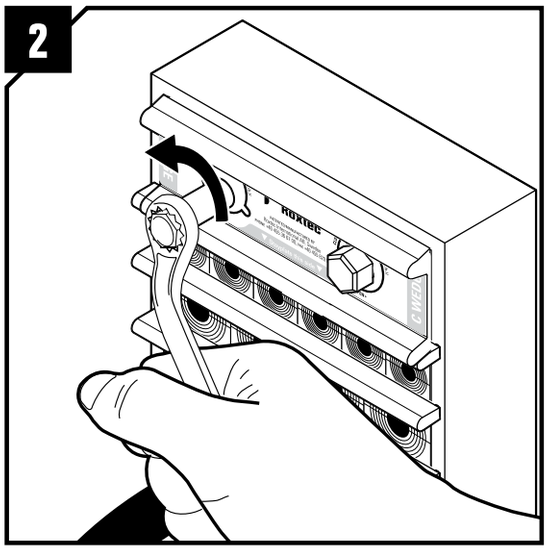
*Per cable.
woc = without core

Solid compensation Roxtec RM BG™ B Ex modules

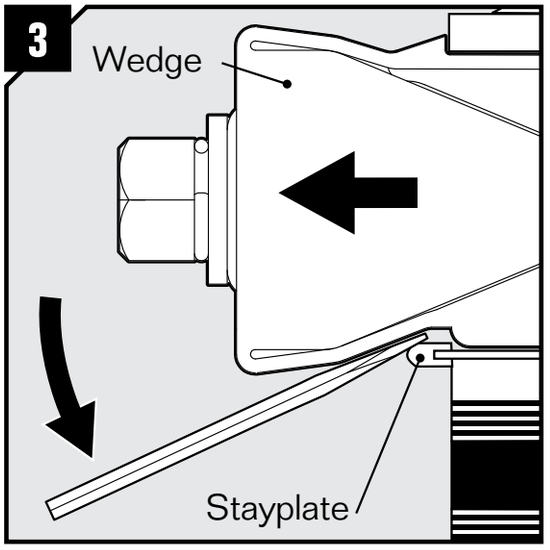
Module	Total braid cross-section sq mm	Approx. eqv. AWG	Number of cables/pipes
RM 5w120/0 BG B Ex	8	8	-
RM 10w120/0 BG B Ex	8	8	-
RM 15/0 BG B Ex	6	9	-
RM 20/0 BG B Ex	8	8	-
RM 30/0 BG B Ex	13	6	-
RM 30H90/0 BG B Ex	42	1	-
RM 40/0 BG B Ex	21	4	-
RM 40H80/0 BG B Ex	42	1	-
RM 60/0 BG B Ex	42	1	-



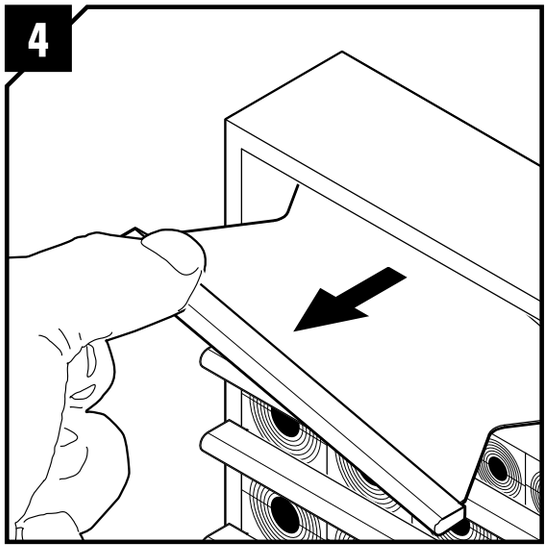
Remove the Wedge Clip from the wedge.



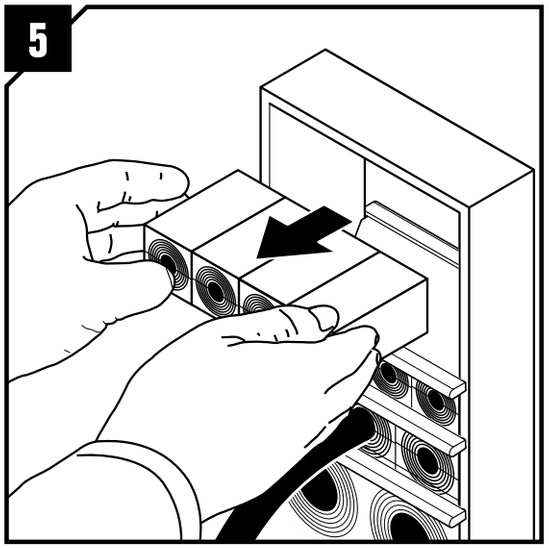
Release the compression by loosening the screws alternately to full stop. Do not exceed 20 Nm (15 ft.lb.).



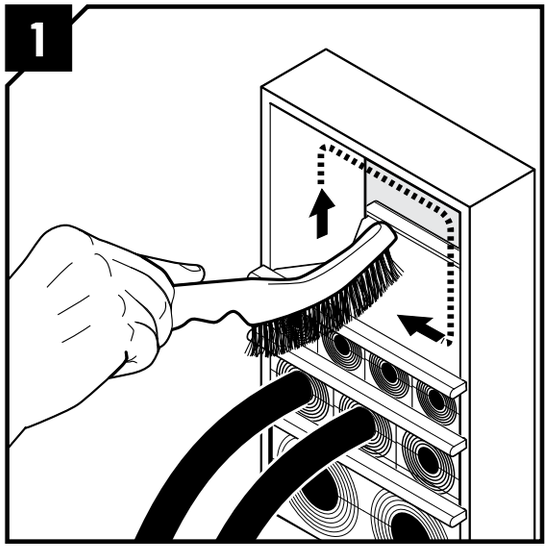
Insert a flat tool between the wedge and the stayplate to simplify removal of the wedge. Roxtec special tools are available.



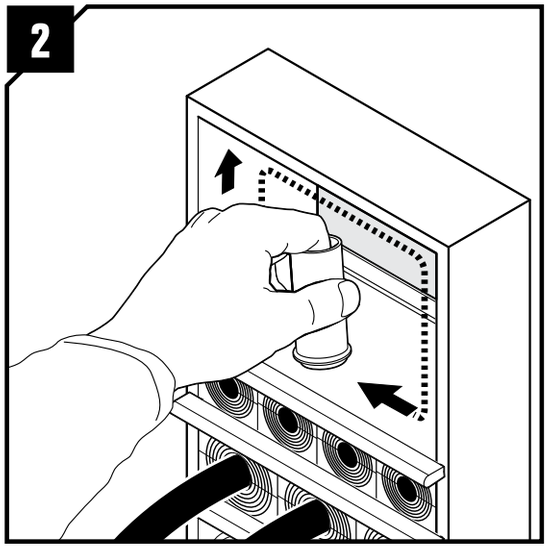
Remove the stayplate.

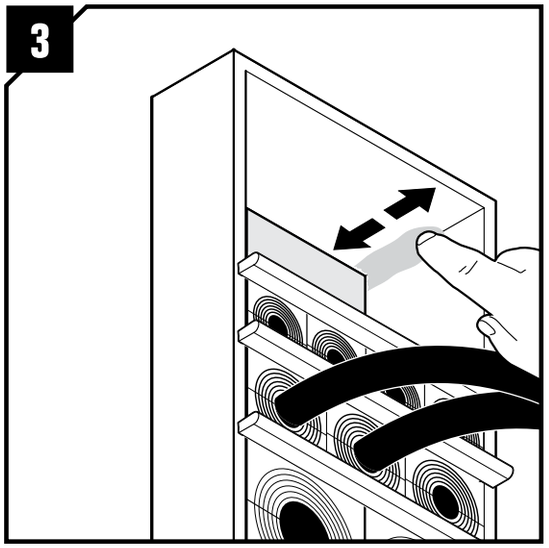


Remove the modules required. Keep the rows sorted until it is time to re-install the transit. If a module is damaged or replaced, all modules in that row must be replaced.



Make sure that the inside surfaces of the exposed packing space are free from dirt or dust.





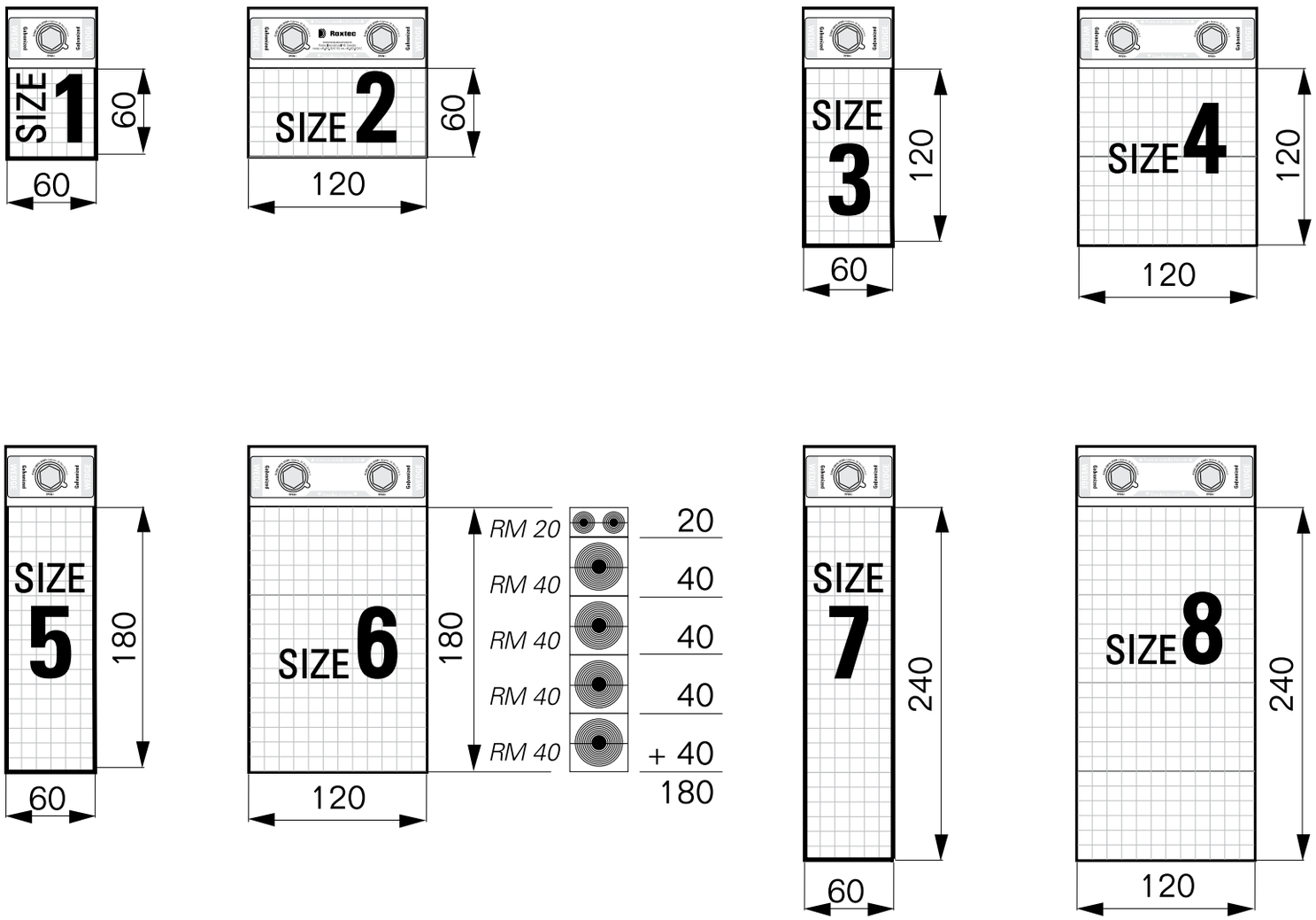
Lubricate the inside surfaces all around with Roxtec Lubricant, especially into the corners.
Continue the re-installation.

Note

- For optimum reliability, wait 24 hours or longer after installation before exposing the cables/pipes to strain or pressure.
- Cables shall pass straight through the frame.
- An incorrectly adapted module shall be replaced (layers shall not be reused).
- Temperature range -60°C to +80°C.
- You find EC Type Examination certificate at www.roxtec.com, or contact your local Roxtec supplier.
- The Roxtec Ex Wedge can be placed anywhere in the frame.

Packing space

Packing space is area per opening filled with modules. As example shows for frame size 6, the 180 mm can be the result of 4 rows of RM 40 plus one row of RM 20.



The following conditions for safe use (apparatus certified cable transit devices) and schedule of limitations (U-marked component certified cable transit device) shall be considered according to the ATEX EC Type Examination certificates and the IECEx Certificates of Conformity:

1 In order to maintain the explosion protection, the installation instructions that accompany the products shall be considered.

2 Only cable for fixed installation is permitted for the cable entry.

3 For optimum reliability, wait 24 hours or longer after installation before exposing the cables/pipes to strain or pressure.

4 For cable transit devices certified as Ex components and marked with the symbol U (cable transit devices of types B…C, G...W, S…, S…S0… , SF…W and S...WM), compliance with applicable requirements not covered by the sub-clauses stated below, shall be verified. This includes mechanical test (if applicable) and test of degree of protection IP, which shall be carried out on the frame of the cable entry (excluding modules and compression unit) after it has been mounted on the enclosure of the apparatus subject to test and certification.

IEC 60079-0:2011
1, 2, 3, 4.2, 4.3, 5.2 (with respect of temperature limits), 6.1, 6.2, 7.1.1, 7.1.2.3, 7.2.1, 7.2.2, 7.5, 8.1, 8.3, 8.4, 13.1, 13.2, 13.4, 13.5, 16.3, 24, 25, 26.1, 26.2 (with respect of internal ingress protection), 26.4.1.1, 26.4.1.2, 26.4.1.2.2, 26.4.2, 26.4.4, 26.4.5.1 (with respect of internal ingress protection), 26.4.5.2, 26.7.1, 26.7.2, 26.8, 26.9, 29.1, 29.2, 29.4, 29.5, 29.9, 30.1, A.1, A.2.1, A.2.3, A.2.4.1, A.2.5, A.2.6, A.2.7, A.3.1.1, A.3.1.4, A.3.1.5, A.3.2.2, A.3.3, A.3.4 (with respect of internal ingress protection), A.4.1, A.4.2 and B.1.

EN 60079-0:2012
ZA

IEC 60079-31:2008
1, 2, 3, 4, 4.1, 5.2.1, 6.1.1 (with respect of internal ingress protection) and 7.

EN 60079-31:2009
ZA

DISCLAIMER

”The Roxtec cable entry sealing system (”the Roxtec system”) is a modular-based system of sealing products consisting of different components. Each and every one of the components is necessary for the best performance of the Roxtec system. The Roxtec system has been certified to resist a number of different hazards. Any such certification, and the ability of the Roxtec system to resist such hazards, is dependent on all components that are installed as a part of the Roxtec system. Thus, the certification is not valid and does not apply unless all components installed as part of the Roxtec system are manufactured by or under license from Roxtec (“authorized manufacturer”). Roxtec gives no performance guarantee with respect to the Roxtec system, unless (I) all components installed as part of the Roxtec system are manufactured by an authorized manufacturer and (II) the purchaser is in compliance with (a), and (b), below.
(a) During storage, the Roxtec system or part thereof, shall be kept indoors in its original packaging at room temperature.
(b) Installation shall be carried out in accordance with Roxtec installation instructions in effect from time to time.
The product information provided by Roxtec does not release the purchaser of the Roxtec system, or part thereof, from the obligation to independently determine the suitability of the products for the intended process, installation and/or use.
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