

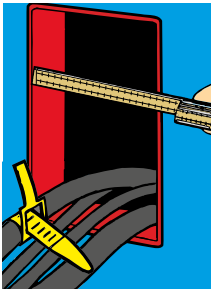


Putting safety first

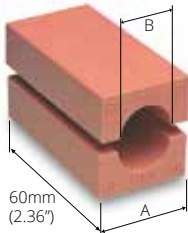
Installation Guide

Rektangular transit installation (RGS- / RGG-)	Page 2
Adapting insert blocks	Page 3
Horisontal installation, Diassembly guide	Page 4
RGP	Page 5
E-RGS, E- RGG	Page 6
E-RGP	Page 7
E-Addblock	Page 8

Installation Guide



1 Measure the opening and check that the measurement is within the tolerance range 120.5 mm +/- 1 mm (4.74"/±0.039"). Check that the frame is clean and pull through the cables. Measure the diameter of the cables and choose suitable blocks. Lubricate the inner faces of the frame.



2 Insert Block. The blocks are identified by their width (A) and hole diameter (B). A block that is 30 mm (1.18") wide and has a hole diameter of 18 mm (0.71") is marked 30/18. This marking is cast into the block.



3 Pack the frame. Place stayplates between each row of blocks

STG ENDPACKING



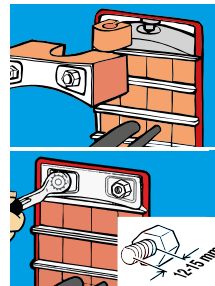
4 Pack the frame. Place stayplates between each row of blocks.



5 Insert the top row of blocks.

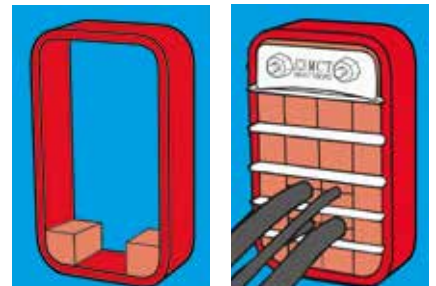


6 Tighten the bolt in the compression plate anticlockwise until there is a gap of 32-33 mm (1.26-1.30") between the top of the plate and the inside of the frame.



7 Insert the STG endpacking with the tongue around the compression bolt. Tighten the nuts in the endpacking until 12-15 mm (0.47-0.59") of thread is visible.

RGSC WITH STG ENDPACKING

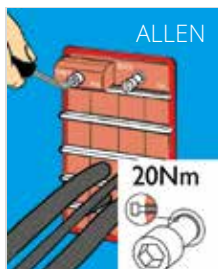


Begin packing with the special corner blocks. Proceed as shown in image 3 and then see STG Endpacking image 4-6. Insert endpacking C-STG (with special corner blocks). Tighten the nuts on the endpacking to compress and complete the seal. About 12 mm (0.47") of the thread should protrude on each bolt.

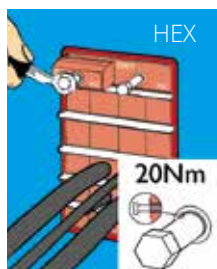
PTG PRESSWEDGE, ALLEN AND HEX



4 Place the last two stayplates in the frame before the last row of blocks. Then fit the PTG presswedge over the stayplates.



5 Insert the final row of blocks. Tighten the nuts in the PTG to the end or 20 Nm.

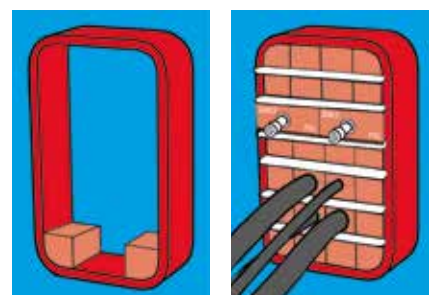


6 Insert the final row of blocks. Tighten the nuts in the PTG to the end or 20 Nm.



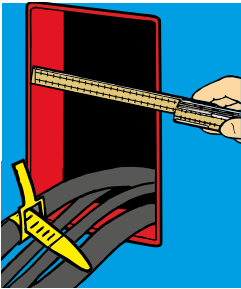
7 The PTG presswedge may be placed anywhere in the frame.

RGSC WITH PRESSWEDGE



Begin packing with the special corner blocks. Proceed as shown in image 3 and then see PTG Presswedge. The PTG presswedge can be placed anywhere except at the top or bottom. At the top row insert the special corner blocks and then the last row of blocks. Tighten the nuts in the PTG to the end or 20 Nm.

AddBlock



Measure the opening and check that the measurement is within the tolerance range 120.5 mm +/- 1 mm (4.74"/+/-0.039"). Check that the frame is clean and pull through the cables.
Measure the diameter of the cables and choose suitable blocks.
Lubricate the inner faces of the frame.

HANDBLOCK



Tear off attached sheet to fit the dimension selected.



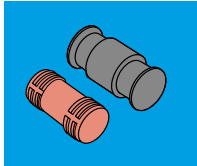
Place sheet into centre slot and affix it with the unique locking device.



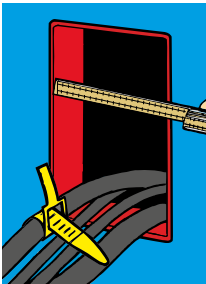
Tear off superfluous sheets.



Pack the frame. Place stayplates between each row of blocks

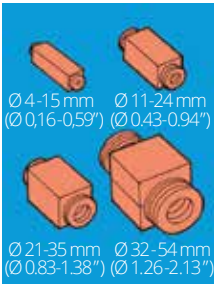


Plugs for AddBlock and HandiBlock



Measure the opening and check that the measurement is within the tolerance range 120.5 mm +/- 0.5 mm (4.74"/+/-0.02"). Check that the frame is clean and pull through the cables. Measure the diameter of the cables and choose suitable blocks.
Lubricate the inner faces of the frame.

U-Block



Select the HandiBlock that fits the cable / tube.



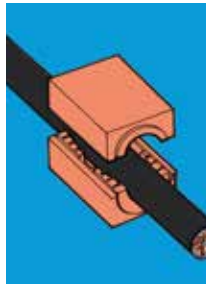
Select the two compression rings closest to the cable diameter. Remove all compression rings smaller than the selected.



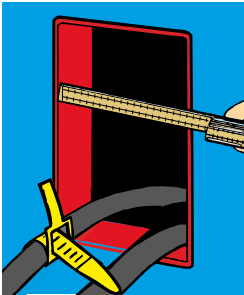
If the insert gets longer than the block, remove the current rings in the middle.



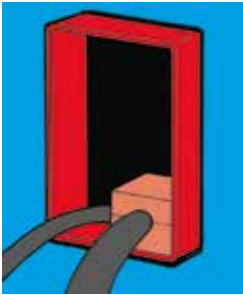
Place the two inserts in the main block so that the outermost rings are at the outer edge of the main block.



Build the second block half the same way. Insert the cable / tube and lay over the block half. Continue packing as shown in figure 4 on the left side.



Measure the opening and check that the measurement is within the tolerance range 120.5 mm +/- 1 mm (4.74"/+/-0.039"). Check that the frame is clean and pull through the cables. Measure the diameter of the cables and choose suitable blocks.
Lubricate the inner faces of the frame.



Select a suitable block for the largest cable in the row.



Select a suitable InsertBlock or AddBlock for the small cable. Then create a base using U-Blocks. The external measurements should be the same as the previous block.

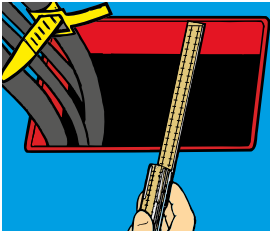


Start packing the frame.

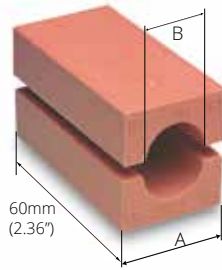


Insert stayplates between each row of insert blocks.

Horizontal Installation Guide



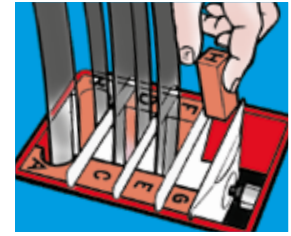
1 Measure the opening and check that the measurement is within the tolerance range 120.5 mm +/- 1 mm (4.74" +/- 0.039"). Check that the frame is clean and pull through the cables. Measure the diameter of the cables and choose suitable blocks. Lubricate the inner faces of the frame.



2 The blocks are identified by their width (A) and hole diameter (B). A block that is 30 mm (1.18") wide and has a hole diameter of 18 mm (0.71") is marked 30/18. This marking is cast into the block.



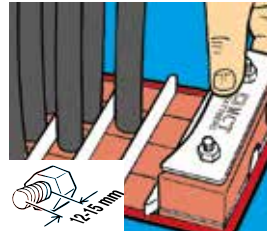
3 To prevent the blocks from falling through during horizontal installation, fit all the stayplates and the compression plate first. Check the RG plan to make sure the cables are positioned correctly.



4 Insert the outer blocks first (A, B, C, etc.). Then insert the rest of the blocks. Note: block A must be rotated 90°, see diagram.



5 Pack the frame. Tighten the bolt in the compression plate anticlockwise until there is a gap of 32-33 mm (1.26"-1.30") between the top of the plate and the inside of the frame.



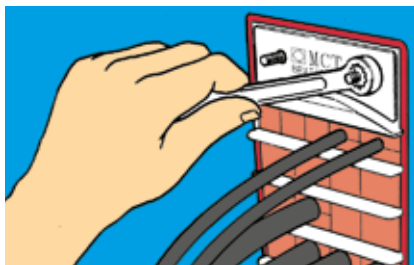
6 Insert the STG endpacking with the tongue around the compression bolt. Tighten the nuts in the endpacking until 12-15 mm (0.47"-0.54") of thread is visible.

Disassembly Guide

STG

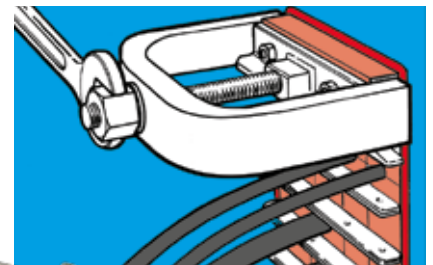
1

Remove the nuts and the hardware from the face of the endpacking.



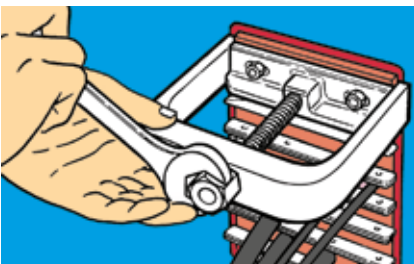
2

Attach the endpacking puller to the bolts with the nuts from the endpacking.



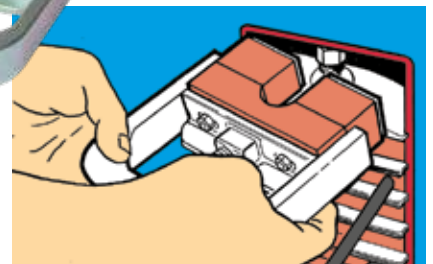
3

Tighten the bolt on the puller and the endpacking slides out.

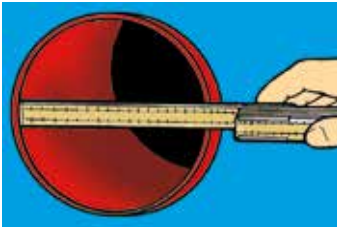


4

Remove the endpacking.



RGP Installation



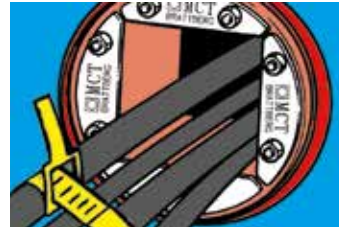
1

Measure the pipe/drilled hole to ensure that the size conforms to tolerance standards.



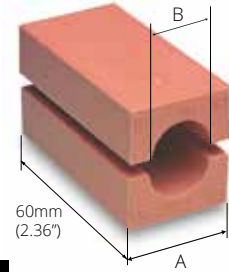
2

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



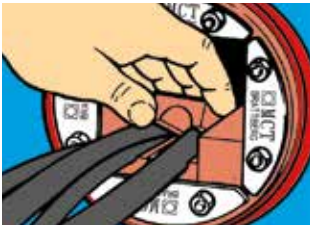
3

Place the frame in correct position in the hole. Check that the frame is clean and pull through the cables. Place the largest cables at the bottom of the frame. Measure the diameter of the cables and choose suitable blocks.



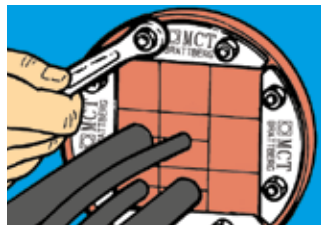
4

InsertBlock. The blocks are identified by their width (A) and hole diameter (B). A block that is 30 mm (1.18") wide and has a hole diameter of 18 mm (0.71") is marked 30/18. This marking is cast into the block.



5

Begin packing.



6

Tighten the nuts in diagonal order until 10-12 mm (0.39"-0.47") of thread is visible.

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

PRESSURE-TIGHT INSTALLATION RGP

All contact surfaces between the pipe and the RGP plug must be cleaned carefully prior to installation. Do not use any lubricant on these surfaces. All blocks must be lubricated carefully with MCT Brattberg lubricant. The penetration must not be subjected to pressure for at least 48 hours after installation. This is to allow the pressure to equalise throughout the penetration. It will take more time for the pressure to equalise at temperatures below 20°C.

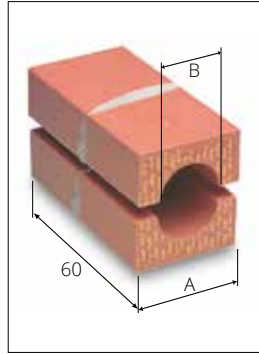
Installation E-Series (EMC)



1 Clean the inside of the frame carefully to ensure good electrical contact between the metal sheet and the frame.



2 Pull cables to final position. Mark cable 30 mm (1.18") from front edge of frame. Remove cable sheath 5 mm (0.2") on either side of the line.



3 The E-Blocks are identified by their width (A) and hole diameter (B). A block that is 30 mm (1.18") wide and has a hole diameter of 18 mm (0.71") is marked 30/18. This marking is cast into the block.



4 When packing the transit, ensure all the insert blocks have the yellow marking facing the installer.



5 Position the stayplates between each layer of insert blocks.

E-STG ENDPACKING



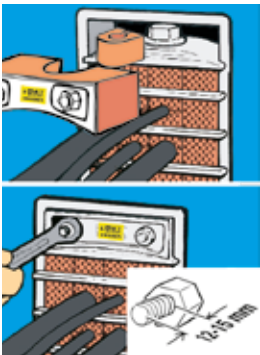
6 Before the final row of E-blocks, the compression plate is installed. Alternatively, the E-PTG Presswedge can be fitted.



7 Tweezers can be used, if required to aid installation of the last row of E-blocks.



8 Tighten the bolt in the compression plate anticlockwise until there is a gap of 32-33 mm (1.26, 1.30") between the top of the plate and the inside of the frame.

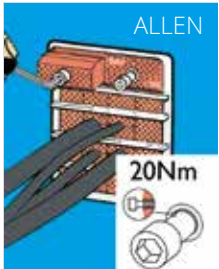


9 Insert the E-STG endpacking with the tongue around the compression bolt. Tighten the nuts in the endpacking until 12-15 mm (0.47-0.59") of thread is visible.

E-PTG PRESSWEDGE, ALLEN AND HEX



6 Place the last two stayplates in the frame before the last row of blocks. Then fit the E-PTG presswedge over the stayplates.



7 Insert the final row of E-blocks. Tighten the nuts in the E-PTG to the end or 20 Nm.



8 Insert the final row of E-blocks. Tighten the nuts in the E-PTG to the end or 20 Nm.



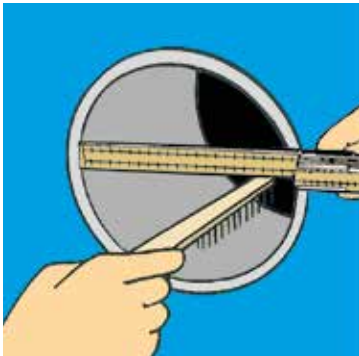
9 The E-PTG presswedge can be placed anywhere in the frame.

PRESSURE APPLICATIONS RGS, RGSC, RGSF, RGSK, RGSR AND RGSbtb

Make sure the frame is clean and lubricate the inside of the frame thoroughly. Lubricate all Lycron parts carefully with the MCT Brattberg lubricant. Place the compression plate in the center so that the rubber can come up between the compression plate and the frame on both sides of the plate. The seal may not be pressurized within 48 hours of installation. This allows for the settlement of the system (based on a 20°C ambient temperature). NOTE. The lower the temperature, the longer the needed settlement time.

NOTE. For pressurized applications, all components must be replaced with new material after removal and refitting.

Installation E-RGP (EMC)



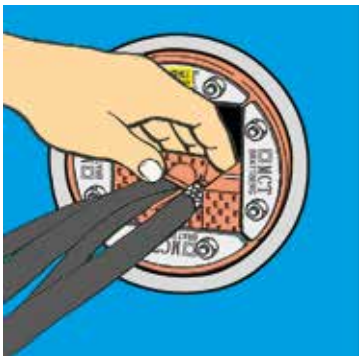
1
Thoroughly clean the inside of the frame. Check that frame dimensions agree with stated tolerances.



2
Place the E-RGP in the correct position in the opening.



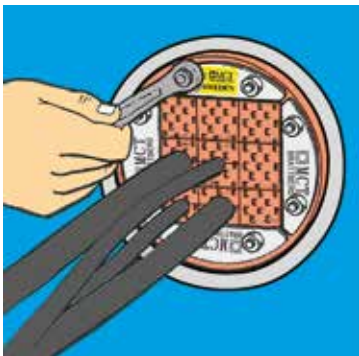
3
Pull the cables to final position. Mark cable 30 mm (1.18") from front edge of frame. Remove cable sheath 5 mm (0.2") on either side of the line.



4
When packing the transit, ensure all the insert blocks have the yellow marking facing the installer.



5
Tweezers can be used, if required, to aid installation of last row of blocks.



6
Tighten the nuts so that 10-12 mm (0.39-0.47") of the protruding thread is visible.

Tolerances for pipes and drilled holes		
Pipes	Inner mm	Inner
E-RGP 50	50-51	1.97-2.08
E-RGP 70	70-71	2.76-2.80
E-RGP 100	100-102	3.94-4.02
E-RGP 125	125-127	4.98-5.0
E-RGP 150	150-152	5.91-5.98
E-RGP 200	200-202	7.87-7.95

PRESSURE APPLICATIONS E-RGP

Clean the inside of the pipe and the outside of the E-RGP prior to installation, but apply no lubricant to either surface.
 Lubricate all the Lycron parts carefully with the MCT Brattberg lubricant.
 The E-RGP seal may not be pressurized within 48 hours of installation - this allows for the settlement of the system (based on a 20°C ambient temperature). NOTE. The lower the temperature, the longer the needed settlement time.
 Test pressure 4.5 bar. In the case of higher pressure, please contact MCT Brattberg.

NOTE. For pressurized applications, all components must be replaced after removal and refitting.

Installation E-Addblock (EMC)



1

Clean the inside of the frame carefully to ensure good electrical contact between the metal sheet and the frame.

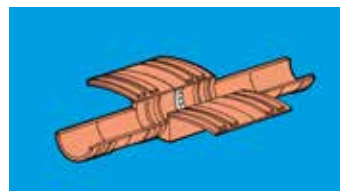


2

Pull cables to final position. Mark cable 30 mm (1.18") from front edge of frame. Remove cable sheath 5 mm (0.2") on either side of the line.

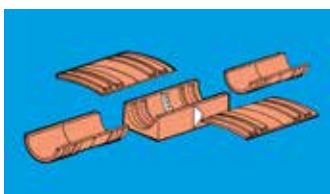
Note:

- Installation method is the same as other E-blocks.
- Plugs and Wraps are only for use in Grounding and Bonding applications, not EMC.



3

The E-AddBlock comes complete with 4 inserts to give 5 different block sizes. They are affixed with a small yellow marking on one side.



4

Remove all inserts.



5

Select the insert with the required diameter and tear along the perforations.



6

Attach the two inserts into the locating ridges.



7

When packing the transit, ensure all the insert blocks have the yellow marking facing the installer.



8

Position the stayplates between each layer of insert blocks.

PRESSURE APPLICATIONS

Make sure the frame is clean and lubricate the inside of the transit thoroughly. Lubricate all Lycron parts carefully with the MCT Brattberg lubricant.

The seal may not be pressurized within 48 hours of installation. This allows for the settlement of the system (based on a 20°C ambient temperature).

NOTE. The lower the temperature, the longer the needed settlement time.

NOTE. For pressurized applications, all components must be replaced with new material after removal and refitting.

Disclaimer:

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

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



www.mctbrattberg.com

MCT Brattberg AB
SE-371 92 Karlskrona
Sweden
Phone: +46-455 37 52 00
Fax: +46-455 37 52 90
E-mail: info@mctbrattberg.se
Website: www.mctbrattberg.se

MCT Brattberg Ltd
Commerce Street
Carrs Industrial Estate
Haslingden
Lancashire BB4 5JT
England
Tel: +44 - 170 624 4890
Fax: +44 - 170 624 4891
E-mail: info@mctbrattberg.co.uk

MCT BRATTBERG/CMUS
Houston
3332 Spring Stuebner Rd.
Suite G, Spring, TX 77379
USA
Phone +1-281 355 8191
E-mail: cclarke@brattberginc.com

MCT/CMUS Florida
Consilium Marine US Inc
4370 Oakes Road 721
Fort Lauderdale
FL 33314
USA
Phone +1 954 453 1286
E-mail: info@consiliummarineus.com

We have representatives in:

Austria - Australia - Bulgaria - Brazil - Canada - China - Croatia - Denmark - Egypt - Finland - France - Germany - Greece - Hong Kong - Hungary - Iceland - India
Indonesia - Ireland - Israel - Italy - Japan - Korea - Malaysia - Netherlands - New Zealand - Norway - Oman - Philippine Islands - Poland - Portugal - Qatar
Romania - Russia - Saudi Arabia - Singapore - Spain - South Africa - Switzerland - Taiwan - Turkey - Thailand - UAE - Ukraine - United Kingdom - USA

Visit our website or contact MCT Brattberg for details of your nearest distributor.