METRIC/IMPERIAL™ INSTALLATION INSTRUCTIONS



1. Cut the Pipe Square
Cut the pipe square. There is no need to prepare the pipe end. Chamfering or lubrication is not required.



2. Insert Liner in MDPE pipe
With MDPE pipe a liner must be used to ensure conformance with WRAS.



3. No Liner or Insert Required for Imperial Pipe
For connections to imperial PE pipe (BS1972/3284 and IRS 135 Heavy Gauge) a liner or insert is not required.



4. Ready to Use Position
The fitting is pre-assembled and ready to use, however always ensure the nut is fully relaxed and 2 threads are showing before inserting the pipe.



5. Pipe Insertion
Insert the pipe fully into the fitting to the point where the stop is felt.



6. Nut Tightening
The nut should be tightened by hand and then firmly with a wrench.



7. Fully Installed
Fitting is now fully installed.



8. Imperial Fully Installed
For connections to Imperial PE pipe (BS1972/3284 and IRS 135 Heavy Gauge) steps 5 to 8 are the same as for MDPE connections.



9. Disassembly
To disassemble the fitting simply loosen the nut using a wrench until 2 threads are showing. Pipe will be released and can simply be pulled out of the fitting.

Note: Philmac recommends the use of PTFE tape on BSP threads to ensure a positive seal.

7. Fully Installed
Fitting is now fully installed.

COPPER ADAPTER fittings for Metric Copper pipe

(suits Copper to EN 1057)

(adaptors also available for copper to other specifications)

Philmac's all new carborundum gripper design has been introduced into the 3G™ copper connection kit.

With no metallic components in the gripping mechanism, there is no risk of electrolysis.



Copper Adapter is supplied fully assembled.
To reassemble - clip pieces together

INSTALLING COPPER ADAPTER



1. Disassembly -
Remove the 3G nut and keep for reinstallation later



2. Disassembly -
Remove the White 3G Collet.
Remove the Black rubber seal.



2. Assembly-
Before installing the Copper Adaptor check the rubber seal and adaptor are assembled correctly.





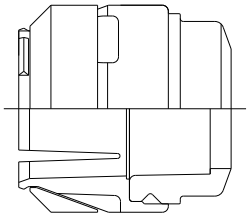
4. Install the Copper Adapter



5. Assembly - Install 3G Metric-Imperial Nut

COPPER CONNECTION KITS (Metric/Imperial to Copper EN 1057)

From	To	Part No.
20/1/2"	No. 2/15mm	99600200
25/3/4"	No. 2/15mm	99603200
25/3/4"	No. 3/22mm	99600300
32/1"	No. 4/28mm	99600400



INSTALLING COPPER WATER TUBE



1. Cut the Pipe Square
Cut the pipe square. There is no need to prepare the pipe end.
Ensure the nut is fully relaxed and there are two threads showing prior to inserting the pipe



2. Witness Mark the Pipe
To ensure the correct insertion depth witness mark the pipe by lining up the pipe against the fitting, using the flange of the body as an indicator.



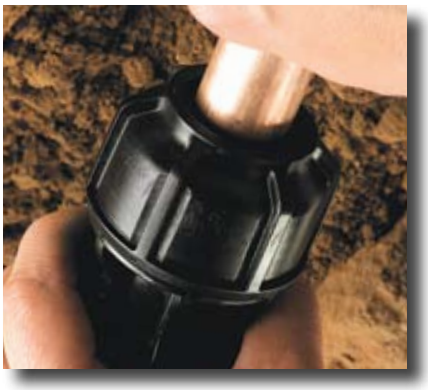
3. Pipe Insertion
Insert the pipe fully into the fitting up to the witness mark.



4. Nut tightening
The nut should be tightened by hand.



5. Nut Tightening
The nut should be tightened firmly with multi-grips or similar plumbing tools until the nut just touches the flange on the body of the fitting.



6. Fully Installed
The fitting is fully installed when the nut butts against the flange of the body.

REDUCING KIT INSTALLATION INSTRUCTIONS



Two styles – one for small size reductions (left) and for large size reductions (right)



1. Disassembly
Take the Metric/Imperial™ fitting and remove the nut.
Retain this Metric-Imperial nut for reinstalation later



2. Disassembly
The white split collet and seal ring must then be removed.



3a Install Reducing Kit
Small diameter change kit is illustrated
Take the appropriate connection kit and place it in the body of the fitting with the tapered end pointing outward.



4a Install Nut
Reinstall the Metric-Imperial Nut

Wind the nut onto body, leaving two threads visible

Pipe is installed as per pipe installation instructions



3b Install the Reducing Kit
Large diameter change kit is illustrated
Take the appropriate connection kit and place it in the body of the fitting as per the image above.



4b Install Nut
Reinstall the Metric-Imperial Nut

Wind the nut onto body, leaving two threads visible

Pipe is installed as per pipe installation instructions

THREADED FITTINGS - INSTALLATION INSTRUCTIONS

Philmac 3G™ Compression fittings offer a range of advantages over metal threaded fittings

- **Faster, Easier and Reliable Installation.**
- **Less Effort through lower friction**
- **Based on over 40 years of experience in Europe and Australia**
- **Exploits the properties of Polypropylene to reduce the installation effort compared to metal threads**

Based on over 40 years experience
Philmac manufactured the World's first all-plastic compression fitting in 1968. With over 40 years experience you can trust Philmac 3G™ to perform.

Manufactured from Engineering Plastics
Philmac threaded fitting bodies are manufactured from high performance engineering plastics which delivers significant benefits.

Less Friction
Philmac threaded fittings require significantly less effort to install. Delivered through the use of high performance plastic that provide far less friction than metal on metal threads.

New Approach to Installation
Philmac 3G™ fittings usher in a new era of thread connection. The high performance materials comform to slight irregularities in metal threads, whereas metal to metal joints tend to bind increasing the installation effort.

Smaller Lighter tools
A simple set of multi-grip pliers can be used to install a Philmac threaded fitting. Gone are the days when you need a large wrench to install and tighten a threaded fitting.

Proven Performance
Philmac threaded fittings are built tough and are used world-wide by water companies, civil contractors, plumbers and in rural applications.

Example - Male Adapter into a metal valve



1. Apply PTFE tape or suitable* sealant to the plastic thread ensuring sufficient is applied to ensure a watertight seal.



2. Using your hands, screw the thread of the Male Adapter into the valve until firm.



3. Grip the body of the 3G fitting with Multi-grips or similar plumbing tools and continue to screw the Male Adapter into the valve until tight.

   Stop if the shoulder of the 3G™ fittings touches the other fitting..

* **Note:** Philmac recommends the use of PTFE tape on threads to ensure a positive seal. If a liquid or paste sealant is used ensure it is suitable to be used with both Polypropylene and the material being connected to the Philmac fitting.