



**aquatherm**

state of the pipe

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**ASSEMBLY INSTRUCTIONS**

**aquatherm blue pipe: AQUATHERM PUSH-FIT FITTINGS**

**WARNING!**

FOLLOW THESE INSTRUCTIONS AND WARNINGS CAREFULLY! FAILURE TO DO SO COULD RESULT IN LEAKS, PROPERTY DAMAGE OR PERSONAL INJURY.

**APPLICATION**

The aquatherm push-fit fittings are intended for use with bare aquatherm pipe only. They are not intended to be used with OT pipes, or with piping from other manufacturers. The push-fit fittings may be used with the aquatherm UV pipes. It can only be used with single push-fit adapter.

**1. PREPARATION**

**1.0** Remove any outer wrap or other packaging material from the pipe. Check the pipe ends for any damage, gouges, cuts, scrapes, or scratches. The full insertion depth must be free of any damage to help ensure a leak-tight connection.

**1.1** Measure the pipe and add the insertion depth to the measurement prior to cutting to the appropriate length.

**1.2** Cut the pipe ends square with the pipe and remove any burrs and debris from cutting. The cut length must include the insertion depth into the push-fit socket.

**1.3** Clean pipe ends of dirt, oils, residues and other contaminants with a suitable cleaner such as isopropyl alcohol or acetone. Do not use any cleaner that is incompatible with PP pipes. If you are unsure about the suitability of a cleaner, please consult aquatherm prior to use.

**2. PROCESSING PUSH-IN SOCKET**

**2.0** Place the chamfering device at the end of the pipe and adjust it to the wall thickness of the pipe to be processed. Chamfer the outside of the pipe using a plastic pipe chamfering device. Remove any burrs and plastic debris from the chamfering of the pipe. Chamfer pipe ends with the chamfering device according to specifications, see table. Pull the chamfering device in one smooth motion around the pipe end to remove a continuous strip of material and to avoid sharp edges or cracks at the pipe end. Multiple passes (complete turns around the pipe) may be necessary to achieve the minimum chamfer length.

**2.1** Remove the chamfering device from the pipe end and visually and manually check the chamfered pipe end for uneven chamfer length or rough areas.

**2.2** Confirm the insertion depth marked on the push-fit coupling or push-fit adapter fitting.

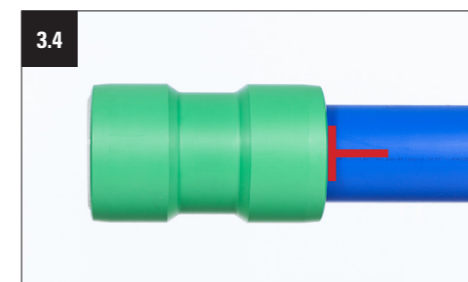
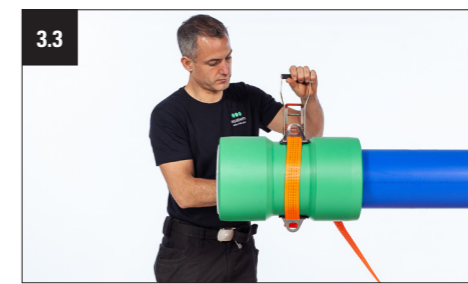
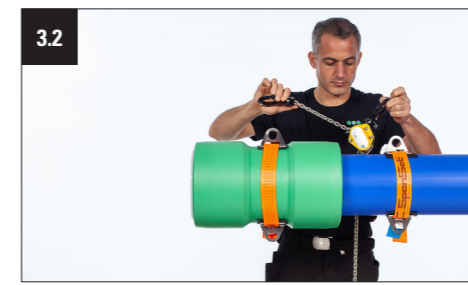
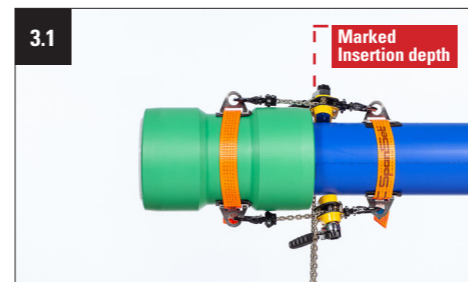
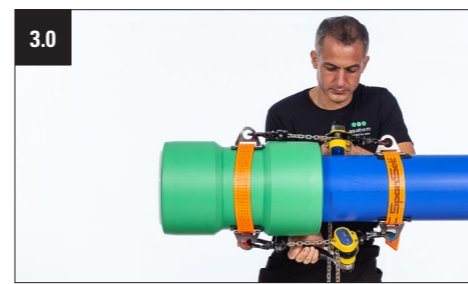
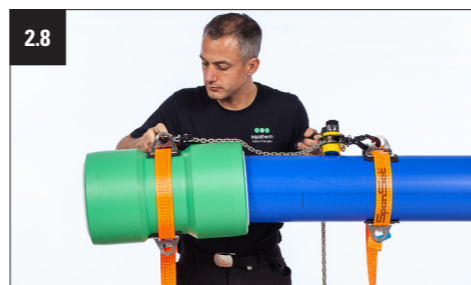
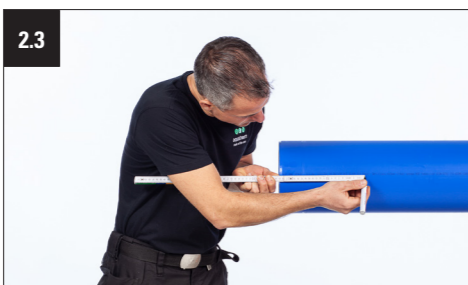
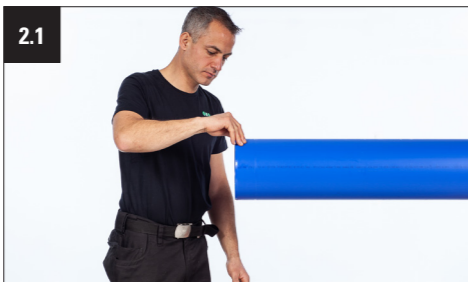
**2.3** Measure the specified insertion depth and mark it with a suitable marker on the pipe.

**2.4** Coat the end of the pipe with a suitable pipe lubricant for approximately the first 5 cm (2-1/2 in.) from the end. The pipe lubricant must be intended for use with plastic pipe that will not deteriorate natural or synthetic rubber/elastomeric or plastic seals and gaskets. If you are unsure of the suitability of a pipe lubricant, please consult aquatherm prior to use.

**2.5** Also coat the rubber gaskets of the push-fit coupling / push-fit adapter using a brush and a suitable lubricant.

**WARNING: SHARP EDGES!**

The grip ring on the interior of the fitting contains sharp components. Hand protection and proper tools must be used when applying lubricant to the interior of the fitting or reaching inside the fitting for any other purpose.



**2.6** Align the fitting socket with the end of the pipe. Place the push-fit socket on the pipe end and push the fitting socket onto the pipe end under slight pressure until the front seal is pushed over the pipe end and the gasket is fully onto the pipe.

**2.7** Final insertion of the pipe into the fitting must be done with an alignment tool.

The alignment tool must attach securely to the pipe and the push-fit coupling or adapter, and pull the fitting evenly to maintain proper alignment with the pipe.

When using a tension belt, the belt should have a width of at least 50 mm and a tensile force of at least 500 N.

**2.8** Use a suitable tool intended for joining pipe and push-fit fittings which will apply uniform pulling force and maintain alignment of the pipe/socket during the full length of travel.

**2.9** Attach the tool recommended by aquatherm to the pipe, at least 20 cm (8 in.) behind the insertion depth. Attach the other end to the center of the push-fit coupling, or the straight portion of the push-fit adapter. When connecting to an adapter, ensure that the tool is connected between the butt fusion bead and the push-fit socket so that the tool is not pulling on the fusion bead.

**3.0 + 3.1** Pull the push-fit coupling/adapter onto the pipe end up to the marked insertion depth.

**WARNING!**  
The installation equipment may be under high tension upon completion of the insertion. Straps or other components may snap or release unexpectedly!

**3.2 + 3.3** After completing the work step, carefully remove the tool from the pipe and the push-fit coupling/adapter in accordance with the tool manufacturer's instructions.

**3.4** Completed assembly showing proper alignment and insertion.

IN ADDITION TO THE SPECIFIC INSTALLATION GUIDELINES ABOVE, ALL INSTALLATION METHODS SHALL BE CARRIED OUT IN A WORK-MANLIKE MANNER CONSISTENT WITH RELEVANT INDUSTRY BEST PRACTICES.

TABLE MINIMUM CHAMFER LENGTH

MINIMUM CHAMFER LENGTH	
Outer diameter [mm]	Chamfer length [mm]
90	10
110	
125	
160	15
200	
250	
315	20
355	
400	
450	