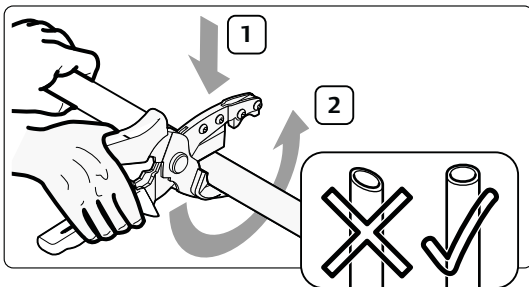# 9 Installation Information

Before the pipe system is installed, it is vital that the fitter reads, understands and takes note of this instruction. On using the Uponor Q&E battery tool and Uponor Q&E manual tool, it is vital that the fitter reads, understands and takes note of the operating and maintenance instruction attached to this tool. The pipes are not to be unpacked before installation to stop any pipe damage or imperfections arising from UV radiation. The pipes must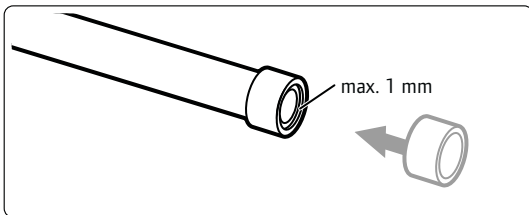 not be fouled at all (free of dust, mortar and grease). Pressure-seal caps are to be fitted onto the pipe ends to stop dirt getting inside. The pressure-seal caps are to remain on the pipe ends for as long as possible.
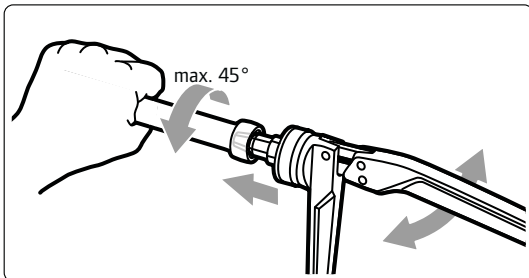
Uponor Q&E Fitting

1. Cutting to length
Use Uponor pipe cutter to cut pipe to length in a correctly angled manner. The cutting edges must be straight and burr-free. Any conduit can be cut to length – independently to the Q&E pipe – using the combi-Uponor pipe cutter. In doing so no damage is done to the actual pipe.
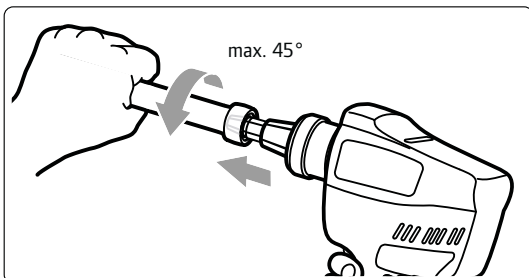

2. Fitting Q&E Ring/eval Ring
Slip the Q&E ring matching the pipe dimension and type onto the pipe. Have it project slightly over the pipe end (max. 1 mm).

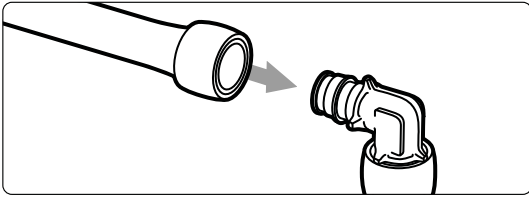**3a. Expanding operation using the Uponor Q&E manual tool**
The Uponor expander head matching the pipe dimension and type must be mounted on the tool. Open the Uponor manual expander tool fully and insert the Uponor expander head straight and as far as possible into the pipe end. Slowly completely close the expander tool and hold for 2-3 seconds. Then open the tool and retract to the extent that the jaws detach themselves from the pipe wall. Radially turn the tool (maximum 45°). Then immediately push in as far as possible into the pipe and again flare. Keep on repeating until the pipe end rests on the limit stop of the expander jaws. Then flare one final time. Detach expander tool and immediately go on with point 4.

3b. Expanding operation using Uponor Q&E battery tool
The Uponor expander head matching the pipe dimension and type must be mounted on the tool. Insert the Uponor expander head straight and as far as possible into the pipe end and press the machine against the pipe. Switch on machine (keep switched pressed). As soon as the Uponor expander head is fully opened (recognisable from the cracking sound), the machine automatically switches to return travel and the head is again closed. Let go the switch again, pull the head a little out of the pipe so that the jaws detach themselves from the pipe wall. Turn the machine radially a little (maximum 45°) and press in the Uponor expander head as far as possible. Switch on the machine. Repeat the expanding operation for as long as it takes the expander jaws to be inserted up to the limit stop in the pipe. Then expand for the final time. Immediately go on with point 4.

9 Installation Information

4. Fitting

Swiftly push the pipe up to the limit stop onto the fitting stub. Hold in this position for a few seconds until the pipe has shrunk onto the fitting stub.

Please note

No gap is to arise between pipe and fitting stop.

Place the Wirsbo Q&E ring on the pipe

Widen the pipe end with the expander tool

Push the pipe onto the fitting – done!
Uponor PPSU fitting with Q&E

Mounting operation

If the Q&E ring is not tight enough on the pipe, then push back the Q&E ring. Slightly flare the pipe and then return it to the right position. The Q&E ring will then fit firmly on the pipe.

It is vital before each expanding operation that the tool is turned somewhat (max. 45°) before being inserted. Only in this way can it be ensured that the pipe inner wall is striation-free flared and as a result a permanent seal-tight connection is provided. Considerable play on putting together fitting and pipe or the need to hold the pipe for over 3 seconds before it grips round a fitting point to the fact that the pipe has been flared too often and/ or kept too long in the expanded position.

It thus takes longer until the joint is seal-tight.