

A Linde forklift is shown lifting a large stack of blue Uponor Barrier PLUS pipes. The pipes are stacked horizontally and are secured with blue straps. The forklift is a red and black model, and the operator is visible in the cab. The background shows a warehouse building with a large open bay door. The sky is clear and blue.

uponor

Handling instructions

Uponor Barrier PLUS

Uponor Barrier PLUS is a fully plastic potable water pipe to protect the drinking water from the toughest toxins thanks to its polymer protective layer, suitable especially in areas at risk of polluted soil. It has 50+ years of service life.



Handling

Because of their special structure Barrier PLUS pipes require more careful handling than standard PE100 pipes. Barrier PLUS pipes must be transported and stored in their own packages. Do not remove them from the original packaging until necessary.

Winter and the Barrier Plus pipe

It is possible to install Uponor Barrier PLUS pipes even in cold weather, but pipes must be handled gently, and all denting must be avoided. In cold weather it might be hard to remove the protection layer with the Barrier tool and pliers, so it is possible to warm up the protection layer before peeling or to use, for example, the Caldertech tool and scrape it. Warming must be done carefully, and air that is too hot must be avoided.

Maximum surface temperature of the pipe is 50 °C. The lowest recommended temperatures for handling Barrier PLUS pipes are -20°C for straight pipes and -15°C for coils. Welding in cold weather is more difficult than welding in normal temperatures. It is important that all welding instructions in cold weather are followed.

Coils

The pipe is forced into a coil shape and opening the coil releases these forces. Take care of occupational safety when opening the coil. In cold weather the coil should be stored in a warm place before installation, so that it is easier to get the pipe straight and installation is easier than with a cold pipe.



Factory peeled pipe

Pipes are delivered as factory peeled. This means that peeling has already been done to both ends of the pipe. Straight pipes are peeled for butt welding. If electrofusion is used, the pipe must be peeled more. Coils are peeled for electrofusion.

Peeling the layers

Instructions for peeling is available in a different manual.

Cutting the pipe

When a chain saw is used for cutting, the movement of the blade causes very strong forces to the pipe structure. To avoid problems caused by using chain saw, peeling of the pipe must be done immediately after cutting.



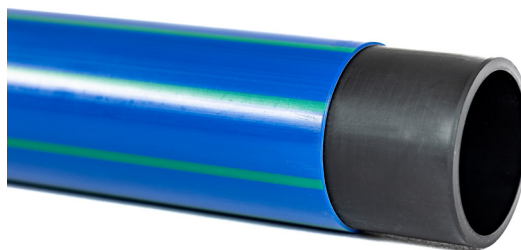
If the protection layer is damaged

The purpose of the protection layer is to protect the barrier layer. If the protection layer is damaged, e.g. by a deep scratch, the barrier properties of the pipe might be affected.

The damaged area must be removed or protected against chemicals. This protection can be carried out with Barrier Wrap or aluminium tape. If aluminium tape is used, it has to be protected against mechanical stress with bitumen tape.

The width of the protection must cover the damaged area and have 50mm overlap on each side over intact layers.

NOTE! A damaged protection layer is a risk for water contamination.



Connections

Connections are possible to make with electrofusion fittings (EF), butt welding and with mechanical fittings. With all these methods the protection layer must be removed from the connection area.

With EF the protection layer should be removed from the area that will be covered with the fitting. When electrofusion is used, the media pipe must be scraped after peeling.

With mechanical fittings the protection layer is removed from the area that will be covered with fitting.

With butt welding the protection layer should be removed 20 mm from the end of the pipe.

Protecting the connection area

To prepare the pipe for a connection, the protective layer must be removed from the connection area, but after the connection, the same area must be protected again. This can be done with the Uponor Barrier PLUS wrap where the solution is still fully plastic and the barrier material is the same with the pipe, or with aluminium tape. Instructions for both methods are available.



Moving > Water

uponor

Uponor Corporation

Ilmalantori 4

00240 Helsinki

Finland

T +358 (0)20 129 211

F + 358 (0)20 129 2841

www.uponor.com