



TECEflex

The universal installation system using composite pipes



TECE:
intelligent housing
technology



The TECEflex composite pipe bends easily by hand, without the use of a spiral spring and despite this does not deform or run the risk of buckling.

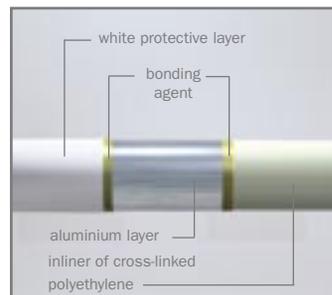
TECEflex composite pipes combine the best properties of both metal and plastic pipes.

A truly universal pipe providing a multiplicity of uses in housing technology which, thanks to its extreme flexibility, is easy to work with. It can't be buckled and also retains its form after bending. TECEflex is so safe that it has also been approved for use in gas installations.



The TECEflex composite pipe has been granted a DVGW design type approval. As from the effective date of the new TRGI it is also approved for use as a gas pipe (yellow).

- Thermal elongation the same as for metal pipes
- Also permitted to be used as a gas pipe as from the effective date of the new German TRGI (technical guidelines for gas installation)
- Attractive even in visible areas thanks to its outer white layer



The inliner of the composite pipe consists of cross-linked PE-Xc pipe. The butt-welded aluminium pipe jacket ensures that it is absolutely airtight.



Its relatively thick wall protects the TECEflex composite pipe even against rough handling on building sites.

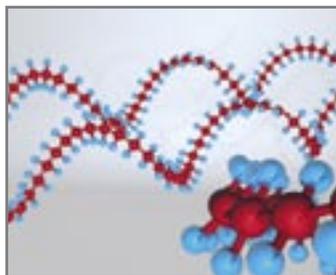


What use is the best installation pipe if the joints are no good?
With the TECEflex system both pipe and jointing technology are optimally connected.

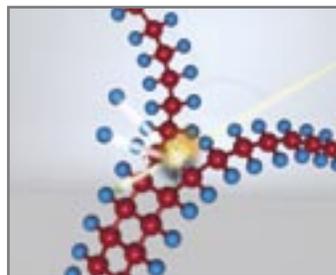
Electron beam cross-linking – high tech ensures safety.

In a purely physical process the individual molecule chains of the PE inliner are cross-linked (thus the description PE-Xc). Thus giving the pipe a considerably higher resistance to temperature changes and stress cracking.

When using TECEflex composite pipe, TECE guarantees decades of safe functioning. Take advantage of the warranty and liability assurance which we give you on request when using TECEflex products.



PE molecules not cross-linked



Cross-linked PE molecules

- Composite pipe certified according to DVGW registration DW-8501 AQ 2007
- High level of safety due to the particularly thick-walled PE-Xc inliner
- With butt-welded aluminium jacket and white outer layer
- Just one pipe for sanitary, heating, floor heating and gas installations



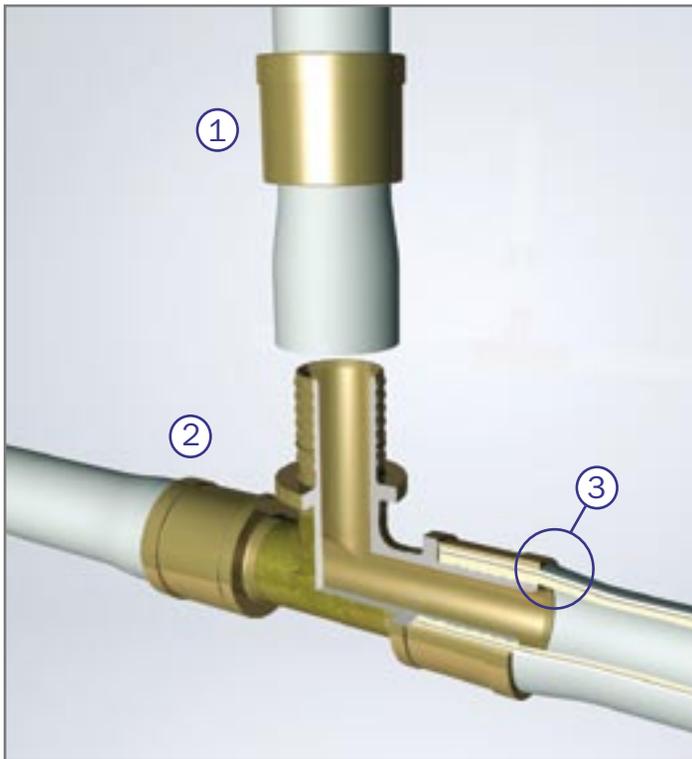
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For TECEflex, all dimensions of pipe are press-fitted axially without using O-rings. A safety benefit also for rising mains.

TECEflex: Doubly insured should damage occur.

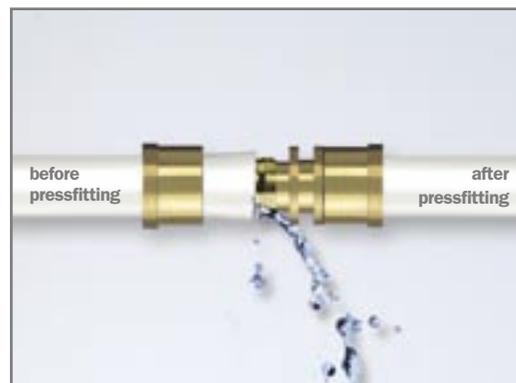


1. Pressfit sleeve and composite pipe prior to pressfitting
2. Pressfit sleeve and composite pipe after pressfitting
3. Memory effect: Following expansion the composite pipe contracts again over the fitting. During pressfitting an O-ring-free, absolutely tight connection is created with a barely narrowed cross-section in the joint area also.

A joint that hasn't been press-fitted catches your eye twice over when using TECEflex! First, when there is a loosely fitting pressure sleeve and, second, when liquid escapes during the pressure test.

The majority of the systems available on the market apply a radial pressfitted joint which requires sensitive O-rings. The TECEflex system uses axial pressfitting technology without O-rings and therefore offers true safety advantages.

- Joints that are not pressfitted are easily detectable due to the loosely sitting pressfitted sleeves
- Joints that are not pressfitted leak during the pressure test
- Safety is guaranteed by the O-ring-free joints
- No safety risk caused by old tools with insufficient pressing force
- DVGW-certified forced leakage



Joints that are not pressfitted are easily detectable due to the loosely sitting pressfit sleeves.

Furthermore, liquid escapes during the pressure test.



Adaptors for expansion and pressing are available for most standard pressing tools.

Fast and reliable pressfitting, by hand or machine...

The TECEflex joint technology makes it possible to work quickly without time-consuming sawing, deburring, welding, soldering and hemping.

TECEflex composite pipe can be pressfitted manually up to dimensions of 32mm using manual pressing pliers. For larger dimensions of 40-50mm corresponding adaptors for expanding and pressfitting are available.

- Calibrating and bevelling of pipe is unnecessary
- No step in the process can be forgotten
- Maintenance-free tools for pipes up to dimensions of 32mm
- The basic standard pipe offers stability and safety even without the aluminium jacket
- Once pressed, a connection can be disconnected using hot air and re-used again



Cutting the TECEflex pipe using plastic cutters



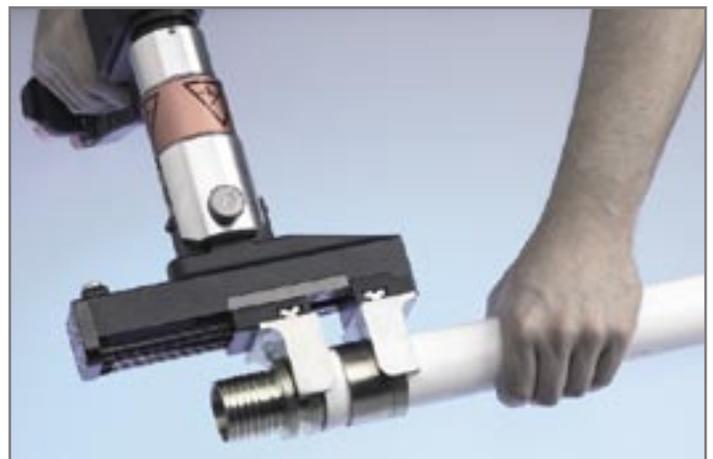
Connecting the pressfitted sleeve to the pipe



Expansion of the pipe end using the expansion pliers



Pressfitting the joint using the hand-held pliers



...or by machine

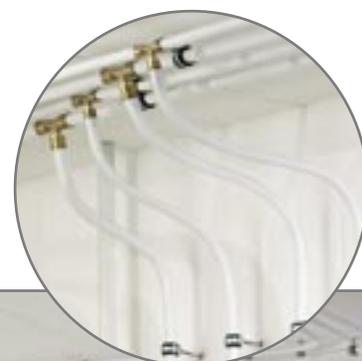
From the water meter to the fitting: TECEflex does not dirty the water.

The high quality of drinking water should not be negatively affected in any way. Therefore, all TECEflex composite and drinking water pipes as well as TECEflex fittings fully comply with current drinking water regulations.

TECEflex composite pipe and TECEflex sanitary pipe are DVGW-certified and have been tested for their hygienic properties. They are also ideally suitable for areas where drinking water is used.

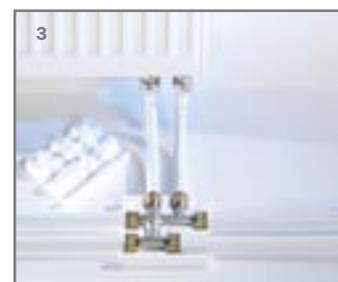
The TECEflex sanitary fittings are delivered as polished CR brass and comply with the strict drinking water regulations which went into effect as of 01.01.2003.

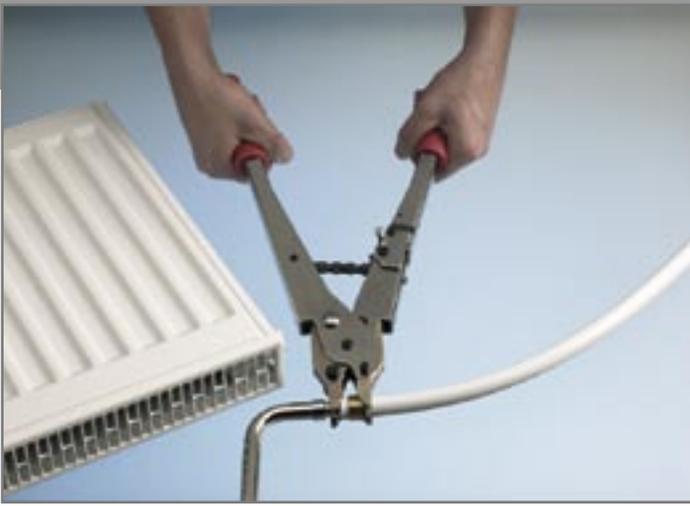
TECEflex sanitary fittings are dezincification-resistant in compliance with DIN 12164/65 and consist of an alloy which is expressly recommended by the DVGW for drinking water installations.



TECEflex sanitary installations make it possible to save costs and time when using this simplified connection and installation technology (see detail)

For radiator connections, the TECEflex product range also offers convenient variants, in addition to standard connections (fig. 1-5), to make installation easier (fig. 6-7).





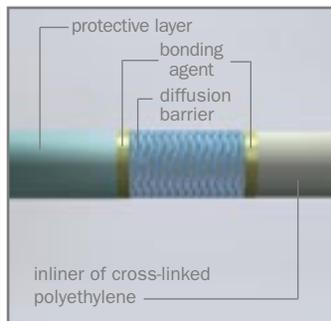
Ideal for floor heating systems
TECEflex-PE-MDXc pipe

TECEflex heating and floor heating: double safety, even underneath the screed.

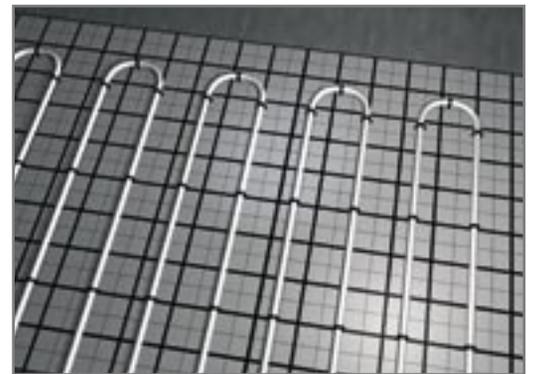
The new TECEflex-PE-MDXc pipe:

Due to its diffusion barrier and a high degree of flexibility it is particularly suitable for floor heating systems.

Due to the electron beam cross-linking properties, the 5-layer floor-heating pipe provides a very strong safety buffer against mechanical stress and strain on the building site. The integrated oxygen barrier layer is effectively protected against damage by being centrally positioned in the pipe wall.



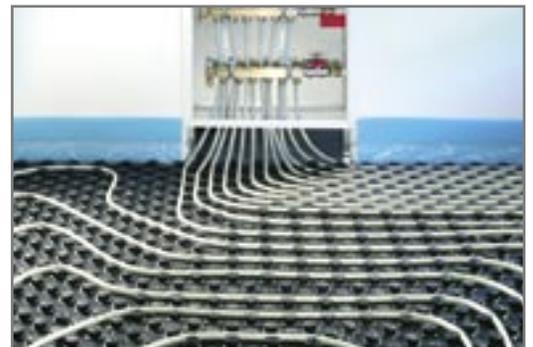
Composition of TECEflex-PE-MDXc pipe



All pipes are pressfitted using the O-ring-free TECEflex fitting making it also possible to place joints inside the screed.

Further advantages of the TECEflex-PE-MDXc pipe:

- Electron beam cross-linked
- High flexibility
- High resistance to bending
- Fittings identical to the TECEflex composite pipe
- Very economical



Ideal for the restoration of old buildings: TECEflex dimpled sheet is only 25mm high.



TECEflex: now also available for gas installations

According to the DVGW regulations, the TECEflex gas pipe may be used also as a gas pipe as of the effective date of the new German TRGI.

Thus TECEflex users can lay complete house gas installations up to a pressure of 100mbar.

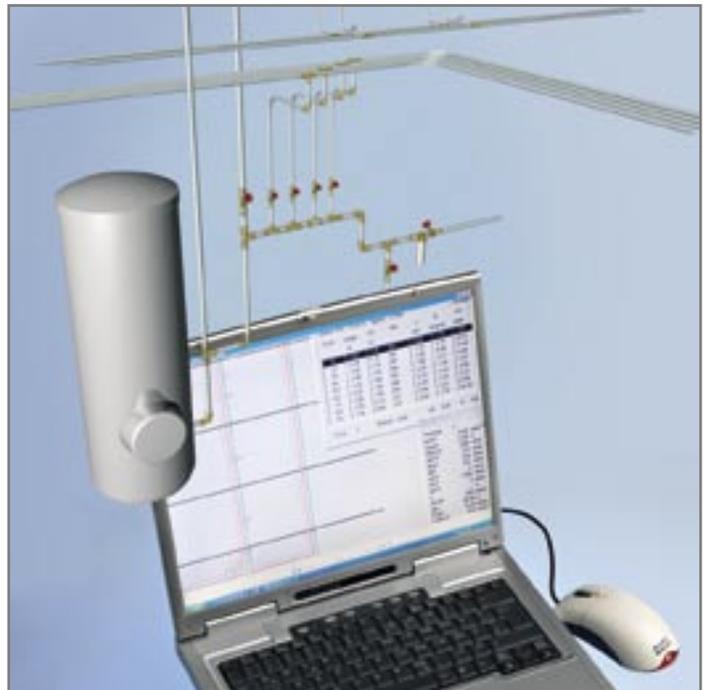
Our standard TECEflex fittings can be used here too. The advantage: simple warehousing and no risk of confusing gas and water fittings. TECEflex gas pipes are available in dimensions from 14mm to 50mm.



TECEdendrit software: the modern alternative to spreadsheets

The simple input command options of this calculation software make it possible to quickly adjust a previously generated pipe run to new or changed building conditions.

- Pipe network calculation of drinking water installations
- Heating load calculation
- Pipe network calculation of heating installations
- Layout of floor heating systems and heating installations
- Layout of floor heating systems and radiators
- Drawing surface 15 x 25m



TECEdendrit, the software for pipe network calculation of TECEflex and TECEquickpipe