

The multilayer metal pipe Hakathen® was developed to resist the wide range of temperatures and pressure found in hot and cold water systems. Hakathen® pipes are superior to conventional piping and are highly suitable for surface heating and cooling systems, radiator connections and sanitary installations.

The entire HakaGerodur range is backed by decades of experience in plastics and aluminium processing. And this vast pool of knowledge is employed for the benefit of our customers.

Structure

A basic pipe of polyethylene is extruded and an adhesive layer applied in a co-extrusion process. An aluminium strip of 0.2 to 0.8 millimetres thickness is shaped around the pipe, butt welded along its length and calibrated to the inner pipe. Finally another adhesive layer and a covering layer of polyethylene are extruded onto the surface. The welding seam is examined inline during the production process. The inner diameter of the finished product is verified by the use of a steel ball.

Material

Standard pipes with PE-RT liners: The inner pipe material PE-RT was developed by renowned manufacturers for this application.

Pipes with PE-Xc inner pipe are cross-linked by electron radiation.

Only the purest material qualities from renowned pipe material manufacturers are used.

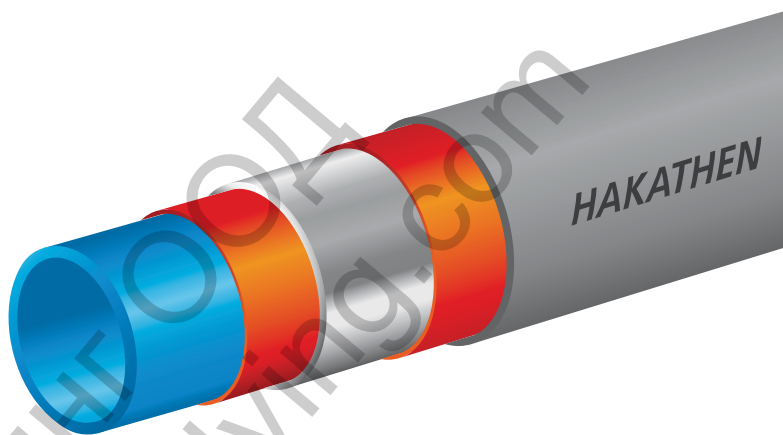
Dimensions

- Ø 10 mm to 63 mm, heating and drinking water dimensions
- Special dimensions and special tolerances on request

We would gladly send you a dimensions and tolerance table.

Applications

- Surface heating and cooling systems: Hakathen®-L/Hakathen®-FBH
- Radiator connections: Hakathen®/Hakathen®-L
- Drinking water installations: Hakathen®/Hakathen®-L
- Cooling systems: Hakathen®/Hakathen®-L
- Gas distribution: Hakathen®/Hakathen®-L
- Special applications: Hakathen®/Hakathen®-L



- Protective layer of PE-HD or PE-RT
- Plastic layer for force-fit connection
- Homogeneous longitudinally butt welded aluminium pipe
- Plastic layer for force-fit connection
- Pipe wall of PE-RT or PE-Xc

Approvals/Standards

- DVGW (German Technical and Scientific Association for Gas and Water) approval: DW-8243BT0329 DW-8243BT0339
- ÖVGW (Austrian Association for Gas and Water) approval: W 1.269
- SVGW (Swiss Association for Gas and Water) approval: 9812-4036
- KIWA (Testing Association) approval: K21006
- KOMO approval: K20900
- CSTB approval: CSTB – 33-1213 CSTB – 78-1213
- SKZ (Southern German Plastics Centre) monitored (SKZ symbols A237 / A275)
- Complies with the requirements of EN ISO 21003, certification 2011 completed
- Additional approvals/certifications in several European countries
- Properties in accordance with DIN 16836

Advantages

- + No oxygen diffusion due to butt welded aluminium layer.
- + Operational range max. 95°C, max. 10 bar, constant temperature 70°C over 50 years (DVGW).
- + High temperature and pressure resistance for all heating and sanitary applications.
- + PE-RT and PE-Xc are corrosion free.
- + No incrustation due to smooth inner pipe surface.
- + Low noise (noise insulation)
- + High degree of flexibility and yet inherently stable during laying, simple and economic working.
- + Significantly lighter than metal pipe, easier to use.
- + UV resistance min. 6 months in unprotected storage.
- + Resistant to numerous chemicals (details on request).
- + Low linear thermal expansion.
- + Pipe diameter and material properties meet the tightest tolerance requirements.

Additional Products



Pipe in corrugated pipe

The pipe is drawn into a corrugated pipe at the factory. This protective pipe is available in the colours red, blue and black. It is recommended especially for drinking water installation and radiator connections.



Pre-insulated pipes

Multilayer metal pipes with pre-fabricated cold/heat insulation of thermally welded, extruded PE foam with a protective layer of a PE film are suitable for drinking water installations and radiator connections. The outer layer offers additional protection against UV radiation as well as against mechanical loading.

- Closed cell structure
- Temperature resistant
- Good thermal insulation
- Easy to assemble due to good bending properties



Jointing method

Our multilayer metal pipes are certified with several completely tight, non-detachable pressing systems. This fast jointing method makes welding, soldering or bonding superfluous. The joints are resistant not only to tensile loads, but also to temperature change and pressure. Our low pipe tolerances and the optimum adhesion of the outer layer also permit the use of push-in fittings. Our multilayer metal pipe is used in combination with several renowned push-in systems.



Accessories and tools

We offer accessories and tools for the use of multilayer metal pipes and their laying (pipe cutters, calibrators, flexible springs, one-man coilers, presses, press jaws and much more).



Mounting rails

The mounting rail for underfloor heating developed by HakaGerodur engineers meets all functional needs and complies with the technical building requirements of professional associations. It is an extruded U-shaped fixing rail with stamped out pipe holding clips.

- Light, compact and low design. Easily inserted and clipped in place
- Fixed to thermal insulation with double-sided adhesive tape or with fixing needles.
- Rail lengths 2.10, 3.00 and 3.90 metres