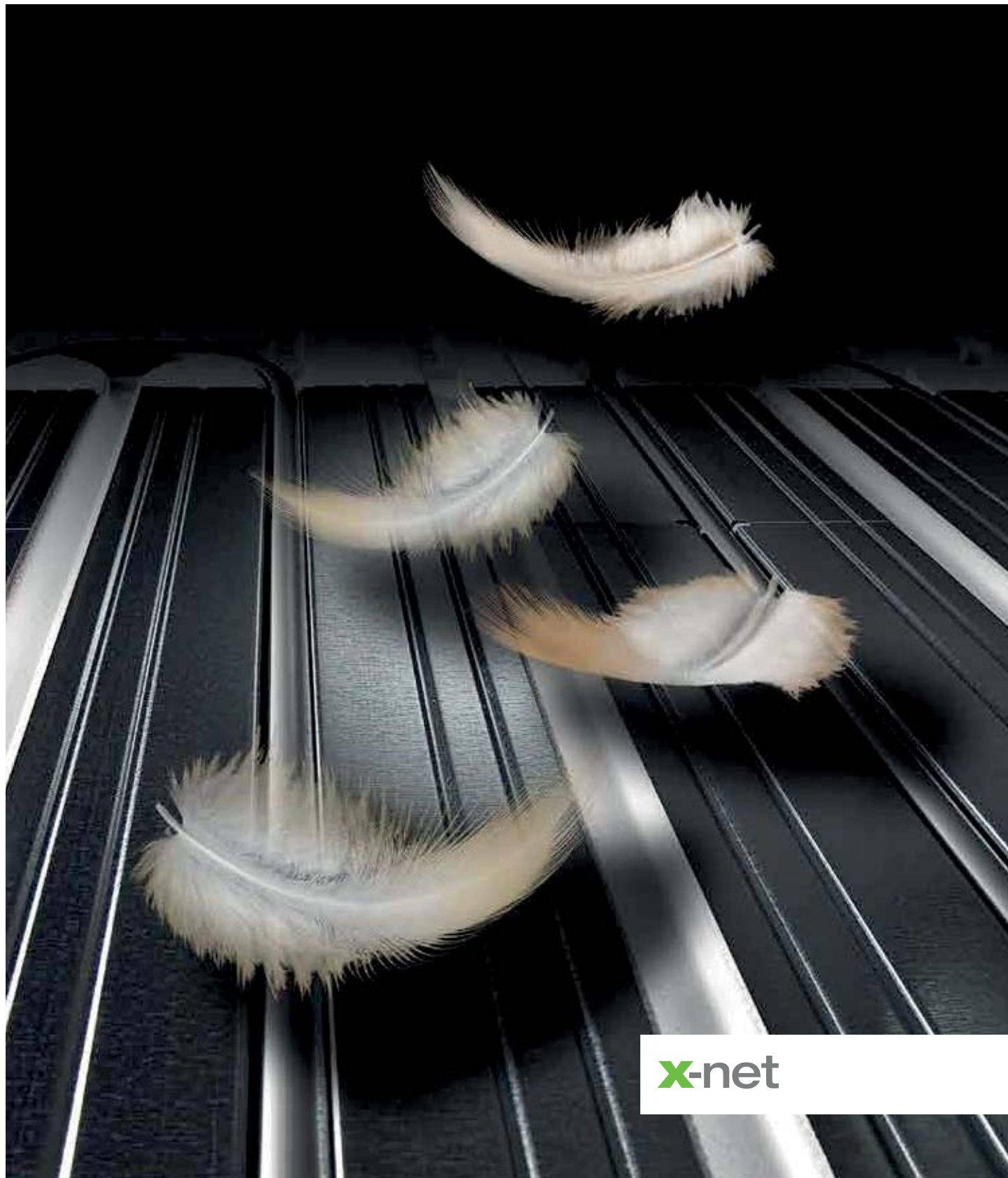


x-net C13 dry system

Versatile lightweight concept – Underfloor heating, above all for renovations.



x-net

x-net C13 dry system. Underfloor heating for dry screed elements and wet screed.

Versatile lightweight concept – perfect for renovation and modernisation. In combination with dry screed elements, the x-net C13 dry system (tubes in the insulating layer) permits especially lightweight floor construction that, in addition, requires minimal time to complete. With wet screeds as well, a lower construction height and weight per unit area can be achieved than with classic wet systems (tubes in the screed). The new, professional detailed solutions for the tube layout in the distributor connection area make x-net C13 even more application-oriented.



For problem-free installation afterwards thanks to its low height and light weight. Quick and economical installation.



x-net C13 benefits

When used with dry screed elements

- Short reaction time
- Ideal for renovations
- Low weight
- No introduction of moisture
- Low construction height

When used with wet screeds

- Heating and cooling
- Lower weight than with classic underfloor heating systems
- Low construction height



Kermi benefits

- Low height of the x-net dry flooring panel (25 mm)
- High load-bearing capacity of the surface thanks to closed structure
- Three transverse tube channels for connecting lines in the head region
- Easy installation:
 1. Polystyrene rigid foam insulation can be cut easily with the x-net cutting tool
 2. Additional tube channels can be made easily with the x-net hot cutting tool
 3. Fast, tool-free length adjustment of the x-net heat-conducting panels
 4. Ideal for one-man tube installation
- Perfect protection of the tubes during the rough-in phase of construction. High tube holding force due to Ω contour of the x-net heat-conducting panel
- Thermal characteristics tested according to DIN EN1264 and DIN Certco-certified
- x-net heat-conducting panels (steel or aluminium) for any given situation

When used with x-net aluminium heat-conducting panels:

- Increased output of 30 % for the same flow temperature
- Flow temperature lower by approx. 3 K for the same heat output; this translates into energy savings of about 7 % when used with a heat pump



x-net dry flooring panel (25 mm).

High load-bearing capacity, easy to install.

System panel for use with dry screed elements and wet screed.
Easy installation thanks to low height and light weight.



The three transverse tube channels in the head allow the installation of two heating circuits in a room without having to create additional tube channels.



Additional tube channels needed can be cut precisely and quickly with the x-net hot cutting tool.



To facilitate the correct positioning of the x-net heat-conducting panel, there are markings on the x-net dry flooring panel (25 mm).



The x-net dry flooring panel (25 mm) has a high load-bearing capacity thanks to the closed structure. Using the x-net heat-conducting panels increases the load-bearing capacity.



Benefits

- High foam density for stability and the ability to withstand high compression loads
- Closed structure for high load-bearing capacity
- Three transverse tube channels in the head area for installation of two heating circuits in a room
- With tube channels spaced 7 cm apart for meander-shaped tube layouts with a spacing of 14/21/28 cm
- Easy installation:
 1. Polystyrene rigid foam insulation can be cut easily with the x-net cutting tool
 2. Additional tube channels can be made easily with the x-net hot cutting tool
- Recyclable as well as CFC- and HBCD-free
- Insulation quality according to DIN EN 13163 monitored by a third party

x-net distributor panel (25 mm). Innovative in every detail.

More reliable floor construction based on professional detailed solution for flexible tube layout in the distributor connection area.



Cut tube channels precisely and quickly with the x-net hot cutting tool with the specially developed x-net Omega cutting tip. For secure tube retention with an especially high tube holding force.



Omega-shaped tube channel cut on-site for secure tube retention with predefined distance between tube and load distribution layer.

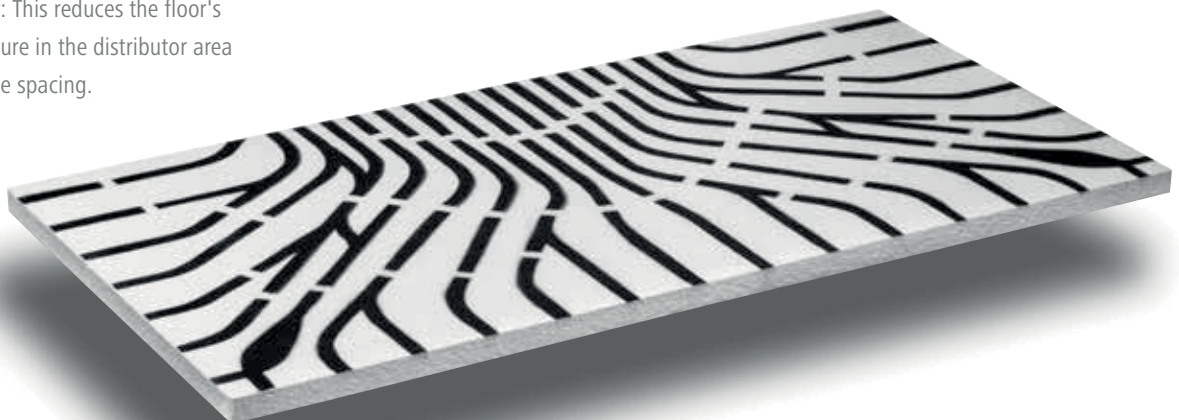



Benefits

- Printed fan-out grid
- Tube channels made quickly
- Secure tube retention
- No unnecessary hollow spots
- Reduced surface temperature despite close tube spacing



Predefined distance between tubes and load distribution layer: This reduces the floor's surface temperature in the distributor area despite close tube spacing.





Fast-responding and
uniform heat distribution.
Multifunctional and easy
to install.

x-net heat-conducting panel made of steel or aluminium. For efficient heat distribution.

Adjustable length, easy fitting and no tools required.



Special Q-shaped contour for high tube holding force and optimal heat conduction from the tube into the floor structure above.

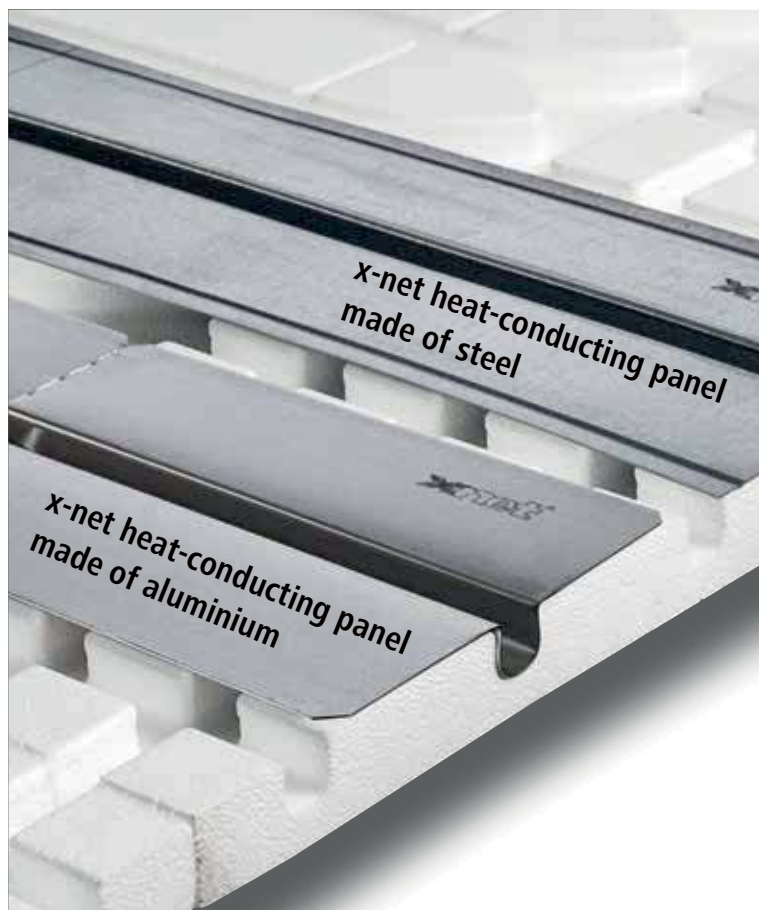


Tools-free length adjustment of the x-net heat-conducting panels through simple, burr-free breaking at the pre-stamped break points.



The heat-conducting panel can be broken into three, different sized individual panels (17,5/34,5/47 cm) and in this way provides the basis for flexible and fast installation.

The x-net heat-conducting panel made of aluminium provides a considerable increase in heat output. Compared to the steel version, the heat output is up to 30 % higher at the same flow temperature. Conversely, the flow temperature can be reduced by approx. 3K for the same heat output – this translates into an energy savings of about 7 % when operated with a heat pump.



Benefits

- Tools-free separation
- Burr-free breaks
- Additional surface stabilization
- High tube holding force thanks to Omega-shaped contour



The x-net heat-conducting panels can be quickly attached to the x-net dry flooring panel (25 mm) manually. In this way, the individual panels are joined to form a large surface.



Before the dry screed elements are installed or the wet screed placed, the x-net C13 dry system is covered with the x-net polyethylene film.

x-net 5-layer-PE-Xc tube.

Conveniently packed, clearly labelled,
technologically unrivalled.



Printing on piping indicates remaining length
and tube length already used for optimum
usage of the piping bundles.



High flexibility permits tight bending radii
and minimises the restoring force in the
tube elbow.



Tubes and tube connectors according to
DIN 4726 and DIN EN ISO 15875 are checked
and regularly monitored by an accredited
independent testing institute.



Practical piping bundle lengths up to
240 m in special cartons to roll out with
the x-net unrolling equipment right out of
the packaging.



Large tube coils in special stretch-film
packaging, which can be unrolled using the
x-net unrolling equipment right out of the
packaging.



Whether cardboard box or stretch-film
packaging: the remaining tube remains in the
packaging, protected against dirt and dam-
age, and ready to be transported at any time.



Protective layer

Priming

Oxygen barrier layer

Priming

PE-Xc base tubing



Benefits

- Twist-free unrolling right out of the packaging
- Remaining tube remains well-protected in the packaging, ready to be transported at any time
- Printing on piping indicates remaining length and tube length already used
- Tubes and tube connections inspected and regularly monitored by third parties
- 5-layer technology with protected internal oxygen barrier layer
- Oxygen diffusion resistant according to DIN 4726
- Practical piping bundle lengths from 120 to 1000 m



x-net edge insulating strips - H 120 mm.

The perfect termination at the wall – glued quickly and without tools at the desired height.



Benefits

- Time-saving and optimal attachment to the wall through use of adhesive strip on the back
- Extra-long film flaps for reliable sealing, even in difficult areas such as outside corners or in front of distributor cabinets
- Optimal protection of the edge joint against ingress of screed. This prevents sound bridges and assures unhindered expansion of the hot screed
- Fast and easy shortening through tear-off slit



Adhesive strips for fixing the x-net edge insulating strip (H 120 mm) to the wall. Height matched to the floor construction, ensuring no adhesive residue visible on the wall.



The extra-long film flaps permit reliable creation of a screed-tight film pan with the x-net T 200 polyethylene film.



Multiple tear-off slits for fast, tools-free shortening of edge insulating strips without leaving marks on the wall plaster.

x-net unwinding unit.

For tension- and twist-free unrolling of the x-net tube system tubes from the packaging.



Solid components, manufactured with high precision and designed for longevity – inherent in every Kermi-designed product.



Installed and ready for laying of tubing in just a few simple steps without the need for tools. With simple transport of the x-net unrolling equipment in a backpack.



Any remaining tubing remains in the cardboard box, protected against dirt and damage and ready to be transported at any time.



Benefits

- Innovation made by Kermi
- Easy transport in a backpack
- Simple, tool-free installation using only a few components
- Extremely stable thanks to solid components and high-quality surface coating
- Long-lasting due to high-quality ball bearings
- Carrying handles for easy transport
- Stable set-up and optimum protection of tubing and insulation due to large plate-shaped bases
- Twist-free unrolling of all tubing from the Kermi tubing packaging for the x-net C13 dry system



x-net C13 dry system.

Overview of components.

Perfectly matched system components for maximum ease of installation.

Kermi x-net C13 dry flooring panel (25 mm)

Product code SFDTBP01000



Application

System panel for use with dry screed elements and wet screed.

Technical data:

- Rigid foam insulation made from EPS 035 DE0, 200 kPa
- Direction-reversing curves and three transverse channels at the head of the panel
- Thermal resistance 0,629 m² K/W
- Material class B1 according to DIN 4102
- Installation spacing: 14/21 and 28 cm
- Installation area per panel 1000 mm x 500 mm = 0,5 m²

Kermi x-net distributor panel (25 mm)

Product code SFDTBPV2000



Application

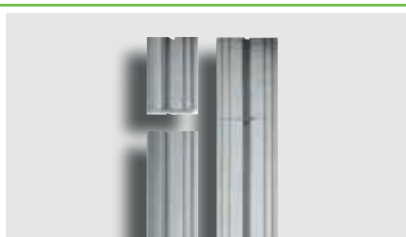
Professional detailed solution for flexible tube layout in the distributor connection area.

Technical data:

- Prevention of hollow spots through manual cutting of the required tube guide channels with the x-net hot cutting tool with the x-net Omega cutting tip
- Made from XPS WLG 035, without tube channels, printed with the fan-out tube layout
- L x W x H = 1000 mm x 500 mm x 25 mm

Kermi x-net heat-conducting panel made of steel

Product code SFDWLBO1000



Application

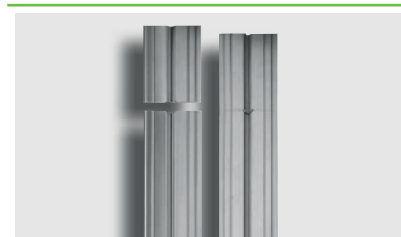
For heat distribution and tube installation in the x-net dry flooring panel (25 mm).

Technical data:

- For x-net system tube 14 x 2
- Made from galvanised sheet steel, with intended breaking points for tools-free shortening
- L x W x H = 990 mm x 120 mm x 0,4 mm

Kermi x-net heat-conducting panel made of aluminium

Product code SFDWLBA1000



Application

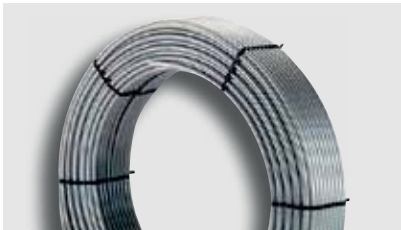
For heat distribution and tube installation in the x-net dry flooring panel (25 mm).

Technical data:

- For x-net system tube 14 x 2
- Made from aluminium, with intended breaking points for tools-free shortening
- L x W x H = 990 mm x 120 mm x 0,5 mm

Kermi x-net 5-layer PE-Xc tube

Product code SFRPE01XXXX



Technical data:

- DIN Certco registration 3V200 PE-Xc and 3V375 PE-Xc
- Application class 5, 6 bar
- Max. 90°C operating temperature
- 5-layer technology with protected internal oxygen barrier layer
- Oxygen-tight to DIN 4726

14 x 2,0 mm:

Delivery lengths in special carton: 120/240 m
Delivery lengths in stretch film: 600/1000 m

Kermi x-net edge insulating strips, H 120 mm

Product code SFZRS002000



Application

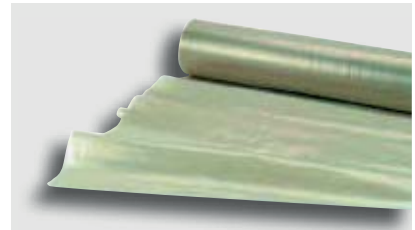
For standards-compliant creation of edge joints in screeds to DIN 18560.

Technical data:

- Fire classification B2/E for separating the hot screed from adjoining components
- Made from closed-cell PE insulation, with PE film flaps
- With adhesive strip on the back for fixing to the wall, height 5 cm from bottom edge of edge insulating strip
- With multiple tear-off slits
- L x W x H = 25000 mm x 120 mm x 8 mm

Kermi x-net T 200 polyethylene film

Product code SFZPF200000



Application

Polyethylene cover and protective film.

Technical data:

- 2 m web width
- Folded at the centre and rolled into 50 m length
- Thickness = 200 micrometers

Kermi x-net hot cutting tool

Product code SFWHS000001



Application

Electric polystyrene cutting tool with round cutting tip for making additional tube guide channels in the x-net dry flooring panel (25 mm), 230 V, 50 Hz

Kermi x-net Omega cutting tip

Product code SFWHS000002



Application

- For cutting tube channels with an omega-shaped contour for x-net system tubes 14x2 mm in the x-net distributor panel (25 mm).
- Secure tube retention with distance between tube and load distribution layer to reduce the surface temperature.
- For use in the x-net hot cutting tool.

Kermi x-net unrolling unit

Product code SFWAV000000



Application

For tension and twist-free unrolling of the x-net tube system tubes from the packaging.

Suitable for following x-net tube system tubes:

- 10 x 1,3: 120 and 240 m
- 12 x 1,4: 120 and 240 m
- 14 x 2: 120, 240, 600 and 1000 m
- 16 x 2: 120, 240, 600 and 1000 m
- 20 x 2: 240 and 600 m

Clear advantages. Complete service.



Comprehensive heating system x-optimised.

- Energy savings of up to 20 %
- Optimally matched components
- Everything from a single source, from planning to commissioning



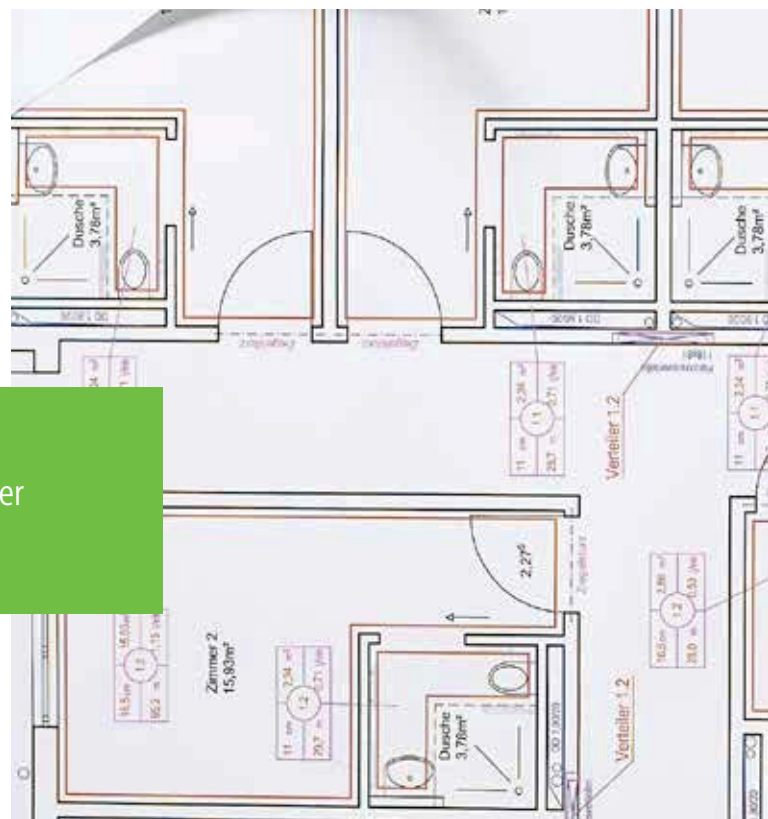
Certified quality.

- Kermi is certified according to DIN EN ISO 9001:2008, 14001:2004 and 50001:2011
- All x-net components comply with current standards and directives
- Regular monitoring of core components by independent testing institutes
- x-net systems tested according to DIN EN 1264 and DIN Certco-certified

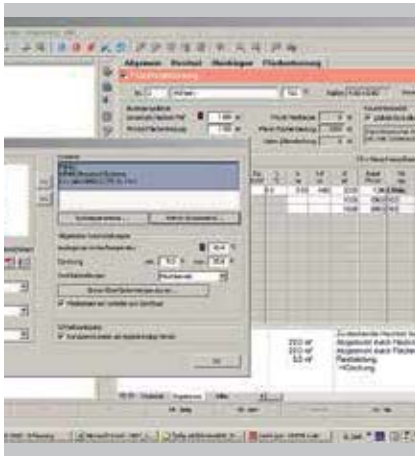


Seminars and continuing education offerings.

- Modern training centre at the Kermi:Campus
- Future-oriented, real-world and solution-oriented seminars for planners, architects and specialised tradespeople
- Seminar schedule and bookings possible online



Kermi.
A capable partner
at your side.



Support during selection and planning.

- Support during order process
- Support with a versatile service offering during system planning
- Comprehensive software for planning for all x-net panel heating and cooling systems
- Comprehensive information material
- Extensive technical Internet portal



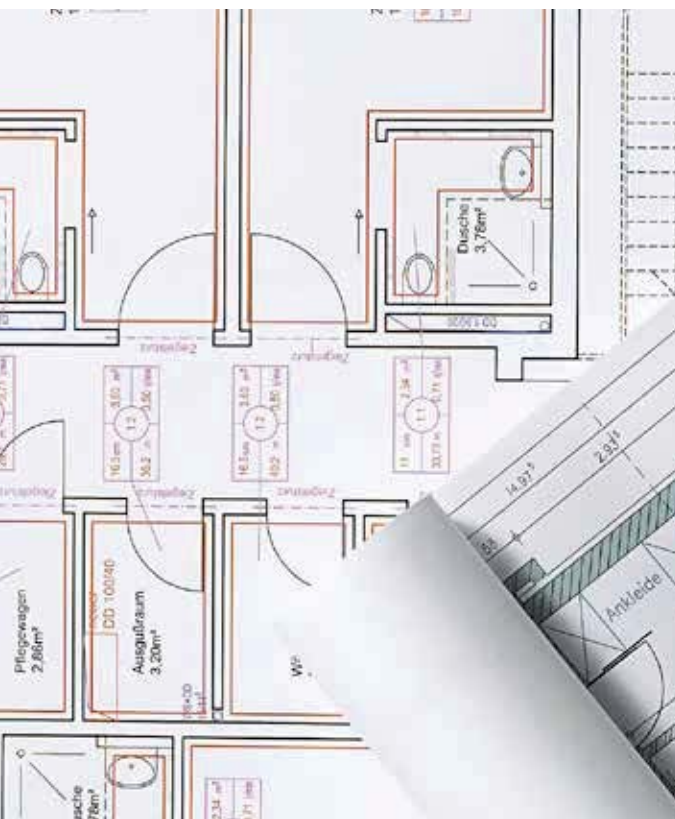
Complete support for the customer.

- Large service as well as field service teams for fast on-site assistance
- Competent in-house service team for fast telephone assistance
- Professional, unbureaucratic complaint processing
- Detailed initial training on-site
- Detailed planning and configuration advice



System knowledge down to the details.

- Carefully engineered system technology developed in-house for easier, fast, safe work
- Many Kermi innovations
- Kermi special solutions for individuals working in the trades





x-change
heat pumps



x-buffer
heat storage



x-center controls



x-net panel heating/
cooling



therm-x2
steel panel radiators



Design radiators



Heating wall



Convactor



Kermi Decor



Wet floor system



Shower enclosure

Healthy, comfortable heat and unlimited showering comfort with the comprehensive Kermi heating technology and sanitary product ranges.

You can find additional information at www.kermi.com



A leading brand of  AFG

Kermi GmbH
Pankofen-Bahnhof 1
94447 Plattling
GERMANY

Phone: +49 9931 501-0
Fax: +49 9931 3075
www.kermi.com
info@kermi.com