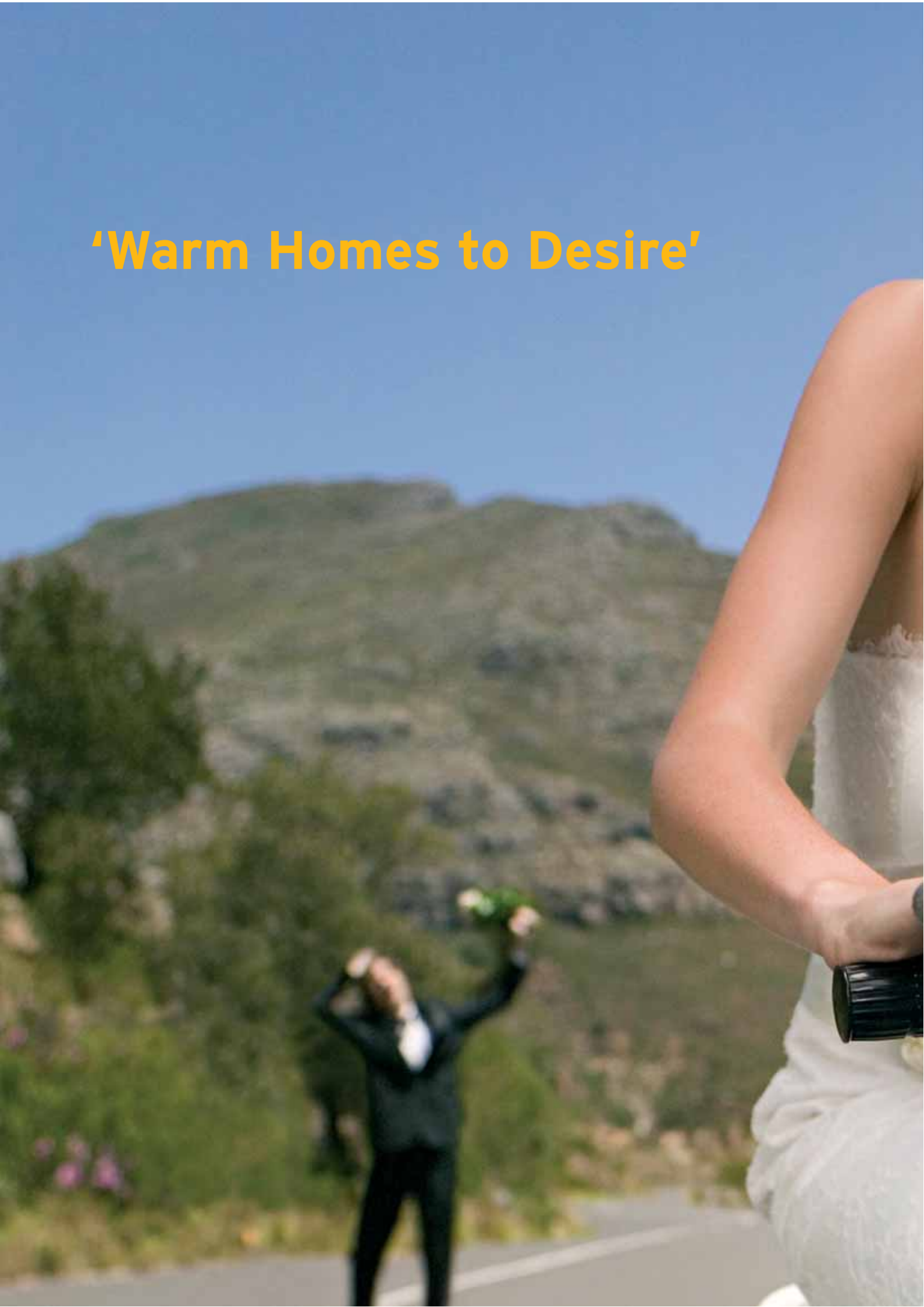
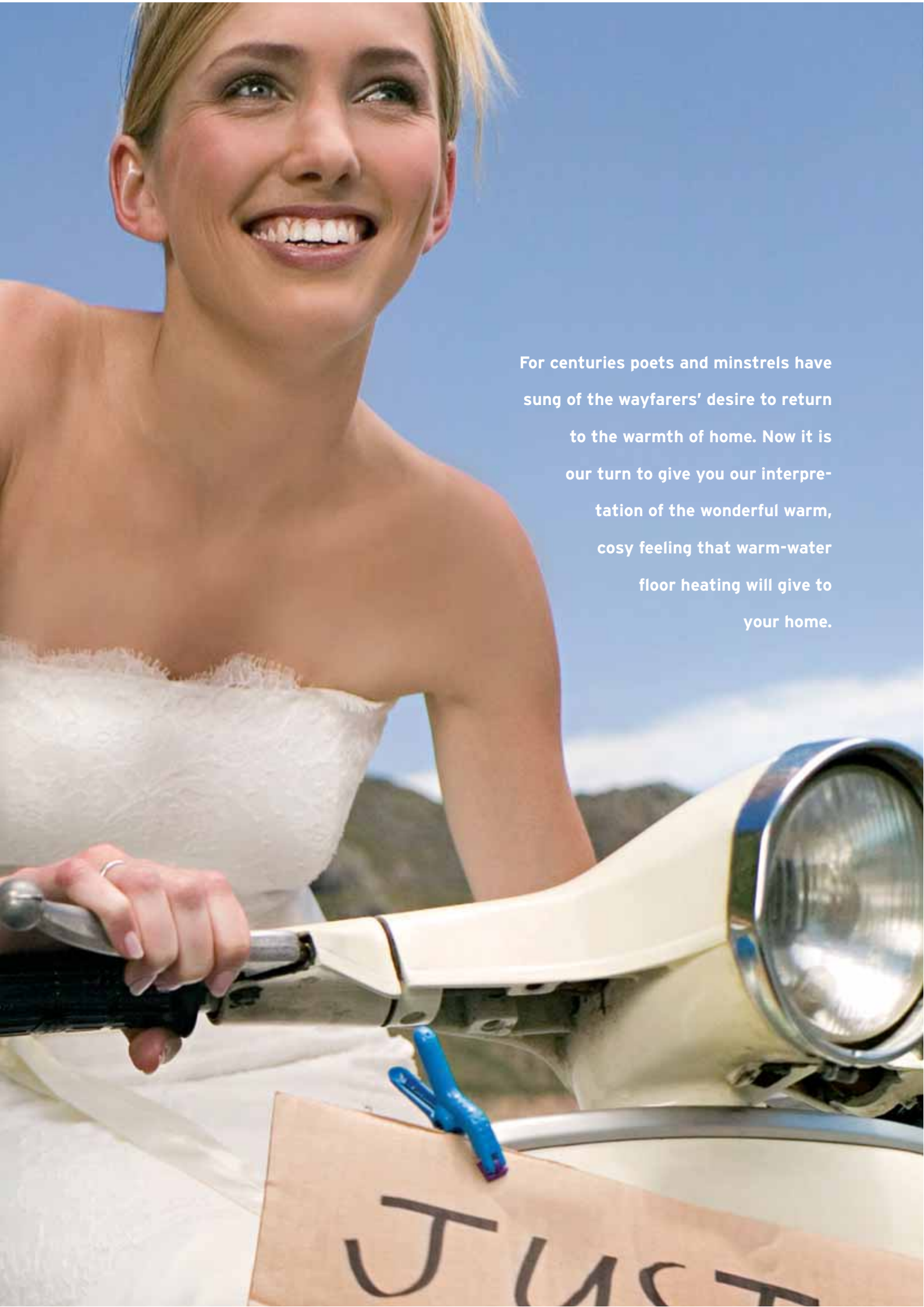


LK Floor Heating



'Warm Homes to Desire'





For centuries poets and minstrels have sung of the wayfarers' desire to return to the warmth of home. Now it is our turn to give you our interpretation of the wonderful warm, cosy feeling that warm-water floor heating will give to your home.

Floors that spread warmth and well being

If you are used to traditional radiators, you will notice the difference right away. Heat from pipe loops below the floor spreads gently and evenly.

As the entire floor surface radiates heat, you get the same comfortable, healthy heating in all parts of the room, plus economy from lower indoor temperature settings. A further advantage with floor heating is that you can arrange your furniture any way you please, letting your own ideas and desires be your guide. Discreet room thermostats are hardly noticeable; there is no need to worry about radiators and piping. You simply let the rooms shape, or lighting, or the beautiful floor be the starting point for your inspiration and decoration.

LK Room Thermostat in silver-grey or white design.





Expertise and experience guarantee your security

Warm-water heating systems must work reliably for the entire life of your home. When you choose LK Floor Heating, you get a complete system that has been developed, tested and tailored to Scandinavian conditions, comfortably exceeding UK needs.

Lagerstedt & Krantz has manufactured and developed warm-water floor heating for over 25 years. We continually strive to improve and further develop our systems. Our expertise and experience guarantees you security, comfort and the best possible financial savings.

'GREAT EXPECTATIONS'

We use only LK's own unique pipes, manufactured to the highest quality in our own factory. We also ensure that installers of our floor heating system get the support and training they need so

that they can live up to the great expectations that we know you have of us and our products.

HEAT-SOURCE OPTIONS

LK Floor Heating can be connected to any heat-source suitable for warm-water heating. It makes no difference whether you have an electric boiler, wood-burner, heat pump, solar panels or conventional condensing boiler. Once your floor heating system is installed, you have great flexibility and can easily switch energy source or use combinations of fuel.





Installations for any Solid Floor

LK Floor Heating is easily installed in new-build or renovations. We have solutions for all types of surfaces and constructions. There are two different systems for setting in screed or concrete.

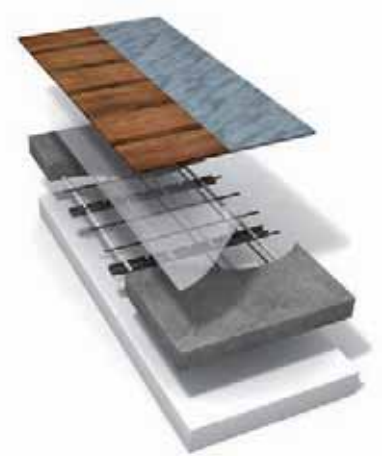
LK CLIP-RAIL 16/20 is used for installing in screed above floor insulation.

The clip-rail is fixed to the building insulation using plastic staples. The floor heating pipes are then simply and easily pressed into the clip-rail. The clip-rail holds the pipe securely and at the correct spacing to guarantee uniform heat emission.

Once the installation is complete, screed is applied and the final floor finish can be laid.

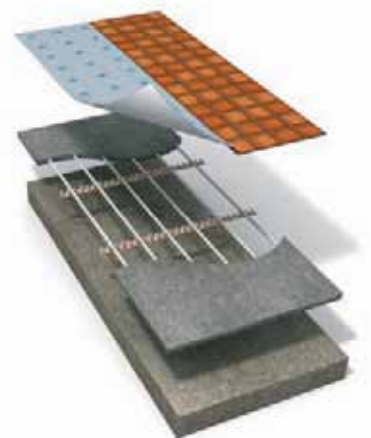
LK CLIP-RAIL 12 is designed for LK's 12-mm pipes and is often used for the renovation of small areas, such as bathrooms, entrance halls and laundry rooms.

The clip-rail has double-sided tape so that it can be easily fixed direct to the sub flooring. Once the pipes are positioned in the clip-rail, they are encapsulated in self-levelling screed or filler. Then, all that is left is installation of the final flooring.



LK Clip-Rail 16/20

- For new-build and renovation
- Ideal for ground-slab or setting in screed
- Suitable under all types of surface flooring
- Installation height: 0 mm for new-build, 55 mm when laying on pre-insulated floor



LK Clip-Rail 12

- For renovation
- Ideal for small areas, such as bathrooms, entrance halls and laundry rooms
- Suitable under all types of surface flooring
- Low Installation height: from 25 mm

Heating in Suspended Floors

When LK Floor Heating is installed on joists, the standard sub flooring in the construction can often be replaced with LK's pre-grooved system panels for floor heating pipes.

LK WOOD 22 is an eco-labelled sub flooring that is load bearing and designed for joists with centres between 400mm and 600 mm. The Wood 22 replaces standard 22 mm sub flooring and is often installed at an early stage of construction and before the floor heating is installed.

Wood 22 is pre-routed and the grooves must be laid at 90° to the joists. Aluminium heat distribution plates are fitted prior to pipe installation. The floor heating pipes are easily pushed into the aluminium grooves; the plates ensure heat is spread evenly across the entire floor surface. Final flooring is then "floated" above.

LK JOIST PLATE 16/20 is used on floor joists spaced at 600 mm centres only and where a load-bearing floor (such as solid wood flooring) will be fixed directly to the joists.

The joist plate is fixed and laid so that the pipes run between the joists.

Once the pipes are laid in the joist plate grooves, the final load-bearing floor can be installed in direct contact with the floor heating. The total installation height depends on the thickness of the final flooring.

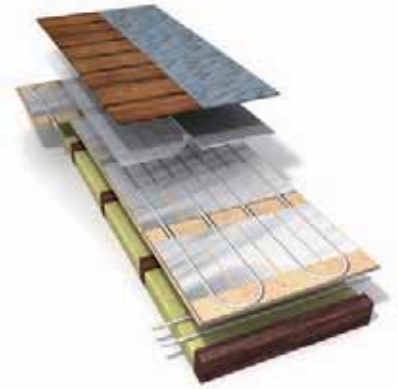
LK HEAT DISTRIBUTION PLATE

16/20 is used when secondary spaced boarding is required. The system is ideal for those who wish to renovate an older house with joists that have varying centre distances. With this installation method, the installation height is 28 mm.

There is one additional installation method – the construction is set between the joists; here installation height is 0 mm.

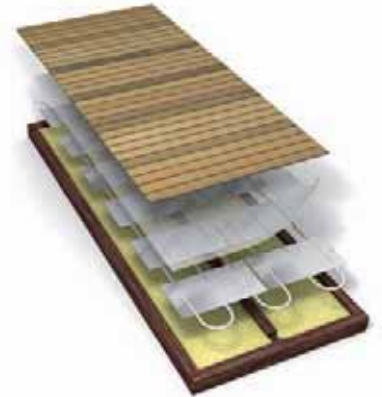
In both methods, the heat distribution plate is installed in the gaps between the secondary boards and is fixed to them.

The pipes are pushed into the plate's grooves. The final flooring is then laid in place over the installation.



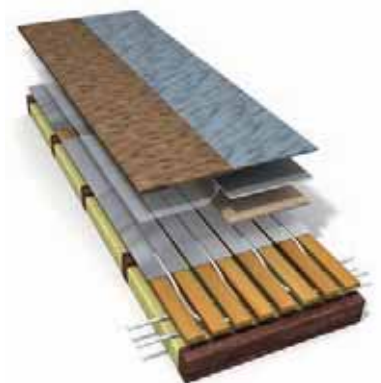
LK Wood 22

- For new-build and renovation
- Best solution on wood joists
- Suitable under all types of surface flooring
- Installation height:
0 mm for new-build
22 mm when installing over existing floor



LK Joist Plate 16/20

- For new-build and renovation
- For joists with centres at 600 mm only
- Ideal for load bearing floors, e.g. wood floor
- Installation height: 0 mm



LK Heat Distribution Plate 16/20 in secondary boarding

- For new-build and renovation
- Ideal for old buildings with non standard joist spacing
- Suitable under all types of surface flooring
- Installation height: 0-28 mm, depending on installation method



Smart solutions for difficult installations

When renovating, construction limitations must be kept in mind. For this reason, we have developed products to keep build heights to a minimum.

LK HEATING PANEL EPS 16 is the solution for anyone who is renovating a room with restricted height. The insulated, pre-grooved panel is only 16 mm thick and is installed over existing floors.

The heating pipe loops are simply pushed into the panel grooves, which is entirely covered by a bonded aluminium plate; heat from the pipes is spread evenly across the entire floor surface, with little downward heat loss.

Load bearing flooring is then installed directly on top of the panel. If, for example, you decide to lay tiles over the floor heating installation, the total installation height is only 26 mm.

LK Overlay F/F Panel XPS is used as a floating floor [F/F] for heating on a load bearing floor that requires additional insulation. It is therefore suitable for installation on existing ground-slab, intermediate floor or in a cellar space.

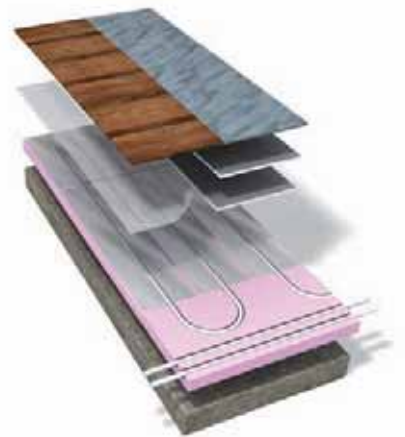
The pre-grooved panel, available in thicknesses of 30 mm and 50 mm, has grooves for aluminium heat distribution plates. The heating pipe loops are then pushed easily into the aluminium grooves, ensuring heat is evenly distributed over the floor surface. The final flooring is installed “floating” over the heating installation.





LK Heating Panel EPS 16

- Ideal for renovation
- Cuts downward heat loss
- Suitable under all types of final flooring
- Low installation height: from 25 mm



LK Overlay F/F Panel XPS 30/50

- For renovation and new-build
- Ideal in cellars
- Perfect for insulating intermediate floors
- Suitable under all types of final flooring

CHOICE OF FINAL FLOORING

Regardless of which type of surface flooring you choose for your home, you can feel confident with LK Floor Heating.

All LK floor heating systems can be installed problem-free with wood floors, vinyl and carpet, ceramic and natural stone tiles, plus many other finishes.

Differing floor finishes, however, do require different design criteria when considering factors such as thermal performance and temperature limitations. It is therefore very important that our design and installation instructions, plus the floor manufacturers' instructions, are followed with care.



The heart and the brain of your floor heating system

The only component of the floor heating installation you see is the discreet room thermostat in an elegant and timeless design. Every room always has its individual heat regulation and control.

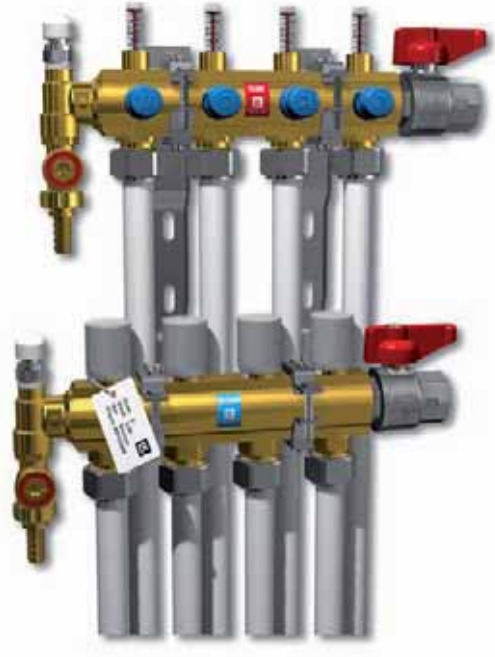
Behind the cosy, reliable and economic heating lies some clever engineering. Water temperature and room temperature are carefully balanced for comfort

by a range of solutions; consult your LK installer or LK system supplier to ensure the right solution for your home.

LK HEATING CIRCUIT MANIFOLD

The heating circuit manifold is the heart of your floor heating system. It is discreetly hidden in a convenient location to supply the heating loops. *LK Heating Circuit Manifolds* range is 2 to 12 port.

Primary plumbing from the boiler is connected to the manifold, where the flow to each heating loop is controlled, ensuring the manifold balances the floor heating system so that different rooms or areas have the correct temperatures.



INDIVIDUAL ROOM REGULATION

Using *LK Room Thermostat*, each room has just the right temperature. Thermostats are placed in all rooms to "detect" and communicate the room's heating needs to the motorised valves on the manifold. The valves then regulate flow to the floor heating loops in each room.

LK Room Thermostats also help you save energy; the room thermostat will react to any excess heat from, for instance, a decorative fire or strong sunlight by signalling the manifold valves to close, aiding economy.

LK Room Thermostats are available in two versions – hard-wired and a wireless version that works via radio signals. *LK Wireless Room Control Cq* is ideal for renovations and other instances where you do not wish to route cable in the walls.



LK SHUNT

Floor heating systems are low-temperature systems that generally have flow temperatures about 20°C to 25°C lower than a radiator system. For this reason, a shunt pack is necessary if floor heating is to be installed in combined heating systems with radiators.

LK Shunts are designed to mix boiler heated radiator water with cooled return water from the floor heating coils before the water is returned to the floor heating system. This makes it possible for both radiators and floor heating to have the "right" temperature.

LK Shunts are available in several sizes, so regardless of how large or small your floor heating system, we have the right shunt for you.



LK Mini Circuit Valve M5

LK Mini Circuit Valve M5 is the obvious choice for small floor heating installations, such as bathrooms, entrance halls or laundry rooms.

The mini circuit valve makes it easy to connect small floor heating areas to an existing heating system. It also gives you a stylish, discreet installation since the compact valve can be mounted in the wall in an integrated cabinet or hidden behind a wall cover.



LK MINI SHUNT M60

LK Mini Shunt M60 is a compact, yet complete, mixing unit for floor areas to about 30m².

The mini shunt is used to connect to existing radiator systems where the floor heating is installed in extensions or conservatories.

LK Mini Shunt M60 can be connected direct to existing radiator pipes.

LK Mini Shunt M60 gives you a complete mixing unit at a low investment cost, plus it requires very little space.



A complete supplier with the resources for you

LK can deliver all the products necessary for a reliable, effective floor heating system providing comfort and luxury.

As floor heating experts, we can recommend system solutions for all kinds of homes. Using our design program, we will create the perfect solution for your home. All you have to do is send a floor plan to your LK installers or suppliers.

LK Floor Heating has been developed for use with all types of floor materials. We take account of material, thickness and thermal properties when designing your system. Please feel free to discuss these and any other questions with your LK installers.

Once installation has been completed, you will own a reliable, safe and economic floor heating system throughout the life of your home.

LK Floor Heating will not be seen or heard, but it will give you a sensual feeling of well being. Truly, a warm home to desire...

VISIT US ONLINE

Please visit our website at www.lagerstedt-krantz.co.uk to learn more about our products and systems.

LK Floor Heating - Warm Homes to Desire





Lagerstedt & Krantz UK Ltd. is one of nine
subsidiaries of the Lagerstedt & Krantz Group.
We are one of Scandinavia's leading heating and
plumbing system suppliers offering Britain and Ireland
a complete range and unique system solutions.



www.lagerstedt-krantz.co.uk