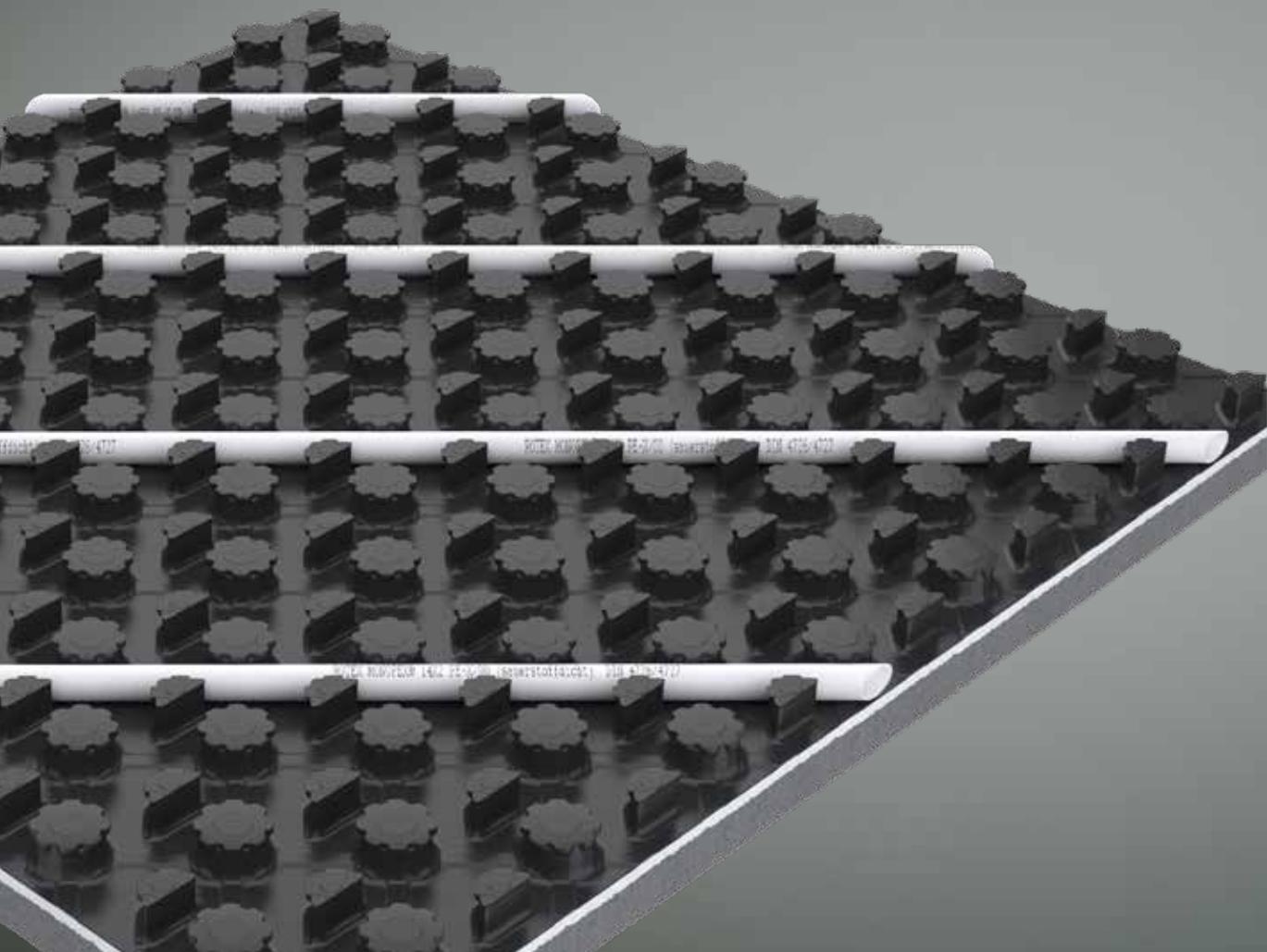
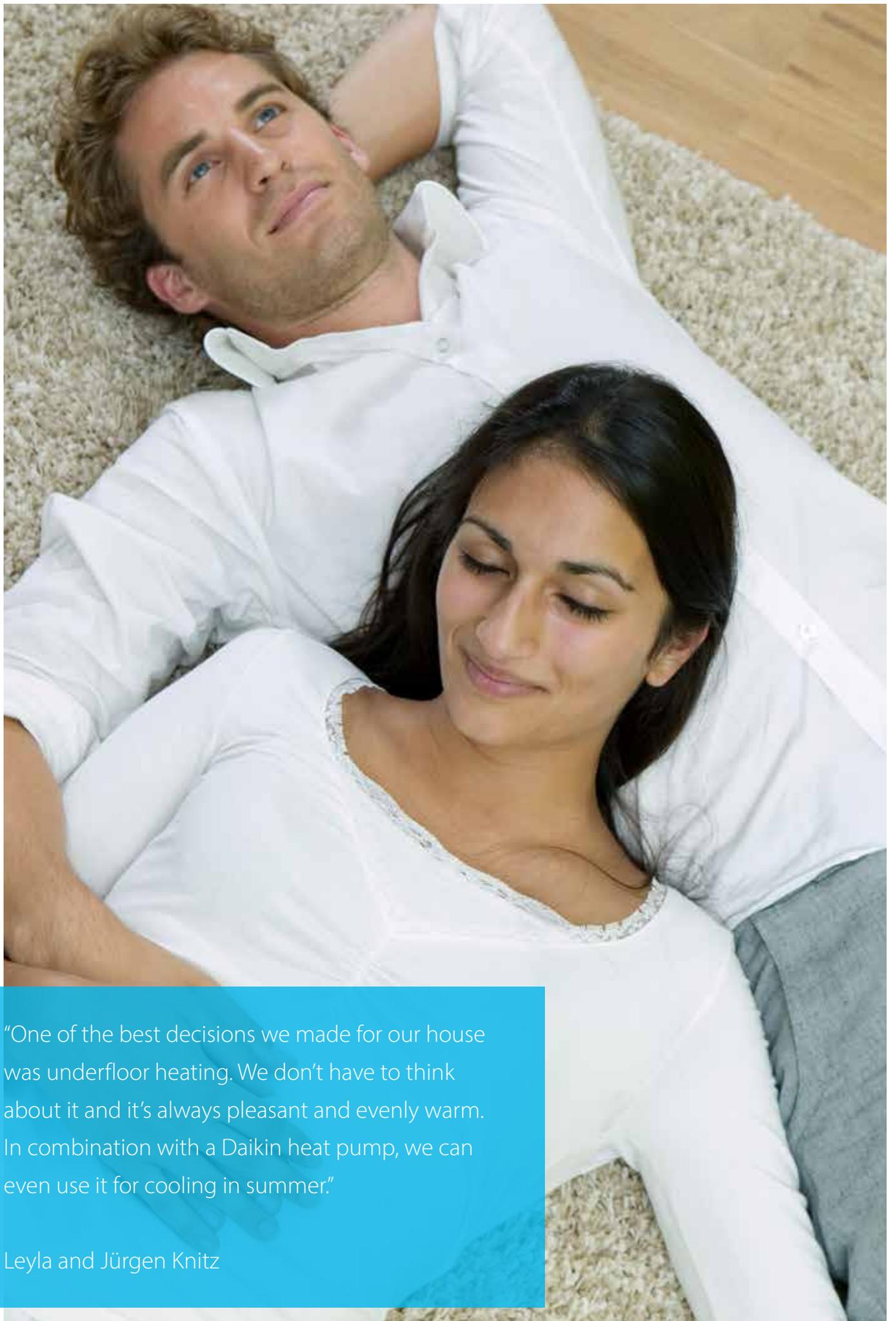




# Daikin Altherma UFH

Underfloor heating  
A fresh approach to comfort





“One of the best decisions we made for our house was underfloor heating. We don’t have to think about it and it’s always pleasant and evenly warm. In combination with a Daikin heat pump, we can even use it for cooling in summer.”

Leyla and Jürgen Knitz

# More comfort, lower energy costs

## Welcome to your new room ambience

The choice of heating surface is essentially influenced by the room, window and wall layout of your new home. Light-flooded rooms with large windows, variable, open floor areas and a constantly pleasant room climate – with underfloor heating systems by Daikin you can enjoy your creative living ideas to the full.

## Floor coverings of your choice

With all Daikin underfloor heating systems, you have a virtually unrestricted choice of floor coverings. If this is taken into account right from the planning stage, optimal thermal performance is guaranteed.

## Lower fuel consumption and healthy comfort

Due to the extremely large heating surface, the underfloor heating system can operate at a low surface temperature. The air temperature can be kept significantly lower at the same perceived temperature than in rooms with conventional heating. Lower levels of air circulation reduce the dispersion of dust and dust mites. A big plus for house dust allergy sufferers!

## Contemporary heating – for the future too!

The available heating surface significantly influences your choice of heat generator. Modern heat generators such as heat pumps are designed for low system temperatures. And the lower the flow temperature, the more efficient and economical the heating system. With a Daikin underfloor heating system, you have a wide choice of heat generator. It can be combined with all common heating systems such as oil, gas or district heating, as well as with a heat pump and solar panels.

Today and tomorrow.

## Your advantages

### Daikin Altherma UFH underfloor heating systems

- › Individual interior design
- › Free choice of floor coverings
- › Sustainable: Compatible with all heat generators
- › Savings in heating costs through more efficient use of energy
- › Healthy heat, suitable for house dust allergy sufferers
- › Simple and variable temperature control
- › Heating in winter and cooling in summer with maximum energy efficiency in combination with a Daikin heat pump
- › Can be combined with existing radiators
- › Suitable for modernisation projects and new-builds

Air-water heat pump  
Outdoor and indoor unit  
Daikin Altherma 3 R ECH<sub>2</sub>O

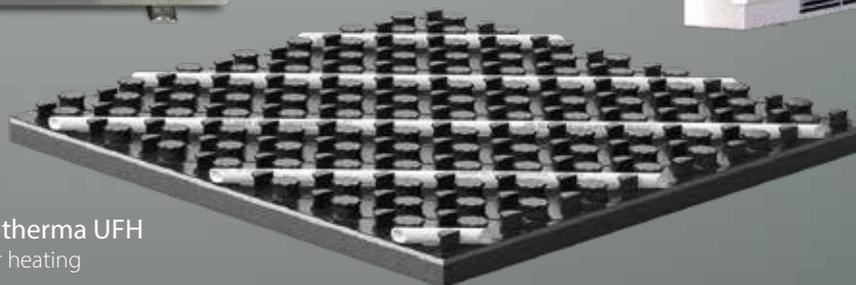


Solar system  
Daikin Altherma ST, solar thermal panels



Daikin Altherma HPC  
Heat pump convector

Daikin Altherma UFH  
Underfloor heating



# Your comfortable climate, day after day

## Desired temperature at any time of year

Our heating systems make for a comfortable home. Heat generators such as an air-water heat pump use regenerative environmental energy as a heat source and so reduce energy consumption and keep costs to a minimum. But what about air conditioning of the rooms in summer? Very few residential buildings have air conditioning for a pleasant and comfortable temperature even on hot summer days and nights. That's changing now. With a heating system that not only provides comfortable warmth in winter, but also gentle cooling in summer throughout the entire building. And all this with very economical operation and no additional purchase costs.

## Regenerative heating in winter, gentle cooling in summer

The Daikin heat pump really comes into its own when combined with a Daikin underfloor heating system. For cooling, the heat pump process is simply reversed, i.e. heat is extracted from the building and released into the environment. The room is cooled mainly by the underfloor heating system. The large surface makes for a very pleasant and draught-free room climate. Invisible and noiseless, even in cooling mode.

## Clever combination: Underfloor heating and convector fan

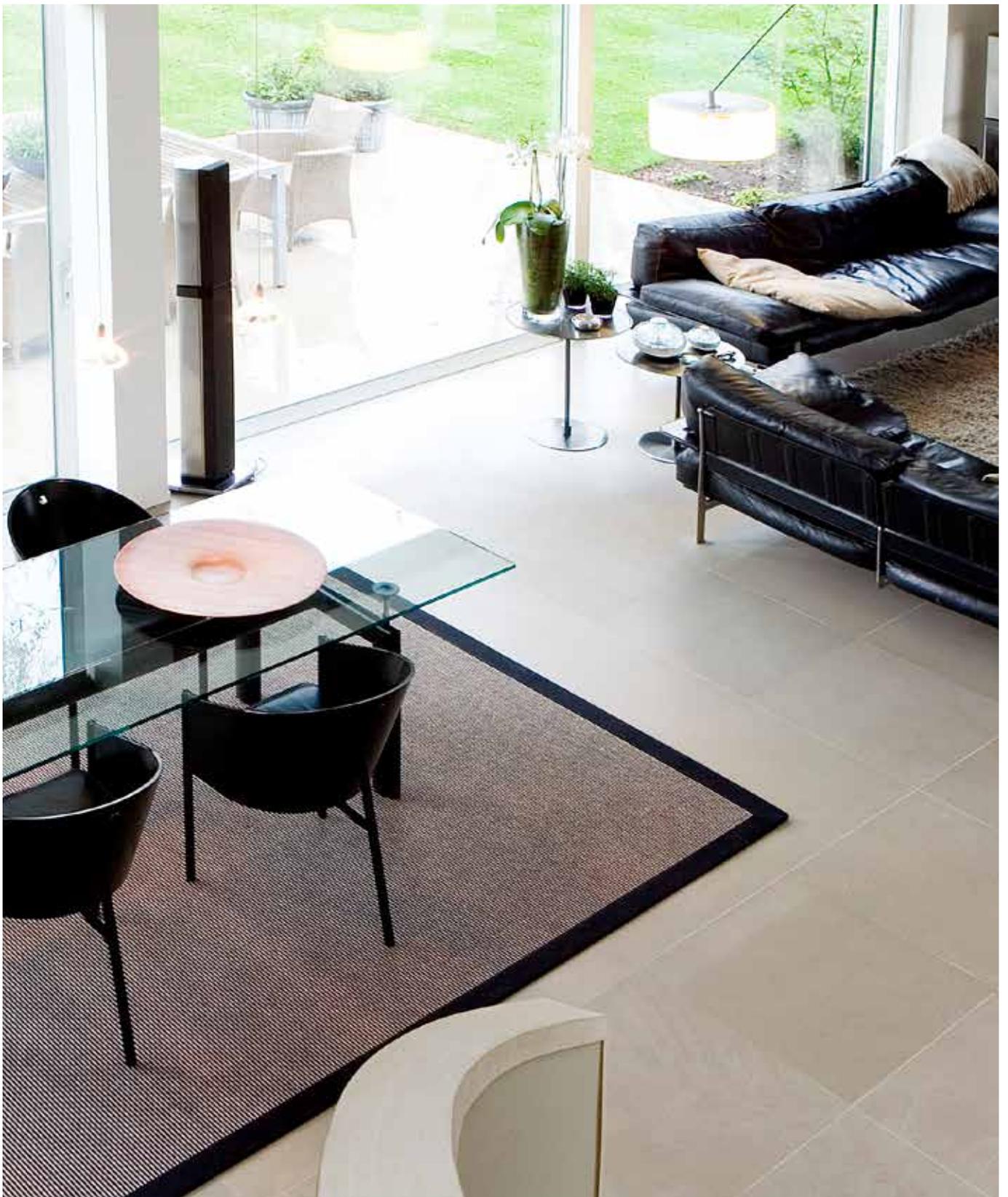
A convector fan is used in rooms without underfloor heating to handle the dual functions of heating and cooling. It is the ideal complement to the Daikin heat pump if not all rooms have underfloor heating. Its very quiet operation means it can even be used in bedrooms. The integrated electronic room temperature control unit ensures an optimal climate in every room.

## Maximum comfort and maximum savings – all-inclusive

With the existing or optionally available cooling function of the Daikin air-water heat pump, you can enjoy both heating and cooling in rooms with underfloor heating without any further outlay or investment. The operating costs for this additional comfort are also low.

## Daikin Altherma ST solar thermal system: Minimizes energy costs

The integration of a solar system, which additionally contributes heating in winter from free solar energy, offers maximum living comfort with minimal energy costs.



### Desired temperature in a jiffy

The underfloor heating is regulated by intelligent electronic temperature controllers. They allow you to set your comfort temperature exactly in each room. Heating or cooling at the touch of a button.



### Panel heating - also on the wall

Daikin heating systems can also be designed as wall heating/cooling systems.

# New building: Always first choice

## We do right by everyone

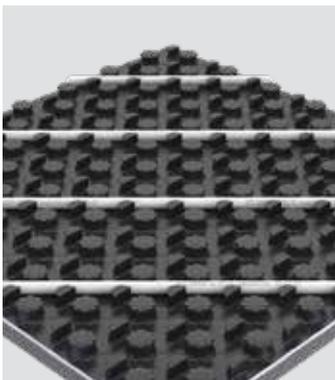
Daikin offers innovative underfloor heating system solutions to meet every need. All heating surfaces are designed to meet your requirements for each room and achieve the best living comfort, room climate and energy efficiency.

## Structure with system

Daikin surface heating and cooling systems for new buildings are usually constructed using system panels. These panels offer good thermal insulation of the substructure and excellent impact-sound insulation properties. They are easy to install, environmentally friendly (CFC-free) and meet all structural requirements thanks to their different designs.

## Floor or wall

Daikin heating systems are not only used as floor heating but also as wall heating systems. This option is always available if underfloor heating is not possible due to structural issues, or if the floor area is not sufficient to heat a room. In a bathroom or guest toilet, for example, very comfortable areas can be created with partial wall heating so there is no need for additional radiators.



## Easy installation plus thermal insulation

The Daikin system and tacker panels offer numerous benefits when laying your underfloor heating. They are easy to install, environmentally friendly (CFC-free), ensure a uniform temperature profile, provide good thermal insulation and have excellent impact-sound insulation properties.



**The right option for every modernisation.**

**Daikin cut:** Underfloor heating system milled in. No extra height is required and installation is very simple. The ducts for the heating pipes are milled into the existing screed without generating dust. The Daikin heating pipe is then laid.



[See installation video](#)

# Modernisation: Retaining the tried and true

## Underfloor heating – simple retrofitting

When modernising existing buildings, it is often desirable to integrate underfloor heating at the same time. But with many conventional systems, the additional increase needed in the floor or heating water temperature using the existing heating network make this very expensive, if not impossible. Not with Daikin. Because Daikin also offers underfloor heating systems for existing buildings for quick and economical retrofitting.

## Daikin cut: Tailor-made - without adding height

In existing buildings, Daikin cut is the best solution for retrofitting underfloor heating without extra height. Installation is extremely simple. The ducts for the heating pipes are milled into the existing screed without generating dust. The grinding dust is extracted immediately by the integrated industrial vacuum cleaner. The Daikin heating pipe is then laid. The existing floor height is retained. Your doors open normally. Installation of Daikin cut underfloor heating can usually be completed in just one day. No costly reworking is required and the floor can be filled or covered right after installation. Almost all screeds can be milled except for mastic asphalt screeds.

## Daikin System 70: Combine with radiators

The Daikin System 70 allows you to combine existing radiators with underfloor heating. The water temperature of the underfloor heating depends entirely on the selected temperature of the radiator. Thanks to the special DUO heating pipe, the surface temperatures of the floor and radiators are maintained at the usual levels.



## Daikin System 70

This system allows you to combine existing radiators with underfloor heating. The underfloor heating and radiators operate at the same flow temperature and without additional expense.

# From system to success

## Comfort and costs – tailor-made

We need some basic information to be able to adapt the special options of a Daikin underfloor heating system to suit your wishes and needs.

You will then receive a concept that is accurately tailored to suit your requirements and your property from an economic and ecological point of view.

Our planning and calculations take into account the type of building, location, layout, wall structures (materials, layer thicknesses), target temperatures of each room, intended floor coverings, plus the location of the distribution cabinet and room temperature controllers.

## Always a good fit - whether residential or commercial building

Daikin underfloor heating systems are also suitable for the efficient, economical and comfortable air conditioning of commercial buildings with large surfaces. Ask us or request our special information pack.

We will be happy to advise you comprehensively and without obligation.

Areas of application:	System temperatures 35°C - 45°C			System temperatures 55°C - 70°C		Option
	Monopex	Monopex cut	Monopex Industrial	System 70	System 70 Industrial	Heat pump convector
New building	•			(•)*		•
Modernisation with additional height						•
Modernisation without additional height		•				•
Underfloor heating combined with radiator				•	•	•
Heating and cooling (in combination with heat pump)	•	•	•			•
Wall heating						
Large areas			•		•	
<b>Heat generators</b>						
Boilers	•	•	•	•	•	•
Heat pump (low-temperature heating)	•	•	•			•

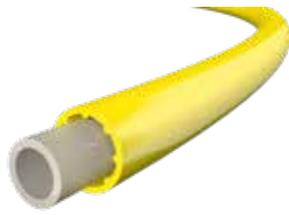
\* If system temperature of the heat generator requires 55°C - 70°C in the flow line



**Monopex**

The underfloor heating for low system temperatures. Ideal in combination with heat pumps.

- › Monopex 14 for floor structures with system or tacker panel, wall heating and the Daikin milling system
- › Monopex 16 (for France) for floor installation with system or tacker panels
- › Monopex 17 for floor installation with system or tacker panels
- › Monopex 20 for commercial and industrial surfaces



**System 70**

Underfloor heating for direct combination with radiators or other heating surfaces. Different pipe dimensions for different applications.

- › DUO 17 for floor mounting with system panels
- › DUO 25 for commercial and industrial areas



**Daikin Altherma HPC heat pump convector**

- › Slim design
- › Heating and cooling
- › Integrated electronic room temperature controller with timer
- › Very quiet and compact
- › Also suitable for bedrooms
- › Ideal in buildings with underfloor heating and radiators



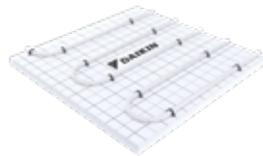
**Clip rail for wall heating**

Clip rail combined with Monopex 14 for wall heating.  
**Systems:** Monopex 14



**Protect system plate**

The Protect system plate consists of a nub plate with an additional surface protection layer made of deep-drawn polystyrene to protect the heating pipe during installation.  
**Systems:** Monopex, System 70



**Tacker system**

The Daikin tacker panel for underfloor heating pipes is available as a folding panel and roller track with laminated, high-strength film, and is ideal for laying heating pipes over large surfaces (e.g. commercial buildings).  
**Systems:** Monopex



**Daikin cut**

The ideal solution for existing buildings to retrofit underfloor heating without additional height. Installation is extremely simple. The ducts for the heating pipes are milled into the existing screed without generating dust. The Daikin heating pipe is then laid.  
**Systems:** Monopex cut



**RMV heating circuit distributor**

Heating circuit manifold in stainless steel. For all Daikin underfloor heating and radiator connection systems.



**RMX heating circuit manifold**

Heating circuit manifold made of heat-stabilised, glass fiber reinforced polyamide. For all Daikin underfloor heating and radiator connection systems.



**Room controller**

The room thermostat ensures convenient and individual control of the room temperature and impresses with its flat design and construction. Versions:

**Wireless version**

- › wireless without battery

**Wired version**

- › LED display: Heating/cooling (red/blue)
- › Read all status messages



**Basic module with integrated power pack and clock module**

- › Basic module with integrated power pack to supply the control unit (wireless and wired) plus optional clock module
- › Optimal interface to Daikin heat generators



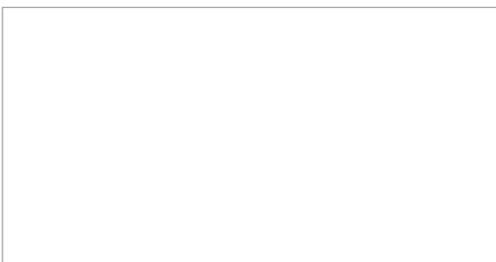
**Clock module to supplement basic module:**

- › 2 reduction times for heating circuits
- › Pump stopping time
- › Removable from the basic module for easy operation



There is only one first choice: [www.daikin.eu](http://www.daikin.eu)

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