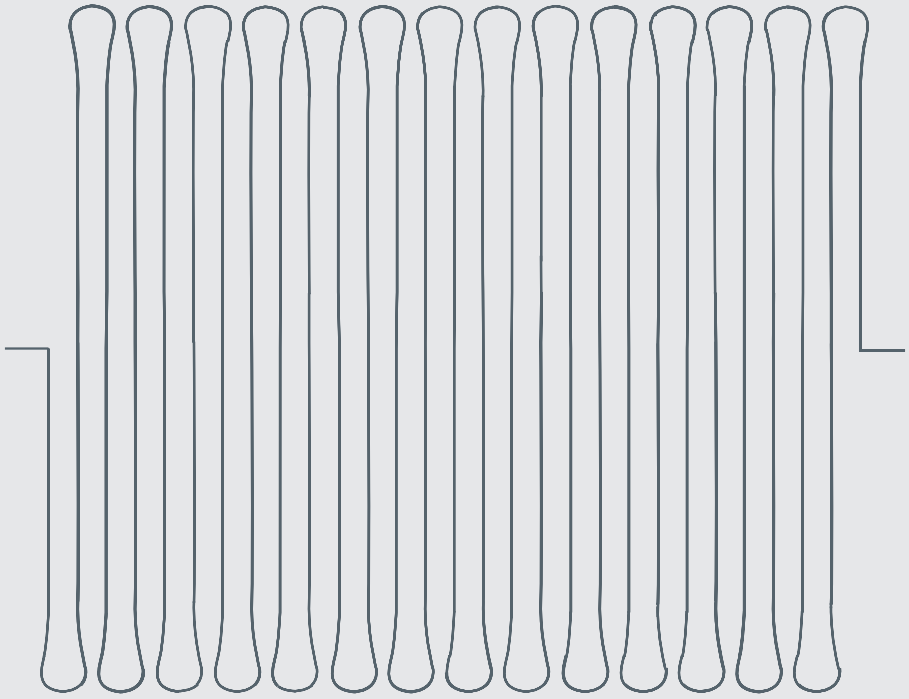
RBM



Kilma Futura

The new **dry radiant** climate control system

Made in Italy

High or low inertia?

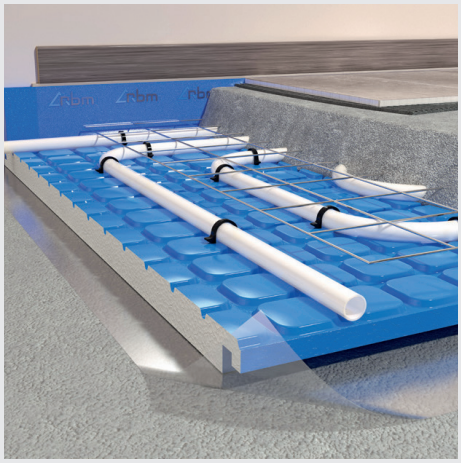
To build a radiant floor system,
you can choose between different types of systems,
depending on the intended use and characteristics of the building, whether it is new or being renovated.

Depending on their capacity to store,
retain and release heat, there are distinctions between high and low thermal inertia underfloor radiant systems.

RBM Kilma,
radiant systems
100% Italian

Traditional

RADIANT SYSTEMS WITH **HIGH THERMAL INERTIA**



High inertia systems are particularly suitable for buildings that require constant and continuous heating and, in general, for more thermally dispersive buildings.

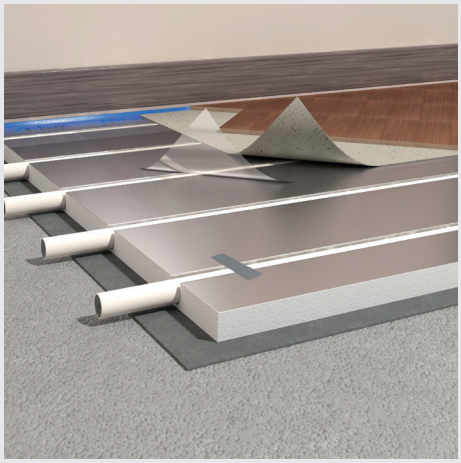
Pipes embedded in concrete screed

7 hours or so to reach full operation

Total thickness greater than 8 cm

Kilma Futura

RADIANT SYSTEMS WITH **LOW THERMAL INERTIA**



Generally of low thickness, they are often implemented as 'dry systems'. They have the capacity to heat up within minutes, and are also suitable for discontinuous use. Thanks to their characteristics, they are perfect for renovations and for the construction of new homes with a high thermal efficiency envelope

No cement screed required

At full operation in 43 minutes

Minimum total thickness, even less than 3 cm

TOTAL THICKNESS
28 mm
(SCALE 1:1)

Simple, practical, efficient.

The revolutionary system with minimal overall thickness and maximum energy efficiency ideal for renovations and new builds.

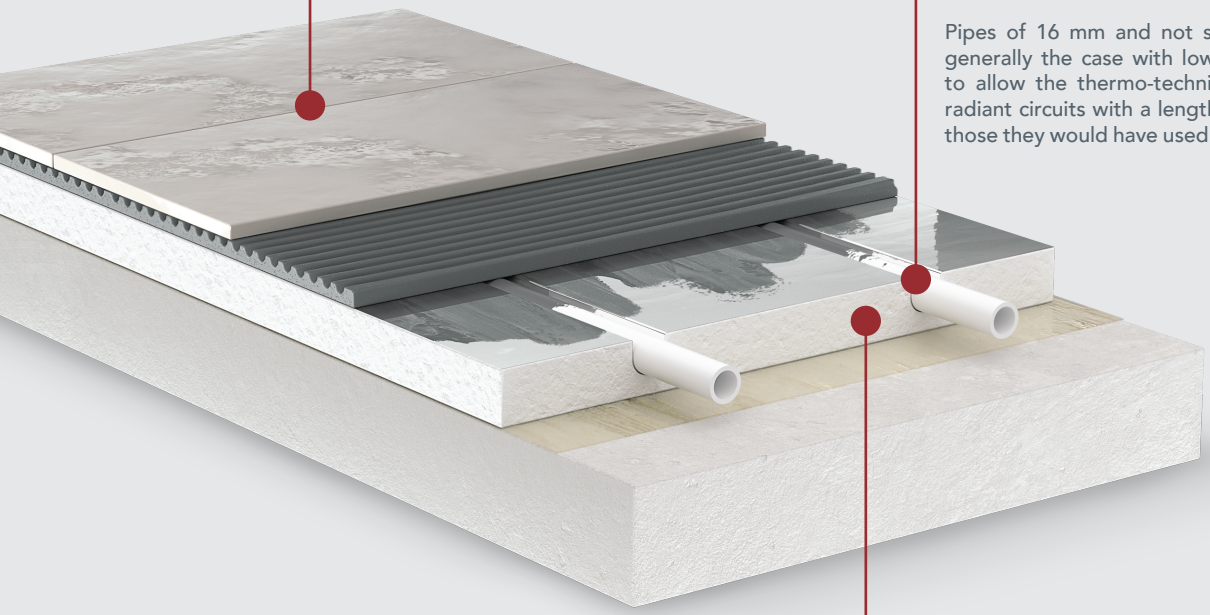
ADVANTAGES OF THE SYSTEM

- No cement screed is needed
- Low thermal inertia: heats up in a few minutes
- Great savings
- Maximum comfort
- Floor, wall, ceiling installation
- For heating and cooling systems
- Total thickness less than 3 cm
- Quick and easy to install
- Ideal for restorations and new homes with high energy efficiency

FINISH
COATING

POLYETHYLENE PIPES
Ø 16 mm HI-PERFORMANCE
PLUS

Pipes of 16 mm and not smaller diameters, as is generally the case with lowered systems, in order to allow the thermo-technical designer to design radiant circuits with a length and number similar to those they would have used for a traditional system.



KILMA FUTURA
PANEL

Simple.

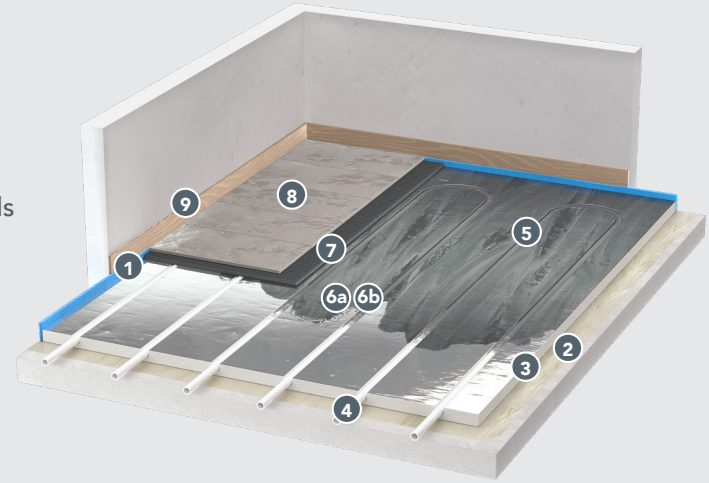
DOES NOT REQUIRE SCREED OR SUPPORTING LAYERS UNDER THE FINISHED FLOOR!

Kilma Futura is a revolutionary radiant system, without screed and characterised by its extremely small overall size, which allows for finished underfloor heating and cooling systems in less than 3 cm. A unique characteristic of Kilma Futura is the possibility of laying the floor directly on the insulating panel, without having to provide a supporting and load-distributing layer such as metal plates, fibreglass panels, sheathing, netting, etc. This greatly simplifies and speeds up the installation work, as well as considerably reducing costs and critical implementation issues. Furthermore, when building a system with Kilma Futura, only one type of panel is used for the entire site, without having to distinguish between panels for ends, intermediate, bends, etc. Each panel is already equipped with pre-moulded tracks and bends to accommodate the pipework.

CERAMIC FINISH

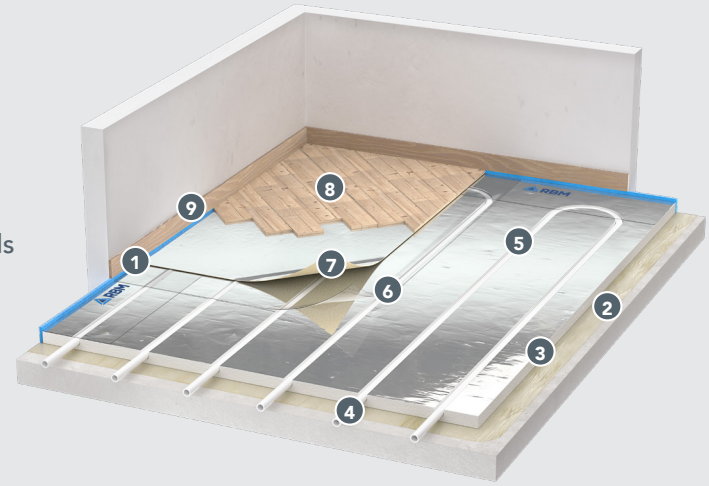
1 Perimeter expansion joint
2 Glue for fixing the panel to the substrate
3Kilma Futura Panel
4 HI-PERFORMANCE PLUS PE-RT PIPE Ø16x2 mm
5 If necessary, aluminised tape to block the pipe on the bends (qty approx. 1 m/m2)
6a Protection epoxy primer (e.g. PRIMER MF RBM by Mapei)

6b Superior glue gripping primer (not supplied)
7 Glue for tiles (not supplied)
8 Tiles (minimum dim. 25x25 cm or in alternative 15x30 cm strips)
9 Skirting board



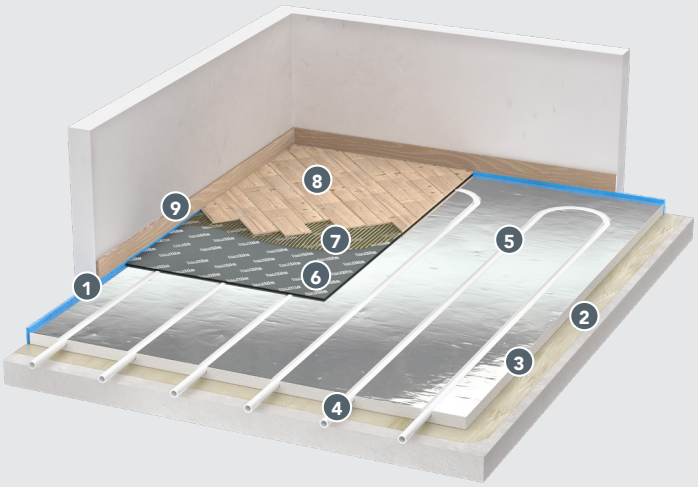
PARQUET FINISH (TYPE 1 FLOATING PARQUET)

1 Perimeter expansion joint
2 Glue for fixing the panel to the substrate
3Kilma Futura panel
4 HI-PERFORMANCE PLUS PE-RT PIPE Ø16x2 mm
5 If necessary, aluminised tape to block the pipe on the bends (qty approx. 1 m/m2)
6 PE protective sheet
7 Any substrate fabric/non-fabric layer (not supplied)
8 Floating parquet placed resting on the underlying surface
9 Skirting board



PARQUET FINISH (TYPE 2 GLUED PARQUET)

1 Perimeter expansion joint
2 Glue for fixing the panel to the substrate
3Kilma Futura panel
4 HI-PERFORMANCE PLUS PE-RT PIPE Ø16x2 mm
5 If necessary, aluminised tape to block the pipe on the bends (qty approx. 1 m/m2)
6 IsolTile AD support mat (with adhesive)/IsolTile (without adhesive, requires glue not supplied by RBM) by Isolmant (not supplied)
7 Glue for parquet (not supplied)
8 Parquet
9 Skirting board



Practical.

IMMEDIATE WALKABILITY!
SPEEDS UP CONSTRUCTION
AVOIDING DRYING TIMES
OF THE SCREED

In traditional radiant systems, the cement screed always needs a drying and curing time which, although it varies depending on the thickness and type of material used, is generally never less than 3 to 4 weeks. In addition, at the end of this period, at least another week must elapse in order to be able to carry out the 'first start-up' test as required by EN 1264-4. For the entire time the screed is laid, the construction site is not accessible internally, which increases the time and cost of the work. In addition to this, the laying of the screed entails the presence of several operators throughout the entire pouring period, which significantly increases the risk of the pipes being punctured. Kilma Futura avoids all this.
The absence of a screed, in addition to drastically reducing construction time, allows the plumber to easily control all phases of the construction site, avoiding the intervention of third parties and significantly facilitating all testing operations required by the technical standard.

With **Kilma Futura** , the construction site is always accessible and walkable, allowing the immediate continuation of the different work phases.

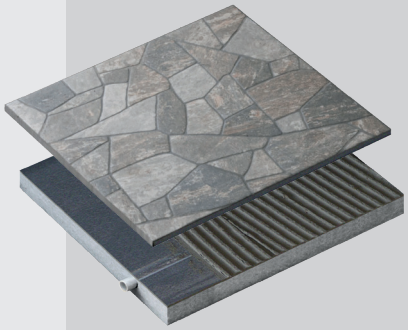
TIME AND COST OF THE WORK
REDUCED TO A MINIMUM!

Kilma Futura:
only advantages for the construction site as well

- Quick system installation
- Simplicity of installation
- Immediate walkability
- Low thermal inertia: Reaches full operation quickly

HIGH RESISTANCE
TO CONCENTRATED LOADS

Thanks to its special conformation and the high density of the material it is made of, Kilma Futura provides extremely effective mechanical support, enabling the system to withstand considerable loads. The permanent compressive stress value of 90kPa allows a load of up to 570 kg distributed on a single plate with dimensions 25x25 cm to be considered!



UP TO
570kg
CONCENTRATED

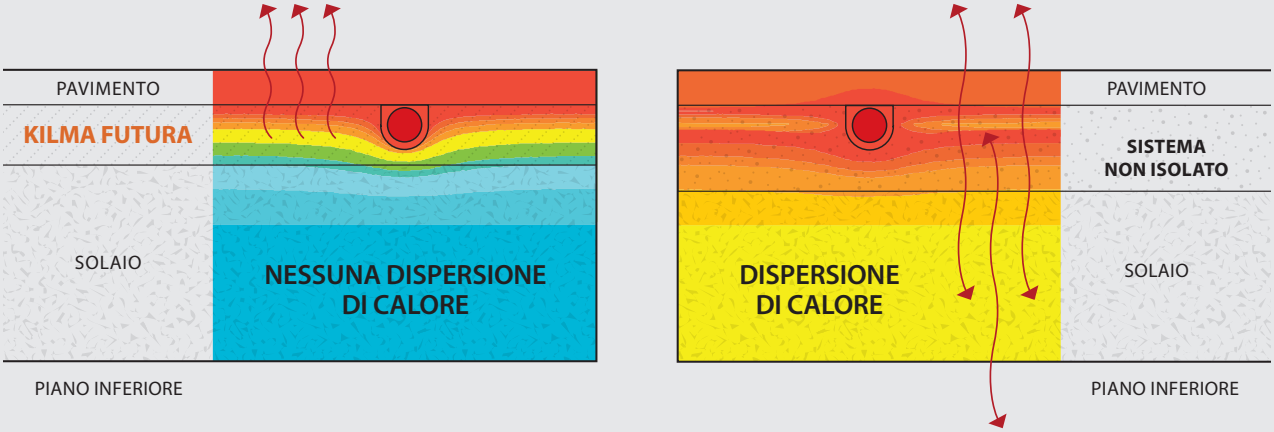
Efficient.

A SYSTEM THAT **IMMEDIATELY** REACHES FULL OPERATION AVOIDS STEALING HEAT BECAUSE IT IS A TRUE INSULATION PANEL

Kilma Futura is a radiant system that reaches full operation extremely quickly. When compared to a conventional system, it can be seen that Kilma Futura is up and running in less than 45 minutes, i.e. 8 times faster! This peculiarity makes Kilma Futura the ideal solution for holiday homes, spaces that are used occasionally and, more generally, for all homes that remain empty for many hours of the day. Thanks to Kilma Futura, it is now possible to achieve the excellent level of comfort typical of a low-temperature radiant system, without necessarily having to keep the system running continuously throughout the day. The result is a considerable money savings and improved quality of life.

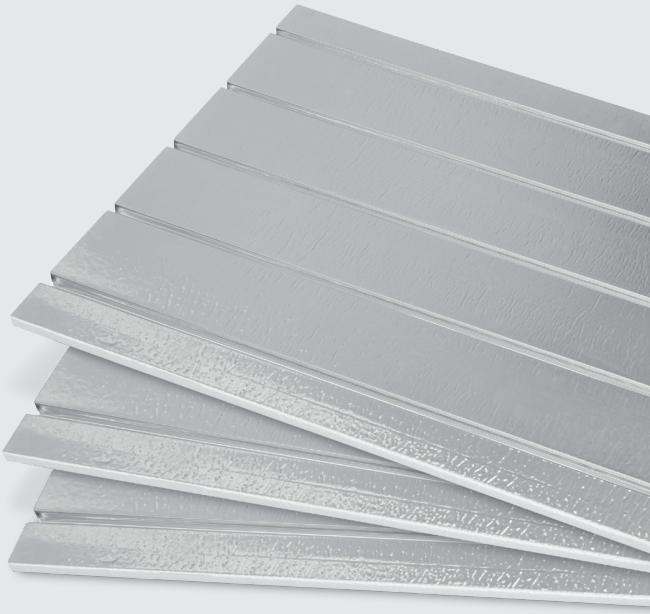
The heart of the Kilma Futura system is the insulation panel. Many radiant systems with low thermal inertia, as well as many 'dry' systems, have pipe containment layers made of materials that do not oppose the minimum thermal insulation to the downward diffusion of heat such as concrete, fibre cement and the like.

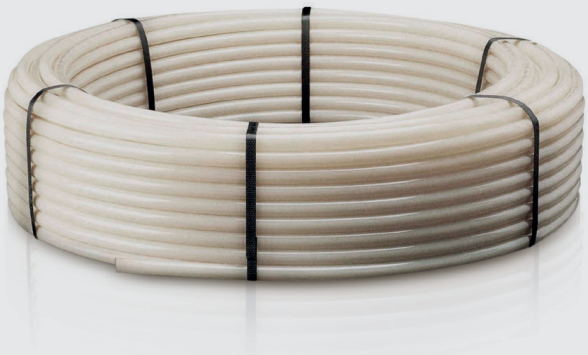
In multi-storey dwellings, using systems without insulation, in addition to 'stealing heat', there is a further side effect: the floor slab in contact with the radiant system becomes a large thermal flywheel, with serious effects on the living comfort level of those living on the floor below, who are no longer able to freely thermoregulate their environment, especially during the transitional phases.
Kilma Futura is to all intents and purposes an insulation panel. While the aluminium layer that it is entirely clad with allows optimal heat transmission into the room, at the same time the thermal resistance value of the panel can reach the minimum or prescribed value by the technical standard.



The insulation panel

Kilma Futura consists of an EPS insulation layer, in which the ducts for housing the ø 16 mm pipe are built, and an aluminium surface foil that is bonded so that it fully adheres to the entire surface, including the duct grooves. The aluminium layer ensures complete wrapping of the pipe by the metal for ideal and uniform heat transfer to the environment.
The Kilma Futura panel is produced in different thicknesses:
17 mm, 25 mm, 33 mm and 48 mm, in order to meet both the requirements of the smallest overall dimensions and those of compliance with the thermal resistance value stipulated under a radiant system according to standard UNI EN 1264.
In the thicknesses 25 mm, 33 mm and 48 mm, the panel is also available with 2 different laying pitches: 10 and 15 cm, in order to guarantee maximum flexibility in the choice of product depending on the heat output required by the building.





HI-PERFORMANCE PLUS piping

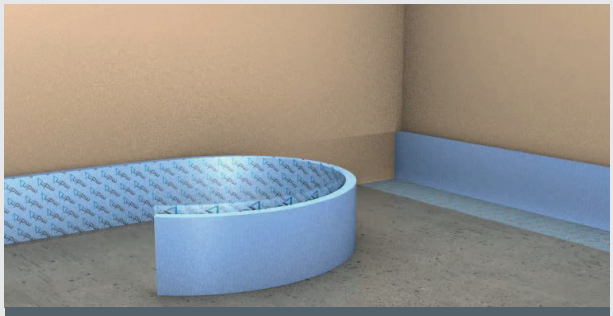
The new HI-PERFORMANCE PLUS pipes, manufactured with state-of-the-art technology, are equipped with an internal oxygen barrier, externally protected against foreign agents that could compromise continuity and effectiveness.

Laying phases

Download the **installation manual**

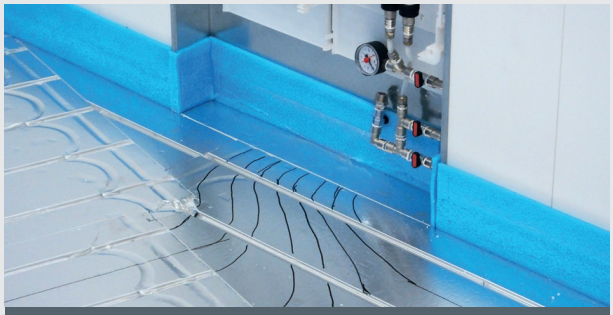
Easy installation is another strong point of the Kilma Futura system. All operations can be performed by the installer, with a few simple tools. In order to achieve an optimal result, it is important that all the precautions and prescriptions listed here are observed. This photo sequence represents an indicative guideline, which does not replace what is prescribed in the UNI 1264 standard and by the manufacturers of the various accessory components of the system. In any case, before installing the system, we recommend that you consult the system's installation manual, which is available at www.rbm.eu or, on request, by e-mail to **kilma@rbm.eu** and/or contact your local RBM officer.

THE SYSTEM MUST BE LAID ON A PERFECTLY LEVELLED AND COPLANAR SUBSTRATE



Stretch the perimeter edge to absorb the expansions of the system. This element must be applied to the walls along the entire perimeter of the rooms affected by the installation.

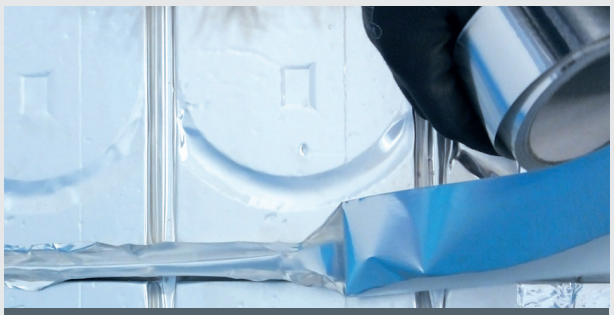
Glue the panel to the substrate with suitable adhesives. For this operation, we recommend MAPECONTACT by MAPEI® reinforced bi-adhesive tape or polyurethane adhesives such as FERMACELL or similar.



Cutting a new track / pipe guide: it may be necessary to create a new track on site to complete one or more circuits or to create new ones.

After marking the track you wish to create with a felt-tip pen, proceed to make it with a cutter or, better still, with a common electric DIY milling machine for polystyrene.

At the bends, the track is already prepared, so all you need to do is cut through the surface layer of aluminium, freeing the underlying housing created for the pipe.

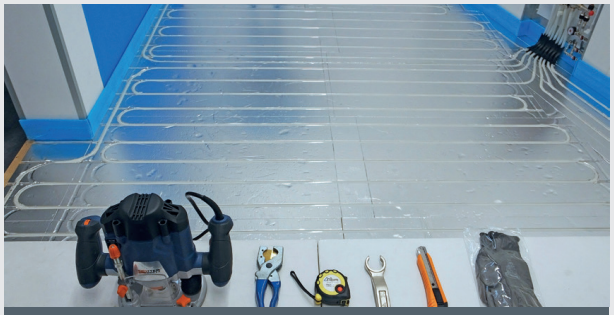


Insert the aluminised adhesive tape supplied by RBM into the track created, in order to restore the aluminised surface layer. Take care to ensure that the tape adheres well to the panel.

Now the installation of the radiant circuits can begin, following the suitably prepared installation diagram.

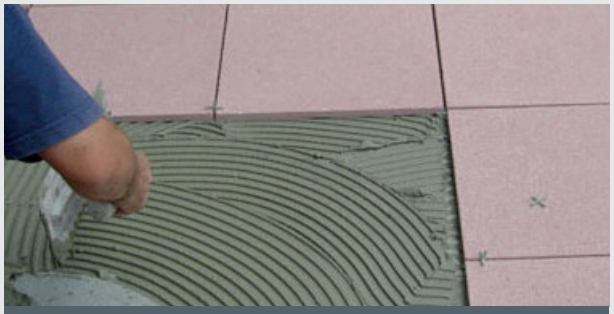
It is imperative that the pipework remains well below the surface of the panel.
Apply aluminised adhesive tape on the bends or where necessary to hold the pipe in place.

Curve holders prevent the possible crushing of pipes near their entry into the panel.



Before laying the flooring, carry out the system leakage test, as required by the standard.

Prior to applying ceramic flooring or cement-based substrates (glued parquet or resilient flooring), apply RBM MF by Mapei epoxy primer and then the bonding primer.



Bond ceramic or natural stone tiles with suitable adhesives such as ELASTORAPID by MAPEI® or similar.

With 'floating parquet', no primer will be required, but before laying the parquet with its fabric/non-woven backing layer, apply a layer of PE.

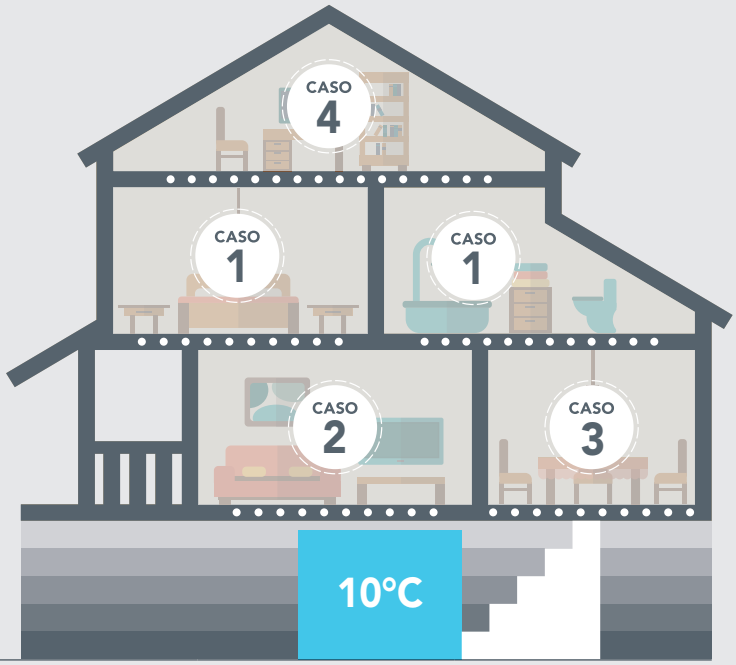
Thermal insulation values of panels for radiant floor systems

The UNI EN 1264 standard prescribes minimum thermal resistance values for the insulation to be provided under the radiant system piping, depending on the situation that the system is installed in.
The standard also allows these minimum values to be achieved by overlapping several insulating layers, provided that these are firmly joined together and laid in a staggered manner so that the joints between the panels are not aligned with those of the adjoining layer. The image and table on the opposite page show the minimum values required by the standard for each of the cases indicated.
The Kilma Futura panel with insulation thicknesses of 33 mm and 48 mm meets the requirements set forth by the standard in many situations. Should it be necessary to achieve higher thermal resistance values, an additional insulation layer can be added under the Kilma Futura panel, depending on the thermal resistance value to be achieved.
It is important that the additional insulation layer has mechanical properties compatible with the outstanding compressive strength of Kilma Futura. Some possible combinations with the high compressive strength extruded polystyrene panel RBM Kilma Therm are listed in the table.

UNI EN 1264

Applies to floor systems for residential, office or other buildings with corresponding or similar use.

Specification of **minimum thermal resistance values** for the insulating layers underneath the underfloor heating system according to uni en 1264-4 "under-floor heating - systems and components - installation"



CASE	WHAT'S UNDERNEATH?	Thermal resistance Rt [m²K/W] according to UNI-EN 1264-4	RBM KILMA FUTURA SOLUTIONS		
1	Heated rooms	0.75	Kilma Futura 33mm (code 2926.33.**) Rt=0.775	Kilma Futura 17mm (code 2926.17.**) + Kilma Therm 20mm (code 1053.20.02) Rttot=0.815	Kilma Futura 25mm (code 2926.25.**) + Kilma Therm 20mm (code 1053.20.02) Rttot=1.083
2/3	Cold rooms, rooms heated occasionally and land	1.25	Kilma Futura 48mm (code 2926.48.**) Rt=1.25	Kilma Futura 25mm (code 2926.25.**) + Kilma Therm 30mm (code 1053.30.02) Rttot=1.433	Kilma Futura Kilma Futura 33mm (code 2926.33.**) + Kilma Therm 20mm (code 1053.20.02) Rttot=1.325
4	Outdoor temperature > 0°C (southern Italy)				
4	-5°C < Outdoor temperature < 0°C (central and northern Italy)	1.50	Kilma Futura 17mm (code 2926.17.**) + Kilma Therm 50mm (code 1053.50.22) Rttot=1.733	Kilma Futura 25mm (code 2926.25.**) + Kilma Therm 40mm (code 1053.40.02) Rttot=1.733	Kilma Futura 33mm (code 2926.33.**) + Kilma Therm 30mm (code 1053.30.02) Rttot=1.675
4	-15°C < Outdoor temperature < -5°C (northern Italy)	2.00	Kilma Futura 25mm (code 2926.25.**) + Kilma Therm 50mm (code 1053.50.22) Rttot=2.003	Kilma Futura 33mm (code 2926.33.**) + Kilma Therm 50mm (code 1053.50.22) Rttot=2.245	Kilma Futura 48mm (code 2926.48.**) + Kilma Therm 30mm (code 1053.30.02) Rttot=2.15

N.B. The thermal resistances given in the table refer to systems with 100 mm laying pitch, in the case of 150 mm laying pitch, the values improve.

Walk-on noise abatement requirements

A fundamental factor to be taken into account when designing a building is the provisions of PMD 5/12/97 regarding the determination of the passive acoustic requirements of buildings, according to which the minimum values to be respected in the theoretical estimation are as follows, depending on the category of intended use of the building.

CATEGORY OF INTENDED USE

A	Residential or similar buildings
B	Office and similar buildings
C	Buildings used as hotels, guesthouses and similar
D	Buildings used as hospitals, clinics, nursing homes or similar
E	Buildings for school activities at all levels or similar
F	Buildings used for recreation or worship or similar
G	Buildings used for commercial or similar activities

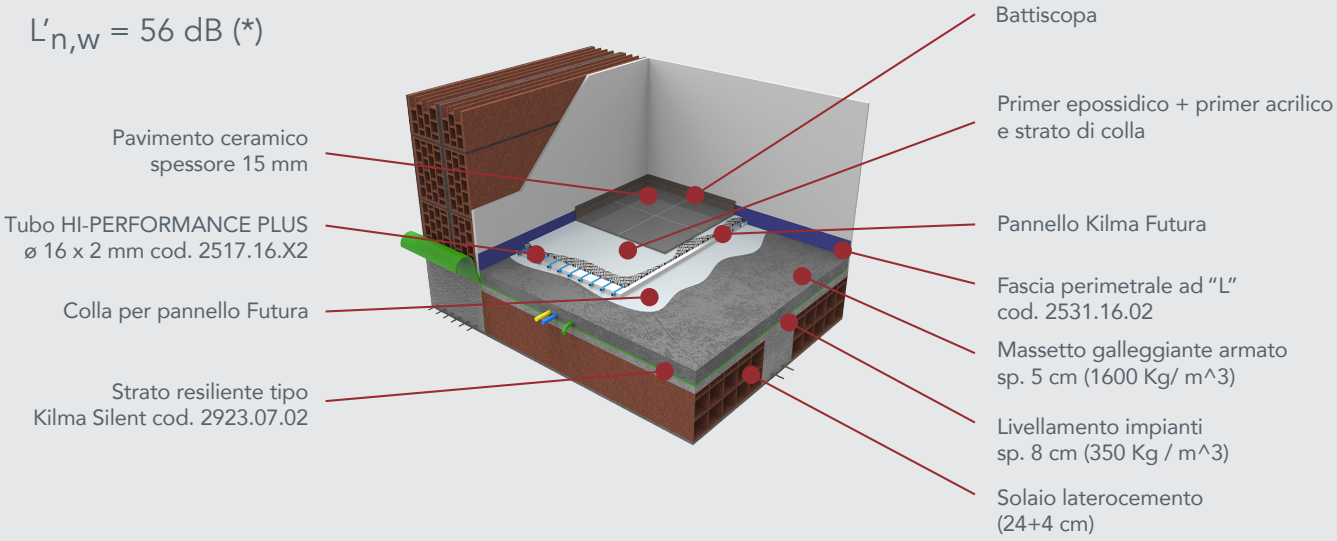
CATEGORY OF INTENDED USE	Apparent soundproofing power of elements separating two different units housing	Insulation sound insulation of the building façade	Walk-on level of normalised floor slabs	Pressure levels sound pressure levels of installations or services with discontinuous operation	Pressure levels sound pressure levels of installations or services with continuous operation
	R'_w	$D_{2m,nT,w}$	$The_{n,w}$	L_{ASmax}	L_{Aeq}
D	55	45	58	35	35
A-C	50	40	63	35	35
E	50	48	58	35	25
B-F-G	50	42	55	35	35

For the sole purpose of providing the designer with some simple food for thought regarding the choice of possible solutions to this problem, here are some 'model' stratigraphies, containing the Kilma Futura radiant system, from which to start in order to determine, by means of forecast calculations, the desired results (*)

NEW OR EXISTING HOLLOW CORE SLAB

With the possibility of 'weighting' the structure

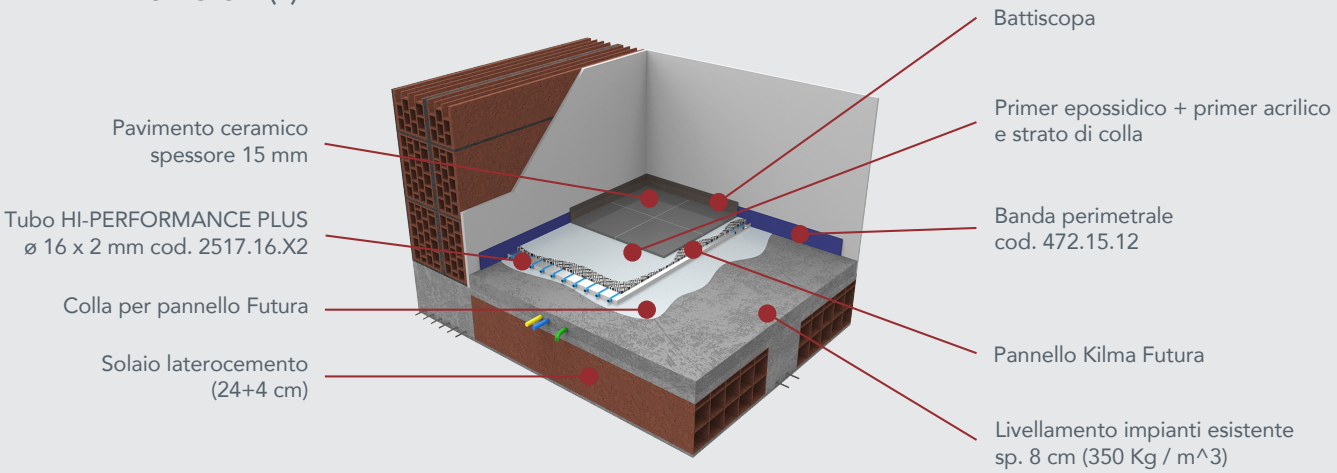
$L'_{n,w}$ = 56 dB (*)



EXISTING HOLLOW CORE SLAB

Without the possibility of 'weighting' the structure

ΔLw = 10-15 dB (*)



(*) What is reported here is only to be considered as resulting from a forecast calculation and therefore performed with reference to intact structures (discontinuities due to the presence of installations, flues or anything else that interrupts the continuity of the structure cannot be considered). The calculation evaluations through which the values given here have been arrived at separately consider the acoustic performance of partitions and elements forming part of the building, even though in reality the behaviour of one element cannot be distinguished from that of the connected elements. In order to rectify this possible discrepancy, the data obtained were appropriately worsened by calculation with correction coefficients (K) that took into account the incidence of lateral and side transmissions. The values given in this document, as well as depending on the boundary conditions considered for the calculation, are therefore purely indicative. They cannot be 'guaranteed' in any way, unless previously screened and verified by a qualified technician.

ΔLw: evaluation index of the walk-on sound reduction of the floating system 'screed+elastic layer'

Radiant floor

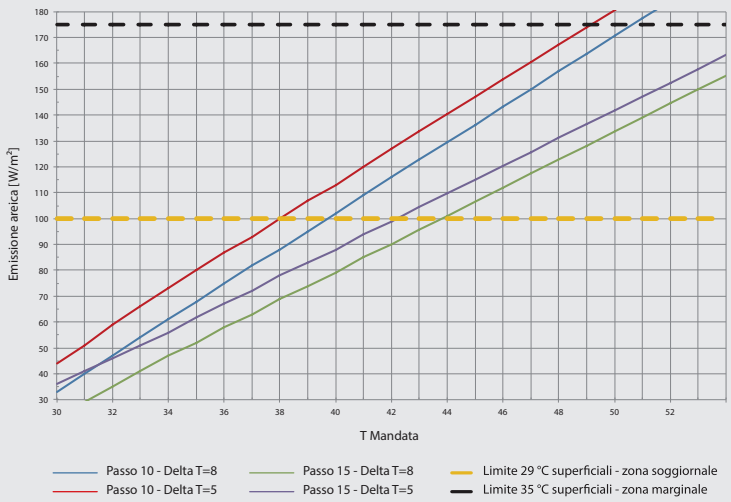
Heating power of dry radiant floor system RBM Kilma Futura

(VALUES ACCORDING TO UNI EN 1264)

OPERATING CONDITIONS OF THE SYSTEM CERAMIC 12.5 MM

Floor thermal resistance (ceramic 12.5 mm)	RΛ,B	0.01 [m²K/W]
Pipe thermal conductivity (polyethylene pipe value)	ΛR	0.41 [W/mK]
External pipe diameter	From	16.0 [mm]
Pipe wall thickness	Sr	2.0 [mm]
Ambient temperature	θi	20.0 [°C]

SYSTEM CURVES



SPECIFIC AREIC EMISSION AND SURFACE TEMPERATURE (*)

Delivery T [°C]	T Delta	Pipe centre distance			
		10 [cm]		15 [cm]	
		q [W/m²]	$\theta_{f,m}$ [°C]	q [W/m²]	$\theta_{f,m}$ [°C]
33	5	66	26.3	51	24.8
	6	62	25.9	48	24.6
	7	58	25.6	44	24.3
	8	54	25.3	41	24.1
34	5	73	26.9	53	25.3
	6	69	26.6	50	25.0
	7	65	26.3	47	24.8
	8	61	25.9	62	24.6
35	5	80	27.5	59	25.8
	6	76	27.2	55	25.5
	7	72	26.9	52	25.3
	8	68	26.6	67	25.0
36	5	87	26.6	64	26.3
	6	83	28.1	61	26.0
	7	79	27.8	58	25.8
	8	75	27.5	72	25.5
37	5	93	27.2	69	26.8
	6	90	28.7	66	26.5
	7	86	28.4	63	26.3
	8	82	28.1	78	26.0
38	5	100	27.8	75	27.3
	6	96	29,3	72	27.0
	7	92	28.7	69	26.8
	8	88	28.4		26.5
39	5	107	30.0	83	27.7
	6	103	29.6	80	27.5
	7	99	29,3	77	27.3
	8	95	29.0	74	27.0
40	5	113	30.6	88	28.2
	6	110	30.3	85	28.0
	7	106	30.0	82	27.7
	8	102	29.6	79	27.5
41	5	120	31.2	94	28.7
	6	116	30.9	91	28.5
	7	113	30.6	88	28.2
	8	109	30.3	85	28.0
42	5	127	31.8	99	29.2
	6	123	31.5	96	29.0
	7	119	31.2	93	28.7
	8	116	30.9	90	28.5

* - Values obtained by complying with the above operating conditions
θf,m = Floor surface temperature
q = Specific floor areic emission

Radiant wall

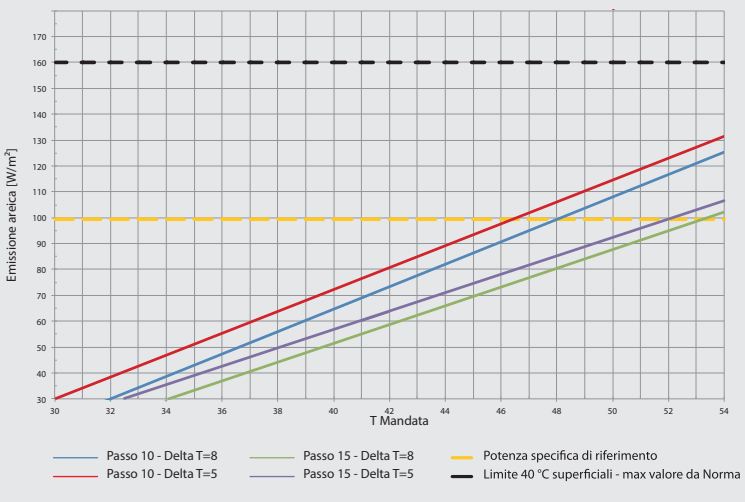
Heating power of dry radiant wall system RBM Kilma Futura

(VALUES ACCORDING TO UNI EN 1264)

OPERATING CONDITIONS OF THE SYSTEM CERAMIC 12.5 MM

Floor thermal resistance (ceramic 12.5 mm)	RΛ,B	0.04 [m²K/W]
Pipe thermal conductivity (polyethylene pipe value)	ΛR	0.41 [W/mK]
External pipe diameter	From	16.0 [mm]
Pipe wall thickness	Sr	2.0 [mm]
Ambient temperature	θi	20.0 [°C]

SYSTEM CURVES



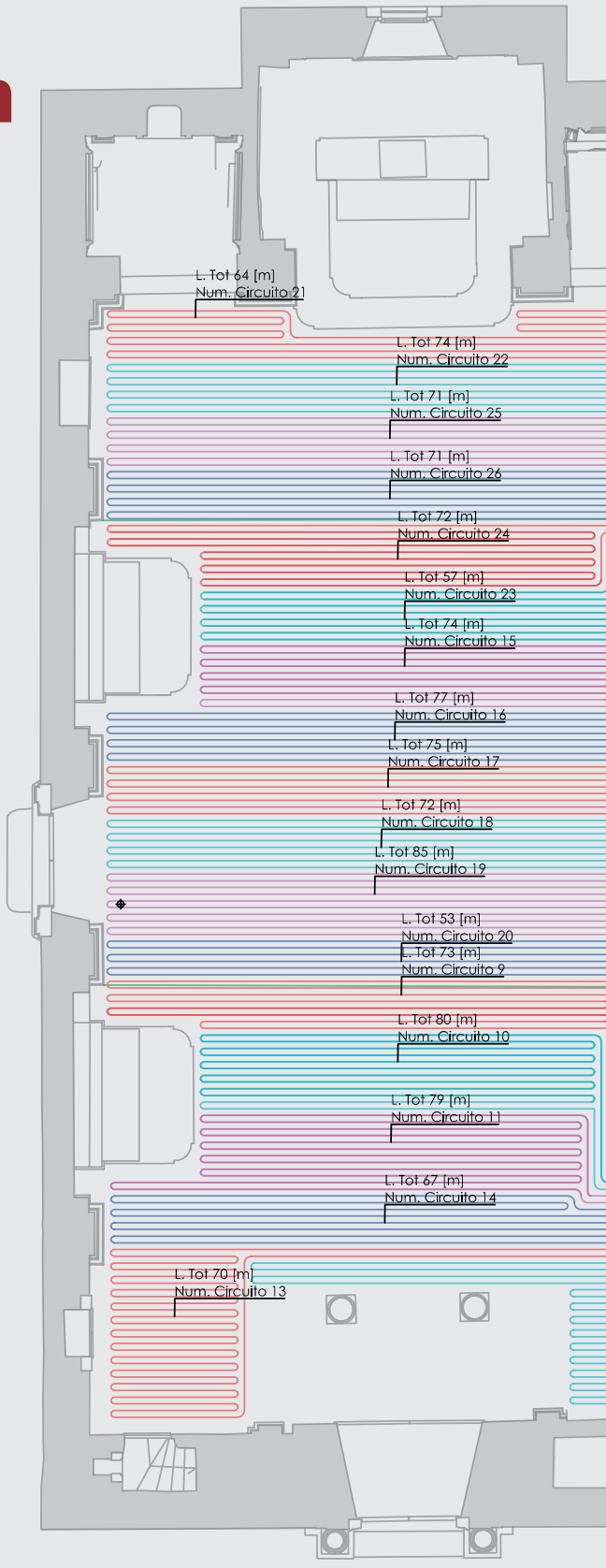
SPECIFIC AREIC EMISSION AND SURFACE TEMPERATURE (*)

Delivery T [°C]	Delta T	Pipe centre distance			
		10 [cm]		15 [cm]	
		q [W/m²]	θf,m [°C]	q [W/m²]	θf,m [°C]
33	5	42	25.4	33	24.1
	6	40	25.1	31	23.9
	7	37	24.8	28	23.7
	8	34	24.6	26	23.5
34	5	46	25.9	36	24.6
	6	44	25.6	34	24.4
	7	41	25.4	32	24.1
	8	39	25.1	30	23.9
35	5	51	26.4	40	25.0
	6	48	26.2	38	24.8
	7	46	25.9	36	24.6
	8	43	25.6	33	24.4
36	5	55	27.0	43	25.5
	6	53	26.7	41	25.2
	7	50	26.4	39	25.0
	8	48	26.2	37	24.8
37	5	59	27.5	47	25.9
	6	57	27.2	45	25.7
	7	55	27.0	43	25.5
	8	52	26.7	41	25.2
38	5	64	28.0	50	26.3
	6	61	27.8	48	26.1
	7	59	27.5	46	25.9
	8	56	27.2	44	25.7
39	5	68	28.6	54	26.8
	6	66	28.3	52	26.5
	7	63	28.0	50	26.3
	8	61	27.8	48	26.1
40	5	72	29.1	57	27.2
	6	70	28.8	55	27.0
	7	68	28.6	53	26.8
	8	65	28.3	51	26.5
41	5	77	29.6	61	27.6
	6	74	29.4	59	27.4
	7	72	29.1	57	27.2
	8	69	28.8	55	27.0
42	5	81	30.2	64	28.1
	6	79	29.9	62	27.9
	7	76	29.6	60	27.6
	8	74	29.4	58	27.4

* - Values obtained by complying with the above operating conditions
θf,m = Floor surface temperature
q = Specific floor areic emission

Installation drawing of a typical installation

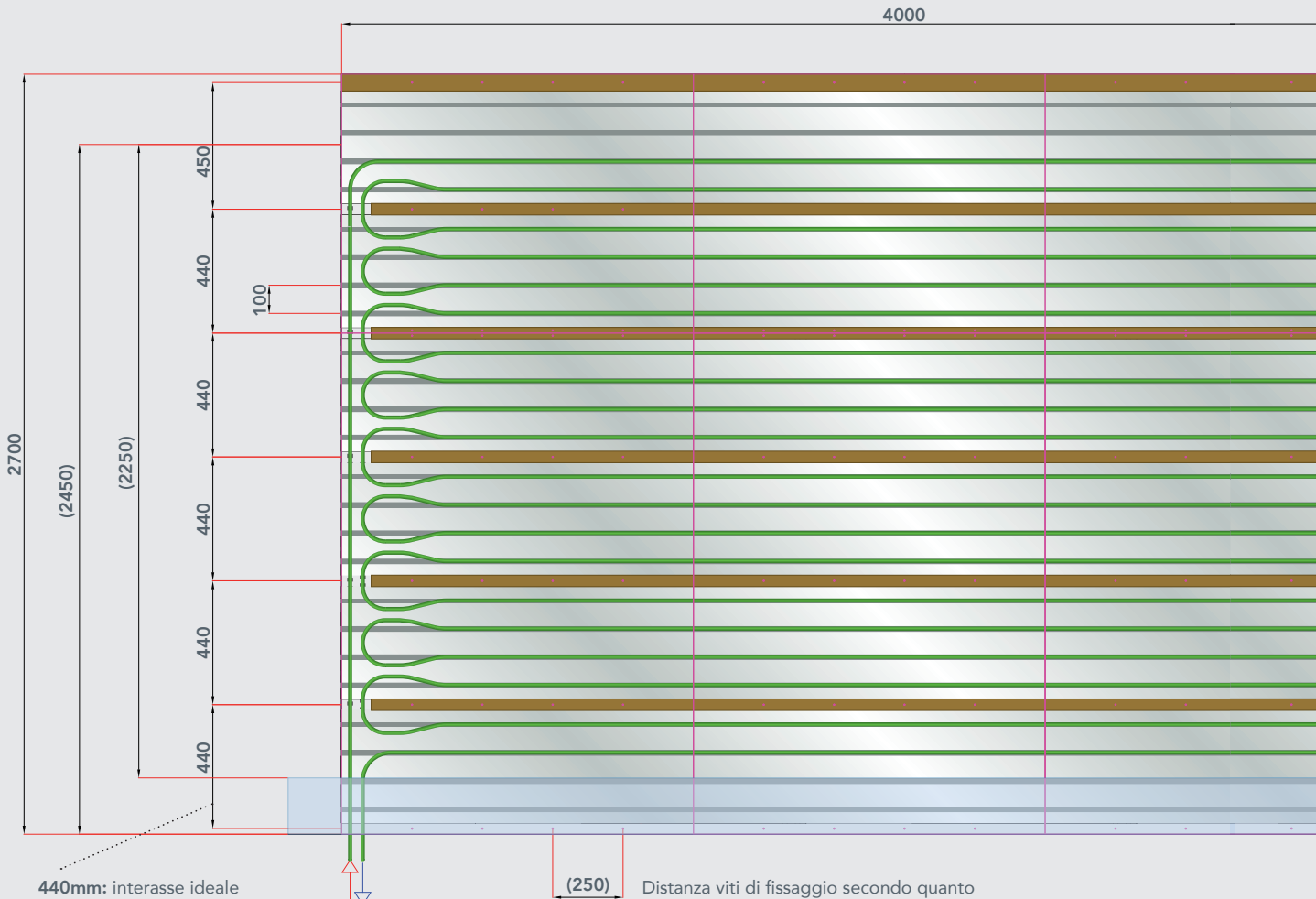
RBM KILMA is also pre- and after-sales service.
Our technical department is at the designer's disposal to advise them in the choice of the Kilma Futura system best suited to their needs and to support them in the design process of the radiant system, assisting them in the delicate task of establishing its ideal operating conditions.
The installation diagram, drawn up using certified calculation software and based on the specifications of the heating engineer, will help the installer when laying out the circuits.




Descrizione SAGRESTIA
Area 20.12 [m²]
Codice 1-7
Descrizione LOCALE 4
Area 5.27 [m²]
L. Tot 70 [m]
Num. Circuito 31
L. Tot 48 [m]
Num. Circuito 28
L. Tot 67 [m]
Num. Circuito 30
L. Tot 62 [m]
Num. Circuito 32
L. Tot 62 [m]
Num. Circuito 29
L. Tot 51 [m]
Num. Circuito 33
Codice 1-6
Descrizione LOCALE 3
Area 10.20 [m²]
C5
C4
L. Tot 21 [m]
Num. Circuito 27
L. Tot 51 [m]
Num. Circuito 34
Codice 1-5
Descrizione LOCALE 2
Area 6.10 [m²]
Codice 1-4
Descrizione LOCALE 1
Area 30.14 [m²]
L. Tot 75 [m]
Num. Circuito 38
C6
L. Tot 71 [m]
Num. Circuito 37
Codice 1-3
Descrizione AUTORIMESSA
Area 15.43 [m²]
L. Tot 77 [m]
Num. Circuito 39
L. Tot 74 [m]
Num. Circuito 36
C3
L. Tot 75 [m]
Num. Circuito 40
L. Tot 76 [m]
Num. Circuito 35
C7
C1
L. Tot 44 [m]
Num. Circuito 7
C2
L. Tot 75 [m]
Num. Circuito 1
L. Tot 70 [m]
Num. Circuito2
L. Tot 73 [m]
Num. Circuito3
L. Tot 74 [m]
Num. Circuito 4
L. Tot 69 [m]
Num. Circuito 8
L. Tot 75 [m]
Num. Circuito 5
L. Tot 68 [m]
Num. Circuito 12
L. Tot 51 [m]
Num. Circuito 6
Codice 1-2
Descrizione CAPPELLA
Area 52.52 [m²]

Kilma Futura System wall-mounted

The Kilma-Futura system can also be mounted on the wall. In this case, the radiant panel must be placed against the wall and then covered with a plasterboard or gypsum fibre coating. Its reduced thickness, quick installation and the use of ø 16x2 mm pipes that can be connected directly to the radiant system manifold make it suitable for any situation.



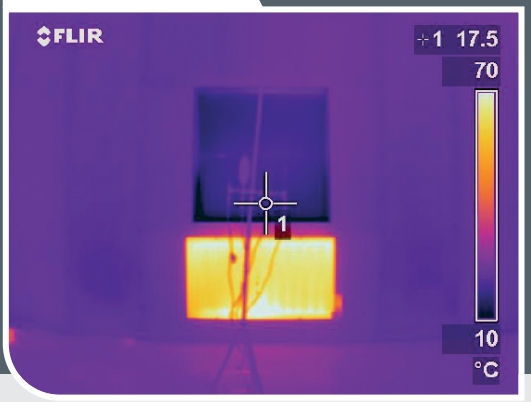
440mm: interasse ideale per pannello con passo 100mm, per gli altri pannelli questa distanza potrebbe variare

Distanza viti di fissaggio secondo quanto prescritto dalla scheda tecnica della lastra di rivestimento adottata

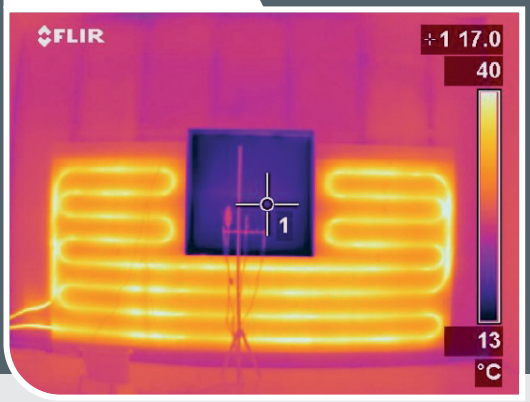
Thermographic comparison between Kilma Futura wall-mounted and a classic radiator

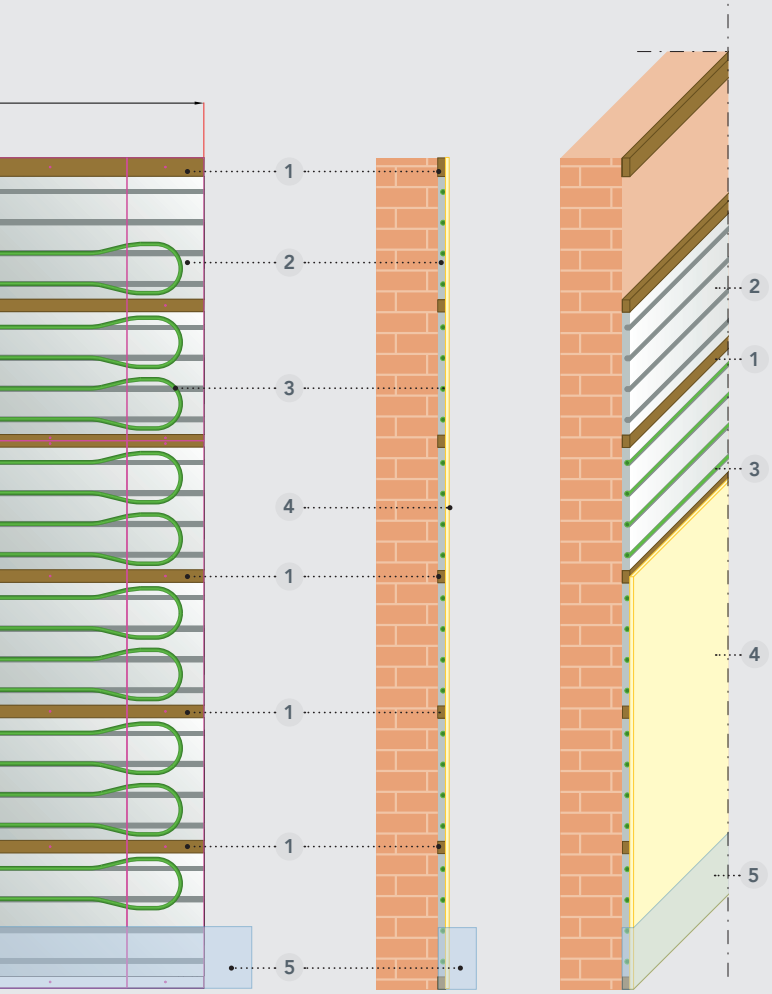
The thermographic image shows the temperature difference in a room heated with the RBM Kilma Futura wall system and a room heated with a classic radiator.

RADIATOR



KILMA FUTURA





RADIANT WALL COMPONENTS

1. Wooden strip 40 x 25 mm
2. EPS300 RBM Kilma Futura panel 25 mm thick
3. HI-PERFORMANCE PLUS pipe ø16 x 2 mm
4. Plasterboard panel
5. Possible buffer strip for installation of electrical sockets according to IEC 64-8

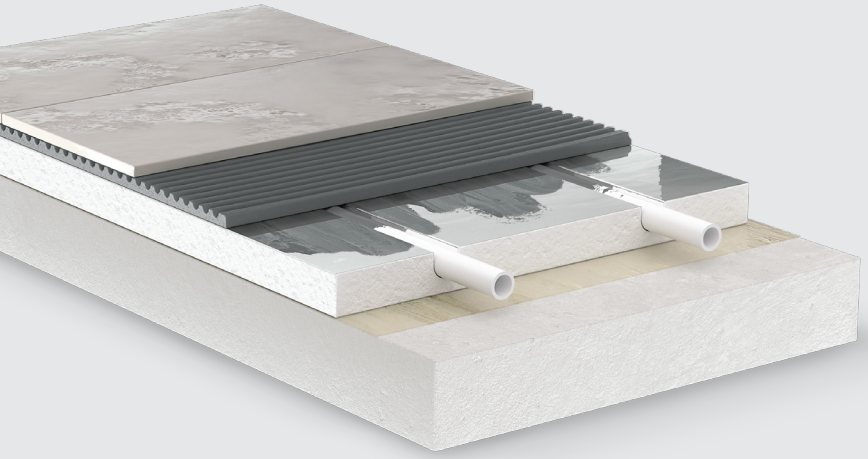
The invisible radiant system

CEILING
INSTALLATION

FALSE CEILING
INSTALLATION

WALL-MOUNTED
INSTALLATION

FLOOR
INSTALLATION



12 good reasons to choose Kilma Futura

1. No load allocator required
2. Equipped with aluminium layer for even heat distribution
3. No heat stealing
4. Insulation layer under the pipe
5. Easy installation
6. Lightness of the system
7. Only one panel model to build the construction site
8. Laying pitch easily changed if required
9. No thermal expansion of the system
10. Speed of implementation (no screed drying)
11. Can also be used on the wall
12. Over 1,000,000 m² installed worldwide

RBM Support

RBM Kilma also means technical support. Dedicated personnel who takes care of customers, from the first consultation during the design phase through system start-up.

Our technical support team, on request,
can help the installer who is installing the Kilma Futura system for the first time, free of charge, by supporting him through the different stages of implementation.

For information write to **kilma@rbm.eu**

Training of installers

KILMA
TRAINING CENTRE

For installers wishing to learn the best installation techniques, RBM has created the Kilma Training Centre, a professional specialisation centre dedicated to radiant air conditioning systems. Kilma Training Centre offers participants the opportunity to learn the techniques of correct installation and immediately put them into practice within a dedicated space for practical tests, followed step by step by an RBM technician.

For information and registration, contact your local agency or write to **kilma@rbm.eu**

QUALITY ASSURANCE
MADE IN ITALY

All RBM products are covered by warranty, according to the terms of the law.
As a further element of protection for the users of its products, RBM has taken out an insurance policy for risks arising from liability for consequential damage
to any manufacturing defects.

For more information visit **www.rbm.eu**
or write to **kilma@rbm.eu**

Scan the qr code
to know more

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