
warmset
ELECTRIC HEATING SYSTEM
CATALOGUE
www.warmset.com

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LAMINATED HEATING TECHNOLOGY

INDEX

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LAMINATED HEATING TECHNOLOGY

WHO WE ARE

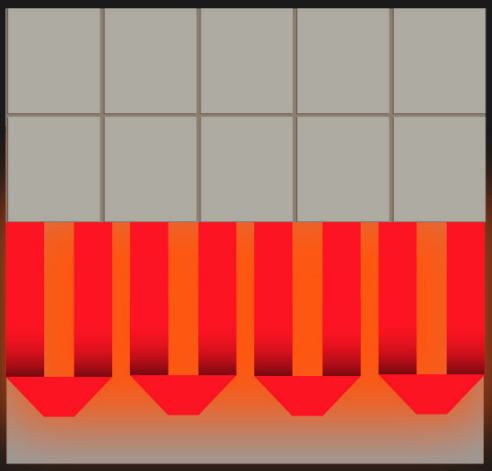
Dynamic and innovative, **Warmset** was founded with the goal of offering a new solution in the field of **electric heating systems** for homes and other facilities. Its unique technology, patented and with many applications, catapulted the company into various relevant markets. Warmset has thus achieved major goals on an international scale.

Warmset products are made of select materials and the structure of the **multilayer laminated ribbon** - the outcome of meticulous tests - provides particular advantages. In addition to electric underfloor heating systems, Warmset also offers snow melt applications for the outdoors, radiators, workstation heating, industrial heaters and heating for events and other recreational activities.

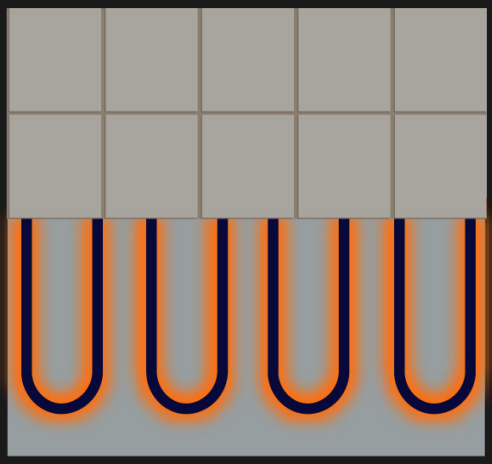
UNIQUE TECHNOLOGY

Warmset's electric underfloor heating is a **unique technology** that ensures **better heat distribution** than a system with a circular heating cable. Thanks to its flat geometry that offers a very high heating surface and to the reduced distance of the heating elements, the Warmset technology requires less power from the system, thus allowing to **save electricity**.

The peculiar element of this heating system is the multilayer laminated ribbon, patented by Warmset. Sturdy and durable, it is **easy to handle**, less prone to damage during the installation process and requires no future maintenance.



Ribbon technology of Warmset



Cable heating

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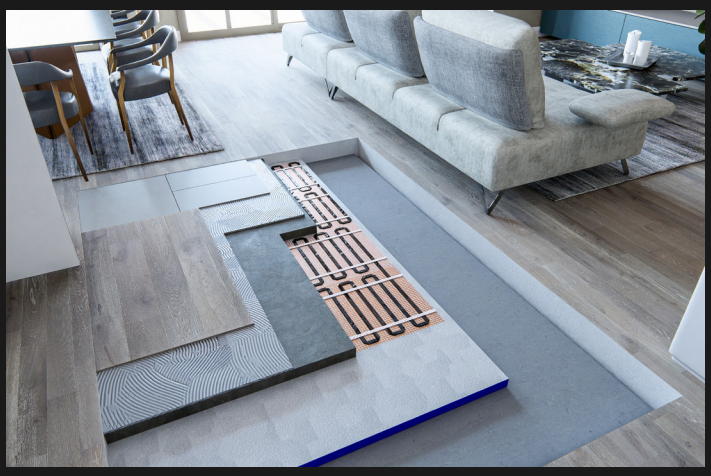
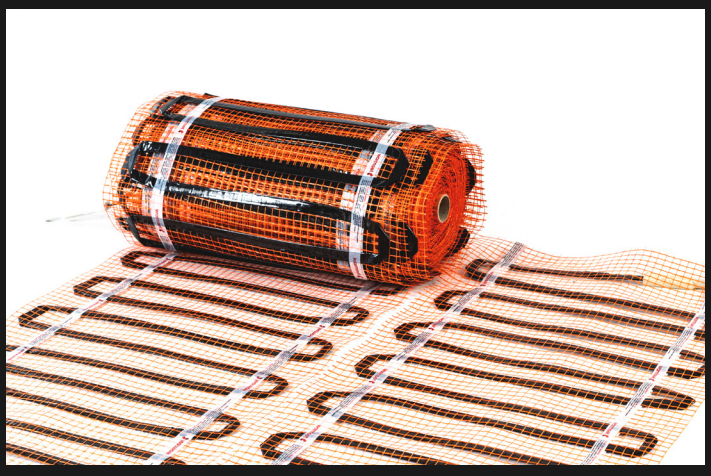
HEATING FOR ALL APPLICATIONS

The **Warmset heating** system is able to adapt to all surfaces and floors and be installed both for domestic heating and for the heating of industrial, snow and deicing warehouses, churches, greenhouses and sports fields.

In the **fiberglass product**, its reduced thickness (3 mm) allows it to be installed directly in laying glue with ceramic, natural stone or glued wood floors as well as being drowned in cementitious or self-leveling screeds.

With the **aluminum product** it is possible to lay floating floors such as parquet, laminated wood floors, vinyl floors on top of the heating surface.





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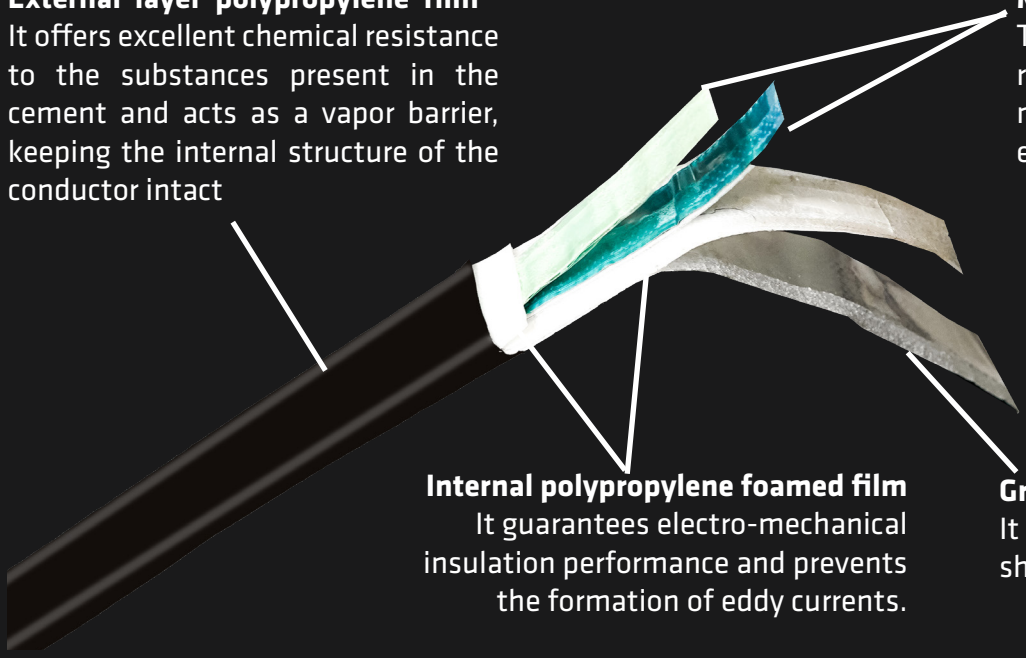
RIBBON STRUCTURE

BLACK RIBBON - Warranty 10 years

External layer polypropylene film
It offers excellent chemical resistance to the substances present in the cement and acts as a vapor barrier, keeping the internal structure of the conductor intact

Metal-plastic layer conductors
The metal / plastic core of the radiant system guarantees high mechanical strength (elastic elongation stress).



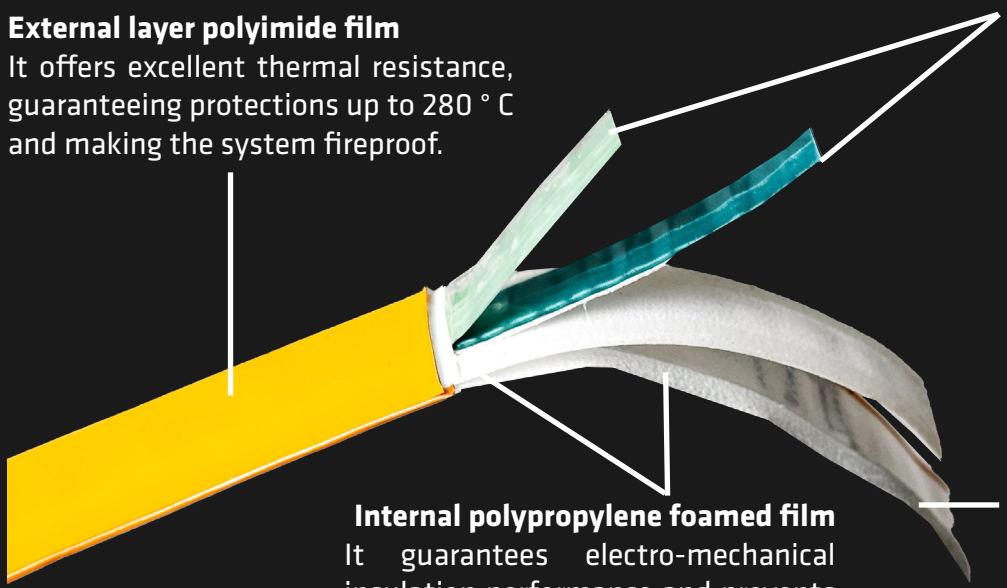
Internal polypropylene foamed film
It guarantees electro-mechanical insulation performance and prevents the formation of eddy currents.

Ground conductor aluminum layer
It responds to the grounding and metal shielding function of the system.

GOLD RIBBON - Lifetime Warranty (25 years)

External layer polyimide film
It offers excellent thermal resistance, guaranteeing protections up to 280 ° C and making the system fireproof.

Metal-plastic layer conductors
The metal / plastic core of the radiant system guarantees high mechanical strength (elastic elongation stress).



Internal polypropylene foamed film
It guarantees electro-mechanical insulation performance and prevents the formation of eddy currents.

Ground conductor aluminum layer
It responds to the grounding and metal shielding function of the system.

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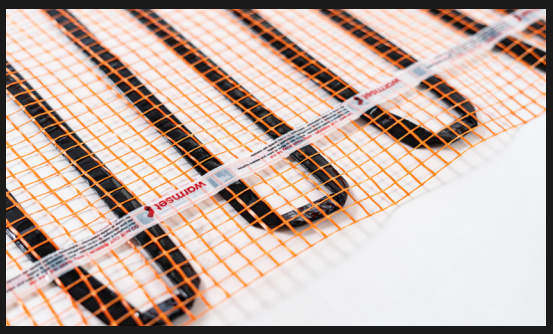
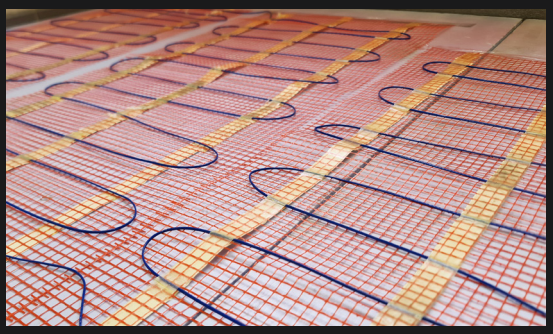
WHY WARMSET

DIFFERENCE BETWEEN OUR PRODUCT AND THE TRADITIONAL CABLE

- **Better heating diffusion** thanks to the flat surface of the heating ribbon
- **Lower thickness**
- Only 3 mm
- **Green product** and 100% made in Italy
- Heat spreads evenly and the **system warms up faster**
- **Self-adhesive product**, YOU DO NOT NEED TO PRE-GLUE the product



WARMSET heating system



CABLE heating system

DIFFERENCE BETWEEN OUR PRODUCT AND THE HEATING FILM

- Our heating system is not a printed conductive ink but a laminated tape inside which there are two conductors and a grounding in order to have a better yield and **resistance over the years**
- Our heating system is **already provided by the connection** and a cold cable
- Our heating system is very **functional for glued tiles** and floors unlike the Korean one

WARMSET heating system

FILM heating system

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TECHNICAL DATA SHEET

BLACK FIBERGLASS

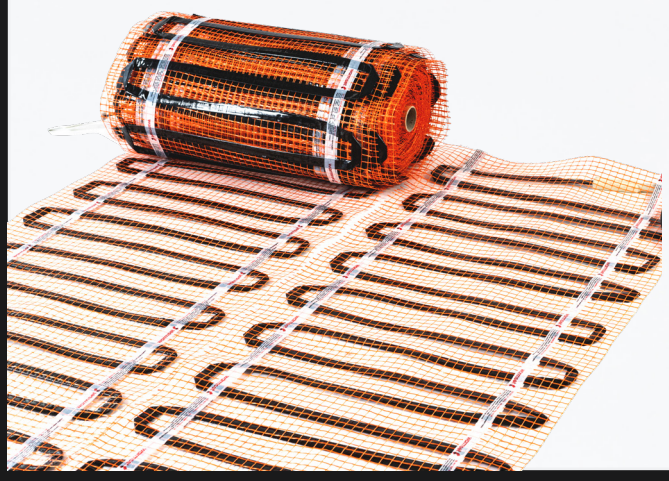
Warmset's Black Technology (WHB) is the company's flagship product, distinguished by its polypropylene sheath outer covering. This feature allows the underfloor heating system to **cover large surfaces**, making it ideal for i**ndoor applications.**
The multilayer heating ribbon is **fixed onto a fiberglass mesh,** supplied in rolls designed for embedding in **screed or for direct glued** installation beneath flooring.

The product can also be installed in **humid environments** such as bathrooms and spas.

The product is available in a wide range of standard lengths, and comes with a **3 - meter supply cable** (extendable upon request). It is **fully customizable** in terms of size, power, and voltage (24V, 48V, 120V, 230V, 240V, 380V).

10 YEARS WARRANTY

IPX7



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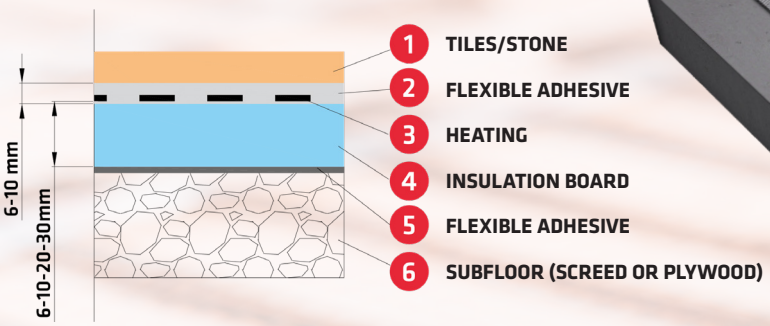
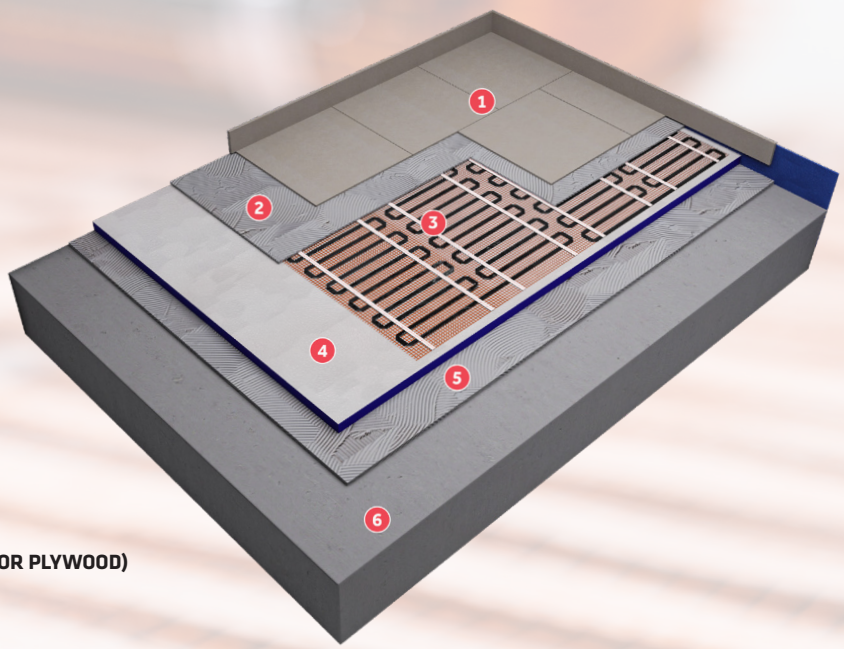
TYPE OF INSTALLATION

INDOOR

GLUED FLOOR

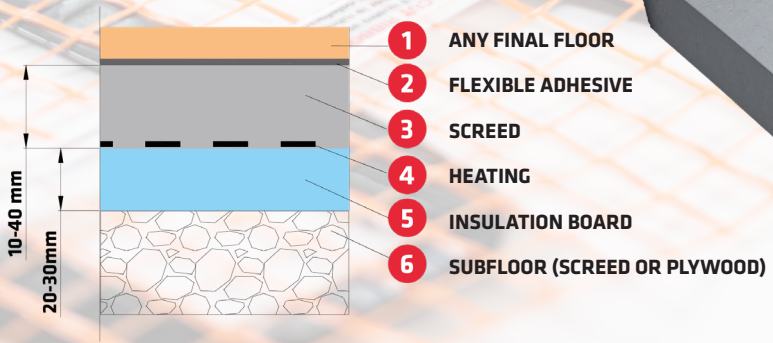
FROM ONLY 12MM THICKNESS

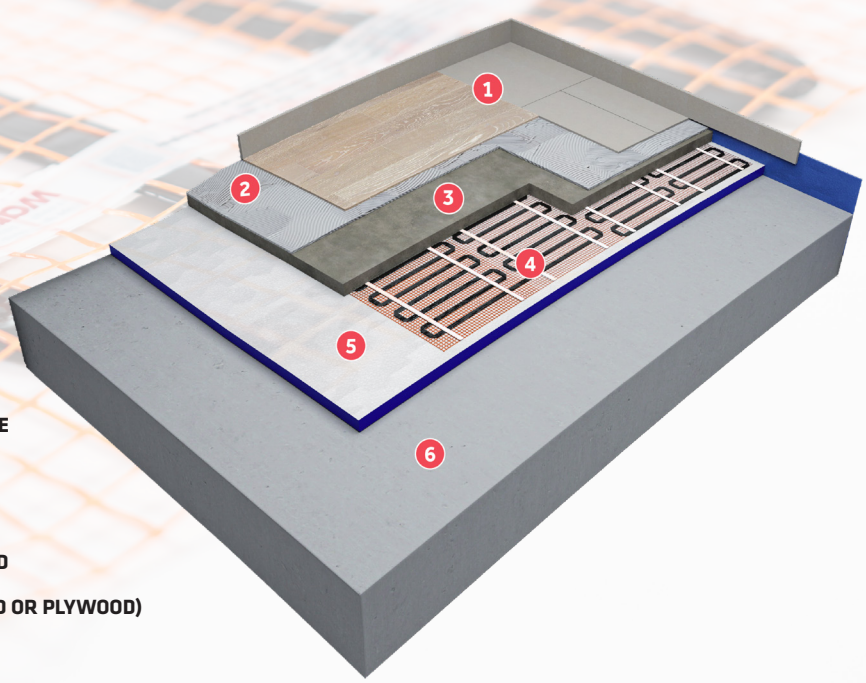




IN SCREED

FOR ALL COVERINGS





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STANDARD SIZES AND POWERS

CUSTOMIZABLE SIZE & POWERS

AREA	SIZE	65 W/M²	85 W/M²	100 W/M²	120 W/M²	150 W/M²	200 W/M²
		POWER(W) CODE	POWER(W) CODE	POWER(W) CODE	POWER(W) CODE	POWER(W) CODE	POWER(W) CODE
0.5	0.5x1	32.5 W WHB - 0.5 - 65	42.5 W WHB - 0.5 - 85	50 W WHB - 0.5 - 100	60 W WHB - 0.5 - 120	75 W WHB - 0.5 - 150	100 W WHB - 0.5 - 200
1.0	0.5x2	65 W WHB - 1 - 65	85 W WHB - 1 - 85	100 W WHB - 1 - 100	120 W WHB - 1 - 120	150 W WHB - 1 - 150	200 W WHB - 1 - 200
1.5	0.5x3	97.5 W WHB - 1.5 - 65	127.5 W WHB - 1.5 - 85	150 W WHB - 1.5 - 100	180 W WHB - 1.5 - 120	225 W WHB - 1.5 - 150	300 W WHB - 1.5 - 200
2.0	0.5x4	130 W WHB - 2 - 65	170 W WHB - 2 - 85	200 W WHB - 2 - 100	240 W WHB - 2 - 120	300 W WHB - 2 - 150	400 W WHB - 2 - 200
2.5	0.5x5	162.5 W WHB - 2.5- 65	213 W WHB - 2.5- 85	250 W WHB - 2.5- 100	300 W WHB - 2.5- 120	375 W WHB - 2.5- 150	500 W WHB - 2.5- 200
3.0	0.5x6	195 W WHB - 3 - 65	255 W WHB - 3 - 85	300 W WHB - 3 - 100	360 W WHB - 3 - 120	450 W WHB - 3 - 150	600 W WHB - 3 - 200
3.5	0.5x7	227.5 W WHB - 3.5 - 65	298 W WHB - 3.5 - 85	350 W WHB - 3.5 - 100	420 W WHB - 3.5 - 120	525 W WHB - 3.5 - 150	700 W WHB - 3.5 - 200
4.0	0.5x8	260 W WHB - 4 - 65	340 W WHB - 4 - 85	400 W WHB - 4 - 100	480 W WHB - 4 - 120	600 W WHB - 4 - 150	800 W WHB - 4 - 200
4.5	0.5x9	292.5 W WHB - 4.5 - 65	383 W WHB - 4.5 - 85	450 W WHB - 4.5 - 100	540 W WHB - 4.5 - 120	675 W WHB - 4.5 - 150	900 W WHB - 4.5 - 200
5.0	0.5x10	325 W WHB - 5 - 65	425 W WHB - 5 - 85	500 W WHB - 5 - 100	600 W WHB - 5 - 120	750 W WHB - 5 - 150	1000 W WHB - 5 - 200
6.0	0.5x12	390 W WHB - 6 - 65	510 W WHB - 6 - 85	600 W WHB - 6 - 100	720 W WHB - 6 - 120	900 W WHB - 6 - 150	1200 W WHB - 6 - 200
7.0	0.5x14	455 W WHB - 7 - 65	595 W WHB - 7 - 85	700 W WHB - 7 - 100	840 W WHB - 7 - 120	1050 W WHB - 7 - 150	1400 W WHB - 7 - 200
8.0	0.5x16	520 W WHB - 8 - 65	680 W WHB - 8 - 85	800 W WHB - 8 - 100	960 W WHB - 8 - 120	1200 W WHB - 8 - 150	1600 W WHB - 8 - 200
9.0	0.5x18	585 W WHB - 9 - 65	765 W WHB - 9 - 85	900 W WHB - 9 - 100	1080 W WHB - 9 - 120	1350 W WHB - 9 - 150	1800 W WHB - 9 - 200
10.0	0.5x20	650 W WHB - 10 - 65	850 W WHB - 10 - 85	1000 W WHB - 10 - 100	1200 W WHB - 10 - 120	1500 W WHB - 10 - 150	2000 W WHB - 10 - 200
12.0	0.5x24	780 W WHB - 12 - 65	1020 W WHB - 12 - 85	1200 W WHB - 12 - 100	1440 W WHB - 12 - 120	1800 W WHB - 12 - 150	2400 W WHB - 12 - 200
14.0	0.5x28	910 W WHB - 14 - 65	1190 W WHB - 14 - 85	1400 W WHB - 14 - 100	1680 W WHB - 14 - 120	2100 W WHB - 14 - 150	2800 W WHB - 14 - 200

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LAMINATED HEATING TECHNOLOGY

PROJECT REFERENCES

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LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

BLACK ALUMINUM

Warmset's Black Aluminum (WHA) is a **dry installation heating system** based on the company's patented multilayer ribbon technology, with a polypropylene sheath outer covering. The multilayer heating ribbon **is laminated between two aluminum sheets.** This specific configuration is designed for **dry-laid floor heating applications** in indoor environments.

It can be installed beneath dry-laid parquet, laminated wood, floating floors, vinyl coverings, or carpet. These materials can be placed **directly in contact with the heating.** A soft insulation layer such as Warmfoam or **Warmduplex Foam** must be installed.

The product is available in a wide range of standard lengths, and comes with a **3-meter supply cable** (extendable upon request). The system is **fully customizable** in terms of size, power, and voltage (24V, 48V, 120V, 230V, 240V, 380V).

10 YEARS WARRANTY

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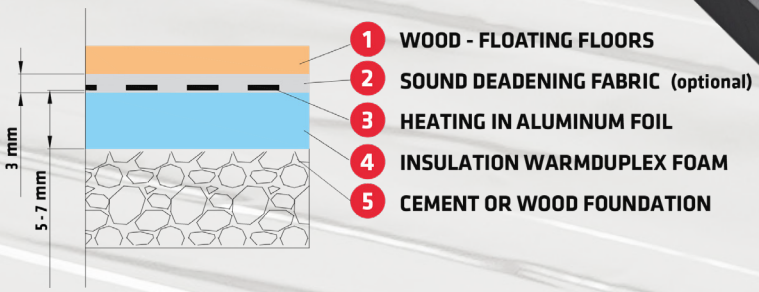
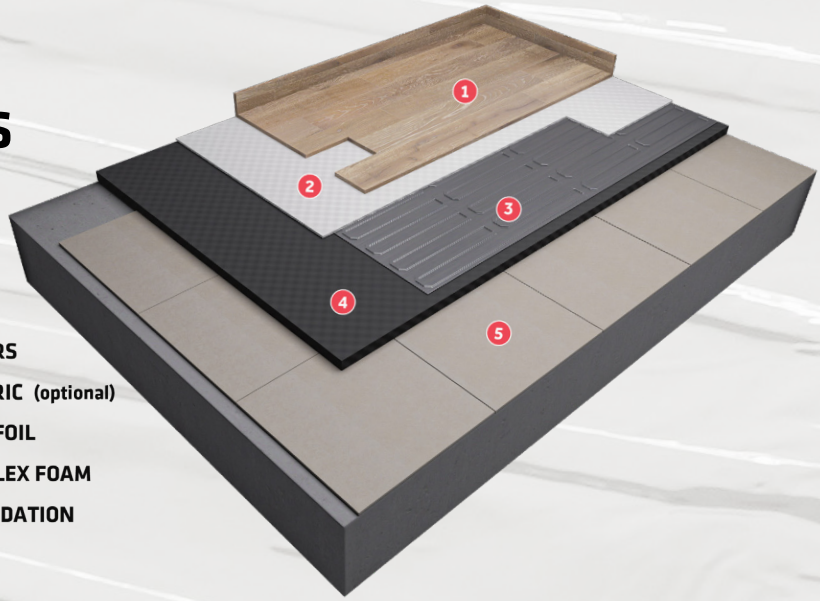
TYPE OF INSTALLATION
INDOOR

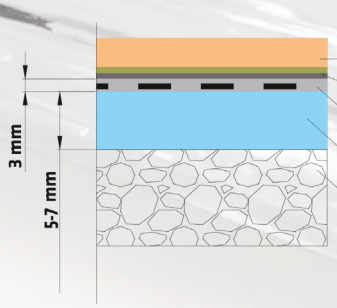
WOOD - FLOATING FLOORS



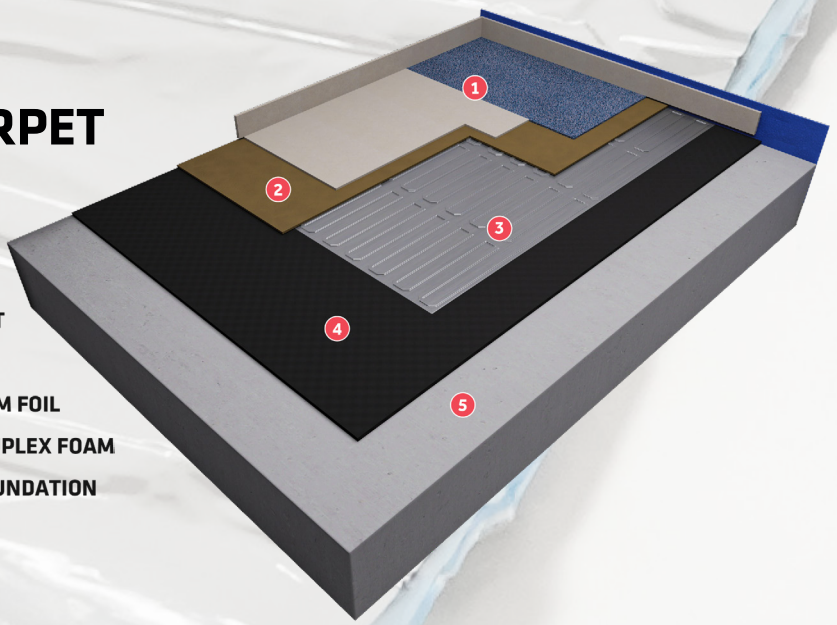
1. WOOD - FLOATING FLOORS
2. SOUND DEADENING FABRIC (optional)
3. HEATING IN ALUMINUM FOIL
4. INSTALLATION WARMDUPLEX FOAM
5. CEMENT OR WOOD FOUNDATION



VINYL FLOORS, RUGS, CARPET



1. VINYL - RUGS - CARPET
2. HEAT PAK
3. HEATING IN ALUMINUM FOIL
4. INSTALLATION WARMDUPLEX FOAM
5. CEMENT OR WOOD FOUNDATION



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LAMINATED HEATING TECHNOLOGY

STANDARD SIZES AND POWERS

CUSTOMIZABLE SIZE & POWERS

AREA	SIZE	65 W/M²	85 W/M²	100 W/M²	120 W/M²	140 W/M²
		POWER(W) CODE	POWER(W) CODE	POWER(W) CODE	POWER(W) CODE	POWER(W) CODE
0.5	0.5x1	32.5 W WHA - 0.5 - 65	42.5 W WHA - 0.5 - 85	50 W WHA - 0.5 - 100	60 W WHA - 0.5 - 120	70 W WHA - 0.5 - 140
1.0	0.5x2	65 W WHA - 1 - 65	85 W WHA - 1 - 85	100 W WHA - 1 - 100	120 W WHA - 1 - 120	140 W WHA - 1 - 140
1.5	0.5x3	97.5 W WHA - 1.5 - 65	127.5 W WHA - 1.5 - 85	150 W WHA - 1.5 - 100	180 W WHA - 1.5 - 120	210 W WHA - 1.5 - 140
2.0	0.5x4	130 W WHA - 2 - 65	170 W WHA - 2 - 85	200 W WHA - 2 - 100	240 W WHA - 2 - 120	280 W WHA - 2 - 140
2.5	0.5x5	162.5 W WHA - 2.5- 65	213 W WHA - 2.5- 85	250 W WHA - 2.5- 100	300 W WHA - 2.5- 120	350 W WHA - 2.5- 140
3.0	0.5x6	195 W WHA - 3 - 65	255 W WHA - 3 - 85	300 W WHA - 3 - 100	360 W WHA - 3 - 120	420 W WHA - 3 - 140
3.5	0.5x7	227.5 W WHA - 3.5 - 65	298 W WHA - 3.5 - 85	350 W WHA - 3.5 - 100	420 W WHA - 3.5 - 120	490 W WHA - 3.5 - 140
4.0	0.5x8	260 W WHA - 4 - 65	340 W WHA - 4 - 85	400 W WHA - 4 - 100	480 W WHA - 4 - 120	560 W WHA - 4 - 140
4.5	0.5x9	292.5 W WHA - 4.5 - 65	383 W WHA - 4.5 - 85	450 W WHA - 4.5 - 100	540 W WHA - 4.5 - 120	630 W WHA - 4.5 - 140
5.0	0.5x10	325 W WHA - 5 - 65	425 W WHA - 5 - 85	500 W WHA - 5 - 100	600 W WHA - 5 - 120	700 W WHA - 5 - 140
6.0	0.5x12	390 W WHA - 6 - 65	510 W WHA - 6 - 85	600 W WHA - 6 - 100	720 W WHA - 6 - 120	840 W WHA - 6 - 140
7.0	0.5x14	455 W WHA - 7 - 65	595 W WHA - 7 - 85	700 W WHA - 7 - 100	840 W WHA - 7 - 120	980 W WHA - 7 - 140
8.0	0.5x16	520 W WHA - 8 - 65	680 W WHA - 8 - 85	800 W WHA - 8 - 100	960 W WHA - 8 - 120	1120 W WHA - 8 - 140
9.0	0.5x18	585 W WHA - 9 - 65	765 W WHA - 9 - 85	900 W WHA - 9 - 100	1080 W WHA - 9 - 120	1260 W WHA - 9 - 140
10.0	0.5x20	650 W WHA - 10 - 65	850 W WHA - 10 - 85	1000 W WHA - 10 - 100	1200 W WHA - 10 - 120	1400 W WHA - 10 - 140
12.0	0.5x24	780 W WHA - 12 - 65	1020 W WHA - 12 - 85	1200 W WHA - 12 - 100	1440 W WHA - 12 - 120	1680 W WHA - 12 - 140
14.0	0.5x28	910 W WHA - 14 - 65	1190 W WHA - 14 - 85	1400 W WHA - 14 - 100	1680 W WHA - 14 - 120	1960 W WHA - 14 - 140

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LAMINATED HEATING TECHNOLOGY

PROJECT REFERENCES

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LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

GOLD FIBERGLASS

Warmset's Gold Technology (WHG) is the premium solution in the company's range for electric underfloor heating applications, distinguished by its gold-colored **polyimide film outer coating.** This high-performance material offers excellent thermal conductivity and resistance to chemical agents, ensuring long-term durability and optimal **heating efficiency.**

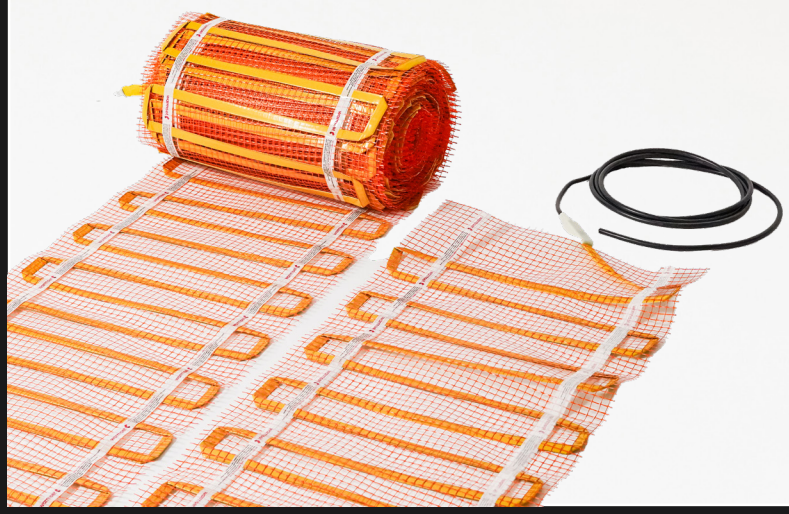
The multilayer heating ribbon is **fixed onto a fiberglass mesh,** supplied in rolls designed for embedding in screed or for direct glued installation beneath flooring.

The product can also be installed in humid environments such as bathrooms and spas.

The product is **UL certified and covered by a 25-year warranty,** ensuring safety and long-term reliability. It is available in a wide range of standard lengths, and comes with a **3-meter supply cable** (extendable upon request). It is **fully customizable** in terms of size, power, and voltage (24V, 48V, 120V, 230V, 240V, 380V).

LIFETIME WARRANTY

IPX7

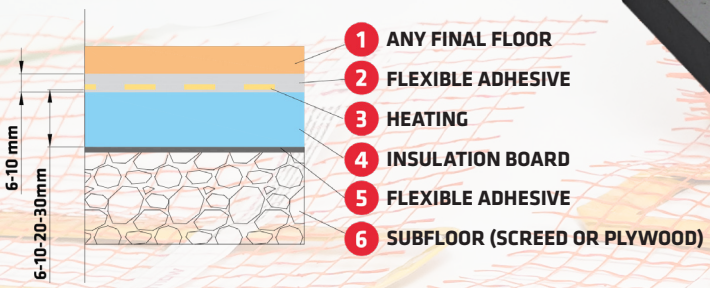


TYPE OF INSTALLATION

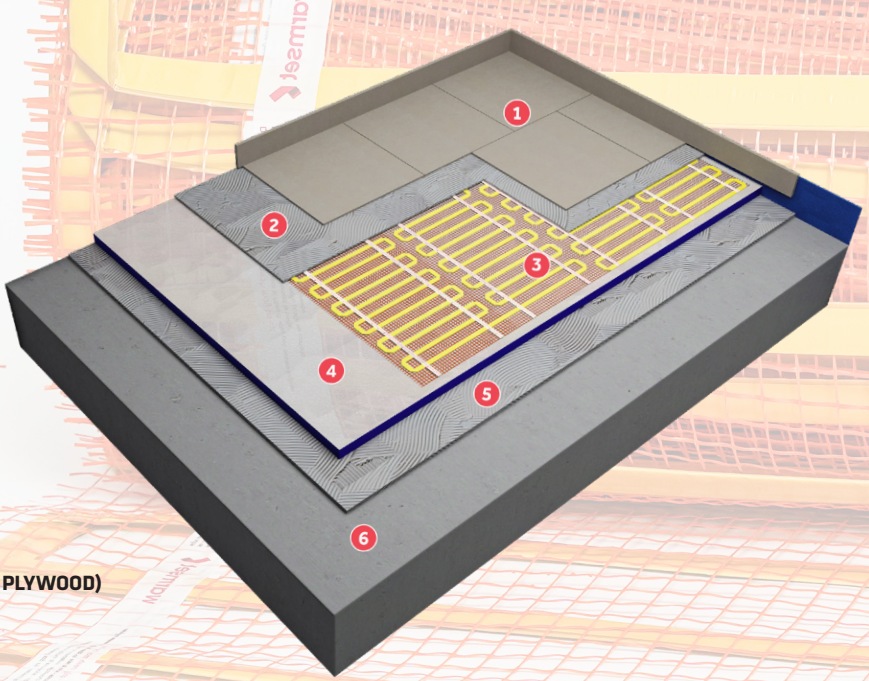
INDOOR

THIN-SET

FROM ONLY 12MM THICKNESS

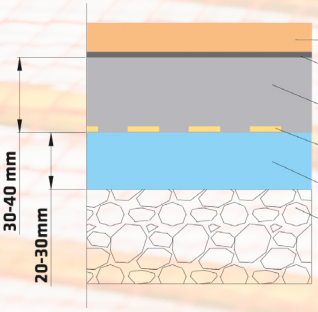


1. ANY FINAL FLOOR
2. FLEXIBLE ADHESIVE
3. HEATING
4. INSULATION BOARD
5. FLEXIBLE ADHESIVE
6. SUBFLOOR (SCREED OR PLYWOOD)

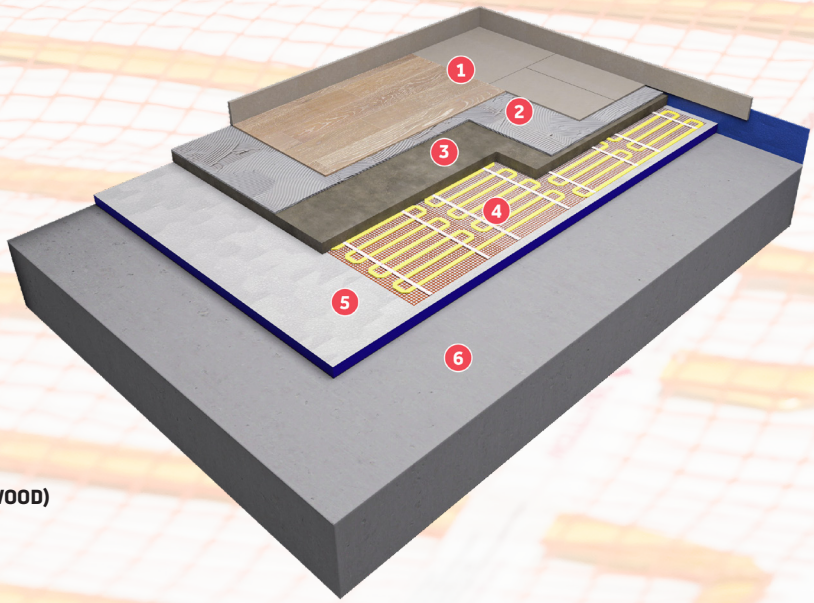


IN SCREED

FOR ALL COVERINGS



1. ANY FINAL FLOOR
2. FLEXIBLE ADHESIVE
3. SCREED
4. HEATING
5. INSULATION BOARD
6. SUBFLOOR (SCREED OR PLYWOOD)



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LAMINATED HEATING TECHNOLOGY

STANDARD SIZES AND POWERS

CUSTOMIZABLE SIZE & POWERS

AREA	SIZE	65 W/M²	85 W/M²	100 W/M²	120 W/M²	150 W/M²	200 W/M²
		POWER(W) CODE	POWER(W) CODE	POWER(W) CODE	POWER(W) CODE	POWER(W) CODE	POWER(W) CODE
0.5	0.5x1	32.5 W WHG - 0.5 - 65	42.5 W WHG - 0.5 - 85	50 W WHG - 0.5 - 100	60 W WHG - 0.5 - 120	75 W WHG - 0.5 - 150	100 W WHG - 0.5 - 200
1.0	0.5x2	65 W WHG - 1 - 65	85 W WHG - 1 - 85	100 W WHG - 1 - 100	120 W WHG - 1 - 120	150 W WHG - 1 - 150	200 W WHG - 1 - 200
1.5	0.5x3	97.5 W WHG - 1.5 - 65	127.5 W WHG - 1.5 - 85	150 W WHG - 1.5 - 100	180 W WHG - 1.5 - 120	225 W WHG - 1.5 - 150	300 W WHG - 1.5 - 200
2.0	0.5x4	130 W WHG - 2 - 65	170 W WHG - 2 - 85	200 W WHG - 2 - 100	240 W WHG - 2 - 120	300 W WHG - 2 - 150	400 W WHG - 2 - 200
2.5	0.5x5	162.5 W WHG - 2.5- 65	213 W WHG - 2.5- 85	250 W WHG - 2.5- 100	300 W WHG - 2.5- 120	375 W WHG - 2.5- 150	500 W WHG - 2.5- 200
3.0	0.5x6	195 W WHG - 3 - 65	255 W WHG - 3 - 85	300 W WHG - 3 - 100	360 W WHG - 3 - 120	450 W WHG - 3 - 150	600 W WHG - 3 - 200
3.5	0.5x7	227.5 W WHG - 3.5 - 65	298 W WHG - 3.5 - 85	350 W WHG - 3.5 - 100	420 W WHG - 3.5 - 120	525 W WHG - 3.5 - 150	700 W WHG - 3.5 - 200
4.0	0.5x8	260 W WHG - 4 - 65	340 W WHG - 4 - 85	400 W WHG - 4 - 100	480 W WHG - 4 - 120	600 W WHG - 4 - 150	800 W WHG - 4 - 200
4.5	0.5x9	292.5 W WHG - 4.5 - 65	383 W WHG - 4.5 - 85	450 W WHG - 4.5 - 100	540 W WHG - 4.5 - 120	675 W WHG - 4.5 - 150	900 W WHG - 4.5 - 200
5.0	0.5x10	325 W WHG - 5 - 65	425 W WHG - 5 - 85	500 W WHG - 5 - 100	600 W WHG - 5 - 120	750 W WHG - 5 - 150	1000 W WHG - 5 - 200
6.0	0.5x12	390 W WHG - 6 - 65	510 W WHG - 6 - 85	600 W WHG - 6 - 100	720 W WHG - 6 - 120	900 W WHG - 6 - 150	1200 W WHG - 6 - 200
7.0	0.5x14	455 W WHG - 7 - 65	595 W WHG - 7 - 85	700 W WHG - 7 - 100	840 W WHG - 7 - 120	1050 W WHG - 7 - 150	1400 W WHG - 7 - 200
8.0	0.5x16	520 W WHG - 8 - 65	680 W WHG - 8 - 85	800 W WHG - 8 - 100	960 W WHG - 8 - 120	1200 W WHG - 8 - 150	1600 W WHG - 8 - 200
9.0	0.5x18	585 W WHG - 9 - 65	765 W WHG - 9 - 85	900 W WHG - 9 - 100	1080 W WHG - 9 - 120	1350 W WHG - 9 - 150	1800 W WHG - 9 - 200
10.0	0.5x20	650 W WHG - 10 - 65	850 W WHG - 10 - 85	1000 W WHG - 10 - 100	1200 W WHG - 10 - 120	1500 W WHG - 10 - 150	2000 W WHG - 10 - 200
12.0	0.5x24	780 W WHG - 12 - 65	1020 W WHG - 12 - 85	1200 W WHG - 12 - 100	1440 W WHG - 12 - 120	1800 W WHG - 12 - 150	2400 W WHG - 12 - 200
14.0	0.5x28	910 W WHG - 14 - 65	1190 W WHG - 14 - 85	1400 W WHG - 14 - 100	1680 W WHG - 14 - 120	2100 W WHG - 14 - 150	2800 W WHG - 14 - 200

warmset
LAMINATED HEATING TECHNOLOGY

PROJECT REFERENCES

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

GOLD ALUMINUM

Warmset's Gold Aluminum (WHAG) is a **dry installation heating system** based on the company's patented multilayer ribbon technology, enclosed in a **polyimide film outer coating** and laid between two aluminum sheets. This specific configuration is designed for **dry-laid floor heating applications** in indoor environments.

It can be installed beneath dry-laid parquet, laminated wood, floating floors, vinyl coverings, or carpet. These materials can be placed **directly in contact with the heating ribbon**.

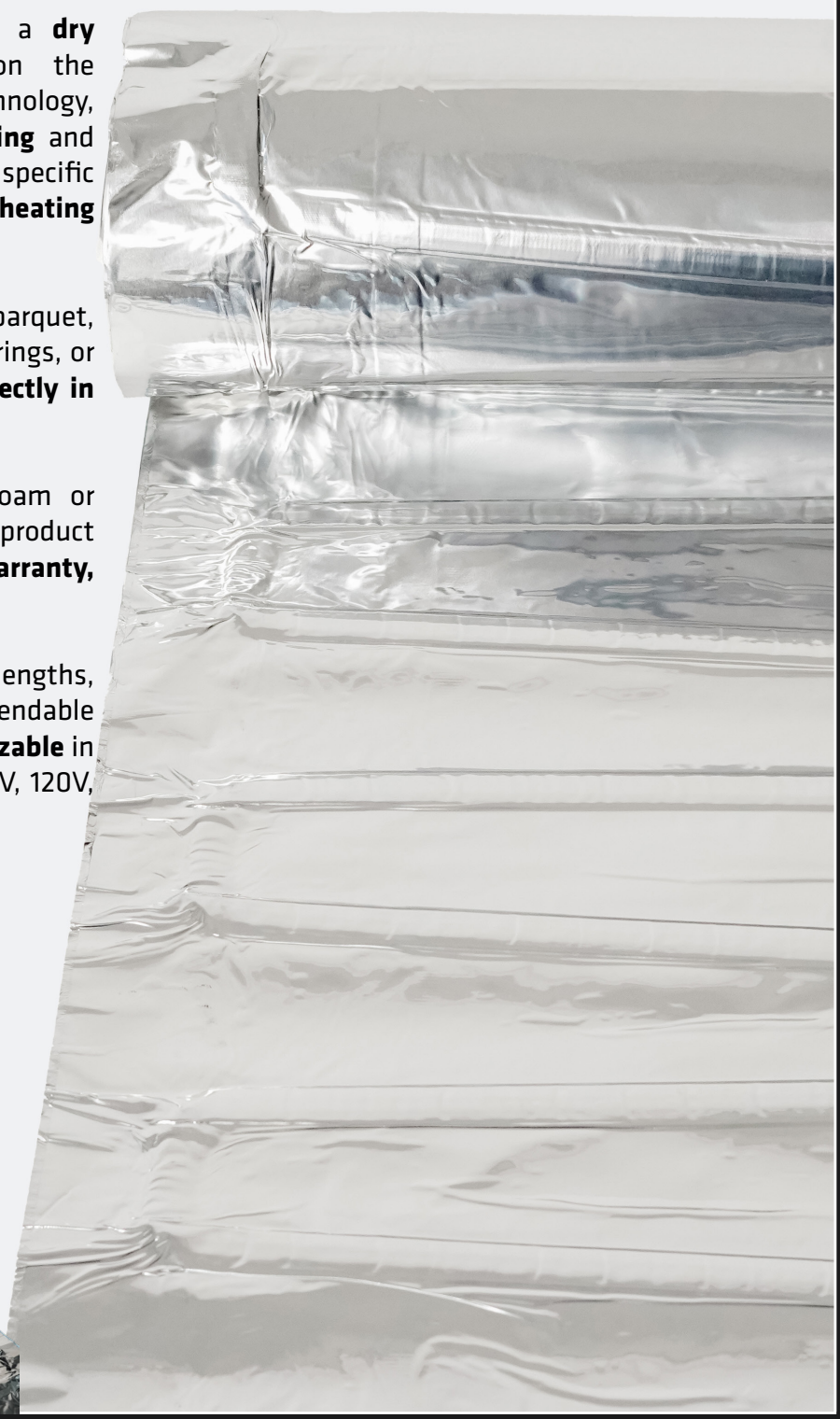
A soft insulation layer such as Warmfoam or Warmduplex Foam must be installed. The product is UL certified and comes with a **25-year warranty,** ensuring safety and long-term reliability.

It is available in a wide range of standard lengths, and comes with a 3-meter supply cable (extendable upon request). The system is **fully customizable** in terms of size, power, and voltage (24V, 48V, 120V, 230V, 240V, 380V).

LIFETIME WARRANTY

CE

c UL US

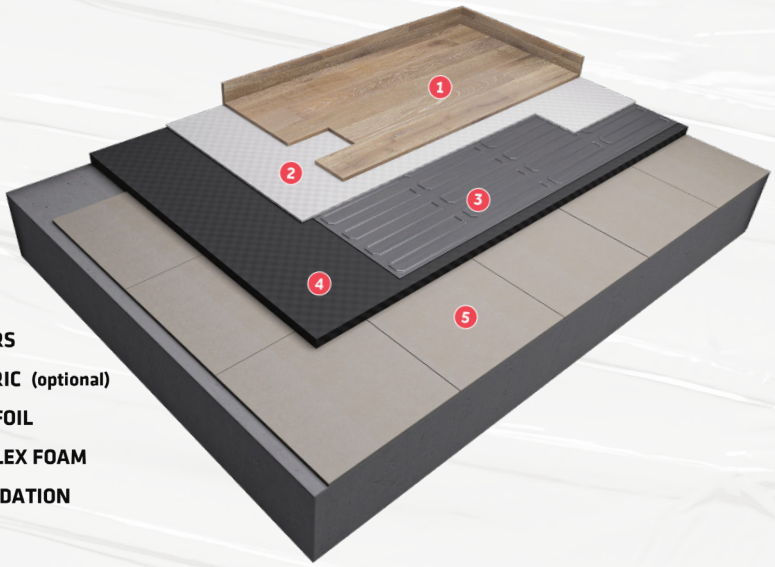


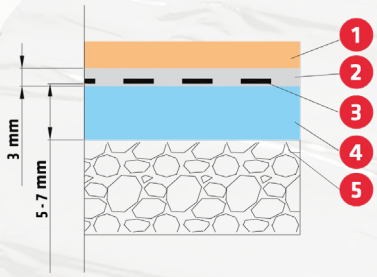
warmset
LAMINATED HEATING TECHNOLOGY

TYPE OF INSTALLATION

INDOOR

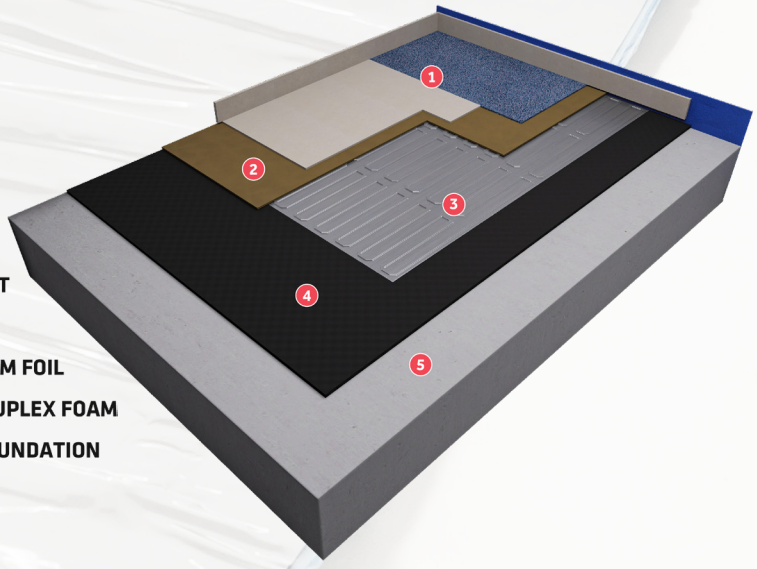
WOOD FLOATING FLOORS

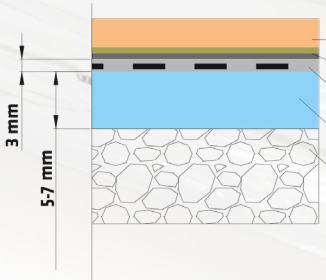




1. WOOD - FLOATING FLOORS
2. SOUND DEADENING FABRIC (optional)
3. HEATING IN ALUMINUM FOIL
4. INSULATION WARMDUPLEX FOAM
5. CEMENT OR WOOD FOUNDATION

VINYL FLOORS, RUGS, CARPET





1. VINYL - RUGS - CARPET
2. HEAT PAK
3. HEATING IN ALUMINUM FOIL
4. INSULATION WARMDUPLEX FOAM
5. CEMENT OR WOOD FOUNDATION

warmset
LAMINATED HEATING TECHNOLOGY

STANDARD SIZES AND POWERS

CUSTOMIZABLE SIZE & POWERS

AREA	SIZE	65 W/M²	85 W/M²	100 W/M²	120 W/M²	140 W/M²
		POWER(W) CODE	POWER(W) CODE	POWER(W) CODE	POWER(W) CODE	POWER(W) CODE
0.5	0.5x1	32.5 W WHAG - 0.5 - 65	42.5 W WHAG - 0.5 - 85	50 W WHAG - 0.5 - 100	60 W WHAG - 0.5 - 120	70 W WHAG - 0.5 - 140
1.0	0.5x2	65 W WHAG - 1 - 65	85 W WHAG - 1 - 85	100 W WHAG - 1 - 100	120 W WHAG - 1 - 120	140 W WHAG - 1 - 140
1.5	0.5x3	97.5 W WHAG - 1.5 - 65	127.5 W WHAG - 1.5 - 85	150 W WHAG - 1.5 - 100	180 W WHAG - 1.5 - 120	210 W WHAG - 1.5 - 140
2.0	0.5x4	130 W WHAG - 2 - 65	170 W WHAG - 2 - 85	200 W WHAG - 2 - 100	240 W WHAG - 2 - 120	280 W WHAG - 2 - 140
2.5	0.5x5	162.5 W WHAG - 2.5- 65	213 W WHAG - 2.5- 85	250 W WHAG - 2.5- 100	300 W WHAG - 2.5- 120	350 W WHAG - 2.5- 140
3.0	0.5x6	195 W WHAG - 3 - 65	255 W WHAG - 3 - 85	300 W WHAG - 3 - 100	360 W WHAG - 3 - 120	420 W WHAG - 3 - 140
3.5	0.5x7	227.5 W WHAG - 3.5 - 65	298 W WHAG - 3.5 - 85	350 W WHAG - 3.5 - 100	420 W WHAG - 3.5 - 120	490 W WHAG - 3.5 - 140
4.0	0.5x8	260 W WHAG - 4 - 65	340 W WHAG - 4 - 85	400 W WHAG - 4 - 100	480 W WHAG - 4 - 120	560 W WHAG - 4 - 140
4.5	0.5x9	292.5 W WHAG - 4.5 - 65	383 W WHAG - 4.5 - 85	450 W WHAG - 4.5 - 100	540 W WHAG - 4.5 - 120	630 W WHAG - 4.5 - 140
5.0	0.5x10	325 W WHAG - 5 - 65	425 W WHAG - 5 - 85	500 W WHAG - 5 - 100	600 W WHAG - 5 - 120	700 W WHAG - 5 - 140
6.0	0.5x12	390 W WHAG - 6 - 65	510 W WHAG - 6 - 85	600 W WHAG - 6 - 100	720 W WHAG - 6 - 120	840 W WHAG - 6 - 140
7.0	0.5x14	455 W WHAG - 7 - 65	595 W WHAG - 7 - 85	700 W WHAG - 7 - 100	840 W WHAG - 7 - 120	980 W WHAG - 7 - 140
8.0	0.5x16	520 W WHAG - 8 - 65	680 W WHAG - 8 - 85	800 W WHAG - 8 - 100	960 W WHAG - 8 - 120	1120 W WHAG - 8 - 140
9.0	0.5x18	585 W WHAG - 9 - 65	765 W WHAG - 9 - 85	900 W WHAG - 9 - 100	1080 W WHAG - 9 - 120	1260 W WHAG - 9 - 140
10.0	0.5x20	650 W WHAG - 10 - 65	850 W WHAG - 10 - 85	1000 W WHAG - 10 - 100	1200 W WHAG - 10 - 120	1400 W WHAG - 10 - 140
12.0	0.5x24	780 W WHAG - 12 - 65	1020 W WHAG - 12 - 85	1200 W WHAG - 12 - 100	1440 W WHAG - 12 - 120	1680 W WHAG - 12 - 140
14.0	0.5x28	910 W WHAG - 14 - 65	1190 W WHAG - 14 - 85	1400 W WHAG - 14 - 100	1680 W WHAG - 14 - 120	1960 W WHAG - 14 - 140

warmset
LAMINATED HEATING TECHNOLOGY

PROJECT REFERENCES

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

WHBE OUTDOOR

Warmset's WHBE Technology is a heating system based on the company's patented multilayer laminated ribbon, composed of two conductive materials laminated together and enclosed in a polypropylene sheath. This configuration ensures durability and consistent **performance in demanding environments.**

To enhance mechanical strength and weather resistance, the WHBE outdoor mat includes an **additional protective layer of EVA resin**, applied through hot extrusion. The electrical c**onnection is also resin-coated** with a bi-component compound, ensuring long-term protection against atmospheric agents.

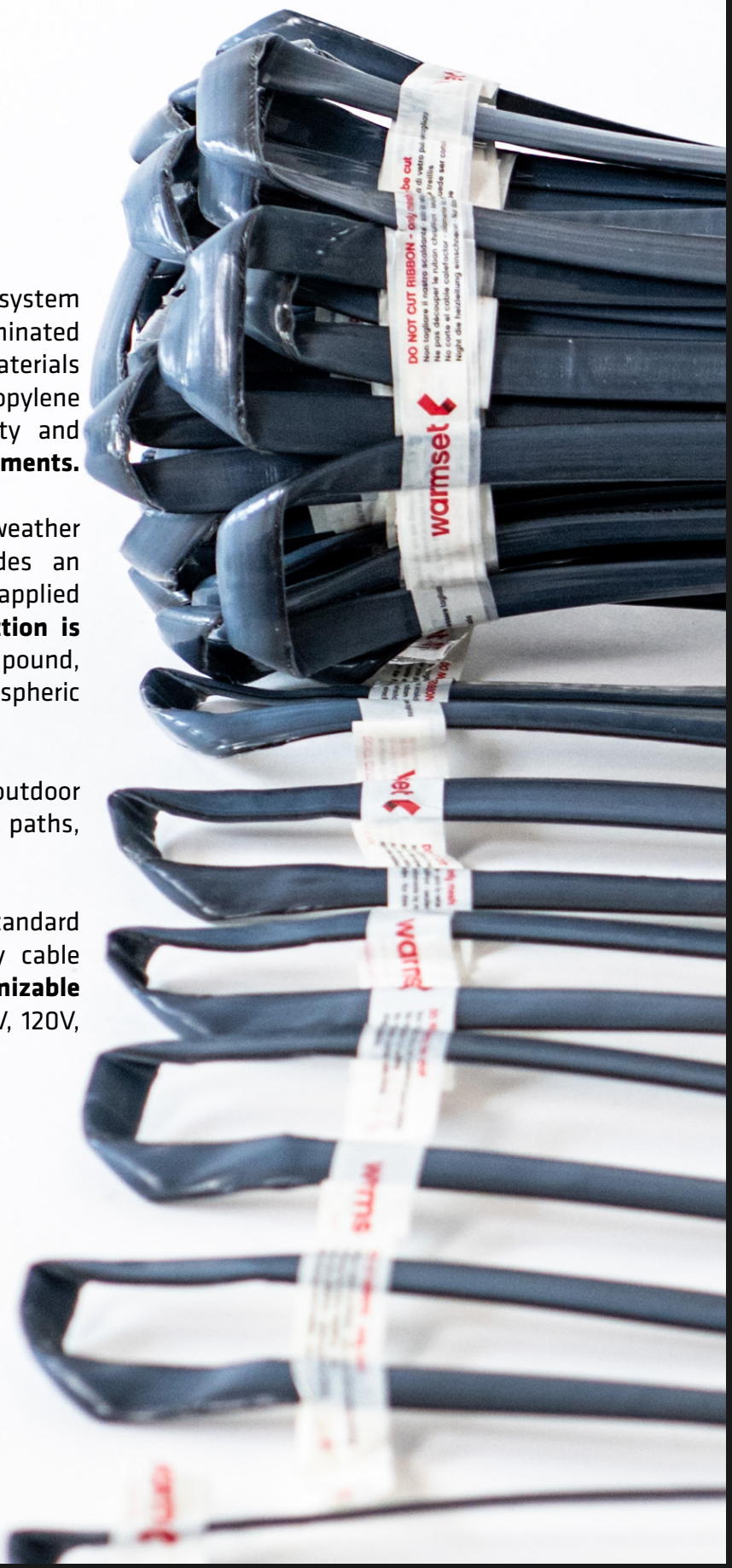
The product is **supplied in mats** and is ideal for outdoor applications, particularly suitable for ramps, paths, roofs, and gutters.

The product is available in a wide range of standard lengths, and comes with a 3-meter supply cable (extendable upon request). It is **fully customizable** in terms of size, power, and voltage (24V, 48V, 120V, 230V, 240V, 380V).

10 YEARS WARRANTY

CE

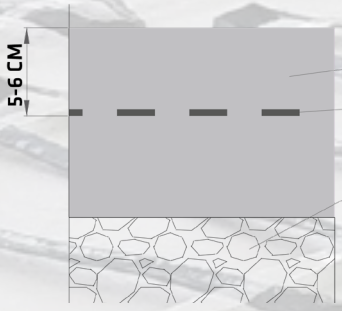
IPX7



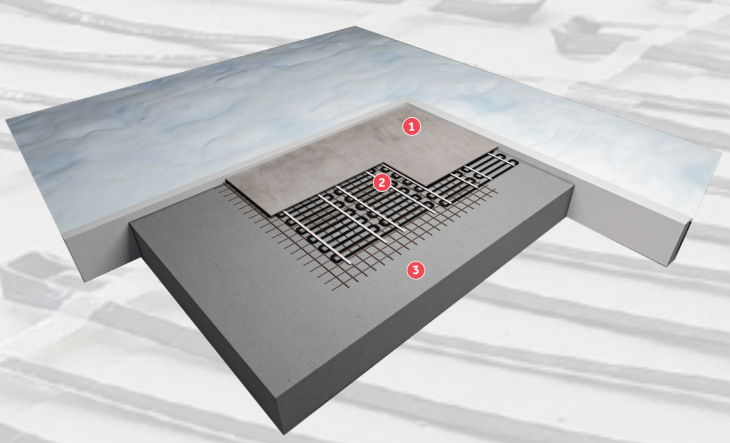
TYPE OF INSTALLATION

OUTDOOR

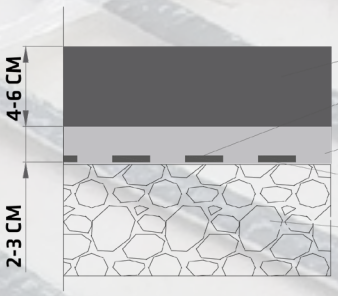
UNDERNEATH CEMENT



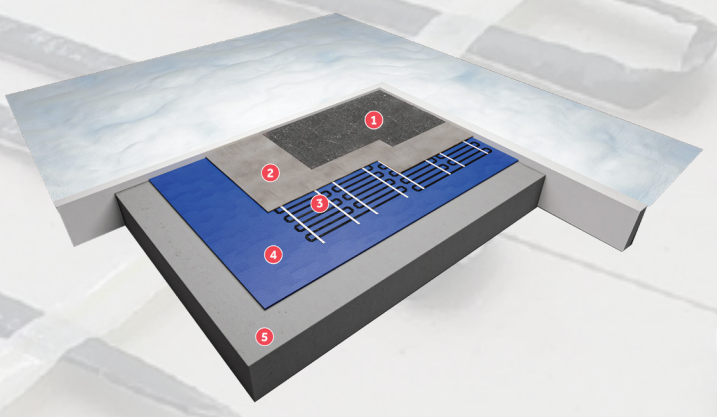
1. CEMENT SCREED
2. HEATING ANCHORED ON ELECTRIC WELDED MESH
3. FOUNDATION



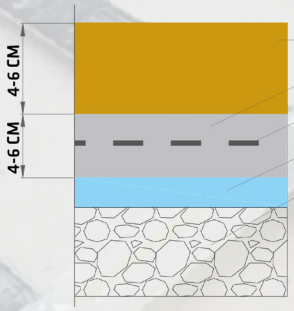
UNDERNEATH ASPHALT



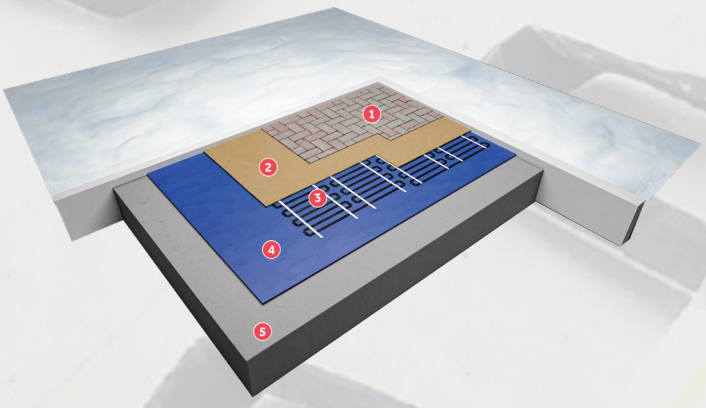
1. ASPHALT
2. CEMENT BED TO PROTECT HEATERS
3. HEATING
4. INSULATING (OPTIONAL)
5. FOUNDATION



UNDERNEATH INTERLOCKING ELEMENTS



1. INTERLOCKING PAVEMENT
2. SAND OR GRIT BED
3. HEATING
4. INSULATION (RECOMMENDED)
5. FOUNDATION



warmset
LAMINATED HEATING TECHNOLOGY

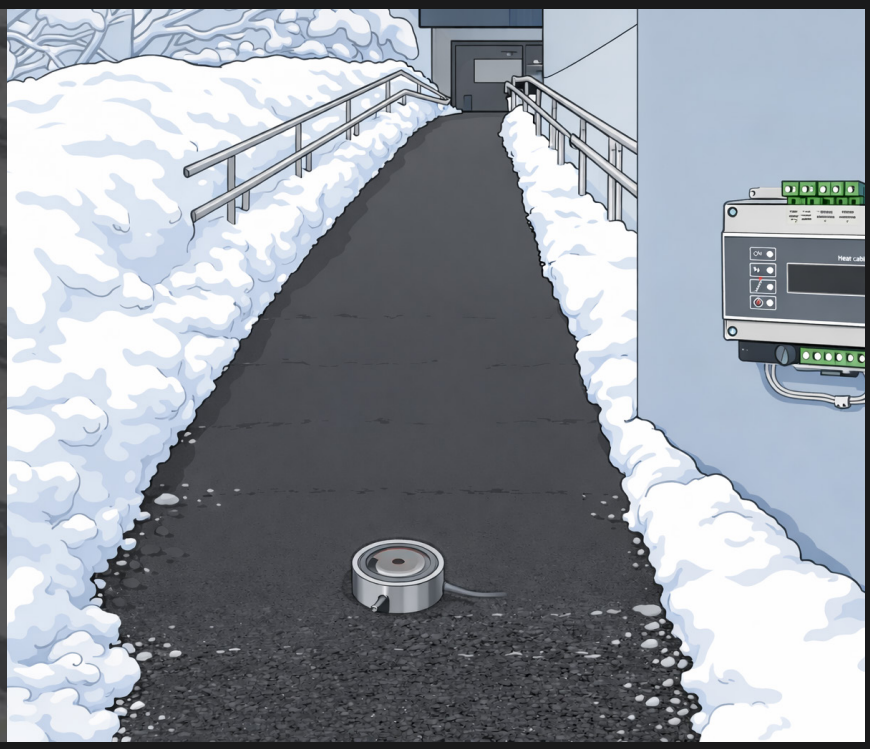
STANDARD SIZES AND POWERS

CUSTOMIZABLE SIZE & POWERS

AREA	SIZE	250 W/M²	300 W/M²	350 W/M²	400 W/M²	450 W/M²
		POWER(W) CODE	POWER(W) CODE	POWER(W) CODE	POWER(W) CODE	POWER(W) CODE
0.5	0.5x1	125 W WHBE - 0.5 - 250	150 W WHBE - 0.5 - 300	175 W WHBE - 0.5 - 350	200 W WHBE - 0.5 - 400	225 W WHBE - 0.5 - 450
1.0	0.5x2	250 W WHBE - 1 - 250	300 W WHBE - 1 - 300	350 W WHBE - 1 - 350	400 W WHBE - 1 - 400	450 W WHBE - 1 - 450
1.5	0.5x3	375 W WHBE - 1.5 - 250	450 W WHBE - 1.5 - 300	525 W WHBE - 1.5 - 350	600 W WHBE - 1.5 - 400	675 W WHBE - 1.5 - 450
2.0	0.5x4	500 W WHBE - 2 - 250	600 W WHBE - 2 - 300	700 W WHBE - 2 - 350	800 W WHBE - 2 - 400	900 W WHBE - 2 - 450
2.5	0.5x5	625 W WHBE - 2.5- 250	750 W WHBE - 2.5- 300	875 W WHBE - 2.5- 350	1000 W WHBE - 2.5- 400	1125 W WHBE - 2.5- 450
3.0	0.5x6	700 W WHBE - 3 - 250	900 W WHBE - 3 - 300	1050 W WHBE - 3 - 350	1200 W WHBE - 3 - 400	1350 W WHBE - 3 - 450
3.5	0.5x7	875 W WHBE - 3.5 - 250	1050 W WHBE - 3.5 - 300	1225 W WHBE - 3.5 - 350	1400 W WHBE - 3.5 - 400	1575 W WHBE - 3.5 - 450
4.0	0.5x8	1000 W WHBE - 4 - 250	1200 W WHBE - 4 - 300	1400 W WHBE - 4 - 350	1600 W WHBE - 4 - 400	1800 W WHBE - 4 - 450
4.5	0.5x9	1125 W WHBE - 4.5 - 250	1350 W WHBE - 4.5 - 300	1575 W WHBE - 4.5 - 350	1800 W WHBE - 4.5 - 400	2025 W WHBE - 4.5 - 450
5.0	0.5x10	1250 W WHBE - 5 - 250	1500 W WHBE - 5 - 300	1750 W WHBE - 5 - 350	2000 W WHBE - 5 - 400	2250W WHBE - 5 - 450
6.0	0.5x12	1500 W WHBE - 6 - 250	1800 W WHBE - 6 - 300	2100 W WHBE - 6 - 350	2400 W WHBE - 6 - 400	2700 W WHBE - 6 - 450
7.0	0.5x14	1750 W WHBE - 7 - 250	2100 W WHBE - 7 - 300	2450 W WHBE - 7 - 350	2800 W WHBE - 7 - 400	3150 W WHBE - 7 - 450
8.0	0.5x16	2000 W WHBE - 8 - 250	2400 W WHBE - 8 - 300	2800 W WHBE - 8 - 350	3200 W WHBE - 8 - 400	3600 W WHBE - 8 - 450
9.0	0.5x18	2250 W WHBE - 9 - 250	2700 W WHBE - 9 - 300	3150 W WHBE - 9 - 350	3600 W WHBE - 9 - 400	4050 W WHBE - 9 - 450
10.0	0.5x20	2500 W WHBE - 10 - 250	3000 W WHBE - 10 - 300	3500 W WHBE - 10 - 350	4000 W WHBE - 10 - 400	4500 W WHBE - 10 - 450
12.0	0.5x24	3000 W WHBE - 12 - 250	3600 W WHBE - 12 - 300	4200 W WHBE - 12 - 350	4800 W WHBE - 12 - 400	5400 W WHBE - 12 - 450
14.0	0.5x28	3500 W WHBE - 14 - 250	4200 W WHBE - 14 - 300	4900 W WHBE - 14 - 350	5600 W WHBE - 14 - 400	6300 W WHBE - 14 - 450

CONTROL SYSTEM

The ramp thermoregulation system consists of a **control unit and a combined temperature and humidity sensor** installed in the most critical area of the surface. The sensor continuously **detects surface temperature and the presence of moisture, snow, or ice.** When predefined conditions are met, the control unit automatically **activates the heating ribbon** to prevent ice and snow formation. Thanks to the intelligent power management function, the system **can operate with up to 50%** less installed load, optimizing energy consumption without compromising performance. Once the surface is dry and the temperature rises above the set thresholds, the system automatically switches off.



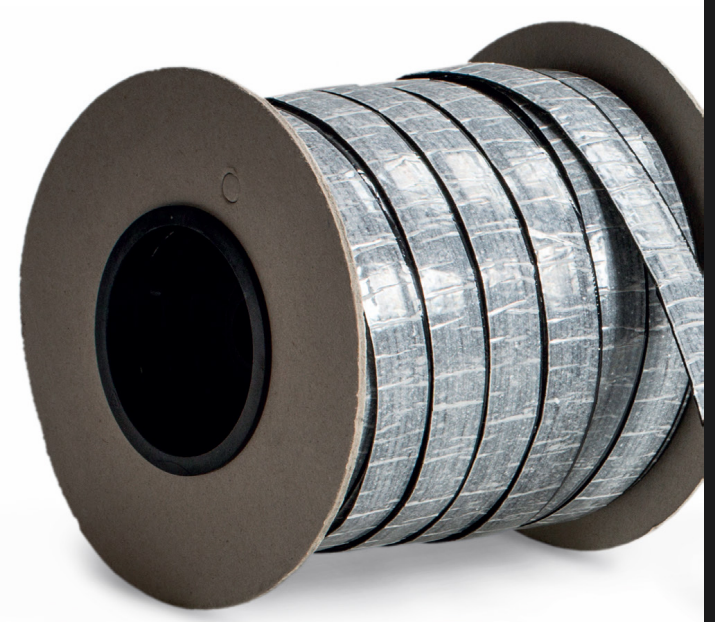
PROJECT REFERENCES

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

BLACK LOOSE RIBBON

Warmset's Black Loose Ribbon (BDB) is the ideal solution for installing electric heating **in small or irregular areas.** The product is available in two versions: standard (BDB) and self-adhesive (BDBA), both designed to offer **maximum flexibility** and ease of installation.



The heating ribbon can be embedded in screed or **installed directly beneath the final surface** using tile adhesive. Its self-sticking variant allows for quick and secure placement, enabling the creation of custom heating layouts with minimal effort.

The **bifilar heating element** features a single-side power feed and a 3-meter cold tail, extendable upon request.

Thanks to its high mechanical protection, the ribbon ensures long-lasting performance and minimizes the risk of damage during handling and setup. Like Warmset's mats, the ribbon is **suitable for humid environments** such as bathrooms and spas, and is fully **customizable** in terms of size, power, and voltage (24V, 48V, 120V, 230V, 240V, 380V).

10 YEARS WARRANTY

IPX7

STANDARD SIZES AND POWERS

CUSTOMIZABLE SIZE & POWERS

10 W/m			
LENGTH	POWER (W)	CODE (NO ADHESIVE)	CODE (SELF-ADHESIVE)
12	120 (W)	BDB-12-10	BDBA-12-10
16	160 (W)	BDB-16-10	BDBA-16-10
24	240 (W)	BDB-24-10	BDBA-24-10
36	360 (W)	BDB-36-10	BDBA-36-10
50	500 (W)	BDB-50-10	BDBA-50-10
84	840 (W)	BDB-84-10	BDBA-84-10
103	1030 (W)	BDB-103-10	BDBA-103-10
134	1340 (W)	BDB-134-10	BDBA-134-10
150	1500 (W)	BDB-150-10	BDBA-150-10
190	1900 (W)	BDB-190-10	BDBA-190-10

15 W/m			
LENGTH	POWER (W)	CODE (NO ADHESIVE)	CODE (SELF-ADHESIVE)
10	150 (W)	BDB-10-15	BDBA-10-15
13	195 (W)	BDB-13-15	BDBA-13-15
20	300 (W)	BDB-20-15	BDBA-20-15
30	450 (W)	BDB-30-15	BDBA-30-15
42	630 (W)	BDB-42-15	BDBA-42-15
59	885 (W)	BDB-59-15	BDBA-59-15
77	1155 (W)	BDB-77-15	BDBA-77-15
90	1350 (W)	BDB-90-15	BDBA-90-15
109	1635 (W)	BDB-109-15	BDBA-109-15
145	2175 (W)	BDB-145-15	BDBA-145-15

20 W/m			
LENGTH	POWER (W)	CODE (NO ADHESIVE)	CODE (SELF-ADHESIVE)
11	220 (W)	BDB-11-20	BDBA-11-20
17	340 (W)	BDB-17-20	BDBA-17-20
26	520 (W)	BDB-26-20	BDBA-26-20
36	720 (W)	BDB-36-20	BDBA-36-20
59	1180 (W)	BDB-59-20	BDBA-59-20
72	1440 (W)	BDB-72-20	BDBA-72-20
94	1880 (W)	BDB-94-20	BDBA-94-20
109	2180 (W)	BDB-109-20	BDBA-109-20
125	2500 (W)	BDB-125-20	BDBA-125-20
145	2900 (W)	BDB-145-20	BDBA-145-20

TECHNICAL DATA SHEET

GOLD LOOSE RIBBON

Warmset's Gold Loose Ribbon (BDG) is the ideal solution for installing electric heating in small or irregular areas. Available in both standard (BDG) and **self-adhesive (BDGA) versions,** this product offers maximum flexibility for custom heating layouts.

The ribbon features a gold-colored polyimide outer layer, a material known for its **excellent thermal properties** and high resistance to chemical agents. This makes it suitable for demanding environments and allows Warmset to offer it with an exclusive **lifetime guarantee.** A UL-certified version is also available upon request.

The heating element can be embedded in screed or installed directly beneath the final surface using tile adhesive. The self-adhesive version **simplifies installation,** reducing setup time and ensuring secure placement.

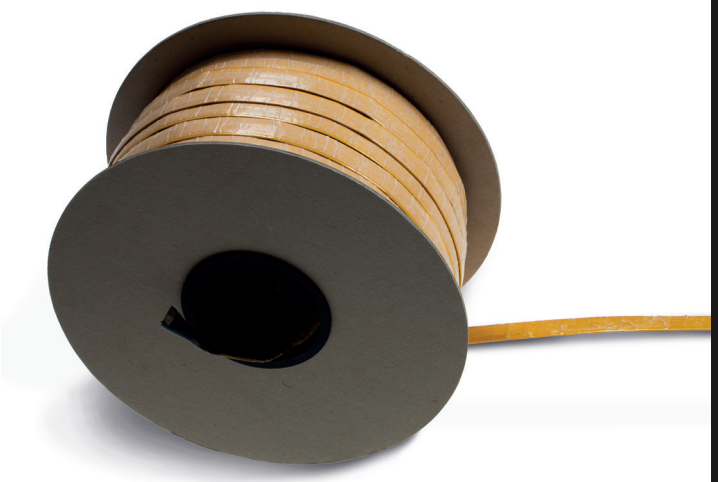
The ribbon is **fully customizable** in terms of size, power, and voltage (24V, 48V, 120V, 230V, 240V, 380V), and is suitable for humid environments such as bathrooms and spas.

LIFETIME WARRANTY

CE

c UL US

IPX7



STANDARD SIZES AND POWERS

CUSTOMIZABLE SIZE & POWERS

10 W/m			
LENGTH	POWER (W)	CODE (NO ADHESIVE)	CODE (SELF-ADHESIVE)
12	120 (W)	BDG-12-10	BDGA-12-10
16	160 (W)	BDG-16-10	BDGA-16-10
24	240 (W)	BDG-24-10	BDGA-24-10
36	360 (W)	BDG-36-10	BDGA-36-10
50	500 (W)	BDG-50-10	BDGA-50-10
84	840 (W)	BDG-84-10	BDGA-84-10
103	1030 (W)	BDG-103-10	BDGA-103-10
134	1340 (W)	BDG-134-10	BDGA-134-10
150	1500 (W)	BDG-150-10	BDGA-150-10
190	1900 (W)	BDG-190-10	BDGA-190-10

15 W/m			
LENGTH	POWER (W)	CODE (NO ADHESIVE)	CODE (SELF-ADHESIVE)
10	150 (W)	BDG-10-15	BDGA-10-15
13	195 (W)	BDG-13-15	BDGA-13-15
20	300 (W)	BDG-20-15	BDGA-20-15
30	450 (W)	BDG-30-15	BDGA-30-15
42	630 (W)	BDG-42-15	BDGA-42-15
59	885 (W)	BDG-59-15	BDGA-59-15
77	1155 (W)	BDG-77-15	BDGA-77-15
90	1350 (W)	BDG-90-15	BDGA-90-15
109	1635 (W)	BDG-109-15	BDGA-109-15
145	2175 (W)	BDG-145-15	BDGA-145-15

20 W/m			
LENGTH	POWER (W)	CODE (NO ADHESIVE)	CODE (SELF-ADHESIVE)
11	220 (W)	BDG-11-20	BDGA-11-20
17	340 (W)	BDG-17-20	BDGA-17-20
26	520 (W)	BDG-26-20	BDGA-26-20
36	720 (W)	BDG-36-20	BDGA-36-20
59	1180 (W)	BDG-59-20	BDGA-59-20
72	1440 (W)	BDG-72-20	BDGA-72-20
94	1880 (W)	BDG-94-20	BDGA-94-20
109	2180 (W)	BDG-109-20	BDGA-109-20
125	2500 (W)	BDG-125-20	BDGA-125-20
145	2900 (W)	BDG-145-20	BDGA-145-20

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

BLACK LOOSE RIBBON Outdoor and wet surface

Warmset's Black Loose Ribbon for **Outdoor Applications (BDBE)** is a flexible heating solution designed for small or irregular external areas where traditional mats cannot be used.

Based on Warmset's multilayer laminated ribbon technology, the product i**s extruded with a waterproof resin layer** that ensures high mechanical strength and long-term resistance to weather conditions. Electrical connections are sealed with a **bi-component resin system, offering full protection against water damage.**

Its bifilar configuration allows for a single-side power feed and includes a 3-meter cold tail, extendable upon request.

Ideal for **outdoor applications** such as ramps, paths, roofs, and gutters, the BDBE ribbon is also suitable as an **anti-freeze system for pipes,** downspouts, and other installations where mats cannot be applied.

The product is **fully customizable** in terms of size, power, and voltage (24V, 48V, 120V, 230V, 240V, 380V), and is available in a wide range of standard lengths.

10 YEARS WARRANTY

IPX7

The product can be made in lengths from 10 to 150 meters and with any power rating

STANDARD SIZES AND POWERS

CUSTOMIZABLE SIZE & POWERS

15 W/m		
LENGTH	POWER (W)	CODE (NO ADHESIVE)
10	150 (W)	BDBE-10-15
13	195 (W)	BDBE-13-15
20	300 (W)	BDBE-20-15
30	450 (W)	BDBE-30-15
42	630 (W)	BDBE-42-15
59	885 (W)	BDBE-59-15
77	1155 (W)	BDBE-77-15
90	1350 (W)	BDBE-90-15
109	1635 (W)	BDBE-109-15
145	2175 (W)	BDBE-145-15

20 W/m		
LENGTH	POWER (W)	CODE (NO ADHESIVE)
11	220 (W)	BDBE-11-20
17	340 (W)	BDBE-17-20
26	520 (W)	BDBE-26-20
36	720 (W)	BDBE-36-20
59	1180 (W)	BDBE-59-20
72	1440 (W)	BDBE-72-20
94	1880 (W)	BDBE-94-20
109	2180 (W)	BDBE-109-20
125	2500 (W)	BDBE-125-20
145	2900 (W)	BDBE-145-20

30 W/m		
LENGTH	POWER (W)	CODE (NO ADHESIVE)
14	420 (W)	BDBE-14-30
23	690 (W)	BDBE-23-30
31	930 (W)	BDBE-31-30
40	1200 (W)	BDBE-40-30
48	1440 (W)	BDBE-48-30
63	1890 (W)	BDBE-63-30
76	2280 (W)	BDBE-76-30
82	2460 (W)	BDBE-82-30
90	2700 (W)	BDBE-90-30
103	2900 (W)	BDBE-103-30

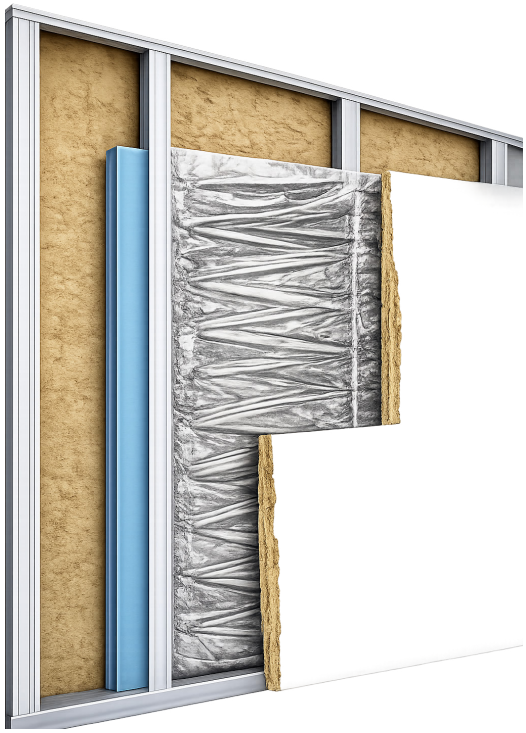
warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

WARMWALL

WALL+CEILING HEATING

WarmWall is **the vertical and overhead application** of Warmset's patented multilayer laminated ribbon technology. Developed from the same advanced system used for underfloor heating, it can be i**nstalled on walls as well as ceilings**, offering maximum design flexibility in projects where floor installation is not possible or where radiant heat from above is preferred.



The **heating ribbon is laminated in multiple protective layers** and fixed onto a fiberglass mesh, supplied in ready-to-install mats. The mesh allows perfect embedding into tile adhesive or mortar, ensuring **structural stability,** optimal heat transmission and prevention of cracking over time.
For wall and ceiling applications, the recommended **power is typically 250/300 W/m²**. Warmset systems can also be supplied in low voltage versions such as 24V or 48V, in addition to standard voltages including 120V, 230V, 240V and 380V. In **shower or high-humidity areas**, the application of a waterproof resin layer above the heating element is mandatory to prevent any water infiltration into the electrical resistance.

For drywall installations, Warmset offers the **WarmDrywall version.** This variant is laminated onto an aluminum film and equipped with lateral adhesive flaps, allowing secure fixing directly onto metal studs or onto plasterboard surfaces depending on the specific construction method.

All systems are **fully customizable in size, power and voltage** to meet project-specific requirements. The technology is also available in the Gold version, featuring an external polyimide layer that enhances thermal performance, durability and chemical resistance.
UL-certified versions can be supplied upon request for markets requiring additional compliance.

10 YEARS WARRANTY

CE

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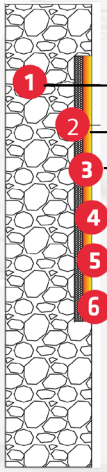
IPX7

warmset
LAMINATED HEATING TECHNOLOGY

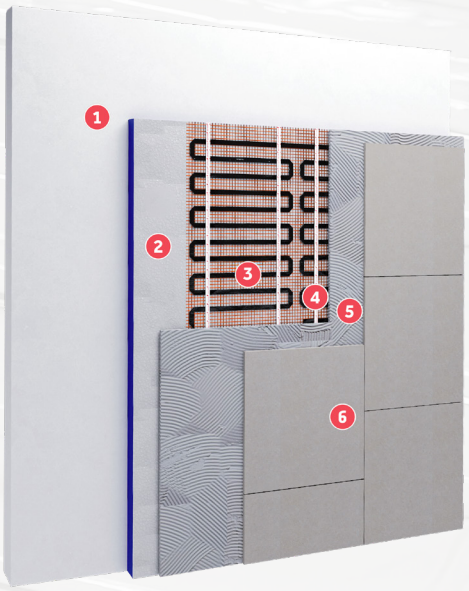
TYPE OF WALL INSTALLATION

WARMWALL

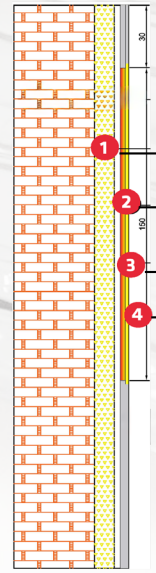
REINFORCED CONCRETE - MORTAR



1. EXISTING WALL
2. GLUED INSULATION BOARD (AS PCB)
3. WARMWALL MAT FIXED ON INSULATION
4. RESIN (FOR SHOWER APPLICATIONS)
5. THERMAL MORTAR
6. FINAL COVER



PLASTERBOARD PANEL



1. RIGID INSULATION PANEL
2. UPRIGHTS
3. WARMDRY WALL BETWEEN THE UPRIGHTS
4. CONDUCTIVE PANEL (15/20 MM)

warmset
LAMINATED HEATING TECHNOLOGY

CONTROL

The heating element must **always be connected to an external control device.** Direct and uncontrolled connection to the power supply is not permitted. Temperature management can be achieved in two alternative ways, depending on the type of installation and system configuration.

The first option consists of a **dedicated room thermostat** with dual temperature sensing. The heating element is supplied through a protected line from the electrical panel, equipped with a dedicated circuit breaker and residual current protection. The **thermostat** must monitor both the **ambient temperature and a secondary probe installed close to the heating element.** The ambient sensor regulates comfort according to the selected set point, while the secondary probe continuously controls the temperature near the heating ribbon. This dual reading **prevents excessive surface temperatures** on walls or ceilings, avoiding localized overheating and ensuring safe and reliable operation.

The second option consists of a **surface thermoregulator**. In this configuration, the control device manages the heating element exclusively based on the surface temperature. A **probe positioned close to the heating ribbon** continuously measures the temperature of the wall or ceiling surface and modulates the switching cycles in order to reach and maintain the selected set point. The regulation is therefore focused on controlling the surface temperature directly.

WARMFLOORUP
RAISED TILE HEATER

Warmfloorup is a modular raised floor heating system powered by Warmset's patented multilayer heating ribbon technology. The system uses two metal-polymer conductors laminated together and enclosed in a protective polypropylene sheath, ensuring durability and consistent performance.

Each module is available in 50x50 cm or 60x60 cm formats and includes:
An adhesive aluminum base for secure placement

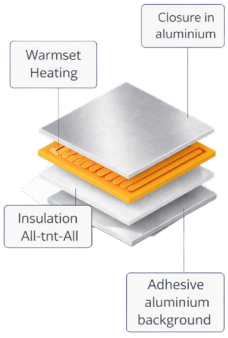
- A heating surface of 44x44 cm or 50x50 cm
- A thermal insulation layer designed to prevent downward heat loss
- A top aluminum closure layer for mechanical protection

Modules are equipped with two **60 cm power cables and IP67-rated connectors** (one male, one female), allowing multiple units to be **connected in parallel.** For enhanced adhesion to the tile surface, a suitable glue can be used to ensure optimal bonding.

Warmfloorup is ideal for **custom heating installations in raised floors,** offering efficient heat distribution and easy modular expansion.

10 YEARS WARRANTY

IPX7



Warmfloorup modules are designed for parallel connection (up to 37 units), delivering 80W per module in the 50x50 cm version and 95W in the 60x60 cm version, with a heating density of 370 W/m²

warmset
LAMINATED HEATING TECHNOLOGY

PHOTOVOLTAIC HEATING

Anti Snow / De-icing

Warmset's heating system restores PV output in snow and ice by delivering fast, even **heat across the module surface.** The aluminum backing spreads heat uniformly, while the **self-adhesive layer** ensures durable bonding on clean, dry panels; some customers optionally add a thin bead of glue along the edges for extra security. Installation is quick and requires no additional hardware.

The heaters **operate at 230 V (also in 120V or 400V** upon request), and draw about 200 W/m^2 when active. **Energy use can be cut by up to 50%** with the optional load-management control unit, which engages the heaters only when temperature and humidity sensors indicate the need.

Electrical connectivity is practical and flexible: the **integrated connectors support series wiring** as specified, and parallel connections are allowed up to a **maximum branch current of 15 A**; therefore, the number of panels that can be connected in parallel depends on the module size and the supply voltage, and must always comply with the applicable current limits and local codes.

2 YEARS WARRANTY

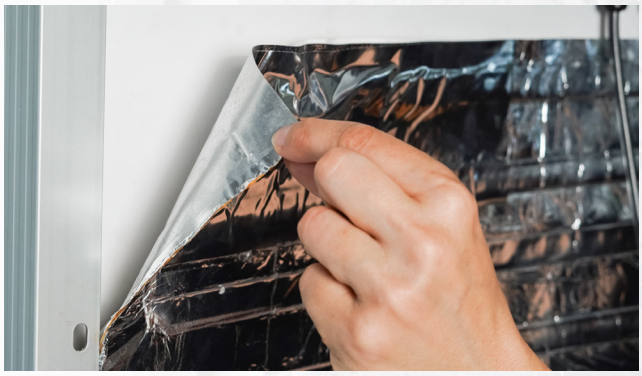
IP67

Heaters for PV panels can be manufactured to any size and voltage, with the space of the connection box into the panel

STANDARD SIZES AND POWERS

CUSTOMIZABLE SIZE & POWERS

STANDARD MODELS				
SIZE (M)	POWER (W)	MAXIMUM PANELS / ARRAY		
		MAX IN 230 V	MAX IN 400 V	MAX IN 120 V
2X1	400 (W)	8	15	4
2,2X1	440 (W)	7	13	4
1,7X1	340 (W)	10	17	5
1,8X1	360 (W)	9	16	5
1,5X09	270 (W)	12	22	6



INSTALLATION

Installation is straightforward and suitable for both **new modules and panels already in service.**

After isolating the circuit and exposing the rear of the panel, the backsheet is cleaned and dried; the release liner is removed and the heater is applied from one edge, pressing evenly to avoid folds or air pockets. **The self-adhesive aluminum backing ensures durable bonding** on properly prepared surfaces; where extra security is desired, installers sometimes secure the corners with heat-resistant tape or apply a thin bead of glue along the edges (optional). Electrical connection is completed **using the supplied IP-rated connectors** without modification.

CONTROL

The system is managed by a **control unit** with dual **temperature and humidity sensors**. The controller continuously monitors local conditions and automatically switches the heating circuits on when the measured values cross the programmed activation thresholds (wet surface/ risk of frost) and off once the surface is dry or the temperature rises above the setpoint. S**etpoints are user-adjustable from the display**; automatic and manual modes are available, with optional remote activation. Sensors should be placed in moisture-prone areas.

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

WARM DUPLEX FOAM FOR FLOATING FLOORS

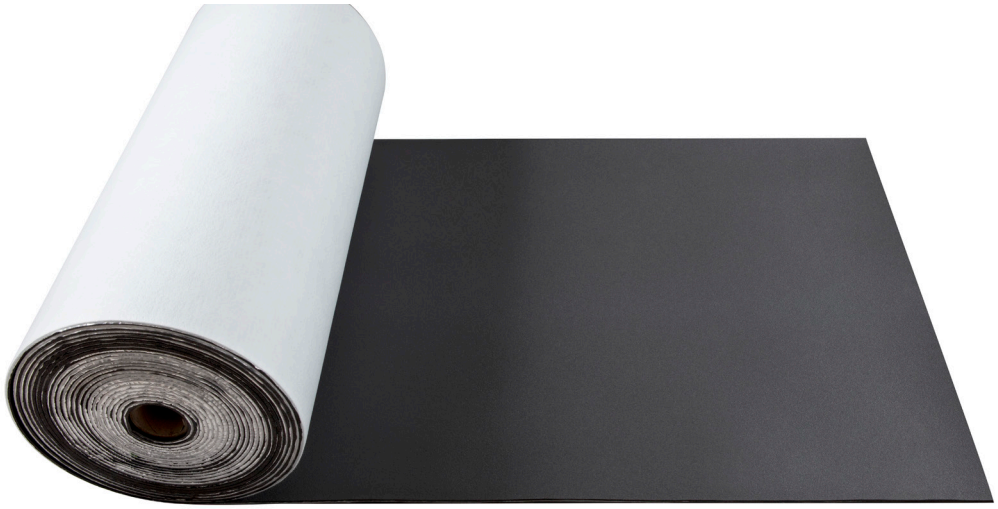
2 YEARS WARRANTY

CE

CLASS 0/E

warmset
LAMINATED HEATING TECHNOLOGY

WARM DUPLEX FOAM



WARM DUPLEX FOAM insulation is ideal for the installation of floating floors. With its triple-layer structure, it ensures optimal performance in that each material covers a specific property:
• the 440 g/m² TNT base ensures high thermal insulation and adherence with the substrate during installation;
• the sheet of aluminum is an excellent vapor barrier and acts as a reflector of infrared light, directing it towards the active side;
• the polyethylene foam provides the system with mechanical stability and dampens noise to reduce the sound of footsteps.

INSULATION FOR FLOATING FLOORS	
Warm duplex foam insulation with fully customizable lengths, featuring a height of 0.7 meters	
DATA SHEET	
THICKNESS	7 mm
WEIGHT	0,735 Kg/m²
VALUE R	0.19
DENSITY (m².K.W.³)	30 +/- 3 Kg/m³
LONGITUDINAL ULTIMATE TENSILE STRENGTH	> 0,18 N/mm²
TRANSVERSE ULTIMATE TENSILE STRENGTH	> 0,16 N/mm²
TEMPERATURE IN USE	-40 °C / +95 °C
WATER VAPOR PERMEABILITY	0,12 ng/Pa s m
THERMAL CONDUCTIVITY	λ = 0,0340 Kcal/h m °C
FIRE RATED	CLASS 0/E

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LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

WARMFOAM FOR FLOATING FLOORS

2 YEARS WARRANTY

CE

CLASS 0/E

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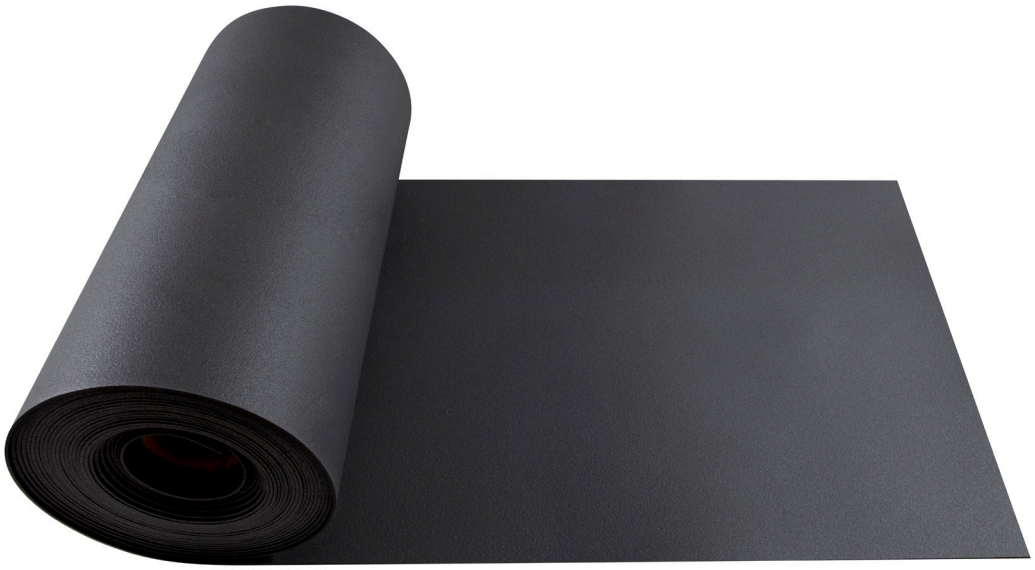
LAMINATED HEATING TECHNOLOGY

WARMFOAM



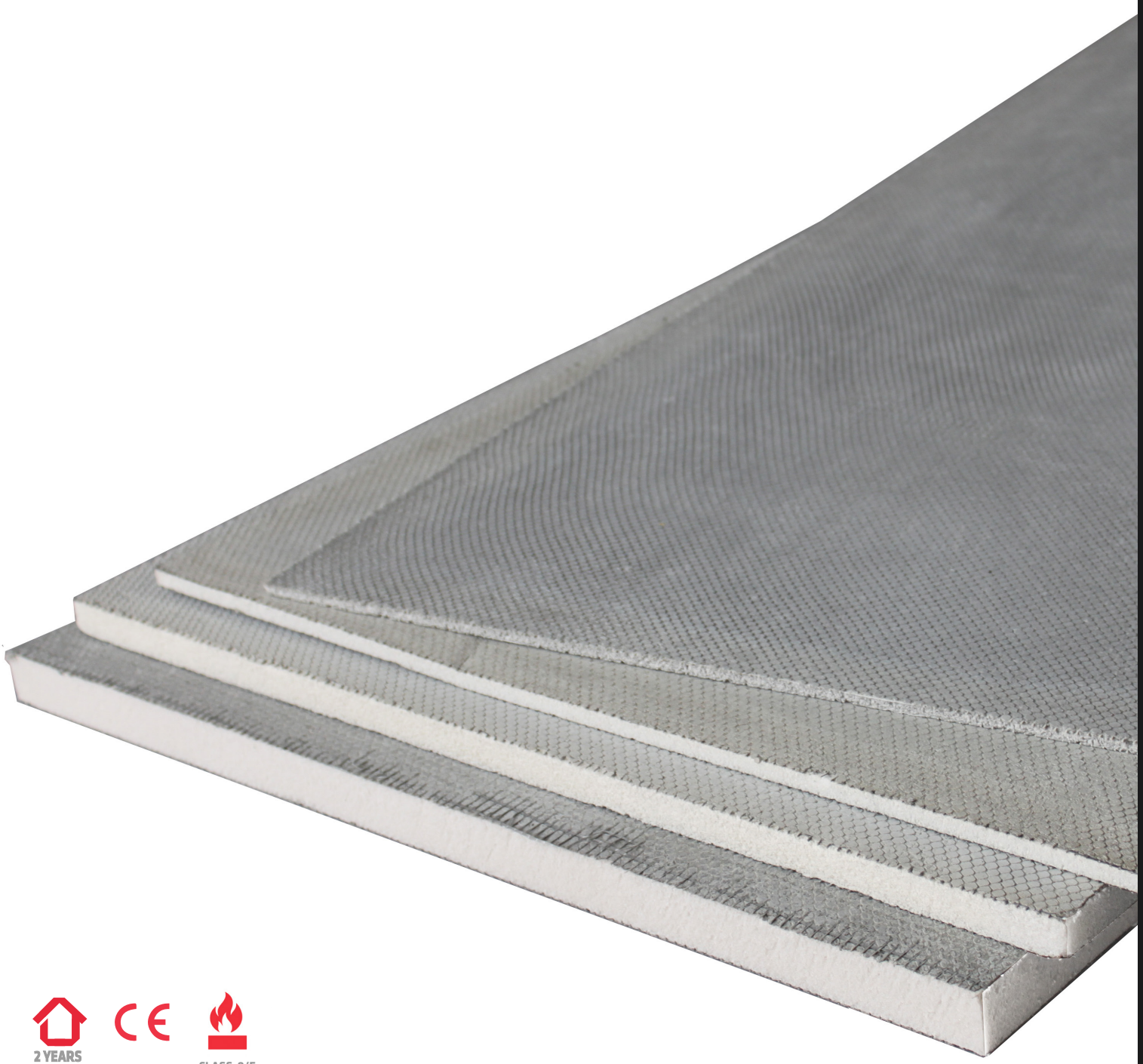
WARMFOAM insulation is ideal for the installation of floating floors where space is limited. It acts as a vapor barrier, dampens noise, and acts as a mechanical base for the Warmset Aluminum Foil system.

INSULATION FOR FLOATING FLOORS	
Warmfoam insulation with fully customizable lengths, featuring a height of 1.5 meters	
DATA SHEET	
THICKNESS	5 mm
WEIGHT	0,030 Kg/m²
VALUE R	0.19
DENSITY (m².K.W.³)	30 +/- 3 Kg/m³
LONGITUDINAL ULTIMATE TENSILE STRENGTH	> 0,18 N/mm²
TRANSVERSE ULTIMATE TENSILE STRENGTH	> 0,16 N/mm²
TEMPERATURE IN USE	-40 °C / +95 °C
WATER VAPOR PERMEABILITY	0,12 ng/Pa s m
THERMAL CONDUCTIVITY	λ = 0,0340 Kcal/h m °C
FIRE RATED	CLASS 0/E

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

PCB INSULATION FOR UNDER TILES



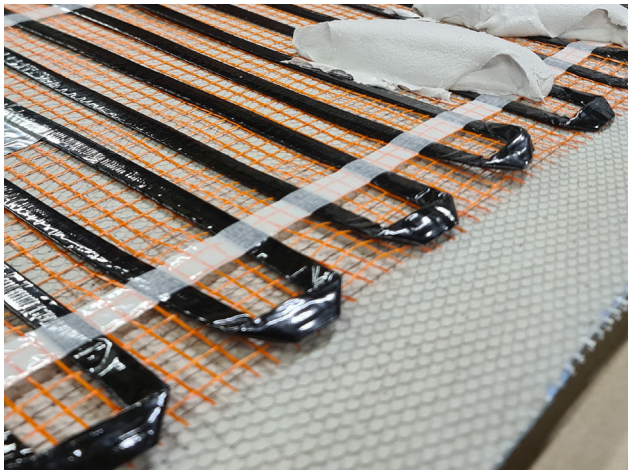
2 YEARS WARRANTY

CE

CLASS 0/E

PCB INSULATION

Warmset PCB Insulation Board is the ideal support layer to be placed **beneath Warmset electric heating** systems to enhance thermal performance. With low thermal conductivity (0.033–0.036 W/mK), it significantly **reduces heat loss** and minimizes the risk of surface condensation, contributing to improved energy efficiency and comfort.



Made of extruded **polystyrene reinforced with fiberglass mesh and a polymer-modified cement coating,** the board is lightweight and easy to handle. It is available in three key thicknesses: **6 mm, 10 mm, and 20 mm,** suitable for various installation needs.

The PCB board can be bonded **directly under tiles** using cement-based adhesive, without the need for priming. Its surface is compatible with gypsum plaster, making it suitable for both wall and ceiling applications. **Installation is straightforward,** with mechanical fixings and reinforcing tape ensuring stability and durability. Waterproof and nearly vapor-proof, the board is suitable for both internal and external use. However, additional ventilation may be required when used on external walls. **The product is CE-marked** and ISO9001 certified.

DATA SHEET	
THICKNESS	6 - 10 - 20 mm
THERMAL CONDUCTIVITY	0,033 W/mK
COMPRESSION STRENGTH	3,0 Kg/cm^3 300 KN/m^3
WATER ABSORPTION (CAPILLARY)	NIL
FIRE RATED	CLASS 0/E
WATER VAPOR PERMEABILITY (S_d)	3,2 m
COEFFICIENT OF THERMAL EXPANSION	30 x 10^{-6} K^{-1}

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LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

WI-FI THERMOSTAT WHT-2000

2 YEARS WARRANTY

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LAMINATED HEATING TECHNOLOGY

WI-FI THERMOSTAT WHT-2000

The Warmset WHT-2000 Wi-Fi thermostat is a **smart and stylish solution** for managing radiant floor heating systems remotely. Designed to fit seamlessly into any living or working space, **it's available in both black and white** finishes to match a variety of interiors.

Thanks to its intuitive **smartphone app**, users can control the temperature of their environment from anywhere, ensuring comfort and efficiency at all times. The thermostat can also be integrated into **centralized heating systems**, allowing multiple units to be connected to a load management control panel for optimized energy distribution.

In addition to its core functionality, the WHT-2000 offers several **intelligent modes** such as Holiday, ECO, and Anti-Freeze, which help reduce energy consumption and protect the system during periods of low use or extreme cold.

Importantly, the WHT-2000 is fully **compliant with Ecodesign regulations**, ensuring it meets the latest European standards for energy efficiency and environmental sustainability.

FEATURES	DATA
VOLTAGE	230VAC (120VAC OPTIONAL)
SENSORS	1 X NTC10K PROBE
OUTPUT	1X SWITCH RELAY(R1)
LOAD CAPACITY	MAX 16A
ROOM TEMPERATURE	-5°C ~ +45°C
FLOOR TEMPERATURE	-5°C ~ +90°C
COLORS	WHITE / BLACK
RH HUMIDITY	0~95% (ANTI-CONDENSATION)
SENSITIVITY	+/- 1 °C FOR +20 °C
DIMENSIONS	86 MM X 86 MM - 20 MM (DEPTH)
BACKLIGHT DURATION	5,000 HOURS
DEGREE OF PROTECTION	IP30

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LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

WI-FI THERMOSTAT WTR-8000

2 YEARS WARRANTY

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LAMINATED HEATING TECHNOLOGY

WI-FI THERMOSTAT WTR-8000

Warmset WTR-8000 Wi-Fi Thermostat is a smart control device specifically **designed for managing radiant floor heating systems remotely.** Its sleek and versatile design blends seamlessly into any interior, making it suitable for both residential and commercial environments.

The thermostat connects via Wi-Fi and can be fully **managed through a dedicated smartphone app,** allowing users to adjust temperature settings, monitor energy usage, and schedule heating cycles with ease. It supports **integration into centralized heating systems,** enabling multiple thermostats to be linked to a load management control unit for coordinated operation across different zones.

In addition to standard temperature control, the WTR-8000 offers a range of **intelligent features** including Holiday Mode, ECO Mode, and Anti-Freeze Protection, ensuring comfort, efficiency, and safety in every season.

Importantly, the **WTR8000 is fully compliant with Ecodesign regulations,** ensuring it meets the latest European standards for energy efficiency and environmental sustainability.

FEATURES	DATA
VOLTAGE	230VAC (120VAC OPTIONAL)
SENSORS	1 X NTC10K PROBE
OUTPUT	1X SWITCH RELAY(R1)
LOAD CAPACITY	MAX 16A
ROOM TEMPERATURE	-5°C ~ +45°C
FLOOR TEMPERATURE	-5°C ~ +90°C
COLORS	WHITE / BLACK
RH HUMIDITY	0~95% (ANTI-CONDENSATION)
SENSITIVITY	+/- 1 °C FOR +20 °C
DIMENSIONS	120x86x20 mm (LXHXD) - Horizontal
BACKLIGHT DURATION	5,000 HOURS
DEGREE OF PROTECTION	IP30

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

WI-FI THERMOSTAT WHT-6000

2 YEARS
WARRANTY

warmset
LAMINATED HEATING TECHNOLOGY

WI-FI THERMOSTAT WHT-6000

Warmset **WHT-6000 is a Wi-Fi-enabled thermostat** developed for precise and remote control of underfloor heating systems. Its minimalist circular design makes it a discreet yet stylish addition to any space, harmonizing with both contemporary and classic interiors.

Through a **dedicated smartphone app,** users can easily manage temperature settings, create personalized schedules, and monitor energy usage from anywhere. The thermostat supports integration into multi-zone heating systems and can be connected to a load management control unit for centralized operation.

Beyond standard temperature regulation, the **WHT-6000** offers smart features such as Holiday Mode, ECO Mode, and Anti-Freeze Protection, ensuring **comfort and efficiency throughout the year.**

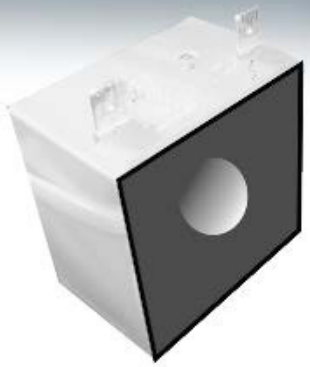
Importantly, the WHT-6000 is **fully compliant with Ecodesign regulations**, ensuring it meets the latest European standards for energy efficiency and environmental sustainability.

FEATURES	DATA
SUPPLY	95 - 240 VAC
SENSORS	1 SENSOR NTC10
OUTPUT	1X SWITCH RELAY(R1)
LOAD CAPACITY	MAX 16A
ROOM TEMPERATURE	0°C ~ +45°C
HUMIDITY RH	5 ~ 95 %
ACCURACY	+/- 0,5 °C
DIMENSION	86 MM (DIAMETER) - 20 MM (DEPTH)
JUNCTION BOX	502 - INTERNAL SPACE 60MM
COLOR	WHITE/BLACK
PROTECTION RATING	IP30

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

HEAT ROOM CONTROL



2 YEARS WARRANTY

HEAT ROOM CONTROL

The **Power Manager Control** is an advanced device designed to efficiently and safely manage and control room heating. This system uses a microcomputer to monitor and **regulate the power distributed to different heating zones**, ensuring optimal energy use.
The device features an intuitive user interface with 8 keys and 5 LED displays, allowing easy access to parameters and settings.

The control unit consists of the main unit, a TA module for current reading (which can be integrated with two additional modules for three-phase systems), a 12V power supply transformer, and relay modules with 4 outputs (16A for each module). The control unit can manage up to 4 relay modules for a maximum of 16 outputs.

The 4-zone control system allows **precise and independent management of different heating areas**, optimizing energy efficiency and improving user comfort. Communication via RS485 Modbus enables remote control of the device, f**acilitating integration with other automation systems**.
In case of power excess, the Power Manager Control is designed to automatically shut down the relays, preventing overloads and ensuring system safety. Additionally, the device offers manual ignition, bypassing power excess control for emergency or specific needs.

The included MODU-4RL relay module consists of 4 relays of 16A each, allowing **flexible and powerful output management**. The device complies with European Union directives, ensuring compatibility and safety according to standards EN61000-6-2:2005, EN61000-6-4:2007, and 2014/30/EU (EMC).

FEATURES	DATA
TA AMPERE CONTROL	4-ZONE CONTROL
OPERATOR INTERFACE	LEXAN® MEMBRANE
DIMENSIONS	H 90 MM, L 156 MM, P 61 MM
WEIGHT	260G
POWER SUPPLY	230 VAC (OTHER VOLTAGES ON REQUEST)
USER INTERFACE	8 KEYS, 5 LED DISPLAYS
SERIAL INTERFACE	RS485 MODBUS
RAM	2 KBYTE VOLATILE
MODBUS PROTOCOL	50/60 HZ FREQUENCY, ASYNCHRONOUS RS 485
INTERFACE MAXIMUM CONSUMPTION	6 VA
PROCESSOR 8	8-BIT FLASH RAM 60 KBYTE NON-VOLATILE

warmset
LAMINATED HEATING TECHNOLOGY

HEAT ROOM CONTROL WORKING EXAMPLE

The control unit is a device designed to **manage temperature control** in different rooms, optimizing the use of electrical energy. This system prioritizes the coldest rooms and adjusts the heating **based on the difference between the ambient temperature and the desired set point.**

In this example the control unit has a total installed power of 8.5 KW, but the electric meter is sized for 6 KW. To ensure safe and efficient operation, the maximum usable power has been set at 4 KW.

Operating Logic

The operation of the control unit is based on some key logics, maximum Load Threshold, the sum of the loads must not exceed the maximum threshold set at 4 KW.

Heating Priority:

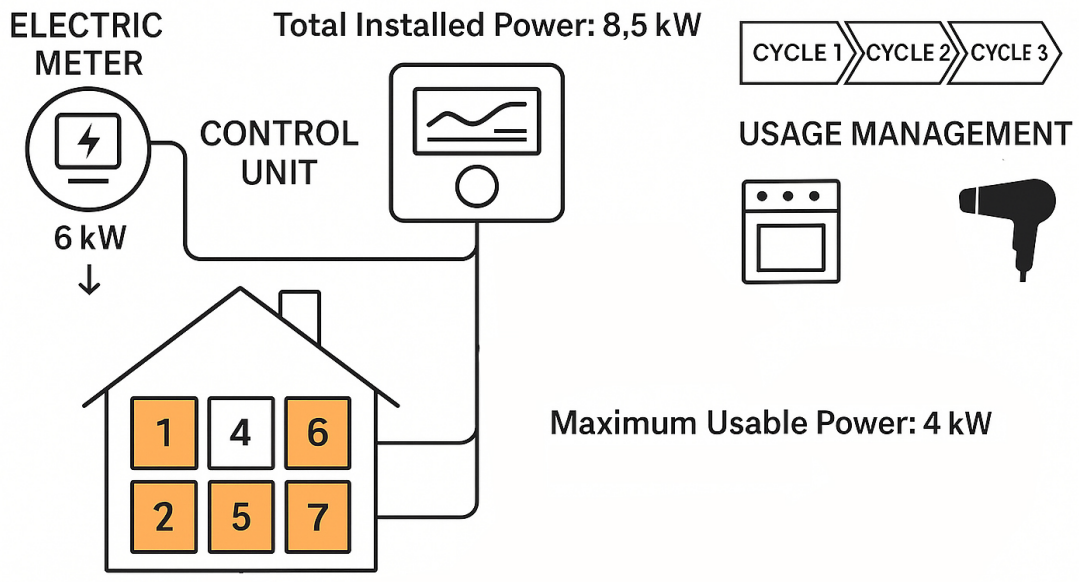
The control unit prioritizes the coldest rooms, i.e., those with a temperature difference greater than 1 °C compared to the set point. Rooms that are already close to the set point receive less priority, while those that have already reached the desired temperature are not heated. Rotation Recalculation: Once the set point is reached in a room, the control unit recalculates a new rotation based on the coldest room.

Heating Cycles

The control unit manages heating through three different cycles turning on-off the mats in a very short time, in this way the final user does not feel the no-heating in that moment.

Usage Management

When appliances such as the washing machine, oven, or hairdryer are turned on, the system gives absolute priority to these users. In this way, the heating loads are turned off to keep the maximum load below the meter threshold of 6 KW.



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LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

HEATING CARPETS

2 YEARS WARRANTY

CE

IP54

warmset
LAMINATED HEATING TECHNOLOGY

HEATING CARPETS

The **Warmset Heating Carpet** is an innovative heating system designed to provide optimal thermal **comfort to the feet and legs**, ideal for those who spend long hours seated–whether at home or especially in the office. Perfectly suited for **placement under a desk**, it's the ideal solution for anyone working at a computer and struggling with cold discomfort.

Thanks to Warmset's patented heating technology, its slim profile, and the attention to fabric and stitching quality, the carpet blends design, comfort, and performance. **Simply plug** it into any standard electrical outlet: within minutes, and with energy **consumption comparable to a lamp**, it delivers a pleasant sense of warmth that spreads from the lower limbs to the entire body.
The product is **available in the standard size of 75×50, 140X50 and 35X42 cm**, in various colors, and features –making it a true Italian design item.

The carpet is available in **five fabric ranges**: Chenille, Fire-retardant Danae, Fire-retardant Fashion, Fire-retardant Melange, and Fire-retardant Wool. Its multilayer structure includes Warmset heating technology laid over an insulating base, with fabric on the top and anti-slip PVC underneath. A built-in thermal safety protector automatically shuts off the system if the temperature reaches
50 ° C, **preventing accidental overheating**. The cables are IP54 certified, and the cold output cable features a bipolar plug compliant with European standards, along with a **pedal switch with LED indicator** for system activation and shutdown.
Warmset also offers **custom-made heating carpets** as an elegant and non-invasive solution for heating sensitive environments such as churches, museums, and offices. These carpets require no structural modifications, comply with cultural heritage regulations, and can be tailored in **color and size** to match the space.

Thanks to 100% Italian craftsmanship, they can be **adapted to specific areas** like altars, confessionals, and sacristies. They can also be installed beneath existing carpets. **Power ranges from 250 to 300 W/ m²** depending on the building type. **Maximum dimensions are 150×400 cm** for the Fashion line and 140×400 cm for other fabric lines.

MODEL	SIZE / POWER
STANDARD	75 x 50 cm (100W)
LONG	140 x 50 cm (200W)
SMALL	35 x 42 cm (50W)
UPON REQUEST	Max 150 x400 cm (fashion/chenille) / 250-300 W/SQM Max 140 x 400 cm (other line) / 250-300 W/SQM

REINFORCED HEATING CARPETS

The **Warmset Reinforced Heating Carpet** is designed to provide the same comfort and warmth as the standard heating carpets, with an enhanced structure developed for more intensive and demanding use. It is the ideal solution for people who spend many hours sitting, especially in office environments or under desks, where cold feet and lower-limb discomfort are very common.

The main advantage of the Reinforced version is the **presence of a special internal reinforcing plate,** positioned between the heating element and the external fabric. This additional layer makes the carpet significantly **more resistant and durable**, allowing it to be used even in more demanding conditions, for example in workplaces where office chairs with casters are placed directly on the carpet.

The power output is proportional to the size and corresponds to approximately **300 W/m²**, ensuring effective **heating performance** while maintaining low energy consumption. The Warmset Reinforced Heating Carpet is available in **three standard sizes:** 100×50 cm (150 W), 100×100 cm (300 W) and 100×200 cm (600 W), with **custom dimensions available upon request**. Several fabric collections and colour options are also offered (the same as standard carpets), making the product suitable for both home and professional environments.

To ensure maximum safety, comfort, and long-term reliability, the Warmset Reinforced Heating Carpet is **always recommended to be installed with a surface temperature sensor.** This probe continuously monitors the carpet's surface temperature, preventing any risk of overheating and guaranteeing stable and controlled warmth during operation.

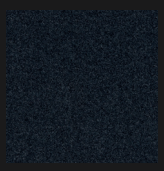
In the standard configuration, the carpet is supplied with an outgoing connection cable that can be linked to an **external thermostat** (adding a sensor). The thermostat allows the user to accurately regulate the surface temperature. Alternatively, Warmset can provide a configuration with a single **five-core cable output**, designed to be connected directly to a dedicated temperature controller. In this solution, the controller manages the carpet's surface temperature automatically, ensuring precise regulation and effective protection against excessive temperature peaks. Both options provide an **advanced thermoregulation system**, making the Reinforced Heating Carpet suitable for intensive professional use as well as for safe and comfortable everyday applications.

MODEL	SIZE / POWER
STANDARD	100 x 50 cm (150W)
LONG	100 x 100 cm (200W)
SMALL	100 x 200 cm (600W)
UPON REQUEST	Max 150 x400 cm (fashion/chenille) / 250-300 W/SQM Max 140 x 400 cm (other line) / 250-300 W/SQM

warmset
LAMINATED HEATING TECHNOLOGY

HEATING CARPETS - COLORS

Wool Line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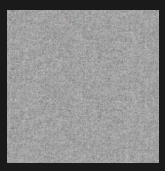
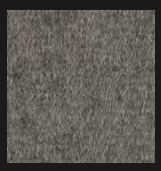
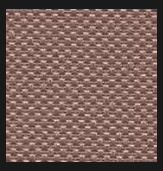
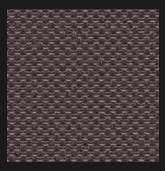
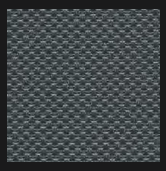

Grey


Camel

Danae Line


Beige


Brown

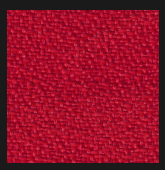

Grey

Melange Line


Grey

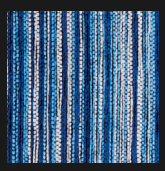

Blue


Green

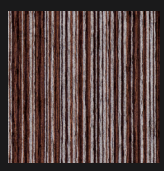

Red

Chenille Line


Black


Blue


Green


Brown

PROJECT REFERENCES

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

HEATING UNDER CARPETS

2 YEARS WARRANTY

CE

IP54

HEATING UNDERCARPETS

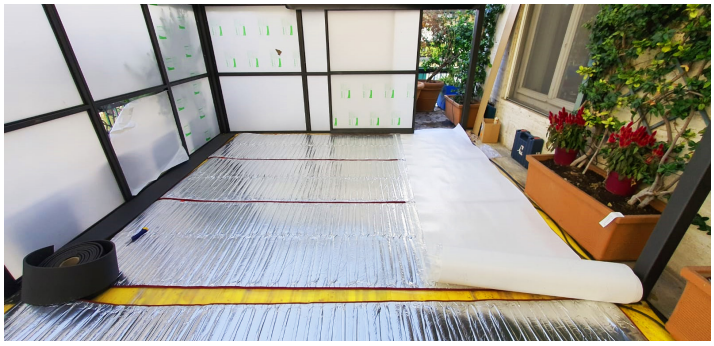
The **Warmundercarpet** is a heating solution designed to be **installed underneath existing carpets** or laminated platforms, offering exceptional comfort and fast heat distribution thanks to its extremely low thermal inertia. It is composed of a black aluminum heating mat combined with Warmduplex insulation.

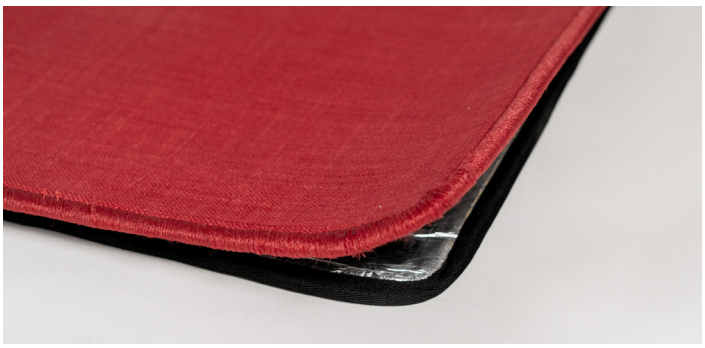
The heating mat integrates **Warmset's patented technology**, enhanced with a polypropylene protective sheath and an aluminum coating, ensuring durability and efficient heat transfer. The Warmduplex insulation provides excellent mechanical resistance, acts as a soundproofing layer, and ensures optimal infrared reflection thanks to its Warmfoam structure.

This combination guarantees a uniform and comfortable heating experience.
The product is available in **widths ranging from 0.5 to 1.5 meters and lengths from 0.5 to 10 meters**, with a power **output between 200 and 400 W/m²** depending on the specific environment and application. For undercarpet installations larger than 1 m², it is essential to include a thermostat or temperature regulation system to ensure safe and efficient operation.

CHARACTERISTICS	SIZE / POWER
SIZES	Max 1.5 M WIDTH Max 10 M LENGTHS
POWERS	FROM 200 TO 400 W/M²

PROJECT REFERENCES





warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

HEATING CUSHION

2 YEARS WARRANTY

CE

IP54

HEATING CUSHION

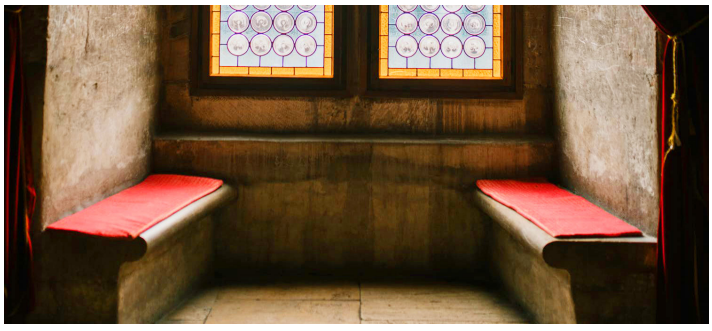
The Warmset Heating Cushion is a refined heating solution designed to **provide comfort and warmth** during ecclesiastical celebrations or in any context where seated well-being is desired. It combines advanced technology with elegant design, offering a **discreet and efficient source of heat**. Thanks to Warmset's patented heating system, the cushion warms up in just a few minutes when connected to a standard electrical outlet, **consuming only 150 W/m^2**.

The internal t**emperature is regulated by a built-in sensor**, which ensures consistent heat distribution and **prevents overheating**. At its core lies the Warmset heating element, embedded within a 5 cm layer of wadding that enhances softness and thermal efficiency. The outer surface is made of **flame-retardant fabric**, available in different colors–while the underside features a non-slip PVC layer for stability on benches or chairs.

The **standard width of the cushion is 35 cm**, with length customizable according to user needs. From each unit extends a 5-pole cable that not only supplies power but also allows for **temperature management**, ensuring optimal performance and safety.

CHARACTERISTICS	SIZE / POWER
SIZES	35 CM WIDTH Max 10 M LENGTHS
POWERS	150 W/M^2

PROJECT REFERENCES



warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

HEATING PANELS FOR BENCHES

2 YEARS WARRANTY

CE

IP54

HEATING PANELS FOR BENCHES

The Warmset Radiant Panel is an **innovative heating solution** designed for ecclesiastical environments. It features a **polycarbonate casing** housing the patented Warmset technology, while the **outer cover in pre painted aluminum** ensures superior mechanical stability.
The panel is installed on the back of the benches, providing **direct radiant heat to the person seated** in front. The radiation **temperature reaches 80°C** on the front side and 40°C on the rear side, delivering optimal comfort for individuals positioned approximately 50–60 cm away. Each panel is custom-made to **fit the specific bench design**, ensuring targeted heating and reducing energy consumption compared to traditional systems.

Available Configurations:
- **Radiant Panel for Free-Back Benches:** Installed to occupy the entire open space, heating from both sides. The surface temperature reaches **80°C toward the person** and 40°C toward the opposite side, ensuring full comfort.
- **Radiant Panel for Solid-Back Benches**: Mounted on the rear of the backrest, it provides direct heating to the person seated in front, with a radiation temperature of **80°C for optimal comfort at 50–60 cm** distance.

CHARACTERISTICS	SIZE / POWER
SIZES	FROM 0.2 TO 0,5 MT WIDHT FROM 0.5 TO 1,5 MT LENGHT
POWERS	750 W/M^2

PROJECT REFERENCES

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

METAL HEATING PANEL

2 YEARS WARRANTY

CE

IP67

METAL HEATING PANEL

Warmset's panel heaters are an elegant **heating solution** essentially composed of a metallic casing in which Warmset's unique, patented technology is installed. The **Metal Heating Panel is available in white**, black and light grey finishes. An optional towel rail can be supplied.
The panel is powered at 230 VAC and has a rated **power of 400 W**. Overall dimensions are **900 × 600 × 13 mm**. The surface **temperature of the panel is 80–90°C**, measured with an ambient temperature of 20°C. The internal structure consists of a resinated metal front panel, an integrated heating system, an aluminized adhesive layer, a TNT insulating layer, a rear panel, and a power supply cable.
The panel can be supplied with **different control solutions**, depending on the selected regulation system. In the basic configuration, the panel is equipped with a **Schuko plug for ON/OFF power supply**. Temperature regulation is performed via an external controlled socket with integrated thermostat, to which the panel power cable is connected.
Alternatively, the **panel can be associated with a dedicated room thermostat**. The thermostat operates on its own network and communicates with an internal relay integrated into the panel. The thermostat can be **installed in any position** within the room, independently of the panel location.

THERMOREGULATION VIA EXTERNAL SOCKET

PROJECT REFERENCES

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

WORKSTATION FOOTBOARDS

2 YEARS WARRANTY

CE

IP67

WORKSTATION FOOTBOARDS

The heated footboards for industrial workstations are designed to enhance **operator well-being during prolonged standing**. The system is plug & play and ready for immediate use, offered in **three standard sizes** and also available in custom formats on request. The metal construction provides exceptional, **uniform heat distribution** and robust mechanical strength, suitable for environments where tools may generate swarf or scraps. Inside the platform, an insulating layer improves thermal efficiency by preventing downward heat loss to the floor. An integrated thermostat can be provided on request for temperature regulation.

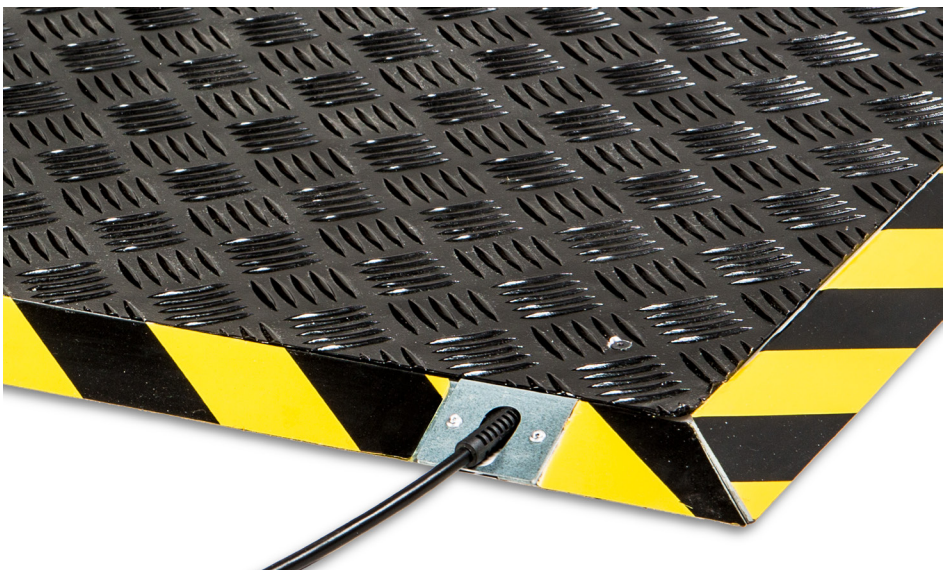
The **power density ranges approximately from 400 to 600 W/m²**, depending on configuration (standard/ enhanced). Typical surface temperature is between **30 and 40 °C**, with actual values influenced by ambient conditions at the installation site. Thanks to the speed of heat-up and excellent lateral heat spread, there **is no need for prolonged preheating**, which translates directly into energy savings during daily operation.

Three standard sizes are available in two versions, standard or enhanced: 90 × 60 cm, 180 × 60 cm , and 180×120 cm. Beyond the standard range, **made-to-measure versions** or powers can be produced to suit specific workstation layouts.

SIZE mm	OUTPUT STANDARD (W)	OUTPUT ENANCED (W)	WEIGHT CAPACITY	WEIGHT Kg
900x600x16	200	300	150 Kg/smq	18
1800x600x16	400	600	150 Kg/sqm	30
1800x1200x16	800	1200	150 Kg/sqm	40

TEMPERATURE CONTROLLER

PROJECT REFERENCES



warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

HEATED SCREEN

2 YEARS WARRANTY

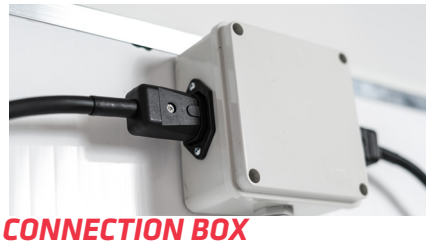
IP67

HEATED SCREEN

The **heated screen** is a self-supporting radiant barrier made of lightweight honeycomb polycarbonate that houses the heating element stiffened by a perimeter frame in aluminum for mechanical stability and durability; to increase thermal yield and improve heat spreading, the **polycarbonate panel** is covered on the radiant face by a thin **metallic sheet** that works as a heat-spreader.

Each **standard module measures 0.5 × 1.5 m** with a nominal power of 560 W, corresponding to a power density of approximately 750 W/m^2; the minimum configuration of a screen is **two modules**, and the number of modules can be scaled according to the size of the work area and the comfort target, respecting the supply and protection sizing of the installation. At an ambient temperature of 20 °C, the nominal s**urface temperature reaches about 90 °C**. The assembly can be supplied fully painted on request—both metallic cover sheet and aluminum frame—provided the finish is compatible with operating temperatures and optimized for emissivity to preserve radiant efficiency and aesthetic integration with the environment. Electrically, the architecture is organized around a **master panel** that provides the power entry point and, where required, the control and protection devices; the remaining modules connect to the master in a daisy-chain via **polarized male/female** quick **connectors** integrated at the panel edges, creating a neat plug-and-play backbone that simplifies installation, expansion, and maintenance.

SIZE mm	OUTPUT STANDARD (W)	SURFACE TEMPERATURE	MINIMUM MODULES	MAXIMUM MODULES
500x1500	560 W	90°C	2 PCS	4 PCS



CONNECTION BOX

PROJECT REFERENCES

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

W-RADIANT INDUSTRY

2 YEARS WARRANTY

CE

IP54

W-RADIANT INDUSTRY

W-Radiant Industry is a lightweight **radiant heating** panel conceived for industrial and professional environments where targeted, localized comfort is required. Its enclosure uses **alveolar polycarbonate for minimal mass** and good thermal behavior, combined with a **perimeter aluminium frame** that ensures mechanical stability. The proprietary bifilar heating architecture delivers sun-like radiant warmth to people and objects within the intended zone, prioritizing direct irradiation rather than convective air heating, and is suitable for integration into modern workspaces and technical areas.

The **standard module measures 1 m by 1 m**, built around a one-meter form factor to simplify planning in regular grids. The technology provides an approximate **power density of 750 W/m²**, with typical panel surface temperatures between 60 °C and 90 °C when the ambient is 20 °C. **Larger heated surfaces can be created** by composing multiple 1 m × 1 m modules to obtain the required overall dimensions while maintaining uniform appearance and performance across the array. When suspended, the panel should be installed at a **height of approximately 2.5 to 3 metres** to ensure the best performance. The heating action effectively **covers the area directly beneath the panel** with a slight overhang beyond the panel's edges, but it does not create a defined irradiation cone, since the concept is to **heat only the zone directly below the panel.**

SIZE mm	OUTPUT STANDARD (W)	SURFACE TEMPERATURE	MINIMUM MODULES	MAXIMUM MODULES
1000x1000	750 W	90°C	1 PCS	4 PCS

FIXING DETAIL

PROJECT REFERENCES

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

DRUM HEATERS

2 YEARS WARRANTY

CE

IP40

warmset
LAMINATED HEATING TECHNOLOGY

DRUM HEATERS

Warmset electric **drum heaters** are an efficient, reliable and cost-effective solution for heating and **maintaining the temperature of liquids** and materials stored in cans, drums, barrels, tanks, cisterns and IBC containers. Thanks to Warmset's proven heating technology, these heaters ensure **uniform heat distribution**, reduced heating times and optimized energy consumption. Installation is quick and easy thanks to the spring fastening system, which allows the **heater to perfectly adapt to the container surface**. Standard models are available for the most common drum sizes (25, 50, 200 and 1000 litres), while **custom-made solutions can be produced** upon request (also custom voltage options, such as 120 V or 400 V), according to customer specifications. All drum heaters are manufactured using high-quality technical materials, designed for industrial use, and are equipped with a built-in adjustable thermostat that allows precise temperature control up to 120 °C. The 1000-litre model is supplied complete with an insulated cover, ensuring improved performance and faster heating times.

MODEL	DRUM CAPACITY	POWER	SURFACE TEMPERATURE	THERMOSTAT	DIMENSION HxCirconference	MATERIALS	NOTES
DRUM HEATER 25L	25 LT	110 W	80-90°C	ONE THERMOSTAT	400x1200mm	OUTSIDE: Cordura INSIDE: Silicone rubber / coated fiberglass	-
DRUM HEATER 50L	50 LT	210 W	80-90°C	ONE THERMOSTAT	460x1330mm	OUTSIDE: Cordura INSIDE: Silicone rubber / coated fiberglass	-
DRUM HEATER 200L	200 LT	550 W	80-90°C	ONE THERMOSTAT	800x1990mm	OUTSIDE: Cordura INSIDE: Silicone rubber / coated fiberglass	-
DRUM HEATER 1000L	1000 LT	1x2000 W	80-90°C	ONE THERMOSTAT	1000x4400mm	OUTSIDE: Cordura INSIDE: Silicone rubber / coated fiberglass	INSULATED COVER INCLUDED
DRUM HEATER 1000L	1000 LT	2x1000 W	80-90°C	TWO THERMOSTAT	1000x4400mm	OUTSIDE: Cordura INSIDE: Silicone rubber / coated fiberglass	INSULATED COVER INCLUDED

25 LT

50 LT

200 LT

1000 LT (1 Thermostat)

1000 LT (2 Thermostat)

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

HEATING PANEL FOR ANIMALS

2 YEARS WARRANTY

CE

IP67

warmset
LAMINATED HEATING TECHNOLOGY

HEATING PANEL FOR ANIMALS

Omeoterm Heating Panel for Animals is a **low-temperature infrared heating system** designed to provide deep, **uniform warmth to animals** in a safe and energy-efficient way. Developed in collaboration with our partner Probios, this solution is ideal not only for **livestock but also for domestic animals** such as dogs, offering a natural and comfortable thermal experience.
Unlike traditional infrared lamps, Omeoterm panels **do not emit visible light** and operate at a surface temperature of around 90 °C, significantly lower than the 180 °C typical of conventional lamps. Despite this, they are capable of **penetrating up to 3 cm into living tissue**, delivering effective and enveloping warmth. The heat generated is evenly distributed across a wide surface, creating a stable and natural sensation of warmth. The system reaches operating temperature in approximately 90 seconds and maintains thermal reactivity with remarkable consistency.
Its efficiency approaches 100%, as it converts electrical energy directly into far infrared radiation (FIR), ensuring excellent performance and low operating costs. Constructed with materials designed to mimic the behavior of an ideal radiant surface, Omeoterm panels are **easy to install, require no maintenance**, and pose a very low fire risk. Entirely designed and manufactured in Italy, Omeoterm panels represent a reliable, **long-lasting, and safe heating solution** for animal welfare.

SIZE mm	OUTPUT (W)	AMPERE 120 VAC	AMPERE 230 VAC	SURFACE TEMP. (C°)	WEIGHT Kg	RADIATION AREA (cm^2)
600x300x30	130	1.2 A	0.6 A	80-90 Room Temp. 20°C	2.2	2584
600x600x30	260	2.4 A	1.2 A	80-90 Room Temp. 20°C	4.5	4624
900x600x30	400	3.6 A	1.8 A	80-90 Room Temp. 20°C	5.6	6864

PROJECT REFERENCES

warmset
LAMINATED HEATING TECHNOLOGY

TECHNICAL DATA SHEET

HEATING MAT FOR GREENHOUSES

2 YEARS WARRANTY

CE

IP67

HEATING MAT FOR GREENHOUSES

Warmset provides a complete range of **electric heating systems** specifically designed for **greenhouses**, nurseries and agricultural cultivation areas. Thanks to the patented laminated heating technology, Warmset solutions ensure uniform and efficient heat distribution directly at plant level, **improving growth conditions** and protecting crops during cold seasons.

The heating conductor is flat and laminated, offering a **large thermal exchange surface** and ensuring highly homogeneous warmth across the cultivation area. Power output, dimensions and supply voltage can be fully customized depending on the specific greenhouse layout and crop requirements.

For traditional greenhouse applications, **Warmset heating mats are installed directly under soil layers** or with **pots placed in direct contact with the heating surface**. Temperature control is managed through dedicated regulation systems capable of monitoring soil temperature, preventing overheating and ensuring optimal plant comfort. The standard **power density** for these applications is approximately **120 W/m²**, with the possibility of customization.

Two main product options are available: **Polypropylene Black**: Designed for applications where **water permeability** is required. The polypropylene mesh structure allows moisture to pass through, making it ideal for cultivation benches where irrigation and drainage occur directly above the heating surface.
Aluminium Black: Featuring an aluminium diffusion layer for enhanced **heat spreading** across the cultivation surface. This version is particularly suitable for benches requiring improved **thermal uniformity** and for direct contact installations with soil or pots, always **protected by a nylon waterproof layer** to avoid liquid accumulation. Both systems **can also be produced in low voltage versions** (24/48V).

In hydroponic greenhouses, Warmset heating is supplied in the form of a f**lexible heating ribbon** (loose ribbon), installed directly in c**ontact with the cultivation channels** or growing structures. This solution is designed to provide localized heat directly where roots and plants require thermal stability, improving crop performance and reducing the risk of cold stress. The **standard power** output for hydroponic heating ribbon applications is: **30 W per linear meter**. This makes the system extremely versatile and easy to integrate into hydroponic layouts, even in long continuous cultivation rows.

Temperature regulation is aimed at controlling the heating element and the t**emperature at soil/cultivation leve**l, depending on the installation, and not the overall greenhouse air temperature.

Warmset solutions can be managed in two ways. The first option is the use of a **dedicated thermostat** supplied by Warmset. In this configuration, the end user sets the desired working temperature according to the cultivation needs, keeping the heating surface/soil within the required range.

The second option is **centralized control through DIN-rail thermoregulators** installed inside an electrical panel. This solution is ideal when multiple benches or zones must be managed from a single control point, allowing organized and scalable regulation in professional greenhouses.

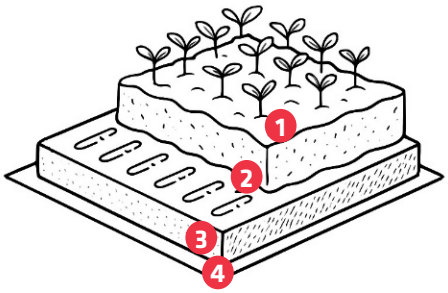
warmset
LAMINATED HEATING TECHNOLOGY

TYPE OF INSTALLATION

POLYPROPYLENE BLACK

INSTALLATION IN CONTACT WITH SOIL

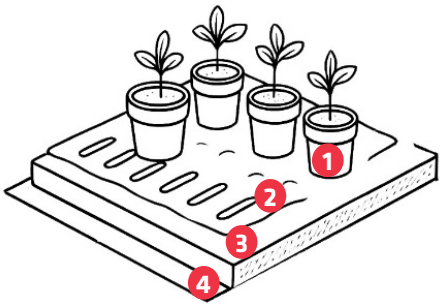
1. CULTIVATION SOIL
2. WARMSET POLYPROPYLENE MAT
3. THERMAL INSULATION (OPTIONAL)
4. BENCH OR SUPPORTING BASE



POLYPROPYLENE BLACK

INSTALLATION WITH POTS IN DIRECT CONTACT

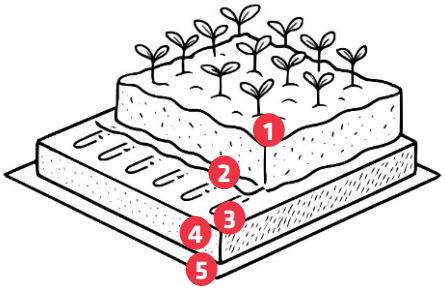
1. POTS / CONTAINERS
2. WARMSET POLIPROPILENE MAT
3. THERMAL INSULATION (OPTIONAL)
4. BENCH OR SUPPORTING BASE



ALUMINIUM BLACK

INSTALLATION IN CONTACT WITH SOIL

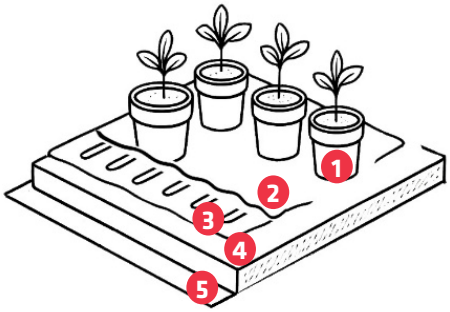
1. CULTIVATION SOIL
2. WATERPROOF NYLON (MANDATORY)
3. WARMSET ALUMINIUM BLACK MAT
4. THERMAL INSULATION (OPTIONAL)
5. BENCH OR SUPPORTING BASE



ALUMINIUM BLACK

INSTALLATION WITH POTS IN DIRECT CONTACT

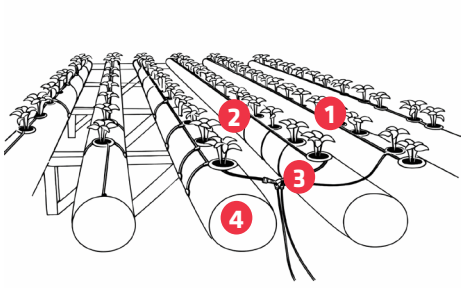
1. POTS / CONTAINERS
2. WATERPROOF NYLON (MANDATORY)
3. WARMSET ALUMINIUM BLACK MAT
4. THERMAL INSULATION (OPTIONAL)
5. BENCH OR SUPPORTING BASE



HYDROPONIC CULTIVATION

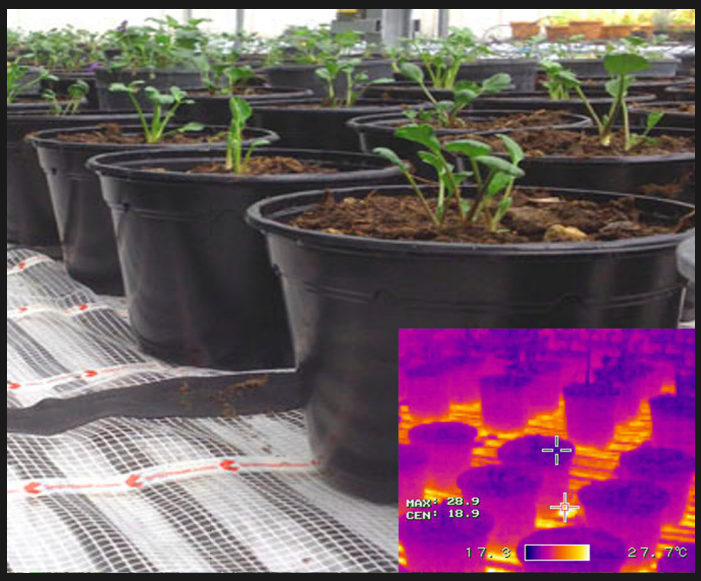
LINEAR HEATING RIBBON

1. HEATING RIBBON
2. FIXING TIES
3. COLD CABLE
4. HYDROPONIC CULTURE



warmset
LAMINATED HEATING TECHNOLOGY

PROJECT REFERENCES



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