

EN // HEATING MAT

Installation manual for the heating mat under laminate flooring

Aluminium heating mat ANET 150, 150 W/m² • width 50 cm • intended for installation under laminate flooring.



DEAR CUSTOMER, THANK YOU FOR YOUR PURCHASE

Scan the QR code to access video materials and the complete product documentation at www.ergowave.eu

Caution: read the manual before you start the installation!

Comfort. Efficiency. Innovation



UK CA



Installation and operating manual for Ergowave heating mats – under laminate flooring

1 How does Ergowave underfloor heating work under laminate?

Laminate floors have a low heat storage capacity and react sensitively to rapid temperature changes. For this reason they cannot be combined with high-temperature systems. The Ergowave system heats the floor evenly and gradually, which means it:

- does not stress the laminate with temperature jumps,
- ensures stable thermal comfort,
- allows precise control thanks to the thermostat with a floor sensor.

The sensor inserted into the protective tube measures the floor temperature and sends the signal to the thermostat, which switches the heating on and off automatically. Programmable Ergowave controllers additionally enable energy savings through automatic modes, time programmes and the ECO function. In the event of a sensor failure or a power cut, the system is switched off automatically.

2 Safety and operating rules

- Ergowave mats must not be shortened and the heating cable must not be cut (only the carrier mesh / carrier film may be cut)
- The mats must not be installed in areas with fixed fittings (cabinets, kitchen islands).
- During installation and when laying the panels, the surface must be protected, e.g. with XPS boards or loosely laid panels.
- After the panels have been laid, the final resistance measurement and the thermostat connection are carried out.
- The system is put into operation only after the floor works have been fully completed.

3 Tools required for the installation

- electrical meter (ohmmeter),
- inductor,
- utility knife and scissors (for cutting the film),
- tape measure,
- screwdriver and accessories for mounting the temperature controller.

4 Preparation of the subfloor

- The subfloor must be clean, stable and free of sharp elements, nails, unevenness and cracks.
- Ergowave mats are not laid directly on concrete – an insulating underlay is required.
- A channel for the flush-mounted box and the protective tube of the floor sensor is made in the wall.
- The tube is inserted into the floor to its full depth so that its protrusion does not obstruct the panels.
- At the sensor position, an incision is made in the underlay.

CAUTION! THE HEATING CABLE MUST NOT BE SHORTENED!

5 Arrangement of the heating mats

- The width of Ergowave mats is 50 cm.
- When choosing the length, the area without fixed fittings must be taken into account.
- The mat can be adjusted by cutting only the carrier film — never the cable.
- The connection leads are routed exclusively along the walls, never between the mat runs.
- Where the mat layout needs to be adjusted, a piece of film can be cut out and the cable repositioned, keeping the original spacing.

Joining the mat runs:

- The mats are joined with aluminium connectors which ensure even heat distribution.
- All contact points are then covered with conductive aluminium tape.

6 Installation stages of the Ergowave system

Step 1 — Checking the components

Inspection of the mats, leads and controller. Any damage requires an immediate complaint.

Step 2 — Preliminary measurements

First resistance measurement (with the ohmmeter). The data is entered in the warranty card.

Step 3 — Laying the underlay and planning the layout

The underlay is laid over the entire area. The sketch of the mat and furniture layout is drawn on it.

Step 4 — Laying the mats

- We lay out the mat according to the plan.
- We cut the film where the adjustment requires it.
- We join the runs with aluminium connectors and tape.

Step 5 — Installing the floor sensor

We insert the sensor all the way into the protective tube.

Step 6 — Control measurements

Second resistance measurement (after laying the mats).

Step 7 — Function test

Before laying the panels we switch the mat on for a few minutes – the surface must warm up noticeably.

Step 8 — Laying the panels

- The mats must be protected against being walked on.
- No nails may be driven above the heating cables and the panels must not be drilled or cut there.
- After the panels have been laid, the third resistance measurement is carried out.

Step 9 — Mounting the thermostat

- Switch the system on in accordance with the thermostat manual.
- Set the initial parameters (test mode/power limitation, if available).
- Monitor the temperature and operating stability during the first 24–48 hours.
- Save the settings and hand the manual over to the user.

7 Measurements and safety standards

- The insulation resistance of the heating cable must be at least 10 MΩ when measured at 1000 V.
- The measurements are carried out 3 times: before installation, after laying the mats and after laying the panels.
- All results must be entered in the warranty card.

8 Recommended build-up of the Ergowave floor

- laminate panels,
- impact sound insulation,
- heating mat,
- surface of the subfloor.

9 Important final notes

- Contact between the heating cables must be avoided.
- Do not install the mats under elements that obstruct heat dissipation.
- Do not shorten the mats or the heating cable.
- Do not kink or squeeze the connection sleeves.
- Do not put the system into operation before the floor laying has been fully completed.

✓ Maintenance and operation

- Do not place fixed fittings or heavy furniture without legs on the heated surfaces.
- Check regularly (once before the heating season) the operation of the thermostat and the temperature reading.
- In case of damage to the floor or the electrical system, switch off the circuit and call the service department.

✓ Handover protocol — checklist

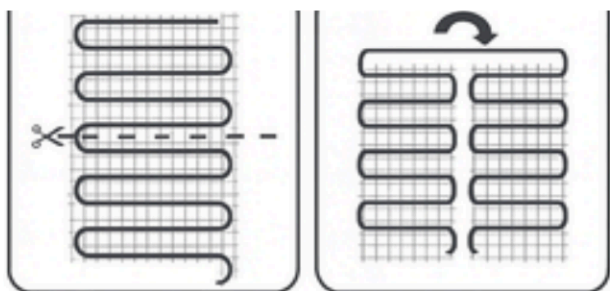
- | | |
|--|---|
| ☐ Subfloor prepared and insulation laid | ☐ Conductor resistance check — result: OK ($\pm 10\%$) |
| ☐ Mat layout plan drawn up and approved | ☐ Connections in the box prepared (temporarily) |
| ☐ Mat laid without overlapping of the cables | ☐ Floor covering completed and cured |
| ☐ Temperature sensor installed in the protective tube | ☐ Final mains connection carried out by an electrician |
| ☐ Insulation resistance check — result: OK | ☐ Measurement protocol and photo documentation attached |

! Most common problems — quick solutions

Insulation reading $\neq \infty$	Possible damage to the insulation. Do not put into operation, contact the service department.
Resistance outside $\pm 10\%$	Check the connections, measure again; if the value is still outside the range → submit a complaint.
Heating up too slowly	Check the floor insulation, mat output and thermostat settings.
Hotspots / overheating	Check that the mat is not covered by furniture without legs; inspect the temperature sensor.

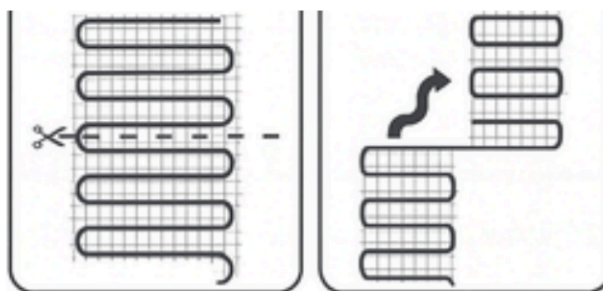
Laying and folding the ergowave heating mat

1 Parallel fold



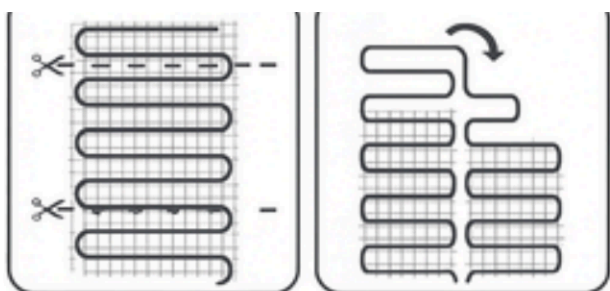
Cut the aluminium film at the selected point and change the laying direction of the mat by folding it parallel through 180°.

2 Parallel fold



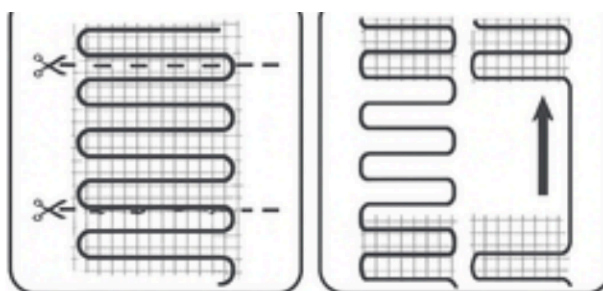
Cut the aluminium film at the selected point and turn the remaining part of the mat through 180° about its axis to continue laying in the opposite direction.

3 Offset fold



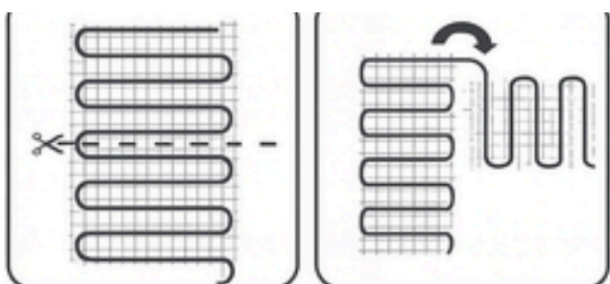
Cut the aluminium film at two selected points to change the laying direction of the mat. Lay out the heating cable and lay the remaining part of the mat according to the requirements of the room.

4 Offset fold



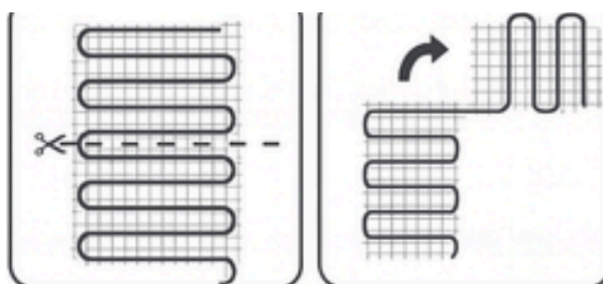
Cut the aluminium film at two selected points, changing the laying direction of the mat. Pull out the heating cable to the required length and then fit the remaining part of the mat to the planned layout. Cover the cable with film.

5 Right-angle fold



Cut the aluminium film at the selected point to change the laying direction of the heating mat. Turn the remaining part of the mat through 180° about its axis and then through 90° so that a right angle is formed.

6 Right-angle fold

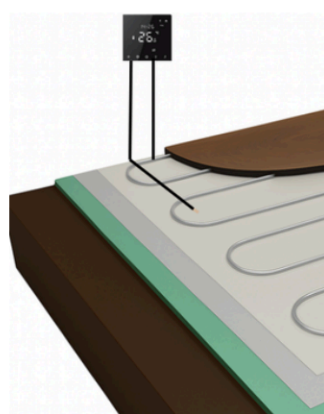


Cut the film at the selected point and fold the mat at a right angle by turning its remaining part through 90°.

Resistance values for the individual mat sizes (+/-10%)

Model	POWER (W)	Dimensions (m×m)	Area (m2)	Resistance, Ohm
ANET 150-1.0	150	0.5×2	1,0	352,7
ANET 150-1.5	225	0.5×3	1,5	235,1
ANET 150-2.0	300	0.5×4	2,0	176,3
ANET 150-2.5	375	0.5×5	2,5	141,1
ANET 150-3.0	450	0.5×6	3,0	117,6
ANET 150-3.5	525	0.5×7	3,5	100,8
ANET 150-4.0	600	0.5×8	4,0	88,2
ANET 150-4.5	675	0.5×9	4,5	78,4
ANET 150-5.0	750	0.5×10	5,0	70,5
ANET 150-6.0	900	0.5×12	6,0	58,8
ANET 150-7.0	1050	0.5×14	7,0	50,4
ANET 150-8.0	1200	0.5×16	8,0	44,1
ANET 150-9.0	1350	0.5×18	9,0	39,2
ANET 150-10.0	1500	0.5×20	10,0	35,3
ANET 150-12.0	1800	0.5×24	12,0	29,4

Laying diagram of the aluminium heating mat



- Thermostat
- Laminate panel
- Aluminium heating mat
- Insulating underlay
- Temperature sensor
- Concrete subfloor

DECLARATION OF PERFORMANCE

The declaration of performance is issued by:

ergowave sp. z o.o.

ul. Malinowa 14h, 43-100 Tychy, Poland VAT ID (NIP):6463025040 | REGON:543175153

As importer of the product: heating mat, type: ANET150W, country of origin: China

The importer declares that the above products:

- are safe when used as intended,
- meet the requirements set out in the technical documentation,
- are covered by measures ensuring the conformity of all products placed on the market with EU regulations and the technical requirements of the manufacturer.

1. Performance characteristics

The performance characteristics of the product meet all relevant technical requirements of the applicable EU regulations and, where necessary, of other legal provisions.

2. Conformity assessment

The conformity assessment was carried out in accordance with:

- the Low Voltage Directive (LVD) 2014/35/EU,
- Directive 2014/30/EU on electromagnetic compatibility (EMC).
- IEC 60800:2021, EN IEC 55014-1:2021, EN IEC 55014-2:2021,
- EN IEC 61000-3-2:2019+A1:2021+A2:2024,
- EN 61000-3-3:2013+A2:2021+AC:2022-01

WARRANTY CARD

Warranty granted to:

Date of granting the warranty:

Invoice number / handover protocol:

Warranty conditions

The guarantor of the product quality is Ergowave Sp. z o.o.. Faults should be reported to the installer who carried out the installation.

Scope of warranty liability

The guarantor is liable for defects attributable to the manufacturer which occur in the product within the following periods:

- 25 years – heating mats, provided that the installation is carried out in accordance with the manual supplied with the product by a suitably qualified person
- 2 years – the remaining components of the heating system, including the thermostat,
- The warranty for the installation is granted by the installer.

Start of the warranty

1. The product warranty applies from the date of commissioning of the system, confirmed by the corresponding installation handover protocol.

Complaint processing time

1. The warranty complaint is processed within 31 working days from the date of notification.

Place and conditions of complaint processing

– The complaint is processed at the customer's premises after the product has been permanently installed, unless the parties agree otherwise. – If it is established that Ergowave Sp. z o.o. is not the distributor of the device concerned, the complaint is manifestly unfounded and the notifying party bears all costs related to its processing.

Fulfilment of warranty claims

1. If the complaint is accepted, Ergowave Sp. z o.o. carries out:
 - a repair or
 - a replacement of the defective product.
2. The costs of repair or replacement constitute the only compensation under the complaint. The warranty does not cover other costs incurred by the customer.

Expiry of the warranty

1. The warranty expires in the following cases:
 - service operations carried out by persons not authorised by the distributor,
 - mechanical damage,
 - improper power supply,
 - damage caused by flooding, lightning strike, fire or force majeure,
 - electrical installation carried out contrary to the applicable regulations.

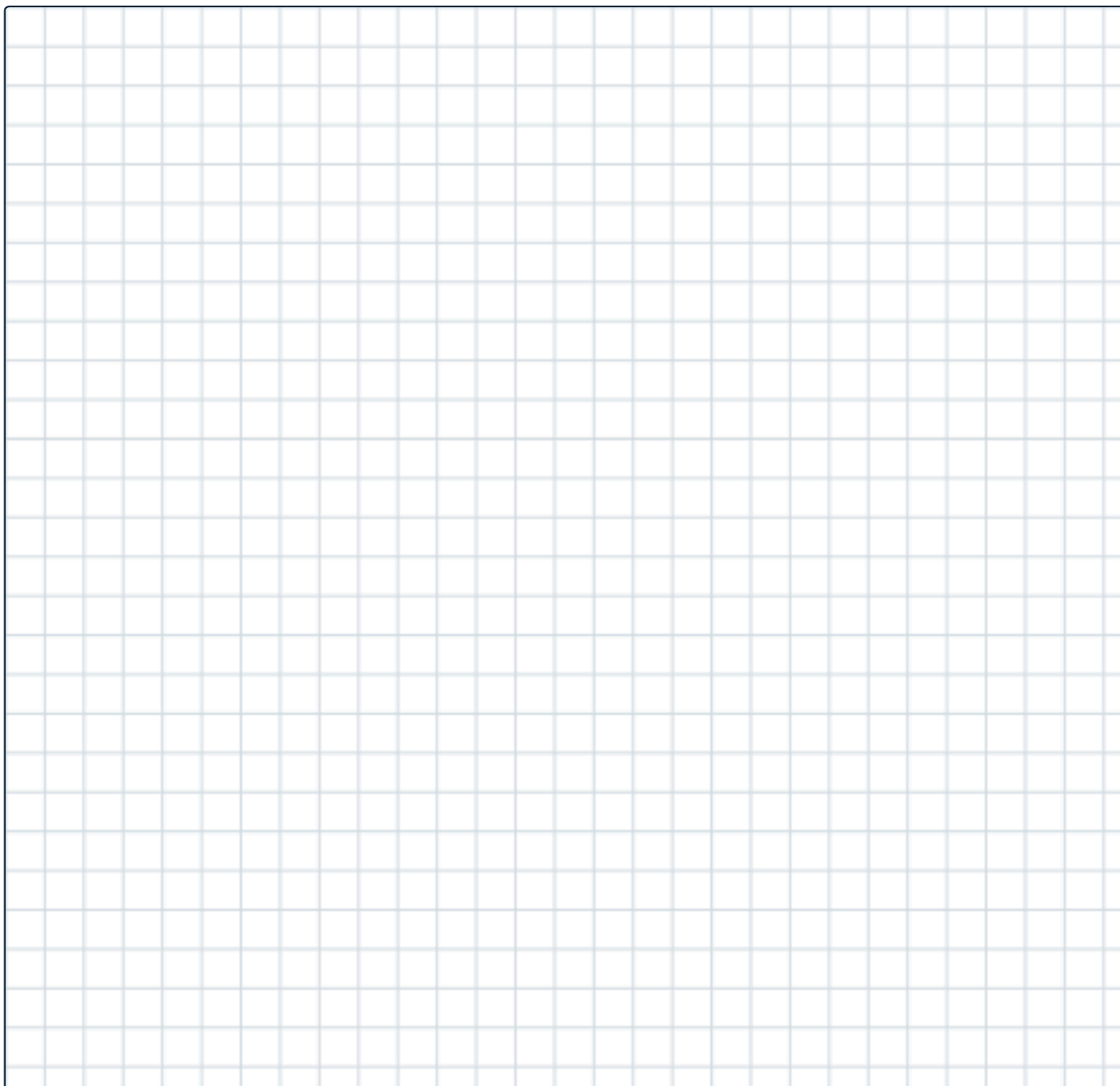
ergowave sp. z o.o. ul. Malinowa 14H, 43-100 Tychy, Poland, NIP:6463025040 | REGON:543175153

✉ E-MAIL: OFFICE@ERGOWAVE.COM

☎ TELEFON: (0048) 533-319-109

Layout plan of the heating mat in the room

On the grid below, draw the sketch of the room, the arrangement of the heating mat runs, the position of the temperature sensor as well as furniture without legs and fixed fittings.



ergowave sp. z o.o. ul. Malinowa 14H, 43-100 Tychy, Poland, NIP:6463025040 | REGON:543175153

✉ E-MAIL: OFFICE@ERGOWAVE.COM

☎ TELEFON: (0048) 533-319-109