

Pro-mat

Installation Instructions

1. Inspection

Check the contents of the packaging.

A complete set consists of:

- Pro-mat heating mat with connection cable
- Warranty card
- Pro-mat thermostat including floor sensor*

* Only included in complete Pro-mat sets.

Please note: terminal blocks are not included. The flexible sensor conduit is optional and available separately via our dealers. This manual is not included in the box and can be consulted online at www.pro-mat.nl.

2. Technical Data

Area	Power	Dimensions	Resistance
1 m ²	150 W	0.5 x 2 m	353 Ω
1.5 m ²	225 W	0.5 x 3 m	235 Ω
2 m ²	300 W	0.5 x 4 m	176 Ω
2.5 m ²	375 W	0.5 x 5 m	141 Ω
3 m ²	450 W	0.5 x 6 m	117 Ω
4 m ²	600 W	0.5 x 8 m	88 Ω
5 m ²	750 W	0.5 x 10 m	71 Ω
6 m ²	900 W	0.5 x 12 m	59 Ω
7 m ²	1050 W	0.5 x 14 m	50 Ω
8 m ²	1200 W	0.5 x 16 m	44 Ω
10 m ²	1500 W	0.5 x 20 m	35 Ω
12 m ²	1500 W	0.5 x 24 m	29 Ω
15 m ²	1875 W	0.5 x 30 m	23.5 Ω
20 m ²	2500 W	0.5 x 40 m	21 Ω

Our products are manufactured using high-quality and durable materials. To ensure optimal performance and full warranty coverage, the installation instructions below must be strictly followed.

The electrical installation must be carried out by a certified installer.

3. Important Notes

- Check that the mat surface matches the area to be heated.

- Ensure sufficient available power capacity.
- Do not damage the heating cable during installation.
- Measure the resistance before, during, and after installation and record it on the inspection card.
- The heating cable must not be cut or crossed.
- Mats must not be placed on top of each other.
- The sensor must always be placed centrally between two heating cables.
- The sensor must always remain inside the sensor conduit.
- Maintain a minimum distance of 15 cm from walls.
- Pro-mat must not be installed underneath fixed objects.

4. Warranty

The Pro-mat heating mat is maintenance-free and comes with:

- Lifetime warranty on the electrical operation of the heating mat*
- 2-year warranty on the thermostat and floor sensor

* Please consult the warranty conditions and register your product at www.pro-mat.nl.

5. Required Materials

- Pro-mat heating system
- Flexible tile adhesive or leveling/flow mortar suitable for underfloor heating
- Multimeter
- Standard tools
- Optional: flexible electrical conduit (16 mm)

6. Preparation

- Determine the location of the Pro-mat thermostat (preferably at a height of 1.40 m).
- Install a flush-mounted box with a minimum depth of 50 mm.
- Cut grooves for the electrical conduit and sensor conduit.
- Place the sensor conduit in a shallow groove in the floor.

WARNING

A 230V underfloor heating system is installed beneath the floor. Never drill or screw into the floor.

7. Resistance Measurements

Measure the resistance:

- Between both resistance wires (max. $\pm 10\%$)
- Between each resistance wire and earth (infinite)

Record all values on the warranty card. After installation, a copy of the completed warranty card must always be sent to garantie@pro-mat.nl. Keep the original in the meter cupboard; this is part of the warranty conditions.

8. Installation Method

Leveling / Flow Mortar:

- Roll out the mat with the cables facing upward
- Cover with a maximum of 2 cm

Tile Adhesive:

- Roll out the mat with the cables facing downward
- Apply adhesive in two layers

9. Cutting and Fitting the Pro-mat

- The fiberglass mesh may be cut
- Never damage the heating cable
- Keep loose cables at least 5 cm apart

10. Thermostat Connection

- Use only the Pro-mat thermostat
- Connection according to NEN 1010
- Installation by a certified installer
- Connect grounding outside the thermostat

The connection of the Pro-mat thermostat must be carried out exclusively by a certified installer and in accordance with NEN 1010 regulations. Always switch off the power in the meter cupboard before installation or removal.

Pro-mat thermostat wiring diagram:

- Port 1: L (live) – power supply (brown)

- Port 2: N (neutral) – power supply (blue)
- Port 3: N1 (neutral) from the heating mat
- Port 4: L1 (live) from the heating mat

Floor sensor:

- The two sensor terminals are intended for the floor sensor
- Polarity is not important
- Each sensor wire must be connected to a separate sensor terminal

Earth:

- The earth wire of the heating mat is not connected to the thermostat
- Connect the earth wire of the heating mat directly to the earth in the flush-mounted box

Check all connections carefully after installation before mounting the thermostat and switching on the system.

11. Commissioning

Observe the drying times of the adhesive or leveling compound.

When starting up for the first time, use the thermostat's slow heating function.

12. Tips for Optimal Performance

For optimal performance and maximum efficiency of the Pro-mat underfloor heating system, proper insulation beneath the heating mat is essential.

We recommend using Pro-board XPS insulation boards. These boards are equipped with a special bonding layer or can be applied with a cement-based finishing layer on both the top and bottom sides, ensuring perfect adhesion of the Pro-mat and the finished floor.

Pro-board XPS insulation boards are available in:

- 6 mm thickness
- 10 mm thickness

Using this insulation minimizes heat loss to the subfloor, allows the floor to heat up faster, and reduces energy consumption.