



## Technical parameters of the thin teflon heating mat AL Net™T80

Mat type: double-core wire with **teflon** insulation and **AL sheath** 

Operation voltage: 230 V / 50 Hz / AC

Output: 80 W/m²
Mat width: 0.5 m
Mat length: 6 to 24 m
Heating cable diameter: 2.0 mm
Cold lead - supply length: 2.5 m

Declaration of conformity:

issued in accordance with §13 art.1 of Act No. 264/99 Coll. and Government Regulation No. 194/2005 Coll. as amended by Government Regulation No. 318/2007 Coll. and No. 308/2004 Coll. as amended by Government Regulation No. 449/2007 Coll. The name: AL Net™T80 electric heating mats. Conformity assessment has been performed in accordance with: Government Regulation No. 194/2005 Coll. as amended by Government Regulation No. 318/2007 Coll. on electromagnetic compatibility of devices and Government Regulation No. 308/2004 Coll. as amended by Government Regulation No. 449/2007 Coll. on electric equipment. In conformity assessment regarding the product, there have been the following EU directives used as well as standards followed: EN 60730-1:2011,EN 60730-2-9:2010, EN 61000-3-2:2006+A2:2009, EN 61000-3-3:2008, the Low Voltage Directive 2006/95/EC, Annex 4, the EMC Directive 2004/108/EC, Annex II.

## General instructions for heating mat installation:

- a) Only qualified electrician with relevant certificate is allowed to connect the heating mat to the mains.
- b) The subfloor under the heating mat must be clean, without sharp edges and impurities.
- c) The heating cable on the mat **must not be shortened**, <u>mutually contacted or crossed</u>, <u>or pressed into the insulation</u>. It must not be under excessive tension in the connection spot of the heating cable and power lead. It is designed for indoor applications.
- d) Do not install the heating mat under the built-up areas (e.g. furniture, built-in wardrobes...), to prevent it from overheating.
- e) Operate the heating mat only with thermostat and floor sensor, or floor sensor in combination with room sensor.
- f) A part of this manual is a warranty coupon that must be filled in for warranty recognition.
- g) In order to provide electrical safety, a 30 mA residual current circuit breaker must be used. Follow the applicable standards.

## How to cut and turn the mat AL Net™T80:



Preparation of the cut



End of the cut

MIND the cable!



Cutting out a wedge for turning



The final shape, no need to glue the joints



The mat layout

## Installation instructions

- In order to increase the temperature onset speed and reduce the consumption, under the hating mat AL Net™T80 install impact insulation insulation mat. It works as a thermal insulation and at the same time it prevents transmission of sound in the floor.
  - Products such as Mirelon... can be used as an insulation layer. It is not included.
- 2. Measure the room and draw an installation plan for laying the heating mats.

- 3. When planning the layout, leave out the areas with permanently fitted household parts: furniture, built-in wardrobes ...
- 4. Make a groove to fit the conduit for the temperature sensor. Seal the end of the conduit and insert it into the heating area 50 cm away from the wall.
- 5. Before laying the heating mat **AL Net™T80**, measure its resistance and compare with the data in the warranty coupon. The tolerance must match.
- 6. Then measure and write down the insulation condition of the heating mat by test voltage >= 1000 VDC (max. 2500 VDC) the value must be  $> 50 \text{ M}\Omega$
- 7. Slide the power lead through the conduit into the box for thermostat or into the connection box.
- 8. Place the mat on the floor according to the plan of the heating mat laying. Place the heating mat on the floor in such a manner that at the end you will cut only the aluminium fabric the heating cable is attached to it and you will turn the remaining mat and continue back towards the end. When cutting the fabric, **be careful not to cut the heating cable.**
- 9. In case it is not adhesive enough, it is possible to fix the heating mat to the floor by the help of adhesive tape or aluminium tape.
- 10. After the hating mat is laid, measure its resistance and insulation status again to make sure no mechanical damage has occurred.
- 11. The heating mat is designed for dry process application. After it has been laid, cover the heating mat with floating floor laminated, wood, vinyl... that is suitable for floor heating.
- 12. After laying the floor, check the resistance and insulation status of the heating mat again AL **Net™T80** and write it down into the warranty coupon to make sure no mechanical damage has occurred.
- 13. WARNING! Do not glue the floor with construction adhesive. The mat is designed for dry laying process!
- 14. Insert the temperature floor sensor only on the end of the conduit and connect the thermostat according to the wiring diagram.
- 15. You can put the heating mat into operation immediately after floating floor has been laid.
- 16. During installation do not step on the heating cable. Avoid sharp objects and careless manipulation. If it is not possible to press the lead into the layer of the insulation used because of its thickness, it is necessary to cut out the piece of insulation under it, or make a groove in the sub-layer in such a way that the lead will be completely embedded in the insulation layer.
- 17. Fixing elements: Al tape 50 m x 5 cm

Warranty coupon

The extended 10 year warranty for the heating mat AL Net™ T80 is valid only with correctly delivered documents:

- 1. When the Warranty coupon is correctly filled in, see below;
- 2. Document on purchase: invoice or purchase receipt;
- 3. Photo documentation: of the heating mat layout, location of the connection and the cable end;
- 4. The manufacturer duty will be to repair or deliver the product to the customer free of charge, without any other additional costs related to the repair or exchange of the unit.

The warranty is null and void, if the installation was not performed by professionally competent person or in case of error caused by incorrect design, damage, incorrect installation or any other later damage. If we are asked to repair or replace such a product, all the costs will be charged.

Room:	Room No.:	Name of the facility:

AL Net™T80 Heating mat	Output (W)	Dimensions (m)	Resistance(Ω) @ 20 °C +10/- 5 %	Resistance( $\Omega$ ) before installation	Insulation resistance(MΩ) before installation	Resistance( $\Omega$ ) after installation	Insulation resistance( $M\Omega$ ) after installation
AL Net™T80-3.0 m <sup>2</sup>	240	0.5 x 6.0	220				
AL Net™T80-4.0 m <sup>2</sup>	320	0.5 x 8.0	165				
AL Net™T80-5.0 m²	400	0.5 x 10.0	132				

AL Net™T80-6.0 m²	480	0.5 x 12.0	110				
AL Net™T80-7.0 m²	560	0.5 x 14.0	94				
AL Net™T80-8.0 m²	640	0.5 x 16.0	83				
AL Net™T80-9.0 m²	720	0.5 x 18.0	73				
AL Net™T80- T10.0 m²	800	0.5 x 20.0	66				
AL Net™T80- T12.0 m²	960	0.5 x 24.0	55				
Date of sale / Stamp: Installation date:		date:		Stamp:			
Electrician / Distributor: Name and		Name and S	Surname, tel. No., e-mail:		Signature:		