



Technical parameters of the thin Teflon heating mat Net™T160

Mat type:	double-core conductor with teflon insulation and braiding and outer teflon insulation		
Operating voltage:	230 V / 50 Hz / AC		
Output:	160 W/m ²		
Mat width:	0.5 m		
Mat length:	2 to 24 m for indoor applications		
Heating cable diameter:	1 m ² to 10 m ²	3.9 mm	
	12 m ²	4.9 mm	
Cold lead - supply length:	2.5 m +/-10 cm		

Declaration of conformity: 

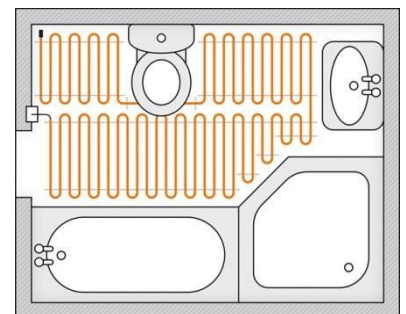
Issued in accordance with § 13 art. 1 of Act No. 264/99 Coll. and Government Regulation No. 194/2005 Coll. as amended by Government Regulation No. 318/2007 Coll. and No. 308/2004 Coll. as amended by Government Regulation No. 449/2007 Coll. The name: Net™T160 electric heating mats. Conformity assessment 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, Low Voltage Directive 2006/95/EC, Annex 4, EMC Directive 2004/108/EC, Annex II.

General instructions for heating mat installation:

- Only qualified electrician with adequate certificate is allowed to connect the heating mat to the mains.
- The subfloor under the heating mat must be clean, without sharp edges and impurities.
- The heating cable on the mat must not be shortened, mutually contacted or crossed, or pressed into the insulation. It must not be straightened, under excessive tension in the connection spot and the terminal of the heating cable, as well as of the power lead.
- Do not install the heating mat under the built-up areas (e.g. bathtubs, corner showers, ...), to prevent its overheating.
- Operate the heating mat only with thermostat and floor sensor or floor sensor in combination with room sensor.
- A part of this manual is a warranty coupon that must be filled in for warranty recognition.
- In order to provide electrical safety, 30 mA residual current circuit breaker must be used. Follow the applicable standards.

Installation instructions

- In order to increase the temperature onset speed and reduce the consumption, install a 10 mm insulation of **IzolaNet™10** under the heating mat. It is not included within the package.
- Measure the room and draw an installation plan for laying of the heating mats.
- Do not install the heating mat under the areas with permanently fitted household parts: bathtub, shower...
- Make a groove to fit in 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.
- Before laying of the heating mat, **Net™T160** measure its resistance and compare with the data in the warranty coupon. The tolerance must match.
- Then measure and write down the insulation condition of the heating mat by testing voltage ≥ 1000 VDC (max. 2500 VDC) - the value must be > 50 M Ω
- Slide the power lead through the conduit into the box for thermostat or into a connection box.
- 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 mesh, the heating cable is attached to it, and you will turn the remaining mat and continue back towards the end. When cutting the mesh, make sure you will **not cut** the heating cable.
- In case it is not adhesive enough, it is possible to fix the heating mat to the floor by the help of a glue with hot glue gun, plaster or construction adhesive.
- After the heating mat is laid, again measure its resistance and insulation status to make sure no mechanical damage has occurred.
- On the heating mat, pour flexible construction adhesive or self-levelling screed.



12. After maturing, check the resistance and insulation status of the heating mat **Net™T160** again and write it down into the warranty coupon to make sure no mechanical damage has occurred. Check the cable spacing by **thermal imaging camera!**
13. Apply the flooring with flexible construction adhesive. Fill in the gaps by flexible filler.
14. Insert the floor temperature sensor only at the end of the conduit, and connect the thermostat according to the wiring diagram.
15. You can put the heating cable into operation only after **complete drying out - maturing** of the construction material used. **The construction material** must not be dried by the heating mat, and **its humidity must be measured before laying the flooring.** The last 5 % of the humidity may be dried **by gradual temperature increase** of the floor under professional supervision.
16. During installation, do not step on the heating cable. Avoid sharp objects and careless pouring of concrete or cement. Make sure there are no air gaps in the concrete or cement. The heating net must not be laid across the expansion joints. The connection of the heating cable and power lead must be laid in the **floor filler material**, thin mortar, out of shower area and it must not be led through the conduit. Be careful when you manipulate with the connection, do not **bend it or pull it**. Always follow the instructions for flooring installation.
17. Check heating mat by thermo camera before using it.

The extended 22-year warranty for the heating mat Net™ T160 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 spot of the connection and the cable terminal;
4. The manufacturer's 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 replacement 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. Net™T160 Heating mat must be installed with a thermostat with **floor sensor** like brand **Displej™**. Furniture and other objects must have legs with the minimum height of **5 cm**. The floor must not be covered by fur or any other **insulation material**. If we are asked to repair or replace such a product, all the costs will be charged.

Warranty coupon

Room:

Room No.:

Name of the facility:

Net™T160 Heating mat	Output (W)	Dimensions (m)	Resistance (Ω) @ 20 °C +10/-5 %	Resistance (Ω) before concrete application	Insulation resistance (MΩ) before concrete application	Resistance(Ω) after concrete application	Insulation resistance(MΩ) after concrete application
Net™T160-T1.0 m ²	160	0.5 x 2.0	330.6				
Net™T160-T1.5 m ²	240	0.5 x 3.0	220.4				
Net™T160-2.0 m ²	320	0.5 x 4.0	165.3				
Net™T160-2.5 m ²	400	0.5 x 5.0	132.3				
Net™T160-3.0 m ²	480	0.5 x 6.0	110.2				
Net™T160-3.5 m ²	560	0.5 x 7.0	94.5				
Net™T160-4.0 m ²	640	0.5 x 8.0	82.7				
Net™T160-4.5 m ²	720	0.5 x 9.0	73.5				
Net™T160-5.0 m ²	800	0.5 x 10.0	66.1				
Net™T160-6.0 m ²	960	0.5 x 12.0	55.1				
Net™T160-7.0 m ²	1120	0.5 x 14.0	47.2				
Net™T160-8.0 m ²	1280	0.5 x 16.0	41.3				
Net™T160-9.0 m ²	1440	0.5 x 18.0	36.7				
Net™T160-T10.0 m ²	1600	0.5 x 20.0	33.1				
Net™T160-T12.0 m ²	1920	0.5 x 24.0	27.6				

Date of sale / Stamp:	Installation date:	Stamp:
Electrician / Seller:	Name and surname, tel. No., e-mail:	Signature: