

# under floor & in screed heating cable

## installation instructions and technical information

### Prepare the Subfloor



Apply a sealant/primer over the entire subfloor. Alternatively, spray adhesive at opposing ends of the room on which the fixing tape can be stuck.

### Measure the Available Floor Area



Measure the available floor area of the room, excluding areas under fixtures and a perimeter of 100mm along walls and obstacles.

Allow a 200mm perimeter when installing under carpets.

### Calculate the Required Cable Spacing

Divide the available floor area by the length of the heating cable, and multiply by 1,000. (minimum 80mm - maximum 120mm)

Available Floor Area  m<sup>2</sup>

Cable Length  m

$\times 1000 =$   mm Cable Spacing

Repeat the calculation twice to confirm.

### Fix the Cable to the Subfloor



Unroll the cold lead from the cable spool, securing it directly below the provision for the thermostat. Then, use fixing tape to attach the cable to the subfloor.

### Position the Cold & Sensor Leads

Position the floor temperature sensor between two runs of the cable and at least 150mm from the wall. Then, pull the cold leads and sensor lead into the wall leaving the black cable connections fixed to the floor.

### Secure & Protect the Cable

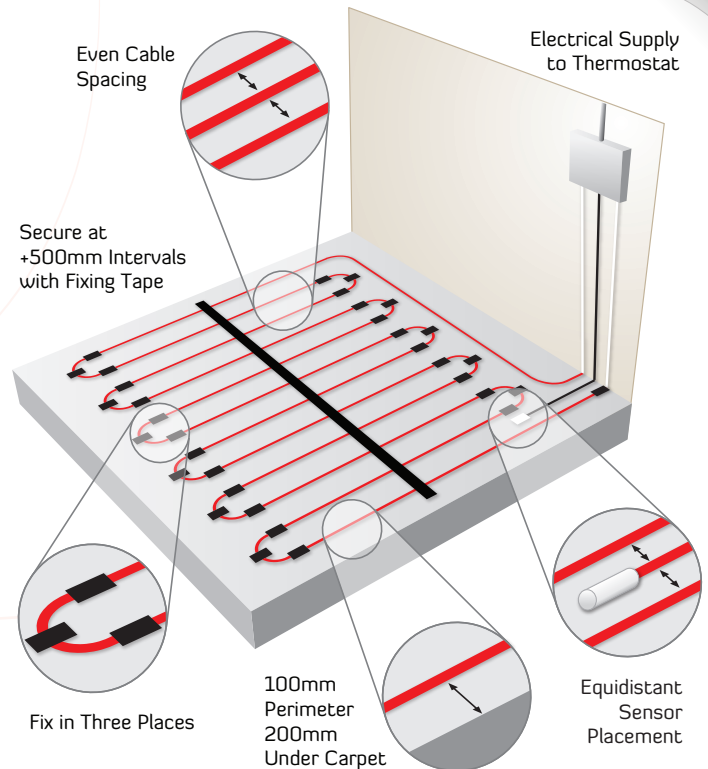


Optionally, secure and protect the cable using a self-adhesive fiberglass mesh or an application of a suitable leveling product.

The application of a leveling product is required when installing directly under carpet, timber or vinyl.

	FIBREGLASS MESH	LEVELING
Screed Bed	Optional	
Tile, Stone & Slate		Optional
Carpet, Vinyl & Timber		Required (4mm)

Refer Overleaf For Further Information



### Sizing Guide

MODEL	COVERAGE	RESISTANCE	LENGTH
UF0200	1.0 - 1.6m <sup>2</sup>	264.5Ω	13.3m
UF0300	1.6 - 2.2m <sup>2</sup>	176.3Ω	20.0m
UF0400	2.2 - 3.0m <sup>2</sup>	132.3Ω	26.7m
UF0500	3.0 - 4.0m <sup>2</sup>	105.8Ω	33.3m
UF0650	4.0 - 5.0m <sup>2</sup>	81.4Ω	43.3m
UF0800	5.0 - 6.0m <sup>2</sup>	66.1Ω	53.3m
UF1000	6.0 - 7.5m <sup>2</sup>	52.9Ω	66.7m
UF1250	7.5 - 9.0m <sup>2</sup>	42.3Ω	83.3m
UF1500	9.0 - 11.0m <sup>2</sup>	35.3Ω	100.0m
UF1800	11.0 - 13.5m <sup>2</sup>	29.4Ω	120.0m
UF2000	13.5 - 16.0m <sup>2</sup>	26.5Ω	133.3m
UF2500	16.0 - 20.0m <sup>2</sup>	21.2Ω	166.7m
UF3000	20.0 - 24.0m <sup>2</sup>	17.6Ω	200.0m

If the top of the finished floor covering is greater than 30mm from the floor heating cable then Livella should be consulted regarding the Wattage to be applied per square meter.

### Technical Specifications

Voltage	230-240	Lead Length	3m
Cable Diameter	3.0mm	Watts/Metre	15
Cold Lead Diameter	6.0mm		
Standards	IEC 60800: 2009	IP Rating	IPX7
Cable Construction	<ul style="list-style-type: none"> <li>Sheath Insulation - Red PVC (105<sup>o</sup>)</li> <li>Primary Insulation - White XLPE (105<sup>o</sup>)</li> </ul>	<ul style="list-style-type: none"> <li>Woven Braid - Copper</li> <li>Conductor - Single</li> </ul>	

# installation checklist

Installation of this heating system is simple and straightforward. However, it is important that you adhere strictly to the instructions in this guide as well as to any current building and electrical regulations that may apply.

## Electrical Regulations

In certain Australian states the installation of a floor heating system may constitute prescribed electrical work and must be performed by a qualified tradesperson.

In New Zealand, floor heating systems can be installed by any competent person. However, connection of the thermostat must be performed by a licensed electrician.

## Electrical Preparation

All floor heating systems must be connected to an RCD protected circuit.

## Heating Selection

Use the Sizing Guide to ensure that the correct heating cable has been supplied for the area to be covered.

Areas larger than 24m<sup>2</sup> can be heated using multiple cables connected to a single thermostat and relay.

## Compatible Products

Use only glues, adhesives and other flooring products that are expressly compatible with heating systems. Contact the relevant manufactures for any specific instructions.

## Subfloor Preparation

Concrete subfloors must be completely cured as per the manufacturer's written specifications.

Ensure that the subfloor is clean, level and completely dry prior to installation.

The subfloor must be rigid and capable of carrying the ultimate weight of the floor coverings and contents of the room without any movement. Otherwise, first install a fiber cement underlay.

Whenever possible, fix the cables prior to the application of waterproofing products.

## Cable Fixing

Do not fix heating cables under permanent floor mounted fixtures. Do not cut, join or shorten the cable at any time. If necessary, first contact the customer care team for customisation instructions. Adhere strictly to the calculated cable spacing. At no time should the cable cross or come within 50mm of another run.

Do not unnecessarily cross the cable over expansion joints.

## Cold & Sensor Leads

The temperature sensor lead must not cross over or under the heating cable.

Position the cold lead so that the black cable connection remain fixed to the floor.

No part of the heating cable must enter the wall.

## Protect the Cables

Take due care when working over the heating cable. Do not rest heavy objects directly on the cable and avoid all unnecessary foot traffic.

Connect an installation monitor (damage alarm) to the cold lead and leave connected until the thermostat is fitted.

## Electrical Connection

Megger the heating cable at 1000V prior to connection to the thermostat and electrical supply.

Measure the resistance of the heating cable, checking it against the Sizing Guide.

## Warranty Application

A warranty application must be lodged within 30 days of installation. Contact Livella by phone, fax or email for additional copies or visit the website for more information.


Terms and Conditions apply.

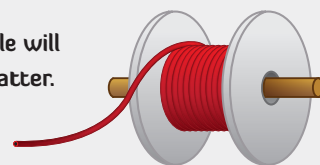
## First-time Operation

The floor heating system must not be used until the floor coverings and adhesives are completely cured.

Always observe the floor covering manufacturer's operating temperature recommendations.

## Installation Tip

 Spooling on an axle will allow cables to lay flatter.



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