



COSY[®]
F L O O R

Installation Guide

Cable System
Edition 3

Contents & Quick Guide

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Installer Tips



DO

- Check resistance before, during and after installation. (use digital multi-meter)
- Use circuit fault detector throughout installation.
- Apply reinforcing joint tape at seams. (or follow manufacturer's recommendations)
- Ensure floor surface is dust free.
- Install finished flooring as soon as possible after heating system is installed.
- Install & provide power in accordance with your local electrical codes and standards.
- Register your heating system immediately after install to retain your lifetime warranty.
- Ensure the cable is completely encapsulated in thinset mortar or self-leveling cement prior to installing flooring.

DON'T

- Forget to install heat sensor wire included with thermostat.
- Install heating cables closer than 6" to toilet flange.
- Scrape, sand, or sever wires in any way.
- Hit trowel or other sharp object on CosyFloor cable.
- Install cables closer than 2" to each other.
- Cross cables, thermostat sensor, or power lead.
- Use knife to clean grout lines.
- Open splices, cut or modify cable in any way.
- Bend the connection between the black cold lead and the yellow heating cable

cosyfloor cable system installation guide

877.757.8930
cosyfloor.ca

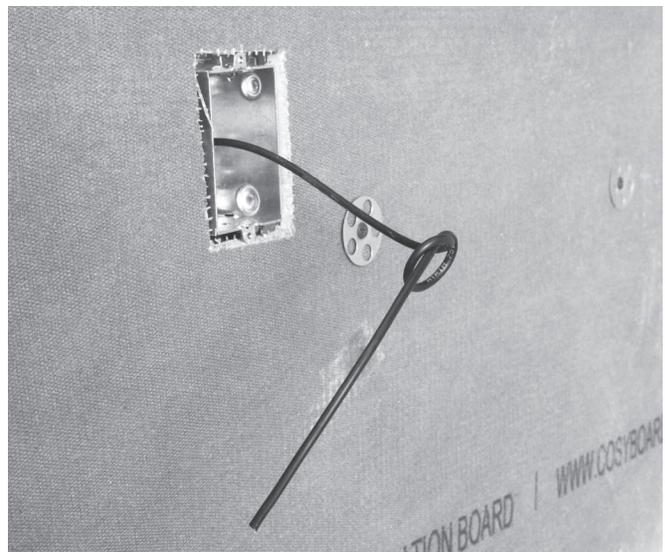


1. Electrical Rough-In

1. Install a suitable power supply to a single gang box at the desired location for thermostat.
2. Run a conduit from the electrical box down to subfloor & leave a pull wire inside conduit. (some areas require a separate conduit for thermostat sensor wire-check local codes)

Watchpoint

The installation must be performed in accordance with all National and Local Building & Electrical Codes and any local amendments. Turn off the electrical supply to avoid risk of electric shock.



2. Subfloor Preparation

1. Ensure that the subfloor does not have flex or movement.
2. Ensure subfloor is dust free.



3. Sizing Guide

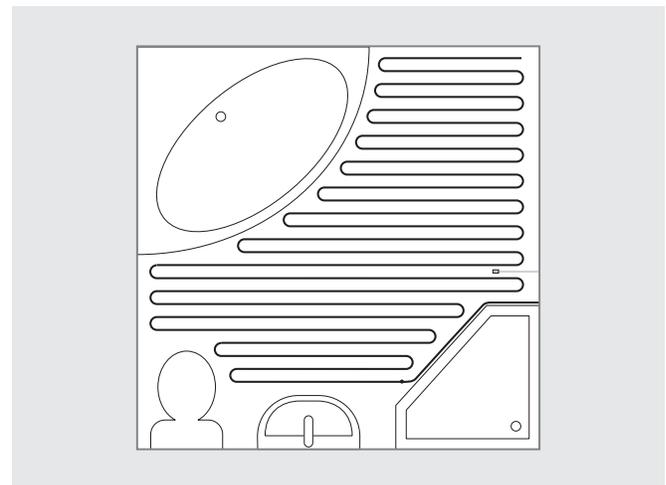
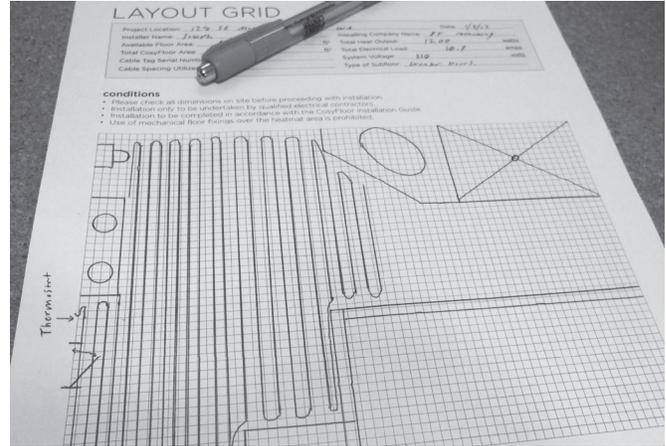
1. Measure floor area to be heated & determine square footage of heating cable needed. Do not install heating cables under any fixed furniture. (eg: vanity units)
2. Be sure to leave area close to toilet flange free of heating cables (6" radius). It is recommended that heating cables are installed 4" away from all walls.
3. Standard spacing of 3" is recommended for most areas. For high heat loss areas, use cable spacing of 2". (floors over unheated crawl spaces or non-insulated concrete slabs)

4. Layout

1. The yellow heating cable must NEVER cross at any point—this includes the thermostat sensor probe wire.
2. The simplest way is to run the cable the length of the room with the fixing strips fastened across the width of the room.
3. Make sure the thermostat floor sensor is able to be installed midway between 2 heating cables without crossing them.

5. Resistance Test (Before Installation)

1. Using a digital multi-meter, measure the resistance between the power leads (insulated wires). This reading should be within 5% of the OHM reading on the cable tag.
2. Using the digital multi-meter, measure the resistance between the Ground (un-insulated) cable and each of the power (insulated) leads. This should have no reading or .OL (open load). If you have an OHM reading at this point STOP AND DO NOT CONTINUE WITH INSTALLATION.
3. Measure OHM reading for thermostat floor sensor & ensure this reading is within the guidelines stated on the floor sensor cable tag.
4. Record these readings along with cable serial number, date and factory readings on the warranty application or online at <https://cosyfloor.ca/warranties/>



6. Cable Installation

1. Check that you have heating cable, fixing strips, tape, heatmat monitor, thermostat and floor sensor.
2. Using pull wire provided in conduit, feed the black cable lead up into the electrical junction box.
3. Leave all cable tags on cable and ensure they remain in electrical junction box.
4. Connect provided heatmat monitor to cable lead ends.
5. Chisel a channel in subfloor to recess the cold lead and heating cable splice.
6. **DO NOT BEND THE CONNECTION BETWEEN BLACK COLD LEAD AND YELLOW HEATING CABLE**
7. Screw fixing strips at both ends of the room where the cables will be fastened. (if installing over concrete, use a spray contact-cement type glue to fasten fixing strips)
8. Ensure the black cable lead (coming from conduit) is taped to the subfloor to avoid it moving. Ensure cable is free from any defect.
9. **NEVER ALLOW YELLOW HEATING CABLE TO GO UP WALL OR INTO CONDUIT.**
10. Starting at one end of the room, string the heating wires between the fixing strips clipping them in every 3". (or appropriate distance from 2-4")
11. Use provided tape to hold wires to floor as needed between rows of fixing strips.

Installer Tip



- **NEVER** use nails or cable fasteners to hold wires in place



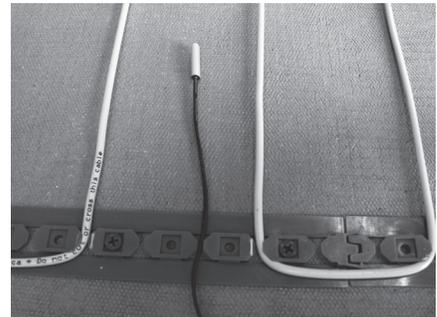
7. Floor Sensor Installation

1. Position end of sensor probe in the exact center between 2 heating cables.
2. Fasten floor sensor with tape provided as needed.
3. Feed floor sensor wire up wall to thermostat location.

Installer Tip



Ensure the sensor probe will not be in an area covered by a bath mat or area rug-these will trap the heat & give a false reading, causing the heating system to shut off prematurely.

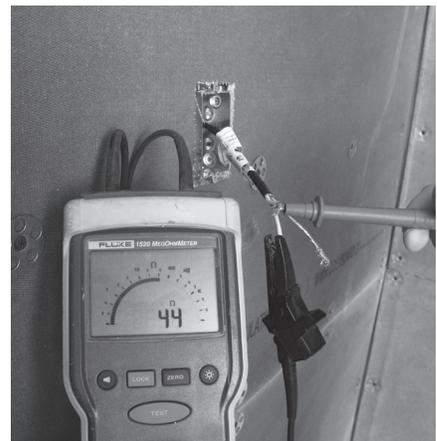


8. Resistance Test (During Installation)

1. Using a digital multi-meter, measure the resistance between the power leads (insulated wires). This reading should be within 5% of the OHM reading on the cable tag.

2. Using the digital multi-meter, measure the resistance between the Ground (un-insulated) cable and each of the power (insulated) leads. This should have no reading or .OL (open load). If you have an OHM reading at this point **STOP AND DO NOT CONTINUE WITH INSTALLATION.**

3. Measure OHM reading for thermostat floor sensor & ensure this reading is within the guidelines stated on the floor sensor cable tag.
4. Record these readings along with cable serial number, date and factory readings on the warranty application or online at <https://cosyfloor.ca/warranties/>



9. Floor Finish

1. Cover floor and heating cables with thinset mortar or self-leveling concrete compound in accordance with manufacturer's instructions.
2. Keep foot traffic & general construction to a minimum until tile flooring is installed.
3. Install new flooring using caution: don't drop flooring material, trowel, or scrape floor.
4. Ensure other personell are aware of the in floor heating system. (mark wall at conduit location "no nails", make sure plumbers don't need to drill any holes etc)

Installer Tip

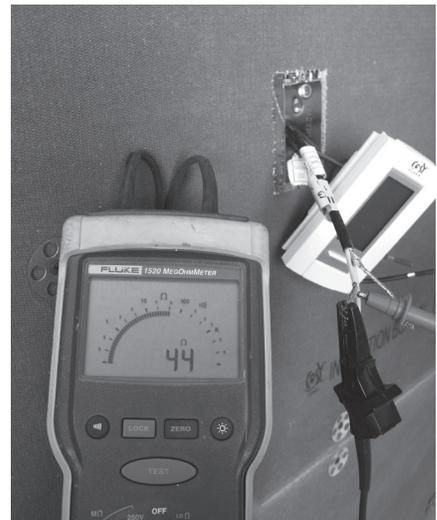


- DO NOT use a knife to clean grout lines.
- DO NOT have floor heat on during floor install.



10. Resistance Test (After Installation)

1. Using a digital multi-meter, measure the resistance between the power leads (insulated wires). This reading should be within 5% of the OHM reading on the cable tag.
2. Using the digital multi-meter, measure the resistance between the Ground (un-insulated) cable and each of the power (insulated) leads. This should have no reading or .OL (open load). If you have an OHM reading at this point **STOP AND DO NOT CONTINUE WITH INSTALLATION.**
3. Measure OHM reading for thermostat floor sensor & ensure this reading is within the guidelines stated on the floor sensor cable tag.
4. Record these readings along with cable serial number, date and factory readings on the warranty application or online at <https://cosyfloor.ca/warranties/>. Submit completed warranty form to CosyFloor for warranty registration.



11. Electrical Connection

Watchpoint

The installation must be performed in accordance with all National and Local Building & Electrical Codes and any local amendments. Turn off the electrical supply to avoid risk of electric shock.

Perform electrical connections in accordance with the thermostat installation guide provided.



Customer Handover (During Installation)

Once the installation is complete, provide homeowner with the CosyFloor Installation Guide Envelope containing:

1. This Installation Guide
2. Thermostat Programming Instructions
3. Copy of Completed Warranty Form
4. Layout Drawing

Troubleshooting

Thermostat does not switch on	1.	Ensure thermostat is switched to the "ON" position.
	2.	Check there is power to the thermostat, and the circuit breaker is switched on.
	3.	Ensure voltage between heatmat, thermostat and circuit breaker is the same. (either 110V or 220V)
Thermostat screen is blank	1.	Check there is power to the thermostat, and the circuit breaker is switched on.
Heatmat resistance does not correspond with measurement on CosyFloor factory test certificate	1.	Make sure your multi-meter is set to the correct OHM setting.
	2.	Ensure fingers are not touching the probes, as this will affect the resistance reading.
Heatmat is not heating up, and thermostat display says "GFI"	1.	Check thermostat connections.
	2.	Ensure ground conductor from heatmat is connected to ground, not to thermostat.
	3.	Perform GFI test as outlined in thermostat instructions in steps 4 8 and 10.
Heatmat is not heating up, and thermostat display says "ER"	1.	Check floor sensor is connected to correct terminals on thermostat.
	2.	Check there is no damage to floor sensor using a resistance test with a digital multimeter
	3.	If floor sensor is not installed, and the thermostat floor sensing mode is not being used, the thermostat will need to be used in ambient mode.

Warranty Information

CosyFloor's warranty covers the following:

- Thermostats are covered by a 2 year warranty.
- Heating cables are covered by a limited lifetime warranty.

It should be noted that in-floor heating guarantees are only entertained if the warranty application form is returned within 60 days of the floor installation. Lifetime warranty for CosyFloor products is only applicable for the original purchaser. For any warranty questions call: 1-877-757-8930 or email to: info@cosyfloor.ca



Warranty Application

Homeowner Details

Name	Surname
Phone Number	Email
Address	
City	Zip / Postcode

Installer Details

Name	Surname
Phone Number	Email
Where did you buy CosyFloor from?	

On-Site Resistance Test Results

Stage 1 Reading: Take the first reading prior to installing your CosyFloor system.

Stage 2 Reading: Take the second reading after the CosyFloor system is laid, but prior to flooring installation.

Stage 3 Reading: Take the third and final reading after the final floor covering is laid.

Stage 1

First Centrecore to Centrecore Ohm Reading*
First Centrecore to Ground Ohm Reading*
First Temperature Sensor Killiohm Reading*

Stage 2

First Centrecore to Centrecore Ohm Reading*
First Centrecore to Ground Ohm Reading*
First Temperature Sensor Killiohm Reading*

Stage 3

First Centrecore to Centrecore Ohm Reading*
First Centrecore to Ground Ohm Reading*
First Temperature Sensor Killiohm Reading*