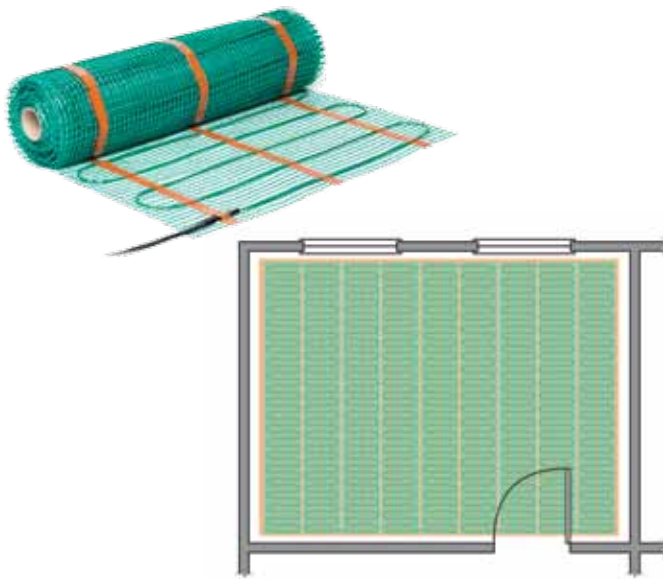


# GreenCable<sup>TM</sup>MAT

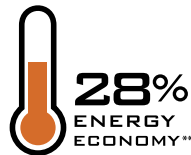


## Comfort, squared

The Green Cable<sup>TM</sup> Mat is perfect for square or rectangular rooms with no obstacles. It consists of a 3W cable with 7.6 cm (3 in) spacing on a self-adhesive substrate. Green Cable Mat is designed for installation under ceramic and natural stone flooring and can be used as a room's main or secondary heat source.

## Benefits of the Green Cable Mat

- Self-adhesive backing for easy installation
- Simplified installation: no return to the thermostat
- Solid mechanical joint for quick installation and durability
- Strong and reliable copolymer jacket
- Compatible with ceramic and natural stone coverings
- EMF-free (electromagnetic field)\*
- Does not dry the air nor spread dust or germs
- No maintenance required
- CSA approved (Canada and the US)
- Designed for installation in a wet environment (make sure that the installation complies with the local or regional electrical code)
- Manufactured entirely at the FLEXTHERM plant, with end-to-end quality control
- 25 year limited warranty

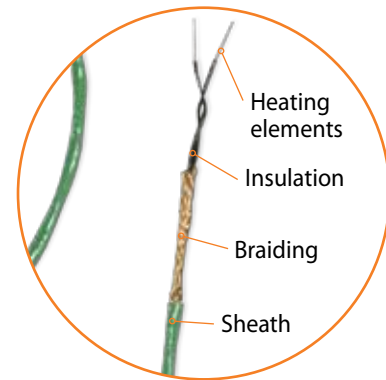


\* Based on the installation instructions included in the FLEXTHERM installation guide, the recorded EMF measurement is considered insignificant (between 0.25 mg and 0.5 mg).

\*\* In rooms heated with a FLEXTHERM floor heating system.

## Comfort that's quick to install

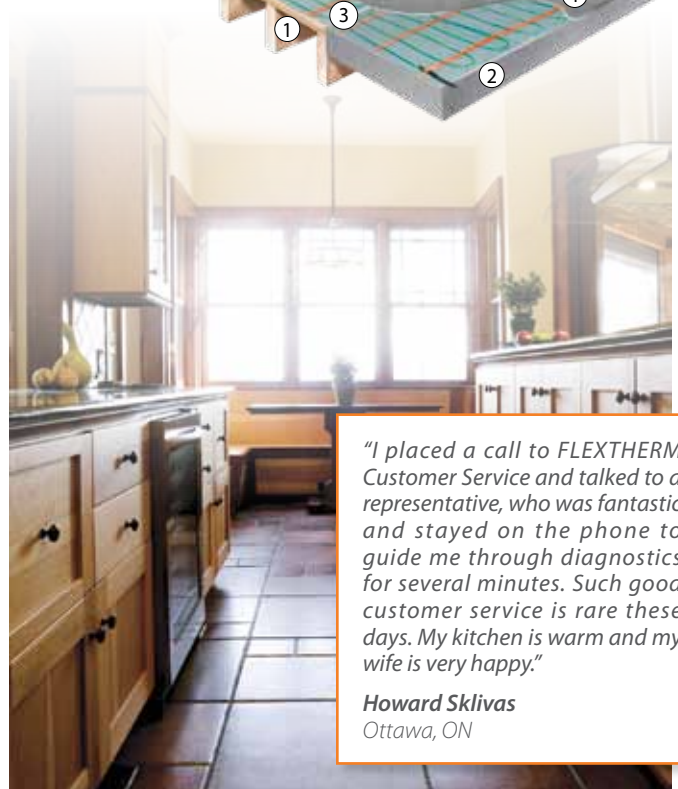
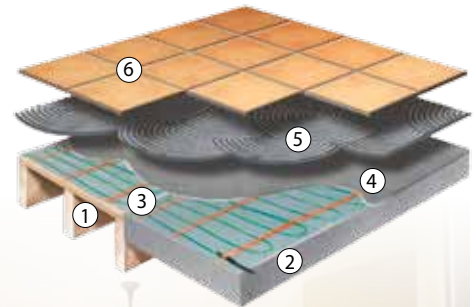
Integrated into the Green Cable Mat, the 3W heating cable consists of two twisted and paired heating elements, covered in copolymer. This innovation developed by FLEXTHERM uses ultra-resistant and high-performance components to provide you with complete comfort, peace of mind, a healthy environment and real energy savings.



## Floor coverings

The type of floor covering also has an influence on the choice of system output. Output of 129 W/m<sup>2</sup> (12 W/ft<sup>2</sup>) is reserved for ceramic and natural stone.

- ① Wood structure
- ② Concrete structure
- ③ FLEXTHERM's Green Cable Mat
- ④ Mortar or self-levelling underlayment
- ⑤ Adhesive
- ⑥ Floor covering



*"I placed a call to FLEXTHERM Customer Service and talked to a representative, who was fantastic and stayed on the phone to guide me through diagnostics for several minutes. Such good customer service is rare these days. My kitchen is warm and my wife is very happy."*

**Howard Sklivas**  
Ottawa, ON

## Compatibility of the Green Cable *Mat* with installation surfaces and floor coverings

Green Cable <i>Mat</i>		
	Floor covering	
Installation surface	Ceramic	Natural stone
Plywood	✓	✓
Smooth concrete <sup>1</sup>	✓	✓
Concrete panels	✓	✓
Ceramic	✓	✓
Acoustic membrane	✓	✓
Anti-fracture membrane	✓	✓
Scratch coat	✓	✓
Mortar bed <sup>1</sup>	✓	✓

<sup>1</sup> The concrete slab (or mortar bed) must be insulated to avoid heat loss from below. FLEXTHERM also recommends that all rooms supported by the concrete slab be equipped with a FLEXTHERM floor heating system to avoid perimeter heat loss.

### A warm mat

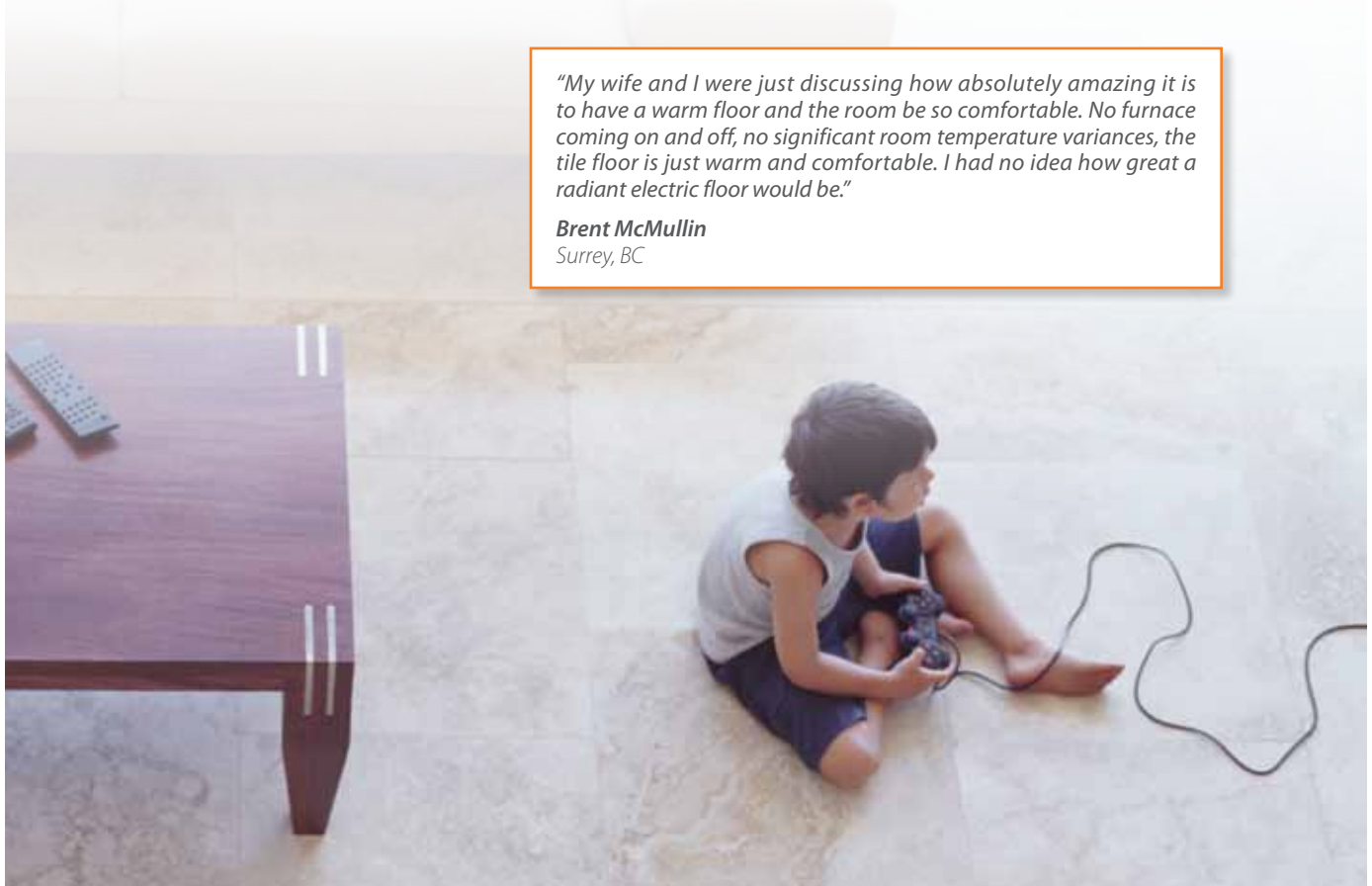
The Green Cable *Mat* has a standard width of 61 cm (24 in) and is available in a variety of lengths and with an output of 120 volts or 240 volts. It is also available in 208 volts on special order (minimum quantity required).

Electrical characteristics	
Standard voltage	120 and 240 volts (208 volts available upon request)
Output	129 W/m <sup>2</sup> (12 W/ft <sup>2</sup> )
Connection to thermostat	Simple installation: a single cold lead is connected to the thermostat (return feed on the same cable)
Cold lead	2.1 m (7 ft) Two conductors and grounding
Certification	CSA Canada: series type G and W space heating CSA US: series type C space heating Dry and wet environments
No significant electromagnetic field emission*	✓

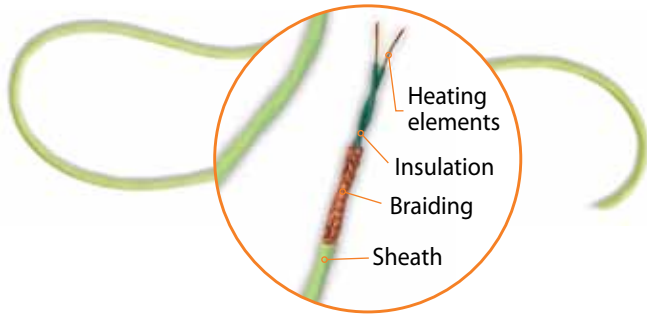
\* Based on the installation instructions included in the FLEXTHERM installation guide, the recorded EMF measurement is considered insignificant (between 0.25 mG and 0.5 mG).

*"My wife and I were just discussing how absolutely amazing it is to have a warm floor and the room be so comfortable. No furnace coming on and off, no significant room temperature variances, the tile floor is just warm and comfortable. I had no idea how great a radiant electric floor would be."*

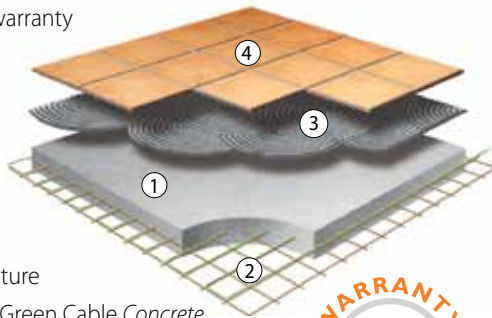
**Brent McMullin**  
Surrey, BC



# GreenCable CONCRETE™



- Loose cable that can be installed easily thanks to a quick and uniform anchoring system
- 5W cable producing 10 or 15W/ft<sup>2</sup>
- Bright colored product makes it easier to install on the construction site
- 20 year limited warranty



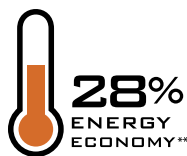
- Concrete structure
- FLEXTHERM's Green Cable Concrete (secured to the mesh)
- Adhesive
- Floor covering



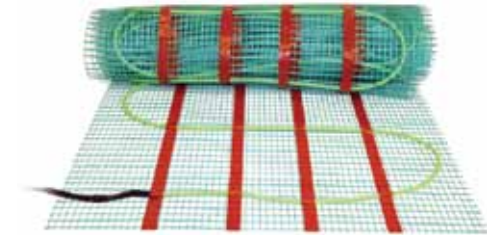
## EMBEDDING IN CONCRETE

### Concrete results

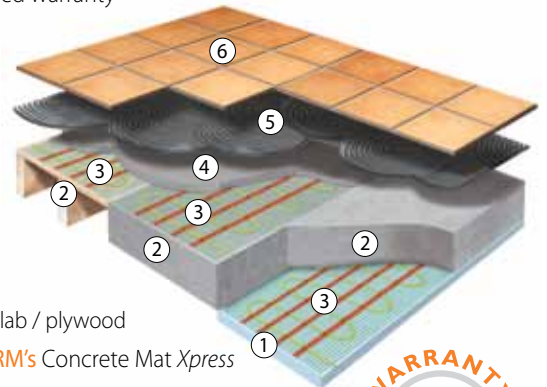
Installed in the concrete slab or under a concrete topping during construction, the Green Cable Concrete and Concrete Mat Xpress provide the ultimate in uniform comfort and generate major energy savings. These products use the concrete slab to spread heat more evenly for a longer period of time, with reduced heat loss, making them ideal for garages, basements, commercial buildings, condos and much more.



# NEW! CONCRETE MAT XPRESS™



- Can be easily installed on the insulation of the concrete slab, or on a concrete or plywood subfloor with a 1.5 inch topping
- 6W cable on a self-adhesive substrate with a 15 cm (6 in) spacing, producing 12W/ft<sup>2</sup>
- 20 year limited warranty



- Insulation
- Concrete slab / plywood
- FLEXTHERM's Concrete Mat Xpress
- Concrete topping
- Adhesive
- Floor covering



## Why embed a system in concrete?

- Perfect for construction projects in basements, garages, commercial buildings, etc.
- Increased thermal mass effect and heat is spread more evenly due to the exceptional conductivity of the concrete mass
- No maintenance cost
- Does not increase the floor height
- Compatible with most floor coverings
- Designed specifically to be embedded in concrete
- Ideal alternative to hydronic systems
- Easy installation: no return to the thermostat
- EMF-free (electromagnetic field)\*
- Designed for installation in a wet environment (make sure that the installation complies with the local or regional electrical code)

\* Based on the installation instructions included in the FLEXTHERM installation guide, the recorded EMF measurement is considered insignificant (between 0.25 mG and 0.5 mG).

\*\* In rooms heated with a FLEXTHERM floor heating system.



## Invisible, but nothing to hide

The Green Cable *Concrete* and the Concrete Mat *Xpress* are available in a wide range of lengths for maximum coverage. The Green Cable *Concrete* includes adhesive tape to secure the heading cable to the wire mesh in the slab while the Concrete Mat *Xpress* includes plastic anchors to secure the mat to the rigid insulation.

## Steadfast, lasting comfort

The heating cable consists of two paired and twisted heating elements covered in copolymer. This innovation developed by FLEXTHERM ensures that the cable remains free of electromagnetic fields.\* The cable is built with ultra-resistant and high performance components to provide you with complete comfort, peace of mind, a healthy environment and real energy savings.

## Floor coverings

The type of floor covering also has an influence on the choice of system output. Output of 161 W/m<sup>2</sup> (15 W/ft<sup>2</sup>) is reserved for ceramic and natural stone; 108 W/m<sup>2</sup> (10 W/ft<sup>2</sup>) and 129 W/m<sup>2</sup> (12 W/ft<sup>2</sup>) lets you choose almost any floor covering. Refer to the table below for all the details.

## Compatibility of the Green Cable Concrete and Concrete Mat Xpress with floor coverings

Green Cable Concrete Concrete Mat Xpress			
Floor covering	Spacing/Power		
	Green Cable Concrete		Mat
	161 W/m <sup>2</sup> (15 W/ft <sup>2</sup> )	108 W/m <sup>2</sup> (10 W/ft <sup>2</sup> )	129 W/m <sup>2</sup> (12 W/ft <sup>2</sup> )
Ceramic	✓	✓	✓
Natural stone	✓	✓	✓
Engineered wood <sup>1</sup>		✓	✓
Vinyl <sup>1</sup>		✓	✓
Floating floor <sup>1</sup>		✓	✓
Linoleum <sup>1</sup>		✓	✓
Parquet <sup>1</sup>		✓	✓
Carpet <sup>1</sup> (without rubber backing or carpet padding)		✓	✓

<sup>1</sup> For floor coverings other than ceramic and natural stone, always check with the manufacturer of the floor covering first, to make sure its product is compatible with FLEXTHERM floor heating systems.

## Applications

Concrete slab <sup>1</sup>	<ul style="list-style-type: none"> <li>✓ Green Cable <i>Concrete</i> (cable secured to the wire mesh in the slab)</li> <li>✓ Concrete Mat <i>Xpress</i> (secured to the rigid insulation under the slab)</li> </ul>
Plywood or concrete subfloor	<ul style="list-style-type: none"> <li>✓ Concrete Mat <i>Xpress</i></li> </ul>

<sup>1</sup> The concrete slab (or mortar bed) must be insulated to avoid heat loss from below. FLEXTHERM also recommends that all rooms supported by the concrete slab be equipped with a FLEXTHERM floor heating system to avoid perimeter heat loss.

## Electrical characteristics

Standard voltage	240 volts (208 available on special order)
Output/linear m (ft)	<b>Green Cable <i>Concrete</i></b> 16.4 W/m (5 W/ft) <b>Concrete Mat <i>Xpress</i></b> 19.7 W/m (6 W/ft)
Output by type of installation	<b>Green Cable <i>Concrete</i></b> 161 W/m <sup>2</sup> (15 W/ft <sup>2</sup> ) at a 10 cm (4 in) spacing 108 W/m <sup>2</sup> (10 W/ft <sup>2</sup> ) at a 15 cm (6 in) spacing <b>Concrete Mat <i>Xpress</i></b> 129 W/m <sup>2</sup> (12 W/ft <sup>2</sup> )
Connection to thermostat	Simple installation: a single cold lead is connected to the thermostat (return feed on the same cable)
Certification	CSA Canada: series type G and W space heating CSA US: series type C space heating Dry and wet environments
No significant electromagnetic field emission*	✓

\* Based on the installation instructions included in the FLEXTHERM installation guide, the recorded EMF measurement is considered insignificant (between 0.25 mG and 0.5 mG).



*"I have been in the tile and stone trade for 28 years now. Back in the day, in-floor heat was predominately hydronic, which meant wire mesh and floating mud floors. It was costly, labor intense and physically demanding. FLEXTHERM is the answer! Lay out the installation gauges, string the wire and continue to skim coat, or start the floor installation. It's almost too easy and time-saving!"*

**Jim Stearle**  
Milwaukee, WI