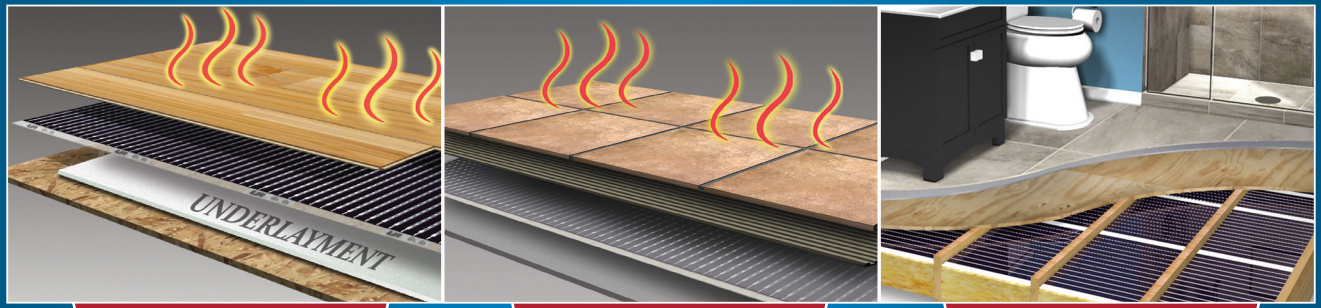
QUIETwarmth®

INTRODUCTION TO THE WORLD'S EASIEST RADIANT FLOOR HEAT SYSTEM



FLOAT | TILE | JOIST

REFERENCE GUIDE

Quick reference guide only,
refer to the instruction manual for full installation details

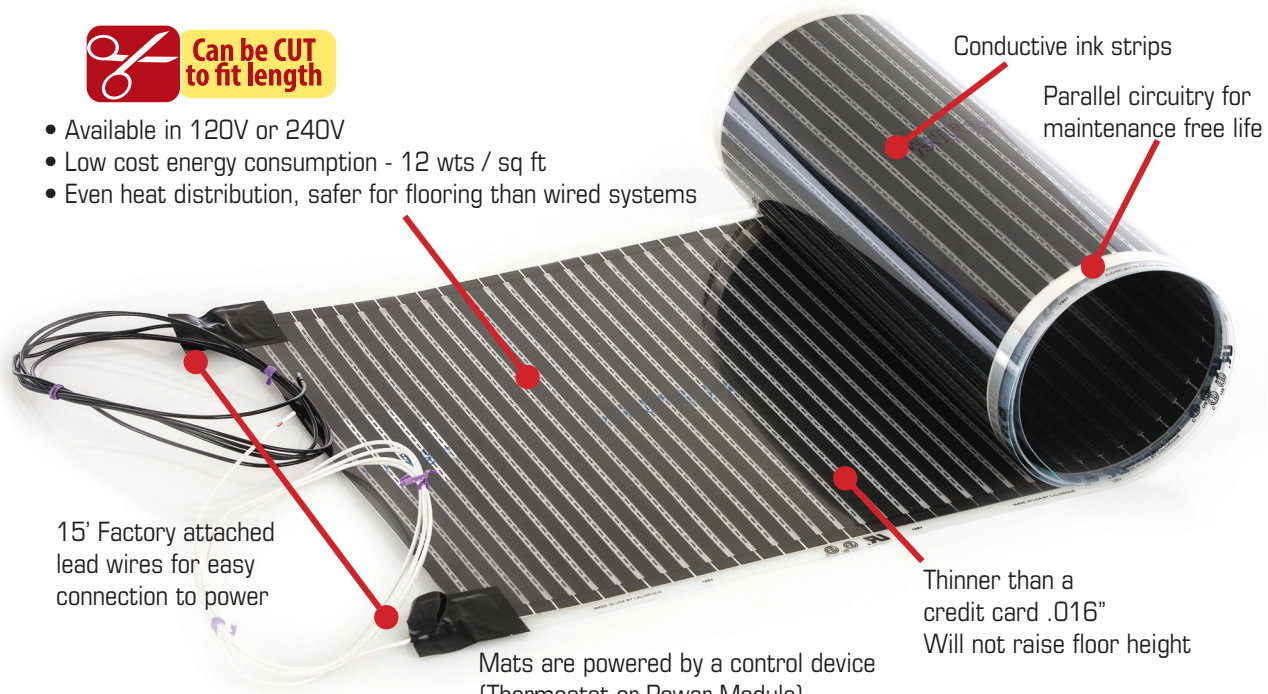
QUIETWARMTH FLOAT

Thin • Flexible • Easy • Safe

QuietWarmth Float radiant heat mats use conductive ink heating elements that deliver an even, gentle, and energy efficient heat under floating or click-together flooring – *vinyl plank, laminate, engineered wood, and many other floating flooring options 4mm or thicker.* QuietWarmth Float is approved for use with pad-attached flooring.

Can be CUT to fit length

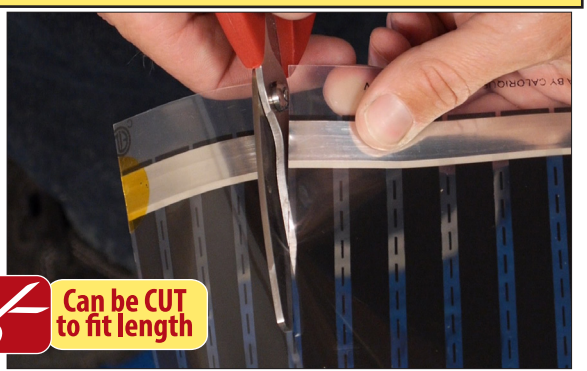
- Available in 120V or 240V
- Low cost energy consumption - 12 wts / sq ft
- Even heat distribution, safer for flooring than wired systems



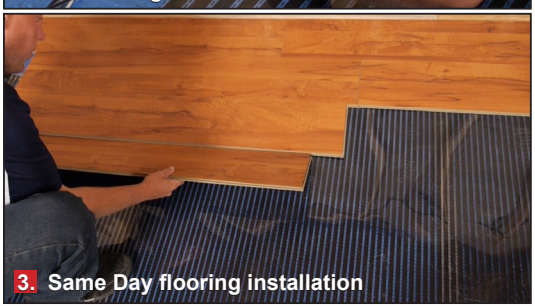
The QuietWarmth Float radiant heat mats are thin and flexible - thinner than a credit card. This allows for the mats to be installed directly below the flooring, without the need for self-levelers. Easy, mess-free installation saves time and money!

We recommend pairing QuietWarmth Float with an underlayment from our QuietWalk family of products. The added thermal insulation below the mats will direct the heat towards the floor, increasing the efficiency.

Choose the appropriate QuietWalk product based on type of flooring used.



The design of QuietWarmth is constructed with parallel circuitry, meaning mats can be cut to length on dashed lines between solid black bars. Mats cannot be cut to width, at an angle, or on a curve.



NOTE: This page refers ***ONLY*** to the **QuietWarmth Float**

QUIETWARMTH TILE

Thin • Flexible • Easy • Safe

QuietWarmth Tile radiant heat mats use conductive ink heating elements to deliver an even, gentle, and energy efficient heat. QuietWarmth Tile mats are encased in an anti-fracture membrane with a very easy-to-install peel & stick backing. These mats are designed for traditional tile and glue-down flooring.

Conductive Ink Bars

Thin design, will not raise floor height!

Anti-fracture membrane allows thinset and adhesives to properly adhere.

Parallel Circuitry for maintenance free life

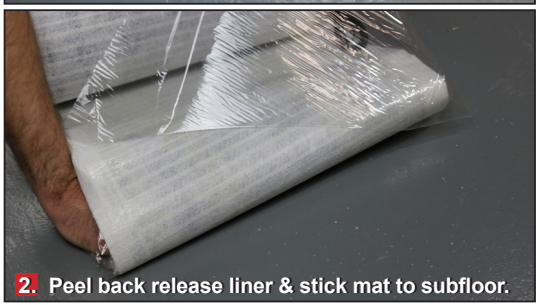
Can be CUT to fit length

- Available in 120V or 240V
- Low cost energy consumption - 12 wts / sq ft
- Even heat distribution for tile floors

Mats are powered by a control device (Thermostat or Power Module)

Easy to install quick connections with 15' factory attached lead wires for power supply


1. Cut mat to length and install insulating discs.


2. Peel back release liner & stick mat to subfloor.


3. Seal sides of mat.

The QuietWarmth Tile radiant heat mats are thin, flexible, and cleverly designed with an anti-fracture encapsulating skrim. The white skrim promotes superior bond with thinsets and adhesives. The unique peel & stick backing has a clear liner that when removed reveals a heavy-duty adhesive. This conveniently eliminates the need to trowel extra thinset or glue to adhere the mat to the subfloor. No heat cables or clips means no self-levelor to pour; saving time & money, and lowering the height of the finished flooring.

QuietWarmth Tile mats should be installed over a clean, stable subfloor that meets flooring manufacturer's guidelines. The easy install process allows for same-day flooring installation!

4. Same day flooring installation.

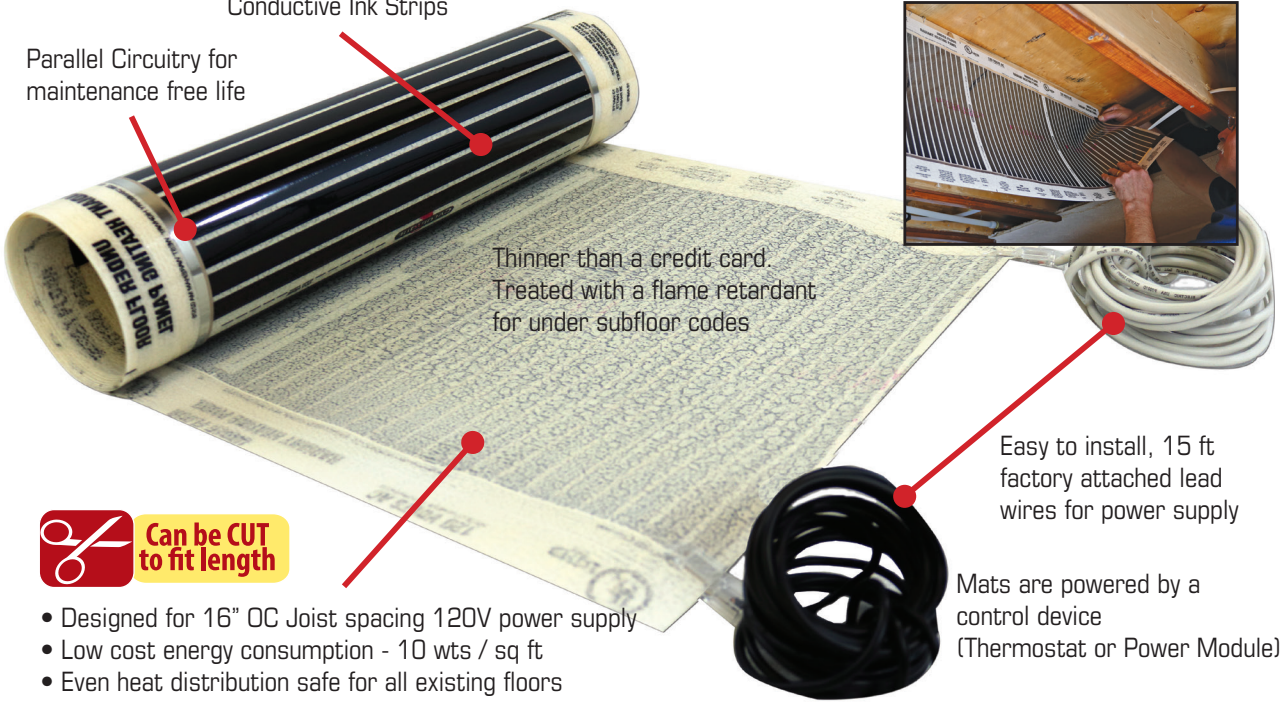
NOTE: This page refers ***ONLY*** to the **QuietWarmth Tile**

QUIETWARMTH JOIST

Thin • Flexible • Easy • Safe

QuietWarmth Joist radiant heat mats use thin conductive ink to transfer even, gentle heat to warm your new or existing floors. QuietWarmth Joist mats are installed under the subfloor, between the joists to add heat without removing existing flooring. Safe for nearly any type of flooring- ceramic tile, original hardwoods, carpet, and more!

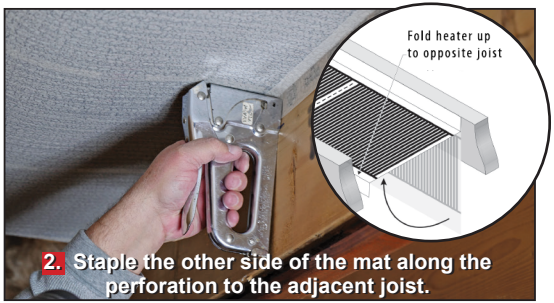
Retrofit Under Floors!



Can be CUT to fit length

- Designed for 16" OC Joist spacing 120V power supply
- Low cost energy consumption - 10 wts / sq ft
- Even heat distribution safe for all existing floors

INSTALLING QUIETWARMTH JOIST



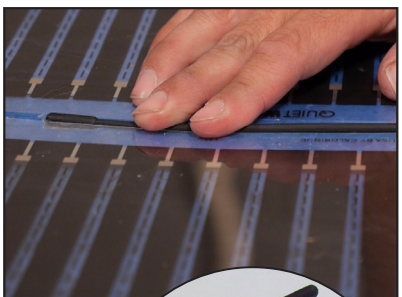
The QuietWarmth® Joist radiant heat system is a retrofit heating system that is installed under the subfloor, between the 16" OC joists, to provide added warmth and comfort to new or existing flooring. It can be used under most floor covering types, including carpet. Imagine being able to safely add heat to original hardwood flooring!

Installation is a breeze! QuietWarmth Joist mats can be cut at the dashed lines to remove a section and shorten the mat. Once the mats are appropriately fitted, staple them into position between the joists and complete the electrical connections. Install insulation below the QuietWarmth Joist mats to efficiently heat the flooring above.

NOTE: This page refers ***ONLY*** to the **QuietWarmth Joist**

THERMOSTATS

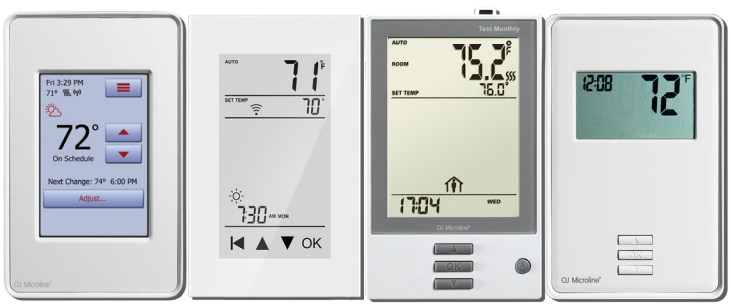
QuietWarmth Thermostats- QuietWarmth radiant heat mats are operated by a thermostat, which directs power as needed to acheive desired temperature. All thermostats come with a 10' floor sensor to be installed near the heat mats, which sense the temperature of the floor and relay the information back to the thermostat. **National Electrical Code** requires that electric radiant floor heat systems be protected by a **GFCI** (ground-fault circuit interrupter). All QuietWarmth thermostats have a built-in GFCI. Each QuietWarmth Thermostat is wired to a dedicated 20A standard circuit breaker.



Floor Sensor

*Place the sensor next to the long edge of the QuietWarmth mat for most accurate readings.

All thermostats are dual-voltage meaning they can be used with either the 120 volt or 240 volt heating mats (but not both).



THERMPROTOUCH Enhanced Security Smart Home/WiFi Programmable

THERMAEGH Smart Home/Wifi Programmable

THERMPRO Programmable

THERMST-D Non-Programmable

THERMOSTATS

Multiple QuietWarmth mats can be powered by one thermostat. The coverage area one thermostat can power is dependent on the voltage of the mats.

120 volt system = 120 sq ft per thermostat
240 volt system = 240 sq ft per thermostat

QuietWarmth Power Module- If the desired heated area in the room is larger than the coverage of one thermostat, a Power Module can be incorporated. A power module operates as a relay point for the thermostat, so that all mats in the area are operational at the same time.

HOW IT WORKS

The Power Module takes orders DIRECTLY from the main thermostat without having a floor sensor itself.

When the thermostat activates to power the QuietWarmth mats, it nudges the Power Module to kick on as well. The Power Module is wired much like a regular thermostat, on its own dedicated 20A standard circuit breaker. A small gauge wire is used to connect the thermostat to the Power Module. Each Power Module is capable of powering 120 sq ft of 120V mats; or 240 sq ft of 240V mats. Multiple Power Modules can be used in relay.

HOW IS IT WIRED INTO THE HOME'S ELECTRICAL SYSTEM?

QuietWarmth Mats are available in 120 volt or 240 volt versions; in either case they need to be connected to a thermostat on a dedicated 20 amp circuit, on a standard circuit breaker. An electrician will run wire from the breaker box to a QuietWarmth thermostat located in the room where the mats are being installed. The thermostat will then supply power to the mats through the 15' lead wires attached to the mats.

DO I NEED A THERMOSTAT FOR EACH MAT?

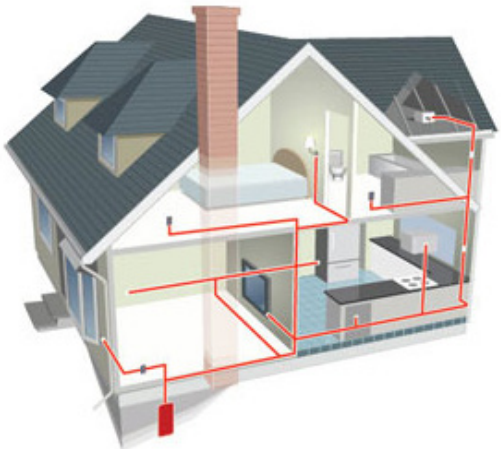
No, each thermostat can control multiple mats. On a 120 volt system each thermostat can control up to 120 square feet of heated mats, and on a 240 volt system each mat can control up to 240 square feet of heated mats. When installing multiple mats, the lead wires from all mats (each mat has two 15' lead wires) are connected in a junction box in parallel with a pigtail running from the junction box to the thermostat box.

CONNECT THEM IN PARALLEL WITH A PIGTAIL?

Your electrician will know what that means. If you really want to know, see **Figure 1**.

WHAT IF I WANT TO HEAT AN AREA LARGER THAN THE LIMIT OF THE THERMOSTAT?

Divide the area into heating zones of roughly equal size, no greater than 120 square feet for 120 volt installations or 240 square feet for 240 volt installations. Each heating zone will require a thermostat or power module and a dedicated 20 amp circuit.



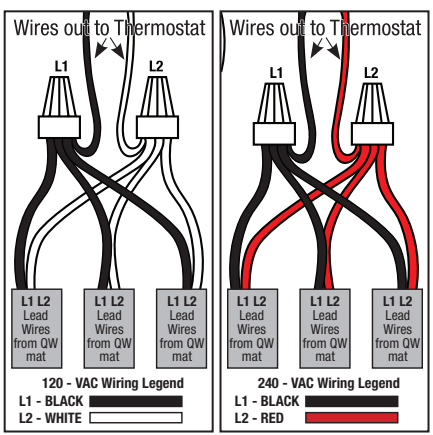


Figure 1

WHAT IS THE WARRANTY OF THE QUIETWARMTH RADIANT HEAT PRODUCTS?
QuietWarmth Radiant Heat systems carry a limited 25 year warranty.
QuietWarmth thermostats carry a 3 year replacement warranty.

IS THE QUIETWARMTH RADIANT HEAT SYSTEM A LOW EMF PRODUCT?

Electromagnetic Field (EMF) is referred to as Electromagnetic radiation. Yes, all QuietWarmth mats have low output, lower than many common household products used your home, for example, a toaster oven.

HOW LONG AFTER THE SYSTEM IS ENTIRELY CONNECTED WILL IT TAKE TO WARM THE FLOOR?
After turned on, the floor should get up to full controlled temperature within 24-48 hours, depending the flooring surface and subfloor. The QuietWarmth Thermostat will maintain the desired temperature on the set schedule (if a programmable thermostat is used).

WILL QUIETWARMTH HARM MY NEW FLOOR IN ANY WAY?

QuietWarmth is a gentle heating system, offering even heating across the entire mat. The mats are engineered not to exceed 85° F, so the heat output will not exceed what is deemed safe by flooring manufacturers. However, care must be taken to not “trap” the heat, which can cause excessive heat accumulation.

CAN I PLACE FURNITURE AND RUGS OVER THE TOP OF THE HEATED AREA?
To avoid build-up of excess heat, do not place appliances, flat bottom furniture or heavy area rugs on top of the heated floor area. Any furniture used over heated area should have “legs”, offering an airgap of roughly 2”.

PLANNING THE LAYOUT

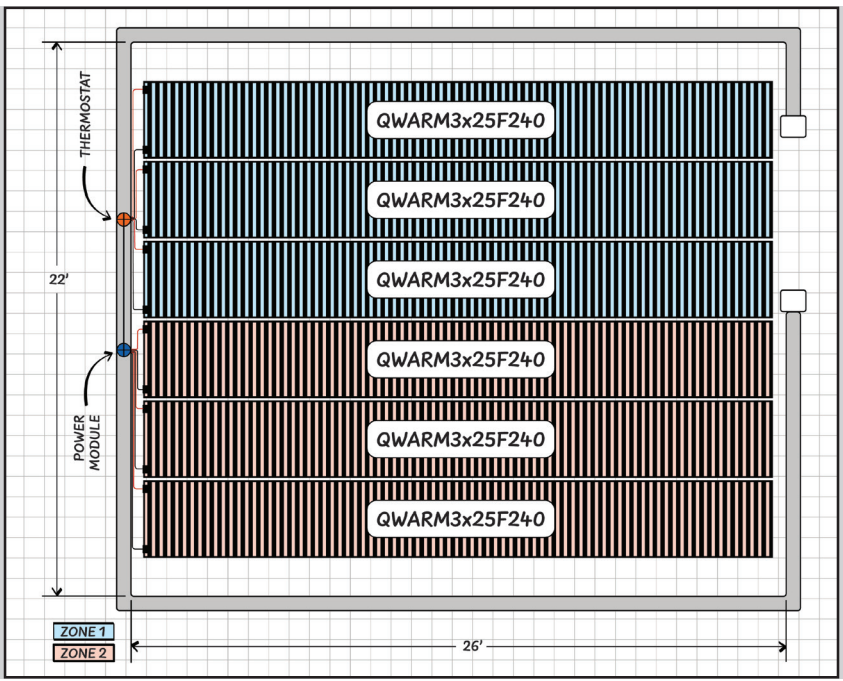
FULL COVERAGE:
Draw a picture of the room to be heated, including all obstructions such as cabinets, appliances, bathroom fixtures (shower, toilet, sink, etc), floor vents, flat bottom furniture (bookcase, filing cabinets, etc). It is helpful to do this on graph paper so your drawing is to scale. Draw in mats to cover the room, utilizing different sizes to fill the area. Keep in mind there should be a 6" buffer zone between the edge of the mats and those obstructions. Mats can be cut to length, but not width. If the area exceeds recommended square foot coverage for one thermostat, divide the room into roughly equal "zones". Each zone requires a thermostat or power module.

Thermostat Coverage:
- **120 sf of 120V mats**
- **240 sf of 240V mats**
- **Add power modules to expand coverage**

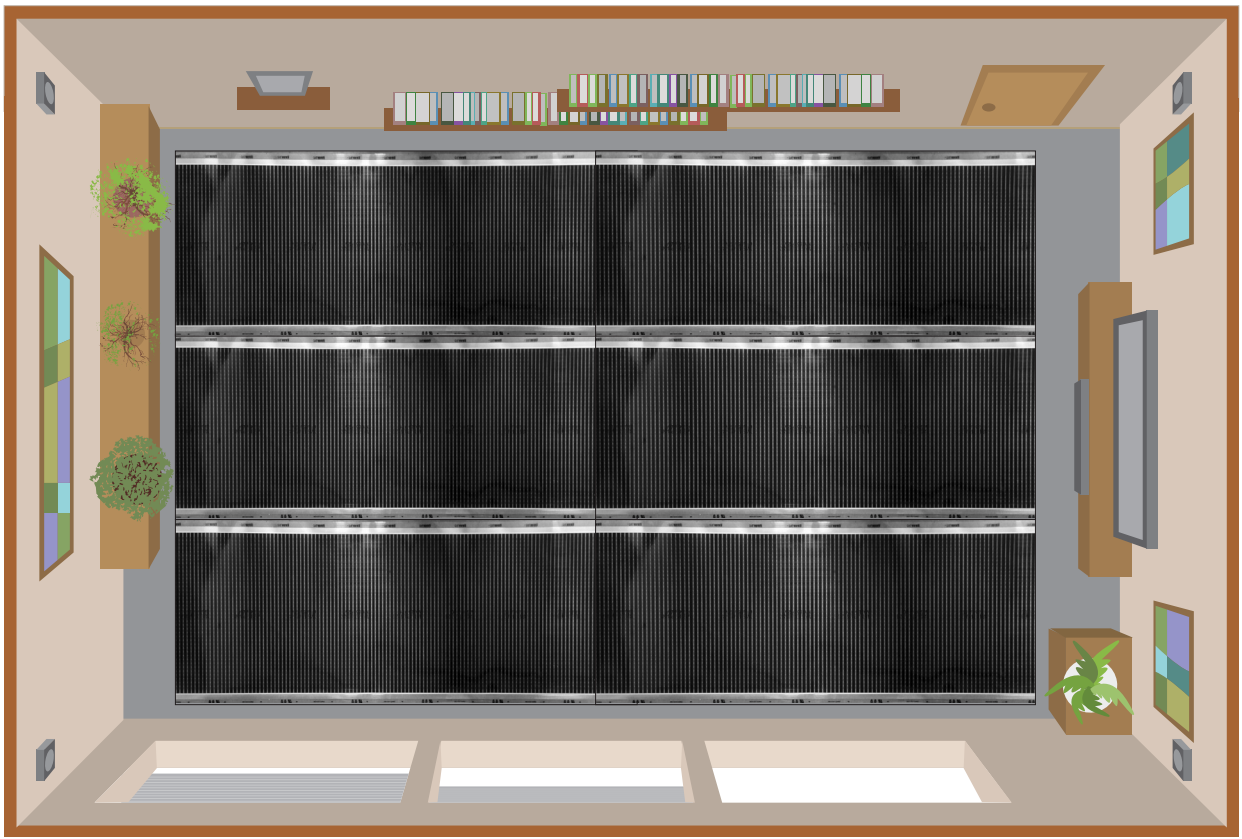
Power Module Coverage
- **120 sf of 120V mats**
- **240 sf of 240V mats**

Power consumption:
Total Sq Ft of heated area x 12 Watts per sf/1000 x local cost per kilowatt hour electric rate.

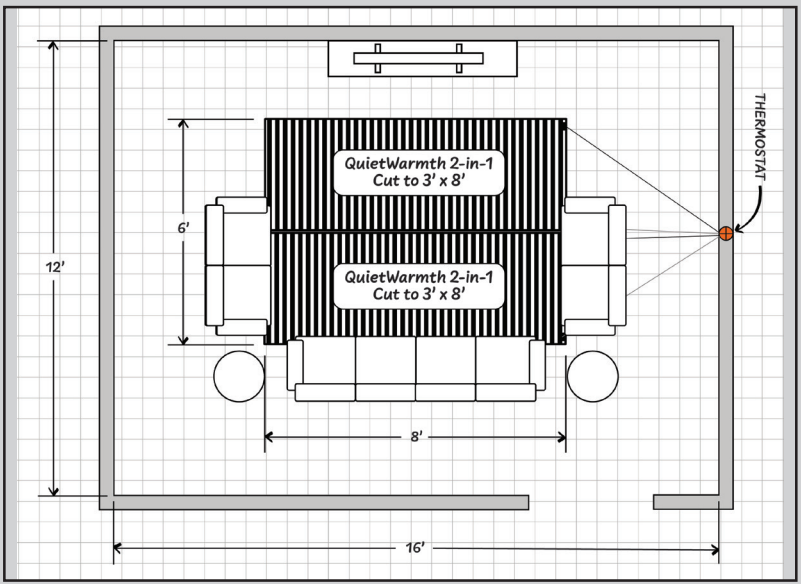
Example:
450 Sq. Ft x 12 Watts/sf = 5400
5400W/1000kW/W = 5.4kW
5.4kW x $0.16/kWh
(National average cost)
$0.86 per hour for first hour to reach temp, then about half that for each hour thereafter



FULL COVERAGE
WALL TO WALL



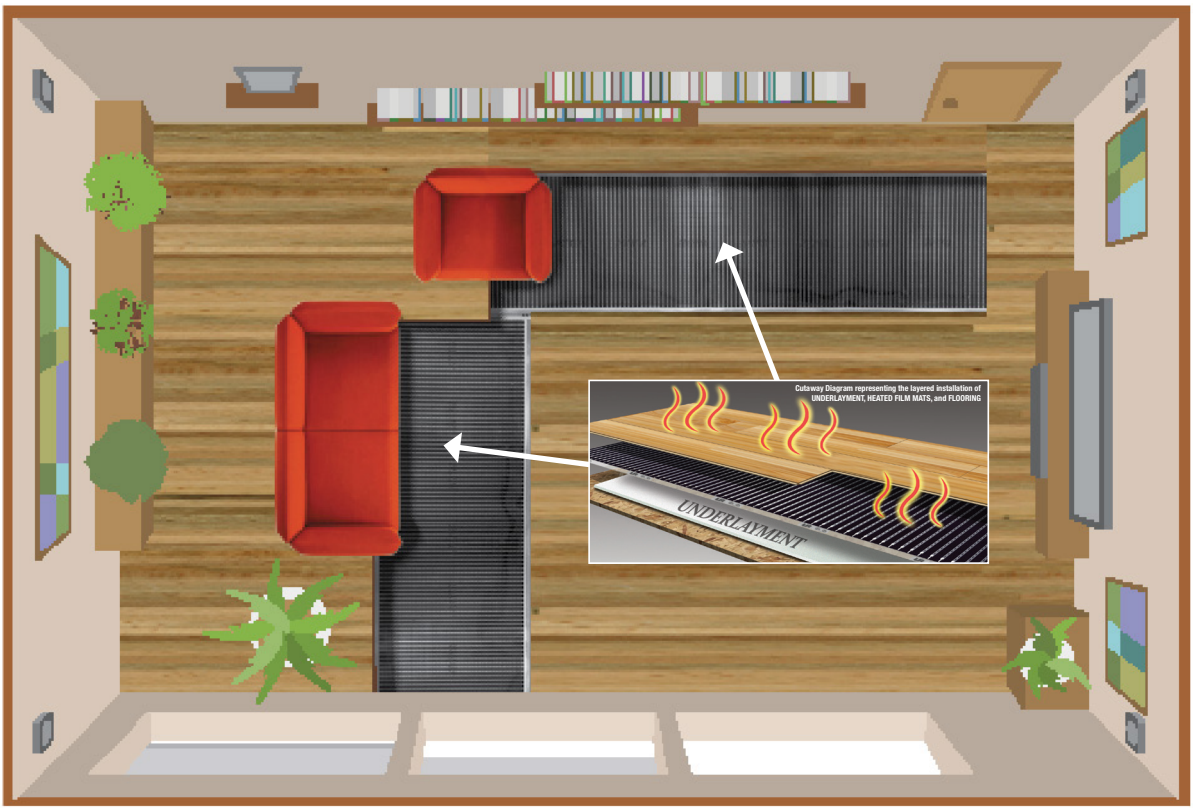
Spot Heat: Mats can be placed wherever heat is desired

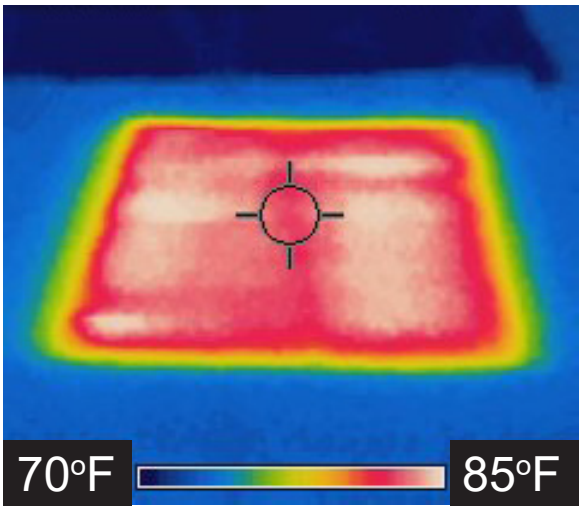


Living room example:
Install mats in seating area to keep feet warm and cozy.

SPOT HEAT COVERAGE:
QuietWarmth is thin and light, which allows the mats to be placed in key areas where warmth is desired. The various sizes allow for easy planning for any configuration, and QuietWarmth mats can be cut to length, offering unlimited versatility.

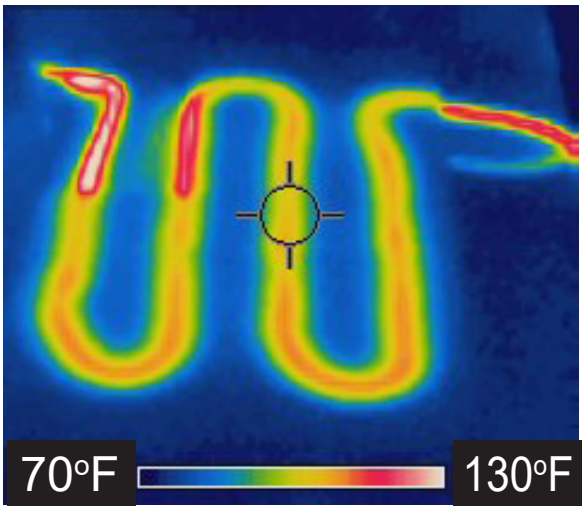
SPOT HEAT
PRECISE COVERAGE





QUIETwarmth®

The mats heat up evenly and will ***NEVER*** create unsafe hot spots to the click together flooring.



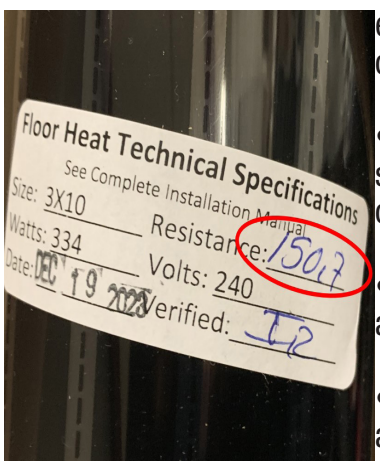
Radiant Heat Mesh Mat

Wire will distribute heat to uncovered areas, creating unsafe hot spots for flooring.

- The Float and Tile mats are available in either 120V or 240V; Joist is for 16” OC spacing in 120V only.

- The 120V mats require a 120 volt power supply, and the 240V mats require a 240 volt power supply

- The mats have two 15’ lead wires connected to one end of the mat. One black wire and one white on the 120V mats; one black and one red wire on the 240V mats. The Float 2-in-1 mats have lead wires on both ends and must be cut, resulting in two customized mats with one set of lead wires each.



- The thermostat can be used for either 120 volt or 240 volt systems, but not both. The thermostat is not a transformer, the output voltage is the same as the input voltage

- The service tag on each mat shows the wattage, voltage, amperage, and ohms range for that mat

- The thermostats are rated at 15 amps, and must be on a 20 amp dedicated circuit from the main electrical box.

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- The thermostat can control up to 120 square feet of 120 volt mats, or up to 240 square feet of 240 volt mats

- Thermostats come with a floor sensor to properly monitor the floor temperature, ensure the placement of the probe is placed within 1 inch of the mat BEFORE the flooring is installed

- The thermostat has a built in GFCI. The circuit breaker in the breaker box SHOULD NOT BE GFCI protected. Using a GFCI breaker with a GFCI thermostat will cause nuisance tripping.

- There is no grounding conductor used since the thermostat is protected by the built in GFCI

- When wiring multiple mats together, the mats should be connected in parallel using wirenuts. All connections should be made in a junction box in the wall (please refer the installation manual for full details)

QUIETWARMTH FLOAT

Standard Sizes for 120V

PRODUCT PART #	DIMENSIONS	WATTS	AMPS
QWARM1.5X5F120	1'6"x5'	90	0.75
QWARM1.5X10F120	1'6"x10'	180	1.5
QWARM1.5x166F120*	1'6"x16'8"	300	2.5
QWARM3X5F120	3'x5'	180	1.5
QWARM3X10F120	3'x10'	360	3
QWARM3X166F120*	3'x16'8"	600	5
QWARM3X25F120	3'x25'	900	7.5

Standard Sizes for 240V

PRODUCT PART #	DIMENSIONS	WATTS	AMPS
QWARM1.5X5F240	1'6"x5'	90	0.375
QWARM1.5X10F240	1'6"x10'	180	0.75
QWARM1.5x166F240*	1'6"x16'8"	300	1.25
QWARM3X5F240	3'x5'	180	0.75
QWARM3X10F240	3'x10'	360	1.5
QWARM3X166F240*	3'x16'8"	600	2.5
QWARM3X25F240	3'x25'	900	3.75

QUIETWARMTH TILE

Standard Sizes for 120V

PRODUCT PART #	DIMENSIONS	WATTS	AMPS
QWT1.5X5F120	1'6"x5'	90	0.75
QWT1.5X10F120	1'6"x10'	180	1.5
QWT3X5F120	3'x5'	180	1.5
QWT3X10F120	3'x10'	360	3

Standard Sizes for 240V

PRODUCT PART #	DIMENSIONS	WATTS	AMPS
QWT1.5X5F240	1'6"x5'	90	0.375
QWT1.5X10F240	1'6"x10'	180	0.75
QWT3X5F240	3'x5'	180	0.75
QWT3X10F240	3'x10'	360	1.5

QUIETWARMTH JOIST

Standard Sizes for 120V

PRODUCT PART #	LENGTH	WATTS	AMPS
QWJOIST17X5120	5'	50	0.416
QWJOIST17X10120	10'	100	0.833
QWJOIST17X15120	15'	150	1.250

* **2-IN-1 SYSTEM ONLY**

MPglobal™

Quick reference guide only,
refer to the instruction manual for full installation details

REV: 0724

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