



FloorWarm

PLANNING YOUR PROJECT WORKBOOK

Your feet will love you for it!

Roam your house in bare feet and feel the wonderful warmth of Floor Warm. Far infrared heat created by Floor Warm will make you feel like you are basking in the sun.

Imagine your feet feeling this good - luxurious comfort every time you walk across the floor. You'll never get tired of how good it feels

Your tile will love you for it!

In addition to providing comforting warmth, Floor Warm also protects your flooring investment by preventing horizontal substrate movement - such as shrinkage cracks in the concrete slab - from cracking the finished tile. Floor Warm can protect against in-plane movement of up to 3/8" without cracking the tile or harming the electrical components of the system.

Time and Cost Saving Installation

No need for self-leveling installation and thin-set like comparable products.

Save on time and material.

Install flooring the same day Floor Warm is installed!

The self-adhering properties of Floor Warm heating elements eliminate the thin-set or self-leveling installation step typically associated with other systems. This not only saves you time and material costs, it actually allows for tile flooring installation to begin the same day.

Ultra Thin Profile

Less than 1/8" thick.

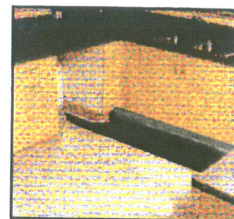
Other systems add up to 3/8" of thin-set

The installed 40 mil profile of Floor Warm is less than 1/8" thick, versus the installed thickness of standard looped wire systems that can range up to 3/8" or more of thin-set. This is important for helping to minimize height differences at transition areas of varying floor coverings on your project.

This overview workbook will help you design, measure, order and install your Floor Warm project

It's good to start with a sketch.

Be sure to measure and sketch cabinets, toilets, kitchen islands, or any other areas that won't be heated. Then you can start to decide what width(s), length(s) and mat(s) you'll need. Don't forget to make use of multiple mats in your design if you have a large area that needs heat. This kitchen example, and the bathroom examples below, will help you visualize some different layout possibilities.

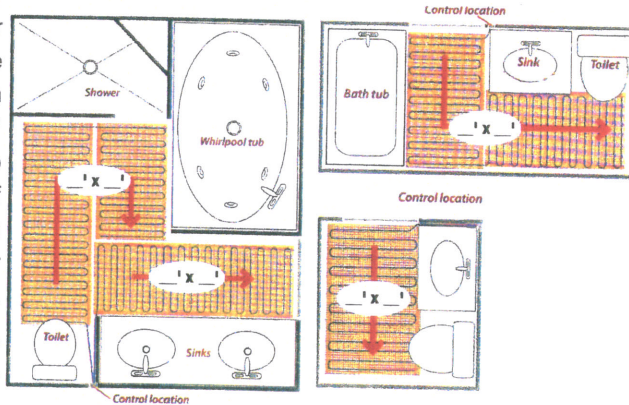


Floor Warm mat ready to unroll in front of kitchen ink.

Designing for a Floor Warm floor.

Do not put Floor Warm under cabinets or appliances. Leave the mat at least 4" away from the toilet wax ring and 4"-6" away from walls. Do install up to the toe-kick in front of kitchen or bath cabinets, and in front of a toilet and/or shower and tub, so toes will stay warm.

Remember, multiple mats of the same voltage can be wired together to fill larger areas.



How to Order Floor Warm.

Based on your sketch and design, select the appropriate kit/mat(s) from the tables on the following page.

Accurate dimensions are required for the proper kit/mat size selection (or for custom-mats to be ordered and fabricated). Please note that the heating elements cannot be cut or notched to fit around any obstructions or penetrations (such as door openings or floor registers).

Bathrooms: In front of vanity, toilet, shower, whole floor. Please remember to keep the Peel & Heat at least 4"-6" away from the walls and 4" from wax ring. Do not install inside the shower.

Measure the area that you want to cover; ie: for vanity 48" base, use a 2' or 3' wide x 3' or 5' long Peel & Heat kit.

Kitchen: In front of cabinets, stove, sink, food prep

Entry Way: Door entry area

If your installation requires additional radiant heated areas, add individual mats as needed (do not include additional thermostats, as you will only need one for this room), and "daisy chain" (parallel wire) or run wiring leads back to the junction box.

For installations over wooden sub-floors: Check floor for deflection — if it flexes when walked on, the addition of another layer of plywood may be required to provide sufficient rigidity to support tile. (For further information on wood sub-floor design criteria for tile installations refer to the International Residential Code).

Installing Your Floor Warm System

POSITIONING OF THERMOSTAT

Location of the thermostat should be approximately 60" (120 cm) above the floor on an inside wall, near the center of the room to allow

the connection leads to reach. A 3" deep box is recommended for the thermostat.

Installations with multiple heating mats will require a junction box to gang the connections together. If a junction box is required, it should be located directly beneath the thermostat, 12" - 18" above the floor.

Thermostat Requirements: Thermostat included with kit comes complete with a GFCI (ground fault circuit interrupter) that meets the Electrical Code(s). Thermostats are rated at 1,800 watts, 120 volts or 3,600 watts, 240 volts. IMPORTANT NOTE: Thermostat requires a dedicated 20 amp breaker.

Floor Warm Kits:

Includes one mat, 7-day programmable Thermostat that can be programmed to turn on & off up to 4 times per day & Primer (8-oz bottle of primer covers approximately 25 sq ft.)

Code	Description	Quantity	Cost Each	Quantity Ordered or Total Cost
	Floor Warm 2' x 3' Kit			
	Floor Warm 3' x 3' Kit			
	Floor Warm 3' x 5' Kit			

Floor Warm Mat-Only Cartons:

No Thermostat or Primer, add to kits to create multi-mat installations.

Code	Description	Quantity	Cost Each	Quantity Ordered or Total Cost
72123	Floor Warm Under Tile Heat Mat 2x3			
72133	Floor Warm Under Tile Heat Mat 3x3			
72125	Floor Warm Under Tile Heat Mat 2x5			
72135	Floor Warm Under Tile Heat Mat 3x5			
72127	Floor Warm Under Tile Heat Mat 2x7			
72137	Floor Warm Under Tile Heat Mat 3x7			
72129	Floor Warm Under Tile Heat Mat 2x9			
72139	Floor Warm Under Tile Heat Mat 3x9			
72108	Floor Warm Roll-On Primer - 8 oz			
72116	Floor Warm Roll-On Primer - 16 oz			
72128	Floor Warm Roll-On Primer - 1 Gallon			
72150	Floor Warm Programmable Thermostat			

INSPECTION AND TESTING OF HEATING MATS

NOTE: Verification that the heating mats were received in operable condition is important prior to installation. When the heating mats are removed from the shipping box test the resistance using an Ohm meter and record the information. If the resistance reading varies greatly from the recorded readings on each element do not install the mat and call QEP at (866) 435-8665 for replacement assistance.

Connection leads from the heating mats are 12' long and can be cut to desired length to connect at the junction box. Run the leads right at the base of the wall - do not run leads over heating mats or over each other under the tile flooring. Use of conduit and/or nail protection is recommended for leads within the wall cavity. Note: If the wires are dropped into the basement, the junction box can be located beneath the floor.

DO NOT CUT, NAIL THROUGH OR ATTEMPT TO MODIFY THE HEATING MATS IN ANY WAY.

PREPARING THE FLOOR

Clear the floor of all debris, nails, etc. so the floor is smooth, clean and dry.

Roll or brush on a coat of QEP #6000 primer diluted 2 parts clean water to 1 part concentrate and allow to dry to a tacky finish (30 minutes minimum). Please note that application of the Primer is a requirement of the Warranty. It is important to take care in the placement of the heating mats; once the adhesive side of the heating mat comes in contact with the primed surface it will provide a tenacious bond.

INSTALLING THE MATS

With the release paper still on, position the mat into place making sure the leads are within reach of the junction box and that there are no obstructions or floor penetrations in the way.

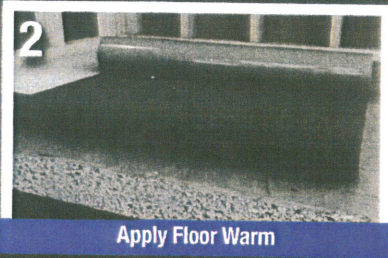
When mat is in proper position, roll the end with the connections back far enough to trim off approximately 12" (30cm) of the release paper to expose a portion of the adhesive surface. Press this exposed section of the mat onto the primed surface and then roll the other end back to the point where the release paper was removed. Begin pulling the release paper off and hand smooth the mat into position as it unrolls to achieve a positive bond while avoiding trapping air bubbles. For adjacent mats, follow the same procedure starting with

alignment of side by side mats in a butt joint fashion. Do not overlap mats. (The pictures show an installation that unrolls the leads last)

As soon as the mat is in place, tape the thermostat sensor along side mat or in butt joint of multiple mats. Ensure the sensor is set down so it is level with the mat and not on top of it. Now run the lead wires from the mats along the base of the wall to the junction box using duct tape to hold them in position. If the wires are to be dropped down through the floor, drill small holes through the floor and drop the wires through (these holes should be plugged with a non-solvent based sealant to ensure the integrity of the floor). Now that the mats are installed, repeat STEP #3 and perform resistance test reading again and record the information. Also provide a visual check to look for any signs of damage to the



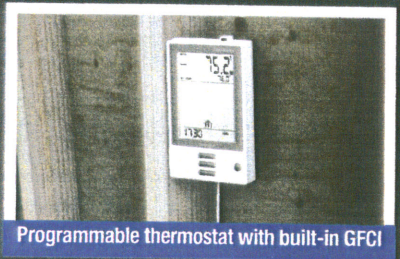
Roll on QEP #6000 Primer, allow 20-30 minutes to dry.



Apply Floor Warm



Floor Warm is wired to a junction box.



mat or connection leads that may have occurred during installation. If damage is found, contact QEP for advice and/or replacement assistance at (866) 435-8665.

The project is now ready for tile installation using a latex modified thin-set with a maximum thickness of 3/8" after the tile is embedded. It is recommended to use a plastic notched trowel to help prevent damage to the heating mat surface. Take care during the troweling process to not nick or cut into the mat.

DO NOT TURN ON THE SYSTEM FOR 28 DAYS ALLOWING THE THIN-SET AND GROUT TO MATURE.

ELECTRICAL CONNECTIONS

All Electrical Connections should be performed by a licensed electrician.

Drill or saw a hole at the bottom plate and feed power leads and thermostat sensor to junction box, make proper connections and connect to thermostat.

Visually inspect the system and connections prior to activation and repair or replace components as may be required. ELECTRICAL TEST: After any remedies have been performed for open or short circuits, the system must be retested. Apply caution stickers provided with kit in appropriate locations. Important reminder: when installing tile, you MUST allow 28 days for the thin set mortar and grout to cure before operating the Floor Warm system. This allows these materials to cure properly before applying the heat. After the tile installation has been installed for a minimum of 28 days, turn on the power to the system and set the

programmable Thermostat to desired temperature and time schedule by following instructions provided in Thermostat box.

LIMITATIONS

LIMITATIONS: Punctures, cuts or modifications to the heating mats may result in risk of electrical concerns and will Void the Warranty. Do not apply mats to floors where hydrostatic or moisture vapor rate emissions exist above 4lbs per 1,000 sq in 24 hours per the Calcium Chloride test method. Install tile using latex modified thin-set at a maximum thickness of 3/8" after the tile is embedded. Do not allow any solvent based products (caulking, sealers, sealants) including silicone to come in contact with QEP products. #6000 Primer is water based - Protect from Freezing.

