FeelsWarm® Installation Instructions

Stick-On Heaters

Thank you for purchasing a FeelsWarm® heater to eliminate the cold feel of your stone countertop. Please follow instructions thoroughly. Claims will not be allowed for direct or indirect damages of this product due to installation errors. You can contact the FeelsWarm support team to answer any installation questions or visit our website (FeelsWarm.com) for help.

It is recommended to have two sets of hands when installing larger mats.

_____ Wattage _____ Voltage _____ Current Draw (amps) at stated voltage _____ Approximate Current Draw on household 110/120V line

Serial Number: _____

IMPORTANT: NEVER SUBSTITUTE AN ALTERNATIVE POWER TRANSFORMER THAN THE ONE PROVIDED WITH THIS HEATER.

Your heater is specifically designed to raise the temperature of a stone countertop approximately 20°F above the room temperature. Due to the thermal properties of stone, heat will not radiate laterally (you will only feel warmth where the mat is placed). FeelsWarm heaters utilize slow-rise heating elements to avoid becoming too hot or unsafe. Customers should expect that the temperature of the stone countertop may take up to 90 minutes to warm to the stable heat level that the heater delivers. With the optional Thermal Control Unit, customers may lower the maximum temperature of the countertop or turn the heater on/off (temp adjustments may take 30 minutes). It is most common to leave the heater running 24 hours a day.

SAFETY

Do not pull on the electrical cord connecting the heater to the power supply. All FeelsWarm heaters utilize low voltage (9-24 Volts DC) for home safety. Stick-On heaters are designed with ultra-high bonding adhesive to deter the edges of the heater from being peeled or delaminated. Stick-On heaters are also fabricated with an impact/ scratch resistant cover shield to protect damage to the heating element. However, the heater should be inspected periodically for damage or peeling, and if either is present, immediately disconnect the power supply and contact FeelsWarm for service/support. FeelsWarm Heaters are designed for **indoor use only**.

WARRANTY

- Heating Mat: 10 years from date of purchase.
- Power Supply and Optional Thermal Control Unit: 2 years from date of purchase.

Warranty does not include damage, cutting, tampering, installation errors, improper electrical powering or wiring on any component of the product or power supply. Standard heaters may only be returned within 30 days if in original packaging.

RECOMMENDED TOOLS

- Handheld electric drill with 3/4" spade bit (an extended length bit may be needed if running the cabling into a double-wall cabinet)
- Several dry cotton rags
- Isopropyl alcohol
- Phillips screwdriver
- 1/16" drill bit

Read complete instructions beforehand to understand the full sequence of the assembly.

1 EVALUATE AND PREPARE THE SURFACE OF THE COUNTERTOP

A. Examine the lower surface of the countertop to determine if the epoxy in the Surface Prep Kit is needed for the heater to bond properly.

SMOOTH GRANITE OR MESH BACKING	"ROUGH" GRANITE	QUARTZ, MARBLE, CORIAN, WOOD OR CONCRETE
Epoxy coating not needed. Clean surface with alcohol and **skip to Step 2** on Page 5.	Epoxy coating needed. Follow Surface Prep steps below and allow epoxy to fully dry.	Epoxy coating needed. Follow Surface Prep steps below and allow epoxy to fully dry.

SURFACE PREP INSTRUCTIONS

It is recommended to utilize protective eyewear, gloves and appropriate clothing as well as a drip cloth or other material to protect flooring.

1. Read the following instructions before opening epoxy containers.
2. The tin pan with mixed epoxy will get warm so set it onto cardboard or another layer.
3. Cover the flooring under the countertop to protect from drips of the epoxy coating.
4. If you have two kits included with your FeelsWarm mat, mix and apply one kit at a time.
5. Once the two containers of epoxy are mixed together, the coating has a limited work life. DO NOT mix the ingredients until just prior to brushing on the coating.

APPLYING THE SURFACE PREP COATING

1. Pour both Part A & B equally into the tin pan. Rapidly, but thoroughly, stir the two parts together using the wooden tongue depressor. It is important to thoroughly combine Part A & B. Do not mix the epoxy directly on the stone.
2. Using the enclosed brush, apply a **THIN** layer of coating onto the undersurface of the countertop by applying an inch-wide path along the perimeter/edges of where the heater will attach. The mixed epoxy will **begin to harden in about 12-15 minutes**. This is a short time frame so brush on the epoxy quickly with the primary focus on the perimeter of where the heating mat will be placed. It is not critical to coat the entire surface where the heating mat will attach.
3. It is very important to apply a light layer (not too thick) to avoid drips or bumps.
4. The coating will begin to lose its ability to be brushed within 15 minutes, so work quickly and do not worry about precision or full coverage. Ignore any brush bristles that may come off into the epoxy while applying (the heating mat will cover it up).
5. Once you have applied the coating, wait 30 minutes for the coating to dry fully. Monitor for drips in the first 10 minutes.
6. The surface will no longer be tacky when it has fully dried. You are now ready to adhere your heater to the coated stone.

2 PERFORM A 'DRY" TEST INSTALLATION OF THE HEATER BEFORE STARTING

A. After the surface is prepared, conduct a preliminary fit by leaving the white release liner on the heater and hold the heater under the counter to ensure the fit is what is expected and that there are no conflicts with supports, cabinets or other items.
   - You will only feel warmth where the mat is adhered so it is recommended to **mount the heater 1/4" to 1/2" from the countertop edge** if you are able.
   - If the connection wire/power supply will be connected to an outlet inside a cabinet, mark with a pencil where the heater cable will enter the cabinet.

B. After preliminary test fitting, lie the heater on top of the countertop with the white release liner facing up. NOTE: Once the release liner is removed, the adhesive is very sticky and can be difficult to remove.

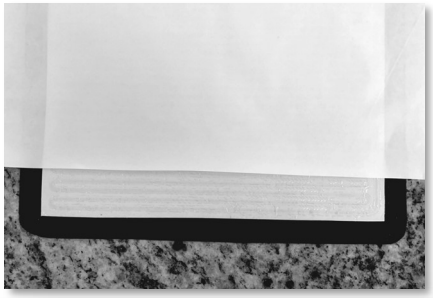
3 DRILL CABLE HOLE IN CABINET

Cable hole after finishing plug is installed.

A. Evaluate how the cable from the heater will reach the outlet inside the cabinet. Consider how the wire will feed and where the access hole needs be located in order for the heater cable to route within the framework of the cabinet without hitting any barriers.
B. To ensure that the cable hole will go through into the cabinet, drill a small 1/16" hole and verify that the hole doesn't hit a stud or other obstacle.
C. Follow-up with a 3/4" spade drill bit to drill a hole in the cabinet wall which will enable the heater cable to route to the power outlet after the heater is mounted.
D. The cable will feed from the heater into the cabinet where it plugs to the transformer and outlet (or the optional Thermal Controller if included). The plastic hole plug provided will be placed around the cable and inserted into the 3/4" hole for a professional look (as shown above).

4 ATTACH THE HEATER

***Mats with multiple sides: See next page for further instructions.**



A. With the heater lying on the top of the counter and the white release paper facing up, peel the release liner off the heater. Do not discard the liner.
B. Reduce the size of the release liner into manageable pieces by ripping the white release paper into smaller sections.
C. Place the release liner sub-sheets back down onto the sticky heater but place them onto the heater so approximately 2" of the front-edge of the heater is exposed (see photo to the right). This process leaves a sticky portion of the heater to start attaching to the countertop while it is being manually held and positioned under the counter.
D. Move the heater from the top of the countertop keeping the shortened white release liner on the heater. This is generally accomplished by sitting on the floor facing out. Align the heater under the counter, keeping the heater close to the front edge(s).
E. Lightly press/tack down a few spots along the front edge of the heater to hold the heater in place. Don't press the entire edge down tight in case you have to realign the heater. The release liner sheets prevent the entire heater from sticking to the counter inadvertently while aligning the heater.
F. Once the front edge of the heater is positioned and is wrinkle-free, gently curl the back edge of the heater down and remove the release paper. Then lightly tack the entire heater in place working from the front edge toward the back in a wiping action. Tacking down the mat lightly allows for a potential realignment if necessary. Be cautious to not yank or pull the tail / cord area.

Please feel free to contact FeelsWarm if you have a unique heater design and need more assistance.

***Mats with Multiple Sides**: If you have a two-sided mat (commonly "L" shaped), you will want to tack down only one of the L sides first: the longer side. Droop down the other side of the L. After tacking the edge of the long side, remove the release liner of the long side and very lightly tack the body of the long side.

Remove the release liner of the short leg. In a wiping/curling motion from the corner, bring up the drooping portion and lightly wipe from the corner (Point A) toward the end of the short side (Point B) and tack lightly in-place. Unlike the long side, do not go along the edge of the short side and tack it. Instead, wipe the mat from the corner as described.

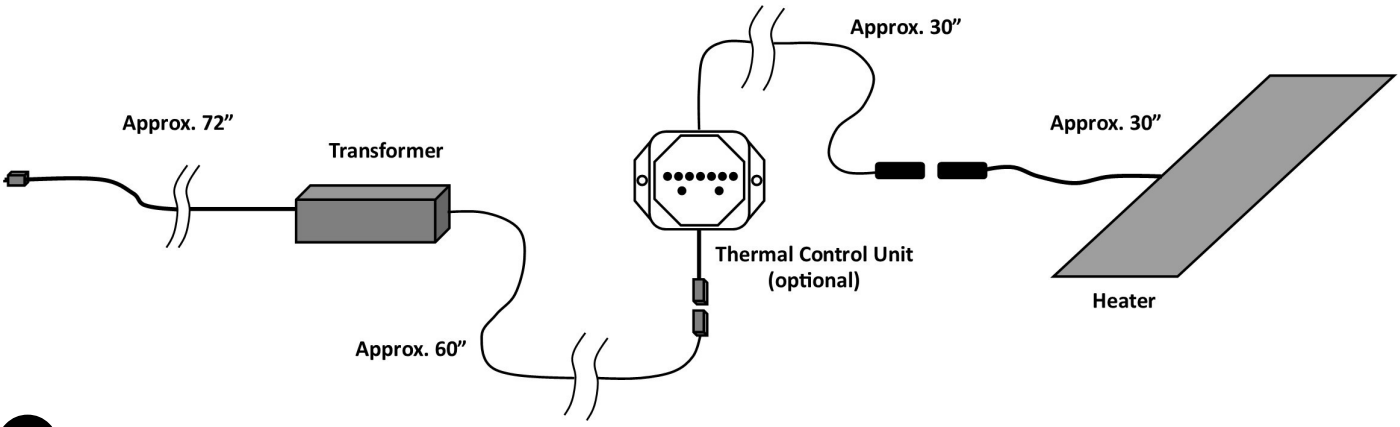
For three-sided mats (commonly "U" shaped), tack down the middle section first, leaving the other two sides drooping down. Continue following the same approach as the above two-sided mats. Once the entire heater is tacked in-place throughout the countertop, ensure it is wrinkle free. If so, then proceed to press firmly throughout the entire heater.

5 FINAL PRESSURE TO PERMANENTLY SECURE PERIMETER

Once the heater is attached, ensure the perimeter 1" of the heater is pressed down extra hard. Avoid pressing hard on the wire connection pad area to not damage connection points.

6 INSERT HOLE PLUG

After the heater has been installed, feed the heater cord through the drilled hole. Put the hole plug over the cable wire (there is a slit in the side of the plug to allow this to happen) then insert the plug into the hole in the cabinet.



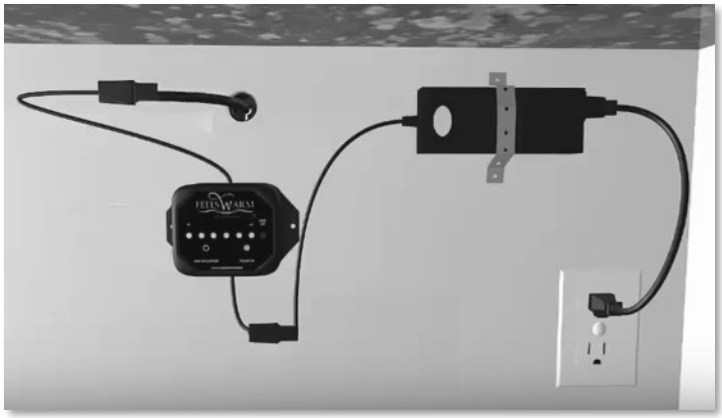
7 INSTALL POWER SUPPLY

Connect the heater, Thermal Control Unit (optional), transformer and power cord together as shown.
IMPORTANT: If the FeelsWarm system involves multiple transformers and/or multiple heaters, each transformer plug and each heater cable will have a numerical tag with matching code numbers.
<u>It is critical that each transformer is plugged into its correlating heater.</u>

It is common to put the Thermal Control Unit (optional) inside a cabinet or out of normal visibility but still be accessible for periodic use. The transformer can be mounted near the outlet or lie in the bottom of the cabinet. It is normal for the transformer to feel warm to the touch (or a bit hot in some cases).

Do not cover the transformer with anything to keep the heat from escaping.

The heater will draw between 1/2 and 2 amps at 120V depending upon the size of the heater. For reference, a toaster typically may draw up to 12.5 amps. Traditional home circuit lines are commonly wired for 15 or 20 amp. If the outlet that the heater plugs into also has significant current-drawing devices that will exceed the circuit breaker limit, consult a licensed electrician for a permanent solution.



*Plug heater directly into transformer if controller was not included.

8 TURN THE HEATER ON

You can turn on your heater immediately. If your heater does not include a Thermal Control Unit, turn the heater on by plugging the transformer into your outlet. To turn the heater off, unplug the transformer.

If your heater includes a Thermal Control Unit (TCU):

This device permits the temperature to be adjusted down from the maximum temperature of the heater and it also provides a quick on/off method. Once the transformer is plugged into your outlet, the TCU will light up. Use the small button on the TCU to change the settings. The red light of the TCU indicates the heater is OFF. The single green light indicates the heater is receiving power. The yellow lights indicate the setting of the temperature level.

It is recommended to put your TCU at HIGH for the first 24 hours. This is the most common setting and is likely the desired temperature. The heater automatically raises the temperature of the countertop approximately 20°F above the room temperature when set at HIGH. To adjust the temperature down towards LOW or OFF, continue pressing the single button. Typically, once the desired temperature of the countertop has been established, the need to make changes to the temperature is infrequent.