

FeelsWarm® Installation Instructions

Stick On Heaters



Thank you for purchasing a FeelsWarm® patented (pending) heater to eliminate the cold feel of stone countertops and to create a soothing and calming feel to accompany the elegance and beauty of stone.

Please read the following information to understand the FeelsWarm heater performance and how to properly install the heater for years of operation.

Heater Model: Custom Stick-On Standard Stick-On Other

Electrical Information (please retain for future reference):

_____ Wattage _____ Voltage _____ Current Draw _____ Approximate Current Draw
(amps) at stated voltage 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 over the room temperature. Due to the thermal properties of stone, heat will only radiate approximately one inch from 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.

Indoor Use: FeelsWarm Heaters are designed for indoor use only.


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 Heated Stone Products for service/support.

Warranty: FeelsWarm Heaters have a two-tier warranty:

- Heating Mat: 3 years from date of purchase. This does not include damage, tampering, improper electrical powering, or wiring.
- Power Supply and Supplemental Accessories (Transformer and optional Thermal Control Unit): 2 years from date of purchase.

Please follow instructions thoroughly. Claims will not be allowed for direct or indirect damages beyond this product due to failure to follow installation instructions.

Customer Support:  sales@feelswarm.com

 952-898-9505

 www.feelswarm.com

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Package Contents: Heater, Transformer (with power cord), Velcro/Strap Packet, Hole Plug, Surface Prep Kit (optional), and instruction manual. Thermal Control Unit with screws (optional) is included with custom heaters only.

Recommended Tools:

- Hand held 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

For large heaters or heaters with unusual cut outs, it is advised to have two people assemble the heater.

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

1 EVALUATE AND PREPARE THE SURFACE OF THE COUNTERTOP

- A. Evaluate the lower surface of the countertop to determine if the Surface Prep Kit must be used to enable the heater to bond properly.

The Surface Prep Kit is needed if the underside of the stone is not smooth granite. Any quartz, marble, wood and “rough” granite underneath will require the surface prep coating. Stones with a mesh backing will likely not need the kit.

The peel test strip (attached) can be used to evaluate whether the surface of the stone will need the prep coating. Attach the peel test strip to the underside of the counter and press with fairly hard pressure. Let the strip remain on the stone for an hour, then peel the strip off by hand. If the strip bonds extremely well, then applying the Surface Prep Coating is not necessary.

- C. If it is determined that the coating is needed, follow the “Surface Prep Instructions” listed below. The coating must harden completely before attaching the heater.
- D. If no Surface Prep Coating is needed, clean the surface where the heater will attach using a rag and isopropyl alcohol. This will remove dirt, dust, and other foreign items. Let dry completely (approximately 5 minutes). Skip to Step 2.

SURFACE PREP INSTRUCTIONS (if needed and included)

Kit Contents: 2 containers of epoxy (Part A and Part B), small brush, tin pan, tongue depressor.

Recommended Tools and Supplies: Protective eyewear required, gloves and appropriate clothing, pencil, drip cloth or other material to protect carpet, cabinet, or flooring under the countertop.

Preparation:

- A. Read the following instructions before opening epoxy containers.
- B. The tin pan with mixed epoxy will get warm so set it onto cardboard or another layer.



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- C. Cover the flooring under the countertop to protect from drips of the Surface Prep Coating.
- D. On the underside of the counter, use a pencil to mark the general outline of where the full heater will be attached, specifically where the perimeter of the heater will be attached to the coated stone. (Oversize the coating area somewhat to provide some extra assembly tolerance).

IMPORTANT: 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. 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.*

*If you have two kits included with your FeelsWarm mat, mix and apply one kit at a time.

Applying the Surface Prep Coating:

- A. 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. Only mix one kit at a time if you are provided two.
- B. Using the enclosed brush, apply a **THIN** layer of coating onto the undersurface of the countertop where you indicated with the pencil. Start by applying an inch wide path along the perimeter/ edges of where the heater will attach. It is not critical to coat the entire surface where the heating mat will attach.
- C. It is very important to apply a light layer (not too thick) to avoid drips or bumps.
- D. 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).
- E. Once you have applied the coating, wait 30 minutes for the coating to dry fully. **Monitor for drips** in the first 10 minutes.
- F. The surface will no longer be tacky when has fully dried. You are now ready to adhere your heater to the coated stone.

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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.
 - The front edge of the heater should be mounted between 1/4 to 1/2 inches from the countertop edge. Precision is not critical.
 - 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 if bonded to the stone.

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DRILL CABLE HOLE IN CABINET

- 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.
- B. Predict where the cable hole can be located to successfully penetrate the cabinet without hitting supports, wires or other barriers. You may choose to use a stud finder and other methods to anticipate a good location for the hole.
- C. 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.
- D. Follow-up with a 3/4" spade drill bit to drill a hole in the cabinet wall(s) which will enable the heater cable to route to the power outlet after the heater is mounted.
- E. The cable will feed from the heater into the cabinet where it plugs to the Thermal Control Unit, Transformer and outlet. The plastic cable plug provided will be placed around the cable and inserted into the 3/4" hole for a professional look (as shown).

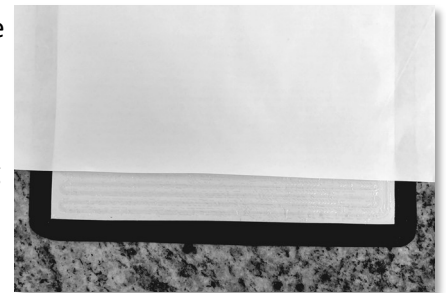


Cable hole after finishing plug is installed.

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ATTACH THE HEATER

- A. With the heater lying on the top of the counter with the white release paper facing up, peel the white release liner off the heater. Do not discard.
- B. Reduce the size of the release liner into manageable pieces by ripping the white release paper into smaller sections approximately 6" X 24" sizes (the size/shape of these sheets is not critical).
- 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 . 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 partial white release liner sheets prevent the entire heater from sticking to the counter inadvertently while the heater is being aligned.
- 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 yanking/realigning the tail area.



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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.

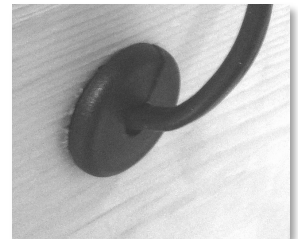
5 FINAL PRESSURE TO PERMANENTLY SECURE PERIMETER

Once the heater is attached, ensure the perimeter 1” of the heater is pressed down extra hard.

NOTE: Avoid pressing hard on the wire connection pad area to not damage connection points.

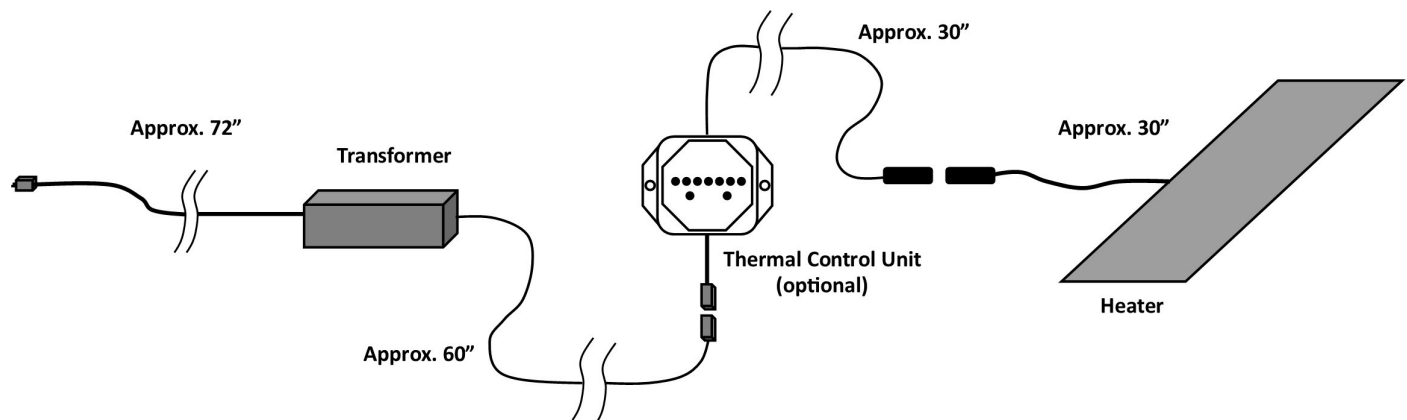
6 INSTALL CABLE PLUG

After the heater has been installed, feed the heater cord through the drilled hole. Included with your heater is a black cable plug. Put the 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 below.



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. It is critical that each transformer is plugged into its correlating heater.

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It is common to put the Thermal Control Unit inside a cabinet or out of normal visibility but still be accessible for periodic use. The Thermal Control Unit can be mounted onto the inside wall of a cabinet with the screws provided. The transformer typically lies in a cupboard or in the bottom of the cabinet. The transformer may feel warm to the touch (or a bit hot in some cases) - this is normal.

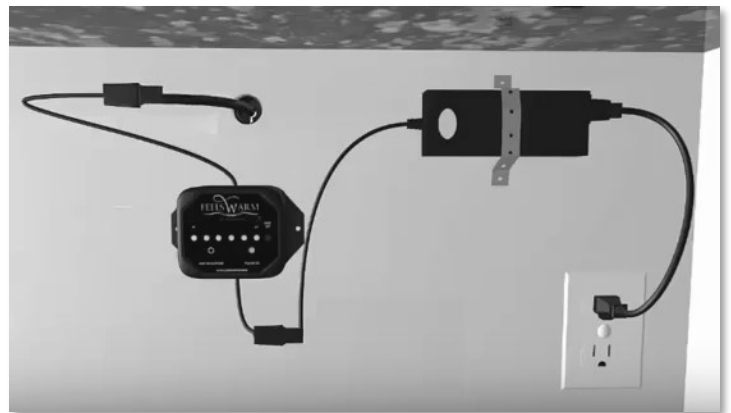
Do not cover the transformer with anything to keep the heat from escaping.

The heater will draw up to 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.

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SECURE WIRES

Your FeelsWarm heater is supplied with a packet of Velcro patches, a strap and screws to secure the various wires inside the cabinet and to mount the transformer on a side wall. You may also elect to rest it on the floor of the cupboard. Often, there is an excess supply of wire provided so keeping the wires out of the way of normal activity is suggested. Peel the clear release liner off one half of each Velcro patch and stick it onto the cabinet wall. Secure the wires using the mating Velcro piece. Cut the strap to the desired length and drill the screws into the cabinet wall to secure your transformer.



*Plug heater directly into transformer if controller was not included

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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), the 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 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 degrees Fahrenheit 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.

If you have installation or user questions, feel free to contact us.