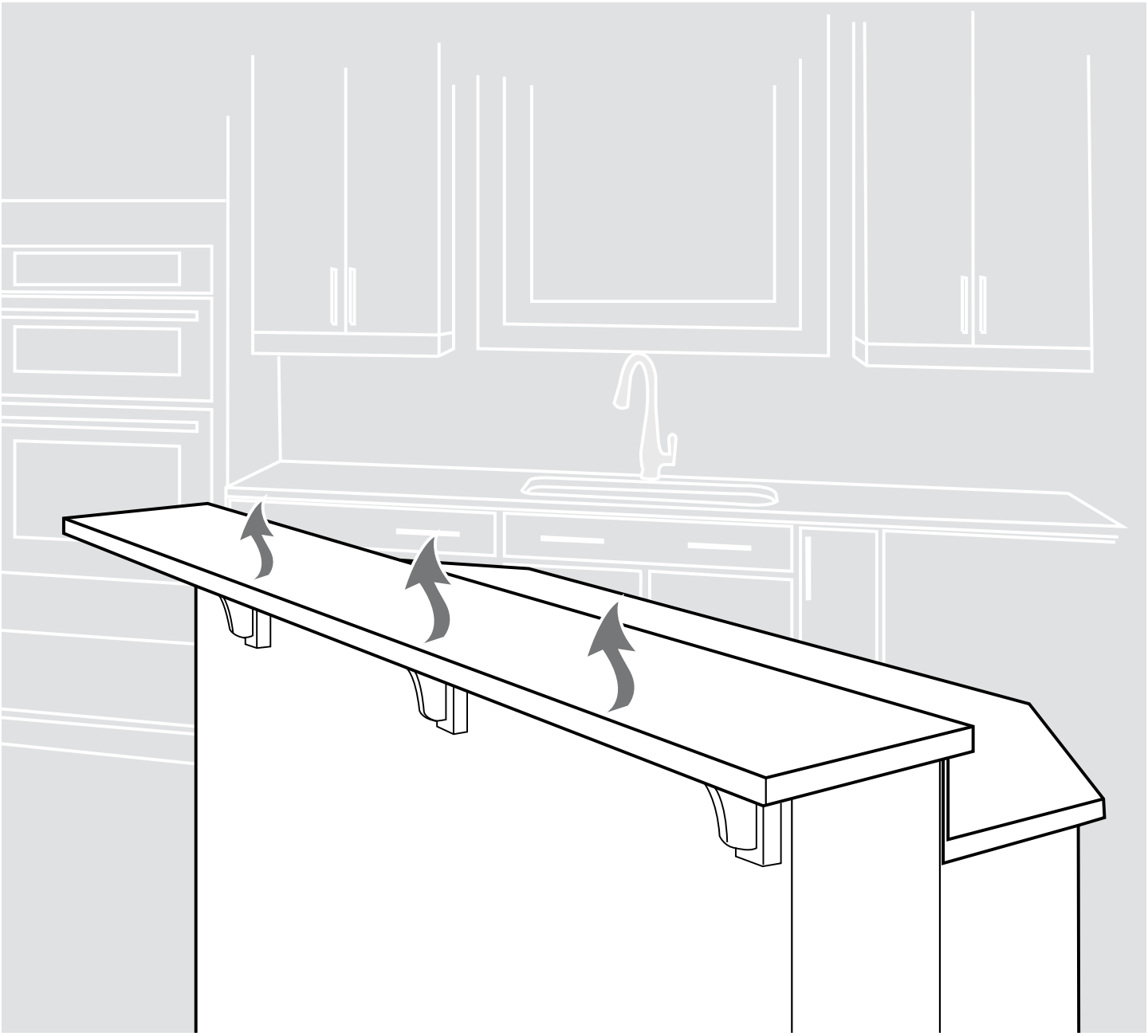
WarmlyYours
Radiant Heating Systems
Experts since 1999

# WarmlyYours FeelsWarm® Countertop Heater
# **Installation Instructions**



*Thank you for purchasing a WarmlyYours FeelsWarm® Countertop Heater! Please read the following information to learn how to install and operate your countertop heater.*

**Heater Model:** ☐ **Custom Adhesive-Backed Heater** ☐ **Standard Adhesive-Backed Heater** ☐ **Other**

**Electrical Information (please retain for future reference):**

| | |
|---|---|
| Wattage (household) | |
| Voltage | |
| Approximate current draw (amps) | |
| Current draw on household at stated voltage 120V line | |

Serial Number: 

***IMPORTANT: USE ONLY THE POWER TRANSFORMER PROVIDED WITH THIS HEATER. NO SUBSTITUTIONS ALLOWED.***

Your heater is specifically designed to gently raise the temperature of the heated area an additional 20 to 25 degrees Fahrenheit. WarmlyYours FeelsWarm® Countertop Heaters utilize slow-rise heating elements so that the heating element does not become excessively hot or unsafe. Consequently, the temperature of the stone countertop may take 1 to 1 1/2 hours to warm to the stable heat level that the heater delivers. With the Thermal Control Unit, the maximum temperature of the countertop can be lowered if needed and the heater can be quickly turned on or off.

**Safety**: WarmlyYours FeelsWarm® Countertop Heaters are designed for indoor use only. All WarmlyYours FeelsWarm® heaters utilize low voltage (9-24 volts dc) for home safety. These adhesive-backed heating elements are designed with ultra-high bonding adhesive to help prevent the edges of the heater from being peeled or delaminated. They are fabricated with an impact- and scratch-resistant cover shield to protect the heating element from damage. However, the heater should be inspected periodically for damage or peeling. If either is present, immediately disconnect the power supply and contact WarmlyYours for technical support. Do not pull on the electrical cord connecting the heater to the power supply.

**Warranty**: WarmlyYours FeelsWarm® Countertop Heaters come with a two-tier warranty against manufacturer defects. The warranty does NOT cover damage due to tampering, improper wiring or installation, use of incorrect power, or other causes.

- Heating element: 3 years from date of purchase. This does not include damage, tampering, improper electrical power, or wiring.
- Power supply and supplemental accessories (Transformer, Programmer, Thermal Control Unit): 2 years from date of purchase.

**Customer Support**: For questions or support, contact WarmlyYours at (800) 875-5285 or go to WarmlyYours.com.

**FeelsWarm® technology is a registered trademark of Heated Stone Products, patent pending.*

# Before You Begin

SECTION **1**

## Package Contents:

- Adhesive-backed heating element
- Thermal Control Unit and screws
- Transformer (with power cord)
- Velcro/strap packet
- Hole plug
- Peel test strip
- Instruction manual

**Surface Prep Kit**

- 2 tubes of epoxy (Part A and Part B)
- Small brush
- Tongue depressor
- Mixing tin

- Programmable timer (optional)

## Recommended Tools and Supplies:

- 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
- Quart-sized container that can be discarded after use
- 1/16" drill bit

If Surface Prep Kit is used:

- Protective eyewear --REQUIRED
- Gloves and appropriate clothing
- Pencil
- Dropcloth or other material to protect carpet or flooring under the countertop

For large heating elements, WarmlyYours recommends having two people perform the installation.

*Read these instructions completely before starting assembly and installation.*

## *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 create a smooth, uniform surface, which will ensure a secure bond for the heater. Use the peel test strip included in this package to evaluate whether the surface of the stone needs the Surface Prep Coating. If the counter is "rough cut" natural stone, the WarmlyYours FeelsWarm® Surface Prep Coating will be necessary. As a general rule, a Surface Prep Kit will be needed if the heating mat is being applied to quartz, "rough" feeling granite underneath the counter, or supporting wood. Smooth granite and any stone with a mesh backing will most likely not need a kit.

B. To determine whether or not the stone surface will be acceptable as is (without the Surface 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.

- If there is support wood on the bottom surface of the stone (common for thinner stone countertops), the heater can be attached to the wood instead of directly to the stone. HOWEVER, the wood must be prepared with the Surface Prep Coating to ensure the heater bonds sufficiently.

C. If it is determined that the coating is needed, apply the Surface Prep Coating onto the area where the heater is to be attached. Follow the instructions below, labeled "Surface Prep Instructions". The coating must cure completely– approximately 30 min. The surface will no longer be tacky when it has dried fully.

D. Clean the surface where the heater will be attached. Perform this step whether the surface has been coated or not. Clean with a rag and isopropyl alcohol. This will remove dirt, dust, and other debris. Let dry completely (approximately 10 minutes).

E. If your heater is larger than 4 square feet or is an unusual shape or configuration, you will need another person to help attach the heater to the countertop.

## *Surface Prep Instructions (If needed)*

### Kit Contents:

- 2 tubes of epoxy (Part A and Part B)
- Small brush
- Mixing tin
- Tongue depressor

### Recommended Tools and Supplies:

- Protective eyewear REQUIRED
- Gloves and appropriate clothing
- Pencil
- Drop cloth or other material to protect carpet or flooring under the countertop

If the surface is not suitable for bonding, then WarmlyYours FeelsWarm® Surface Prep Coating will need to be applied to the surface prior to installing the heater.

## *Preparation*

1. PROTECTIVE EYEGLASSES ARE REQUIRED.
2. Wear gloves and appropriate clothing.
3. Cover surface of the work area and the carpet or flooring under the countertop to protect these areas from drips or spills of the Surface Prep Coating.
4. On the underside of the counter, use a pencil to mark the general outline of where the heater will be attached. Surface Prep Coating should be carefully applied to the area, ensuring that the perimeter of the heater will be attached to coated stone.
5. Do not mix the Surface Prep Coating epoxy directly on the stone. Use the mixing tin provided. The mixing tin with mixed epoxy may become warm, so set it on a piece of scrap material like cardboard.

***IMPORTANT: Once the two tubes 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 3-5 minutes.***

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

## *Applying the Coating*

1. In the mixing tin, combine the entire contents of the tubes containing both Part A and Part B of the epoxy. Stir together using the tongue depressor. It is important to thoroughly combine Part A and Part B.
2. Use the enclosed brush to apply a thin layer of the Surface Prep Coating to the underside of the countertop. Start by applying an inch-wide path (inside the penciled outline) around the entire perimeter of where the heater will be attached. The coating must cover where the edges of the heater will attach to the countertop. It is not critical to coat the entire surface where the heating element attaches, but you may do so if there is enough coating available. Focus on working quickly and not precision. Bristles from the brush may come off, but the heating mat will cover them up.
3. Brush on the coating in thick strokes. The consistency of coating is similar to thick honey. The coating will not drip down vertically if a thin coat is applied.
4. Complete the application quickly. The coating will start to harden and will no longer be usable within 5 minutes after mixing the epoxy.

## *After Application*

1. The coating will harden completely in approximately 30 minutes (at 70 degrees F). Avoid touching the coating prior to that time.
2. Once the surface is no longer tacky, the surface is ready.
3. Wipe the surface with isopropyl alcohol prior to installing the heater.
4. Attach the heating element to the counter following the instructions in this manual.

### Customer Support

For questions or support, contact WarmlyYours at (800) 875-5285 or go to WarmlyYours.com.

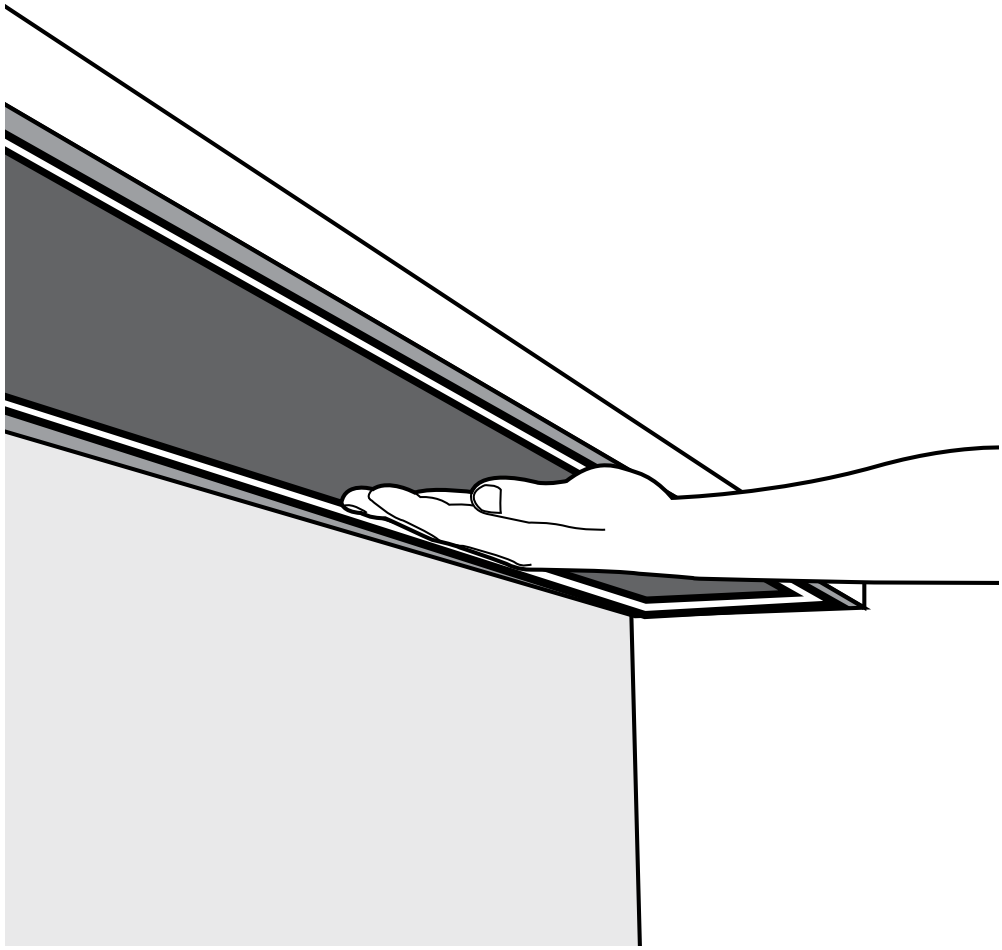
## *2. PERFORM A TEST INSTALLATION OF THE HEATER BEFORE STARTING*

A. After the surface is prepared, conduct a preliminary fit by leaving the white release liner on the heater and holding the heater under the counter to ensure it fits as expected and that there are no conflicts with supports, doors, or other items.

- The front edge of the heater should be mounted between ¼" and ½" from the countertop edge. Precision is not critical.
- If the connection wire or power supply will be connected to an outlet inside a cabinet, use a pencil to mark where the connection wire will enter the cabinet.

B. After preliminary test fitting, lay the heater on top of the counter 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 it bonds to the stone.*

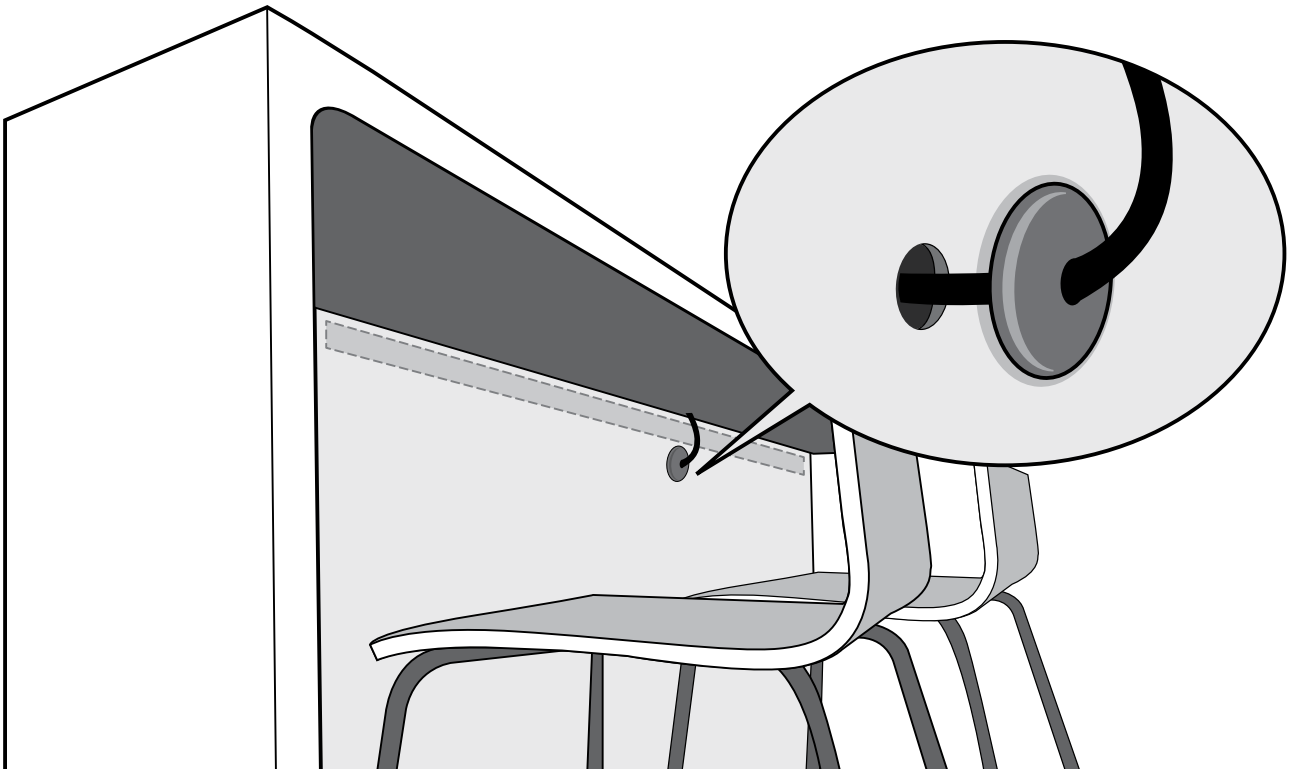


## *3. DRILL CABLE HOLE IN CABINET*

A. Evaluate how the cable from the heater will reach the outlet inside the cabinet. Consider how the wire will feed and where an access hole needs to be located in order to route the heater cable within the framework of the cabinet.

B. Determine where the cable hole can be located to successfully penetrate the cabinet without hitting supports, wires, or other barriers. Use a stud finder or other method to determine a good location for the hole.

C. To ensure that the cable hole will go into the cabinet, drill a 1/16" hole and verify that the hole doesn't hit a stud or other obstacle. A 1/16" hole is recommended so that if a second hole has to be drilled, the original hole is small enough to conceal with putty.



*Note: In many cabinets, there is a horizontal support board in this area. In this case, drill the cable hole below the horizontal support board to ensure the hole will enter the cabinet as needed.*

D. Use a 3/4" spade drill bit to drill a hole in the cabinet wall(s)

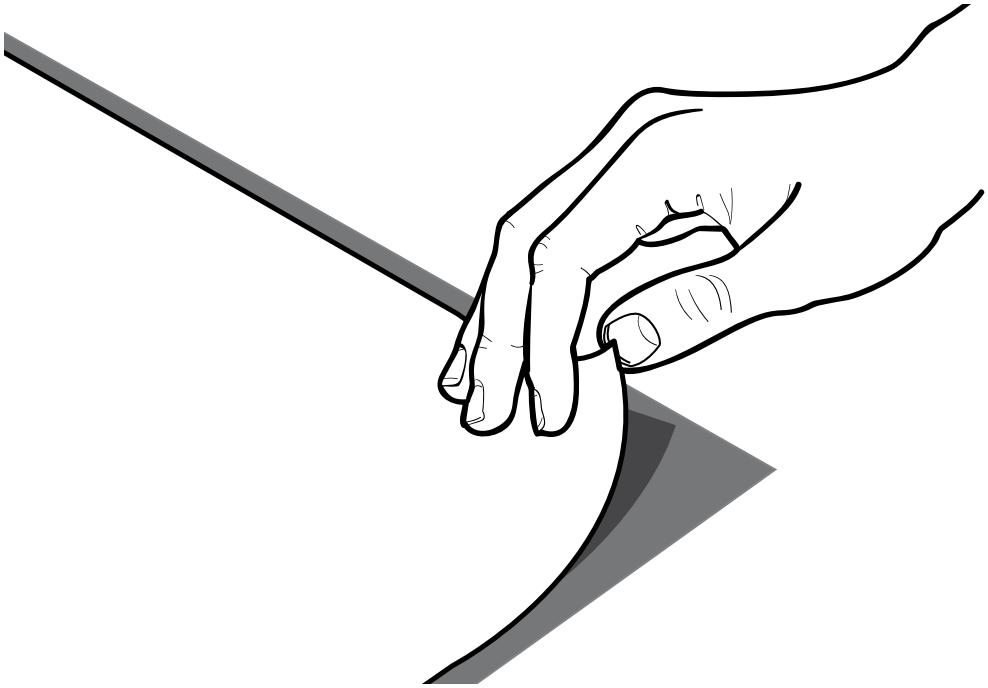
E. The cable will feed from the heater into the cabinet where it plugs to the transformer, Thermal Control Unit, and outlet. The plastic cable plug will be placed around the cable and inserted into the 3/4" hole for a professional look (as shown).

## *4. ATTACH THE HEATING ELEMENT*

A. With the heating element 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" (the size and shape of these sheets is not critical).

C. Immediately place the release liner sheets back down onto the sticky heating element (with shiny side touching the heater). Place them onto the heater so that approximately 6" of the front edge of the heating element is exposed. This process leaves a sticky portion of the heating element exposed to attach to the countertop while it is being manually held and positioned under the counter.



D. Move the heater from the top of the countertop and begin attaching it to the underside of the stone counter while keeping the white release liner on the heater. This is generally accomplished by sitting on the floor facing outward with your back to the cabinet.

Align the heater under the counter, keeping it close to the front edge (1/4" to 1/2" from the edge). Lightly press the heater down, so that it is flat and wrinkle free. The partial white release liner sheets prevent the entire heater from sticking to the counter inadvertently while the heater is being aligned.

E. Once the front edge of the heater is positioned and wrinkle free, gently curl down the back edge of the heater and remove the release paper. Then, lightly tack the entire heater in place.

F. Once the entire heater is tacked in place along the underside of the countertop, ensure it is wrinkle free. If so, then proceed to press firmly over the entire heating element.

G. Using a dry rag to help provide evenly distributed pressure, press firmly across entire surface of the heating element.

## 5. ACTIVATE PERIMETER ADHESIVE

Once the heating element is attached, the high-bonding adhesive must be fully activated.

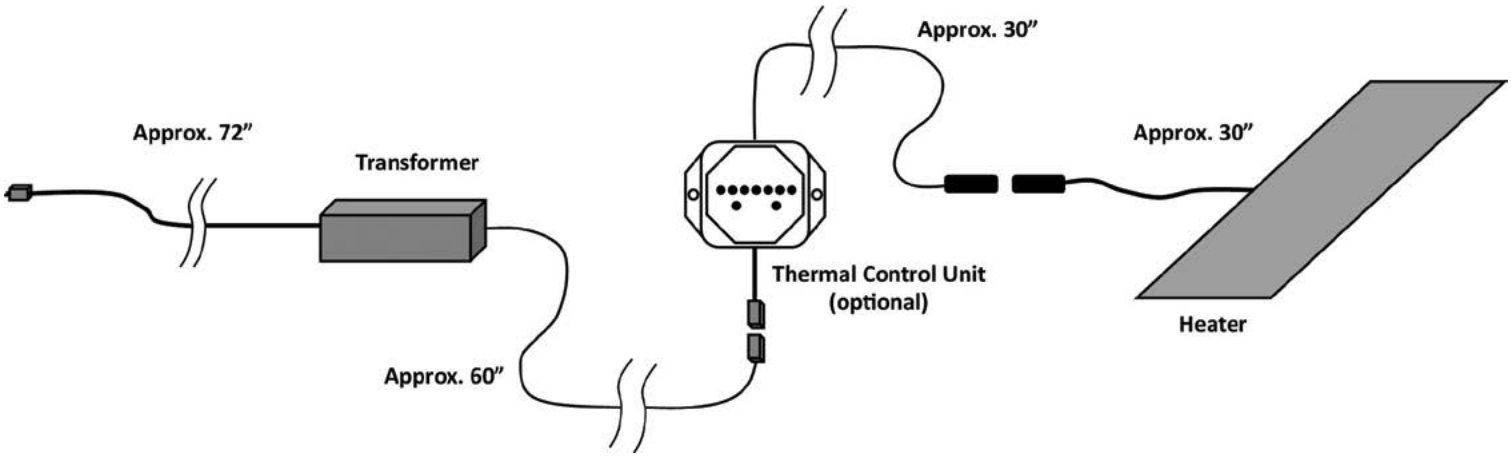
***IMPORTANT: The heater has a perimeter bonding adhesive that provides the premium adhesion of the edges of the heating element to the stone. Press extra hard within the area within 1" of the perimeter to secure the high-bond edges.***

***IMPORTANT: To avoid damage to connection points, do not press hard on the wire connection pad area.***

*NOTE: The bonding adhesive takes 72 hours to reach the full bond strength. Do not attempt to peel the heater off the stone to test the adhesion.*

## 6. INSTALL POWER SUPPLY

Connect the power cord to the transformer, then connect the three units together as shown.




It is common to put the Thermal Control Unit within a cabinet or out of normal visibility but still 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.

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 will draw up to 12.5 amps). Traditional home circuit lines will be wired for 15 amps. If other significant current-drawing devices use the same circuit as the outlet the heater is plugged into, and the circuit breaker limit will be exceeded, consult a licensed electrician for a permanent solution.

***IMPORTANT: If the WarmlyYours FeelsWarm® system to be installed involves multiple transformers and/or multiple heating elements, each transformer plug and each heating element cable will have a numerical tag with matching code numbers. It is extremely important that the correct transformer plug is plugged into its corresponding heater cable.***

## *7. SECURE WIRES*

Your WarmlyYours FeelsWarm® Countertop Heater is supplied with a packet of Velcro patches, a strap, and screws to secure the wires inside the cabinet. Because the length of the wires provided often exceeds what is needed, WarmlyYours recommends securing the wires to keep them out of the way of normal activity. To apply each patch, peel the clear release liner off one half of the Velcro patch and stick it onto the cabinet wall. Secure the wires using the matching Velcro piece. If the velcro doesn't stick to your cabinet wall, use the strap included. Cut the strap to the desired length and drill the screws into the cabinet wall to secure your transformer and access cord.

## *8.TURNING HEATER ON*

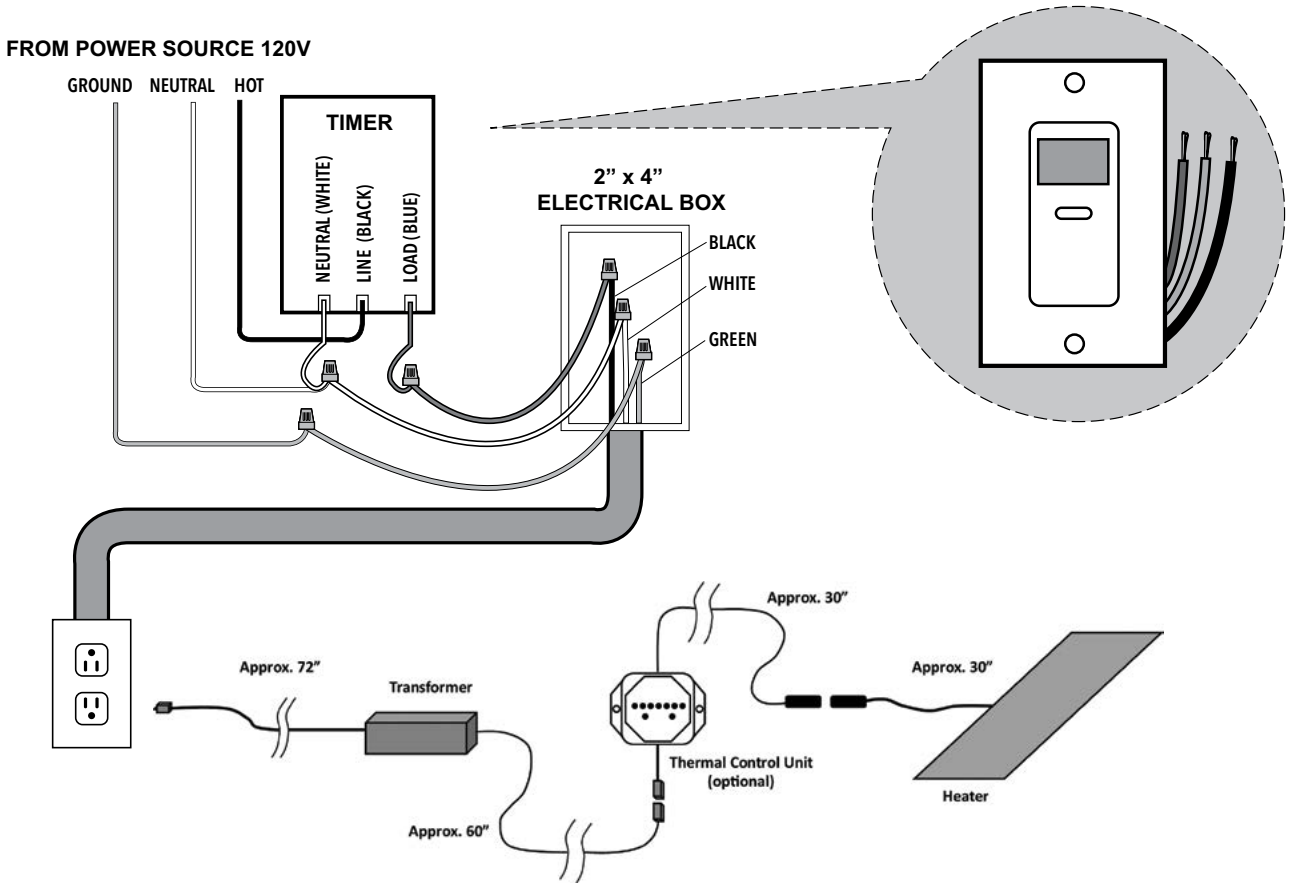
You can turn on your WarmlyYours FeelsWarm® heater immediately. If your heater does not include a Thermal Control Unit, turn the heater on by plugging in the transformer to your outlet. To turn the heater off, unplug the transformer.

If your heater does include a Thermal Control Unit (TCU), the temperature can be adjusted down from the automatic 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.

It is recommended to set your TCU at HIGH for the first 24 hours. This is the most common setting and most 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. If the room temperature is elevated, then either turn the TCU to OFF or adjust it toward LOW in various increments. Typically, once the desired temperature of the countertop has been established over a day or two period, the need to make changes to the temperature is infrequent.

## *9. INSTALL CABLE PLUG*

A round cable plug is included with your heater. Using the slit in the side of the plug, place the plug over cable wire, then insert the plug into the hole in the cabinet. See drawing on page 6.

## *10. OPTIONAL TIMER*

To make operation easier and enhance your experience using your WarmlyYours FeelsWarm® Countertop Heater, WarmlyYours offers an optional 7-day programmable timer, allowing you to program 14 events or 2 ON-OFF cycles per day. The timer must be used on a GFCI protected circuit, as it does not have built-in GFCI protection.