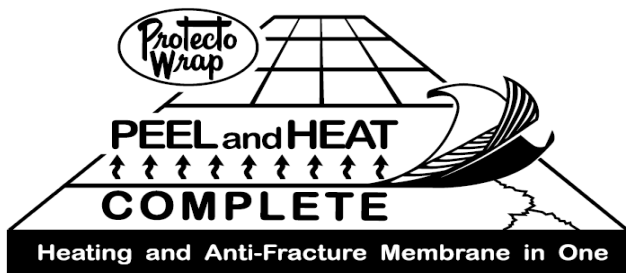


# PEEL AND HEAT COMPLETE™ INSTALLATION INSTRUCTIONS



Heating Element Sizes	
Available Kit Sizes	
Width:	2' and 3'
Length:	3', 4', 5' and 7'
Custom Sized Kits	
Width:	1', 2', and 3'
Length:	Length as needed (to the inch)

**IMPORTANT! READ ALL INSTRUCTIONS BEFORE STARTING.**

**DO NOT MAKE ANY CONNECTIONS TO ELECTRIC POWER UNTIL THE INSTALLATION IS COMPLETED.**

**ALL ELECTRICAL CONNECTIONS SHOULD BE PERFORMED BY A LICENSED ELECTRICIAN.**

IMPORTANT NOTES:

- 1.) Read this entire manual before installing the heating system. The designer and installer must be familiar with all details of the installation.
- 2.) Peel and Heat Complete should not be installed when temperatures are below 40°F (10°C).
- 3.) We recommend a qualified installer be used.
- 4.) The installation of this heating product shall be in accordance with the following instructions and the regulations of the authority having jurisdiction. USA: The installation of this heating product shall be in accordance with Article 424, Part J, of the National Electrical Code, ANSI/NFPA 70. Canada: The installation of this heating product shall be in accordance with Section 62 of the Canadian Electrical Code, Part I. USA/Canada Installation according to TCA instructions.

The Peel and Heat Complete™ Installation Instructions are divided into the following sections:

STEP 1: Designing the System

STEP 2: Positioning of Thermostat

STEP 3: Inspection and Testing of Mat

STEP 4: Preparing the Floor

STEP 5: Installing the Element

STEP 6: Electrical Connections

STEP 7: Warranty

## STEP 1: DESIGNING THE SYSTEM

To select the proper size heating element(s) for your application, measure the area to be heated and determine the heating element widths and lengths to fit the clear inside dimensions (wall to wall, etc). It is important to allow up to 6" of clearance around the perimeter of room and from any baseboard heating or permanent fixtures to allow the elements to fit without touching adjacent vertical surfaces or overlapping. Accurate dimensions are required for the proper kit size selection or for custom elements to be ordered and fabricated. Please note that the heating elements can not be cut or notched to fit around any obstructions or penetrations such as door openings or floor registers.

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).

## STEP 2: POSITIONING OF THERMOSTAT

1. 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 elements 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.**

2. The heating elements should be laid out so the connection leads are running to the shorter wall of the room where the thermostat is located.

### STEP 3: INSPECTION AND TESTING OF HEATING ELEMENTS

NOTE: Verification that the heating elements were received in operable condition is important prior to installation. When the heating elements 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 element and call Protecto Wrap Company at (800) 759-9727 for replacement assistance.

Connection leads from the heating elements 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 elements 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 ELEMENTS IN ANY WAY.**

### STEP 4: 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 Protecto Wrap #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 elements as once the adhesive side of the heating element comes in contact with the primed surface it will provide a tenacious bond.

### STEP 5: INSTALLING THE ELEMENT

With the release paper still on, position the element 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 element 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 element 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 element into position as it unrolls to achieve a positive bond while avoiding trapping air bubbles. For adjacent elements, follow the same procedure starting with alignment of side by side elements in a butt joint fashion. Do not overlap elements.

#### Electrical Requirements

120V or 240V

Requires a dedicated 20 amp breaker

12 watts per sq. foot

As soon as the element is in place, tape the thermostat sensor along side element or in butt joint of multiple elements. Ensure the sensor is set down so it is level with the element and not on top of it. Now run the lead wires from the elements 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 elements 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 element of connection leads that may have occurred during installation. If damage is found, contact Protecto Wrap Company for advice and/or replacement assistance at (800) 759-9727.

The elements are 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 element surface. Take care during the troweling process to not nick or cut into the element.

**DO NOT TURN ON THE ELEMENT FOR 14 DAYS ALLOWING THE THIN-SET AND GROUT TO MATURE.**

### STEP 6: 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. If any element connectors must be replaced, ensure that the heating panel has not been damaged by removing the original connector. If it has been damaged, then the entire panel set must be replaced. Any element connectors which are removed must be replaced. A connector may only be crimped once. Apply caution stickers provided with kit in appropriate locations. After the tile installation has been installed for a minimum of 14 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:

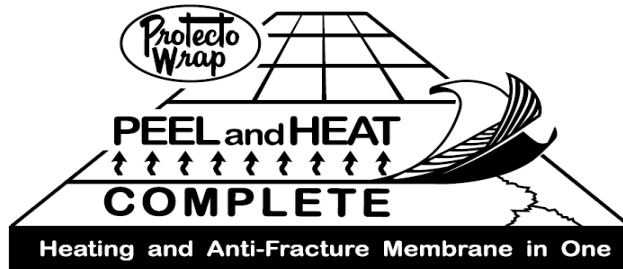
Punctures, cuts or modifications to the heating elements may result in risk of electrical concerns and will Void the Warranty.

Do not apply elements 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 Protecto Wrap products.

#6000 Primer is water based - Protect from Freezing.



# PEEL AND HEAT COMPLETE™

## WARRANTY INFORMATION & REGISTRATION

Thank you for purchasing Peel and Heat Complete! To register your system, please go to [www.protectowrap.com](http://www.protectowrap.com) or complete the warranty card below within 30 days of purchase and fax to 303.777.9273.

### Homeowner Information

Company Name		Telephone	
Address		Email	
City	State	Postal/Zip	
Fax			

### Floor Installer Information

			Check here if homeowner installed <input type="checkbox"/>
Company Name		Telephone	
Address		Email	
City	State	Postal/Zip	
Installer Name		Fax	

### Electrician Information

Company Name		Telephone	
Address		Email	
City	State	Postal/Zip	
Electrician Name		Fax	

### Heating System Information

Install Date			
Sub Floor Material			
Total Rolls Installed			
	First Ohm Reading	Final Ohm Reading	
Roll 1			
Roll 2			
Roll 3			
Roll 4			
Roll 5			
Roll 6			
Roll 7			