

Once the piping arrangement has been selected you will then solder the tubing in place using accepted practices. Please note that an expansion compensator must be provided on any straight continuous run longer than 25 feet.

#### Start Up

Check for any leaks. Ensure that adequate flow is providing the required water temperature delta "T" for maximum output. It may be necessary to balance the system to achieve the flow or water temperature required to meet the desired capacity. Check performance chart for output at specific flow rate.

#### Front casing

Place the lower locating lip (on the inside of the front cover) on the front bottom side of the plastic glide clip. See figure 4. Carefully pivot the casing upward towards the top of the backplate and snap it into position. See figure 5.

When installing starter strip, end caps, valve boxes and internal or external covers, the accessories do not attach to the glide clips but overlay the front casing. See Accessories installation guide.

To remove the front casing, starting from one end of a length of Heating Edge locate the first plastic element glide clips and carefully apply downwards pressure onto the edge of the grille, then pull the bottom casing away from the heater element, repeat the process on the next plastic element glide clips until the front casing can be lifted clear.

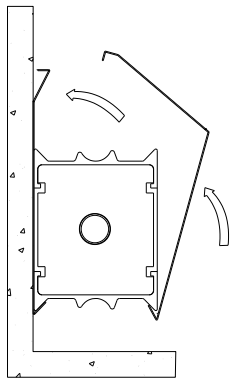


FIGURE 4

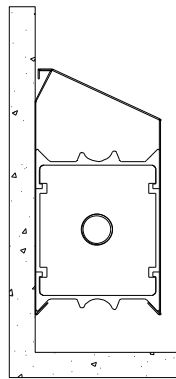


FIGURE 5

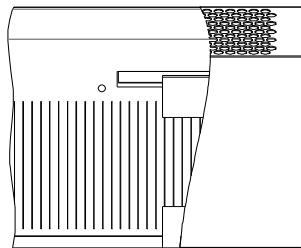


FIGURE 6

#### Room Thermostat Control

Heating Edge™ can be controlled via a remote wall mounted room thermostat, utilizing zone valves or circulators. Please refer to manufacturer's instructions for the application and installation of thermostats and zone valves or circulators

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[www.smithsenvironmental.com](http://www.smithsenvironmental.com)



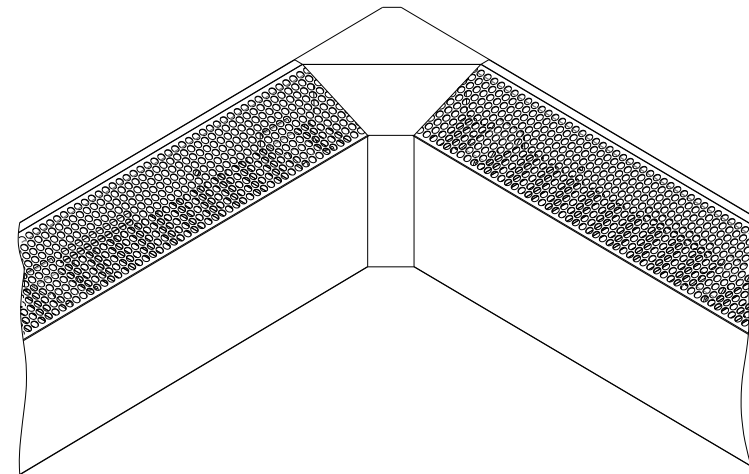
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## HE3 SILENT FIN™ HEATING EDGE

PATENT PENDING

PERIMETER HEATING

INSTALLATION GUIDE



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## IMPORTANT

HEATING EDGE™ HAS BEEN FULLY ASSEMBLED AT THE FACTORY TO MINIMIZE ANY SHIPPING DAMAGE. To prepare the components for installation, first remove the front casing. Starting from one end of a length of Heating Edge, locate the first plastic element glide clip and carefully apply downwards pressure onto front casing allowing the bottom to be disengaged from the clip holding it in place. Gently pull the bottom casing away from the plastic element glide clip. Repeat the process on the next plastic element glide clips until the front casing can be lifted clear of the backplate. Then slide the coil block off of the backplate See Figure 2. THESE THREE ITEMS ARE REQUIRED FOR A SUCCESSFUL INSTALLATION. PLEASE PROCEED WITH THE FOLLOWING INSTRUCTIONS.

## Introduction

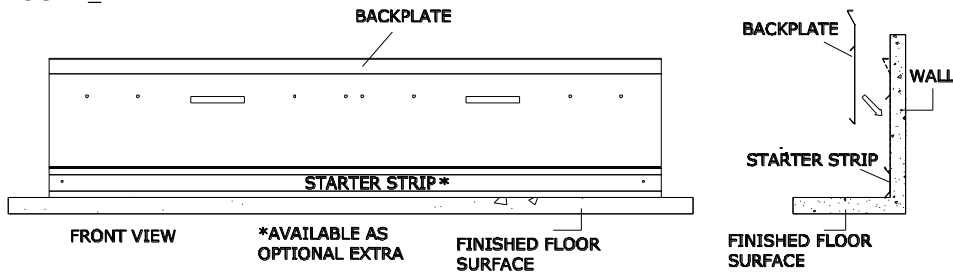
Heating Edge™ is designed to fit directly against a perimeter wall to provide a constant flow of warm air into the room. Heating Edge™ is supplied complete with a backplate, a heating element (core), a front cover and 3" splicer. Starter strips, end caps, valve boxes, inside and outside corners are all available as accessories. Element only (EO) and casing only (TK) are also available to order separately

## Preparation/ Installation

Ensure that the walls are flat, sound and capable of safely supporting the weight of the product.

Although a minimum AIR GAP of 1¼" is required between the underside of the backplate and the finished floor surface, it is advisable to maintain a 2" to 3" air gap at all times. Failure to provide, at least the minimum, will dramatically affect the output from the product. See figure 1

FIGURE\_1



### If using a starter strip (Available as accessory)

Attach the starter strip at the base of the wall (See figure 1), This acts as a guide for mounting the backplate. Note that this strip is 1¼" high (the minimum installation height), If your installation will be at an alternate height, the starter strip will not be necessary. Also note that if a kick board has already been installed, it may be necessary to remove it

### Backplate See figure 1

After measuring the correct mounting height please screw the left hand (or right hand) end of the backplate to the wall. Ensure that the backplate is level and then secure the opposite end firmly to the wall. Mounting holes are 16" on center. Additional holes may be drilled as required. Repeat this process with each length of backplate. Always allow the correct distance from the return walls to compensate for the dimensions of the accessories you have selected

## Cutting to size

If required, Heating Edge can be cut to size using the appropriate tools per manufacturers' instructions. After determining the required length, mark front panel and backplate and cut to size. Remove aluminium element core fins to equal the same distance previously cut.

**NOTE: REMOVE THE FINNS FROM THE END OF THE ELEMENT CORE THAT IS NOT SWEDGED.**

Measure and cut the length of copper tubing so it is equal to the length of the front panel and backplate using a tube cutter.

Any irregularities in the cut metalwork will be hidden by the splicer or corner joints etc.

## Heating Element. See figure 2

Ensure the element core has plastic element glide clips fitted and evenly spaced across the element.

Locate the bottom plastic element glide clips in the bottom edge of the backplate, pivot the element towards the backplate and carefully slide the top plastic element glide clips into the louvres in the backplate. See figure 3

The element core is now ready for connecting to the Supply & return pipework.

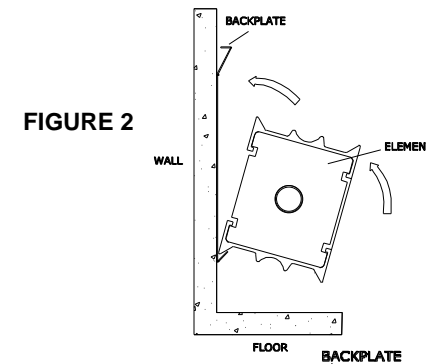
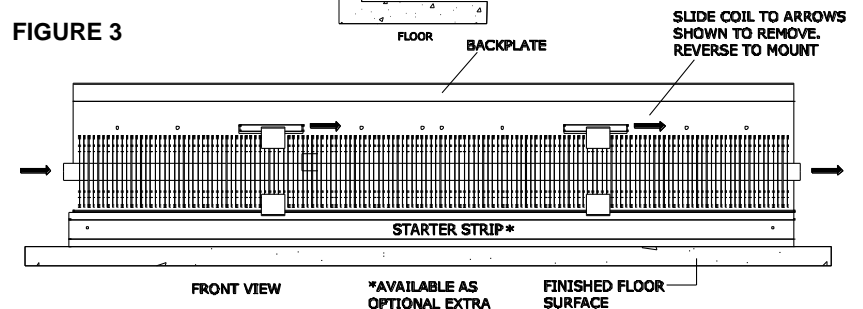


FIGURE 2

FIGURE 3



## Pipework

The Heating Edge™ element core is supplied with ¾" Supply tubes. Tube for return pipework may be fitted on top of plastic element glide clips which incorporate a tube support.

Please check the website for full range of capacities - [www.smithsenvironmental.com](http://www.smithsenvironmental.com)



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## HE3 SILENT FIN™ HEATING EDGE

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### PERIMETER HEATING ACCESSORY INSTALLATIONS TO FIT HEATING EDGE THREE.

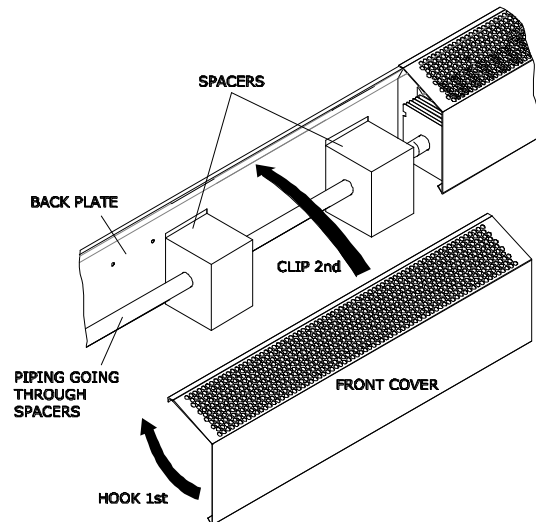


End Caps and valve Boxes are two piece accessories. These comprise of a front/ side plate and a pipe cover. To install an end cap or valve box first screw the pipe cover in to conceal the pipework, then hook the front/ side panel onto the front panel ensuring a minimum 1" overhang. Finally lever the front/side panel up and snap onto the backplate.

#### Trim Kit.

Trim kits are available in 1ft, 2ft, 3ft, 4ft, 5ft, 6ft, 7ft and 8ft lengths. Each kit includes a backplate, a front casing and specially designed spacers that are used to hold the cover off of the backplate. The spacers are manufactured to allow both a supply and return tube to pass through them. So, if a trim kit is needed the installer must install the spacers at the same time that he installs the Heating Edge™ fin block.

The trim kit is used to complete a run of Heating Edge™ from wall to wall where the required heating output has been achieved and a dummy panel is required to ensure the installation looks uniform. The trim kit backplate is installed first so that it is parallel and level with the backplate of the full baseboard strip. The spacers are hooked into the backplate by placing the lower groove on the bottom lip of the backplate and tilting the spacer up and into the top part of the backplate until it snaps into place. The installer must then run his copper supply and return tubes through the spacers and then solder them to the ends of the Heating Edge™ coil block. The trim kit cover is installed along with the baseboard covers in the same manner as described for the baseboard cover installation. Note that all accessories will fit the trim kits as well as the full cored baseboard sections.



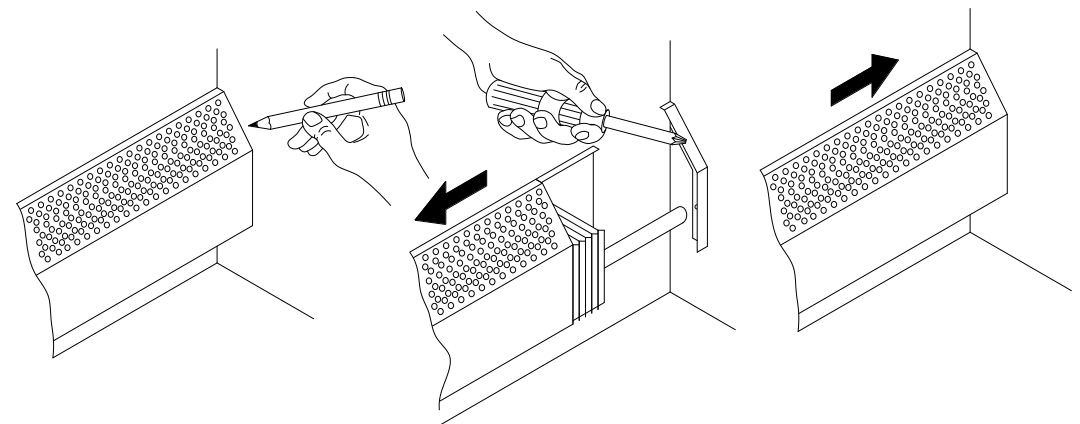
#### Heating Edge Wall End Bracket

The bracket allows the casing or splicer to slide over or clip over itself for extra support, additionally the design of the bracket allows for pipe-work to pass through easily.

Lightly trace around the Heating Edge casing and remove or slide the casing away from the wall. (See removing the casing section for information on casing removal)

Space the Wall End Bracket 1/16<sup>th</sup> inside the tracing line and affix the HEWB bracket in this position using suitable fasteners for your wall.

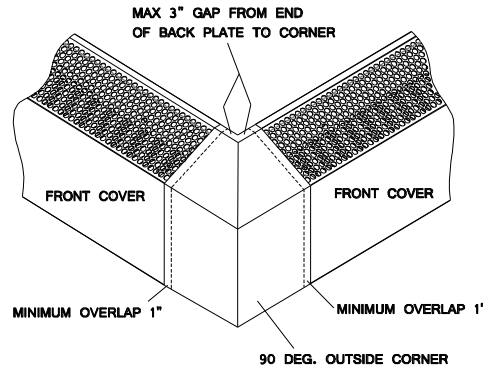
Re-attach the casing by either sliding the casing over the bracket or joining the casing to the bracket with a splicer (Not included)



## 90° outside Corner

To be used when joining two lengths of Heating Edge™ on an outside corner where the angle is 90°.

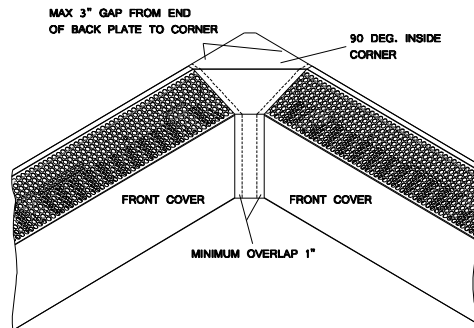
The Heating Edge™ outside corner is a single piece with tabs at the top and a tab clip at the bottom. To install, please ensure that the Heating Edge™ backplate is fixed to the two opposing wall surfaces with a maximum gap from the corner of no more than 3". Place the bottom tab clip under the adjacent Heating Edge™ covers. Then angle the outside corner up so that the top tabs snap in between the wall and the covers of the tops of the adjacent covers. Once installation is complete, the outside corner should fit snugly and the seam formed by the corner and the covers should be smooth and uninterrupted.



## 90° inside Corner

To be used when joining two lengths of Heating Edge™ on an inside corner where the angle is 90°.

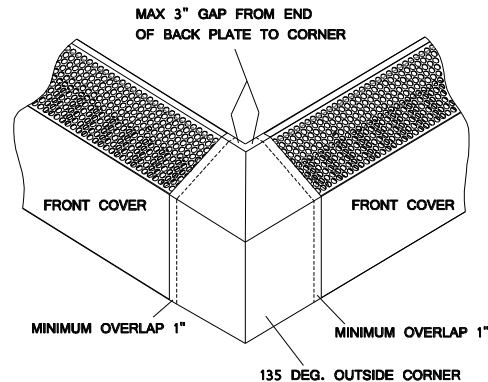
The Heating Edge™ inside corner is a single piece with tabs at the top and tab clips at the bottom. To install, please ensure that the Heating Edge™ backplate is fixed to the two opposing wall surfaces with a maximum gap in from the corner of no more than 3". Place the bottom tab clip under the adjacent Heating Edge™ covers. Then angle the inside corner up so that the top tabs snap in between the wall and the covers of the tops of the adjacent covers. Once installation is complete, the inside corner should fit snugly and the seam formed by the corner and the covers should be smooth and uninterrupted.



## 135° outside corner

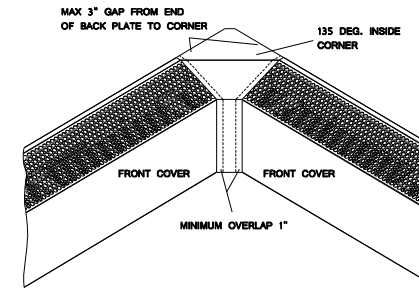
To be used when joining two lengths of Heating Edge™ to the two opposing surfaces with a maximum gap from the corner of no more than 3".

The Heating Edge™ outside corner is a single piece with tabs at the top and a tab clip at the bottom. To install please ensure that the Heating Edge™ backplate is fixed to the two opposing wall surfaces with a maximum gap from the corner of no more than 3". Place the bottom tab clip under the adjacent Heating Edge™ covers. Then angle the outside corner up so that the top tabs snap in between the wall and the covers of the tops of the adjacent covers. Once installation is complete, the outside corner should fit snugly and the seam formed by the corner and the covers should be smooth and uninterrupted.



## 135° inside Corner

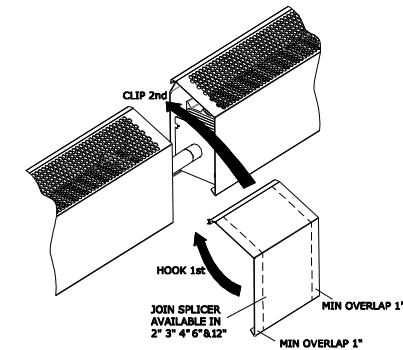
To be used when joining two lengths of Heating Edge™ on an inside corner where the angle is 135°.



The Heating Edge™ inside corner is a single piece with tabs at the top and tab clips at the bottom. To install, please ensure that the Heating Edge™ backplate is fixed to the two opposing wall surfaces with a maximum gap in from the corner of no more than 3". Place the bottom tab clip under the adjacent Heating Edge™ covers. Then angle the inside corner up so that the top tabs snap in between the wall and the covers of the tops of the adjacent covers. Once installation is complete, the inside corner should fit snugly and the seam formed by the corner and the covers should be smooth and uninterrupted.

## Joint Splicer

These are available in 2", 3", 4" and 6" lengths and are used to cover joints between two abutting Heating Edge™ covers or to provide spacing between Heating Edge™ covers if required (i.e. expansion joints and precise fitting around awkward areas)



Select the desired splicer width for the application ensuring the splicer has an overlap of at least 1" over the front cover on either side of the joint to be covered. The splicer is a single piece with a tab at the top and a snap tab at the bottom. To install, place the lower snap tab under the front cover, lift up and snap the top edge between the wall and the back of the Heating Edge™ covers. Once installation is complete the splicer should fit snugly and the seams formed by the splicer and the covers should be smooth and uninterrupted. Please note that the 6" splicer can easily be confused with the cover of the 6" end cap. The difference is that the 6" splicer is a true 6" while the cover for the 6" end cap is actually 6 1/2" to accommodate the overlap.

## Adjustable Valve boxes (right and left hand)

Adjustable valve boxes (6" or 12") allow supply and return valves to be field installed (if desired) and allow the piping to enter the unit from the bottom. Adjustable valve boxes may also be used to finish a length of Heating Edge that does not run the whole length of a wall.