



NEUEX
HEARTH PRODUCTS

Vermiculite Replacement Panels
Installation Method





Suggested Installation Procedure Thermax Vermiculite Replacement Panels

This method is a suggested procedure only and not the *only* method for installing vermiculite panels in fireplaces or stoves. The method of attachment suggested here is for pre-fabricated fireplaces and stoves to which one may clamp the panels. Panels may also be fixed in masonry fireplaces by masonry anchor & clamp or mortared into place using a refractory air set mortar.

1. Tools and Supplies Required:

- Quantity of Thermax Vermiculite Panels sufficient to cover the area to be lined.
- Table saw, band saw, or jig saw with wood-working tooling.
- Metal clamps (usually provided or in place from previous liner) and sheet metal screws. Sufficient quantity to hold the back and two side panels.
- Measuring Stick/Rule.
- Pencil for marking the panels before cutting – straight edge for marking the panels.
- Dust mask.

2. Preparation:

- Remove old refractory material to be replaced.
- Clean all surfaces that will contact the replacement panels – free from debris and dust. Make sure that the surface that will support the panels is smooth and without projections that would damage the panel or create gaps behind the panel. If an uneven surface is present and cannot be smoothed by cleaning, apply a refractory air setting mortar to “level and smooth” the surface so that the panel is in contact along its entire surface area.

3. Measure and Mark:

- Measure individually the areas to be lined. Normally this would consist of a back panel and two sides. A hearth panel may also be desired. If installing a hearth panel, remember to allow a gap at the rear of the fireplace for the back panel to fit. Measure the side panels keeping in mind that they will rest on *top* of the hearth panel.
- It is recommended that the maximum width of any panel *not* exceed 18”. For example, if your rear panel dimension is 30”, it is suggested to divide the rear panel into two pieces 15” wide. Height of the panel is not restricted in this way.

Suggested Installation Procedure

Thermax Vermiculite Replacement Panels

Page 2

- Mark on the smooth side of the panel(s) the dimensions of each piece based upon your measurements.
- For expansion, allow 1/8" gap on each end of the panel where the panel meets another panel or the wall of the firebox.

4. Cut Panels

- Standard wood-working tools are sufficient. No special tooling required.
- Be sure to wear an OSHA approved dust mask during cutting.
- Cut in a well ventilated area and use a shop vacuum to minimize dusting.
- Off cuts may be disposed of at your locality's disposal of non-hazardous construction materials waste facility. It may also be ground up as a soil supplement to retain moisture.

5. Install Thermax Replacement Panels:

- First install the back panel and secure at the top with clamps. Do not over-tighten any of the clamps! The clamps should be just tight enough to hold the panel to the wall but also allow the panel to move as it expands or contracts.
- Install the hearth panel (if replacing) so that it fits tight against the back wall panel and extends to the sidewalls (which is to be behind the sidewall panel).
- Next, install the two side panels, fixing them at the top with clamps.

6. Build a fire!

- Build a small fire for the first 24 hours. If a mortar is used, allow 24 hours for it to air dry before building a fire.
- Avoid throwing large pieces of wood against the vermiculite replacement panels! They will break if abused.
- Small hairline cracks may appear over time. This is normal due to repeated heat up and cooling. This will not require the replacement of the panels or make them unsafe. If the panel develops cracks more than 1/8" wide, the crack should be patched temporarily with a refractory mortar and replaced, promptly.
- Contact your Chimney Professional when in doubt.

NOTICE:

Installation and proper use of Thermax Vermiculite Panels is not the responsibility of Neuex Hearth Products or its affiliates. No warranty or guaranty is offered or implied.

Follow manufacturer's instructions for installation and use of your specific heating appliance and the local building and fire codes in your area for construction requirements. Do not replace any refractory in zero-clearance fireplaces whose R-Value is greater than the R-Value of Thermax Vermiculite Panels. The R-Value for Vermiculite panels is from 0.85 – 1.03 *per inch*, depending upon the density selected. In most cases vermiculite panels of any density would have a higher R-Value than for fire bricks and dense refractory castables.