



Burley Stove Vermiculite Brick Installation: User Guide

This document provides a detailed guide on how to correctly fit the internal refractory bricks in your Burley Fireball wood-burning stove. Proper installation of these bricks is crucial for the stove's efficiency, heat retention, and the longevity of its internal components. The stove relies on these bricks to manage heat effectively.

1. Safety First!

Before you begin, please ensure the following:

- **Stove is Cold:** Ensure the stove has cooled completely. Attempting to work on a hot stove can cause severe burns.
- **Gloves:** Wear appropriate work gloves to protect your hands from sharp edges or dust.
- **Ventilation:** Ensure the area is well-ventilated, especially if there's any residual dust.
- **Read Your Manual:** Always refer to your stove's specific user manual for any model-specific details or warnings.

2. Tools and Materials You Might Need

- New set of Burley refractory bricks (ensure you have the correct set for your model).
- A vacuum cleaner or a brush for cleaning.
- A protective sheet or newspaper to cover the floor.
- Flashlight (optional, for better visibility inside).

3. Understanding Your Bricks

The refractory bricks in your stove are designed to protect the steel body from direct flame impingement and to retain heat, which aids in a more complete combustion. They are typically made of vermiculite or similar heat-resistant materials and are cut to specific shapes to fit snugly within the firebox.

For the Burley range of stoves, you will generally have:

- **Base Bricks:** These form the floor of the firebox.
- **Side Bricks:** These line the left and right walls.
- **Back Bricks:** These line the rear wall.
- **Top Baffle Plate/Brick:** This sits at the top of the firebox, deflecting hot gases and increasing their residence time in the stove, improving efficiency.
- **Lower Baffle:** This is the stainless-steel soot filter with marine-grade mesh.

Step 1: Prepare the stove for the new bricks

Remove Old Bricks (if applicable): If you are replacing old, worn, or broken bricks, carefully remove them from the stove. Note their positions by marking with a pencil as you remove them, as this can help with the installation of the new ones.

Clean the Firebox: Thoroughly clean out any ash, debris, or small pieces of old brick from the firebox. Use a vacuum cleaner or a stiff brush. Ensure the surfaces where the new bricks will sit are clean and free of obstructions.

Step 2: Insert and Position Top Brick

Carefully position and hold the top brick securely in its designated position at the top of the firebox.



Step 3: Insert Left Side Brick

While holding the top brick, take the left side brick. Angle it to insert it, guiding the top edge in first, then lowering the back into place. Ensure they are flush against the walls.



Step 4: Seat The Left Brick

Ensure the left brick is fully seated against the side and back walls of the stove, resting correctly on the stove floor.



Step 5: Insert Right Side Brick

Now, insert the right-hand brick using the same technique. Position it slightly higher at the top to clear the fittings as you guide it in. Ensure they are flush against the walls.



Step 6: Insert Back Brick & Stainless-Steel Soot Filter

With the side bricks in place, you can now release the top baffle. Place the back brick. After the back brick is secure. This is often the trickiest part, but with patience, it's straightforward. The baffle plate is crucial for the stove's performance and flue draught.

1. **Locate the Ledges/Supports:** Look inside the top of the firebox for corner risers where the baffle plate legs are designed to rest.
2. **Angle and Insert:** Angle the baffle plate slightly and carefully manoeuvre it into the firebox. You might need to push it up and back, then lower the front edge onto its supports.
3. **Secure Position:** Ensure the baffle plate is sitting level and securely on all its designated supports. It should not wobble or fall easily. It typically sits below the top brick with the slot at the rear forcing the smoke to take a longer path before exiting.



Step 7: Final Check

The installation is complete. **Snug Fit:** All bricks should fit snugly, with minimal gaps. This prevents them from shifting during use.

- **No Obstructions:** Ensure no bricks are obstructing the air inlets or the flue exit.
- **Gentle Use:** When first using the stove after brick replacement, start with smaller fires to allow the new bricks to 'settle in' and cure slightly.
- **Avoid Impact:** Be careful not to strike the bricks with logs when loading the stove, as this can cause them to crack or break prematurely. These refractory brick boards, which manufacturers use inside stoves, are made from vermiculite, which is an inert insulating material perfect for withstanding high temperatures and improving combustion. It can survive nearly anything except impact. If you throw logs into the stove, you can break the boards.
- **Regular Inspection:** Periodically inspect your bricks for cracks or damage. Replacing them when necessary maintains your stove's efficiency and protects its steel body. Remember, a well-maintained stove ensures optimal performance and safety.

If you have any further questions or require assistance, please don't hesitate to contact us or your local Burley retailer.

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