



Thermax[®] HIGH STRENGTH VERMICULITE PANELS



1. Material Description:

Vermiculite is a naturally occurring non-combustible mineral of the 3-layered silica group. The expanded form of vermiculite is mixed with inorganic binders and pressed into durable refractory boards. There are no fibers or other hazardous materials added. The product is odor free and will not create any off-gases when heated. The boards are strong and durable to 2,012°F. Disposal as produced is ecologically “friendly”. Granulated after use, it can be mixed with compost material or as a soil additive for moisture retention, aeration, and beneficial mineral additions.

2. Applications:

- Original or replacement firebox liner, baffle, insulation for fireplaces, pellet stoves, boilers, and bio-mass heaters.
- Veneer old refractory materials. Suitable for zero clearance fireplaces where the R-Value of the material being replaced is equal to or lower than the R-Value of Thermax Panels.
- Fire protection – such as steel beam cladding, fire door cores, and laminated construction panels and surrounds.
- Heat shield core material.

3. **Better Combustion:**

Thermax Boards have considerably lower heat capacity than higher density Refractories, such as fireclay bricks and precast shapes. The heat remains in the combustion chamber and speeds ignition and contributes to complete combustion, lowering emissions and ash volume. The Thermax lined heater remains clean: will not as readily build up with soot and ash.

4. **CUTTING METHODS AND TOOLING REQUIREMENTS:**

The panels may be cut to fit using normal wood-working tools. Customized lining shapes can be created in our factory or at your location. Decorative designs can be accomplished using CNC router or special molds.

5. **STANDARD DENSITIES, DESIGNS, SIZES, AND THICKNESS:**

Panels are provided in a standard size of 39.4" x 24" x 5/8", 39.4" x 24" x 1" or 39.4 x 24" x 1 1/4". Two standard designs are "Brick Wall Design" and "Herringbone Design" (picture above). Other designs are possible and available upon request.

Panels are available in sizes up to 8' x 4' and thickness ranges from 3/8" to 3".

The recommended density is 600 (37 pcf) for baffles, pellet, and gas fired appliances, 750 (47 pcf) for wood burning applications. Higher density = Higher strength. Caution: *Thermax Vermiculite panels are not suitable for all wood-burning applications, for example, the floor of a fireplace. Care must be taken when placing logs into the fireplace so not to impact the panels.*

Standard 1" x 24" x 39.4" brick wall and herringbone panels in SF-750 weigh approximately 25 lbs. each. F-600 panels weigh approximately 22 lbs. each.

