How to Make a Brick Kiln

Two Methods:  Brick Kiln for Firing Clay

A fire built in a kiln made of bricks can be used to heat clay or “fire” and harden the clay. Freshly-made bricks that have not yet been fired can also be used for a kiln's walls. The heat from the kiln's fire can harden the bricks to finish them. A kiln for firing bricks may be very large and require many bricks. This kind of kiln can be seen in developing countries such as India or Mexico. Try these methods to make a brick kiln.

Method 1  Brick Kiln for Firing Clay

1. Decide on your kiln's measurements. This may be determined by the size of your kiln shelf or how much space you have for a kiln.

2. Find the wind’s direction for your kiln. Plan to build the kiln so the wind can enter into it from the top.

3. Put down a layer of dirt in your kiln’s location. Smooth the dirt so it is level. This provides an even foundation for your kiln and protects anything under the dirt, such as concrete, which can crack under a kiln's high heat.

4. Form the side and back walls of the kiln. Stack 2 rows of bricks for each wall. Use enough bricks to allow your kiln shelf to be diagonally laid across the walls later.

5. Place 1 brick against the inner side of each side wall. Each brick should extend about halfway past the wall to form a sort of doorway for the kiln. These 2 bricks should be placed with their longer, narrow side down on the ground.

6. Lay a square iron grate on top of the walls. 1 edge of the grate may extend over the back wall while the sides of the grate fall within the inner edges of the kiln's side brick walls. Ashes from the kiln will fall through the grate.

7. Add 2 more rows of bricks to the kiln. Place them on top and around the grate to build up the kiln’s 3 walls.

8. Lay the kiln shelf on top of the bricks. It should be arranged diagonally or like a diamond so 3 of the shelf’s corners are supported by the kiln walls.

9. Place a piece of sheet iron at the front of the kiln. The sheet iron should go partially under the kiln shelf’s fourth corner to support it.

10. Lay another row of bricks on top of the kiln’s walls. These bricks should go around all 4 sides of the kiln.
   - Some of the bricks in this row will be balanced on the kiln shelf. Use pieces of broken shelf or other scrap material to even out the height of the other bricks.

11. Arrange a row of bricks on top of the kiln in a circular pattern. Place additional bricks in a smaller circle inside the first one.

12. Create a hole at the top of the kiln. The hole will act as a chimney to let smoke out of the kiln. Cover part of the top of the kiln with more broken shelving or scrap material to form the hole.
Method 2

1. **Dig a trench in a circular or oval shape.** It may be about 20 to 30 feet (6 to 9 meters) wide, 7 to 8 feet (2 to 2.5 meters) deep, and 328 to 492 feet (100 to 150 meters) in circumference.

2. **Build a tall brick chimney in the center of the trench.** Smoke from the kiln's fire will leave through this chimney. The chimney may need to be above 98 feet (30 meters) in height.

3. **Stack unfired bricks, also called "green" bricks, in a lattice pattern over at least half of the trench.** The openings in the lattice arrangement will let air flow through the kiln.

4. **Top the unfired bricks with finished brick.** This forms a kind of "roof" over the kiln. Leave holes in the roof to drop fuel material (wood, grass, coal, etc.) for the kiln's fire into the middle area of the trench.

Community Q&A

**What is the price of 1 brick?**

It varies, bricks come in all sizes and materials. It is also dependent upon how many you want to purchase. An estimated price of $0.20 would be that. Bricks are typically sold as either $/100 or $/1000 and by the pallet. The pallet depends upon the size and manufacturer.

Tips

- Try using thinly cut, dry wood and newspaper to fuel your kiln's fire for hardening clay.
- Consider leaving the top of the brick kiln open or roofless if possible.
- Consider building your kiln for bricks on a platform of spaced bricks to let air flow underneath it.
- You may be able to place coal in between layers of brick when building your kiln for firing bricks.
Warnings

- Be aware that bricks being fired may melt together from too much heat in 1 area of the kiln.

Things You'll Need

- Kiln dimensions
- Wind direction
- Dirt
- Kiln shelf
- Bricks
- Grate for ashes
- Sheet iron
- Broken shelving pieces
- Scrap material
- Trench-digging equipment
- Brick chimney
- Unfired bricks
- Finished bricks

Sources and Citations

- http://www.hablakilns.com/industry.htm

Made Recently

Did you try these steps?  
Upload a picture for other readers to see.