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BRICKING INSTRUCTIONS

HIGH EFFICIENCY EVAPORATORS



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READ THIS ENTIRE MANUAL BEFORE BRIQUETTING

SUPPLIED MATERIALS

PYROMIX (HIGH TEMPERATURE MORTAR) REFRACTORY CEMENT (BAG) FIRE BRICKS 2 1/2 X 41/2 X 9 FIRE BRICKS 1 1/4 X 4 1/2 X 9 CERAMIC WOOL

NECESSARY TOOLS

BRICK OR CERAMIC SAW TROWEL MEASURING GALLON CEMENT MIXING TOOLS WITH MIXING PADDLE WATER HAMMER METAL ROD WOOD STUD AND SANDED PLYWOOD (1/2'')

Before you begin, you must protect the evaporator from anything that may damage or could dirty the sides or the front of the evaporator.



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Center the grids by measuring the distance from the interior walls of the evaporator.



You must keep a 4 ½ inches space from the threshold of the door. (The width equivalent of a brick)





CERAMIC WOOL

Place the wool on the inside walls of the combustion chamber. (Hold in place with tape)





BRICK INSTALLATION

To install the brick, put approximately $\frac{1}{2}$ inch of concrete on the inside to go about $\frac{1}{4}$ inch away (wall) so that the wall doesn't turn toward the inside and $\frac{1}{4}$ inch of concrete on the side that was installed previously.

Always apply pressure to the bricks

Install the bricks to outline the combustion chamber. (It is possible that the brick will be placed in the direction of the width or the length, next to the grids.)

You must leave a space of approximately 1/8" around the grids.





ANGLE BRICK INSTALLATION





Mount the walls by making cross joints. When starting a brick row from the front of the evaporator, you must start with half a brick, one row out of two. You must also cross the side walls with the back wall.



Example of a cross joint (back and side walls)





When you arrive at the height of the magnetic tube, you must saw a free space for the tube, and be careful not to clog it.



It is important to remove any residue that may be clogging the tube as shown.





INSTALLATION OF BACKWALL BRICKS

The brick must be installed on the side, to do the last row of the rear wall.





INSTALLATION OF BRICK (TOP ROW)

For the top row of brick, there will remain a height of 5½ inches to join the top of the "frame". You will need to put a ¾ inch thickness of concrete under this brick so that ¼ inch remains to the top of the "frame". In addition, it must be cut to a 45 degrees angle, leaving 1 inch width from the outside. The brick is installed on the side.









BRICK INSTALLATION (DOORFRAME)

To complete the installation of the brick, you must install the **small bricks** on the side of the doorframe. It should be cut to the desired width.







BRICK INSTALLATION (EVAPORATOR FLOOR)



When briquetting is done, cut the ceramic wool to the edge of the frame.





GRID INSULATION

When the brick begins to hold, we can isolate the grids:

- 1. Remove the grids;
- 2. Clean the material (steel) under the grids;
- 3. Put a layer of Pyromix concrete;
- 4. Place a strip of ceramic wool on it;5. Make sure Pyromix is dry and reinstall the grids.







REFRACTORY CONCRETE

1. Mix the concrete with water following the supplier instructions (on the bag).

2. Pour the concret onto the bottom of the doorframe.





FORMWORK (MOLDS)

Make the molds into wich the concrete will be poured between the air hoses of the front and rear blocks. Wood panels of a minimum of ½ inch thickness is necessary.





Wood supports must be installed to retain the front and rear shapes and mounts to support underneath the front block. (The rear will lean against the brick wall.)







Pour the cement and take care to fill the corners and the space between each tube.

Use a rod to push concrete everywhere and a hammer to create vibrations, this will greatly help to fill evenly the concrete.







FIRST USE

- 1. Concrete must dry for 4 or 5 days before unmolding.
- 2. Uncover each air tube and open them.

3. When using the evaporator for the first time, a 45-minute precooking at a temperature of about 300 $^\circ$ F is required.

