HEATER BY TURTLEROCK MASONRY HEAT:

Completed core with bench runs and bells complete.

This heater is a contraflow with 3 bells. The first bell is to the left of the left downdraft channel. The other 2 bells are the large volumes at the ends of the bench on both sides.

Heavy cast lintels for firebox openings. Harbison Walker MC-25.

Capping slabs are 3" Clipper DP tiles from Harbison Walker.

Completed base veneer. Firebrick shiner technique was used for the rough facing.

Lintels above firebox openings are castable.

I am using as little steel as possible. Catch up with me in a few years and I'll tell you how well it works.

Structural skin layered over shiner firebrick.

Reinforced stucco with an embedded layer of fiberglass stucco mesh.

Helps with tensile strength and crack resistance.







Completed formwork for cast in place concrete bench and capping slabs.

Forms are made of melamine, with a silicon caulk joint at all seems. They are watertight.



Another view of formwork.

Forms are held with tapcons screws through the blocking on the bottom side of the forms.

Block bond mesh is used to reinforce the concrete.



Poured concrete in place.

It has been hand trowelled and will be polished later by the client.

The concrete mix used Sakrete Pro-Mix in 80# bags, microfibers to prevent surface cracks, a water reducer, and a small amount of pigment.



Forms removed showing the freshly cured concrete and the completed rough veneer.

Slate tile will be added for the final step.



Completed veneer.

The heater is firing very well and has been carrying about 90% of the heat load for a 2300 square foot home.

The owner says it takes about 4-5 firings from a cold heater to get all the mass up to temperature, then he fires 2x day in normal operation with 60 pound loads. It's important that the heater be kept in daily operation.

The bells warm up nicely as does all the concrete.



Another view of the finished heater from the kitchen side of the open first floor.

