

## Soda Kiln Vendor Resources

Larkin Refractory Solutions  
PO Box 716  
Lithonia GA 30058

678-336-7090

this is where I have purchased the Econoram 90 TRix 10 # jar which I use to coat the door of the soda kiln. Make sure the material is consolidated after use, and the top has a bit of water on it so that it does not dry out. This last order of 10 pounds purchased 10/2021 should last for a very long time. This company also makes a mixture for reduction kilns and has been used to secure the gasket of fibre frax in place in both reduction kilns. It is kept on the bank of shelves on the wall of the main room and the kiln room and is located on the bottom right hand shelf. ( it must not freeze)

The kiln door is made of soft brick. The Soda eats away the soft brick so it needs to be recoated in between firings. This material either alone or mixed with some soft brick that has been ground to a powder ( usually happens when making peeps for the kiln) is spread on the larger holes in the soft brick. The brick powder keeps it from shrinking but it is easier to spread the material without the brick added.

After the big holes are filled and allowed to dry, a kiln wash of Kaolin and alumina ( check recipe in box for Soda kiln) is spread over the whole face of the door with particular attention to the recently repaired places.

make sure that any places where the bag wall might hit the door are covered so that the door does not stick to the bag wall from the soda deposits.

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### Bag Wall materials

We use hard brick rated for Cone 10/11 inside the kiln. The Bag wall needs to be replaced periodically as it moves away from the walls into the center of the kiln and eventually pinches the car so that the car cannot move in and out.

There is one more set of bricks for this repair job in the shed in the back and to the right on the shelves on the East wall of the shed. I have purchased these from Harbison Walker Refractories they have a supplier in Romulus Michigan

Harbison Walker Refractories  
28777 Goddard Road  
Suites 203-204  
Romulous MI 48174

734-956-6025

The brick was shipped from their plant in Iowa and I ordered Clippers you need to specify they need to be resistant to soda/ salt environment they are very heavy and the shipping is expensive so I ordered 2 sets at a time to save on shipping

Because we do not have a loading dock, I specify that the delivery has to be made with a truck that has a power tailgate so they can put the pallet on the ground and then we can move the brick a few at a time to the location we want them.

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The burners on the kiln are  
Johnson Burners  
520 E Avenue N W  
Cedar Rapids Iowa 52405

319-365-5267

And as I found with the Catenary Kiln which also has Johnson Burners, the blower and fan are custom made to work with their burners so if there is a problem with them such that you need replacements, you had best contact Johnson Burners and buy the motor and or blower from them for them to work together.

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We have not replaced any of the basso valves on that kiln as yet ( Kiln was built in 1985)

Donovan Palmquist built the Soda Kiln for us in 1985 to our specifications.

507-645-9868  
612-250-6208. I think this is the cell phone

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We put some Fiber Frax material around the Chimney because it was rusting and deteriorating approximately 2019 pr 2020. I notice a place of deterioration on the exterior of the chimney above the roof which can be seen from the backyard looking east towards the shed roof in 2021. the Fibre Frax material is not good to breathe so if you have to work with it cover your skin and wear a mask.

I keep some extra pieces in a box in the kiln room on top of the green ware shelves.

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I have had to use the heavy duty grinder, kept on top of the stilt shelf in the kiln room, to grind down the car for this kiln on the sides to keep it moving freely into and out of the kiln as it seems to catch, especially on the south side (parking lot side). It catches below the level of the Bag Wall.

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October 2021

Axner Supply  
490 Kane Ct  
Oviedo Fl  
407-365-2000

Now part of Laguna but I called them in Florida to get the parts for the Thermocouples we have on Catenary and Soda Kiln

I have had to replace the probe of the Fluke Thermocouple we use for the Soda Kiln. It is from Axner Supply. The wires attaching the probe to the meter broke. The cheapest way to repair it was to buy a new probe, peel back the coating on the wires just enough to attach the wires to the new Probe. The probe must be in a ceramic jacket - a separate purchase. It is not attached securely so be careful when handling it as probe just slides in. The probe is a 12 inch probe and that information is significant when replacing parts. I keep this tool in a special box on my shelf so that it stays safe. We remove the meter from the probe at the end of the firing and put it away then when the probe is cool when we unload the kiln, we put the probe and jacket in the box as well.

You have to have a Thermocouple that will go to cone 10/11 so the ones for the raku kiln will not work as they are not rated to the temperature we go to.