Assembly Manual

HK22” basement firebox with custom upstairs heat battery.
Figure 1
Figure 2
Firbox assembly sequence below is taken from our standard core assembly manual. Ignore the parts outside the firebox.

Lay out the firebox as indicated, using air setting refractory mortar. Line up back corners with the leads that are precast into the lower channels (right channel deleted from drawings for clarity).

Outer width of firebox is 31 ½”. Firebricks sit dry against base channels.

**Error! Reference source not found.** shows the firebricks numbered in the order in which they are installed.

Exact bond is dependent on firebrick thickness, generally between 2-1/4” and 2-1/2”. 
Top front firebricks are notched 1/4” x 4” for firebox lintel.

Begin inner firebox. Note that the bricks are left about 1/4” short at the blind inside corners. The cut edges on these bricks are hidden.
The inner firebox is set dry against the outer firebox. There is no mortar joint between the two fireboxes.

Notch top course of liner as shown. Notches are 1/4” x 4”

Immediately wash down the firebox with a sponge and a liberal amount of water. Rinse with clean water. If this is done right away, it is easy to get a clean looking firebox.
Firebrick floor slopes are glued in place with Sairset - this can be done later.

Install firebox lintel. Brackets on lintel are for heat shields (firebrick splits, installed later, see Error! Reference source not found.).

Lay up next course as shown. Use a dry joint with lintel.
If you have access to strapping tools, this course can be strapped as shown. This is optional. If a strap is used, then round outside corners of bricks slightly.

The purpose of the strap is to transfer weight onto the outer firebox.

This allows the complete inner firebox to be removed, if necessary, rather than in sections.

A total of 10 soaps (5 bricks ripped lengthwise) is used. All bricks are either full length (9"), ¾ length (6 ¾") or half length (4 ½")

(End of standard firebox sequence)

Next course.

Figure 7
Figure 46

Figure 47
Figure 54