

28th April 2018 Boxmoor Kiln Log

Cone positions

Cones 06 (1000), 2 (1160), 5 (1200), 8 (1270), 9 (1280), 10 (1300), 11 (1310) placed at chimney (back) end top and bottom, and top and bottom at door.

Cones 9, 10, 11 placed at top and bottom of centre stack

Kiln log

08.10 Remove all closure bricks from the wood store side stoke and start small kindling wood fire using barbecue fire lighters – all dampers closed.

08.30 Smoke from chimney even though mechanical damper fully in

09.15 Open split damper both sides by 3ins – smoke from chimney cleared and drawing through kiln – keep smallish fire going, not too fast.

09.30 Start bigger wood on first side

10.15 Open up second down slope side and start small fire

11.00 Colour in kiln – both sides firing mixture of small pieces on the lower grating (working well) and bigger pieces on the top fire bars. Start check cones every 30mins

12.00 Kiln atmosphere appears to be reducing slightly even though no smoke seen from chimney – open dampers both sides fully – 4½ ins

16.10 Cone 06 over at door – start reduction. Closing damper fully created back fire at stoke so opened damper 2½ ins at wood store side and 2 ins on down slope side. Increased wood stoke – good reduction

17.10 Open dampers fully and decrease wood stoke to give oxidation. Cone 2 down at door, as well as 06

17.30 Difference in cones

Door - top cone 06/2 both down, 5 up

btm 06/2/5 down

Back – top 06 down, 2/5 up

btm 06 down, 2/5 up

Appears hotter at door end, adjust dampers to try to balance kiln, 4 ins out on down slope side and close to 2¾ ins on wood store side.

18.45 Difference in cones

Door – top cone 5 slight sag, 8-11 up

btm cone 8 slight sag

back - top cone 5 slight sag, 8-11 up

btm cone 5 slight sag, 8-11 up

Appears hotter at bottom of kiln chamber, open the two passive dampers in chimney to give ½ ins gap. Also open top closure brick at the end of wood side fire box

19.30 Kiln appears stuck at cone 5, possibly due to closing damper to direct flames from door to back to balance temperature. Leave passive dampers open and open mechanical dampers fully on both sides.

20.00 No further cone movement, close passive damper and increase wood stoke.

21.10 Make brick support for kiln shelf to cover the wood side stoke hole after loading in wood.
Also start to chop wood into as small strips as possible

01.00 No further effect on temperature, cones remain as before, wood stores now becoming severely reduced, firing aborted

On striking the kiln it was found that the no 8 cone in the centre stack btm had started to sag, though there was no movement in the top centre cones. The kiln therefore was hotter by up to 70 deg C at the bottom of the kiln at the door and in the centre, even though we had attempted to balance out the temperature.



Front Btm shows cones 06/2/5 collapsed at front and cone 8 with sag and cone 9 with slight movement at rear, cones 10/11 no movement

Front Top shows cones 06/2 collapsed at front with cone 5 having slight sag. Cones 8/9/10/11 having no movement.



Back Btm shows cones 06/2 collapsed at front with cone 5 having slight sag. Cones 8/9/10/11 having no movement.

Back Top shows cones 06/2 collapsed at front with cone 5 having slight sag. Cones 8/9/10/11 having no movement.



Centre Top at back shows cones 9/10/11 no movement
Centre Btm shows cone 9 with slight sag and 10/11 no movement.

Also it can be seen that the clay cone holder, being the same in both cases, has matured more in the Centre Btm set.