

Hot Clay Firing Chart



Centigrade	Fahrenheit	Equivalent Cone heated at 150C/hr	Visual Colour*	Notes
100	212	-	Dark	Water boils off as steam. Trapped water can cause the clay to explode so begin firing below this temperature until all water has evaporated
200	392	-		Organic matter burns off causing smoke. Clay body can shrink rapidly at 220C. Fast cooling at this stage may cause pottery to crack
350	662	-	Dark Red	Chemically bonded water begins to be driven off the clay molecules
573	1063	-	Dull Red	Temperature changes (up and down) must be slow at the stage due to chemical changes in the quartz within the clay
600	1112	022		
614	1137	021		
635	1175	020		Decal firing temperature
683	1261	019		
717	1322	018		Carbon and sulphur are burnt off, causing strong smells
747	1376	017		
792	1457	016		The clay surface will start to seal off, trapping any unburnt organic materials. Temperature before this stage should be increased steadily with vents open to allow these materials to burn out before this stage
804	1479	015		
838	1540	014		
852	1565	013		
884	1623	012	Cherry Red	
894	1641	011		
900	1652	010		Bisque firing temperature is 900-1000C
923	1693	09	Orange	Clay particles begin to vitrify from 900C.
955	1751	08		
984	1803	07		
1000	1832	06		
1020	1870	-		
1046	1914	05		<b>Earthenware Range</b> <b>Hot Clay Earthenware:</b> Vitraglaze Earthenware Glazes: 1020C - 1080C Low Fire Earthenware: 1080 - 1160C Standard Red Terracotta 20% Grog: 1080 - 1180C Red School Clay: 1080 - 1180C
1060	1940	04		
1101	2014	03		
1120	2048	02		
1137	2079	01		
1154	2109	1	Yellow	
1162	2124	2		
1168	2134	3		<b>Stoneware and Porcelain Range</b> <b>Hot Clay Stoneware and Porcelain:</b> Royal Porcelain: 1220 - 1280C ES50: 1120 - 1280C ES10: 1160 - 1280C ES20: 1180 - 1280C ES5: 1180 - 1280C Vitraglaze Stoneware glazes: 1240C - 1280C
1186	2167	4		
1196	2185	5		
1222	2232	6		
1240	2264	7		
1263	2305	8		
1280	2336	9		
1305	2381	10	White	
1315	2399	11		
1326	2419	12		
1346	2455	13		
1400	2552	14	Brilliant White	

**\*Warning!** Do not look into kiln with the naked eye. Use goggles which can screen out infra-red & inspect for as short a period as possible.

This is intended as a general guide. Cones, kilns, glazes and clays vary. Fire according to manufacturer instructions. Testing is always advised.