

FIRING PARAMETERS

Firing of zirconium oxide-supported restorations

- Several units (e.g. multi-unit bridges with bulky pontics) in the furnace impede even and thorough heating of the individual units.
- Heat penetration in the firing chamber depends on the type of furnace and the size of the firing chamber.
- To achieve adequate heating of the individual restorations the heating rate should be lowered by 5–10 °C (9–18 °F) and the holding time extended by 30 seconds.
- The parameters listed in the Instructions for Use apply to Ivoclar Vivadent furnaces (temperature tolerance ± 10 °C/18 °F).
- If furnaces other than those from Ivoclar Vivadent are used, temperature adjustments may be necessary.

Firing parameters

IPS e.max Ceram on IPS e.max ZirCAD	B °C/°F	S min.	t ^r °C/°F/min	T °C/°F	H min	V ₁ °C/°F	V ₂ °C/°F
ZirLiner firing	403/ 757	4:00 4:00	60/ 108	960/ 1760	1:00 1:00	450/ 842	959/ 1758
1* Margin firing	403/ 757	4:00 4:00	50/ 90	800/ 1472	1:00 1:00	450/ 842	799/ 1471
2 nd Margin firing	403/ 757	4:00 4:00	50/ 90	800/ 1472	1:00 1:00	450/ 842	799/ 1471
Wash firing (Foundation)	403/ 757	4:00 4:00	50/ 90	750/ 1382	1:00 1:00	450/ 842	749/ 1380
1* Dentin / Incisal firing	403/ 757	4:00 4:00	50/ 90	750/ 1382	1:00 1:00	450/ 842	749/ 1380
2 nd Dentin / Incisal firing	403/ 757	4:00 4:00	50/ 90	750/ 1382	1:00 1:00	450/ 842	749/ 1380
Stain firing	403/ 757	6:00 6:00	60/ 108	725/ 1337	1:00 1:00	450/ 842	724/ 1335
Glaze firing	403/ 757	6:00 6:00	60/ 108	725/ 1337	1:00 1:00	450/ 842	724/ 1335
Add-On with Glaze firing	403/ 757	6:00 6:00	60/ 108	725/ 1337	1:00 1:00	450/ 842	724/ 1335
Add-On after Glaze firing	403/ 757	6:00 6:00	50/ 90	700/ 1292	1:00 1:00	450/ 842	699/ 1290

IPS e.max Ceram on IPS e.max ZirPress Staining Technique	B °C/°F	S min.	t ^r °C/°F/min	T °C/°F	H min.	V ₁ °C/°F	V ₂ °C/°F
ZirLiner firing – before wax-up and pressing	403/ 757	4:00 4:00	60/ 108	960/ 1760	1:00 1:00	450/ 842	959/ 1758
Stain and characterization firing	403/ 757	6:00 6:00	60/ 108	770/ 1418	1:00 1:00	450/ 842	769/ 1416
Glaze firing	403/ 757	6:00 6:00	60/ 108	770/ 1418	1:00 1:00	450/ 842	769/ 1416
Add-On after Glaze firing	403/ 757	6:00 6:00	50/ 90	700/ 1292	1:00 1:00	450/ 842	699/ 1290

- The firing parameters listed represent standard values and apply to the P300, P500, P700, EP 600 and EP5000 furnaces from Ivoclar Vivadent. The temperatures indicated also apply to furnaces of older generations, such as the P20, P80, P90, P95, P100, P200 and PX1. If one of these furnaces is used, however, the temperatures may deviate by ± 10 °C/18 °F, depending on the age and type of the heating muffle.
- If furnaces other than those from Ivoclar Vivadent are used, temperature adjustments may be necessary.
- Regional differences in the power supply or the operation of several electronic devices by means of the same circuit may render adjustments of the firing and press temperatures necessary.