



Kiln Firing Guidelines: 1/8" - 1" (3mm-25mm)

See 'Firing Tips' for common reasons for deviating from this table

Firing Schedules (ramps are for 6" or larger open face firings on shelves)													
Heating					Annealing & Cooling								
Target temps >>	Step 1		Step 2		Step 3		Step 4		Step 5		Step 6		Minimum Total Time (hours)
	Ramp Rate (per hour)	Hold (minutes)	Ramp Rate (per hour)	Hold (minutes)	Ramp Rate (per hour)	Hold (minutes)	Ramp Rate (per hour)	Hold (minutes)	Ramp Rate (per hour)	Hold (minutes)	Ramp Rate (per hour)	Hold (minutes)	
	1250° F 677° C		To Desired Peak Temp (see Peak Temp Table)		950° F 510° C		800° F 427° C		600° F 316° C		100° F 38° C		
Maximum Thickness					AFAP*	30	200° F	0	300° F	0	400° F	0	8.5
							111° C		166° C		222° C		
1/4"	300° F	30	400° F	Per Peak Temp Table	AFAP	60	170° F	0	270° F	0	370° F	0	9.8
6 mm	166° C		222° C					94° C		150° C		206° C	
3/8"	275° F	50	325° F	Per Peak Temp Table	AFAP	90	135° F	0	235° F	0	335° F	0	11.6
9 mm	153° C		166° C					75° C		131° C		186° F	
1/2"	250° F	75	275° F	Per Peak Temp Table	AFAP	120	100° F	0	200° F	0	300° F	0	13.8
12 mm	139° C		153° C					56° C		111° C		166° C	
3/4"	200° F	85	225° F	Per Peak Temp Table	AFAP	180	50° F	0	100° F	0	200° F	0	19.6
19 mm	111° C		125° C					28° C		56° C		111° C	
1"	175° F	100	200° F	Per Peak Temp Table	AFAP	220	25° F	0	45° F	0	150° F	0	29
25 mm	97° C		111° C					14° C		25° C		83° C	

**AFAP means
As Fast as Possible

Basic Definition of firing steps	
Step 1	Heat glass, small prefired components & shelf/mold materials above the softening point. Hold to distribute the heat evenly, and to allow air bubbles to escape (bubble management).
Step 2	Fire to desired peak temp Hold to desired finish
Step 3	Drop to upper annealing point Hold to distribute the heat evenly.
Step 4	Annealing ramp: cool to below the strain point Hold
Step 5	1st Cooling ramp Hold
Step 6	2nd Cooling ramp Open kiln when kiln interior 100° F/38° C, or room temperature.

Peak Temperature Table - Open Face Molds			
This guide is intended as a starting point. Variations of 25° F (13.9° C) or more are expected for specific needs & circumstances, such as kiln type, rate of ramp-up, soak length, thickness of work or mold, etc. All other factors being equal, System 96 glass will require a peak temperature about 25° F (13.9° C) below Fusion FX 90 COE (Bullseye compatible) glass.			
Activity	Temp F	Temp C	Hold Time
'Sugar' firing (sintering)	1300°	704°	1-20 mins
Pâte de Verre	1325°	718°	1-30 mins
Fuse to stick	1350°-1375°	732°-745°	10-45 mins
Maximum Temperature if under 1/4" thickness			
Fuse flat with smooth edges	1420°-1450°	771°-788°	15-90 mins
Fill Bas-Relief molds - wavy edges	1450°-1475°	788°-802°	15-90 mins
Fill sharp mold details -irregular edges	1475°-1500°	802°-816°	90-300 mins
Combing	1650°-1700°	899°-927°	15-30 mins