

Re-firing Thick, Previously Fired Work: 1-8-inches (25-203 mm) - Fahrenheit

For work 1" (25 mm) thick and up, and over 24"(61 cm) in any direction, Oceanside recommends using kilns with top, side, and bottom heating

FAHRENHEIT FIRING SCHEDULE (Ramps are for 6" or larger open face firings on shelves)															
	HEATING						ANNEALING AND COOLING								
	Step 1		Step 2		Step 3 [†]		Step 4		Step 5		Step 6		Step 7		
Target Temps >>	300° F		1000° F		To desired Peak Temp (See Peak Temp Table)		950° F		775° F		500° F		75° F		
Max Thickness	Ramp (Rate /Hr)	Hold (Minutes)	Ramp (Rate /Hr)	Hold (Minutes)	Ramp (Rate /Hr)	Hold (Minutes)	Ramp (Rate /Hr)	Hold (Minutes)	Ramp (Rate /Hr)	Hold (Minutes)	Ramp (Rate /Hr)	Hold (Minutes)	Ramp (Rate /Hr)	Hold (Minutes)	Min Total
1"	50° F	40	50° F	100	185° F	Per Peak Temp Table	AFAP*	220 (3.6 hrs)	25° F	0	45° F	0	150° F	0	43 (1.8 days)
1.5"	37° F	60	37° F	150	150° F	Per Peak Temp Table	AFAP	360 (6 hrs)	12° F	0	24° F	0	75° F	0	68 (2.8 days)
2"	25° F	80	25° F	180	125° F	Per Peak Temp Table	AFAP	480 (8 hrs)	7° F	0	14° F	0	42° F	0	105 (4.4 days)
3"	18° F	120	18° F	225	100° F	Per Peak Temp Table	AFAP	720 (12 hrs)	3° F	0	6° F	0	18° F	0	193 (8.1 days)
4"	12° F	160	12° F	270	75° F	Per Peak Temp Table	AFAP	960 (16 hrs)	1.5° F	300 (5 hrs)	3° F	0	9° F	0	350 (14.6 days)
5"	9° F	200	9° F	305	68° F	Per Peak Temp Table	AFAP	1200 (20 hrs)	1.2° F	375 (6.3 hrs)	2.4° F	60 (1 hour)	7.2° F	0	444 (18.5 days)
6"	6° F	240	6° F	340	60° F	Per Peak Temp Table	AFAP	1440 (24 hrs)	0.8° F	450 (7.5 hrs)	1.5° F	150 (2.5 hrs)	4.5° F	0	666 (27.8 days)
7"	4.5° F	280	4.5° F	375	55° F	Per Peak Temp Table	AFAP	1680 (28 hrs)	0.6° F	525 (8.8 hrs)	1.2° F	225 (3.8 hrs)	3.4° F	0	870 (36.3 days)
8"	3° F	320	3° F	405	50° F	Per Peak Temp Table	AFAP	1920 (32 hrs)	0.4° F	600 (10 hrs)	0.8° F	300 (5 hrs)	2.4° F	0	1271 (52.9 days)
Note that data has been estimated for 5, 6, 7, and 8 inch thicknesses					† For drop slumps cut Step 3 Ramp Rate in half		*AFAP means As Fast As Possible								

FIRING STEP DEFINITIONS /OBJECTIVES	
Step 1	Start heat up of pre-fired cold glass, shelf, mold and kiln. Soak to distribute heat evenly.
Step 2	Heat pre-fired glass components to softening point. Hold to distribute heat evenly.
Step 3	Fire to desired peak temperature. Hold to desired finish.
Step 4	Lower to upper annealing point, dropping quickly to minimize devit. Hold to distribute the heat evenly.
Step 5	Annealing ramp: cool to below the strain point. Hold.
Step 6	First cooling Ramp. Hold.
Step 7	Second Cooling Ramp. Open kiln when kiln interior is at 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 and circumstances, such as kiln type, rate of ramp-up, soak (hold) length, thickness of work or mold, etc. All other factors being equal, Oceanside Compatible glass will require a peak temperature about 25° F (13.9° C) below COE 90 (Bullseye) glass.			
Activity	Temp F	Temp C	Hold time
Bending (uni-directional)	1100°	538°	1-20 minutes
Shallow Drop	1200°	649°	1-20 minutes
Slumping with molds	1225°	663°	1-30 minutes
Medium drop (sinks)	1250°	677°	1-20 minutes
"Sugar" Firing or Tack Fuse	1300°	704°	1-20 minutes
Pâte de Verre	1325°	718°	1-30 minutes
Fuse to stick	1350°-1375°	732°-745°	10-45 minutes
Maximum Temperature if Under 1/4-inch Thickness			
Fuse flat with smooth edges	1420°-1450°	771°-778°	15-90 minutes
Fill Bas-Relief molds - wavy edges	1450°-1475°	788°-802°	15-90 minutes
Fill sharp mold details - irregular edges	1475°-1500°	802°-816°	90-300 minutes