oceanside GLASS & TILE®

CELSIUS

Oceanside Compatible™ (System 96®) Firing Schedules - Celsius

Temperatures and hold times in the following schedules should be considered starting points; you will want to adjust them as necessary to achieve your desired effects. (See Forming Stages below for additional guidance.) Please keep in mind that no one firing schedule will work for all projects. Specifics such as project size, number of layers, style of glass, desired finished shape and texture should all be considered when choosing the right firing schedule.

Advanced 8-Segment Full Fuse Profile

Step	Rate	Temp (ºC)	Hold (mins)
1	139	121	30
2	139	566	30-60
3	139	677	10-30
4	139	732-743	20
5	167	796*	10*
6	999	510	60
7	111	427	10
8	167	38	0

2 solid layer + design projects benefit from longer holds to reduce bubbles

*Adjust schedule here to attain different forming results

Basic Full Fuse Profile

Step	Rate	Temp (ºC)	Hold (mins)
1	139	566	30
2	139	677	20
3	167	796*	10*
4	999	510	60
5	111	427	10
6	167	38	0

*Adjust schedule here to attain different forming results

Basic Slump Fuse Profile

Step	Rate	Temp (ºC)	Hold (mins)
1	139	121	15
2	139	566	30
3	83	663*	10*
4	222	510	60
5	111	427	10
6	167	38	0

*Adjust schedule here to attain different forming results

Basic Tack Fuse Profile

Step	Rate	Temp (ºC)	Hold (mins)
1	139	566	30
2	139	677	20
3	167	738*	10*
4	999	510	60
5	111	427	10
6	167	38	0

*Adjust schedule here to attain different forming results

Oceanside Compatible Forming Stages

Forming Stages information is provided to help users understand the melting characteristics of Oceanside Compatible products. The temperatures provided are estimates for common kilns firing a project about 12-inches (30 cm) diameter or square, consisting of two full glass layers and a third design layer (fired thickness about 1/4-inch (6mm)).

Use these guidelines as a starting place, then make adjustments to obtain the desired results for your specific project using your unique equipment. Temperatures are given in degrees Celsius.

DESCRIPTION	BEHAVIOR	TEMP
Slump	Previously fused project softens and slumps to take the shape of a selected form or mold.	660º-675º
Tack Fuse	Separate glass layers are fused together with little deformation beyond softening or rounding of edges.	732º-743º
Contour Fuse	Separate glass layers are fused together, edges are soft and rounded, project surface retains a degree of dimension desired by the artist. (Any degree beyond Tack but not yet Full fused.)	760º-780º
Full Fuse	Separate glass layers are completely conjoined into a single uniform layer, top surface is smooth and void of dimension or relief.	793º-802º
Combing	Recommended temperature for a 3/8-inch thick combing.	904º-927º

FORMING STAGE RANGES (Illustrations represent a cross-section view of 2 layers of glass.)



Tack Fuse	Contour Fuse	Full Fuse
732º-743ºC	760º-780º C	793º-802º C

STRAIN POINT*	ANNEAL POINT*	SOFTENING POINT
476 (+/- 6)	513 (+/- 6)	680 (+/- 6)

* At the Anneal Point of a glass, internal stresses are largely relieved in a matter of minutes. At the Strain Point, internal stresses are substantially relieved in a matter of hours.