

## CERAMTUFF™ A4AS Firing Cycle Guidelines

CERAMTUFF™ A4AS is supplied with a binder and can be debinded under atmospheric conditions at temperatures of 475-500°C. It must be fired under inert atmosphere. The following should be considered guidelines for processing CERAMTUFF™ A4AS. They may need to be adjusted based on equipment, part dimensions, and application.

Segment	Time (hh:mm)	Temperature (°C)	Rate (°C/min)
1	0:10	50	3.0
2	0:15	50	Hold
3	2:40	600	3.5
4	2:15	1000	3.0
5	3:00	1500	2.75
6	0:20	1500	Hold
7	0:30	1575	2.5
8	0:30 (smaller parts) 0:90 (larger parts)	1575	Hold
9	-	20	-
	<b>9:10 (smaller parts) 10:10 (larger parts) Plus cooling time</b>		

## Firing Cycle Explanation

Segment	Description
1	Heat to 50°C at 3.0°C/minute
2	Hold temperature at 50°C for 15 minutes
3	Heat to 600°C at 3.5°C/minute
4	Heat to 1000°C at 3.0°C/minute
5	Heat to 1500°C at 2.75°C/minute
6	Hold temperature at 1500°C for 20 minutes
7	Heat to 1575°C at 2.5°C/minute
8	Hold temperature at 1575°C for 30-90 minutes, depending on size and geometry of part.
9	Turn heat off and cool down