

SUGGESTED HEATING PROCEDURES For EZ EST Colloidal Silica Bonded Castables

1. Prior to the start of the dryout/heatup procedure, EZ EST castables must be cured for a minimum 24 hours at room temperature and must NOT be exposed to freezing temperature during the curing period.
2. The temperatures shown below are measured at the hot face of the cast surface but temperatures should be monitored at several locations on the cast surface to assure uniform heating.

If steaming is observed at any time during the heating, the temperature should be held constant until steaming subsides. The heating schedule can resume when steaming ends.

The hot air in contact with the cast surface must be circulated to avoid steam buildup.

The dryout of castable refractory entails more than just the following heatup schedule. Issues such as burner sizing and location, hot air exhaust, air volume and air volume turnover, and hot air velocity must also be addressed.

The following dryout/heatup schedule is suggested for situations where proper heating equipment and air circulation are used, weep holes are present and unclogged and the ambient temperature during casting and curing ranged from 60°F to 85°F. If all of these parameters are not met, a more conservative dryout/heatup schedule is suggested.

3. The following dryout/ heatup procedure is suggested for EZ EST castables:
 - Increase temperature of the castable to 400°F (204°C) at a rate of 50°F (27°C) per hour.
 - Hold at 400°F (204°C) for one hour per inch thickness (or 3 hours minimum)
 - Increase temperature at rate of 100°F (55°C) per hour to operating temperature (no temperature holds)