



REFRACTORY DEPOT, Inc.

P.O. Box 26188
Collegeville, PA 19426
Phone: 610-308-5449
Fax: 610-831-0766

DRY-OUT INSTRUCTIONS

The following procedure is recommended for Refractory Depot, Inc. materials. Controlled release of water in the castable is necessary to prevent possible build-up of steam pressure and to properly dehydrate the cement phases at higher temperatures. Explosive spalling may occur if proper dry-out procedures are not followed.

Temperatures shown are measured at the hot face of the lining for heating vessels in place, or the oven air temperature for heating linings up to 9 inches (228mm) in thickness. For thicker linings, please contact a Refractory Depot, Inc. representative for additional assistance.

1. Following the initial 24 hour curing period, raise the temperature at a maximum rate of 100°F (56°C) per hour to 300-400°F (149-204°C).

2. Hold at 300-400°F (149-204°C) for 1 hour per inch (25mm) of lining thickness.

3. Raise temperature at the following maximum rate to 1000°F (540°C):

50°F (28°C) per hour for all RDM-LC (low cement bonded) products.

100°F (56°C) per hour for all RDM-HC (conventional cement bonded) and RDM-LW products.

4. Hold at 1000°F (540°C) for 1 hour per inch (25mm) of lining thickness.

5. If the unit is going immediately on-line and the operating temperature is above 1000°F (540°C), then heat at the following maximum rate from 1000°F (540°C) to the operating temperature:

100°F (56°C) per hour for all RDM-LC (low cement bonded) products.

200°F (111°C) per hour for all RDM-HC (conventional cement bonded) and RDM-LW products.

6. If the unit is not going into operation, but will be cooled down, allow the lining to cool down naturally; do not exceed 100°F (56°C) per hour.

Note: 1.) The dry-out of refractory entails more than just following a heating schedule. Issues such as burner size and location, exhaust location, air volume and velocity, etc need to be addressed. Refractory Depot, Inc. recommends that an experienced dry-out company be consulted.

2.) If steaming occurs at anytime during the dry-out procedure, hold at temperature until steaming subsides.