

Data sheet

# Vibrotek 60

ENGLISH

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## Description

A 1600°C medium alumina, medium cement castable for general applications.

## Features

- General low cement applications where medium strength and good thermal shock resistance is required.

## Installation method

Casting.

## Datasheet

Prepared using EN BSI and ISO standard Methods.

## Storage

Store bagged monolithics in a dry place, off the ground and, when possible, with the original shrink wrapping intact.

## Precautions

This must be installed under closely controlled conditions using mechanical mixers and vibration. The resultant concrete has a dense, low permeability structure and care must be exercised during initial heating.

At top water material can be placed at minimum or no vibration.

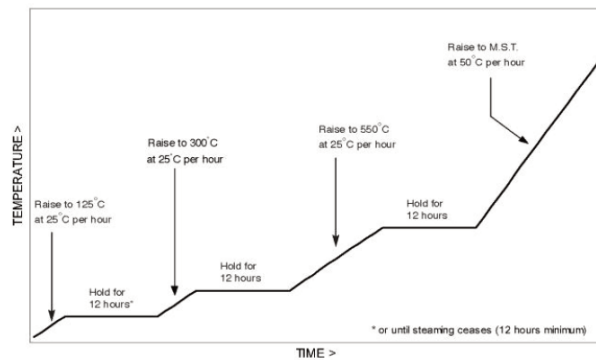
## Typical applications

- Door jambs
- Lintels and piers
- Cartops
- Rotary hearth curbs
- Walking beam furnace and pusher furnace applications

## Instructions for Use

Highest strength is obtained with castable refractory by using the least amount of clean mixing water that will allow thorough working of material into place by vibrating.

A mechanical mixer is required for proper placement (paddle type mortar mixers are best suited). After adding the recommended water mix for at least 4 minutes, place the material within 20 minutes after mixing. For maximum strength cure 24 hours in a damp condition before initial heat-up. New castable installation must be heated slowly the first time.



## Data sheet

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Characteristics		
Bond Type	Hydraulic	
Raw Material Base	Chamotte/ Bauxite	
Maximum Grain size (mm)	6	
Maximum Service Temperature	°C	1600
Bulk Density Dried to 110°C	kg/m <sup>3</sup>	2540
Net Material Required	kg/m <sup>3</sup>	2480

Physical Properties		
Test Temperature (°C)	Cold Crushing Strength (N/mm <sup>2</sup> )	Permanent Linear Change (%)
110	75	
815	55	-0.2
1600	95	1.8

Thermal Conductivity		
W/mK		
@ mean temp	200°C	
	400°C	
	600°C	1.7
	800°C	
	1000°C	
	1200°C	

Typical Chemical Analysis (%)	
Al <sub>2</sub> O <sub>3</sub>	65
SiO <sub>2</sub>	29
Fe <sub>2</sub> O <sub>3</sub>	1
TiO <sub>2</sub>	2.4
CaO	1.9
MgO	0.1
Na <sub>2</sub> O + K <sub>2</sub> O	0.2

Modulus of Rupture (N/mm <sup>2</sup> )	
110°C	N/A
815°C	N/A

Water Addition	
% by weight	5.5-6.5
Volume per Bag (l)	1.375-1.625
Bag Weight (kg)	25

Abrasion Resistance ASTM C704 (cm <sup>3</sup> )	
815°C	N/A

Pallet Size	
kg	1200

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They are supplied as a technical service and are subject to change without notice.

Therefore the data contained herein should not be used for specification purposes.

Check with your Thermal Ceramics office to obtain current information or a Compliance Data Sheet where guaranteed property specifications are required.

Before using these materials, it is strongly recommended that the installer consults Thermal Ceramics manual "storage and installation manual" copies of which are obtainable from Thermal Ceramics offices or distributors.

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