

TECHNICAL DATA SHEET

AIR SETTING MORTAR | READY-TO-USE REFRACTORY MORTAR

PRODUCT Air Setting Mortar	PRODUCT TYPE Ready-to-use, Air Setting	SERVICE TEMP. ≤ 1400 °C
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1. PRODUCT DESCRIPTION

Air Setting Mortar is a ready-to-use refractory mortar for laying and jointing fireclay brick. It hardens at room temperature as it dries, giving handling strength to the joint before the lining is fired, and develops a ceramic bond after heating. It is intended for fireclay brick linings in moderate-temperature zones; for high-alumina brick in higher-temperature zones, use a heat-setting mortar of matching grade.

2. CHEMICAL ANALYSIS (TYPICAL)

Chemical Composition	Typical Value (%)
Al ₂ O ₃ — Alumina	22 - 28
SiO ₂ — Silica	58 - 66
Fe ₂ O ₃ — Iron Oxide	≤ 2.0
LOI — Loss on Ignition	5 - 10

Indicative chemical values for product reference; not contractual or batch-specific limits.

3. PHYSICAL PROPERTIES (TYPICAL)

Property	Test Condition	Typical Value
Recommended Service Temperature	—	1400 °C *
Supply Form	—	Ready-to-use paste
Colour	—	Light grey to cream
Maximum Grain Size	—	0.5 mm
Recommended Joint Thickness	—	1 - 3 mm
Bulk Density	110 °C x 24 h	1.70 - 1.90 g/cm ³
Cold Crushing Strength (CCS)	110 °C x 24 h	30 - 60 kgf/cm ²

** Recommended service temperature is application-dependent and should not exceed the rating of the brick being laid. Actual safe operating temperature can be lower depending on load, atmosphere, thermal cycling, chemical attack and lining design.*

Indicative values for product reference; not contractual or batch-specific limits. CCS values are measured on mortar specimens (5 x 5 x 5 cm) and do not represent bond strength of a laid joint in service.

4. INSTALLATION GUIDELINE

- Stir the mortar thoroughly before use. Do not dilute with water unless the mortar has stiffened, and then add only a small amount.
- Make sure brick surfaces are clean and free of dust, oil and loose particles before laying.

- Apply by trowel at a uniform joint thickness of 1 - 3 mm. Fill the joints completely, press the brick into position and remove excess mortar.
- Allow the mortar to air set at room temperature for a minimum of 24 hours before heating.
- Heat up gradually following the dry-out schedule for the lining. Keep unused mortar in a tightly closed container.

5. TYPICAL APPLICATIONS

• Jointing of fireclay brick	• Furnace lining
• Kiln lining	• Oven and dryer
• Incinerator (selected zones)	• Repair of brick joints

6. PACKAGING & STORAGE

Item	Description
Packaging	40 kg per pail
Storage Life	6 months in the original closed container
Storage Condition	Keep tightly closed in a dry, shaded area, away from direct sunlight

DISCLAIMER

The values shown in this data sheet are typical properties obtained under controlled laboratory and production conditions and are provided for reference only. They do not constitute a specification or a guarantee of performance. Actual results may vary depending on installation practice, water addition, curing, dry-out schedule, furnace atmosphere, and service conditions. For assistance with product selection or installation, please contact Super Refractories.