

Technical Data Sheet

HR GROUT

Non-Shrink Grout



Product Description

HR Grout is a high-performance, non-shrink, cementitious grout designed for structural applications where high strength, durability, and dimensional stability are required. It is non-metallic, non-corrosive, and shrinkage-compensated, ensuring effective load transfer and long-term performance.

Applications

- Grouting under base plates, machinery, and equipment
- Filling voids, gaps, and anchor bolt holes
- Structural repair and retrofitting
- Concrete repair and leveling
- Columns, beams, and precast elements installation

Key Features & Benefits

- Non-shrink and self-compacting
- High compressive strength and load-bearing capacity
- Excellent adhesion to concrete and steel
- Shrinkage compensated for long-term dimensional stability
- Resistant to water and weathering
- Easy to mix and apply



Technical Properties

Property	Typical Value	Typical Value
Appearance	Grey Powder	
Bulk Density	1.6 – 1.8 g/cm ³	
Compressive Strength	≥ 50 MPa @ 28 days	ASTM C109
Setting Time	Initial: 45–60 min	ASTM C266
	Final: 2–3 hours	ASTM C266
Flow / Workability	180 – 220 mm (slump flow)	ASTM C1437
Expansion	+0.1% – +0.3% (compensated)	ASTM C1090
Application Temperature	+5°C to +35°C	
Water Requirement	18–22% by weight of powder	



Method of Application

1. Surface Preparation: Clean substrate; remove dust, oil, grease, loose particles, and laitance.
2. Pre-soak the substrate for 2–3 hours to ensure it is saturated surface dry (SSD).
3. Mix HR Grout with clean water in a mechanical mixer to achieve a smooth, lump-free consistency.
4. Pour or pump grout into the prepared voids or gaps continuously to avoid air entrapment.
5. Allow to set and cure as per standard practice.

Surface Preparation

- Ensure all contact surfaces are sound and free from loose material.
- Roughen smooth surfaces to improve bonding if required.
- Apply bonding agent (HR BondX SBR) if necessary for vertical or overhead grouting.

Storage & Shelf Life

- Store in cool, dry place away from moisture
- Keep bag sealed and off the ground
- Shelf Life: 12 months in unopened packaging

Health & Safety

- Avoid prolonged contact with skin and eyes
- Use gloves, goggles, and protective clothing
- Wash affected areas with water immediately
- Refer to MSDS for complete safety instructions

Limitations

- Not suitable for continuous water flow unless protected
- Do not add excess water beyond recommended ratio
- Ensure proper curing to achieve maximum strength

Disclaimer

The information in this Technical Data Sheet is based on laboratory testing and field experience. Actual performance may vary depending on site conditions, mixing, and application methods. The manufacturer is not responsible for improper use of the product.

