KREVO Grout HS

High-strength, shrinkage-compensated precision grout | Controlled expansion | 30-150 mm

PRODUCT DESCRIPTION

KREVO Grout HS is a high-strength, shrinkage-compensated cementitious grout designed for precision placement beneath structural and mechanical components. Dual shrinkage compensation is specified for both plastic and hardened states to support dimensional stability and non-shrink performance. The mixed grout is placed as a free-flowing material in prepared cavities and below base plates.

ADVANTAGES

- High early and ultimate compressive strength for critical grouting work.
- Controlled expansion and dual shrinkage-compensation characteristics.
- Designed for good dimensional stability and secure contact with the substrate.
- Chloride-free formulation for steel-adjacent grouting applications.
- Suitable for flowable, precision placement with controlled mixing and formwork.

TYPICAL USES

Bridge bearings and bridge beds • Industrial and machinery base plates • Anchor bolts and threaded rods • Crane rails • Structural columns and precast elements • Hole footings • Precision machine grouting.

PRODUCT INFORMATION

PARAMETER	SPECIFICATION
Product type	High-strength, shrinkage-compensated cementitious precision grout
Shrinkage compensation	Dual compensation in plastic and hardened states
Primary function	Flowable precision grouting beneath and around structural components
Standard application depth	30-150 mm
Extended application depth	Up to 350 mm with specified 5-10 mm aggregate extension
Packaging	40 kg bags
Yield	Approximately 20 L mixed grout per 40 kg bag; varies with water
Shelf life / storage	12 months; dry and shaded, between +5 °C and +30 °C

TECHNICAL PERFORMANCE SPECIFICATION

PROPERTY / TEST CONDITION	SPECIFIED VALUE
Compressive strength | 24 hours	45 MPa
Compressive strength | 7 days	75 MPa
Compressive strength | 28 days	92 MPa
Compressive strength | 90 days	102 MPa
Flow at 30 mm gap / 100 mm head	Approximately 1.5 m
Flow at 30 mm gap / 250 mm head	Approximately 2 m
Flow at 50 mm gap / 100 mm head	Approximately 2 m
Flow at 50 mm gap / 250 mm head	More than 3 m
Specification framework	ASTM C1107

Test figures above are stated at +20 °C and a water/powder ratio of 0.15.

Application & System Data

KREVO Grout HS | Grout depth, flow distances, mixing water, substrate requirements and placement

APPLICATION PROPERTIES

PARAMETER	SPECIFICATION	PARAMETER	SPECIFICATION
Minimum grout depth	30 mm	Maximum standard depth	150 mm
Aggregate extension	5-10 mm clean/dry	Maximum extended depth	350 mm
Water per 25 kg bag	3.75-4.25 L	Mixed-grout yield	Approx. 12.5 L
Reference test temp.	+20 °C	Test water/powder ratio	0.15
Aggregate addition	Up to 20 kg / bag	Mixed-grout temperature	Not above +30 °C

Use only measured, clean water and complete 40 kg bags. For standard mixing, add 5.75-6.25 litres of water per bag. The grout and mixed material temperatures affect working time and flow; laboratory flow distances are guidance rather than guaranteed site distances.

TYPICAL PRECISION GROUTING SEQUENCE

STAGE	MATERIAL / METHOD
1 | Inspection	Confirm specified grout depth, load-bearing contact and site conditions.
2 | Preparation	Remove unsound concrete, contamination and rust; saturate porous concrete.
3 | Formwork	Install rigid, watertight forms, pour head and adequate air vents.
4 | Mixing	Add 40 kg powder to 5.75-6.25 L clean water; mix mechanically until flowable.
5 | Pouring	Place continuously to maintain flow, avoiding air pockets and interruptions.

CONCRETE SURFACE PREPARATION

Remove loose or unsound concrete, laitance, dust, grease, oil, coatings and other bond-reducing contaminants. The substrate must be structurally sound. Pre-saturate porous concrete for at least three hours before grouting and remove free surface water immediately before pouring.

STEEL, ANCHORS & BASE PLATES

Remove corrosion, grease, oil and debris from reinforcement, baseplates, anchor bolts and other exposed steel. Verify anchorage, alignment and form dimensions before placement. Do not use this grout for aluminium objects.

INSTALLATION CONDITION	SPECIFIED CONTROL
Substrate / steel	Sound concrete and clean steel; no free water, oil, rust or dust.
Grout head and travel	Provide steady grout head; confirm flow using gap-depth and head guidance.
Deep grout section	Above 150 mm, use approved clean aggregate extension; maximum 350 mm.

Secure rigid, watertight formwork and water-test it before pouring. Provide adequate grout head, feed and air-escape points, as appropriate. Plan the route and sequence to minimise travel distance and prevent trapped air.

FLOW, GAP DEPTH & FORMING

Theoretical flow depends on available grout head. At 30 mm gap depth, approximate flow is 1.5 m under 100 mm head and 2 m under 250 mm head; at 50 mm gap depth, approximately 2 m and more than 3 m respectively. Confirm flow by site trials.

Installation & Product Support

KREVO Grout HS | Mixing, grouting, aggregate extension, curing and safety controls

MIXING PROCEDURE

- Measure 5.75-6.25 litres of clean water for each complete 40 kg bag; use the amount required for the specified flow.
- Add the measured water first, then gradually introduce the grout powder while mixing.
- For small batches use a slow-speed drill (approximately 500 rpm) with suitable paddle; use a high-shear grout mixer for larger batches.
- Mix for up to 5 minutes, until fully dispersed with a consistent flowable / fluid appearance. Avoid unapproved water additions.

PLACEMENT & CURING

- Saturate porous concrete for at least 3 hours; remove free water, then pour continuously to prevent voids and air entrapment.
- Maintain sufficient grout head; allow displaced air to escape through vents or relief holes. Ensure forms are leak-tight.
- Normal application depth is 30-150 mm. For 150-350 mm depths, use clean dry 5-10 mm aggregate only under an approved mix design, up to 20 kg per 40 kg bag.
- Immediately protect and cure all exposed grout after placement using a suitable approved curing method.

LIMITATIONS & SERVICE NOTES

- Store material between +5 °C and +30 °C in dry shaded conditions. Use before the 12-month specified shelf-life period.
- Keep the mixed grout temperature at or below +30 °C; temperature affects working time and flow.
- Do not use ordinary rotating drum mixers. Keep formwork stable, clean and waterproof.
- Do not grout aluminium components. Aggregate extension needs a verified placement procedure and mix design.
- Prevent skin contact and discharge of grout or washwater into the drainage system.

HEALTH, SAFETY & ENVIRONMENT

For professional construction use only. Read the current KREVO Safety Data Sheet before handling. Cementitious powder can irritate eyes, skin and the respiratory system. Use suitable gloves, goggles, protective clothing and dust controls. Follow site safety requirements for mixing, pouring, equipment cleaning and waste disposal.

QUALITY & PRODUCT INFORMATION

Actual performance depends on batch properties, measured water, mixing energy, grout depth, ambient temperature, substrate condition, flow head and curing. Stated strength and flow values are design specifications requiring verification on KREVO production batches before they are represented as certified results.

KREVO | GLOBAL CONTACTS

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