

CLASSIC® NON-SHRINK GROUT

General Purpose Non-Shrink Cementitious Grout

DESCRIPTION

CLASSIC® NON-SHRINK GROUT is a ready-to-use, non-shrink cementitious dry powder mortar[cite: 1]. It is formulated from a precise blend of Portland cements, graded fillers, and advanced chemical additives that impart controlled expansion in the plastic state while minimizing water demand[cite: 1]. The addition of controlled clean water produces a flowing, non-shrink grout for gaps up to 100 mm thick[cite: 1]. Its low water demand ensures rapid early strength gain and long-term durability[cite: 1].

USES

Specifically engineered for general-purpose grouting applications where eliminating shrinkage is critical to completely fill voids between base plates and concrete substrates[cite: 1]:

- Grouting of heavy machinery and rail base plates[cite: 1].
- Structural bedding and column base plate support[cite: 1].
- Void filling and pocket grouting[cite: 1].
- Concrete floor panel repairs requiring rapid high early strength[cite: 1].
- Precision anchoring of structural fixings, tie rods, and bolts[cite: 1].

ADVANTAGES

- Non-Shrink:** Dual expansion system offsets setting and plastic shrinkage completely[cite: 1].
- Adjustable Consistency:** Easily adaptable for trowelable or flowable applications[cite: 1].
- High Early Strength:** Rapid load bearing capability minimizes operational downtime[cite: 1].
- Superior Bond Strength:** Excellent adhesion to both clean concrete and steel surfaces[cite: 1].
- Low Permeability:** Impermeable surface resists water, oil, and chemical ingress[cite: 1].

TECHNICAL PROPERTIES & SPECIFICATIONS

PROPERTY	SPECIFICATION / TEST RESULT
Appearance	Grey Cementitious Powder[cite: 1]
Applicable Standard	Meets or exceeds ASTM C 1107 requirements[cite: 1]
Fresh Density	~ 2,240 kg/m³ (depending on consistency)[cite: 1]
Setting Time	Initial: 2.5 - 2.75 Hours Final: 4.5 - 5.0 Hours[cite: 1]
Compressive Strength	1 Day: ≥ 26 MPa 7 Days: ≥ 44 MPa 28 Days: ≥ 62 MPa[cite: 1]
Flexural Strength	1 Day: ≥ 2.5 MPa 7 Days: ≥ 10.0 MPa 28 Days: ≥ 11.0 MPa[cite: 1]
Shelf Life	6 Months when stored in unopened original bags[cite: 1]

APPLICATION INSTRUCTIONS

- 1. Surface Preparation:** Substrates must be structural, sound, and entirely free from oil, grease, laitance, curing compounds, or loose particles[cite: 1]. Defective concrete must be cut back to a sound base[cite: 1]. Bolt pockets and holes must be blown clean of debris using oil-free compressed air[cite: 1].
- 2. Presoaking:** Flood the cleaned foundation area with fresh water for several hours prior to grouting[cite: 1]. Immediately before placing grout, remove all standing water and clear pockets using compressed air[cite: 1].
- 3. Formwork & Base Plate:** Ensure base plates are clean and free from rust, scale, or grease[cite: 1]. Provide air relief vents at high spots to prevent air entrapment[cite: 1]. Formwork must be leak-proof, sealed with rubber foam strips or sealant[cite: 1]. Unrestrained grout gap width should not exceed 150 mm on the pouring side and 50 mm on the opposite side[cite: 1].

WATER MIXING RATIO (PER 20 KG BAG)

CONSISTENCY	CLEAN WATER REQUIREMENT
Trowelable Consistency	2.6 – 2.9 Liters[cite: 1]
Flowable / Fluid Consistency	3.0 – 3.5 Liters[cite: 1]

Mixing Method: Always add **CLASSIC® NON-SHRINK GROUT** dry powder slowly into the pre-measured clean water[cite: 1]. Mix continuously for 5 minutes using a slow-speed drill attached to a high-shear mixer paddle until a smooth, lump-free consistency is achieved[cite: 1]. Do not use colloidal impeller mixers[cite: 1].

PLACING & CURING

- Placing:** At 20°C, place the grout within **20 minutes** of mixing to gain full benefit of the plastic expansion process[cite: 1]. Pour continuously from one side only to eliminate air entrapment[cite: 1]. Maintain a continuous grout head to ensure uninterrupted flow across the shortest travel distance[cite: 1]. Single pour thickness up to 100 mm is allowable[cite: 1].
- Curing:** On completion of placement, protect exposed areas immediately from rapid drying[cite: 1]. Cure continuously using wet hessian cloths, continuous water misting, or an approved membrane-forming curing compound[cite: 1].

PACKAGING & STORAGE

- Packaging:** Supplied in heavy-duty 20 kg moisture-resistant bags[cite: 1].
- Storage:** Store unopened bags in dry, covered conditions between 5°C and 30°C[cite: 1]. Protect from direct heat, sunlight, and rain[cite: 1].

HEALTH & SAFETY PRECAUTIONS

CLASSIC® NON-SHRINK GROUT is non-toxic but cementitious and alkaline[cite: 1]. Wear protective goggles, gloves, and dust masks during handling[cite: 1]. In case of contact with eyes or skin, wash immediately with soap and clean water[cite: 1]. If irritation persists, seek medical advice[cite: 1].