

## **NON SHRINK GROUT - FAST SET**

FAST SET, EXPANDING GROUT

#### **DESCRIPTION:**

NON SHRINK GROUT-FAST SET is a sanded, cement based expanding grout produced to achieve fast set times and high early strength. This product is designed for use as a plastic or flowable grout. It will exhibit slight expansion prior to initial set in normal working temperatures. NON SHRINK GROUT-FAST SET is designed to meet the performance requirements of ASTM C1107 and ASTM C928 requirements for length change stability.

#### USES:

NON SHRINK GROUT-FAST SET may be used in many grouting applications such as:

- ⇒ Grouting under baseplates, columns and equipment not subjected to heavy impact or vibratory loads
- $\Rightarrow$  Grout jacking of concrete slabs
- $\Rightarrow~$  Grouting of prestressed or post-tensioned tendons, anchor bolts or cables
- $\Rightarrow$  Underpinning of structures
- $\Rightarrow$  Grouting holes or cracks in concrete
- $\Rightarrow$  Void backfilling in tunnels
- $\Rightarrow$  Grouting of post-tensioned structural sections

#### ADVANTAGES:

- $\Rightarrow$  Quick setting
- ⇒ High early strength gain
- $\Rightarrow$  Non-bleeding /non-segregating
- $\Rightarrow$  Non-corrosive/non-chloride/non-metallic
- $\Rightarrow$  Shrinkage compensating
- ⇒ Usable over a wide range of consistencies from dry pack to flowable

#### **PROCEDURES:**

<u>SURFACE PREPARATION</u>: All surfaces to be in contact with NON SHRINK GROUT-FAST SET must be entirely free of oil, grease, laitance or other foreign substances. Roughen exposed surfaces and clean thoroughly with potable water, leaving the concrete saturated but free of standing water.

<u>MIXING</u>: NON SHRINK GROUT-FAST SET should be thoroughly mixed to the desired consistency by varying the amount of water used. For plastic or flowable consistencies, the grout is best mixed in a high speed shear mixer. A high RPM drill with a double propeller is ideal. Mix only the amount of material that can be placed in fifteen minutes.

CONSISTENCY	RECOMMENDED MAX. WATER/25 kg (55 lb.)		
Plastic	3.4 liters (0.9 US gallons)		
Flowable	5.2 liters (1.4 US gallons)		

<u>PLACING</u>: Place NON SHRINK GROUT-FAST SET at the desired consistency using established grouting procedures.

<u>CURING</u>: Once NON SHRINK GROUT-FAST SET has set, moist curing for at least one day is recommended.

#### **TECHNICAL DATA:**

The data outlined below is representative of typical values achievable under controlled laboratory conditions. Results obtained in the field may vary from those stated.

		Test Method	Plastic	Flowable
Flow		CSA A23.2-1B/ ASTM C939	50 - 75%	25 - 35 sec
Plastic Expansion		ASTM C940	0 - 1%	0 - 1%
Hardened Expansion		ASTM C1107	N/A	+0.017%
Bleeding Segregation		CSA A23.2	Nil	Nil
			Nil	Nil
Length Change:	Water bath	ASTM C928	N/A	+0.024%
	Air dry		N/A	-0.076%
Compressive Strength:			MPa (psi)	MPa (psi)
2 hr 4 hr 1 day 7 day			15 (2175)	7 (1015)
		ASTM C109	20 (2900)	10 (1450)
			30 (4350)	15 (2175)
			50 (7250)	35 (5075)
	28 day		65 (9425)	50 (7250)
Set time:	Initial	ASTM C266	20 min	30 min
	Final		35 min	60 mir
Density: kg/m3 (lb/ft <sup>3</sup> )		ASTM C185 (modified)	2210 (138)	2049 (128)
Yield: m3/bag (ft <sup>3</sup> /bag)			0.013 (0.45)	0.015 (0.52)

#### LIMITATIONS:

- ⇒ Adhering to recommended water additions is very important. Exceeding the maximum recommended water content per sack will result in inferior physical properties.
- ⇒ The grout should not be used where it will be subjected to severe repetitive dynamic or cyclic loadings or vibrations.
- $\Rightarrow$  The grout performs best when fully restrained or confined on all surfaces.
- ⇒ The ideal temperature for grouting is between 5°C to 24°C (41°F to 75°F). Grouting in cooler temperatures will retard set and strength gain. Warmer temperatures will accelerate set and strength gain.
- ⇒ For pours exceeding 50mm (2inch) thickness and 0.28m<sup>2</sup>(3 ft<sup>2</sup>) in area, add 12.5kg (28 lb) of clean washed well graded 10mm (3/8 inch) minus stone to each 25kg (55 lb) sack of NON SHRINK GROUT-FAST SET to achieve adequate results.

Liability for damages or defective goods shall be limited to the refund of the purchase price or product replacement.



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### PACKAGING:

NON SHRINK GROUT-FAST SET is packaged in 25kg (55 lb) triple-lined paper bags. All Basalite Dry Mix can be custom packaged to suit specific project requirements. Shelf life is one year when kept dry above  $5^{\circ}$ C and not exposed to open atmosphere.

#### SAFETY PRECAUTIONS:

NON SHRINK GROUT-FAST SET contains hydraulic cement and other carefully selected additives. Normal safety wear such as rubber gloves, dust mask and safety glasses, used to handle conventional cement based products, should be worn. Safety Data Sheet is available at www.basalite.ca.

