



COSTARGROUT C10

Non-Shrink Precision Grout

PRODUCT DESCRIPTION

COSTARGROUT-C10 is a NON-SHRINK, FAST-SET structural grout that is specially designed to produce high early and high ultimate strength in anchoring and grouting of anchor bolts, retrofitted reinforcing steel, steel column bases and other installations.

FEATURES

- Quick setting.
- High early strength gain.
- Non-bleeding /non-segregating.
- Non-corrosive/non-chloride/non-metallic.
- Shrinkage compensating.
- Usable over a wide range of consistencies from dry pack to flow-able
- Non-Shrink Precision Grout

FEATURES

COSTARGROUT 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.
- Grout jacking of concrete slabs.
- Grouting of pre-stressed or post-tensioned tendons, anchor bolts or cables.
- Underpinning of structures.
- Grouting holes or cracks in concrete.
- Void backfilling in tunnels.
- Grouting of post-tensioned structural sections.
- COSTARGROUT-C10 can also be used to make partial or full depth repairs to bridges, roads, industrial floors and other concrete surfaces.

MIXING INSTRUCTION

To mix COSTAR NON-SHRINK GROUT C10, most of the mixing water should be added to the mixer first, then add the powder to the water and adjust as needed to achieve the desired consistency.

The Costar non-shrink fast set grout should be mechanically mixed for a minimum of three minutes.

SURFACE PREPARATION / APPLICATION

- Surfaces to receive the grout must be clean and free of any type of foreign matter, grease, paint, oil, dust or efflorescence.
- In some Cases, it may be necessary to roughen smooth surfaces or etch old ones with acid.
- The area should be thoroughly flushed and soaked with clean water prior to grouting, leaving no standing water.
- Place the grout quickly and continuously using light rodding to eliminate air bubbles.

CURING & WORKING TIME

When properly mixed to a fluid consistency, the non-shrink grout will comply with ASTM C 1107 and CRD621 retain a fluid consistency for the maximum usable working time of 25 minutes at 500 F (100 C).

A damp cure of at least 3 days is required to control the non-shrink characteristics and maintain strength levels.

PRECAUTION

COSTAR NON-SHRINK PRECISION GROUT 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. Material Safety Data Sheets are available upon request.

STORAGE AND SHELF LIFE

Protect from freezing, if frozen or crystallized, thaw gradually and stir to homogenous mixture. Shelf life in unopened original containers is 12 months when stored at 70°F (21°C).





COSTARGROUT C10

Non-Shrink Precision Grout

TECHNICAL PROPERTIES

Packaging	20kg									
Appearance	Grey/white powder									
Shelf life	12 months from date of production									
Storage condition	Product must be stored in original, unopened, and undamaged sealed packaging in drycondition and temperature between +5 °C and +35 °C.									
Mechanical properties	Engineering data						Setting time			
	Age (Days)		1	3	7	28	Consistence	Trowel-able	Flow-able	
		Consistence								
	Compressive Strength MPa	Stiff	>26	>39	>48	>65	Initial settime	3hrs	4.5hrs	
		Plastic	>23	>34	>43	>57	Final settime	4.5hrs	6.5hrs	
		Flowable	>21	>31	>39	>51	Waterratio	3.5L/20kg	4L/20kg	
	Flexural strengthMPa	-	-	-	-	>13.8	Tested at 20°C 50% RH Tested to AS 1012.18 forsetting times			
	Bond strength MPa	-	-	-	>5	>10				
	Tested AS 1012.9 and AS2073 at 20°C for compressive strength / Tested to ASTM C348-86 at 20 degrees for flexural strength / Tested to ASTM C882-1987, Slant shear method.									
	Mixing ratio	3.6litres of water per 20kg bag of product								
Fresh-wet-density	Approx. 2200 kg/m ³ (flow-able/pourable)									
Application temp	A minimum 10° C - Maximum 30° C									
TECHNICAL PROPERTIES										
Expansion character	Expansion 1-2% Plastic state									
Time of expansion	Start 15 min Finish 3 hrs (plastic state)									
Pot life	~2 h (23 °C)									
Bleed	0%									
Youngs modulus	25GPa									
Consumption	115 bags/ (m ³)									





COSTARGROUT C10

Non-Shrink Precision Grout

TECHNICAL PROPERTIES

Layer thickness	Min. 10 mm per pour, Max. 75 mm per pour
Fresh mortar density	~2.20 kg/l (25 °C)
Ambient air temperature	+5 °C min. / +35 °C max

STANDARD COMPLIANCE

- CRD-C 621, Corps of Engineers, Specification for Non-Shrink Grout
- ASTM C1107, "Standard Specification for Packaged Dry, Hydraulic-Cement Grout
- Canadian MTQ

HEALTH & SAFETY

- Please ensure that hand gloves and goggles are worn during installation
- Apply in ventilated areas, away from flames
- It is only important that during application and after application, standard safety procedures are done.
- Please consult current MSDS for product.

• *For Professional Use only*

ADDITIONAL INFORMATION

Costarchem manufactures a complete range of construction chemical products which include:

- Concrete admixtures
- Waterproofing system
- Flooring system
- Cementitious and epoxy precision grouts
- Damp-proofing products
- Sealants and adhesives
- Repair and refurbishment systems

For more information on any of our products, please contact Costarchem global or regional office.

LEGAL NOTE

The information and recommendations relating to the application of Costarchem products, are given in good faith based on current knowledge and experience of the products when properly stored, handled and applied under normal conditions in accordance with the stated recommendations in the product datasheets. Whilst Costarchem endeavors to ensure that any advice, recommendation, specification of information it may give is accurate and correct, it cannot, because it has no direct or continuous control over where or how its products are applied, accept any liability either directly or indirectly arising from the use of its products, whether or not in accordance with any advice, specification, recommendation of information given by it. The user of the product must test the product's suitability for the intended application and purpose. Costarchem reserves the right to change the properties of its products. The proprietary rights of third parties must be observed. All orders are accepted subject to our current terms of sale and delivery. Users must always refer to the most recent issue of the local Product Data Sheet for the product concerned, copies of which will be supplied on request.

