

PRODUCT DESCRIPTION

Construction Grout is a non-metallic non-shrink grouting material, suitable for all grouting requirements. It is both non-corrosive and non-staining. The precise blending of proprietary ingredients in Construction Grout produces a controlled, positive expansion from time of placement.

GENERAL USES

Construction Grout is excellent for grouting precast of prestressed concrete; interior or exterior equipment; and machinery subject to moisture, high humidity and chemical spillage.

- Power Plants
- Petrochemical Plants
- Transmission towers
- Paper Mills
- General purpose grouting: heavy equipment and base plates, structural columns,
- Pump and equipment bases

FEATURES

Construction Grout contains specially graded, fine, select silica aggregates; cement; shrinkage compensating ingredients; and plasticizing and water-reducing agents. Strength, dimensional stability, flowability, workability and setting characteristics are assured by careful blending in Universal's own plants under rigid quality control standards.

- High Early strength
- Non-Shrink
- Non-rusting
- Excellent freeze-thaw resistance
- Interior/exterior applications

STANDARDS

Construction Grout conforms to requirements of Corps of Engineers CRD C 621 and ASTM C 1107

INSTRUCTIONS FOR USE

Surface Preparation: Surfaces must be free from form oil, grease or any loose materials. If the concrete surface is defective or has laitance, it must be cut back to a sound base.

Setting time fluid consistency:

Initial set time approximately 4 hours 30 minutes

Final set time approximately 5 hours 30 minutes

TYPICAL PERFORMANCE DATA

WATER REQUIREMENTS PER 50 LBS.	5.0-7.0 PINTS 2.4-3.3 LITERS 5.2-7.3 LBS. 2.4-3.3 KG.	7.0-8.0 PINTS 3.3-3.8 LITERS 7.3-8.3 LBS. 3.3-3.8 KG.	8.0-9.0 PINTS 3.8-4.3 LITERS 8.3-9.4 LBS. 3.8-4.3 KG.	VOLUME CHANGE ASTM C109			
	COMPRESSIVE STRENGTH ATSM C109						
	PLASTIC ¹		FLOWABLE ²		FLUID ³		% CHANGE
	PSI	MPA	PSI	MPA	PSI	MPA	
1 DAY	3500	23	3000	21	1500	11	0.02
3 DAYS	5500	38	4800	33	3200	22	0.03
7 DAYS	7000	48	6500	45	4500	31	0.03
28 DAYS	8500	59	7500	52	7000	48	0.03

Base plate preparation:

It is essential that area is clean and free from oil, grease, and scale. Air pressure relief hole should be provided to allow venting of any isolated high spots.

Leveling Shims:

If these are to be removed after the grout has hardened, they should be treated with a thin layer of grease.

Pre-soaking:

Several hours prior to grouting, the clean area should be flooded with fresh water. Immediately prior to grouting, any free-standing water should be removed with air to blow out boltholes and pockets.

Approximate Yield:

.43 cu ft. per 50 lb bag.

Mixing:

The amount of water added to obtain the desirable consistency must be precise, and an accurate measuring method must be employed. Consistencies described conform to CRD-C621-83. According to the desired grout consistency, the amount of water required for each 50 lb. bag of **Construction Grout is:**

- Plastic
50 lbs. grout

5.00 to 7.00 pints water
5.20 to 7.30 lbs.
2.40 to 3.30 liters

- Flowable

50 lbs. grout
7.00 to 8.00 pints water
7.30 to 8.30 lbs.
3.30 to 3.80 liters

- Fluid

50 lbs. grout
8.00 to 9.00 pints water
8.30 to 9.40 lbs.
3.80 to 4.30 liters

In cold conditions warm water (95-110°F) may be used to accelerate the strength development.

Application:

For best results, a mechanically powered grout mixer should be used. For small quantities of 1-2 bags, a slow speed electric drill with a suitable paddle is recommended.

It is essential that machine mixing capacity and labor availability is adequate to enable the grouting operation to be carried out continuously. This may require the use of holding tank with provision for gentle agitation to maintain fluidity. The selected water content should first be accurately measured into the mixer. Slowly add the total contents of UniGrout bag. Mix continuously for 5 minutes, making sure that a smooth, even consistency is obtained. Place the grout within 5 minutes of mixing to gain the full benefit of the expansion process. Where large volumes have to be placed Construction Grout may be pumped. A heavy-duty diaphragm pump is recommended for this purpose.

For deep applications (over 2"), a clean 3/8" (1cm) pea gravel should be added to the grout:

2" to 5" application 25% by weight
Over 5" application 50% by weight

Covering and Placing:

A 50 lb. Unit of Construction Grout will yield approximately .43 cubic foot.

When placing Construction Grout or any other grout, a continuous grout flow is essential. Sufficient grout must be available prior to starting and the time taken to pour a batch must be regulated to the time taken to prepare the next.

Pouring and placing grout should be from one side only to eliminate voids in the cured grout by entrapment of air or surplus pre-soaking water. A grout head must be maintained at all times so that a continuous grout front is achieved.

Curing:

Upon completion of the grouting operation, exposed areas, which are not to be cut back, should be thoroughly cured using normal concrete curing methods and practice. Adhesives Technology manufactures a variety of chemical curing compounds, which may be used with Construction Grout. Please contact your Universal representative for additional information.

PACKAGING

- 50 lb. bags

LIMITATIONS/WARNING

Not recommended for placing below 35°F. Do not re-temper. Do not vibrate. Do not use any additives including accelerators, water reducers, or air entraining agents. Do not use water temperature exceeding 80°F.

Refer to material safety data sheet prior to use.

Avoid direct contact with skin and eyes. Product contains Portland Cement. May cause irritation and possibly cement burns. Wash exposed skin area promptly with water. In case of eye contact, flood eyes repeatedly with water and call physician. Do not take internally. Harmful if ingested. Keep product out of reach of children.

TECHNICAL SERVICES

Adhesives Technology's Technical Service Department provides complete product and technical support.

LIMITED WARRANTY NOTICE - Adhesives Technology warrants that at the time and place we make shipment, our materials will be of good quality and will conform with our published specifications in force on the date of acceptance of the order. THE FOREGOING WARRANTY SHALL BE EXCLUSIVE AND IN LIEU OF ANY OTHER WARRANTY, EXPRESSED OR IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE AND ALL OTHER WARRANTIES OTHERWISE ARISING BY OPERATION OF LAW, COURSE OF DEALING, CUSTOM OR TRADE OR OTHERWISE. As the exclusive remedy for breach of this warranty, we will replace defective materials, provided, however, that the buyer examine the materials when received and promptly notify us in writing of any defect before the materials are used or incorporated into a structure. Twelve (12) months after Adhesives Technology has shipped the materials, all our Warranty and other duties with respect to the quality of materials delivered shall conclusively be presumed to have been satisfied, all liability therefore terminates, and no action for breach of any duties may thereafter commence. Adhesives Technology shall in no event be liable for consequential damages. Unless otherwise agreed to in writing, no warranty is made with respect to materials not manufactured for Adhesives Technology. We cannot warrant or in any way guarantee any particular method of use of application or the performance of materials under any particular condition. Neither this Warranty nor our liability may be extended or amended by our salespeople, distributors or representative or by any sales information or drawings.

