

## Commercial Sanded Grout — For Joints 1/8" to 1/2" (3 - 13 mm)

### PRODUCT DESCRIPTION

AR<sup>®</sup> GROUT is a blend of Portland cement, specially graded silica sand and colorfast pigments that form a dense matrix, free of any voids. In addition, special chemicals have been added to provide for a superior grout that offers ease of workability and clean-up, rapid cure, high compressive strength, low shrinkage, good bond strength and color control. AR is highly resistant to bacteria, fungus, oils and alkalis. It is non-toxic, non-dusting and does not contain iron.

### ▶ AREAS OF USE

AR can be used in any installation, residential to heavy commercial, where joint widths will be in excess of 1/8" up to 1/2" (3 up to 13 mm). For joint widths wider than 1/2" (13 mm) use PAVERMIX 928 grout. It is a specially designed, high performance colored grout to be used with quarry, slate, pavers, brick and cement tiles for both interior or exterior use. Only the addition of water is required to produce a dense smooth grout. As an alternate to water, CURECRYLIC<sup>®</sup> 938 ADMIXTURE can be used to intensify its bond and flexural strength for installations subjected to thermal shock. AR should be mixed with CURECRYLIC 938 admixture when grouting tiles with absorption rates greater than 7%.

### ▶ LIMITATIONS

AR, because of its Portland cement base, should not be used in areas where high acid resistance is required. In areas of intermittent mild acid exposure, AR out-performs conventional sand/cement grouts. The potential for efflorescence is inherent in all cement based products and is not considered a manufacturing defect.

### ▶ APPLICABLE STANDARDS

AR may be used in installations that must conform to ANSI A108.1, A108.4, A108.5, A108.7, A108.10 and A118.6 H2.1. Colors — AR is available in 40 standard colors. Upon special request, it can be blended to almost any color to fulfill the needs of both decorators and architects. Texture — Powder, consisting of Portland cement, graded silica sand, colorfast pigments, organic and inorganic chemicals.

### ▶ PACKAGING

25 lb. (11.3 kg) and 50 lb. (22.7 kg) multi-wall bags, 10 lb. (4.54 kg) containers.

### INSTALLATION

#### ▶ PREPARATORY WORK

Evaluation of the job conditions and the materials to be used will be the primary controlling factors that will determine the outcome of the job. As in all cases, if proper precautions are taken before a job is started, many problems that are within the realm of your control may be prevented, assuring a satisfactory job. The following is a suggested check list that one should follow to produce the best possible results when grouting a ceramic tile installation.

1) Wait a minimum of 48 hours before grouting a dry-set installation. Wait 72 hours before grouting a conventional mortar bed installation. Portland cement mortar beds that are excessively wet or have moisture coming through the slab may produce uneven drying conditions and efflorescence. Extra drying time is required to reduce the problem of efflorescence and uneven drying of the grout joint. If organic adhesives are used, a minimum of 48 hours is required for the evaporation of solvents which will prevent proper cure of cement mortars. When epoxies are used, a minimum of 24 hours is required for the evaporation of solvents which will prevent proper cure of cement mortars. These recommendations are made on the premise that the ambient temperature is 70°F (21°C), therefore, allowances should be made if the temperature is other than this. A longer time should be allowed for cooler temperatures, and shorter times may be possible if the temperature is higher.

2) The width and depth of all the joints should be uniform throughout the installation. If tile spacers or construction debris are present, remove prior to grouting. A minimum of 2/3 of the joint shall be open for grouting material. Excessive setting material must be removed.

3) Plan your day's work so the next day's grouting does not join in the center of conspicuous areas (i.e. center of room).

4) On both exterior and interior work, it may be necessary to use shades or screens to prevent rapid water evaporation due to sun or wind. During warmer months, grouting should be done at the coolest part of the day. During cooler months, it will be necessary to prevent the grout from freezing conditions for the first 72 hours.

5) If contrasting grout and tile colors are to be used, it may be necessary to use a grout release. It is best to check with the tile manufacturer for his or her recommendations or do a test panel simulating your job conditions.

6) Dampen the joints and wet the surface of the tile by means of fogging prior to placing the grout on the tile, however, no

standing water should be present. This will do three things: First, the grouting of a wet surface is easier. Second, it will reduce absorption of fine pigments and cement into the small pores of the tile, thus reducing clean-up time and possible staining. Third, this dampening of the joints will prevent the rapid loss of water from the grout, improving its color control and final hardness.

7) Keep grout from getting into the expansion joints, as they will later need to be cleaned out when sealant is applied.

8) During winter months, care should be taken that both the dry powder grout and mixing liquids are at least 60°F (16°C) and the grouted installation should be maintained at 60°F (16°C) for a minimum of 24 hours.

9) When grouting under adverse conditions such as below recommended temperatures or in highly humid conditions, mixing the grout with ProGrout Additive 945 Admixture will decrease the chance of discoloration and help prevent efflorescence of the grout.

#### ▶ MIXING

If possible, use the same person to mix the grout for any on job mixing so that the same mixing technique will be used throughout the job. On small jobs, if less than a full bag is mixed at one time, the entire bag should be dry mixed first prior to the addition of water or CURECRYLIC 938 ADMIXTURE. This is done to prevent a color variance in the finished product that may be possible due to pigments and fine aggregates which have a tendency to settle while being transported. During the mixing process, the grout should be mixed with as little liquid as is practical for application. In addition, the grout must be mixed thoroughly either by hand or with a low RPM power mixer to ensure uniform color and maximum strength. A suggested mixing procedure is as follows: To a mixing container, add approximately 1/2 gal. (1.89L) of liquid per 25 lbs. (11.3 kg) of powder. Add the grout to the liquid using only a small amount of water to adjust consistency of the mortar. Allow the mortar to slake for 15 minutes, then remix. Do not retemper with liquid or powder after this point. Once the grout mortar has become too stiff to work, it must be discarded and a new batch mixed.

#### ▶ APPLICATION

Grout all areas of the installation with the exact same procedure. The most consistent results can be achieved by filling the joints with grout until flush with surface of tile using a hard rubber float working diagonally across the grout joints to both fill and compact the joints. As soon as possible, remove all excess grout with the same rubber float. The least amount of grout left at this time on the face of the tile will make the final clean-up easier. Most importantly, allow

the grout to firm in the joint acquiring its initial set before any further cleaning is to be done. The grout is firm when it can only slightly be indented when pressed hard with your fingernail. Do not be concerned about dried grout on surface of tile at this time. Upon initial set of the grout, use a pad of cheese cloth or towel dampened with a minimum amount of clean cool water to clean tile surface by rubbing in a circular motion to further compact the grout. Also, clean off remaining surface grout on the tile at this time. As an alternate to the cloth pad, a tool distributed by Gundloch Co. called the "Doodle Bug®", a Scotch-Brite™ pad fastened to a float, works very well to remove grout from porous tiles. In no case is a sponge recommended for grouting. To help reduce efflorescence and control color variation, buff the tile surface and grout with a cheese cloth or clean, dry towel within 1 - 2 hours to remove all weep water and grout residue from the surface of the grout.

► **CURING**

During the first 72 hours, care must be taken to prevent the grout from drying out by covering the installation with natural kraft paper. Plastic sheeting or newspaper should not be used. If additional water is required to maintain a moist joint on non-latex-modified grouts, it should be applied in even amounts, but in no case should standing water be allowed. During this time, it is also important to keep the installation covered with kraft paper, not plastic sheeting, to prevent staining and dirt being worked into the fresh grout joints by other construction trades.

► **FINAL CLEANING**

After 10 days, the floor may be re-cleaned to remove any remaining grout from the surface of the tile. Scrubbing the floor with a hot water and TSP (trisodium phosphate) method is best. It is not recommended that acids be used. If acid is required, a solution no stronger than 2 lbs. (0.91 kg) of C-CLEAN granules to 5 gals. (18.9 L) of water may be used. It is important that before the acid solution is placed on the surface, that the grout be thoroughly saturated with water first. Cleaning in this manner will most likely cause color alteration of the grout joint, the degree of which can be determined by doing a small test patch in an inconspicuous place.

► **SEALING AND STAINING**

Sealers, waxes and stains may be used to further enhance the grout by offering richer colors and future prevention of unwanted stains. A period of at least 30 days and complete satisfaction of grout conditions should be allowed before these products are applied. Some sealers may have adverse effects on grout joints, such as softening or discoloration. Try small test area to be sure.

► **COVERAGE**

See separate Grouting Materials Coverage Chart Document #GMCDS.

► **WARRANTY**

AR 922 is included in C-Cure's Five Year System Warranty. For terms and conditions see Warranty Document #WRTDS.

# AR® Grout 922

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AR GROUT 922 TECHNICAL DATA		
TEST	TYPICAL VALUES	
A. Shear Bond (psi) ANSI A118.1 Vitreous (Paver) Tile	7 Days	>300 psi (21 kg/cm <sup>2</sup> )
B. Compressive Strength (psi) ASTM C-109	7 Days 28 Days	>2600 psi (183 kg/cm <sup>2</sup> ) >3500 psi (246 kg/cm <sup>2</sup> )
C. Water Absorption (%)		<6
D. Hardness (Shore D)		>80
E. Initial Set (hours) ASTM C-266		2 Hours
F. Final Set (hours) ASTM C-266		4 Hours
G. Bucket Life		2 Hours
H. Safety—CAUTION: May cause eye, skin or lung injury. Contains free silica. Prolonged exposure to dust may cause delayed lung disease (silicosis). Eliminate exposure to dust. Use NIOSH approved mask for silica dust. Contains Portland cement. If any cement or cement mixtures get into eye, flush immediately and repeatedly with water, and consult a physician promptly. Freshly mixed cement, mortar, concrete or grout may cause skin injury. Avoid contact with skin where possible and wash exposed skin areas promptly with water.		
KEEP OUT OF REACH OF CHILDREN.		
I. Storage Life—One year if kept dry in sealed bags.		

### GUARANTEE

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