

UNISORB® V-1® NON-SHRINK GROUT

UNISORB® V-1® NON-SHRINK GROUT

- Pre-Mixed.
- Extra High Strength.
- Non-Shrinking.
- Flowable (May be pumped and vibrated).
- High Yield.
- Meets ASTM C 1107.

Yield per 48 lb. bag : .40 Cubic Feet.



V-1 Grout is a cement-based, flowable, non-shrink grout that develops extremely high compressive strength in a short period of time. It can be used in any application requiring high strength support and anchoring of machinery.

FAST CURING FOR MINIMUM DOWN TIME

At an ASTM flow index of 109, V-1 Grout has a strength of approximately 6,565 psi in 24 hours. This strength increases gradually and reaches its maximum of 11,875 psi at 28 days.

HIGH QUALITY, NON-CORROSIVE, NON-SHRINKING

V-1 Grout is composed of several carefully blended size ranges of pure silica sand, the best quality, high early curing portland cement and a proprietary controlled expansion compound. V-1 Grout is unique in that it can be extended by adding up to 50% (by weight) pea gravel, thus substantially reducing material costs on larger pours.

V-1 Grout is chloride-free, has controlled expansion and will not shrink below its original mixing volume after the recommended water ratio is added. Controlled expansion ensures a full bearing contact between machine base and foundation.

IMPORTANT ADVANTAGES

Because of its high load carrying capacity, UNISORB V-1 Grout withstands extremely high unit loads, distributing them over a large area. Weaker materials, such as concrete and inferior grout may develop structural flaws when subjected to concentrated loads that weaken the machine-foundation connection. Controlled expansion precludes the possibility of shrinkage related voids so that full bearing contact is ensured between the machine and its foundation. V-1 is an excellent choice where high ambient temperatures will be encountered. It also exhibits superior resistance to attack by strong acids and bases.

V-1 Grout exceeds ASTM 1107 and Corps of Engineers Specification for Non-Shrink Grout CRD-C 621. Test results are available on request.

UNISORB® V-2® GROUT, CONCRETE REPAIR & STRUCTURAL REPAIR

UNISORB® V-2® NON-SHRINK CONSTRUCTION GROUT

- Pre-Mixed.
- High Strength.
- Non-Shrinking.
- Flowable.
- High Yield.

Yield per 50 lb. bag: .45 Cubic Foot.

Yield per 100 lb. bag: .90 Cubic Foot.

Available in 50 and 100 lb. bags and in bulk.

V-2 Construction Grout is a cement-based, flowable, non-shrink grout intended for use in general purpose construction applications. It is chloride-free, has controlled expansion and will not shrink below its original mixing volume after the recommended water is added. V-2 grout exceeds ASTM 1107 and Corps of Engineers Specification for Non-Shrink Grout CRD-C 621. Test results are available on request.

UNISORB® CONCRETE REPAIR COMPOUND

- Pre-Mixed.
- Fluid Consistency.
- Feather Edges.
- Fast Set.
- Resume Normal Traffic in 1 Hour or Less.
- Stronger Than Concrete.
- Self-Sealing.
- Conveniently Packaged: 20 & 50 lb. pails; 50 lb. bags.
- Extended Set Formula Available for Long Working Time in Hot Climate.



UNISORB Concrete Repair Compound is designed for use in making fast repairs of concrete floors, aisle ways and drives. It is also excellent for patching and filling chuck holes and for quick setting of anchors.

Depending on the application, repairs made with UNISORB Concrete Repair Compound can be used in as little as one hour. After a three hour cure it is as strong as most concrete floors (3,900 psi compression).

UNISORB Concrete Repair Compound is self-sealing and requires no sealant when used out-of-doors, unlike most other cementitious products.

UNISORB® STRUCTURAL REPAIR FORMULA

UNISORB Structural Repair Formula is a cement-based, self-bonding and quick setting wall and ceiling patching compound. When used for patching spalls or holes between ½" to 3" thick, it provides a non-shrink, high strength repair. This product does not require primers, bonding agents, etc.

UNISORB® CEMENTITIOUS GROUTS

PHYSICAL PROPERTIES

PHYSICAL PROPERTIES	V-1® NON-SHRINK	V-2® CONSTRUCTION	UNISORB® CONCRETE REPAIR COMPOUND (UCRC)	STRUCTURAL REPAIR
Compressive Strength (psi)				
24 Hours	6,565	1,400	5,200	3,000
28 Days (Ultimate)	11,875	6,800	8,000	5,000
Tensile Strength (psi) (28 Days)	568	—	476	—
Flexural Strength (psi) (28 Days)	1,700	—	1,405	1,100
Allowable Thickness (Typical)	3/4" - 2"	3/4" - 2"	1/16" - 2"	1/2" - 3"
Working Time	45-60 minutes	20-30 minutes	11 minutes initial setting time	13 minutes initial setting time
Yield	.83 cu. ft./100#	.90 cu. ft./100#	.80 cu. ft./100#	.80 cu. ft./100#

SUGGESTIONS FOR CEMENTITIOUS GROUTING

Grouting should be done following established concreting procedures in accordance with the recommendations of the American Concrete Institute.

PREPARATION - All grout contact surfaces must be cleaned of all oil, grease, scale, etc. Unsound concrete should be chipped out, leaving surface level, but rough.

ALL GROUT CONTACT SURFACES SHOULD BE PRE-SOAKED THOROUGHLY FOR 24 HOURS PRIOR TO GROUT PLACEMENT.

This will insure that the existing foundation does not pull water from the newly placed grout at a rapid rate, which could interfere with proper curing. Excess standing water should be removed prior to grout placement. This pre-soaking requirement is particularly important when working with new "green" foundations or floors.

FORMING - Must provide for rapid continuous placement of grout. Adequate clearance for grout placement and head must be provided. Adequate venting to prevent air entrapment must also be provided. A minimum grout thickness of 1 1/4" under base plates is required.

MIXING - V-1 and V-2 grout can be mixed in a concrete mixing pan or in an agitator-type power mixer. Follow water mixing ratio recommended on the bag.

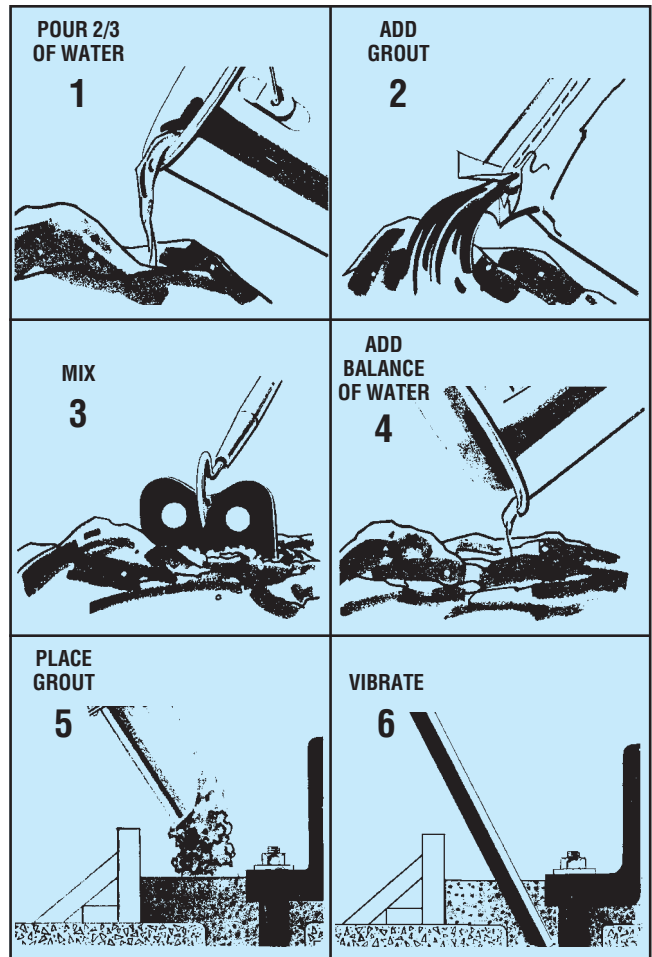
MIX AS FOLLOWS - Add 2/3 water requirement. Add grout, mix partially, then add remainder of water and mix thoroughly for 2-3 minutes.

PLACEMENT - V-1 and V-2 can be placed by pouring or pumping. It is recommended that the fluid material be rodded thoroughly or vibrated to minimize the possibility of air being trapped. Place grout from one side of cavity so it flows uniformly to adjacent and opposite sides.

CURING - Forms may be removed after initial set (3 to 4 hours). At this point, final finishing may be done. No capping or painting is required.

PREVENT RAPID WATER LOSS BY COVERING WITH WET BURLAP FOR THE FIRST 48 HOURS AFTER INITIAL SET.

CURING, SEALING, AND BONDING COMPOUNDS ARE NOT REQUIRED FOR MOST APPLICATIONS.



TEMPERATURE CONSIDERATIONS

The higher the temperature, the faster the set; the lower the temperature, the slower the set. Normal winter and summer concreting procedures should be observed in temperatures below 40°F and above 90°F.

Physical properties shown are the result of independent laboratory testing performed per industry recognized test procedures. Laboratory properties aid in determining suitability of the product for the intended application. Field test results may vary due to procedures or ambient conditions such as temperature and humidity. Laboratory reports are available on request.