UNISORB®

INSTALLATION TECHNOLOGIES

DATA SHEET

SHIP-SAFE CR HI-FLOW V-100™ EPOXY GROUT

Bulletin No.
GB-0145-1.1
08/10

NEW
SHIPS NON-HAZARDOUS

- *Contains no DOT or EU regulated materials (ships non-hazardous)*
- *14,600 psi compressive strength in 8 hours*
  17,000 psi compressive strength in 24 hours
- *No clean up required (mixed in disposable pails)*
- *Easy mixing - two part kit - no added aggregate*
- *No special mixing equipment needed - just a power drill*
- *Minimal PPE required (no aggregate or dust)*
- *Extra resistant to UV rays and water*
- *Cross sections as low as 1/4" can be achieved*
- *Contains no BGE or free silica*
- *Most experienced field support team in the industry*

Specially formulated to address environmental shipping concerns, a two-component, 100% solids, epoxy resin system specifically developed for wind turbine bases, crane rails, and other extraordinarily severe applications where exposure to extreme loads, elevated temperatures and high humidity shortens the life of other grouting materials. Ship-Safe CR Hi-Flow V-100 Epoxy Grout is formulated to be very flowable for ease in placement under longer rails or machine bases. Typical pour cross-sections range from 1/4" to 2" with the material shipped in an easily mixed two part kit.

After curing, Ship-Safe CR Hi-Flow V-100 Grout is impervious to water and saltwater and can be used in total submersion without affect on its operational functions. It is resistant to most fuels, oils, chemical and water absorption, making it ideal for heavy industrial use outdoors. It offers the same features as our other epoxy grouts, i.e. high strength, ease of mixing, self-leveling and fast cure.

PACKAGING/YIELD

22# Kit = .21 cu. ft. (358 cu. in.)
50# Kit = .47 cu. ft. (814 cu. in.)

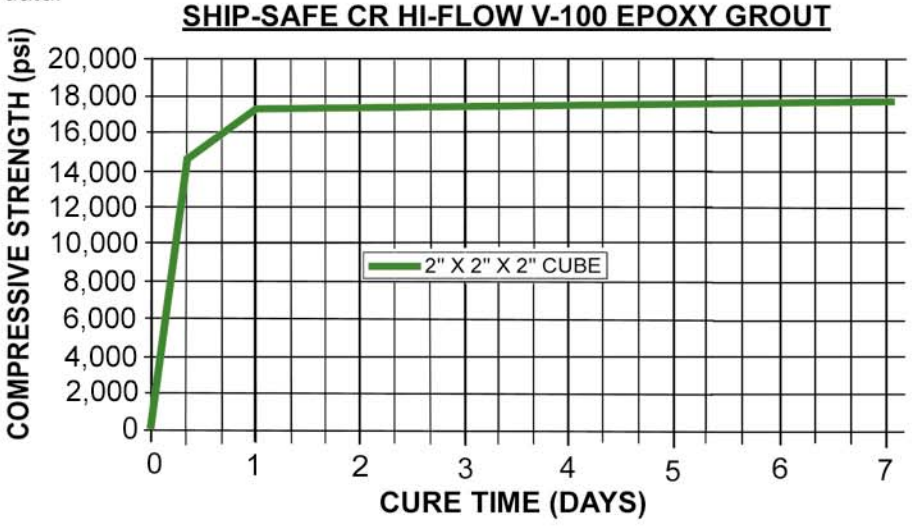
Consult the specific Material Safety Data Sheets (MSDS) for all safety data.

Physical properties shown are the result of 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.

PHYSICAL PROPERTIES

Cure @72° F	
Compressive Strength (ASTM C-579) (72° F)	17,700 psi
Tensile Strength (ASTM C-307)	2,280 psi
Flexural Strength (ASTM C-580)	7,892 psi
Modulus of Elasticity (ASTM C-580)	973,000 psi
Heat Deflection Temperature (ASTM D-648)	187°F
Maximum Service Temperature	260°F
Hardness (Shore D) (ASTM D-2240)	93
Mixed Viscosity (ASTM D-2393)	8,000 cps
Gel Time	30-35 min.
Placement Time	15-20 min.
Linear Shrinkage (ASTM C-531)	0.0007 in./in.
Thermal Expansion (ASTM C-531)	0.0003 in./in.
Creep Test (ASTM C-531)	0.00049 in./in.
Typical Pour Depth (Multiple layers may be used for thicker pours.)	1/4 in. - 2 in.

SHIP-SAFE CR HI-FLOW V-100 EPOXY GROUT



SHIP-SAFE CR HI-FLOW V-100 EPOXY GROUT BASIC APPLICATION TECHNIQUES

CONCRETE SURFACE PREPARATION

Remove all oil, grease and contamination from concrete. Remove loose and weak concrete form the foundation surfaces. The concrete must be dry and have no standing water.

METAL SURFACE PREPARATION

Base plates or soleplates to be grouted should be clean and free of rust, dirt, and other surface contaminants.

FORMING

Method of forming must provide for rapid continuous placement of grout. Adequate clearance for grout placement and head must be provided. Forms should be watertight and greased or waxed to allow easy removal.

PREPARATION OF EPOXY GROUT

Store the material between 70-80°F. Do not mix until ready to pour. Generally, two groups working with the grout (one mixing and the other pouring) is best.

MIXING TWO PART EPOXY

Two part formula contains resin, hardener and a mixing paddle. Thoroughly pre-mix the resin, then pour the hardener into the resin container slowly and mix with the paddle in a variable speed electric drill until thoroughly blended. Make sure there are no colored streaks left in the mixture.

POURING

Always pour from one side to prevent air pockets under the equipment. Continue pouring until the grout has penetrated to the other side of the equipment, then move the pouring spout along the same side of the equipment to where the grout has stopped. The grout will self-level, but may need to be helped to flow under the equipment, especially in colder conditions.

PLACEMENT TIME

The time you have before initial set depends on the air temperature, the ambient temperature of the foundation and equipment, and the temperature of the grout. In cooler conditions you will have more time to place the material, and in warmer temperatures you will have less time.

CURE TIME

The cure time (the time until the grout is strong enough for use) is temperature dependent. Special precautions must be taken when temperatures are below 50°F or above 95°F to assure the grout will properly cure. Consult the factory for details.

TEMPERATURE CONSIDERATIONS

The temperature of the kit components (resin and hardener) at the time of mixing and placement has a significant effect on both the ease of mixing and placement of the mixed material. For optimum results (in ease of mixing and placement, as well as in the final strengths attained) it is very important that both components are at a temperature between 70°F and 80°F at the time of mixing and placement. Storage of both components at a temperature within this range for a minimum of 18 hours before mixing is recommended.

CLEAN UP

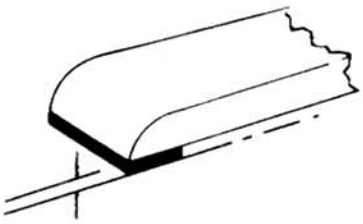
Uncured grout can be easily removed with soap and water. Any grout that has started to set can be removed using isopropyl alcohol or a non-flammable environmentally responsible epoxy solvent.

PRECAUTIONS

Always wear appropriate Personal Protective Equipment. MSDS are available on our web site at www.unisorb.com. Avoid inhaling fumes and keep the work area well ventilated. Wash skin and clothes with soap and water immediately (before grout cures).

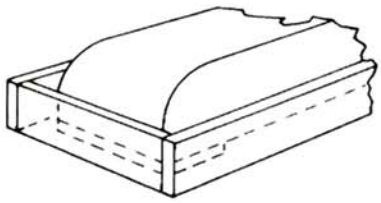
APPLICATION TECHNIQUES FOR EPOXY GROUTING

1



LEVEL EQUIPMENT WITH 1/2" - 1 1/2" CLEARANCE

2

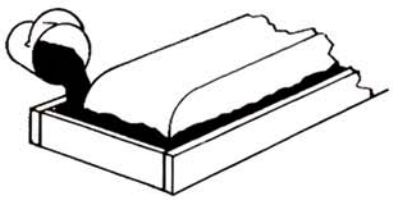


FORM PERIMETER LEAVING ADEQUATE ROOM FOR PLACEMENT AND VENTING

3

MIX RESIN AND HARDENER

4



POUR UNDER EQUIPMENT AND ALLOW TO CURE

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www.unisorb.com

BOX 1000, JACKSON, MI 49204-1000

888-4-UNISORB • FAX 517-764-5607

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