



INSTALLATION SOLUTIONS

GB-0151-1.1M, Rev. 9

**WTF-E V-100 EPOXY GROUT PRODUCT DATA**

WTF-E V-100 Epoxy Grout is a three-component, 100% solids epoxy resin system. It is specifically designed for applications requiring high loads. WTF-E offers resistance to temperature, humidity, chemical environments and most acids. WTF-E V-100 Epoxy Grout is formulated for medium thickness pours ranging from 1 1/2" to 3" or more in a single pour. Deeper depths are possible with proper attention to the conditions and size of the pour. Deep pours may be accomplished by using multiple lifts. Consult Unisorb Engineering for design help for your application.

Its tremendous compressive strength and high effective bearing area make it especially well suited for severe applications such as wind turbine bases, forge hammers, punch presses, power generation equipment and rail installations of all kinds.

**Packaging/Yields:**

WTF-E V-100 Epoxy Grout, 0.7 Cu. Ft. Kit (0.02 M<sup>3</sup>)

WTF-E V-100 Epoxy Grout, 1.4 Cu. Ft. Kit (0.04 M<sup>3</sup>)

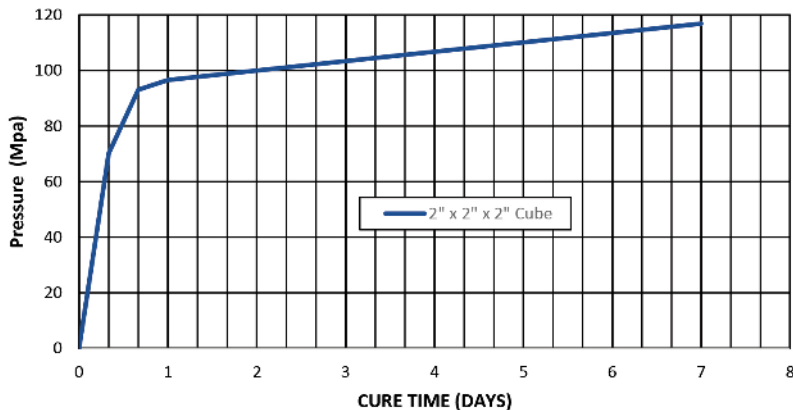
- Meets requirements for "High" effective bearing area per ASTM C-1339.
- 70.2 MPa compressive strength in 8 hours.  
96.7 MPa compressive strength in 24 hours.
- Easy mixing - no special mixing equipment needed. Mix with drill and paddle or paddle type mortar mixer.
- Deep pours and large diameter holes can be done with multiple lifts.
- Contains no BGE or free silica.
- Extra resistant to UV rays and water.



**Physical Properties @ 22°C**

Compressive Strength		
(ASTM C-579)	8 hours	70.2 MPa
	16 hours	93.1 MPa
	1 day	96.7 MPa
	3 days	101.8 MPa
	7 days	106.7 MPa
(ASTM D-695)	Ultimate	119.3 MPa
Tensile Strength		
(ASTM C-307)		16.2 MPa
Flexural Strength		
(ASTM C-580)		33.1 MPa
Heat Deflection Temperature		
(ASTM D-648)		76.7°C
Maximum Service Temperature		
		107.2°C
Hardness (Shore D)		
(ASTM D-2240)		94
Mixed Viscosity		
(ASTM D-2196) (25°C)		27,000 cps
Gel Time		
		50-60 min.
Placement Time		
		60 min.
Typical Pour Depth		
		38mm - 76mm
Linear Shrinkage		
(ASTM C-531)		0.000040 cm/cm
Coefficient of Thermal Expansion		
(ASTM C-531)		0.0000108 cm/cm/°C
Flowability and Bearing Area		
(ASTM C-1339)		1st Contact - 45 sec. Full Contact - 63 sec.
		Bearing Area Range - High (85-100%)
Creep Test (ASTM C-1181)		
	4.1 MPa @ 65.6°C	
	Cured 24 hours	0.00045 cm/cm

**WTF-E V-100 EPOXY GROUT  
TYPICAL FIELD RESULTS**





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**CONCRETE SURFACE PREPARATION**

Remove all oil, grease and contamination from concrete. Remove loose and weak concrete from 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**

All unmixed grout components (resin, hardener, and aggregate) must be stored inside a dry, temperature-controlled storage environment with an approximate temperature range of 75°F to 90°F until all three components exhibit temperatures within this range. This could take 24 to 72 hours depending on seasonal temperature conditions.

**MIXING THREE PART EPOXY**

Three part formulas contains resin, hardener and an aggregate. When ready to mix grout, pour the hardener into the resin container and mix with a paddle with a variable speed drill until thoroughly blended. Pour mixed resin and hardener into a larger container

or paddle type mortar mixer (poly material preferred). Slowly add all of the aggregate until all surfaces become wet as it is mixed. Continue to mix until there are no dry streaks. Do not add water.

**POURING**

Only pour grout from one side. This is to prevent the formation of air pockets under the equipment being grouted. Continue pouring until the grout has completely flowed to the other side of the equipment and to an adequate depth to eliminate potential voids. The grout will self-level under most circumstances but may need to be agitated, pushed, strapped, etc. to help the material flow under the equipment and properly self-level, especially in cold weather

**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 70°F or above 90°F to assure the grout will properly cure. Consult the factory for details.

**TEMPERATURE CONSIDERATIONS**

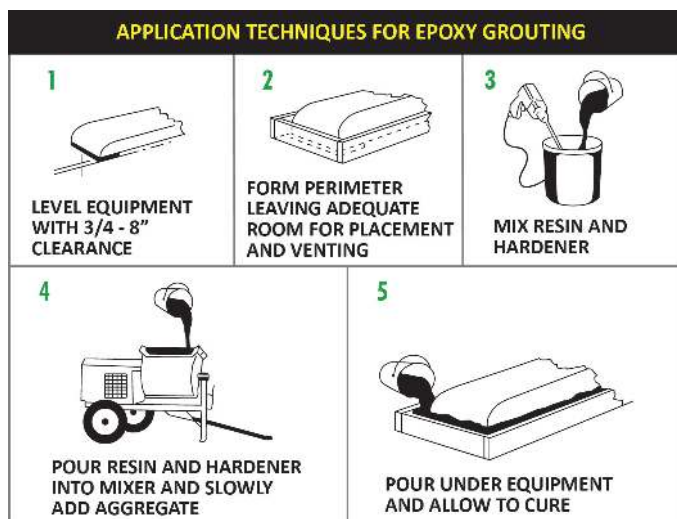
The temperature of the kit components (resin, hardener, and aggregate) at the time of mixing and placement have a significant effect on ease of mixing, placement of the mixed grout, and strength development. For optimum results it is very important all three unmixed grout components are within the 75-90 degree F temperature range. It is recommended that the grouting environment also be preconditioned to a temperature range of 70°F to 95°F to assure predictable results.

**CLEANUP**

Uncured grout may be cleaned from tools and mixing equipment with a mild solvent, detergent, or pressurized water rinse. For best results, clean mixing equipment and tools immediately upon completion of mixing activities.

**PRECAUTIONS**

Always wear appropriate Personal Protective Equipment (PPE). SDS are available on our website at [www.Unisorb.com](http://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).



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 testing results may vary due to procedures or ambient conditions such as temperature and humidity. Laboratory reports are available on request.

*Consult the specific Safety Data Sheets (SDS) for all safety data.*

*Contact Unisorb for all application questions and grouting support.*