

# ACCU-GROUT

## Epoxy Grouts



### Product Description

ACCU-GROUT products are three-component, pre-proportioned, industrial grade epoxy grouting systems.

- **ACCU-GROUT** is a general construction epoxy
- **ACCU-GROUT HD** is a high strength construction epoxy
- **ACCU-GROUT LE** is a low exotherm, high strength construction epoxy

The recommended application temperature range for the grout products is between 60 °F - 95 °F (16 °C - 35 °C).

### General Uses & Applications

- Machine base plate grouts for use in heavy equipment industries such as wind farms, gas transmissions, chemical processing and refining facilities, pulp and paper mills, steel rail seating for railroads and gantry cranes and marine
- Designed for high-stress base plate grouting applications in the applications heavy industrial equipment industries, new equipment installations or quick re-grouting applications that are subject to chemical attack and extreme vibration or impact loading

### Advantages & Features

- Designed for high impact resistance, dynamic or static loading conditions
- High early strength
- Greater flowability and effective bearing area
- Excellent oil and chemical resistance
- Low dust performance
- Precision grouting with negligible shrinkage and creep
- Ready to mix in pre-measured units
- Low toxicity
- Easy soap and water clean up
- Designed for dynamic and static loading
- Made in the USA

**Availability:** Adhesives Technology Corp. (ATC) products are available online and through select distributors serving all your construction needs. Please contact ATC for a distributor near you or visit [www.atcepoxy.com](http://www.atcepoxy.com) to search for a distributor by zip code.

### Color:

**ACCU-GROUT** - Part A (Resin) Gray: Part B (Hardener) Amber, Mixed Color - Concrete Gray

**ACCU-GROUT HD** - Part A (Resin) Gray: Part B (Hardener) Amber, Mixed Color - Concrete Gray

**ACCU-GROUT LE** - Part A (Resin) Gray: Part B (Hardener) Amber, Mixed Color - Concrete Gray

**Storage & Shelf Life:** For best results, store between 40 °F (4 °C) and 95 °F (35 °C). Shelf life is 24 months when stored in unopened containers in dry conditions.

**Installation:** Installation Instructions are available within this Technical Data Sheet (TDS). Due to occasional updates and revisions, always verify the most current usage. In order to achieve maximum results, proper installation is imperative.

**Clean-Up:** Always wear appropriate personal protective equipment such as safety glasses and gloves. Clean uncured materials from tools and equipment using a mild solvent, such as a citrus based product or denatured alcohol. Cured material can only be removed mechanically using a sander or grinder.

### Limitations & Warnings:

- For professional use only
- Do not thin with solvents, as this will prevent cure
- Do not mix partial kits
- Settling may occur during storage; scraping bottom of pails for thorough mixing is imperative
- Substrate temperature should be a minimum of 50 °F (10 °C)
- Consult ATC when mixing or placing outside recommended temperature range
- **ACCU-GROUT** - Maximum pour depth is 8 in.
- **ACCU-GROUT HD** - Maximum pour depth is 6 in.
- **ACCU-GROUT LE** - Maximum pour depth is 22 in.

**Safety:** Please refer to the Safety Data Sheet (SDS) for ACCU-GROUT products published on ATC's website or call for more information at 1-800-892-1880.

## General Construction Epoxy Grout

### Advantages & Features

- Features high early strength, low dust, high bearing area, negligible shrinkage and creep, and excellent flowability

**TABLE 1: ACCU-GROUT**

Package Size	0.5 ft <sup>3</sup> Kit	2.0 ft <sup>3</sup> Kit
Part #	AG05 <sup>1</sup>	AG20 <sup>2</sup>
Pallet Qty.	72 Kits (A/B only)	36 ea. Part A 144 ea. Part B
Pallet Weight (lb.)	835	2,710

1. 0.5 ft<sup>3</sup> kit includes Part A and Part B in a box: part # B1G-AG and one 58 lb. bag of grout blend: part # AG-GB58#.
2. 2.0 ft<sup>3</sup> kit includes Part A: part # B3.2G-AG-A, Part B: part # B1G-AG-B and four 58 lb. bags of grout blend: part # AG-GB58#.



**AG05**

**AG-GB58#**



**AG20**

**TABLE 2: ACCU-GROUT performance to ASTM Standards<sup>1,2</sup>**

Property	ASTM Standard	Units	Result
Gel Time	D2471	min	120
Compressive Strength	C579	psi (MPa)	14,500 (100)
Compressive Modulus		psi (MPa)	2,200,000 (15,168)
Compressive Creep (400 psi at 140 °F)	C1181	in/in	<0.005
Tensile Strength	C307	psi (MPa)	3,200 (22.1)
Tensile Modulus of Elasticity		psi (MPa)	1,900,000 (13,100)
Bond Strength	C882	psi (MPa)	4,000 (27.6)
Flexural Strength	C580	psi (MPa)	5,000 (34.5)
Modulus of Elasticity		psi (MPa)	2,000,000 (13,790)
Coefficient of Thermal Expansion	C531	in/(in-°F)	18x10 <sup>-6</sup>
Thermal Compatibility	C884	---	Pass
Peak Exotherm	D2471	°F (°C)	170 (77)
Fire Resistance	D635	---	Self-Extinguishing
Water Absorption	C413	%	0.05
Linear Shrinkage on Cure	C531	%	0.007

1. Results based on testing conducted on a representative lot(s) of product. Average results will vary according to the tolerances of the given property.
2. Results may vary due to environmental factors such as temperature, moisture and type of substrate.

**TABLE 3: ACCU-GROUT CURE SCHEDULE<sup>1</sup>**

Cure Time Temperature °F (°C)	Working Time	Initial Cure	Compressive Strength psi (MPa)
55 (13)	5 hr	40 hr	11,500 (79.3)
65 (18)			12,900 (88.9)
75 (24)	2.5 hr	30 hr	14,500 (100)
85 (29)			15,700 (108)
95 (35)	40 min	15 hr	17,100 (118)
105 (41)			18,000 (124)

1. Epoxy resins are temperature sensitive and care should be taken to condition all parts, including Part C-Aggregate, between 65 °F - 85 °F (18 °C - 29 °C) for a minimum of 24 hrs. prior to mixing and placement. Temperatures colder than stated range increase viscosity of resins and inhibit mixing and flow of materials. Temperatures warmer than stated range decrease viscosity of resins, hasten the cure and reduce the working time.

## High-Strength Wind Turbine Grout

### Advantages & Features

- Designed for use as a high strength grout suitable for onshore and offshore wind farm installations

**TABLE 4: ACCU-GROUT HD Packaging**

Package Size	0.5 ft <sup>3</sup> Kit	2.0 ft <sup>3</sup> Kit
Part #	AGHD05 <sup>1</sup>	AGHD20 <sup>2</sup>
Pallet Qty.	72 Kits (A/B only)	36 ea. Part A 144 ea. Part B
Pallet Weight (lb.)	835	2,710

1. 0.5 ft<sup>3</sup> kit includes Part A and Part B in a box: part # B1G-AGHD and one 58 lb. bag of grout blend: part # AG-GB58#.

2. 2.0 ft<sup>3</sup> kit includes Part A: part # B3.2G-AGHD-A, Part B: part # B1G-AGHD-B and four 58 lb. bags of grout blend: part # AG-GB58#.



AGHD05

AG-GB58#

AGHD20

**TABLE 5: ACCU-GROUT HD performance to ASTM Standards<sup>1,2</sup>**

Property	ASTM Standard	Units	Results
Gel Time	D2471	min	40
Compressive Strength at 95 °F (35 °C)	C579	psi (MPa)	19,500 (134)
Compressive Modulus		psi (MPa)	2,200,000 (15,168)
Compressive Creep (400 psi at 140 °F)	C1181	in/in	<0.005
Tensile Strength	C307	psi (MPa)	3,600 (24.8)
Tensile Modulus of Elasticity		psi (MPa)	2,100,000 (14,479)
Bond Strength	C882	psi (MPa)	3,700 (25.5)
Flexural Strength	C580	psi (MPa)	5,800 (40.0)
Modulus of Elasticity		psi (MPa)	1,800,000 (12,411)
Coefficient of Thermal Expansion	C531	in/(in-°F)	17x10 <sup>-6</sup>
Thermal Compatibility	C884	----	Pass
Peak Exotherm	D2471	°F (°C)	210 (99)
Fire Resistance	D635	----	Self-Extinguishing
Water Absorption	C413	%	0.08
Linear Shrinkage on Cure	C531	%	0.007

1. Results based on testing conducted on a representative lot(s) of product. Average results will vary according to the tolerances of the given property.

2. Results may vary due to environmental factors such as temperature, moisture and type of substrate.

**TABLE 6: ACCU-GROUT HD CURE SCHEDULE<sup>1</sup>**

Cure Time Temperature °F (°C)	Working Time	Initial Cure	Compressive Strength psi (MPa)
55 (13)	2 hr	48 hr	15,500 (107)
65 (18)			16,000 (110.3)
75 (24)	45 min	36 hr	17,500 (121)
85 (29)			18,200 (125)
95 (35)	20 min	24 hr	19,000 (131)
105 (41)			21,000 (145)

1. Epoxy resins are temperature sensitive and care should be taken to condition all parts, including Part C-Aggregate, between 65 °F - 85 °F (18 °C - 29 °C) for a minimum of 24 hrs. prior to mixing and placement. Temperatures colder than stated range increase viscosity of resins and inhibit mixing and flow of materials. Temperatures warmer than stated range decrease viscosity of resins, hasten the cure and reduce the working time.

## Low Exotherm Epoxy Grout for Deep Placements

### Advantages & Features

- Pumpable, low exotherm epoxy grout designed for deep pour or placement capabilities
- May be used in warm weather
- Extended pot life

**TABLE 7: ACCU-GROUT LE Packaging**

Package Size	0.5 ft <sup>3</sup> Kit	2.0 ft <sup>3</sup> Kit
Part #	AGLE05 <sup>1</sup>	AGLE20 <sup>2</sup>
Pallet Qty.	72 Kits (A/B only)	36 ea. Part A 144 ea. Part B
Pallet Weight (lb.)	835	2,710

1. 0.5 ft<sup>3</sup> kit includes Part A and Part B in a box: part # B1G-AGLE and one 58 lb. bag of grout blend: part # AG-GB58#.

2. 2.0 ft<sup>3</sup> kit includes Part A: part # B3.2G-AGLE-A, Part B: part # B1G-AGLE-B and four 58 lb. bags of grout blend: part # AG-GB58#.



**TABLE 8: ACCU-GROUT LE performance to ASTM Standards<sup>1,2</sup>**

Property	ASTM Standard	Units	Results
Gel Time	D2471	min	300
Compressive Strength at 75 °F (24 °C)	C579	psi (MPa)	12,500 (86.2)
Compressive Modulus		psi (MPa)	2,100,000 (14,479)
Compressive Creep (400 psi at 140 °F)	C1181	in/in	<0.005
Tensile Strength	C307	psi (MPa)	3,000 (20.7)
Tensile Modulus of Elasticity		psi (MPa)	1,800,000 (12,411)
Bond Strength	C882	psi (MPa)	4,000 (27.6)
Flexural Strength	C580	psi (MPa)	4,600 (31.7)
Modulus of Elasticity		psi (MPa)	1,900,000 (13,100)
Coefficient of Thermal Expansion	C531	in/(in-°F)	19x10 <sup>-6</sup>
Thermal Compatibility	C884	----	Pass
Peak Exotherm	D2471	°F (°C)	108 (42)
Fire Resistance	D635	----	Self-Extinguishing
Water Absorption	C413	%	0.05
Linear Shrinkage on Cure	C531	%	0.007

1. Results based on testing conducted on a representative lot(s) of product. Average results will vary according to the tolerances of the given property.

2. Results may vary due to environmental factors such as temperature, moisture and type of substrate.

**TABLE 9: ACCU-GROUT LE CURE SCHEDULE<sup>1</sup>**

Cure Time Temperature °F (°C)	Working Time	Initial Cure	Compressive Strength psi (MPa)
55 (13)	7.5 hr	84 hr	9,800 (67.6)
65 (18)			11,000 (75.8)
75 (24)	4 hr	56 hr	12,500 (86)
85 (29)			13,500 (93)
95 (35)	2 hr	28 hr	14,600 (101)
105 (41)			15,500 (107)

1. Epoxy resins are temperature sensitive and care should be taken to condition all parts, including Part C-Aggregate, between 65 °F - 85 °F (18 °C - 29 °C) for a minimum of 24 hrs. prior to mixing and placement. Temperatures colder than stated range increase viscosity of resins and inhibit mixing and flow of materials. Temperatures warmer than stated range decrease viscosity of resins, hasten the cure and reduce the working time.

## Installation Instructions

### Surface Preparation

Concrete shall have reached its design strength and surface shall be free of standing water (a saturated surface dry condition, although not necessary, is acceptable). All surface contamination must be removed by mechanical means, creating a surface profile of exposed sound aggregate that will provide a strong bond surface for the grout. All metal surfaces to come in contact with the grout should be sandblasted to white metal finish and wiped clean with solvent. Items not intended to bond to grout, such as leveling screws, wedges and bolts must be protected with wax, caulk, duct tape or similar.

**ACCU-GROUTS** are shipped in pre-measured 0.5 cu. ft. or 2.0 cu. ft. units. Mix these products as complete units **ONLY**. **NOTE:** Refer to Limitations & Warnings section on page 1. **IMPORTANT!** All parts, including the aggregate, should be conditioned to a temperature between 65 °F (18 °C) and 85 °F (29 °C) for at least 24 hours prior to use.

0.5 cu. ft. kit contains: Part A: (1) 1-gallon pail (partial fill)  
Part B: (1) 1-gallon pail (partial fill)  
Part C : (1) 58 lb. bag grout blend

2.0 cu. ft. kit contains: Part A: (1) 5-gallon pail (partial fill)  
Part B: (1) 1-gallon pail  
Part C: (4) 58 lb. bags grout blend

### Mixer Selection

It is imperative to select the proper mixing equipment for installation in order for products to perform as published. Failure to do so may also lead to serious equipment damage. When mixing the grout, it is recommended to use a powerful (10 amp) electric mixer with a 2-speed gearbox, such as those designed specifically for the mixing of cementitious adhesives and resins. If this isn't available, a powerful 2-speed angle head drill may be used. **NOTE:** Do not use a standard carpentry power drill, as the motor will likely be damaged or destroyed.

### Paddle Selection

A Jiffy Mixer paddle is recommended for proper mixing. This is a heavy duty mixing paddle made entirely of stainless steel for industrial and commercial applications. With a patented blade system developed for efficient mixing - not just stirring - of dense and viscous materials in an open container, the Jiffy Mixer will help to eliminate waste while minimizing unwanted aeration.

### Mixing 0.5 cu. ft. Kit

Pour Part B into Part A container. Place the Jiffy Mixer paddle into the Part A container that now contains both Parts A and B. Be sure the paddle is completely submerged and start the mixer unit while the paddle remains submerged as the material mixes at a low speed of 300 rpm for **3 minutes**. Use the paddle to scrape bottom of container during mixing to bring up any settled pigment. Once mixing is complete, allow all mixing motion to stop before the mixing unit is pulled out of the material. Failure to keep the mixing unit submerged and/or allowing the material to be mixed at high speeds is likely to cause unwanted air entrainment. After liquid parts are mixed, transfer all liquid into a separate container (not provided) and slowly add Part C (Aggregate). Mix on low speed until all aggregate is wetted out, stop mixer. **DO NOT OVER MIX!**

### Bulk Mixing 2.0 cu.ft. Kit

The proper mixing technique must be used in order for products to perform as published. For bulk mixing, it is recommended to use a mortar mixer (i.e. stucco mixer) where the shaft and paddle rotate to mix the material. **NOTE:** DO NOT use a standard drum mixer, where the drum rotates around fixed fins or vanes using gravity to mix the material. Mixing sand based materials using this type of equipment can be difficult, as they tend to stick to the walls of the drum instead of tumbling and churning to create the proper mix needed to perform as published. Pour Part B into Part A container and mix thoroughly for 3 minutes with a Jiffy Mixer paddle on a low-speed (300 rpm) drill motor until a uniform consistency is achieved. **NOTE:** Keep paddle at bottom of pail to avoid introducing air. Pour liquids into mortar mixer, making sure to remove all resins from sides and bottom of pail with spatula or similar tool. Introduce first bag of Part C (Aggregate) prior to starting mixer. Start mixer and slowly add the remaining three bags of aggregate. Mix on low speed until all aggregate is wetted out, stop mixer. **DO NOT OVER MIX!**

### Installation Instructions

#### Form Preparation

Epoxy grouts require heavy-duty formwork to hold the grout in place until full cure is achieved. A sheet of 3/4 in. plywood or similar and proper bracing should be used to hold the force of the weight of the grout. Forms should be coated with a minimum of two coats of an industrial grade paste wax or similar, to facilitate removal of forms after cure. It is recommended that forms have 45 degree angle chamfer at all vertical corners. Caulk, putty or similar sealant should be used to render the forms "watertight". Forms should be at least 1/2 in. above bottom of base to allow for a hydraulic head to facilitate the placement of the grout.

**ACCU-GROUTS** should be poured into forms at one location in order to allow a unidirectional flow. Use of a header box will ease the placement of the finished product. Strict adherence to temperature considerations will assist the placement properties. Check forms frequently for leaks. Plug leaks with a hydraulic cement or putty. **ACCU-GROUTS** do not self-seal.

#### Finishing

When forms are filled to desired elevation, exposed horizontal surfaces of the grout may be finished with a surfactant such as an industrial citrus cleaner or an approved solvent using a paintbrush or small hand trowel. Surfactant should be lightly sprayed or misted on the surface. However, **DO NOT PUDDLE** on surface. This process can be repeated every 30 minutes until surfaces are firm.

#### Post Cure

Sharp corners may need to be addressed. The use of an angle head grinder equipped with approved abrasive or diamond wheel is recommended. **CAUTION:** Cured edges of grout may be very sharp, use proper PPE when grinding and inspecting grout.