

Epoxy

Data Sheets

1 ----- Ultrabond 1300 Epoxy

3 ----- Ultrabond 2300 Epoxy

ULTRABOND 1300



Quick Selection Guide

Tension Load (1/2")	14,146 lbs.*
Working Time (75°F)	20 min.
Cure Time (75°F)	2 hrs.
Temperature Range	40°F - 110°F

*1/2" threaded rod at 9D in 3000 psi concrete

Description

Ultrabond 1300 is a two component (1:1 ratio), 100% solids, high modulus, structural epoxy gel. It is a solvent free, low odor, high strength, moisture insensitive, non-sag epoxy system. The resin and hardener are uniformly dispensed from a dual cartridge system and mixed simultaneously through a mixing nozzle or available in bulk.



ULTRABOND 1300

ADHESIVES TECHNOLOGY CORP.

Sizes Available

- Sizes available in 22 and 53 oz. dual cartridge systems. One free nozzle included with every 22 oz. cartridge
- Bulk sizes include 1 (102 oz.), 2, 10 and 100 gallon kits

Features & Advantages

- Long working time with a quick 2 hour cure time
- Moisture insensitive - May be used in damp environments
- May be used in concrete, hollow block, brick, clay and stone
- Perfect for vertical, horizontal, overhead and screen applications
- Structural bonding of concrete to concrete

Applications

- High strength anchoring and doweling
- Bonding agent (metal, concrete, brick, wood, stone, block)
- Pick proof sealant - windows, doors, locks, etc. (e.g. Correctional Facilities)
- Concrete Repair - (see Bonding and Coatings Section)

Approval / Listings

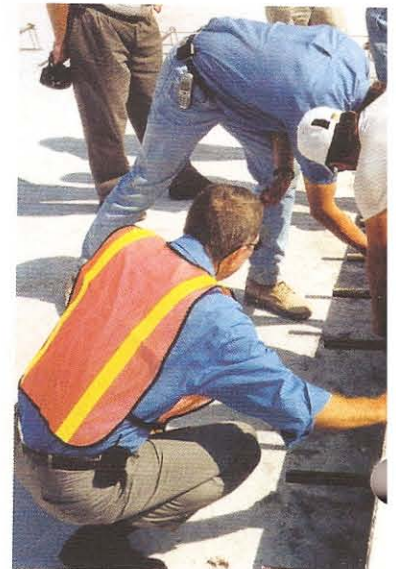
Various DOT's - Call for listing
 Independent Laboratory Tested: Meets ASTM C881-99:
 Type I, II, IV and V, Grade 3, Class B and C
 Metro-Dade 05-0627.02

PERFORMANCE INFORMATION

Independent ASTM C881-99 Technical Data

Properties	ASTM	Results
Compressive Yield Strength - psi	D695	11,890 (7 day)
Compressive Modulus - psi	D695	201,280 (7 day)
Tensile Strength - psi	D638	7,428 (7 day)
Elongation - %	D638	1.8 (7 day))
Bond Strength - psi	C882	1,410 (2 day)
	C882	2,340 (14 day)
Consistency	C881	Non-Sag Gel
Heat Deflection Temperature - °F	D648	131 (7 day)
Water Absorption - %	D570	0.52 (24 hrs.)
Linear Coefficient of Shrinkage	D2566	0.004

Shelf Life	2 years
Mix Ratio	1:1
Color	Gray
Storage	Below 95°F



Ordering Information

Size	22 oz.	53 oz.	Bulk Gal. Kit	2 Gal. Kit	10 Gal. Kit	100 Gal. Kit
Part #	A22-1300N	A53-1300	BUG-1300	B2G-1300	B10G-1300	B100G-1300
Manual Dispensing Tool	TM22HD	N/A	N/A	N/A	N/A	N/A
Pneumatic Dispensing Tool	TA22HD-C	TA53HD-C	N/A	N/A	Bulk Dispenser	Bulk Dispenser
Case Qty.	12	6	1	1	Packaged Each	Packaged Each
Pallet Qty.	648	216	75	75	12	2

See pages 26 and 27 for additional accessories.

TENSION LOADS FOR THREADED RODS - Safety Factor "Allowable" equals 25% of Ultimate Load, 32% for steel

Threaded Rod Diameter (in.)	Hole Diameter (in.)	Minimum Embedment Depth (in.)	f'c = 3000 psi		f'c = 5000 psi		f'c = 7000 psi	
			Ultimate Tension Load (lbs.)	Allowable Tension Load (lbs.)	Ultimate Tension Load (lbs.)	Allowable Tension Load (lbs.)	Ultimate Tension Load (lbs.)	Allowable Tension Load (lbs.)
3/8	7/16	3 3/8	9,336	2,334	10,124	2,531	10,936	2,734
1/2	9/16	4 1/2	14,146	3,537	14,512	3,628	18,400	4,600
5/8	3/4	5 5/8	19,600	4,900	20,688	5,172	29,288	7,322
3/4	7/8	6 3/4	25,052	6,263	26,864	6,716	34,764	8,691
7/8	1	7 7/8	33,376	8,344	34,328	8,582	39,524	9,881
1	1 1/8	9	41,696	10,424	41,792	10,448	52,144	13,036

SHEAR LOADS FOR THREADED RODS - Safety Factor "Allowable" equals 25% of Ultimate Load, 32% for steel

Threaded Rod Diameter (in.)	Hole Diameter (in.)	Minimum Embedment Depth (in.)	f'c = 3000 psi		f'c = 5000 psi		f'c = 7000 psi	
			Ultimate Shear Load (lbs.)	Allowable Shear Load (lbs.)	Ultimate Shear Load (lbs.)	Allowable Shear Load (lbs.)	Ultimate Shear Load (lbs.)	Allowable Shear Load (lbs.)
3/8	7/16	3 3/8	6,940	1,735	7,036	1,759	7,144	1,786
1/2	9/16	4 1/2	8,316	2,079	10,380	2,595	13,096	3,274
5/8	3/4	5 5/8	15,328	3,832	18,056	4,514	19,052	4,763
3/4	7/8	6 3/4	22,336	5,584	25,732	6,433	26,072	6,518
7/8	1	7 7/8	29,364	7,341	31,408	7,852	33,092	8,273
1	1 1/8	9	36,396	9,099	37,084	9,271	40,952	10,238

ULTRABOND 2300



Quick Selection Guide	
Tension Load (1/2")	14,500 lbs.*
Working Time (75°F)	40 min.
Cure Time (75°F)	10 hrs.
Temperature Range	60°F - 110°F

*1/2" threaded rod at 90 in 3000 psi concrete

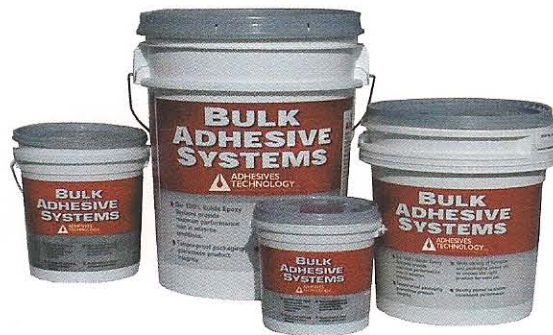
Description

Ultradbond 2300 is a two component (1:1 ratio), 100% solids, high modulus, structural epoxy gel. It is a solvent free, low odor, high strength, moisture insensitive, non-sag epoxy system. The resin and hardener are uniformly dispensed from a dual cartridge system and mixed simultaneously through a mixing nozzle or available in bulk. See *Ultradbond 2000 and 2100* on page 36 & 37 in the *Bonding & Coating* section for 2000 series product best suited for bonding and coating applications.



ULTRABOND 2300™

ADHESIVES TECHNOLOGY CORP.



Sizes Available

- Available in 22 and 53 oz. dual cartridge systems
- Bulk sizes include 1 (102 oz.), 2, 10 and 100 gallon kits

Features & Advantages

- High strength adhesive
- Corrosion inhibitor
- Extended working time
- Moisture insensitive - May be used in damp environments
- May be used in concrete, hollow block, brick, clay and stone
- Perfect for vertical, horizontal, overhead and screen applications
- Structural bonding of concrete to concrete

Applications

- High strength anchoring and doweling
- Bonding agent (metal, concrete, brick, wood, stone, block)
- Pick proof sealant - windows, doors, locks, etc. (e.g. Correctional Facilities)
- Concrete Repair - (see *Bonding and Coatings Section*)

Approval / Listings

Various DOT's - Call for listing
Independent Laboratory Tested: Meets ASTM C881-99:
Type I, II, IV and V, Grade 3, Class C

Performance Information

Independent ASTM C881 Technical Data		
Properties	ASTM	Results
Compressive Yield Strength - psi	D695	10,900 (14 day)
Compressive Modulus - psi	D695	212,400 (7 day)
Bond Strength - psi	C882	1,280 (2 day)
	C882	1,910 (14 day)
Consistency	C881	Non-Sag Gel
Heat Deflection Temperature - °F	D648	131 (7 day)
Water Absorption - %	D570	0.61 (24 hrs)
Linear Coefficient of Shrinkage	D2566	0.002

Shelf Life	2 years
Mix Ratio	1:1
Color	Gray
Storage	Below 95°F



Ordering Information

Size	22 oz.	53 oz.	Bulk Gal. Kit	2 Gal. Kit	10 Gal. Kit	100 Gal. Kit
Part #	A22-2300	A53-2300	BUG-2300	BUG-2300	B10G-2300*	B100G-2300
Manual Dispensing Tool	TM22HD	N/A	N/A	N/A	N/A	N/A
Pneumatic Dispensing Tool	TA22HD-C	TA53HD-C	N/A	N/A	Bulk Dispenser	Bulk Dispenser
Case Qty.	12	6	1	1	Packaged Each	Packaged Each
Pallet Qty.	768	216	75	75	12	2

See pages 26 and 27 for additional accessories. *Also available in metal pails as B10G-2300M.

TENSION LOADS FOR THREADED RODS - Safety Factor "Allowable" equals 25% of Ultimate Load, 32% for steel

Threaded Rod Diameter (in.)	Hole Diameter (in.)	Minimum Embedment Depth (in.)	f'c = 3000 psi		f'c = 5000 psi	
			Ultimate Tension Load (lbs.)	Allowable Tension Load (lbs.)	Ultimate Tension Load (lbs.)	Allowable Tension Load (lbs.)
3/8	7/16	3 3/8	9,336	2,334	9,728	2,432
1/2	9/16	4 1/2	14,500	3,652	14,712	3,678
5/8	3/4	5 5/8	21,804	5,451	22,460	5,615
3/4	7/8	6 3/4	29,108	7,277	30,208	7,552
7/8	1	7 7/8	37,768	9,442	40,228	10,057
1	1 1/8	9	46,432	11,608	50,252	12,563

SHEAR LOADS FOR THREADED RODS - Safety Factor "Allowable" equals 25% of Ultimate Load, 32% for steel

Threaded Rod Diameter (in.)	Hole Diameter (in.)	Minimum Embedment Depth (in.)	f'c = 3000 psi		f'c = 5000 psi	
			Ultimate Shear Load (lbs.)	Allowable Shear Load (lbs.)	Ultimate Shear Load (lbs.)	Allowable Shear Load (lbs.)
3/8	7/16	3 3/8	7,216	1,804	6,852	1,713
1/2	9/16	4 1/2	9,692	2,423	10,840	2,710
5/8	3/4	5 5/8	15,024	3,756	15,220	3,805
3/4	7/8	6 3/4	20,320	5,080	19,600	4,900
7/8	1	7 7/8	30,916	7,729	26,984	6,746
1	1 1/8	9	41,468	10,367	34,364	8,591

DISPENSING TIPS

Always Balance your Cartridge

This applies to all two part adhesives



When dispensing epoxy, always balance the cartridge first. To balance the cartridge, dispense equal amounts of both the black and white material until you get an even flow. This is extremely important and must be done before attaching the mixing nozzle.

Balancing the cartridge helps assure that a uniform grey color with no streaks will be attained by the time the product reaches the tip of the nozzle.



Always dispense a small amount of epoxy off to the side before dispensing into the hole to examine the epoxy color. Do not dispense epoxy into the hole until a uniform color, free from streaks, is achieved.

