

Quickbond™ AB2250-FT Water-Based Adhesive by Coral Industry of AIT Chemical, Inc.

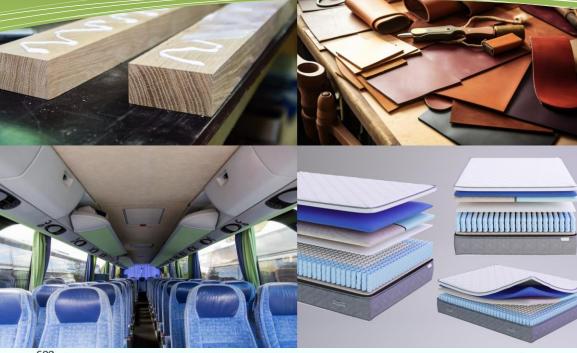
AIT Chemical, Inc. is proud to introduce a novel waterbased adhesive designed and tested to have the combination of fast tack setting (rapid initial bond strength buildup), forming an ultimate bond strength of more than 70% when compared with the industry's best-known similar product. This waterborne adhesive is nonflammable, polychloroprenefree, and has zero VOCs (per EPA test method 24).

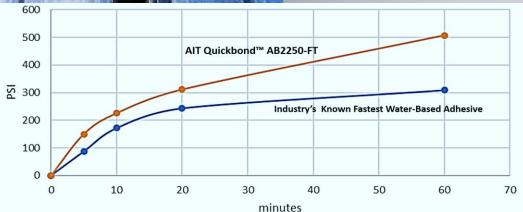
Quickbond™ AB2250-FT water-based adhesive is a contact adhesive that achieves handling strength in less than 60 seconds or less. It has been molecularly engineered to achieve one of the highest bond strengths of over 600 psi within 60 minutes. This heat-resistant adhesive is flexible with the capability of a one-surface contact adhesive application for increasing productivity in the manufacturing environment.

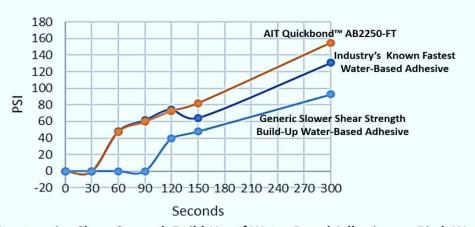
- Fast bonding for instant handling and adhesion strength to keep assembly processes moving
- Solventless, one-part adhesive requires no mixing for easy handling
- Stable bond provides heat resistance for long-term reliability
- High solids content for high bonding coverage
- Bonds a wide variety of substrates with strength and flexibility for a variety of applications

Quickbond™: Fast Tacking Water-Based Contact Cement

- Matching the industry's fastest tacking water-based adhesive
- · Choices of low-temperature flexibility and long and short work life
- The high bond strength version excels over the industry's best by







Comparative Shear Strength Build-Up of Water-Based Adhesive on Birch Wood Substrate

Rapid initial build-up of holding strength allows for efficient field installation and increased productivity. AIT Quickbond $^{\text{IM}}$ demonstrates not only the fastest strength build-up but also significantly stronger ultimate bond strength.



Quickbond™: Fast Tacking with High Ultimate Bond Strength

- Designed molecularly for unparalleled ultimate bond strength to replace heat-curing adhesive for veneer and laminate to particle board bonding
- Engineered fast tacking to enable installation efficiency and productivity
- Choices of flexibility at low temperature with high temperature resistance



<u>Quickbond™ AB2250-FT</u> <u>Adheres to Many</u> Materials and Substrates

Developed and formulated with close to 50% solids, AIT Quickbond™ AB2250-FT is effective in bonding coverage of more than 3 times that of traditional solvent-based contact cement adhesives. Quickbond™ AB2250-FT adheres to many types of flexible foams, fabrics, canvas, polyester fiberfill, wood, plywood, particleboards, papers, and most plastics and metal surfaces. Other applicable substrates and materials include cork, felt, fiberglass reinforced plastics, fiberglass insulation, fibrous glass, thermoplastic elastomers, natural leathers, and Vinyl plasticized leathers.

Rapid initial build-up of holding strength allows for efficient field installation and increased productivity. AIT Quickbond™ demonstrates not only the fastest strength build-up but also significantly stronger bond strength in comparison to the known industry's best water-based adhesives. The rate of contact cementing of the assembly parts and the "cured" bond strength of Quickbond™ AB2250-FT match the best of the solvent-borne contact adhesives.

The VOCs-free water-based AB2250-FT adhesive is formulated to meet the GREENGUARD® Product Emission Standard for Children and Schools for low-emitting interior building materials.

One of the challenges for the contact cement adhesive industry is to develop water-based contact adhesives that can match the efficiency, productivity, and bond strength performance of solvent-borne contact cement. AIT Quickbond™ AB2250-FT is now proven and demonstrated. To offer choices in longer open time work life, Quickbond™ AB2250-HB offers the engineered function of longer from 30 to 60 seconds to 2-5 minutes, but the bond strength build-up and final bond strength remained the same.

The high bond strength of AIT Quickbond™ AB2250-FT and AB2250-HB provides the opportunity for the industry of wood and decorative laminates to particle boards to use water-based adhesive instead of the more traditional Urea-Formaldehyde resins or solvent-borne contact cement. While water-based, the rapid bond strength build-up of Quickbond AB2250-FT eliminates the need for clamping down with the use of the traditional PVA-type water-based adhesive.

For those applications requiring extra flexibility at freezing temperatures and below, AIT Quickbond $^{\text{\tiny M}}$ AB2150-FLEX is molecularly engineered to provide a much lower glass transition, similar to most rubber cements.



Quickbond™: Fast Tacking Water-Based Contact Cement

- Unparalleled productivity and field installation ease without clamping
- Adhesion build-up and ultimate bond strength excel over solvent-based adhesives and all the known best water-based adhesives
- Choices of speeds in adhesion, flexibility at low temperatures, and strength





	Quickbond™ AB2250-FT	Quickbond™ AB2350-HB	Quickbond™ AB2150-FLEX
Adhesive Applications	Bonding wood, wood veneer, particle board, high-pressure laminate, cardboard, paper, cork, fabric, felt, fiberglass insulation, fiberglass reinforced plastics, fibrous glass, flexible polyurethane and latex foam, polyolefines and thermoplastic elastomers and foam, polystyrene foam, vinyl plastics, plastics, glass, metals.		
Industries Served	Aircraft, Train, Automotive, Transportation, Construction, Woodworking, Appliance, Seats and Furniture, Leather Goods, Marine, Metalworking, Military, Electronics, General Industrial		
Adhesive Composition	50% Polymer in 50% Water	50% Polymer in 50% Water	50% Polymer in 50% Water
Color (Wet/Dried)	Milky cream/Transparent	Milky cream/Transparent	Milky cream/Transparent
Work Time Before Dry	30-60 seconds	120-180 seconds	120-180 seconds
Glass Transition	Flexible to 0°C	-20ºC to 0ºC	-40ºC
Bonding Area Limitation	Large areas	Super Large Area	Super Large Area for Low Temperature Environment
High Temperature Limit	<150ºC	<150ºC	<125ºC
Fire Flamability	None Flammable in Solution	None Flammable in Solution	None Flammable in Solution
Environmental	Waterborne and solvent-free to meet California Air Resources Board, GREENGUARD® requirements. Low VOC and comply with Ozone Transport Commission and SCAQMD standards for Electronics and General Industrial uses.		
Storage Condition	Non-Freezing and 5ºC to 50ºC	Non-Freezing and 5ºC to 50ºC	Non-Freezing and 5°C to 50°C
Shelf Life	12 Months	12 Months	12 Months
Open Time	1-10 minutes	3-10 minutes	3-10 minutes
Tacking-Repositioning Time (Wood to Wood)	30-60 seconds	120-180 seconds	120-180 seconds
Availability in Bulk Sizes	1, 5, and 55 Gallon	1, 5, and 55 Gallon	1, 5, and 55 Gallon
Consumer DIY Sizes	4 oz and 16 oz Squeeze Bottle	4oz and 16 oz Squeeze Bottle	16 oz Squeeze Bottle



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Recommended Applications for Ouickbond™ AB2250-FT

AIT Quickbond™ AB2250-FT is a water-based adhesive that can be easily applied by spraying, brushing, and rolling directly on the substrates to be bonded. One coat instead of coating adhesive on both sides should be sufficient for bonding most substrate surfaces. With the special viscosity engineering of the Quickbond™ AB2250-FT, when the edges of the bonding areas are covered along with overall areas of 80%, effective bonding for the assembly is more than adequate. In the case of porous substrates, additional coats may be required. Additional coats can be applied after the initial coat is dry to the touch.

The following are some of the common uses of the Quickbond™ AB2250-FT:

- Bonding of molded foams
- Architectural and decorative paneling
- Countertop, wood veneer, and other decorative laminates bonding to particleboard
- Acoustical foam isolation installation
- Pipe heat insulation foam wrapping
- Heat-resistant, hightemperature insulation bonding

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Quickbond™ Water-Based Adhesives Availability

AIT QuickbondTM AB2250-FT and its sister products, AB2250-HB and AB2150-FLEX, are available in 16 oz squeeze bottles for field installation applications. For volume application, they are available in 1, 5, and 55-gallon packaging.

PARAMETER	AB2250-FT	AB2350-HB	AB2150-FLEX
Operational Temperature Capability	Up to 150°CTg: 0°C	Up to 150°CTg: -20°C	Up to 150°CTg: -40°C
Repositioning Time (Work Life, Open Time)	• 30-60 seconds	• 90-120 seconds	• 2-5 minutes
Shear Bond Strength	• >900 psi	• >900 psi	• >500 psi
Suggested Applications	 Field installation Factory Production Foam Attachment Veneer and Laminate to Particle Boards 	 Field installation Factory Production Foam Attachment Veneer and Laminate to Particle Boards 	 Field installation Factory Production Foam Attachment Veneer and Laminate to Particle Boards
Water Resistance	Outstanding	Outstanding	Outstanding



Quickbond™ Water-Based Adhesive Availability

AIT Quickbond™ AB2250-FT and its sister products, AB2250-HB and AB2150-FLEX, are available in 16 oz squeeze bottles for field installation applications, and 1, 5, and 55 gallon packaging for industrial production use.

About AIT Chemical, Inc. and Coral Industry

AIT Chemical, Inc. is a company of AI Technology, Inc. Founded in 1981, AI Technology, Inc. (AIT) is headquartered in Princeton, NJ, with additional facilities in Princeton Junction, NJ. Coral Industry, Inc., founded in 1968, operates in Los Angeles, CA, and was acquired by AIT Chemical Inc. in 2024.

Coral Industry pioneered many water-based adhesives as well as many solvent-borne contact adhesives used in aircraft and transport seat assembly, furniture assembly, etc. Many of their adhesives are used in Rose Parade floats and other interesting applications.

AIT Chemical, Inc.
manufactures Quickbond™
water-based adhesives in its
Los Angeles, California,
Princeton Junction, NJ, and
Shenzhen, China facilities.