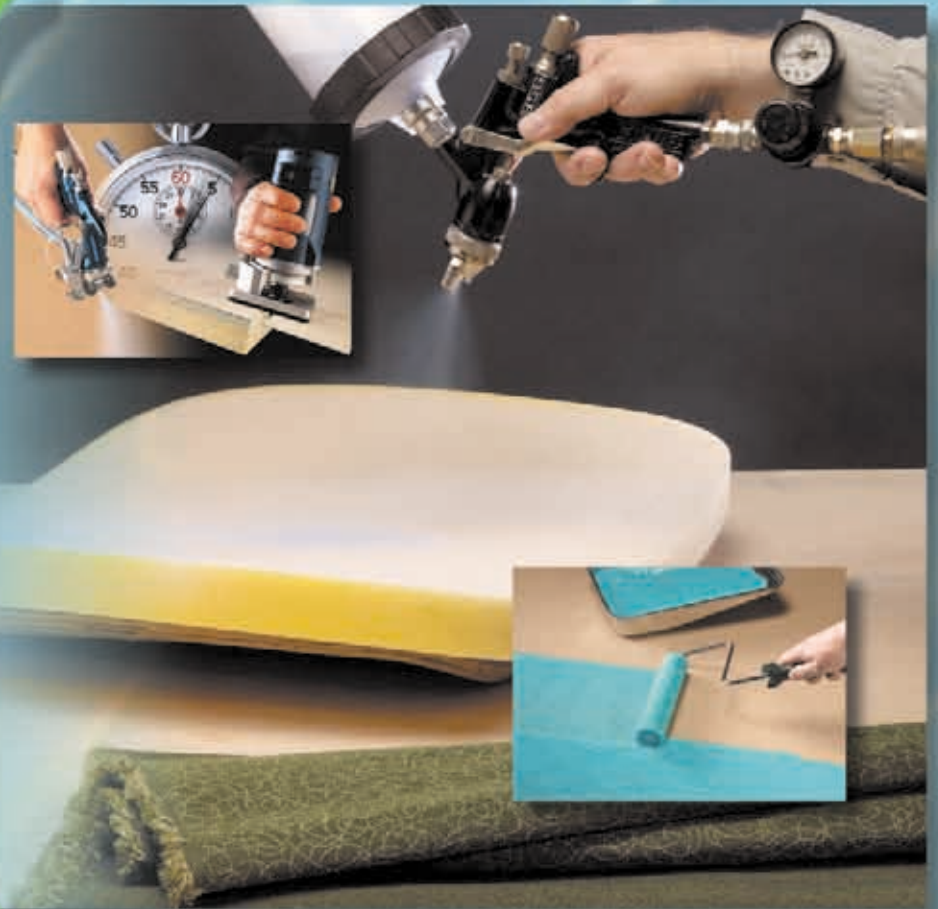




Fastbond™ Water-based Adhesives

*Take to
the water for
productivity,
performance,
profitability,
compliance*



***For your
continued
success...
now is
the time to
get into water***

For compliance and productivity, now is the time to switch from solvent-based adhesives to water-based.

OSHA, EPA and many local and regional regulations are increasing the pressure to reduce solvent use. And fire insurance rates are increasing.

3M has the track record and powerful technologies for compliance plus productivity, bonding performance, and cost savings.

- **No nPB or methylene chloride solvents, eliminating the time and work of managing a controlled substance**
- **High solids content for cost-effective high coverage, bonding more square footage for less money**
- **Non-flammable in the wet state for easy storage without fireproof cabinets**
- **Dries fast without solvent odor, helping improve worker comfort and thus productivity**
- **Choice of formulations that bond fast and strong with a wide variety of substrates**
- **Choice of spray (including low maintenance gravity feed), roller, or brush application to meet production requirements**

3M™ Fastbond™ Contact Adhesive 30NF *The fast, high strength water-based pioneer*



One-part for spray, roller, or brush application

3M™ Fastbond™ Contact Adhesive 30NF complies with California South Coast Air Quality Management District Rule 1168 requirements for contact adhesives. For that reason and others, Fastbond™ Contact Adhesive 30NF has been chosen for more than 40 years as a fast, powerful replacement for solvent-based adhesives in a variety of applications:

- Bond particle board, plywood, plastic laminate and other rigid materials in cabinet and woodworking shops and elsewhere.
- Bond EPS insulation inside metal doors and refrigeration units
- Secure rubber flooring in buses and headliners in boats
- Bond fabric to drywall and felt to wood in speakers



Laminate stays put during post forming.

For these and other applications, 30NF combines multiple advantages for productivity and end use reliability:

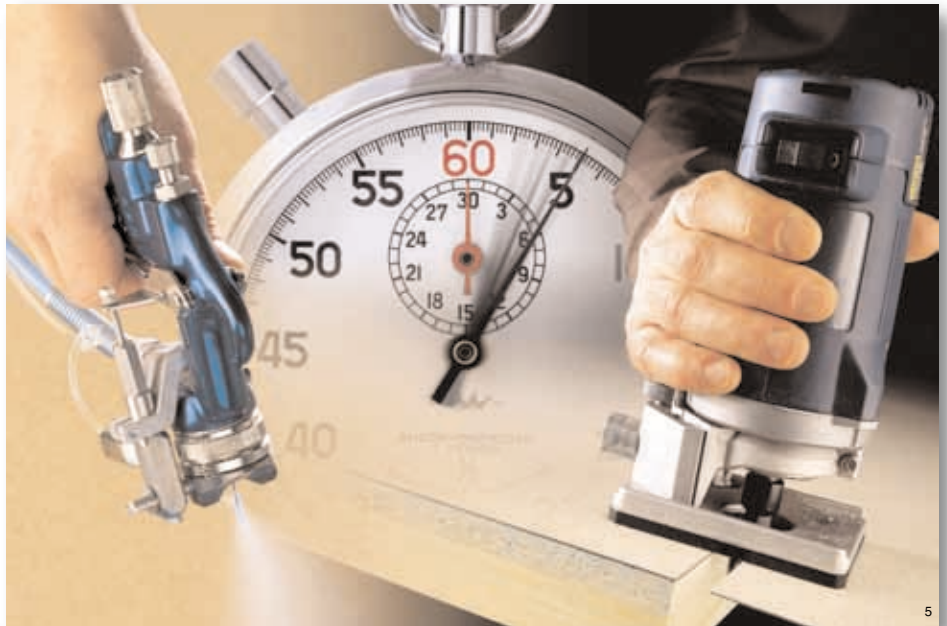
- Long bonding range of up to 4 hours for assembly at your own pace
- High immediate bond strength for fast throughput
- Ultimate shear strength of 480 psi for reliability exceeding many solvent-based adhesives
- High solids for more economical use of adhesive (up to 3.5x more coverage than a typical solvent-based product)
- Heat-activatable for fast post forming
- Heat resistance meets the test standards in the Manual of Millwork of the Woodwork Institute of California

3M™ Fastbond™ Contact Adhesive 2000NF

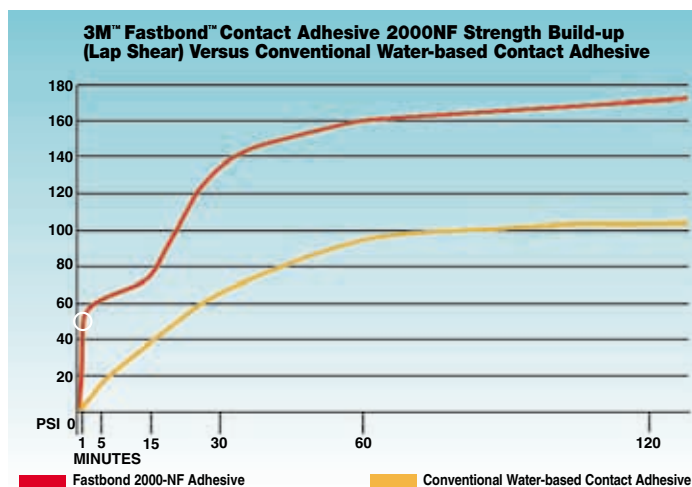
From spray to trim and post forming in seconds

For applications ranging from countertop lamination to marine carpet bonding and interior automotive trim, 3M™ Fastbond™ Contact Adhesive 2000NF helps accelerate production speed of rigid and soft laminations beyond most water-based and conventional solvent-based systems.

- Bonding range up to 2 hours for flexibility in speed of assembly
- Immediate handling strength for fast throughput
- Ultimate shear strength of 350 psi for reliability exceeding many solvent-based adhesives
- High solids for more economical use of adhesive (up to 3.5x more coverage than a typical solvent-based product)
- Resistance to the temperatures found in truck shipping and warehouses
- Two-part low pressure spray mixed outside of nozzle to resist plugging and help reduce overspray
- Heat activatable for fast post forming



Versatility to bond plastic laminate, plastics, particle board, plywood, flexible urethane and latex foams, partition fabrics, carpeting, painted metal, and more throughout a modular office.



NOTE: The values above are typical and should not be used for specification purposes. User should test for specific application suitability.

After only one-minute, 3M™ Fastbond™ Contact Adhesive 2000NF reaches 50 psi on a birch-to-birch overlap bond.

Benefits of neoprene adhesive

All 3M™ Fastbond™ Contact Adhesives are neoprene-based for such characteristics as excellent resistance to aging, rapid strength build-up, long bonding range, excellent resistance to continuous load stress, and good resistance to heat, water, and chemicals.



3M™ Fastbond™ Foam Adhesive 100

Fast-tacking contact adhesive to hold seams and curves in seconds

Spray one-part 3M™ Fastbond™ Foam Adhesive 100 to bond foam to foam and fiber fill, foam to wood, fiber fill to fabric, and more in bedding, furniture, upholstery, and other applications. Hold foam to foam in 15 seconds or bond immediately when used with activator.



Photo courtesy of Four Seasons Mfg.



- 20-minute bonding range for repositioning after initial tack to meet various assembly requirements
- Foam-tearing strength after complete setting (foam fails before the bond line)
- High solids for more economical use of adhesive (up to 4x more coverage than a typical solvent-based product)
- Non-dimpling, soft bond line for finished product aesthetics and a smoother, more comfortable feel
- Spray at low pressure to reduce misting and overspray



10



11



12

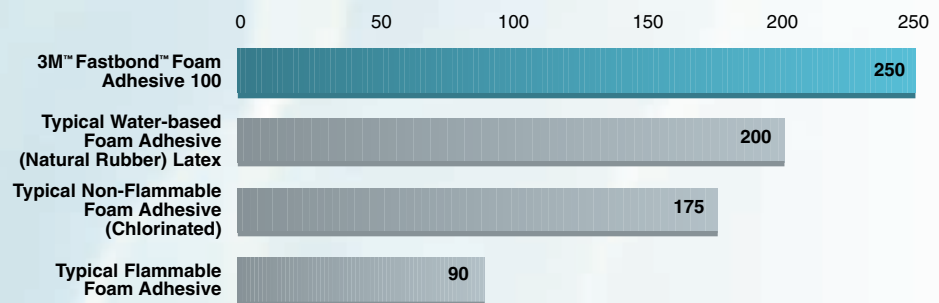
For easy bullnose fabrication in a compound cushion, 3M™ Fastbond™ Foam Adhesive 100 bonds a lighter density foam around a higher density core. High tack holds in seconds.



13

Neoprene-based formulation bonds leather to foam with foam-tearing strength and a soft bond line that complements the leather's suppleness.

Heat Resistance (°F)



Basis: Two spray applied knife edge pinch bonds were made with 1.2 lb/cu ft density polyurethane foam cut into 4 inch cubes, one 4" x 4" face of each foam cube was bonded to itself 30 seconds after application using approximately 5 seconds of manually applied hand and finger pressure, the bonded foam cubes were then dried 24 hours at 70°F ambient conditions, the bonded specimens then placed in a heated oven for a period of 24 hours at various temperatures. Heat resistance, as indicated here, is the highest temperature measured at which the seams of both specimens held together and showed no visual evidence of failure anywhere along the seams.

3M™ Fastbond™ Insulation Adhesive 49

One surface, pressure sensitive formulation for speed and convenience

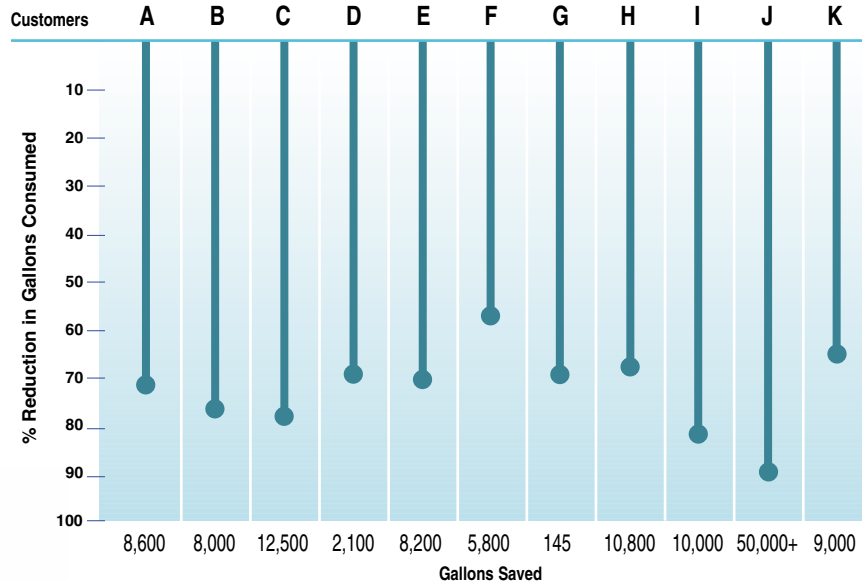
3M™ Fastbond™ Insulation Adhesive 49 is a fast tacking, pressure sensitive formulation for bonding fabric, insulation, and other lightweight materials to themselves, or to metal, wood, and other substrates. Spray, roll, or brush to only one surface and cut time to half that of two surface applications.



With instant tack and high coverage, bonding insulation into HVAC systems, appliances, and walk-in coolers is easy and economical.

- Sticks instantly like tape with strength enough for immediate shipping
- Long bonding range of up to 30 days for delayed assembly
- High solids for more economical use of adhesive with proprietary chemistry to help reduce adhesive consumption
- Low viscosity for simple dispensing with low maintenance systems
- UL component recognition MAGW2 file MH 6288

Reduction in Gallons



In this graph, no matter if the account is big like J or small like G, they save more than 50% in adhesive consumption.

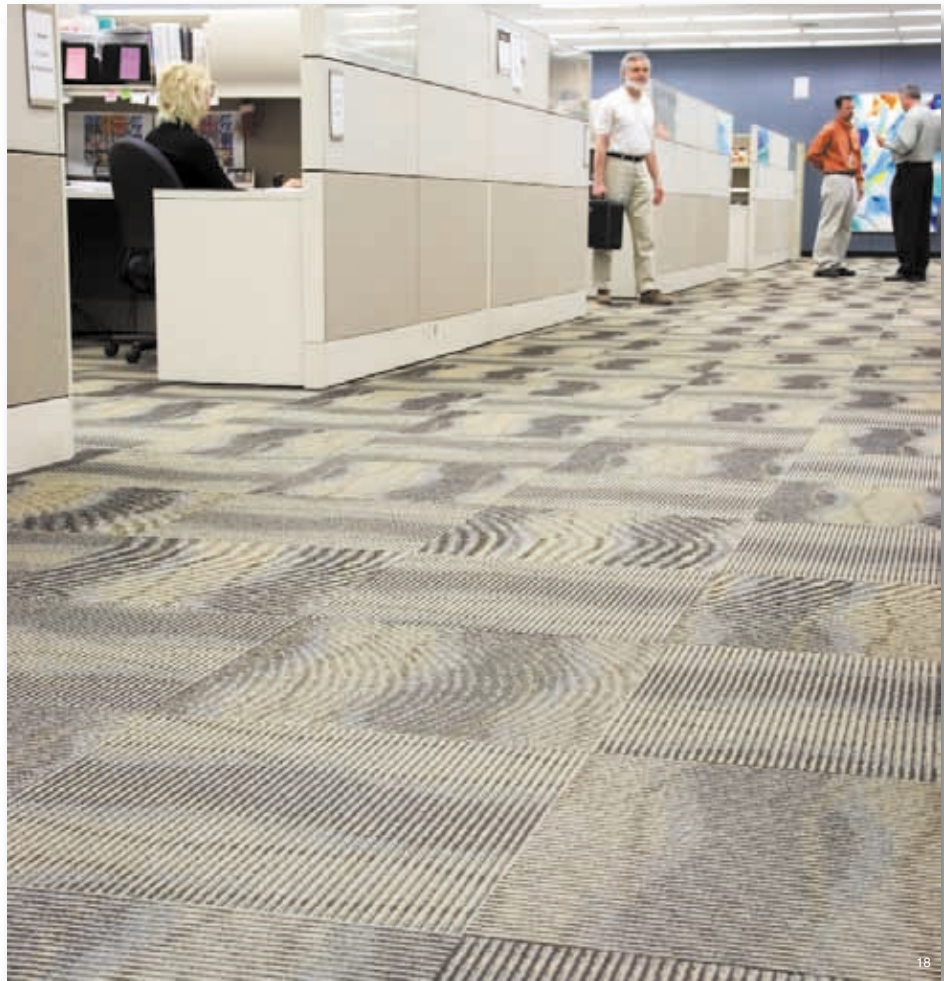
This data was gathered by follow-up visits to customers who recently switched to 3M™ Fastbond™ Adhesive 49. Each customer had a similar application of bonding insulation for HVAC. Coverage may vary on a given application. Each customer must trial the product to assess the actual benefit.



3M™ Fastbond™ Pressure Sensitive Adhesive 4224NF

Pressure sensitive formulation for easy carpet installation, repositioning, and removal

Applied with a roller, brush, or trowel, 3M™ Fastbond™ Pressure Sensitive Adhesive 4224 is a permanently pressure sensitive adhesive to hold various types of carpet and backings to most common floor surfaces. Applies like latex paint to save 40-50% application time compared to mastic adhesives.



- Aggressive tack grabs almost instantly and holds securely
- Bond strength resists the stresses of foot traffic, yet carpet removes easily when necessary without tearing or delaminating
- Covers up to 3x more area per gallon than mastic adhesive for a better return on your adhesive investment
- Plasticizer resistant formulation holds vinyl and polypropylene backings for the long term
- Floor cleaning is convenient with hot water and ammonia-based wax stripper



With long bonding range of up to 30 days, adhesive can be applied to large areas before installing the carpet.



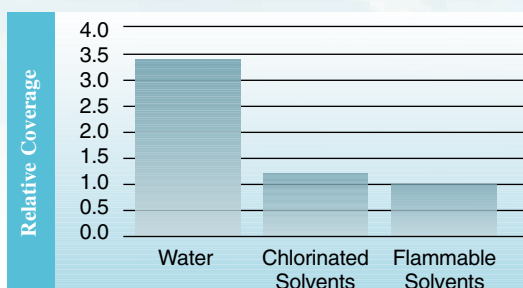
To replace damaged carpet or access under floor spaces, carpets can be easily lifted and replaced.



21

**Bottom line for all 3M™ Fastbond™
Water-based Adhesives –
more usable adhesive per gallon**

Carrier	Water	Chlorinated Solvents	Flammable Solvents
% Solids	50%	15%	20%
Density (lbs/gal)	9.1	10.8	6.7
lbs. of adhesive/gal	4.6	1.6	1.3
Relative coverage	3.4	1.2	1.0
Issues		Toxicity	Flammability



Take to the water and take solvents out of your business.

1-800-362-3550
www.3M.com/adhesives

Solutions through service...

3M representatives are located throughout the United States, Canada, and 50 other countries for sales assistance.

For technical service, a highly trained team is ready to help you evaluate adhesives for specific applications.

A national authorized distributor network provides sales assistance and local product availability.

3M™ Fastbond™ Water-based Adhesives at a Glance

Contact Adhesives

Product/Color	Description	Solids Weight (Approx.)	Flash Point (Closed Cup)	Consistency	Application Method	Bonding Range	Overlap Shear Strength (PSI)		Peel Strength (PIW)	Packaging
							75°F (24°C)	180°F (82°C)	75°F (24°C)	
30NF/ Green and neutral	<ul style="list-style-type: none"> Long bonding range with high immediate bond strength Economical high coverage Meets MIL-A-24179A, Type I 	50%	None	Thin liquid	Spray, roller, brush	Up to 4 hours	480 ⁽¹⁾	60 ⁽¹⁾	5.9 ⁽²⁾	Quart, gallon, 5-gallon pail, drum, tote
30H/ Green	<ul style="list-style-type: none"> High viscosity version of 30NF for roll coating 	50%	None	Medium liquid	Spray, roller, brush, roll coat	Up to 4 hours	480 ⁽¹⁾	60 ⁽¹⁾	5.9 ⁽²⁾	Drum, tote
2000NF/ Black, blue light orange, and neutral	<ul style="list-style-type: none"> Water-dispersed, activated adhesive Immediate bonding and handling strength without forced drying 	49%	None	Thin liquid	Co-Spray	Up to 2 hours	350 ⁽¹⁾	50 ⁽¹⁾	4.1 ⁽²⁾	5-gallon box and pail, drum, tote
100/ Lavender and neutral	<ul style="list-style-type: none"> One-part, fast setting with neoprene base Bonds many porous substrates to porous or non-porous substrates 	47%	None	Very thin liquid	Spray	Up to 20 minutes	NA	NA	1.1 ⁽²⁾	5-gallon box and pail, drum, tote

(1) Birch plywood to birch plywood @ 0.1 inches/minute separation rate. (2) Canvas to cold rolled steel @ 2.0 inches/minute separation rate.

Insulation and Carpet Adhesives

Product/Color	Description	Solids Weight (Approx.)	Flash Point (Closed Cup)	Consistency	Application Method	Bonding Range	Peel Strength (PIW) 75°F (24°C)	Packaging
Insulation Adhesive 49/Clear	<ul style="list-style-type: none"> Fast tacking, high performance pressure sensitive adhesive for lightweight materials Low VOCs UL component recognition MAGW2 file MH 6288 	55%	None	Thin	Spray, brush, roller	30 days plus	3.0 ⁽¹⁾	5-gallon box and pail, drum, tote
Pressure Sensitive Adhesive 4224NF/ Blue and clear	<ul style="list-style-type: none"> Permanently pressure sensitive with aggressive tack Plasticizer resistant Low VOC content 	40%	None	Thick liquid	Spray, brush, roller, trowel, coater	30 days plus	4.4 ⁽¹⁾	5-gallon pail, drum

(1) Primed polyester to steel @ 2.0 inches/minute separation rate.

Note: The technical information and data on these pages should be considered representative or typical only, and should not be used for specification purposes.

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