ECO-BOND Adhesives

Technical Data Sheet

IND 600 Construction Adhesive

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Product Description

ECO-BOND is a no VOC, premium modified polymer adhesive/sealant designed for application in damp, dry or cold climates. **ECO-BOND** is petroleum free, solvent free, moisture curing and contains no isocyanates. **ECO-BOND** will not shrink upon curing, will not discolor when exposed to UV light, and cannot "out-gas" or bubble on damp surfaces as urethane sealants often do. **ECO-BOND** has excellent adhesion to most construction materials and has resilient "elastomeric" properties. **ECO-BOND** is capable of joint movement in excess of 25% compression and extension. Because it cures in wet or dry climate conditions and at low temperatures (30° F), **ECO-BOND** can be used effectively in many difficult construction site conditions.

Advantages

- Non-toxic
- Petroleum free
- Solvent free
- Will not shrink, 100% solids
- 25-30 minute skin over, resists dirt pick up
- · Glossy finish
- Excellent UV resistance
- Color stability, will not suntan or discolor
- 300 psi in 3 hrs
- Can be used between 2 non-porous surfaces
- Can be used in a confined space
- Can be applied to 30 degrees

Typical Cured Properties

Shear strength: 500-600 PSI Tensile strength: 550-650 psi

Peel strength: na

Elongation at break: 90-110%

Shore A Hardness: 55-65 +/- 3 ASTM C-661

Low temperature: Minus 20° F flex pass ¼ inch mandrel, ASTM D-816

Shrinkage: No measurable shrinkage after 14 days

Service Temperate: Minus 40° F to 220° F

Non-flammable

Can be applied to 2 non-porous surfaces

Typical Uncured Properties

Viscosity: 800,000-1,250,000 cps at 72°F, Industrial Method Tack free time: 25 minutes @ 50% RH, 72°F, ASTM C-679

Odor: low

Shelf life Cartridges: 1 year



Applicable Performance Standards

- ASTM D 3498
- AFG-01
- HUD-UM-60a Sub floor bonding

AFG-01 Results

Test	Substrate	Required Shear	Average Shear
3.1.1 Test A	Wet Lumber	225 lbs.	593 lbs.
3.1.1 Test B	Frozen Lumber	150 lbs.	275 lbs.
3.11 Test C	Dry Lumber	225 lbs.	838 lbs.
3.12 Test D	Gap Filling	125 lbs.	333 lbs.
3.2.1.2 Test E	Moisture Resistance	225 lbs.	434 lbs.
3.2.1.1 Test E	Moisture Resistance	90% Pass	Pass
3.2.2 Test F	Oxidation Resistance	No fracture	Pass

Regulatory Compliance

- Conforms to OTC Rule for Sealants and Caulks
- Meets requirements of California Regs: CARB and SCAQMD
- Conforms to California Proposition 65
- Conforms to USDA Requirements for Non-food Contact

Green Standards

- LEED 2.2 for New Construction and Major Renovations: Low Emitting Materials (Section 4.1) 1 Point
- NAHB Model Green Home Building Guidelines:5 Global Impact Points
- VOC Content at 240° F: less than 32 grams/liter (including water), ASTM D2369, EPA Method 24

Packaging

- 10.1 oz (300 ml) 24 cartridges/carton, 45 cartons/pallet
- 20 oz (825 ml)12 sausages/carton, 45 cartons/pallet

Colors

White

Joint Design

Application temperature range is 40F to 100F with optimum application from 60F to 100F. Low humidity or low temperature retard cure time. High humidity or high temperature accelerate cure time. ECO-BOND is a non-slump mastic that can be used on horizontal, vertical, or overhead applications. Bead sizes from 1/16 to ¼ inch diameter are used for various sized bonds. Optimum glue line thickness is 15 mils. Do not leave beads unassembled for more than twenty minutes. Bonds can be set and fixture with nails, screws or staples until adhesive sets.

ECO-BOND will not shrink. ECO-BOND may be used to fill voids around bulkhead penetrations, or for installing windows and doors. Fill the joint or void and tool to a smooth surface. Mask off areas as required to protect decorative surface finishes.

Bonding surfaces should be clean, dry and free from all contamination including: dirt, oils, grease, tar, wax, rust and any other substance that may inhibit the sealant's performance. Clean metal and painted surfaces with alcohol or ammonia water. Abraded surfaces are acceptable but must be clean, sound and free of manufacturing defects.

Test all substrates for strength and compatibility. Do not use on olefins such as polyethylene, polypropylene or TPO.

Basic Uses

Construction Adhesive
Sub floor installation
Block and Masonry Repair
Paneling installation
Ceramic tile installation
Bonds to decorative Brick and stone
Foam installation

Compatible Substrates*

Concrete

Cove base

Vinyl

Block and Brick

Stone

Masonry

Tile

Aged Asphalt

Wood

Drywall

Aluminum and Galvanized Metal

Engineered Plastics

PVC

Glass

EPS Foam

Application Guidelines

Remove all dirt, oil, loose paint, frost and other contamination from all working surfaces with alcohol. DO NOT USE petroleum solvents such as mineral spirits or xylene. Maintain **ECO-BOND** at room temperature before applying to ensure easy gunning and leveling. Test and evaluate to ensure adequate adhesion. Carefully gun the sealant with a smooth, continuous bead. If tooling is needed, do so within fifteen minutes of application.

Application Instructions

Metal

Prepare all metal to ensure maximum adhesion. Remove all rust, scale and residue by wire brushing to a bright metal sheen. Remove films, loose or inappropriate coatings and oils with an appropriate solvent such as alcohol.*

Concrete

Prior to application remove any residual contamination by mechanical abrasion, sand blasting or power washing. On green concrete, remove all release agents and friable and loose concrete. Dry all visible and standing water prior to applying **ECO-BOND**. Install an appropriate backer rod to avoid three-point bonding.

Wood

Wood should be clean, sound and dry prior to sealant application. Allow treated wood to weather for six months prior to application. Remove all coatings and paint (or test for compatibility) to ensure proper bonding. Do not use on fire retardant lumber.

Priming

In most instances **ECO-BOND** will not require a primer. However, certain applications or substrates may require a primer to ensure a long lasting bond and weatherproof seal. It is the applicator's responsibility to determine the need for a primer. **ECO-BOND** recommends a primer be used for any application where prolonged immersion is anticipated.

Limitations

- In areas where prolonged chemical exposure is anticipated, contact Technical Services for recommendations.
- Allow treated wood to "cure" for six months prior to application per APA guidelines.
- Do not use in areas subject to continuous immersion.
- Do not store in elevated temperatures.
- Remove all coatings and sealers before application.
- Do not apply at temperatures below 30F
- * **ECO-BOND** recommends that coated substrates be tested for adhesion prior to starting a project. Please contact Technical Services for specific application quidelines and recommendations.

Caution

Avoid prolonged contact with skin. Uncured adhesive irritates eyes. In case of contact with eyes, immediately flush with water. Call a physician. Please refer to the MSDS for First Aid information. Most current MSDS can be found at www.ecobondadhesives.com.

KEEP OUT OF REACH OF CHILDREN.

Shelf Life

One year from date of manufacture when stored in normal environments. High temperature and high relative humidity may significantly reduce shelf life. Pails and special orders have a shelf life of three months.

Storage

Store original, unopened containers in a cool, dry area. Protect unopened containers from water, heat and direct sunlight. Elevated temperatures will reduce shelf life. **ECO-BOND** will not freeze.

Clean-Up

Wet sealant can be removed using a solvent such as alcohol. Cured **ECO-BOND** can be removed by abrading or scraping the substrate.

Read and ensure that the most up-to-date MSDS and technical guidelines are being followed. Proper use and application are the responsibility of the applicator. Direct any questions to Technical Services at 800-326-8102 prior to starting the project.

IMPORTANT NOTICE

Except where prohibited by law, ECO-BOND makes no warranties, expressed or implied, statutory or otherwise,

Including, but not limited to, any implied condition or warranty of merchant ability or fitness for a particular purpose. User is responsible for determining whether this **ECO-BOND** product is fit for a particular purpose and suitable for user's method of application.

LIMITATIONS OF REMEDIES AND LIABILITY

If this **ECO-BOND** product is proved to be defective, the exclusive remedy at **ECO-BOND** s option shall be to refund the purchase price of or to repair or replace the defective **ECO-BOND** product. **ECO-BOND** shall not otherwise be liable for loss of damages, whether direct, indirect, special, incidental or consequential, regardless of the legal theory asserted, including negligence, warranty or strict liability.

www.ecobondadhesives.com

ECO-BOND Setting a new Standard, The Next Generation Sealant All Weather Construction Adhesive/Sealant