



Advanced Repair Technology, Inc.

The Science of Repair

FLEX-TEC HV®

Flexible Repair Compound

MANUFACTURER

Advanced Repair Technology, Inc.

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PRODUCT DESCRIPTION

Flex-Tec HV is a two component epoxy material designed specifically for strength and flexibility. Engineered to move with the natural expansion and contraction of various natural and synthetic materials, Flex-Ease offers outstanding long-term performance. Excellent modeling and tooling properties make Flex-Ease the ideal choice for the professional or casual user.

Flex-Tec HV can be used on both vertical and horizontal surfaces. Common applications are on exterior column bases, window sills and sashes, and architectural wood ornaments. It is also suitable for various manufacturing uses, the repair of natural wood imperfections such as knots or checks, and the sealing of end-grain. Flex-Tec HV is ideal for synthetic materials such as cellular PVC trim boards and fiberglass.

APPLICATION LIMITATIONS

- A** Do not apply over damp or contaminated/decayed surfaces.
- B** Designed to be used in concert with Prime-A-Trate Flexible Cell bonding primer.
- C** Always apply varnish or paint after completing the repair.

COLOR

Controlled mixing system turns amber after proper blending. Staining can be achieved by adding dry pigment during the mixing process. Gel stains can be used after curing.

INSTALLATION

(See separate application instructions for complete details)

TECHNICAL DATA

Refer to table below for typical properties*

*For information only. Not for specification purposes.

Performance Properties	Results	Test Method
Mix Ratio, by volume	2 to 1	
Mixed Viscosity, cps	Paste	
Tensile Strength, psi	7,500	ASTM D-638
Flexural Strength, psi	16,500	ASTM D-790
Compression Strength, psi	14,000	ASTM D-695
Elongation, %	6.0	
Hardness, Shore D	7.5	
Coefficient of Thermal Exp., in/in	60 x 10 ⁶	ASTM D-1674
Linear Shrinkage, %	<1%	ASTM D-2566
Peel Strength, pi	30	ASTM D-1876
Moisture Absorption %	10	ASTM D-570
Pot Life, Minutes, 200 gm	20-30	
Specific Gravity, g/cc	1.02	ASTM D-1475
VOC Content, lb/gl	0	
Chemical/Fuel Resistance	Excellent	
Cure Schedule	Room Temp for 24 hours	

PACKAGING

Flex-Tec HV is available in 450ml dual cartridge dispensing system using a heavy or light duty dispensing gun. 150ml single cartridge fits into a standard caulk gun and dispenses both A & B components. Both dispensing systems are re-sealable.

MIXING

A disposable static mixing nozzle blends the resin and hardener automatically and thoroughly to facilitate proper dispensing. The automatic proportioning in the mixing nozzle assures precise, consistent formulation. Material can also be dispensed on to a flat surface and mixed by hand using a putty knife.

WORKING TEMPERATURES

45 to 95 degrees Fahrenheit. Avoid working in direct sun light. Curing time will be extended in temperatures below 45 degrees. (See graph on back.)

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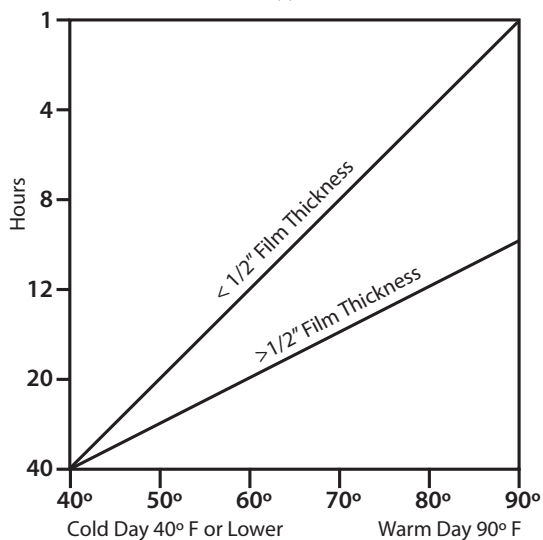


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How Thickness and Temperature Effect Cure Times

(times are approximate)



TOOLING

The unique modeling characteristics of Flex-Tec HV allows for both vertical and horizontal applications without the requirement for "dams" or molds to contain the material while curing. In most cases, a simple putty knife can properly position the material to desired shape. After mixing, Flex-Tec HV has an open time of 20 to 30 minutes. After a curing time of 16 hours, Flex-Tec HV can be sanded, chiseled or drilled. Shrinkage during curing is less than 1%.

SAFETY AND HANDLING

Flex-Tec HV contains no VOCs. Avoid direct contact with skin. Do not take internally. Consult Material Safety Data Sheets for complete information.

CLEANING

Immediately remove all excess material from adjacent areas. Properly mask all adjacent porous surfaces to avoid penetration. For skin contact, wash with soap and water, household vinegar or citrus oil.

SHELF LIFE

3 years when stored in unopened, original container. 2 years once opened. Store in cool, dry area.

TECHNICAL SERVICES

Advanced Repair Technology is committed to offering the best technical support available. Existing condition assessments, cost estimates, repair vs. replacement options, Contractor Workshops, site surveys and core sample testing are all services offered by ART or their Sales Representatives. Specification assistance also available.

AVAILABILITY AND COST

All Products and services are available throughout the United States via UPS shipments from the home office or by contacting your local retailer.

WARRANTY

All recommendations, statements and technical data contained herein are based on tests we believe to be reliable and correct, but accuracy and completeness of said tests are not guaranteed and are not to be construed as a warranty, either expressed or implied. User shall rely on his own information and tests to determine suitability of the product for intended use, and user assumes all risk and liability resulting from the use of the product. Manufacturer and its representatives sole responsibility shall be to replace that portion of the product of the manufacturer which proves to be defective. Manufacturer shall not be liable to the buyer or any third party for injury, loss, or damage directly or indirectly resulting from the use of, or inability to use the product. Recommendations or statements other than those contained in a written agreement signed by an officer of the manufacturer shall not be binding upon the manufacturer.

STRUCTURAL APPLICATIONS

Due to the high flexural modulus of the Advanced Repair Technology's repair products, we recommend consulting a structural engineer to design a specific load bearing recommendation.

PRODUCT REVERSIBILITY

For conservation projects that require the products specified to be "reversible" in nature, Flex-Tec HV can be fully removed at any time using a Methylene-Chloride based paint stripping compound.

AGE CURING PROPERTIES

Flex-Tec HV is formulated with age curing inhibitors. ACI'S block continued cross-linking common in flexible epoxy systems. ACI'S prohibit Flex-Tec HV from becoming brittle over time, protecting the property of flexural strength (ASTM-D-790)

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