



TECHNICAL DATA SHEET

FILE UNDER DIVISION 4

1. PRODUCT NAME

BONSTONE™ MATCH
(hardener B-431)

2. MANUFACTURER

Bonstone Materials Corporation

3. PRODUCT DESCRIPTION

A two-component exterior grade epoxy adhesive. Thick paste viscosity. Thickening powders available to make this product knife grade.

(MATCH Family Includes A-101-T, A-111-T, A-121-T, A-131-T, A-181-T, A-191-T)

Basic Uses:

- Patching and mending stone
- Laminating stone to other construction materials
- Bonding stone to stone
- Anchoring bolts in stone and concrete

Limitations:

Use on dry stone. Use on oil, grease, and coating free stone. Some yellowing and chalking will occur when exposed to ultra-violet light.

Colors:

Cream, rust, buff(tan), gray, red, white. Custom colors available.

Applicable Standards:

Indiana Limestone Institute specifications for units preassembled with thermosetting resins

4. TECHNICAL DATA:

(see second page)

5. INSTALLATION

General Instructions

(See separate doweling, laminating, and patching instructions for more specific

instructions. CSI format specifications are available.)

Surface Preparation & Use:

Use gloves, wear eye protection, and avoid skin contact. When grinding cured joints, wear a dust mask. Substrate to be bonded must be completely dry and dust-free. Mix only the amount of epoxy which can be used in 10 minutes. Avoid stressing joint before complete cure of epoxy. Mask areas which must be kept free of epoxy. Clean uncured epoxy from tools with toluene or xylene. Use caution, these solvents are flammable. Ensure local ventilation. Remove cured epoxy mechanically.

Mixing instructions:

All materials should be at or above 50°F. Combine the two ingredients at the following weight ratio: two parts MATCH part a to one part B-431. Mix thoroughly--- ingredients must be blended homogeneously for proper cure. Best to mix using double mix method, see reverse side.

Temperature dependency:

Temperature will affect the working properties of the material. Approximately every 15°F results in doubling the speed of cure. Therefore, at 95°F set time is cut in half, at 60°F the set time is doubled. Do not use on a substrate with a temperature below 45°F.

Coverage: Approximately 30 square feet per gallon when applied at 50 mils (1/16th of an

inch). 231 cubic inches per gallon.

6. AVAILABILITY

Packaging and storage:

MATCH is available in quarts, gallons, and 5 gallon pails. Shelf life is approximately one year if kept in unopened cans in a dry area at 75°F. **If BONSTONE™ MATCH family is exposed to below room temperature conditions for extended periods of time, it may crystallize, giving it a stiff, grainy consistency. The product must be reconstituted before use by heating it to 150°F. Stir until it becomes a homogeneous liquid.

7. WARRANTY

This product's warranty is limited to replacement of defective material and freight charges to destination only. Bonstone Materials Corp. is not responsible for consequential damages.

8. MAINTENANCE

Designed for application in areas inaccessible to maintenance procedures.

9. TECHNICAL SERVICE

Lab Service

- Spectrophotometric color matching
- Techniques for textured replication of stone.

Specification Service

- Specifications for various applications
- Specification writing dept. for unique applications

4. **TECHNICAL DATA** BONSTONE™ MATCH with B-431 hardener

<i>Mixed Properties</i>	<i>Values</i>	<i>Test Methods</i>
Mix Ratio:	2 parts A to 1 part B-431 by weight	
Mixed viscosity at 75°F:	Creamy paste	
Pot Life at 75°F:	20 minutes	
 <i>Cured Properties</i>		
Initial set time at 75°F:	2 hours	
Full cure time at 75°F:	within 24 hours	
 STRENGTHS		
Tensile:	3,822 psi	ASTM D-638
Compressive:	26,498 psi	ASTM D-695
Flexural:	8,297 psi	ASTM D-790
 MODULUS		
Tensile:	48,050 psi	ASTM D-638
Compressive:	163,976 psi	ASTM D-695
Flexural:	420,250 psi	ASTM D-790
 ELONGATION		
Tensile: Elongation at break	8.3%	ASTM D-638
 Shore D Hardness:		
Heat Distortion Temperature:	90	ASTM D-1706
Water Absorption	130°F	ASTM D-648
	0.06%	ASTM D-570

DOUBLE MIX METHOD:

The double mix method is used to completely and uniformly mix an epoxy product. The two components are mixed in one container, transferred to another, and remixed. This allows the contractor to scrape the final mixing container extremely clean without the possibility of using unmixed product.