



TECHNICAL DATA SHEET

FILE UNDER DIVISION 4

1. PRODUCT NAME

BONSTONE™
Crack Repair 31
(A-031/B-404)

2. MANUFACTURER

Bonstone Materials Corporation

3. PRODUCT DESCRIPTION

A two-component, exterior grade, clear, injection epoxy.

Basic Uses:

- Stone or concrete crack injection, patching and mending
- Bonding stone or hardened concrete to hardened concrete
- Bonding new concrete to existing concrete
- Anchor bolt adhesive
- Bonding stone to other construction materials
- Bonding stone to stone
- General purpose adhesive for wood, concrete, metal

Limitations:

Use on dry substrates. Use on oil, grease, and coating free substrates.

Applicable Standards:

Meets ASTM C-881, Type I, II; Class C, GRADE 1

4. TECHNICAL DATA:

(see next side)

5. INSTALLATION

General Instructions

(If using cartridges, additional usage directions are available. See our information sheet labeled "Cartridge use directions".) 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. Remove cured epoxy mechanically.

Mixing instructions:

All materials should be at or above 55°F. Combine the two ingredients at the following volume ratio: two parts A-031 to one part B-404. Mix thoroughly--- ingredients must be blended homogeneously for proper cure.

Temperature dependency:

Temperature will affect the working properties of the material. Approximately every 10°F results in doubling the speed of cure. Therefore, at 85°F

set time is cut in half, at 65°F the set time is doubled. Do not use on a substrate at a temperature below 55°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:

BONSTONE™ Crack Repair 31 is available in quarts, gallons, and 5 gallon pails, and cartridges. Shelf life is approximately one year if kept in unopened cans in a dry area at 75°F. **If BONSTONE™ A-031 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 degrees. Stir until it becomes a homogeneous liquid.

7. WARRANTY

This 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

Specification Service

- specifications for various applications
- specification writing dept. for unique applications

4. **TECHNICAL DATA** BONSTONE™ Crack Repair 31 (A-031/B-404)

Mixed Properties

Values

Test Methods

Mix Ratio: 2 part A-031 to 1 part B-404 by volume

Viscosity, mixed, 75 F: 1520 centipoise

(Note: Every 15 degrees change in temperature either cuts in half or doubles the viscosity).

Pot Life at 75°F: 40 minutes

Cured Properties

Initial set time at 75°F: 3 hours

Full cure time at 75°F: within 24 hours

STRENGTHS

Tensile: 5,427 psi ASTM D-638

Compressive: 12,430 psi ASTM D-695

Flexural: 15,540 psi ASTM D- 790

MODULUS

Tensile: 230,000 psi ASTM D-638

Compressive: 324,000 psi ASTM D-695

Flexural: 463,000 psi ASTM D-790

ELONGATION

Tensile: Elongation at break 2.7% ASTM D-638

Shore D Hardness: 80 ASTM D-1706

Heat Distortion Temperature: 130°F ASTM D-648