

**STRUCTURAL ADHESIVE FOR CRACK REPAIR, ANCHORING, CONCRETE STRENGTHENING SYSTEMS, AND NARROW VOID GROUTING**

**DESCRIPTION**

CR-204<sup>TM</sup> is a 100% solids, 100% reactive, moisture-insensitive, non-shrink, medium viscosity, two-component modified epoxy adhesive formulated to adhere and cure on dry, damp or underwater surfaces.

**WHERE TO USE**

Use as an adhesive for structural bonding and grout for concrete crack repair, narrow void grouting, anchoring, delamination repairs structural strengthening systems, and honey comb and sand streaking repairs.

**ADVANTAGES**

- Excellent working time
- Cures and adheres on dry or wet surfaces
- Excellent chemical resistance and fast cure
- Applicable / curable to 20°F
- Excellent strength properties
- Penetrates down to 2 mils
- Requires only 14 psi pumping pressure-very safe
- High vibration resistance
- Excellent chemical resistance for floors and containment areas

**TYPICAL DATA FOR CR-204<sup>TM</sup> - (CURED RESIN)**

**COLOR** Straw                      **VISCOSITY** 2,000-2,500cps.  
**POTLIFE** 7 - 35 minutes              **CONSISTENCY** Flowable

**TACK-FREE TIME**

Substrate Temperature  
**73°F** ..... 1 - 4 hrs.  
**90°F** ..... 1 - 2 hrs.

**TENSILE PROPERTIES** ASTM D 638: 5 Days

**Tensile Strength** ..... 8,300 psi  
**Elongation at Break** ..... 2.6 %  
**Modulus of Elasticity** ..... 4.2 X 10<sup>5</sup>

**FLEXURAL PROPERTIES** ASTM D 790: 5 Days

**Flexural Strength** ..... 10,600 psi  
**Tangent Modulus of Elasticity** ..... 9.1 X 10<sup>5</sup>

**DEFLECTION TEMPERATURE** ASTM D 648: 5 DAYS

**Fiber Stress Loading = 264 psi** ..... 179°F

**SLANT SHEAR STRENGTH** ASTM C 882: 5 Days

Test Temperature	Value	Mode of Failure
90°F	5,150 psi	100% Concrete Failure
20°F	4,900 psi	100% Concrete Failure

**COMPRESSIVE STRENGTH** ASTM D 695

	20°F*	73°F	90°F
<b>2 hours</b>	-	3,400 psi	7,100 psi
<b>4 hours</b>	2,100 psi	4,900 psi	9,200 psi
<b>8 hours</b>	3,300 psi	8,300 psi	10,700 psi
<b>1 day</b>	6,100 psi	14,900 psi	15,500 psi
<b>7 days</b>	15,500 psi	15,600 psi	15,600 psi

\* Pre-conditioned epoxy to 90°F before mixing

**WATER ABSORPTION** ASTM D 570

**24 hours** ..... 0.27%

**SHELF LIFE**

Original, unopened containers ..... 2 years  
Original, unopened cartridges ..... 1 year

**PACKAGING**

CR-204<sup>TM</sup> IS AVAILABLE IN TWO-PART CARTRIDGES AND ONE-GALLON (3.785L) CONTAINERS.

**SURFACE PREPARATION**

Concrete, stone and other substrates must be clean and sound. Remove dust, grease, waxes, oils, curing compounds, coatings and all contaminants by mechanical means such as bush hammering and/or abrasive blasting. Abrasive blast all surfaces to white metal for best adhesion. Apply epoxy before flash rusting develops or the cleaned surface becomes contaminated.

**APPLICATION**

After preparation of surface, apply material generously to cover both sides of the crack to be repaired. After "priming", apply a layer of clean silica sand (30-70 mesh) followed again by epoxy. Repeat this process until the repaired void is filled to the top or slightly above. Make a final application of silica sand to complete the repair and provide an aggressive surface for bonding. Material can be ground smooth after 14-18 hours.



### LIMITATIONS

- Minimum substrate and ambient temperature is 40°F.
- DO NOT THIN - solvents will prevent proper cure.
- DO NOT PUMP EPOXY IF ICE IS PRESENT IN CRACK OR VOIDS

### PRECONDITIONING EPOXY

When temperatures drop it becomes harder for the epoxy to flow. To improve the flow ability at lower temperatures preheat each epoxy component to 90°F before mixing. Caution the pot life will be reduced by about 50% when mixing by mechanical means. It does not affect the epoxy when a static mixing tube is used for mixing.

### MECHANICAL MIXING

Mix Component A, then pour Component B into Component A and mix for 90 seconds with a low speed paddle attached to a drill at 400-600RPM.

### STATIC TUBE MIXING

When the epoxy is being mixed with a static mixing tube on a pre-filled cartridge or on an injection machine, no pre-mixing is required.

### IMPORTANT INFORMATION

Use of safety goggles, chemical-resistant gloves, adequate ventilation and NIOSH/MSHA approved respirator is recommended.

### KEEP OUT OF REACH OF CHILDREN

### ORDER SPECIFICATION

Product: UV Shield™		
Shipping Weight: 4 lbs (1.81 kg)	Container Size: 1 2-Part Cartridge (3.79 L)	Item No: CR-204
Shipping Weight: 9 lbs (4.08 kg)	Container Size: 1 Gallon (3.79L)	Item No: CR-204-G

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### CAUTION

Before Using, Read Material Safety Data Sheets.

Component A – Irritant - Contains epoxy resins. Prolonged contact with skin may cause irritation. Avoid contact with eyes.

Component B – Corrosive – Contains aliphatic and other amines. Contact with skin may cause severe burns. Avoid eye contact. Product is a strong sensitizer

### FIRST AID

In case of skin contact, wash thoroughly with soap and water. For eye contact, flush immediately with plenty of water for at least 15 minutes. For respiratory problems, remove person to fresh air. Contact Physician Immediately. Wash clothing before re-use.

### CLEAN-UP

Components A & B - Ventilate area. Control spills. Collect with absorbent material.

Disposal

Dispose in accordance with current, applicable local, state, and federal regulations.