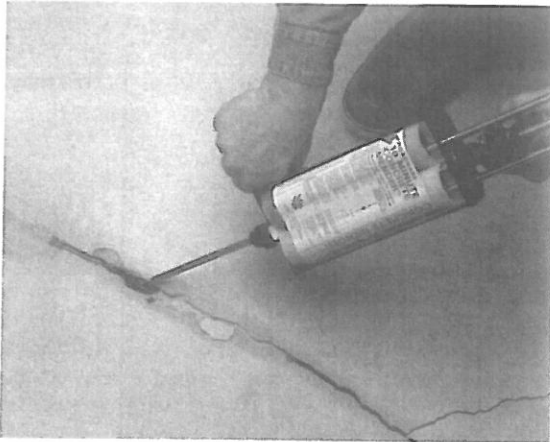


# ROADWARE 10 MINUTE CONCRETE MENDER™

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Road-tough repairs for concrete  
floors, decks, slabs and surfaces.

### APPLICATION INSTRUCTIONS PRODUCT INFORMATION

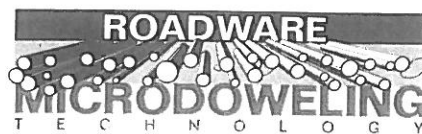
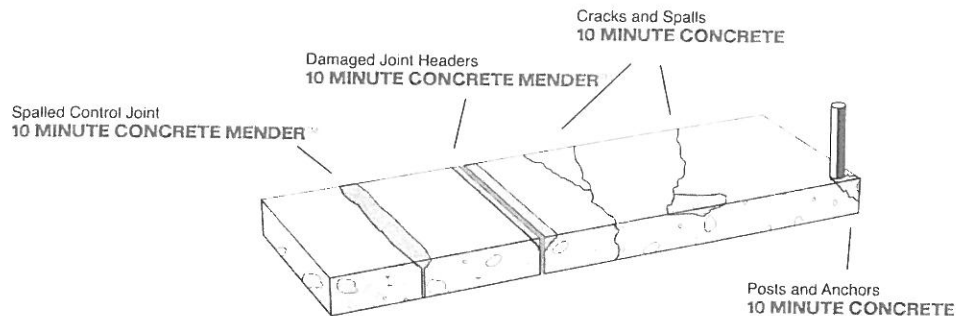


For additional information including:

- Video Instructions
- Latest Product Information
- Color Matching Techniques
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- Technical Assistance
- Specification Data
- MSDS sheets
- Instrucciones españolas

Visit the Roadware Website at:  
[www.concretemender.com](http://www.concretemender.com)  
or call 800-522-7623

**Please read carefully before use!**



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# ROADWARE 10 MINUTE CONCRETE MENDER™

## Road-tough repairs for concrete floors, decks, slabs and surfaces.

### Description

Roadware 10 Minute Concrete Mender is a high-penetration two-part hybrid urethane that combines with sand to form a tough instant polymer concrete. The MICRODOWELING™ formula penetrates deep into concrete and bonds at the microscopic level. This extremely thin material has a surface tension one third of water thus creating extremely high bond strengths and permanent repairs.

Roadware 10 Minute Concrete Mender produces polymer concrete repairs that absorb the shock of heavy traffic without cracking or disbonding. It is highly chemically resistant and can be applied in a wide range of temperatures. It is excellent for industrial floor repairs subject to forklift traffic and harsh conditions.

### Uses:

- Repairing hairline cracks or larger, where future movement is not anticipated.
- Repairing damaged control joints.
- Restoring integrity to distressed concrete.
- Connecting broken slabs.
- Repairing moving slabs.
- Repairing spalls and pop-outs in concrete.
- Securing bolts, equipment, or railings into concrete.
- Vertical repairs when combined with specified sand.
- Repairing concrete surface imperfections prior to coating.

### Features:

- Extremely low viscosity allows deep penetration into concrete.
- All material is self-mixed and delivered at the point of application. No messy pot-mixing or wasted product.
- Completely cures in 10 minutes after application at 70° F. Will also cure rapidly in subzero environments.
- Excellent resistance to chemical attack.
- When combined with manufactured sand, Concrete Mender will form a tough 4500 psi polymer concrete with similar properties to existing concrete that will stay pliable over time.
- Safe to use. Materials react quickly with very low odor.
- Self-leveling or may be combined with sand and worked with a trowel.
- Meets FSIS standards.

### Benefits:

- Long lasting repairs that accommodate harsh physical environments.
- Easy preparation, a wire brush is all that is needed in most cases.
- No downtime, repairs are fully ready for traffic in approximately 10 minutes from application.
- Very low odor, can be used in a wide range of indoor and outdoor areas.

### Limitations:

10 Minute Concrete Mender is designed for use on interior or exterior concrete surfaces. It is not intended for repairing areas of movement such as exterior cracks and joints subject to continued movement. It must be applied to concrete free of surface moisture.

### Packaging:

10 Minute Concrete Mender  
21 fl oz. dual cartridge units (600 ml) with mixer  
2 gallon (9 liter) units in two parts  
10 gallon (45 liter) units in two parts

### Technical Data:

Typical Properties:	Value (average)
Hardness @ 72° F. (22° C)	72D
Compressive Strength (with sand)	4500 psi
Elongation:	6%
Tensile Strength:	4475 psi
Bond Strength, Cal-551:	1100 psi
Viscosity (at application)	>8 cps
V.O.C.(mixed):	5.5 g/l
Solids:	98%
Cured Color	Gray

### Installation:

Application Temperature: Recommended application temperature is between -30° F and 100° F (-34° to 38°C). It is best to keep material at room temperature (60° to 80° F) prior to application. If manufactured sand is to be used with product, it also should be kept at room temperature. Avoid frost laden surfaces as this may adversely affect bonding and curing. 10 Minute Concrete Mender will fully cure in 10 minutes at 72° F (22° C). Cure time is affected by the temperature of the material and the temperature of the concrete surfaces. Warmer temperatures will decrease cure time and colder temperatures will increase cure time. **For applications below 0 F (-18 C) see Cold Environment Application Instructions available from Roadware.**

### Preparation:

Surface Cracks (all depths and widths): Cracks should be free of dirt, oils, dust, latents and old crack repair materials. ALL SURFACES MUST BE CLEAN AND DRY. New concrete must be fully cured. A wire brush or dry diamond blade attached to an electric hand grinder is recommended for preparing cracks and creating a clean surface for bonding.

Surface Spalls and Deflections: Remove all loose materials back to sound concrete with a chisel or light chipper. DO NOT SQUARE CUT THE REPAIR AREA. If a square appearance is necessary, lightly score surface and remove material. Use a wire brush or dry diamond grinder to clean the repair area. All surfaces must be free of dirt, oils, dust, latents and old repair materials. New concrete must be fully cured.

### Mixing:

Cartridges: 10 Minute Concrete Mender is a two component material and must be thoroughly mixed at a ratio of 1 part "A" to 1 part "B" by volume. Material is packaged in specially designed self-mixing cartridges. The cartridge comes complete with static mixer nozzle, flow-control washer and retaining nut. Follow assembly instructions carefully. Use a 300x300ml dual cartridge caulking gun such as Roadware #5300 Application Gun. The properly assembled cartridge and application gun will mix and dispense material directly to the repair area.

Bulk: 10 Minute Concrete Mender supplied in 2 or 10 gallon kits may be mixed in small volume batches in a mixing bucket. Due to the rapid setting nature of the material, mix only the amount of material needed to make a single repair. A typical batch is one pint of part "A", one pint of part "B" and two or three quarts of 30-40 grit manufactured silica sand. Mix with a drill mixer for 15-30 seconds or until well blended. The mixed material and sand should be resin rich with little slump. Apply immediately to the repair area and strike off with a trowel.

### Application Methods:

Surface Cracks and contraction joints (all depths and widths): Assemble cartridge according to directions. Holding the Roadware 5300 application gun upward, place cartridge set into gun. Gently squeeze trigger to bleed-off air and start material flowing into mixers. Point mixer into waste container and squeeze trigger to start mixing process. DO NOT POINT MIXER UPWARD AFTER MATERIAL IS FLOWING. This may cause material to flow back into the tubes and cause clogging.

Pre-wet repair area with material. Fill with 1 inch of 30-40 grit manufactured silica sand and additional material. Work in 1 inch lifts if needed to grade. Be sure to saturate all of the sand completely. Additional sand may be added to the repair as necessary. Saturated sand may be moved into place with a small squeegee or scraper. Work with one small section at a time. Do not stop flowing material for a period of more than 2 minutes. If material sets inside mixer, remove cartridge from gun and replace mixer and flow controller if necessary.

Fill all repair areas to grade. When material cures (turns gray) in about 10 minutes, remove excess material with a sharp scraper or a concrete finishing stone for a smooth and flat finish.

Spalls: Pre-wet repair area with material. Fill with 1-2 inches of 30-40 grit manufactured silica sand and additional material. Work in 2 inch lifts to grade if needed. Be sure to saturate all of the sand completely. Additional sand may be added to the repair as necessary. Saturated sand may be moved into place with a small squeegee or scraper. Work with one small section at a time. Do not stop flowing material for a period of more than 2 minutes. If material sets inside mixer, remove cartridge from gun and replace mixer. A trowel or scraper may be used to move saturated sand into place and to create a level surface. Allow to cure (approximately 10 minutes). Finished repairs may be "cleaned up" by sanding or buffing within a few hours of application.

**Color:**

10 Minute Concrete Mender is composed of an amber colored liquid and a violet colored liquid. The material is black when dispensed and cures to a gray finish. Alternate colors can be achieved by selecting different colors of manufactured sand. 10 Minute Concrete Mender will lighten in color when exposed to ultraviolet rays. This natural occurrence within urethanes will NOT effect the physical properties of the material or the repair.

**Clean Up:**

Clean all tools and equipment immediately after use with acetone, xylene, MEK, or toluene. Cured material may be removed by soaking or abrading. 10 Minute Concrete Mender is very aggressive, gloves should be worn to keep material from contacting skin. Use an industrial paint and stain hand cleaner to remove from skin.

**Curing:**

10 Minute Concrete Mender will cure to 80% strength in approximately 10 minutes from application at 72° F. Traffic may be restored at this time. The material will reach its full strength in 24 hours. Cure rates in extremely cold environments should be tested beforehand.

**CAUTION:**

Roadware 10 Minute Concrete Mender Part A contains diphenylmethane-diisocyanate (MDI) CASS# 101-68-8, naphthelene CASS# 91-20-3, and petroleum hydrocarbon CASS# 64742-94-5.

**Risks:**

Roadware does not recommend spraying this material with mechanical pumps or by other means. Do not atomize the material. Inhalation of mists and vapors may cause dry throat, cough, dizziness, headache, nausea, unconsciousness and other central nervous systems effects. MDI can induce respiratory sensitization with asthma-like symptoms. Repeated and prolonged contact with skin can cause irritation.

**Emergency And First Aid Procedures:**

Eye contact - flush eye with water for at least 15 minutes. Get medical attention promptly. Inhalation - remove person to fresh air, if breathing is difficult administer oxygen. Get medical attention

immediately. Skin contact - wipe off and wash thoroughly contacted area with soap and water. Ingestion - do not induce vomiting. Consult physician immediately. For 24 hour emergency information, contact CHEM-TEL 800-255-3924.

**Precautions:**

Provide adequate ventilation to keep the airborne concentration of diisocyanate below TLV limit. For concentration above TLV limit, use of a positive pressure self- contained breathing apparatus (SCBA) or NIOSH/MSHA approved positive pressure supplied air respirator with a full face piece and escape (SCBA) required. Use protective equipment to minimize skin contact. Wear chemical safety goggles, and laboratory coats or aprons to avoid skin contact. Provide access to safety shower and eye wash stations.

SEE MSDS SHEETS FOR FURTHER INFORMATION.

**CAUTION:**

Roadware 10 Minute Concrete Mender Part B contains naphthelene CASS# 91-20-3, and petroleum hydrocarbon CASS# 64742-94-5

**Risks:**

Roadware does not recommend spraying this material with mechanical pumps or by other means. Do not atomize the material. Inhalation of mists and vapors may cause dry throat, cough, dizziness, headache, nausea, unconsciousness and other central nervous systems effects. Repeated and prolonged contact with skin can cause irritation.

**Emergency And First Aid Procedures:**

Eye contact - flush eye with water for at least 15 minutes. Get medical attention promptly. Inhalation - remove person to fresh air, if breathing is difficult administer oxygen. Get medical attention immediately. Skin contact - wipe off and wash thoroughly contacted area with soap and water. Ingestion - do not induce vomiting. Consult physician immediately. For 24 hour emergency information, contact CHEM-TEL 800-255-3924.

**Precautions:**

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LIMITED WARRANTY

Please see Roadware representative for details.

FOR PROFESSIONAL USE ONLY  
NOT FOR SALE TO OR USE BY THE  
GENERAL PUBLIC

**Coverage:**

Packaging	Cubic inches of material
One 21 fl. oz cartridge set (neat)	36.614
One gallon bulk mixed (neat)	231
One gallon bulk mixed with sand	460-700

(Approximate yield based on 1 gallon bulk liquid and 2 - 3 gallons of 30-40 grit manufactured sand.)

Approximate Liner feet per 21oz Cartridge with 2x 30-40 grit sand\*

Crack Depth (inches)	Crack Width					
	1/4	3/8	1/2	5/8	3/4	
1/8	195.5	130.0	97.5	78.0	65.0	49.0
1/4	97.5	65.0	49.0	39.0	32.5	24.5
3/8	65.0	43.5	32.5	26.0	21.0	16.5
1/2	49.0	32.5	24.5	19.5	16.5	12.0

\*Note: The above coverages are approximations and vary significantly depending on the type of sand used, the characteristics of the concrete, and the profile of the crack to be repaired. Always test a small portion of a large job to determine the amount of product needed

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