

## PRODUCT MANUFACTURER

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## GENERAL PRODUCT DESCRIPTION

LINE-X MEND-X is a rapid set, high strength ultra-low viscosity concrete repair material. This two part Urethane/polyurea system is designed for quick rebuilding broken control joints and repairing cracked and spalled concrete surfaces very quickly.

## FEATURES

LINE-X MEND-X can be put back in service in approximately 15 minutes after installation is made.

## POTENTIAL APPLICATIONS

- Rebuilding Control Joints, Floor Repair, “Knitting Cracked Concrete”
- Shallow or Deep Spalls on Warehouse Floors and Bridge Decks
- Spalls and Crack Repairs in Fork Lift Traffic Areas
- Grade Matching
- Fill and Repair Spalls before Coating

## APPLICATION GUIDELINES

Fast set – Low Viscosity. MEND-X is used with sand in the crack and set time is approximately 4 to 8 minutes depending on temperature. Viscosity is 24 cps producing excellent penetration into cracks and select sand fillers. Low Viscosity produces “wet-out” penetration unequalled by any other polymer product. Produces high strength bonds capable of heavy traffic support in a short time.

## ADVANTAGES

Rapid applications and set times  
Meets USDA requirements  
Cold applications (0°F)  
“Drive-over” in approximately 10 to 15 minutes  
Produces high strength quickly  
Self-leveling grouts easily made  
Restores Traffic use in 25 minutes  
Very long lasting repairs that stay in better than epoxy

## PRODUCT COLOR

Dark gray for outside applications and light gray for interior repairs. Color changes occur when light gray product is exposed to sunlight.

## AVAILABILITY

MEND-X is packaged in 2 gallon kits, 10 gallon kits, and 110 gallon kits.

## SURFACE PREPARATION

Clean the area of debris and contaminants that would act as a bond breaker such as oils, loose materials, dirt, rubber, etc. To clean spalls and cracks, use a “Twisted Wire Wheel”. This rapidly cleans the concrete and speeds the preparation process. Do not use a straight wire wheel – this type of wheel deposits metal on the surface of the concrete and polishes the concrete resulting in poor bonding properties of the product. Expose clean rough concrete for best results. A rough profile is a must and all dust must be removed. If using a dry diamond saw to cut concrete and clean the crack, remove all the dust from the sides of the cut. Use acetone (or other suitable material, i.e. alcohol) to wipe or wash off dust. Make sure the area is dry before proceeding with the repair.

## PHYSICAL PROPERTIES

Solids:		70%	
Viscosity:		24 cps	
Specific Gravity:		A=1.108 B=0.847	
<u>Test Name</u>	<u>Hardness</u>	<u>Test Method</u>	<u>Value</u>
Shore D: Tensile		ASTM D2240	70D
Strength, psi:		ASTM S412	4500
Tear Strength lb/pli		ASTM D624	489
Elongation %		ASTM D412	7
Compression Strength 2 hr			
Blended/sand			3900 PSI
Neat			3000 PSI
Compression Strength 7 Day Cure			
Blended/sand			4800 PSI
Neat			3900 PSI
VOC grams/liter combined:			5 g/l
Color:			Dark Gray
Exudation:			None
Shrinkage:			None
Pot life 100 gram mass:			190 seconds

## APPROXIMATE MINIMUM APPLICATION TEMPERATURE

Product @ 70°F with substrate at 20°F cure time 45 minutes.

Product @70°F with substrate at 50°F cure time 20 minutes.



## MAXIMUM APPLICATION TEMPERATURE

Product and substrate @ 90°F cure time approximately 3 to 5 minutes.

## USING THE PRODUCT

The product can be used as a grout or repairs can be made by replacing the sand in the repair area and applying product into the sand. Group – Use kiln dried sand when making a pourable grout for spall repair or joint repair.

Making a Fast Grout: Example – mix one pint of Part A to one pint of Part B. Mix with a jiffy mixer for only about 30 seconds. This will equal one part of mixed product or in this case, one quart of mixed product. Immediately add this mix (one part of mixed material) to two parts (up to 2.5 parts) of kiln dried sand. Immediately mix the sand and the product mix together using a high speed drill motor and steel jiffy mixer to another 30 seconds. Make sure that the product and sand is completely mixed. Do not wait – pour this grout mix into the prepared repair area. Keep the final pour of the liquid grout slightly above the finish grade. Quickly work the grout into the repair. Caution: Work fast – the product sets very fast. Warm product and warm conditions will cause the product to set faster, cool product and conditions will slow down the set time of the product. Product containers can be placed in a cooler or refrigerator if the product is too warm.

Finishing and Grinding: When using the product grout has set (slightly above grade) use a diamond wheel or zee wheel to grind the over pour down almost to the surface of the concrete. Change to a fine grit corundum or zee wheel and grind the remaining hardened grout to finished grade. Work in a circular motion grinding evenly until the surface of the surrounding concrete just begins to show signs of abrasion from the grinding. Finishing is best using a small 90 degree grinder; this reduces the potential for gouging.

Making Repairs with Preplaced Sand: Filler – sand filler should be kiln dried. Grit sizes from 30 to 60. Pea gravel can be used on very large cracks. \*Product will bond damaged slabs together and may stop movement. Not intended for use where substrate movement is required.

## APPLICATION

Moisture – Products are moisture sensitive and should not be applied to wet surfaces. After the area has been cleaned, place the sand in layers of about ½ inch to 1 inch in depth. Mix product at a 1:1 ratio, mix A and B for no longer than 45 seconds using a high speed drill motor and steel jiffy mixer. Pour mixed product into the sand. Fill and pour as needed until the sand is saturated and filled to finished grade or slightly over. The newly set product can be cut using a razor cutter provided cutting is done soon enough, otherwise, grind using a very smooth, flat grinding wheel.

Finishing: Some sands may contain small amounts of moisture and produce fine pinholes in the set product. To finish the surface with pinholes, mix MEND-X and squeegee the liquid product over the finished surface to fill in any pinholes. The area should be hard, smooth and ready for traffic in about 15 minutes.

## CLEAN UP

Clean up newly set-up product from unwanted areas quickly, before product has had time to remain for more than 10 minutes.

## PRODUCT STORAGE

Product may be stored at room temperature in unopened containers. Do not store above 85°F or in direct sunlight. Shelf life is approximately 12 months. Opened containers (cans, pails, and drums) should be resealed with a nitrogen blanket over the product before the container is closed. Always keep drums or other containers out of the rain, heat, and cold.

## DISPOSAL

Kit containers must be empty and drip free, consult local, state, and federal disposal laws before disposal.

## WEAR PROTECTIVE CLOTHING

Long sleeved shirts or overalls, rubber gloves, boots, and safety glasses are recommended. Follow all application instructions and use only for specified uses. Do not use this or any other product near high heat or open flame. Do not take internally; keep out of reach of children.



## **FIRST AID**

Eye Contact – flush immediately with plenty of water for 15 minutes, seek medical attention immediately.

Skin Contact – remove contaminated clothing and wash contact area with soap and water for 15 minutes.

Ingestion – if appreciable quantities are swallowed, seek medical attention immediately.

Inhalation – in case of exposure to high levels of vapor or mist, remove person to fresh air. If breathing has stopped, administer artificial respiration and seek medical attention immediately.

Clothing – use gloves, eye protection and NIOSH cartridge mask for areas that are poorly ventilated. Wear safety clothing and boots when using this product. Read all MSDS for additional first aid information on each product before it is used.

## **SAFETY**

Read all product MSDS and make sure that personnel using the products understand the data in the MSDS and General Safety Information Sheets. Call LINE-X LLC for questions concerning product use and safety.

## **TECHNICAL INFORMATION**

Technical and application information is provided for the purpose of establishing a general profile of the product and proper application methods or procedures. Test performance results were obtained in a controlled environment and LINE-X LLC makes no claim these tests or any other tests, accurately represent all environments. As application, environmental and design factors can vary significantly, due care should be exercised in the selection of the product used. Published technical data and instructions are subject to change without notice. Contact your LINE-X LLC representative for current technical data and instructions.

## **PRODUCT USER RESPONSIBILITIES:**

Users of the LINE-X MEND-X product are responsible for reading the general guidelines, product data sheets, specifications and material safety data sheets (MSDS) before using this material. Printed technical data and instructions are subject to change without notice.

Contact your local LINE-X representative or visit our website [www.LineX.com](http://www.LineX.com) for current technical data instructions.

## **PRODUCT DISCLAIMER**

All guidelines, recommendations, statements, and technical data contained herein are based on information and 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. It is the users responsibility to satisfy himself, by his own information and test, to determine suitability of the product for his own intended use, application and job situation and user assumes all risk and liability resulting from his use of the product. We do not suggest, or guarantee that any hazards listed herein are the only ones which may exist. Neither seller nor manufacturer shall be liable to the buyer or any third person for any injury, loss or damage directly or indirectly resulting from use of, or inability to use, the product. Recommendations or statements, whether in writing or oral, other than those contained herein shall not be binding upon the manufacturer, unless in writing and signed by a corporate officer of the manufacturer. Technical and application information is provided for the purpose of establishing a general profile of the material and proper application procedures. Test performance results were obtained in a controlled environment and LINE-X LLC makes no claim that these tests or any other tests accurately represent all environments.

