



TECHNICAL DATA SHEET

MENDER X2 AND X2-NC

PRODUCT DESCRIPTION

MENDER X2 AND MENDER X2-NC ARE TWO COMPONENT, EASY TO MIX, FAST CURING CRACK AND SPALL REPAIR MATERIALS. MENDER X2 GOES FROM BLACK TO GREY AS IT CURES TO INDICATE COMPLETION. MENDER X2-NC IS A NON-COLORED VERSION SPECIFICALLY FOR GRIND AND CLEAR APPLICATIONS.

TYPICAL USES/APPLICATIONS

- CRACK AND SPALL REPAIR
- MIXED WITH SAND TO FILL LARGE HOLES AND VOIDS

PRODUCT ADVANTAGES

- RAPID CURE
- LOW VISCOSITY
- EASY TO MIX

PACKAGING

MENDER X2

10-GALLON KIT

PART A: 5-GALLON PAIL

PART B: 5-GALLON PAIL

MENDER X2-NC

2-GALLON KIT

PART A: 1-GALLON JUG

PART B: 1-GALLON JUG

STORAGE

PRODUCT SHOULD BE STORED INDOORS BETWEEN 60°F TO 85°F AWAY FROM DIRECT SUNLIGHT AND MOISTURE.

MAKE SURE CONTAINERS ARE COMPLETELY SEALED TO PREVENT MOISTURE CONTAMINATION AND ENSURE BEST PERFORMANCE.

SHELF LIFE IS 12 MONTHS.

RECOMMENDED APPLICATION TEMPERATURE

SUMMER: 60° - 80° F
WINTER: 30° - 60° F

APPLYING MATERIAL OUTSIDE OF THE RECOMMENDED TEMPERATURE RANGE MAY DRAMATICALLY INCREASE OR DECREASE CURE SPEED.

TEST DATA

SOLIDS CONTENT:

A+B CURED

>98%

WEIGHT PER GALLON (ASTM D1475):

PART A:

8.52 LB/GAL

PART B:

9.00 LB/GAL

VISCOSITY (ASTM D7867):

PART A:

240 CPS

PART B:

60 CPS

GEL TIME:

100 ML RESIN ONLY

SUMMER:

5 MIN

WINTER:

1.5 MIN

TACK FREE TIME (ASTM D5895):

5-7 MILS, 50% RH

SUMMER:

20 MIN

WINTER:

5 MIN

SHORE D HARDNESS (ASTM D2240):

10 DAY RESIN ONLY:

68 UNITS

10 DAY WITH SAND*:

82 UNITS

ADHESION (ASTM D4541):

10 DAY: >500 PSI (CONCRETE FAILED)

*USING THE RECOMMENDED MIX RATIO OF SAND

ALL TEST DATA COLLECTED AT 70°F.



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SURFACE PREPARATION

MAKE SURE SURFACE IS PROPERLY ABRADED, CLEAN, AND DRY BEFORE APPLICATION. SURFACE MUST BE FREE OF DIRT, GREASE, OIL, AND OTHER CONTAMINANTS. CONTAMINANTS COULD LEAD TO SURFACE DEFECTS SUCH AS CRAWLING AND POOR ADHESION.

ALL CRACKS SHOULD BE GROUND OUT WITH A V-BLADE AND ALL DUST AND DEBRIS REMOVED. IT MAY BE NECESSARY TO USE A WIRE BRUSH TO ENSURE CRACKS AND VOIDS ARE PROPERLY PREPARED.

ENSURE THAT THE FLOOR TEMPERATURE IS MORE THAN 5 DEGREES OVER THE LOCAL DEW POINT TO AVOID WATER CONDENSATION.

FLOOR MOISTURE SHOULD BE MONITORED WITH A NONDESTRUCTIVE ELECTRONIC MOISTURE METER AS PER ASTM F2659. READING SHOULD BE LOWER THAN 5.5% BY THIS METHOD.

PRE-MIX REQUIREMENTS

MENDER X2:

PART A: REMOVE LID AND MIX WITH DRILL MIXER FOR 2 MINUTES. BE SURE TO SCRAPE THE BOTTOM OF THE BUCKET TO MIX IN ANYTHING THAT HAS SETTLED OUT.

PART B: NOT REQUIRED.

MENDER X2-NC:

PART A: INVERT AND SHAKE VIGOROUSLY FOR ABOUT 1 MINUTE. CHECK THAT THERE ARE NOT SOLIDS ON THE BOTTOM OF THE JUG, CONTINUE SHAKING AND INVERTING UNTIL UNIFORM.

PART B: NOT REQUIRED.

MIX RATIO:

1:1 MIX RATIO BY VOLUME (A:B)

+ 1 PART SAND BY VOLUME (OR MORE IF DESIRED)

MIX INSTRUCTIONS:

CAREFULLY MEASURE 1 PART A AND 1 PART B BY VOLUME AND BLEND TOGETHER FOR 2 MINUTES WITH A DRILL MIXER. MIX IN THE DESIRED AMOUNT OF SAND. EITHER 4030 OR 5030 GRADE SAND WILL WORK. PROCEED TO APPLICATION IMMEDIATELY AFTER MIXING.

NOTE THAT LARGER VOLUME MIXES WILL HAVE A SHORTER POT LIFE DUE TO THE HEAT GENERATION OF THE MATERIAL.

MIX IN SMALL BATCHES AS NEEDED. DO NOT MIX MORE MATERIAL THAN CAN BE USED IN 5-10 MINUTES.

APPLICATION

1. POUR MIXTURE INTO PRE PREPARED CRACKS, PITS, AND SPALLS IN THE CONCRETE.
2. AFTER 20 MINUTES, CHECK THAT THE MENDER X2 IS HARD ENOUGH TO GRIND. IF NOT, CHECK IN 10 MORE MINUTES. TEMPERATURE AND HUMIDITY CONDITIONS WILL AFFECT THE HARDNESS DEVELOPMENT.
3. GRIND MATERIAL FLUSH WITH THE SURFACE OF THE CONCRETE. SWEEP AND VACUUM AWAY ANY LEFTOVER DUST AND DEBRIS. INSPECT REPAIRS AND PERFORM TOUCH UPS AS NEEDED.
4. FOR A GRIND AND CLEAR FLOOR, USE MENDER X2-NC WITH CLEAN CONCRETE DUST (EXAMPLE: FROM FLOOR GRINDER) TO MATCH CONCRETE APPEARANCE.

PRODUCT AND APPLICATION SUPPORT

REFER TO THE PENNTEK TRAINING MANUAL OR CONTACT TECHNICAL SUPPORT LINE (952-491-0616) FOR FURTHER INFORMATION.



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HELPFUL TIPS

- KEEP MATERIAL COOL BEFORE USING TO ENSURE MAXIMUM WORK TIME.
- MINIMIZE HOW LONG CONTAINERS ARE OPEN TO LIMIT MOISTURE EXPOSURE. THIS WILL KEEP OPENED CONTAINERS FRESH FOR LONGER.
- THE USE OF SAND WILL EXTEND THE WORK TIME.
- KEEP SAND AS DRY AS POSSIBLE BEFORE USE TO AVOID FOAMING.
- USE MORE SAND FOR DEEPER AND WIDER CRACKS. THIS WILL HELP REDUCE MATERIAL SOAKING AWAY.
- START WITH THIN CRACKS AND SMALLER PITS AS THESE WILL TAKE LONGER TO CURE.
- ALLOWING THE MIX TO THICKEN SLIGHTLY BEFORE APPLYING WILL HELP IT CURE FASTER.
- WINTER AND SUMMER PART A CAN BE MIXED TO MAKE A "FALL BLEND".
- CHOOSE SPEED BASED ON THE SLAB TEMPERATURE OF THE CONCRETE, NOT THE AIR TEMPERATURE.