



Quick Mender X.O.®

Minimum Odor Repair Polymer & Concrete Primer
 Technical Data Sheet

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Selection and Specification Data

DESCRIPTION

Quick Mender X.O.® is a superior concrete repair product designed specifically to repair or patch horizontal concrete surfaces with holes, divots, cracks, pop outs, spalls, and re-nosing of joints. **Quick Mender X.O.** may be mixed with dry industrial quartz, polishing dust, Portland cement, silica flour, fumed silica, or cabosil to produce a durable polymer concrete.

Quick Mender X.O. is specially designed as a minimal odor system for interior and confined spaces, **Quick Mender X.O.** is a polymer rapid repair product. In its basic low viscosity formulation, **Quick Mender X.O.** may be used in a variety of unique applications to repair concrete substrates.

Quick Mender X.O. may be used with all VersaFlex rapid curing polyurea sealants. It is designed for use in both interior and exterior concrete repair applications.

IDEAL FOR

- Repairing spalls, and cracks
- Fast turn around in traffic areas
- Restores integrity to dusted concrete
- Horizontal resurfacing compound
- Low temperature repair and priming
- Polished concrete floors
- Freezer applications
- Location where odor is a concern such as interior applications and food processing

COLORS

Quick Mender X.O. is sold un-pigmented. Available Standard colors are Concrete Gray (VF1376) and Light Gray (VF1221). Custom colors are available by request. Custom colors are not returnable. Review the Versaflex “ColorFlex” color charts on www.versaflex.com for further information. In thicker builds, un-pigmented **Quick Mender X.O.** dries to a milky opacity.

LIMITATIONS

NOTE: **Quick Mender X.O.** should be shipped in heated transit when the temperature is expected to be less than 40F for more than 24 hours. Prolonged exposure to low temperatures can negatively impact the processing and performance of the **Quick Mender X.O.**

PHYSICAL PROPERTIES (TYPICAL)

Description	Method	Result
VOC (g/l)	Theoretical	<100
Volume Solids Content	Theoretical	95.7%
Pot Life @ 77F	Internal	3 – 4 min.
Working Time @ 77F—Neat Mix	Internal	3—4 min.
Working Time @ 77F—Aggregate	Internal	15—20 min.
Tack Free @ 77F	Internal	20 min.
Open to Traffic @ 77F	Internal	45 min.
Tensile Strength	ASTM D638	> 3,300 psi
Tensile Elongation	ASTM D638	> 2%
Die C Tear Strength	ASTM D624	> 175 pli
Shore D Hardness	ASTM D2240	> 60
Tabor Abrasion (H-18, mg loss)	ASTM D4060	< 400 mg
Adhesion to Steel	ASTM D4541	> 500 psi
Adhesion to Concrete	ASTM D7234	> 200 psi

The value ranges stated in this Technical Data Sheet are based on system processing under controlled laboratory conditions. Equipment configuration and/or field application conditions may produce variances in the final system values.

COVERAGE RATE

Quick Mender X.O. is designed for a variety of substrates. Application method, substrate roughness, profile, and porosity will effect coverage rates. Contact VersaFlex for recommended coverage rate. Typical coverage rate is 130—200 ft² per gallon.



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Substrate and Surface Preparation	
<p>GENERAL</p> <p>Prior to coating, the substrate must be prepared in a manner that provides a uniform, clean, sound, neutralized surface suitable for the specified coating. The substrate shall be free of all contaminants, such as oil, grease, rust, scale or deposits. The substrate shall be free of all dirt, dust, debris, and deleterious material. Coating performance is dependent on the degree of surface preparation.</p>	<p>MAXIMUM MOISTURE CONTENT CONCRETE</p> <p>Calcium Chloride Test – 3 lb/24 hr./1,000 ft² 5% maximum as per ASTM F2160 or ASTM F2420</p> <p>CONCRETE & MASONRY</p> <p>Reference SSPC-SP 13/NACE No. 6 Surface Preparation of Concrete. Minimum surface profile equivalent to ICRI CSP3 to CSP5 in accordance with ICRI Technical Guideline No. 310.2R-2013. Maximum Moisture Content of 3 lb./24 hr./1,000 ft² per ASTM F1869 and/or less than 5% maximum moisture content per ASTM F2420.</p>
Mixing, Thinning, and Pre-Warming	
<p>COMPONENTS & MIX RATIO</p> <ul style="list-style-type: none"> Mix ratio is 1:1 by volume Mix pigmented B side prior to combining Measure each component using metered buckets Drill mix at low speed for 10 seconds <p>THINNING: DO NOT THIN</p>	<p>POLYMER CONCRETE</p> <p>Pre-mix A and B components prior. Slowly add 30 mesh quartz silica or fumed silica to desired viscosity. Do not exceed 1:4 liquid to solid loading</p> <p>PRE-WARMING:</p> <p>A and B components should be warmed to a minimum of 50°F prior to mixing.</p>
Application and Equipment Guidelines	
<p>POLYMER CONCRETE</p> <p>Quick Mender X.O. can be installed as a polymer concrete patching and repair material on horizontal surfaces to strengthen “dusted” or spalled concrete, as a leveler and resurfacing compound, or to repair damaged joint headers. Be sure to remove and loosely adhering or spalled substrate prior to repair. Prime the area to be repaired using Quick Mender X.O. in the neat form to prevent liquid material absorption of the polymer concrete.</p>	<p>Combine A & B components prior to adding aggregate. Follow all mixing and material handling recommendations. A 20-30 mesh Quartz Silica is recommended. Liquid to aggregate mix ratio will vary based on aggregate size and selection. A 1:3 mx ratio is recommended as a starting point. Always try a small amount to determine working time and workability prior to placement. DO NOT exceed a 1:4 mix ratio. Repair patches may be prepared using traditional surface preparation methods after 1 hour. Do not use wire wheels or brushes as this can cause burnishing</p>



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Application and Equipment Guidelines

PRIMER

Quick Mender X.O. can be installed by plural component sprayer, roller, brush, broom or squeegee. Install at temperatures greater than 0°F. Application methods should be adjusted based on surface profile and roughness. Additional coats may be needed based on material absorption and substrate porosity. Avoid pooling or puddling.

When working on horizontal surfaces pouring the batch out onto the substrate will extend the working time and improve penetration into porous substrates.

HAND MIX

Follow all mixing and thinning instructions. Detail work should be done with a roller or brush. Larger areas are more easily covered using a broom or soft silicone or foam squeegee.

PLURAL COMPONENT SPRAYER

Use a plural component pump and a direct impingement mix spray gun. A back roll or broom back is still required to ensure proper coverage, and absorption. **DO NOT** use static mix as primary mixing mechanism. Contact VersaFlex for additional equipment set-ups and recommendations.

RECOMMEND EQUIPMENT OPERATING PARAMETERS:

Do NOT heat **Quick Mender X.O.**

Dynamic Pressure	900—1200 psi
Dynamic Pressure Differential	< 100 psi

RECOMMENDED PROPORTIONING EQUIPMENT

Graco Reactor series proportioners are recommended. If using a gear type pump, contact the pump manufacturer to ensure the pump is designed for the **Quick Mender®** viscosity.

RECOMMENDED SPRAY GUN CONFIGURATIONS

Graco	Fusion AP	AR/AF 2929
		AR/AF 3737
		AR/AF 4242
Graco	Fusion MP	MR/MF 3535
		MR/MF 4747
Graco	Probler P2	00 - 02
PMC	AP2 & AP3	00 - 02

Application & Service Conditions

ENVIRONMENTAL & SUBSTRATE CONDITIONS

Material and equipment temperatures must be kept at 50°F or above. Lower substrate and ambient temperatures will reduce cure time.

Substrate temperatures must be greater than 0°F.

The substrate must be 5°F above dew point and rising before application of coating materials.

If the substrate is below freezing, traditional methods of determining moisture content are not effective. Additional steps should be taken to ensure moisture content is less than 5%. Refer to the Installation Guide for more information.

SERVICE TEMPERATURES (TEMPERATURE RESISTANCE)

Dry temperature resistance is -40°F to 250°F.

LIMITATIONS:

Quick Mender X.O. is not designed as an exposed finished coating system. Prolonged exposure to UV will degrade the primer. **Quick Mender X.O.** is hygroscopic. Exposure to moisture during storage or after installation while the material is still curing will negatively affect the material performance.



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Curing Schedule, Re-Coat Windows, and Top Coats

CURE TIME

Full cure is achieved in 14 days @ 72°F.

TOP COATING

Quick Mender X.O. can be top-coated after curing for 30 minutes at 77°F. Primer will be hard and not indented with a thumb nail. Colder ambient and substrate temperatures can lengthen cure times.

RE-COAT TIME

Quick Mender X.O. can be re-coated up to 24 hrs. after application at 72°F. Warmer temperatures will reduce the re-coat window. If the re-coat window is exceeded, additional preparation is required. Prior to coating, primed substrate shall be clean, dry, and free of all dirt, dust, debris, contamination, or deleterious material.

Cleanup & Safety

CLEANUP

Cured product may be disposed of without restriction. Product containers that are “drip free” may be disposed of according to local, state, and federal laws.

SAFETY

Read, understand, and follow all recommendations on the SDS. Review SDS at www.versaflex.com

Wash thoroughly after handling, and before eating, drinking, or smoking. Have proper First Aid and PPE on site prior to opening or processing the material. Use chemical safety glasses, or goggles with splash shields. Use impervious body coverings including long sleeve clothing and boots. Use neoprene or nitrile chemical resistant gloves. Use a combination particulate filter and organic vapor respirator.

CAUTION

Consult the SDS prior to use. **Quick Mender X.O.** contains isocyanate. All safety precautions must be followed including proper skin protection and breathing protection. Consult SDS for proper safety suggestions.

Packaging, Handling, and Storage

PACKAGING

One Hundred Ten Gallon Kit: 55 gallons of ‘A’ side and 55 gallons of ‘B’ side. Drums filled by weight.

Ten Gallon Kit: 5 gallons of ‘A’ side and 5 gallons of ‘B’ Side

Two Gallon Kit: 1 gallon of ‘A’ Side and 1 gallon of ‘B’ Side

SHELF LIFE AND STORAGE

One year from date of shipment, in original, unopened factory containers, stored in a sheltered area between 60°F - 95°F. Seal tightly after use to prevent introduction of moisture laden air. Store open ‘A’ side with a nitrogen cap after each use.

Warranty

Limited Warranty. Company warrants its goods to be free of manufacturing defects. Goods manufactured by Company will comply with all applicable federal, state and local laws and regulations. Company makes no warranty as to any parts or equipment manufactured by others. Customer shall look solely and only to the manufacturer of such parts or equipment with respect to any warranty claims. Company hereby assigns to Customer the original manufacturer’s warranties to all such equipment and parts, to the full extent permitted. THE AFORESAID IS THE EXCLUSIVE WARRANTY AND IS IN LIEU OF ALL OTHER WARRANTIES, EXPRESS OR IMPLIED. SPECIFICALLY, THERE ARE NO WARRANTIES OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PURPOSE.

Limitation of Liability. COMPANY’S LIABILITY FOR DEFECTIVE OR NON-CONFORMING GOODS SHALL BE LIMITED TO, AND SHALL IN NO EVENT EXCEED, THE AMOUNT PAID BY CUSTOMER FOR SUCH DEFECTIVE OR NON-CONFORMING GOODS. UNDER NO CIRCUMSTANCES SHALL COMPANY BE LIABLE FOR ANY SPECIAL, PUNITIVE, INCIDENTAL OR CONSEQUENTIAL DAMAGES OR FOR LOST PROFITS. In no event may any claim by Customer arising from or relating to any sale of any goods or services referenced herein be brought more than one year after the date of delivery of such Goods.