



Product Data Sheet

CPR-MD MODERATE-DUTY FLOWABLE RAKE & TROWEL

Moderate-Duty, Cementitious Polyurethane Flowable Rake & Trowel Mortar

CPR-MD-PDS-051424

DESCRIPTION: Smith's CPR-MD is a 3-component, flowable, rake and trowel grade Cementitious Polyurethane Mortar with very good flow characteristics, allowing the applicator to spread and finish like an SL product but control mild slopes to drains better as well as yields a wear surface durable enough to accept forklift or pallet jack traffic without needing a Quartz broadcast.

Protect floors susceptible to Thermal Shock and/or heavy water erosion due to steam or hot water cleaning in moderate traffic environments such as food and beverage environments, automatic car washes, constant damp conditions and much more.

RECOMMENDED USES:

- To resurface eroded concrete floor from 3/16" to 1/2" per lift
 - May be tapered down to 1/8" at transitions
- For Thermal Shock risk areas
 - Steam cleanable when applied ≥3/16" (188 mils) ave. thickness
 - Handles +230°F (+93.3°C) constant water immersion (fully cured)
 - Down to -100°F (-37.8°C) splash spills
- Food & Beverage environments:
 - Breweries / Distilleries – Bottling, Coolers, & Production areas
 - Chillers / Freezers *(Once cured)
 - Dairy Processing
 - Meat Processing / Packing / Slaughtering Areas
 - Commercial Kitchens, Bakeries & Restaurants
 - Grocery & Foodservice
 - Wash Down Bays & Sanitation Areas
- Pharmaceutical Plants
- Vivarium's & Morgues
- Animal Kennels
- Automotive – Service Bays, Car Washes
- Water Treatment Facilities

HIGHLIGHTS:

- Moderate-Duty Traffic rated, even when applied neat
 - Accepts castor & forklift traffic even without a Quartz broadcast
 - Good Impact Resistance – Does not shatter nor disbond upon blunt impact strike but will distort at impact point
- Non-Tainting for areas at risk of food flavor contamination
 - Meets USDA requirements for flooring (indirect food contact)
- VOC Compliant in all regions
 - California 01350 Air Quality Compliant
- LEED Compliant – Contains Rapidly Renewable Raw Materials
- Can be applied to fresh concrete (properly, mechanically prepared) after 7 to 10 day cure once concrete tests ≤4% MC using gravimetric concrete moisture meter
 - 2 day cure time necessary over Polymer modified mortars
- Easy to clean
- Castor Oil based – Good Antibacterial Properties
- Interior & Exterior Applications
- Chemical Resistant
- Fluid consistency for gauge rake & trowel finishing
- Phthalate free

STORAGE: Indoors between 40°F (4.4°C) to 85°F (29°C); Keep dry

SUBSTRATE SURFACE TEMPERATURE (during installation): 50°F (10°C) to 85°F (29°C) with less than 80% Ambient Humidity (air)

SHELF LIFE: 1 Year in original, unopened containers

COLORS:

- Natural Beige
- [Smith's Dry Pigment Packs](#) sold separately

CURE TIMES @ ¼" ave. (with 50% Relative Humidity):

Temperature	50°F (10°C)	72°F (22.2°C)	86°F (30°C)
Pot-life	25 to 30 min.	17 to 20 min.	6 to 9 min.
Working Time	20 to 25 min.	15 to 17 min.	5 to 8 min.
Tack Free	4½ hrs.	3 hrs.	90 min.
Recoat Window			
-Solvent-based products	6 to 24 hrs.	3½ to 24 hrs.	2½ to 12 hrs.
-Water-based products	5½ to 24 hrs.	2½ to 24 hrs.	2¼ to 12 hrs.
Foot Traffic	20 to 24 hrs.	10 to 12 hrs.	7 to 8 hrs.
Heavy Traffic (i.e. forklifts, etc.)	48 to 64 hrs.	24 to 36 hrs.	14 to 16 hrs.
Full Chemical Resistance	10 to 12 days	5 to 7 days	3 to 4 days

*Cure time is influenced heavily by humidity and temperature

CURED COATING PROPERTIES (DRY FILM):

Property	Test Method	Results
Abrasion Resistance, mg/loss* Taber Abraser	ASTM D4060	100 mg (0.1 g) loss (Neat – no broadcast nor topcoat)
Compressive Strength	ASTM C579	6,502 psi (44.83 MPa)
Flexural Strength	ASTM D790	1,501 psi (10.35 MPa)
Tensile Strength	ASTM C307	700.5 psi (4.83 MPa)
Adhesion to Concrete	ASTM D7234	452.5 psi (3.12 MPa) concrete failure
Percent Elongation	ASTM D2370	6%
Shore D Hardness	ASTM D2240	80 to 85
Volatile Organic Compounds (VOC's)	ASTM D3960	5 g/L mixed (Natural) Thinned w/ Mineral Spirits: 40 g/L (with 16 oz) 71 g/L (with 32 oz)
Microbial Resistance	ASTM G21	Pass #1
Water Absorption (24 hour immersion)	ASTM C413	<0.1%
Thermal Stability / Heat Resistance -Tested on concrete block	MIL-D-3134J Section 4.6.3	No slip, flow, no softening or change in appearance
Thermal Compatibility with Concrete	ASTM C884	Pass
Softening Point / Service Temp (Constant)	ASTM C905	+266°F (+130°C) Min. -100°F (-37.8°C) Max. +230°F (+93.3°C)
Impact Resistance -Tested on concrete block	ASTM D3134	Pass
	ASTM D2794	160 in.lbs.- no delamination/chipping

*CS-17 Taber Abrasion Wheel, 1,000 gram load, 1,000 revolutions Results are based on conditions at 77°F (25°C), 50% relative humidity.

APPROXIMATE COVERAGE:

Coverage will vary depending on the application thickness, floor profile and absorbency of the concrete:

Thickness (inches / mils)	Coverage per mixed kit
3/16" (187 mils WFT)	34 sq.ft.
1/4" (250 mils WFT)	27.5 sq.ft.
3/8" (375 mils WFT)	20.5 sq.ft.





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Typical Chemical & Stain Resistance

Covered Spot Test – 125 mil film at 7 day cure:

E - Excellent; G - Good (slight sign of exposure/stains, coating recovers);

NR - Not Recommended (Permanent Damage)

ACIDS	24 hour Exposure (CPR-SL neat)
Acetic Acid 25% (Vinegar)	G
Citric Acid 10%	G
Lactic Acid (Milk)	G
Phosphoric Acid 85%	G
Sulfuric Acid 25% (Battery Acid)	G
Sulfuric Acid 98%	NR
Hydrochloric Acid 32% (Muriatic)	G
Nitric Acid 50%	G
BASES	
Ammonium Hydroxide 10%	E
EBGE	E
Sodium Chloride 20%	E
Sodium Hydroxide 50%	E
Sodium Hypochlorite (Bleach)	G
Trisodium Phosphate 10%	E
ALCOHOLS	
Ethylene Glycol (Antifreeze)	E
Hand Sanitizer	G
Isopropyl Alcohol 91%	G
Methanol	G
SOLVENTS	
Acetone	NR
d-Limonene	E
MEK	NR
Methylene Chloride	NR
Mineral Spirits	E
PGMEA	G
HYDROCARBONS	
Brake Fluid	G
Transmission Fluid	G
Motor Oil (SAE 30)	G
Gasoline	G
Kerosene	G
Hydraulic Fluid	G
Skydrol® – LD-4	G
MISCELLANEOUS	
Coffee	G
Coca-Cola®	G
Hydrogen Peroxide 3%	G
Ketchup	G
Monster Energy® Drink	G
Mustard	G
Tide® 1%	G
Windex (Ammonia Based)	G
Wine – Red	G

LIMITATIONS:

- CPR products are NOT Ultra Violet light stable & should be expected to discolor unless an aliphatic solid color product or system is applied on top

CHECK FOR MOISTURE: Testing concrete moisture and pH is highly recommended. Readings below are acceptable when tested in accordance with the stated ASTM standard:

Acceptable Readings:

- Comparative Gravimetric Moisture Content meter (ASTM F2659) ≤4% MC
- Calcium Chloride testing (ASTM F1869) <10 pounds with between 9 to 12 pH
- Relative Humidity (ASTM F2170) <90% RH

Follow the testing manufacturer's instructions precisely or visit www.astm.org to purchase the test methods. Testing MUST occur within an acclimated, interior environment for the results to be valid / conclusive. Absence of an effective moisture vapor barrier may create an environment for moisture vapor transmission as well as high levels of alkalinity in concrete slabs (generally, but not limited to interiors).

Should moisture vapor emissions exceed the above thresholds, an appropriate moisture vapor remediation primer, such as [Smith's Epoxy MAC100](#) or [Smith's Epoxy MAC125](#) with a full broadcast of dry, washed Quartz sand to suppress the moisture vapor emission rate to a level within the tolerance of subsequent coating system.

Please note that Silicate-based "moisture vapor remediation" products cannot be proven to lower the vapor permeability nor can testing determine whether an acceptable permeability has been achieved after treatment. Therefore, silicate based products are NOT recommended for use prior to Smith's CPR products.

Smith Paint Products is strictly a product manufacturer and does NOT offer any testing or analysis but may be able to offer guidance to an appropriate testing lab or third party inspector. When in doubt, hire a qualified third party testing firm. Smith Paint Products is not responsible for failures due to the presence of moisture vapor emissions and/or high levels of alkalinity, ionic salts, etc.

CONTAMINATION OF SUBSTRATE: Concrete, Tile, Terrazzo, brick and other porous substrates can become contaminated with oils, chemical from spills, etc. which act as a bond breaker. Determine if a potential bond breaker exists and a proper course of remediation.

OIL CONTAMINATION: [Smith's Oil Clean](#) may be used to remove oils, such as petroleum, synthetic and food oils, from the surface of the concrete prior to mechanical preparation. If an oil stop primer is necessary, use [Smith's Epoxy MAC125](#) at 10 to 12 mils neat over a minimum CSP 4 to 5, allow to hard set then apply a second coat of [Smith's Epoxy MAC125](#) at 8 to 12 mils with a full broadcast of dry, washed Quartz sand then allow to dry 1 to 2 hours, sweep and vacuum any loose sand from the primer then proceed with the installation of Smith's CPR-MD.

**Wood substrates contaminated with oil require removal and replacement of the oil contaminated area with new wood to ensure proper adhesion*

CHEMICAL CONTAMINATION: Chemical contamination should be determined and may require additional testing. Once the type of contaminant is determined, contact Smith Paint Products for recommendations while following local regulations regarding contaminant and disposal.

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INSPECT THE SUBSTRATE: Ensure the concrete is free of contaminants or bond breakers (i.e. curing compounds, silicone, oil/grease, paint, densifiers/sealer, wax etc.) and is structurally sound / solid. Concrete compressive strength must be >3,500 psi (24 MPa) at 28 days & >217 psi (1.5 MPa) in-situ tensile bond strength at the time of application.

TEMPERATURE & HUMIDITY: Maintain substrate & material temperature between 50°F (10°C) to 85°F (29°C) with 20% to 80% humidity for 48 hours prior to & 24 hours after installation. Do not install coatings when the Dew point is within 5° of the temperature.



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NECESSARY TOOLS and EQUIPMENT:

- Plastic Sheeting to cover floor for mix station
- High Torque, Low speed 1/2" drill (Variable Speed ≤450 rpm)
- Gauging tool:
 - Sled, Pin or CAM style Gauge Rake with extension pole
- Mixing Buckets or Portable Mix Stations
- Paint Roller Frame with Extension Pole
- Spiked Porcupine Roller with Extension Pole
- Spiked shoes or Soccer Cleats
- Flat Blade Squeegee or Flex Steel Blade Smoother
- Finishing Trowel
- Low Odor Mineral Spirits or Acetone for cleaning tools
- Vinyl "Stucco" Tape



TEMPORARY HEAT: Moisture vapor is emitted (i.e. humidity) by fueled temporary heaters. As cementitious urethane products are moist-cured, high humidity during installation will reduce working time, possibly resulting in a more difficult application, surface imperfections, air bubbles, etc. Many temporary heating methods also can emit unburned petroleum into the air which act as a bond breaker once it falls onto the surface of the substrate

- Precautions must be taken when using direct fired portable temporary heaters (Fuel = LP, gasoline, diesel, kerosine, etc.)
 - if available, use electric or indirect fired temporary portable heaters when necessary
 - Always shut off direct fired temporary heaters at least 2 to 3 hours prior to application to reduce risk of an amine blush
 - Ensure exhaust emissions & toxic fumes from temporary heaters exhaust to the exterior of the building to prevent health hazards & damage to work.
 - Always clean the mechanically prepared surface with [Smith's Oil Clean](#) or similar using an auto-scrubber followed by a thorough clean water rinse when temporary heat is believed to have been in use
- Fisheyes are a result of surface contamination

SUBSTRATE PREPARATION: DO NOT USE MURIATIC / HYDROCHLORIC ACID TO PREPARE CONCRETE AS CHLORIDE CONTAMINATION CAN OCCUR.

CLEANING: Detergent scrub with [Smith's Neutral Detergent](#), or similar, then rinse with clean, potable water to remove surface dirt, light surface grease/oil and contaminants prior to mechanical preparation. Heavy grease and oil should be removed using [Smith's Oil Clean](#). If a densifier or dissipative curing compound is believed to have been present, use [Smith's Green Clean Pro](#) biodegradable etching gel after mechanical preparation methods. [Smith's Green Clean Pro](#) requires the use of water as a rinse and therefore will require a minimum of 90 minutes with forced air movement or overnight prior to installation of Smith's CPR-MD to dry. Damp substrates may accelerate cure of Smith's CPR-MD.

SUBSTRATE PREPARATION: Achieve a CSP 4 to 6 (Concrete Surface Profile in accordance with ICRI Guideline 310.2R2013, as published by the International Concrete Repair Institute) yielding a surface texture similar to 40 grit sand paper or more course in order to maintain long term adhesion to the substrate.

Diamond Grinding is NOT an acceptable preparation method for CPR products.

Recommended preparation methods:

- **SCARIFY / PLAINER**
- **ROLLER BUSH HAMMER GRINDING**
- **HYDROBLAST**
- **STEEL SHOT BLAST** (Shot size S-230 to S-330 grit recommended)

Using a 7" vacuumized shroud angle grinder, edge diamond grind around all tight areas, columns, around equipment, etc. Key in all termination points using a diamond cutting blade prior to any above preparation method. Score cutting with a diamond cutting blade on an angle grinder every 6 to 10 feet both North / South then East / West is recommended in areas prone to thermal shock exposure.

Should verification of proper adhesion be desired, follow ASTM D4541 using an Elcometer to determine a direct tensile pull-off strength greater than 250 psi (1.7 MPa) to pass the test.

CRACK REPAIRS & PATCHING: Should patching greater than 3/8" deep be necessary, repairs can be made to properly prepared, sound and solid substrates using a variety of appropriate products, including but not limited to:

- [Smith's Poly-FLEX](#)
- [Smith's SKM](#)
- [Smith's Poly PCF-45](#) mixed with Quartz
- [Smith's Poly-JF](#) or [Smith's Poly-JF/FC](#)
- [Smith's Epoxy FRM](#) fast repair mortar kit
- [Smith's Epoxy GEL-150](#) mixed with Quartz
- [Smith's Epoxy MAC100](#) mixed with Quartz
- [Smith's Epoxy U100](#) or [Smith's Epoxy FC125](#) mixed with Quartz
- [Smith's 4in1 Overlay](#)
- [Rapid Set® Cement All®](#) or similar
- [W.R. Meadows® CG-86 Non-shrink Construction Grout](#) or similar

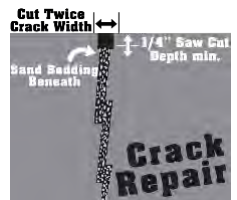
(Click on product name for detailed instructions)

Ensure resinous patch is hard enough to walk on without imprinting or damage before proceeding with next steps.

Resinous repair products are preferred, however, if a cementitious repair compound is used, ensure the following are met:

- non-water soluble / recommended for exterior use
- >5,000 psi
- Reads below 4% MC (ASTM F2659) when tested using a concrete moisture impedance meter prior to applying coating
- Mechanical prepare the substrate beneath of the cement-based product to the appropriate CSP necessary for the coating system as well as the surface of the cement product prior to coating
- Portland or CSA cement-based only
 - rated for direct traffic
- Not recommended over Gypsum-based cementitious products, to include synthetic gypsum products

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CPR-MD-PDS-051424

JOINTS: Honor expansion joints at the finish floor elevation with an appropriate expansion joint filler.

Follow ACI 224.3R-95: Joints in Concrete Construction guidelines for proper filling of construction and control joints. ACI recommends allowing a concrete slab to cure for a minimum of 60 to 90 days or longer to allowing the slab to shrink and acclimate to the intended joint width thus reducing the risk of joint wall separation from the joint filler. Applications such as freezer and coolers must be brought up to and held at a minimum of 45°F substrate temperature for no less than 10 days prior to as well as 7 to 10 days after filling with an appropriate semi-rigid joint filler, such as [Smith's Poly JF](#) or [Smith's Poly JF/FC](#), ideally longer if possible.

Always route out joints with an appropriate width diamond cutting blade attached to a vacuumized and dust controlled joint saw to flush out



Control Joint

[Smith's Poly JF/FC](#).

debris and freshly clean the side walls of the joint. Ensure all loose and broken areas are removed and repaired prior to filling the joint with [Smith's Poly JF](#) or



Construction Joint

Should joint side walls require extensive repairs, cut out the bad section of concrete back to a sound, solid area then fill with an appropriate mortar for the depth and application.

Fill the bottom of the joint with a bond breaker to support the joint filler and assist in sag reduction. Sand is recommended, especially for use in shallow joints less than 2" depth. *Use backer rod only if the joint filler is to be applied greater than 2" above the backer rod.*

PRIMING: Although priming is not typically necessary, some conditions may make priming necessary such as:

- Highly absorbent concrete may cause blisters in the finish of the Smith's CPR-MD and should be primed prior to installing Smith's CPR-MD
- When Moisture Vapor Transmission exceeds the maximum MVT (see page 2)
- Application over existing coating systems (*contact Smith Paint Products for recommendations or install a test area to check for proper adhesion prior to proceeding with any application over existing coating*)
- Non-porous substrates, especially smooth surfaces (*contact Smith Paint Products for recommendations regarding substrates other than porous concrete or acid tile / brick*)

When priming is deemed necessary:

- **Where Solvent Odor / Food Flavor Tainting is a concern:**
Apply [Smith's Epoxy FW38](#) at 5 to 7 mils. Once the primer has cured firm enough to walk on and is tack free with no transfer to the touch, installation of Smith's CPR-MD may proceed. If the primer will not be coated over with Smith's CPR-MD within 6 hours, apply a coat of [Smith's Epoxy MAC100](#) at 10 to 12 mils with a full broadcast of quartz sand (40 mesh or more course) to rejection to create a mechanical anchor ensuring Smith's CPR-MD will not slide across the primer during application.
- **Where Solvent Odor / Food Flavor Tainting is NOT a concern:**
[Smith's Polyaspartic 1000 Fast Cure](#) at 8 to 10 mils with a heavy Quartz Sand broadcast (40 mesh or more course) at a rate of roughly 1.5 lbs. per sq.ft. (roughly 75 sq.ft. per 50 lbs. bag) into the fresh primer allowing 60 to 90 minutes cure prior to removing excess sand then installing Smith's CPR-MD. *Although low VOC's, this method contains solvent that could result in food flavor tainting.*
- **High moisture vapor readings:**
*See page 2 using a 2 coat [Smith's Epoxy MAC100](#) or [Smith's Epoxy MAC125](#) priming system with a broadcast into the second coat to achieve a mechanical anchor between primer and Smith's CPR-MD. Smith's CPR-MD will slide across a smooth, primed surface during application without a sand broadcast into the primer. **DO NOT USE Silicate based "moisture vapor remediation" products for moisture vapor remediation prior to Smith's CPR-MD.**

Abrade the surface prior of the primer if more than 24 hours has occurred since application or if condensation may have occurred on the surface.

SET UP TOOLS & MIX STATION: Due to the short working time, the mix station, all application tools and equipment should be readily available for use prior to mixing any product. Only mix the amount of Smith's CPR-MD which can be placed, spread and finished within 10 minutes allowing for proceeding batches to tie into the wet edge for an additional 10 minutes at 72°F. Higher humidity and temperatures will shorten working time.

MIXING: DO NOT PART MIX – MIX ENTIRE KIT

In a 5 gallon or larger mixing vessel, combine Part's A and B as well as optional [Smith's Dry Pigment Packs](#), mixing with a low speed drill for approximately 30 to 45 seconds. While continuing to mix slowly, add in the Part C mixing for an additional 3 minutes to yield a lump free consistency. Ensure no unmixed powder pockets remain at the bottom of the mixing vessel before pouring out onto the substrate. It is recommended to start with smaller batches initially due to a short pot-life. If a larger batch is desired, use a larger batch mixing station, such as a:

- [Mega Hippo model PMH 80X-RL](#) with a TW225D Mixing Paddle (15" Tall blade paddle) using Ebinstock mixer (<450 RPM) or similar
- [Makinex Mixing Station MS-100](#) with a [Collomix Power mixer Xo 6](#) using an [MK 160 HF](#) or [KR 160 HF mixing paddle](#)



HOT WEATHER THINNING: Smith's CPR-MD may be reduced for warm, humid installation temperatures or to help offset the effect of applying over a moist concrete substrate by adding up to 16 or 32 U.S. fluid ounces of Odorless Mineral Spirits to an entire kit to improve workability. **DO NOT REDUCE THE QUANTITY OF THE PART C as a means of increasing fluidity.**

APPLICATION: Once mixed, immediately pour out Smith's CPR-MD in a straight 18" wide bead followed by spreading and finishing within 10 minutes at 72°F (22.2°C) with less than 50% ambient humidity (*higher humidity or temperature will reduce working time*).

Thickness for single batch kit:

- 3/16" = 18 inches wide by 22½ feet long
- 1/4" = 18 inches wide by 18 feet long
- 3/8" = 18 inches wide by 13 feet long
- 1/2" = 18 inches wide by 9 feet long

Spread using a gauge rake to meter the depth at the desired thickness and evenly cover the area. Continue placing fresh material against the wet edge of the previously spread mix while walking in the mixture with spiked / cleated shoes.

Break the surface tension and any bubbles created while mixing using a loop roller, flat blade smoother, Magic Trowel or flat blade squeegee attached to an extension pole immediately following the gauging step. Use a rounded edge finishing trowel / pool trowel for difficult to reach areas.

Once the surface tension is relieved, lightly roll with a porcupine roller across the surface to break any trapped air bubbles.



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CPR-MD-PDS-051424

APPLICATION (cont.): Smith's CPR-MD requires at least 4 to 5 people to install for projects less than 2,500 sq.ft. with a dedicated individual performing each task (*i.e. mixing, delivering and pouring, gauging, smoothly and porcupine roller steps*). Larger projects with multiple batches being mixed concurrently will require more laborers.

BROADCAST (optional) – When broadcasting into the fresh surface, wait 10 to 15 minutes after initial mixing or after the first 2 to 3 mixes have been placed, spread and finish (*sooner when temperatures / humidity exceed 80°F / 65% and no more than 4 mixes 50°F / 30%*) for the product to relax to an even, smooth surface after finish porcupine rolling. Timing of the broadcast is critical. If the broadcast is too aggressive (*typically caused by broadcast down towards the surface vs. the proper method of broadcasting into the air so the Quartz can cascade evenly*) will create irregular, uneven textures such as dimples, ripples, etc. Broadcasting too late within the working time will create a shallow bond at the surface with poor penetration.

Full broadcast to rejection:

- Quartz = 50 to 75 sq.ft. per 50 lbs. bag (1 to 1.5 sq.ft. per lbs.)
- ¼" Vinyl Chip = 200 to 333 sq.ft. per 40 lbs. box (0.12 to 0.2 lbs. per sq.ft.)

Allow an overnight cure prior to scraping and removing loose aggregates from the surface at:

- 55°F with 40% to 60% humidity = roughly 20 to 24 hours
- 72°F with 25% to 35% humidity = roughly 16 to 18 hours
- 72°F with 40% to 60% humidity = roughly 12 to 16 hours
- 85°F with 25% to 35% humidity = roughly 9 to 12 hours
- 85°F with 60% to 85% humidity = roughly 6 to 8 hours

COVERAGE: *See chart on page 1 of this document

OPTIONAL LAYERS or TOPCOATS:

Grout Coat over Broadcast Systems: If topcoating or additional layers are desired over a broadcast surface, Smith's CPR-MD does not require sanding of the surface (for adhesion).

Raw, trowel finished systems (without a broadcast): Abrade the surface using 80 grit metal screens or sandpaper using an orbital low speed floor buffer or 150 grit metal bond diamonds using an appropriate diamond grinder to abrade the surface. Sanding may occur as soon as the surface is not able to be damaged by the desired method, typically after curing for about 12 hours. More aggressive grit screens or sandpaper may create scratches, swirls and grooves in the finish of the Smith's CPR-MD, especially within 12 to 14 hours after the initial application which topcoats and subsequent thin layers may not hide. Hard to reach areas or any depressions should be made uniformly dull using an orbital palm sander and 60 to 100 grit sandpaper. Done correctly, the surface should be uniformly dull with no scratches easily identified.

Once uniformly dull and properly abraded, vacuum the entire surface followed by either a thorough Acetone solvent tack rag wipe or use an auto-scrubber with white, soft nylon bristle brushes and a very mild neutral detergent, such as Smith's Neutral Detergent or Dawn® dish detergent (**DO NOT USE SIMPLE GREEN®**) followed by a thorough clean water rinse.

DO NOT ALLOW DETERGENT TO DRY ON THE SURFACE of Smith's CPR-MD. Once dry, check the surface to ensure all dust has been removed before proceeding with the next layer.

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SLIP RESISTANCE: Smith Paint Products recommends the use of angular slip-resistant aggregate in all coatings that may be exposed to wet, oily, or greasy conditions as well as any condition where increased traction may be necessary. It is the contractor and end users' responsibility to determine the appropriate traction needs and footwear necessary for the conditions as well as setting performance parameters prior to beginning the application, testing to determine parameters have been met upon completion to achieve the end users documented safety standards.

Mock-ups are highly recommended as part of the evaluation process to determine the appropriate amount of slip-coefficient necessary for the environment.

Do NOT Use Smith's A/O 325 Aluminum Oxide for additional traction in a topcoat as it is too fine to be considered "Anti-skid". Instead use [Smith's Resin Sand](#) or [Smith's Glass Bead](#) (Mild or Coarse grit only) when using a traction additive.

MAINTENANCE:

- **Unsealed (raw finished) Smith's CPR-MD must cure for no less than 24 hours with no exposure to water, neutral detergents or cleaning equipment**
- **Smith's Polyaspartic's as the final wear surface wait a minimum of 3 days before using mechanical cleaning equipment and 48 hours prior to water exposure and neutral cleaning. Only dust or damp (water dampened only) mop for the first few days**
- **All other finishes, the coating system must be allowed to cure for no less than one week (7 days) before using any mechanical cleaning equipment on the surface and no less than 24 hours before neutral cleaner or water exposure. Only dust and wet mop the first week. This includes auto-scrubbers, swing buffers, sweepers, etc.**
- **Regardless of the finish, DO NOT EXPOSE to steam or freezing temperatures for at least 1 week to ensure proper curing and chemical resistance development**

Regular cleaning, to include dust mopping, is crucial to maintain the appearance and to achieve the appropriate longevity of any floor coating system. **Cleaning cannot occur too often.** Spills should be removed quickly. Avoid the use of Polypropylene or abrasive bristle (Tynex®) brushes as these are known to create scratch patterns, lessen the floor coatings longevity and lower the sheen of the finish.

Proper maintenance will help to maximize your investment by removing particles that scratch and dull the appearance of a floor coating. The floor should be swept daily and scrubbed once per week or per month depending on the amount and type of soils present. Environments with oils or regulated by health departments will need a stricter cleaning regiment.

DETERGENT: Always use the least aggressive detergent necessary to remove the residue. Typically, coated floors may only need a detergent scrub on a weekly or monthly basis depending on the environment. Daily dust mopping or water only mopping/scrubbing is highly recommended. Environments with exposure to foods, oils, chemicals, ink, etc. should be detergent scrubbed daily, possibly after every shift.

Avoid spinning tires on the surface of a coated floor. The heat created from the friction of a spinning tire will quickly soften the coating causing permanent damage to the finish.

Click here for more in-depth maintenance and cleaning instructions: [Smith's Cleaning & Maintenance for Industrial Floors](#)

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CPR-MID
MODERATE-DUTY
FLOWABLE RAKE & TROWEL

Moderate-Duty, Cementitious Polyurethane
Flowable Rake & Trowel Mortar

CPR-MD-PDS-051424

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