

Mix Polymer Modified, Fiber Reinforced, Self-Consolidating Concrete

DESCRIPTION:

RepMortar PMSC is a flowable, high strength, non-shrink, corrosion inhibiting, non-staining, self-consolidating mortar that is compatible in appearance with ordinary concrete. This product contains no metallic aggregates, accelerators, or oxidizing catalysts and utilizes the same non-shrink properties required by CRD-621.

USES:

- Full depth repairs, above and below grade
- Minimum thickness of 1" to 8" on vertical surfaces
- V & O surfaces- formed and pumped & poured
- As a structural repair material for parking facilities, Industrial plants, walkways, bridges, tunnels, dams
- Filler for voids and cavities
- Re-sloping floors

FEATURES:

- Meets standards through 3 consistencies
- Thixotropic: Flow restored by agitation
- Non-Corrosive: Will not rust
- Excellent for pumping
- Superior freeze/ thaw resistance
- Non-staining natural aggregate
- Excellent bearing capacities
- Does not contain any added chloride ions
- Can accept coatings within 48 hours

TECHNICAL:

RepMortar PMSC has been specifically formulated to exceed the requirements of Corp of Engineers CRD C621 and ASTM C1107. When tested in accordance with ASTM C827.

RepMortar PMSC is in accordance with NSF/ANSI 61 Solutions for Drinking Water and meets USDA requirements.

PREPARATION:

All areas to be grouted shall be clean and free of oil, grease, dirt, and contaminants. All metal components to be in contact shall be de-rusted and free of paint or oils. All concrete to come in contact with the mortar shall be thoroughly saturated by dampening or soaking prior to placement of mortar. Remove excess water from holes and voids.

MIXING:

RepMortar PMSC is ready to use and requires only the addition of water. No other materials should be added. Depending on the desired consistency, mix **1 gallon** of clean potable water per 65 pounds of **RepMortar PMSC** using *either* the **TMI Rapid Pail Mixer** "or" a ½ + hp heavy-duty drill with the **TMI Mortar Paddle** utilizing the **TMI One Man Stand!** If pumping, adjust water to 1.25 gallons per 65 lb. bag. Mix until completely blended and free of lumps. **Do Not Over Mix.** Mixing time is not more than 5 minutes.

Have all necessary tools and materials as near work areas as possible to permit rapid and continuous placement of **RepMortar PMCC**. All surfaces in contact with concrete mix should be in a saturated surface dry (SSD) condition with no standing water on the surface.



PLACEMENT:

RepMortar PMSC should be placed immediately after mixing. Do not mix more than can be placed within the allotted work time.

- Pre-wet surface to SSD.
- Ensure good intimate contact with the substrate is achieved. To accomplish this, material should be scrubbed into the substrate or other suitable means should be employed such as vibration of the material or pumping under pressure.
- Vibrate form while pouring or pumping.
- Pump with a variable pressure pump.
- Continue pumping until a 3 to 5 psi increase in normal line pressure is evident then STOP pumping.
- Form should not deflect.
- Vent to be capped when steady flow is evident, and forms stripped when appropriate.

Curing / Dry Time:

- It is best to keep the **RepMortar PMSC** covered or damp to prevent excessive loss of water or use **RepCure P** cure @ 200 SF per gallon or during the first 24 hours.
- Moist curing should commence immediately after finishing.
- Protect newly applied material from direct sunlight, wind, rain, and frost.

CLEAN UP:

Tools and Equipment: Clean with water or **RepGreen** cleaner.

YIELD GUIDE:

One 65-pound unit will yield approximately .50 cf.

PACKAGING:

Available in 65-pound multiwall paper bags.

COLOR:

Light Gray

STORAGE:

Store in a cool, dry area away from direct sunlight.

SHELF LIFE:

Shelf life of unopened bags stored in a dry facility is 24 months. Excessive temperature differential and/ or high humidity can shorten the shelf-life expectancy

TEST	TIME		
	1 Day	7 Days	28 Days
Compressive Strength (ASTM C-39) 73 °F (23 °C) 50 % R.H. 3 Hour - 2"x2"- C-109 3,000 psi	5000 psi	7100 psi	8,500 psi
Flexural Strength (ASTM C-293) 73 °F (23 °C) 50 % R.H.	700 psi	1,350 psi	1,500 psi
Slant Shear Strength (ASTM C-882 modified)*	1000 psi	1500 psi	2500 psi
Shrinkage (ASTM C-157 Modified)			<0.05%
Splitting Tensile Strength (ASTM C-496) 73 °F (23 °C) 50 % R.H.		760 psi	1000 psi
Tensile Adhesion Strength (ASTM C-1583) 73 °F (23 °C) 50 % R.H.	250 psi	300 psi	
Rapid Chloride Permeability (ASTM C-1202 AASHTO T-277)			< 1000 Coulombs
Freeze-Thaw Stability	300 cycles > 99 % (ASTM C-666)		

* Mortar scrubbed into substrate at 73 °F (23 °C) and 50 % R.H.

LIMITATIONS:

Product is temperature sensitive regarding set time; below 60°F set is slower, above 80°F set is faster. In hot weather, cool surface to be patched with cold water and use cold water for mixing. Do not apply when dry product or surface temperature is below 40°F. Do not use "antifreeze" or set accelerator solutions. Do not add any concrete additives, primers, or bonders. Protect from precipitation and freezing for at least 4 hours.

WARRANTY: Due to the use of this product beyond our control, we assume no liability for damages of any kind, and the user accepts the product "as is" and without warranties, expressed or implied, from either TuffTex Materials, Inc. or its agents. The suitability of the product for an intended use shall be solely up to the user. Our only obligation shall be to replace or pay for any material proved defective, with our liability limited to the purchase price of materials supplied by us.