

# Liquid Polymer Mixing & Coverage Charts



## FORMULA FOR ESTIMATING MATERIALS NEEDED

Divide the square footage of the job by the coverage rate shown in the mixing formula box being used. Times that number by the amount of Polymer, Cement and Sand shown in the box to determine approximately how many gallons of each ingredient will be needed for the job. Note: 94 lbs. of cement = approx. 10 gals. by volume. 100 lbs. of sand = approx. 8 gals. by volume. Measure ingredients in one gallon and five gallons buckets for better mixing accuracy or use our pre-mixed 50 lb. Resurfacer-RBM or 1/4" Stamping bag mixes.

**BOND COAT** – Applied in thin applications from 0 – 1/16" thick as a bond coat and resurfacing coat using a metal edge squeegee, available from Concrete Solutions. A hand trowel can also be used. Once the surface has been cleaned, crack repaired with the Concrete Solutions Crack Repair System and patched with an Concrete Solutions Polymer Concrete Patching Mix (if needed), the bond coat is then applied thin over the entire surface to cover all the repairs. It is used to provide a smooth finish and as a bond coat before applying a Concrete Solutions Polymer Concrete Texture Coat, Patching or 1/4" Stamping application. Available in 50 lb. bags called Resurfacer-RBM or mix your own using the formulas below.

BOND COAT					
Five Gallon Bucket Mixing Formula		Mortar Mixer Mixing Formula		Premixed 50 lb Bag Formula	
1 gallon	Concrete Polymer	5 gallons	Concrete Polymer	1 gallon	Concrete Polymer
1 gallon	water	5 gallons	water	1 gallon	water
2 gallons	cement (Portland type I/II, regular or white)	94 lbs	cement (Portland type I/II, regular or white)	1 bag	50 lb Resurfacer
2 – 4 gallons	silica sand (#60 – 90)	100-200 lbs	silica sand (#60 – 90)		

Bond Coat – Approximate Coverage Rate				
Surface Condition	Thickness	Five Gallon Bucket Mix	Mortar Mix	Premixed 50 lb Bag Mix
Smooth	1/64"	400 sq. ft.	2000 sq. ft.	400 sq. ft.
Semi-Smooth	1/32"	200 sq. ft.	1000 sq. ft.	200 sq. ft.
Semi-Rough	1/16"	100 sq. ft.	500 sq. ft.	100 sq. ft.

**BROOM FINISH AND SWIRL PATTERN FINISH** – Applied over the bond coat, when dry to touch, to provide a Straight Broom or Swirl Pattern Texture. Same mix as the bond coat except a fine or coarse bristle broom is used immediately behind the metal edge squeegee to leave the desired broom finish texture. Popular on driveways, patios, pool decks, walkways, parking garages, etc. For steep driveways use the coarse mix for extra traction and slip resistance. Available in 50 lb. bags called Resurfacer-RBM or mix your own using the formulas below.

BROOM FINISH AND SWIRL PATTERN TEXTURE					
Five Gallon Bucket Mixing Formula		Mortar Mixer Mixing Formula		Premixed 50 lb Bag Formula	
1 gallon	Concrete Polymer	5 gallons	Concrete Polymer	1 gallon	Concrete Polymer
1 gallon	water	5 gallons	water	1 gallon	water
2 gallons	cement (Portland type I/II, regular or white)	94 lbs	cement (Portland type I/II, regular or white)	1 bag	50 lb Resurfacer
2 – 4 gallons	silica sand (see grit sizes below)	100 – 200 lbs	silica sand (see grit size below)		

Broom Finish and Swirl Pattern Texture – Approximate Coverage Rate						
Texture	Thickness	Five Gallon Bucket Mix		Mortar Mix		Premixed 50 lb Bag Mix
		Grit Sand Size	Approx. Coverage	Grit Sand Size	Approx. Coverage	
Fine	1/64"	#60 or 90	300 – 400 sq. ft.	#60 – 90	1500 – 2000 sq. ft.	300 – 400 sq. ft.
Medium	1/32"	#30/60 mixed	200 – 250 sq. ft.	#30/60 mixed	1000 – 1250 sq. ft.	200 – 250 sq. ft.
Course	1/16"	#20/60 mixed	80 – 100 sq. ft.	#20,30,60 mixed	400 – 500 sq. ft.	80 – 100 sq. ft.

**TROWEL KNOCKDOWN TEXTURE AND STENCILING** – Applied using a hopper gun sprayer and then troweled flat after several minutes using a hand trowel or funny trowel to create the desired texture. The mix design, air pressure of the hopper gun sprayer, tip size being used (small, medium or large), and the way the material is sprayed and troweled will all determine the final texture. When dry to touch two coats of Concrete Solutions Concrete Colorcoat is applied to achieve a uniform color. Used on pool decks, patios, driveways and walkways. Also used to spray over paper or plastic stencils to create decorative patterns and designs.

**CONCRETE SOLUTIONS® POLYMER MIXING AND COVERAGE CHARTS (continued):**

TROWEL KNOCKDOWN TEXTURE AND STENCILING					
Five Gallon Bucket Mixing Formula		Mortar Mixer Mixing Formula		Premixed 50 lb Bag Formula	
1/2 gallon	Concrete Polymer	3 gallons	Concrete Polymer	see Concrete Solutions Resurfacer bag mix	
1 gallon	water	6 gallons	water		
1 1/2 gallons	cement (Portland type I/II, regular or white)	94 lbs	cement (Portland type I/II, regular or white)		
2 – 4 gallons	silica sand, #60	150 – 250 lbs	silica sand, #60		
Trowel Knockdown Texture and Stenciling Approximate Coverage Rate					
100 – 150 sq. ft. per mix		600 – 900 sq. ft. per mix		see Resurfacer bag mix	
Note: Adjust the consistency of the mix by the amount of sand used. To make the mix wetter add more polymer and water at a 1P to 2W ratio					

**1/4" STAMPING MIX** – Applied 1/4 – 1/2" thick using a gauge rake over a wet bond coat (Resurfacer) or over a wet coat of Spray-Top®, then troweled smooth using a concrete fresno, funny trowel and hand trowels then stamped to leave the desired pattern and/or texture impression. Available in premixed 50 lb. bags or mix your own using the formulas below. (Use Concrete Solutions Accelerator in cooler temperatures to speed up drying time and Concrete Solutions Retarder in warmer temperatures.)

1/4" STAMPING MIX					
Five Gallon Bucket Mixing Formula			Mortar Mixer Mixing Formula		
1/2 gallon	Concrete Polymer		3 gallons	Concrete Polymer	
1 gallon	water		6 gallons	water	
1 1/2 gallons	cement (Portland type I/II, reg. or white)		94 lbs	cement (Portland type I/II, reg. or white)	
4 – 4 1/2 gallons	silica sand (#20, 30, 60)		300 lbs	silica sand (#20, 30, 60 - 1 bag of each)	
<b>Note:</b> For silica sand, mix 1.5 gallons #20, 1.5 gallons #30, 1 – 1.5 gallons #60 To add accelerator: mix 3 – 6 oz to the mix above			<b>Note:</b> For a wetter mix, add a little more polymer and water at a 1P to 2W ratio. To make a mix thicker, add a little more cement and sand at 1C to 2S ratio. To add accelerator: mix 16 – 32 oz to the mix above.		
Bag Mix Formula - Five Gallon Bucket			Bag Mix Formula - Mortar Mixer		
1.75 quarts	Concrete Polymer		3 gallons	Concrete Polymer	
3.5 quarts	water		6 gallons	water	
1 bag	50 lb 1/4" Stamping bag mix		8 bags	50 lb 1/4" Stamping bag mix	
			(Adjust mix with more concrete polymer and water)		
3/8" thick	Approximate Coverage Rate - 20 sq.ft.		3/8" thick	Approximate Coverage Rate - 135 sq. ft.	

**PATCHING MIX** – Applied using a trowel and/or screed rod to patch, level or re-pitch uneven areas, low spots and/or deteriorated surfaces. When patching areas 1/4" or deeper, it is recommended to first apply a thin bond coat using a metal squeegee, or a paint brush or broom over rough surfaces, then immediately apply the patching mix over the bond coat while it is still wet. For patching the edges or corners of joints, steps or curbs, first prime the repair area with a thin coat of Concrete Solutions Epoxy 500 using a paint brush. Patch over the Epoxy 500 with the Concrete Solutions Polymer Concrete Patching Mix while the Epoxy 500 is still wet or tacky (within 15 – 30 minutes). See the Concrete Solutions Training Manual under patching for more detailed information.

PATCHING MIX					
Five Gallon Bucket Mixing Formula Depth of Repair: 1/8 – 1/2" Deep			Mortar Mixer Mixing Formula Depth of Repair: 1/8 – 1/2" Deep		
1 quart	Concrete Polymer		3 gallons	Concrete Polymer	
2 quarts	water		6 gallons	water	
3 quarts	cement (Portland type I/II, reg. or white)		94 lbs	cement (Portland type I/II, reg. or white)	
7.5 – 9 quarts	silica sand (#20, 30, 60: 3 quarts each)		300 lbs	silica sand (#20, 30, 60: equal of each)	
Approximate Coverage Rate			Approximate Coverage Rate		
1/8" deep = 25 sq. ft.		1/2" deep = 6 sq. ft.	1/8" deep = 375 sq. ft.		1/2" deep = 95 sq. ft.
Five Gallon Bucket Mixing Formula Depth of Repair: 1/2 – 1" Deep			Mortar Mixer Mixing Formula Depth of Repair: 1/2 – 1" Deep		
1 quart	Concrete Polymer		2 gallons	Concrete Polymer	
4 quarts	water		8 gallons	water	
5 quarts	cement (Portland type I/II, reg. or white)		94 lbs	cement (Portland type I/II, reg. or white)	
12.5 – 15 quarts	silica sand (#16, 20, 30: 5 quarts each)		300 lbs	silica sand (#16, 20, 30: equal of each)	
Approximate Coverage Rate			Approximate Coverage Rate		
1/2" deep = 12 sq. ft.		1" = 6 sq. ft.	1/2" deep = 95 sq. ft.		1" deep = 45 sq. ft.

**Note:** If a mix seems too thick or dry, it can be made wetter by adding a small amount of Concrete Polymer (CP) and water (W) at 1CP to 3W ratio. For the five gallon bucket mixes, up to 1 cup extra can be added. For the mortar or concrete mixer mixes, up to 2 quarts extra can be added. To make a mix dryer or thicker add more cement and sand at a 1 part cement to 2 part sand ratio, as much as desired.