ULTRA SURFACE POLYMER CONCRETE MIXING AND COVERAGE CHARTS

(Updated July 2003)

Formula For Estimating Materials Needed: Divide the sq. 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 approx. how many gals. 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 or 1/4" Stamping bag mixes.

SQUEEGEE/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 Ultra Surface Crack Repair System and patched with an Ultra Surface Polymer Concrete Patching Mix (if needed), the Squeegee/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 an Ultra Surface Polymer Concrete Texture Coat, Patching or 1/4" Stamping application. Available in 50 lb. bags called Resurfacer or mix your own using the formulas below. [For more information call Concrete Solutions at (800) 232-8311.]

Five Gallon Bucket Mixing Formula:

1 Gallon Ultra Surface Concrete Polymer
1 Gallon Water
2 Gallons Cement [Portland type I/II Reg. or White]
2-4 Gallons Silica Sand [#60-90 grit size]

Surface Condition	Thickness	Approx. Coverage Rate
Smooth	**1/64"**	**400 sq. ft.**
Semi-Smooth	**1/32"**	**200 sq. ft.**
Semi-Rough	**1/16"**	**100 sq. ft.**

Premixed 50 lb. Bag Formula = 1 gal. polymer, 1 gal. water, 1 bag mix

Mortar Mixer Mixing Formula:

5 Gals. Ultra Surface Concrete Polymer
5 Gals. Water
94 Lbs. Cement [Portland Type I/II Reg. or White]
100-200 Lbs. Silica Sand [#60-90 grit size]

Surface Condition	Thickness	Approx. Coverage Rate
Smooth	**1/64"**	**2000 sq. ft.**
Semi-Smooth	**1/32"**	**1000 sq. ft.**
Semi-Rough	**1/16"**	**500 sq. ft.**

Premixed 50 lb. Bag Formula = 1 gal. polymer, 1 gal. water, 1 bag mix

BROOM FINISH AND SWIRL PATTERN TEXTURE - Applied over the Squeegee/Bond Coat, when dry to touch, to provide a Straight Broom or Swirl Pattern Texture. Same mix as the Squeegee/Bond Coat except a fine or coarse bristle broom is used immediately behind the metal 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 or mix your own using the formulas below. [See the Ultra Surface Products Manual Section 6 for more information.]

Five Gallon Bucket Mixing Formula:

1 Gallon Ultra Surface Concrete Polymer
1 Gallon Water
2 Gallons Cement [Portland type I/II Reg. or White]
2-4 Gallons Silica Sand [See grit sizes below]

Texture	Grit Size Sand	Thickness	Approx. Coverage Rate
Fine	**#60 or 90**	**1/64"**	**300-400 sq. ft.**
Medium	**#30/60 mixed**	**1/32"**	**200-250 sq. ft.**
Course	**#20/60 mixed**	**1/16"**	**80-100 sq. ft.**

Premixed 50 lb. Bag Formula =1 gal. polymer,1 gal. water, 1 bag mix

Mortar Mixer Mixing Formula:

5 Gals. Ultra Surface Concrete Polymer
5 Gals. Water
94 Lbs. Cement [Portland Type I/II Reg. or White]
100-200 Lbs. Silica Sand [See grit sizes below]

Texture	Grit Size Sand	Thickness	Approx. Coverage Rate
Fine	**#60-90**	**1/64"**	**1500 - 2000 sq. ft.**
Medium	**#30/60 mixed**	**1/32"**	**1000 - 1250 sq. ft.**
Course	**#20,30,60 mixed**	**1/16"**	**400 - 500 sq. ft.**

Premixed 50 lb. Bag Formula =1 gal. polymer,1 gal. water, 1 bag mix

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 (sm., med. or lg.), and the way the material is sprayed and troweled will all determine the final texture. When dry to touch two coats of Ultra Surface Colorcoat 100 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.

TROWEL KNOCKDOWN TEXTURE AND STENCILING

Five Gallon Bucket Mixing Formula:

1/2 Gallon Ultra Surface Concrete Polymer
1 Gallon Water
1 1/2 Gallons Cement [Portland type I/II Reg. or White]
2-4 Gallons Silica Sand [#60]

Approx. Coverage Rate = 100 - 150 sq. ft. Per Mix.
Note: Adjust the consistency of the mix by the amount of sand used.
Note: To make the mix wetter add more polymer and water at a 1P to 2W ratio.

Bag Mix Formula - Use the Ultra Surface Resurfacer Bag Mix.

Mortar Mixer Mixing Formula:

3 Gals. Ultra Surface Concrete Polymer
6 Gals. Water
94 Lbs. Cement [Portland type I/II Reg. or White]
150-250 Lbs. Silica Sand [#60]

Approx. Coverage Rate = 600 - 900 sq. ft. Per Mix.
Note: Adjust the consistency of the mix by the amount of sand used.
Note: To make the mix wetter add more polymer and water at a 1P to 2W ratio.

Bag Mix Formula - See back of the Ultra Surface Resurfacer Bag Mix.

1/4" STAMPING MIX - Applied 1/4"- 1/ 2" thick using a gauge rake over a wet Squeegee/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 Ultra Surface Accelerator in cooler temp. to speed up drying time and Ultra Surface Retarder in warmer temperatures.]

Five Gallon Bucket Mixing Formula:

1/2 Gallon Ultra Surface Concrete Polymer
1 Gallon Water
1 1/2 Gallons Cement [Portland type I/II Reg. or White]
4-4.5 Gallons Silica Sand [#20, 30, 60]
[Mix 1 ½ gals. #20, 1 ½ gals. #30, 1-1 ½ gal. #60]
Approx. Coverage Rate = 20 sq. ft. at 3/8" Per Mix
[To add accelerator - mix 3-6 oz. to the mix above.]

Bag Mix Formula = 1.75 quarts Polymer, 3.5 quarts water and one 50 lb. bag of 1/4" Stamping Bag Mix.

Mortar Mixer Mixing Formula:

3 Gals. Ultra Surface Concrete Polymer
6 Gals. Water
94 Lbs. Cement [Portland type I/II Reg. or White]
300 Lbs. Silica Sand [#20, 30, 60, one bag of each]
Note: 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 1 cement to 2 sand ratio.
Approx. Coverage Rate = 135 sq. ft. at 3/8" Per Mix
[To add accelerator - mix 16-32 oz. to the mix above.]

Bag Mix Formula = 3 gals. U.S. Polymer, 6 gals. water and approx. 8 bags of 1/4" Stamping Bag Mix. (Adjust mix w/ more Polymer and water.)

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 Squeegee/Bond Coat using a metal squeegee, or a paint brush or broom over rough surfaces, then immediately apply the patching mix over the Squeegee/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 Ultra Surface Epoxy 500 using a paint brush. Patch over the Epoxy 500 with the Ultra Surface Polymer Concrete Patching Mix while the Epoxy 500 is still wet or tacky [within 15 - 30 minutes]. [See the Ultra Surface Products Manual under patching for more detailed information.]

Five Gallon Bucket Mixing Formula: [For patching a minor amount of holes and spalled areas or low spots]

Depth of Repair	U.S. Polymer	Water	Cement [Portland I/II]	Silica Sand	Grit Size	Approx. Coverage Rate Per Mix
1/8 - 1/2"	1 quart	2 quarts	3 quarts	7.5- 9 quarts	#20/30/60 [3 qts. ea.]	1/8" = 25 sq. ft., 1/2" = 6 sq. ft.
1/2 - 1 "	1 quart	4 quarts	5 quarts	12.5- 15 quarts	#16/20/30 [5 qts. ea.]	1/2" = 12 sq. ft., 1" = 6 sq. ft.

Mortar Mixer Mixing Formula:

Depth of Repair	U.S. Polymer	Water	Cement [Portland I/II]	Silica Sand	Grit Size	Approx. Coverage Rate Per Mix
1/8 -1/2"	3 gals.	6 gals.	94 lbs.	300 lbs.	20/30/60 [= of ea.]	1/8" = 375 sq. ft., 1/2" = 95 sq. ft.
1/2- 1"	2 gals.	8 gals.	94 lbs.	300 lbs.	16/20/30 [= of ea.]	1/2" = 95 sq. ft., 1" = 45 sq. ft.

Note: If a mix seems to thick or dry it can be made wetter by adding a small amount of Ultra Surface Polymer and water at a 1 part polymer to 3 part water 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.