

# ULTRA SURFACE FINE BROOM FINISH

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## DESCRIPTION

The Ultra Surface Polymer Concrete Fine Broom Finish was designed as a thin resurfacing application to repair and resurface old or new concrete. For years the only solution to repair cracked, stained or deteriorating concrete was to replace it with 4-6" of new concrete. Ultra Surface Polymer Concrete and other Ultra Surface Products make it possible to fix old concrete without having to remove it. For new concrete surfaces that may have been damaged the fine broom finish provides an economical way to repair the surface and make it look like new again. It is also an excellent application to help protect concrete surfaces from freeze-thaw and salt damage in colder climates. Read the following information with step-by-step pictures for more information on how to apply an Ultra Surface Fine Broom Finish application.

## PRODUCTS AND TOOLS NEEDED FOR THE FINE BROOM FINISH APPLICATION

Description of Application	Product Name	Coverage Rate/Gallon	Tools For Application
Apply a Squeegee/Bond Coat of Ultra Surface Polymer Concrete.	<b>U.S. Concrete Polymer</b> [Mix w/ water, cement and sand or premixed 50 lb. bag mix.]	250 -350 sq. ft. per gallon of polymer.	24" Metal Squeegee, Hand Trowel.
Apply a Fine Broom Finish application of Ultra Surface Polymer Concrete.	<b>U.S. Concrete Polymer</b> [Mix w/ water, cement and sand or premixed 50 lb. bag mix.]	200-300 sq. ft. per gallon of polymer.	24" Metal Squeegee, Fine Broom Finish Broom.
Apply a 1st coat of Ultra Surface Concrete Colorcoat	<b>U.S. Concrete Colorcoat</b>	300 sq. ft. per gallon of Concrete Colorcoat	3/8 - 1/2" nap Paint Roller or Airless Sprayer
Apply a 2nd coat of Ultra Surface Concrete Colorcoat	<b>U.S. Concrete Colorcoat</b>	300 sq. ft. per gallon of Concrete Colorcoat	3/8 - 1/2" nap Paint Roller or Airless Sprayer
Apply one or two coats of Ultra Surface Sealcoat 1000 Clear.	<b>U.S. Sealcoat 1000</b> [Apply undiluted using a pump-up sprayer and a soft broom.]	400 sq. ft. per gallon.	Pump-up or Airless Sprayer, Soft Flag Tip Broom.

## SURFACE PREPARATION

Clean the surface by power scrubbing with detergent to remove oil, grease, dirt or any other contaminants that may interfere with bonding, then pressure wash the surface at close range using a 3000 psi pressure washer to clean and rinse. Acid washing is also recommended. See step-by-step instructions with pictures on how to acid wash in the Surface Preparation section of the Ultra Surface Products Manual. Shotblasting is another popular method for preparing the surface, especially for indoor jobs.

## CRACK REPAIR

After cleaning the surface, fix any cracks in need of repair using the Ultra Surface Crack Repair System. See step-by-step instructions with pictures on how to fix cracks in the Crack Repair Section of the Ultra Surface Products Manual.

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## PATCHING, LEVELING, REPITCHING

Before applying the Ultra Surface Fine Broom Finish the surface should be smooth to achieve the best results. If needed, patch any holes, gouges or deteriorated areas of the surface with an Ultra Surface Polymer Concrete Patching Mix. Feather the edges of the patches to zero or use a right angle grinder with a flat, 7" carborendum grinding wheel attachment to grind the patches smooth. The polymer concrete patching mix can also be used to fill in low spots, level an uneven surface or re-pitch areas with improper drainage. See the Ultra Surface Products Manual under Patching and Leveling in Section Four for detailed mixing and application instructions with step-by-step pictures.

## RESURFACING

The final step before applying a Fine Broom Finish is to apply a thin Squeegee/Bond Coat of the Ultra Surface Polymer Concrete over the entire surface. Apply the Squeegee/Bond Coat using a 24" Metal Squeegee [available from Concrete Solutions] to help smooth out the surface and to cover up any crack repair patches or other patching that may have been done. The Squeegee/Bond Coat also provides extra thickness and durability to the Fine Broom Finish application and makes it easier to achieve a more even broom finish texture. See the Squeegee/Bond Coat mixing and application instructions in the Ultra Surface Products Manual for more details.



Apply a Squeegee/Bond Coat using a 24" Metal Squeegee.

## MIXING INSTRUCTIONS

### FINE BROOM FINISH AND SQUEEGEE/BOND COAT MIXING FORMULA

**Mix By Volume:** (To make a 4 gallon mix change the word "part" below to "gallons")

1	Part	Ultra Surface Concrete Polymer	
1	Part	Water	[Clean]
2	Parts	Cement	[Portland Type I/II, regular and/or white cement.]
2	Parts	Silica Sand	[#60-90 or a 50/50 mixture of #60 and #30 grit for extra slip resistance.]

**Note:** It is recommended to pigment the fine broom finish mix the same color as the Ultra Surface Concrete Colorcoat that will be used. Use Ultra Surface Integral Colors. Using Concrete Colorcoat over the Fine Broom Finish is recommended to achieve the best results and a more uniform color. It is available in concrete gray and 30 standard colors. Custom colors are also available. If not using Ultra Surface Concrete Colorcoat it is recommended to at least seal the Fine Broom Finish with Ultra Surface Sealcoat 1000 Clear to provide extra protection against tire marking and staining.

**Note:** To achieve a new concrete color without using Concrete Colorcoat, or to try to match an existing concrete color it will be necessary to mix white and gray cement together. Try 3-4 parts white cement to 1 part gray or any combination required to get the desired results.

**Slip Resistance:** Do not apply the Fine Broom Finish on a steep slope or driveway as it may become too slippery. For steep driveways a coarser broom finish will be required which can be achieved by mixing coarser sand in the mix such as #20 and #30 and by using a coarser broom. It may also be necessary to add more sand to the mix at a 1 part cement to a two parts sand ratio. It is up to the end user or applicator to determine and achieve the proper texture needed to provide a slip resistant finish. Concrete Solutions or its sales agents will not be responsible for injuries incurred in a slip/fall situation.

# ULTRA SURFACE FINE BROOM FINISH

## APPLICATION INSTRUCTIONS

Once the Ultra Surface Polymer Concrete Squeegee/Bond Coat has been applied and is dry enough to walk on, usually within one to two hours, the Fine Broom Finish Application can begin. Whenever possible the Fine Broom Finish application should be applied during the coolest part of the day or in the shade to achieve the best results.

1. Make sure the surrounding areas are protected then start by spraying the surface with a light coat of water where you wish to begin. Use a water hose with a trigger gun spray nozzle to lightly wet the surface without allowing the water to puddle. The right amount of water will give you more time to spread the material before it begins to dry. Too much water can weaken the mix. **[Remember to pigment the broom finish mix to the same color as the Colorcoat 100 that will be used.]**

2. Pour a row of material out of the mixing bucket approximately 8-10 inches wide next to the starting edge. Start by spreading the material using the 24" Metal Squeegee next to the starting edge and about 5' down the side edges to achieve a thin even coat. Immediately behind the metal squeegee begin brooming the material to achieve the broom finish texture desired. The cooler the temperature the more time you will have to broom the material before it begins to dry. If you have to walk in the material to broom it wear spiked shoes otherwise stand off to the side whenever possible. If necessary an extension handle can be used for long stretches.

3. Before the first row of material runs out pour another row of material on top of it and if necessary spray more water where needed to keep the surface wet. Continue spreading with the metal squeegee and brooming until you reach a joint or stopping point. The best place to stop is at a joint to avoid leaving a seam line. When you are ready to start again carefully spread the material next to the other side of the joint without getting any on the finished side. After the brooming application is completed use a scraper and a paintbrush to touch up any drips around the vertical edges.



1. Make sure surrounding areas are taped off and fog the surface with water where you wish to begin spreading the material.



2. Spread the Fine Broom Finish material to a thin even coat next to the starting edge using a metal squeegee and broom to the desired finish.



3. Before the first row of material runs out pour another row on top of it and if necessary spray more water where needed.



Continue spreading the material ahead of the person brooming using the metal squeegee.



Broom immediately behind the metal squeegee to leave the desired texture.



Scrape or brush the vertical edges where the material drips over the sides.

# ULTRA SURFACE FINE BROOM FINISH

## APPLICATION INSTRUCTIONS CONTINUED

### WHAT TO DO WITH EXISTING JOINTS

4. When the Squeegee/Bond Coat and Fine Broom Finish applications dry to touch within 30 minutes to 1 hour it is important to walk around the surface and cut back open any joints that were filled. The material in the joints will be thicker so it will take longer to dry. It is best to remove the excess material when it is not too wet so it will not be too messy and stick to the finished surface. The material will get to a stage between wet and dry when it is like dry dirt and can easily be scraped out, back to the original edges of the joint then swept up and thrown away.

Using a trowel or a stand up scraper stick one corner in the joint then twist it so both edges are touching each side of the joint Pull the trowel or scraper down the joint like a plow to lift all of the excess material out of the joint and up onto the surface. If necessary the top edges of the joints can be touched up using a damp paint brush. If the material in the joints dries too hard they will have to be saw cut back open using skilsaw and a diamond blade. If any material is left touching in-between the joints delamination can occur next to the joints later on.

### APPLYING ULTRA SURFACE CONCRETE COLORCOAT

5. After cleaning out all of the joints the next step is to apply Ultra Surface Concrete Colorcoat over the entire surface to achieve a uniform color. Concrete Colorcoat is available in 30 standard colors. Custom colors are also available.

6. Concrete Colorcoat can be used straight or diluted up to 10 percent with water and applied using an airless sprayer or 3/8 - 1/2" nap paint roller. When using an airless sprayer, use a .013-.017 tip (see picture 6).

When the first coat of color dries, usually within 1-2 hours, a second coat can be applied if needed. The second coat should be applied straight to achieve the best color uniformity and stain resistance. On driveways it is recommended to apply Ultra Surface Sealcoat 1000 clear as a topcoat for extra resistance to oil and tire marking.

### APPLYING ULTRA SURFACE SEALCOAT 1000

7. After the final coat of Concrete Colorcoat dries (2-4 hours) it is recommended to apply a topcoat seal of Ultra Surface Sealcoat 1000 clear over the entire surface to provide extra stain resistance against dirt, oil, tire marks and other contaminants. Apply the Sealcoat 1000 using an airless sprayer or a pump-up sprayer and soft flag tip broom (available from Concrete Solutions).

**Pour the Sealcoat 1000 through a paint strainer before using to avoid clogging the sprayer.**

To achieve the best coverage spray the Sealcoat 1000 at an 80% coverage rate then use the broom to fill in the other 20%. Use the broom like a big paintbrush and broom in straight rows the same direction as the broom lines (see picture 7). Do not allow the Sealcoat 1000 to puddle or to get wet for 24 hours. [See the Sealcoat 1000 Technical Data Sheet for more information.]



4. Scrape out any material that got in the joints using a trowel or scraper before it dries too hard. Apply Concrete Colorcoat using a paint roller.



6. Apply Concrete Colorcoat using a paint roller.



7. Apply Sealcoat 1000 using a pump up sprayer and a soft flagtip broom.

