

## Solid Surface Finishing Procedures

### Tools Required

Random Orbital Sander

Micro-Mesh Aluminum Oxide Discs

(Discs are available in any size, hole pattern and backing)

### Finishing Step Guidelines

|                       |   |
|-----------------------|---|
| Deep Scratch Removal: | 300 AO  |
| Matte Finish:         | 300 AO, 600 AO  |
| Satin Finish:         | 300 AO, 600 AO, 800 AO, 1500 AO                               |
| Gloss Finish:         | 300 AO, 600 AO, 800 AO, 1500 AO<br>2400 AO, 4000 AO           |
| High Gloss Finish:    | 300 AO, 600 AO, 800 AO, 1500 AO<br>2400 AO, 4000 AO, 12000 AO |

Note: not everyone's idea of a particular finish is the same. Depending on the color and type of solid surface, fewer or more steps may be required in order to achieve the look you want. It is a good idea to check the finish between grades until you become familiar with using Micro-Mesh.

When used properly Micro-Mesh discs will provide you with the best finish imaginable. No special tools are required and you will be able to achieve a matte to a high gloss finish without the use of water or buffing compounds making them not only perfect for a shop environment, but excellent for on-site repairs. Engineered to effortlessly glide across the material, Micro-Mesh greatly reduces the amount of fatigue that fabricators would normally endure while sanding. With Micro-Mesh there is less heat generation so you won't have to worry about burning the material.

### Helpful Hints

1. Light pressure should be used to control sander. The sander should be moved in a random pattern, or in circular motion to "blend" the scratch pattern. We suggest alternating a North/South, East/West pattern, covering the entire surface.
2. The sander should be in contact with the surface before it is turned on. Remove the sander from the surface prior to turning the sander off.
3. Micro-Mesh can be used wet or dry and is reuseable. Simply rinse out the discs and allow to dry.
4. The beginning condition of the solid surface material will determine your starting point. Follow the first step until all of the beginning damage is removed. Make certain to wipe away any sanding debris prior to continuing on with the next step to avoid contamination scratches. Also check the scratch pattern left to make certain that the surface was completely sanded.
5. Each additional step should be used for approximately 1-2 minutes per square foot or until the previous scratch pattern is completely removed. Gloss finishes may require additional time.

### Trouble Shooting

Swirl marks in the finish: do not skip steps. Spend approximately the same amount of time on each step. Be sure to completely remove sanding residue before moving on to the next step. Move the sander in a consistent pattern. Apply less pressure - excessive pressure will change the orbit of the sander causing "fish hooks" in the finish.

Finish not glossy enough: for Micro-Mesh grades 300 AO thru 1500 AO use a standard back-up pad. Change to a soft back-up pad for grades 2400 AO thru 12000 AO.

Finish not matte enough: use a firm back-up pad.

Milky/Hazy appearance: repeat the last step using a spritz of water.

Home owner can't maintain finish: Micro-Mesh Soft Touch Pads are available in any grade or combination of grades. Leave with the home owner so they can feather out scuffs and light surface scratches.

If the finish you desire is not obtained, please contact Micro-Surface Finishing Products Inc. at 800-225-3006 or 563-732-3240 for assistance.

## Acrylic Based Solid Surface Repair Kit Instructions

**Contents:** MICRO-MESH® Aluminum Oxide 3" x 4" Soft Touch Pads:

|              |                   |              |
|--------------|-------------------|--------------|
| 300 - white  | 1500 - peach      | 12000 - gray |
| 600 - yellow | 2400 - lilac      |              |
| 800 - green  | 4000 - light blue |              |

Keep MICRO-MESH® clean; contamination can cause scratches. When repair is complete, rinse MICRO-MESH®, allow to air dry and return to the original packaging. MICRO-MESH® is re-useable!

### Part 1 - General Guidelines for the use of Micro-Mesh® on Solid Surface Countertops

1. MICRO-MESH® can be used wet or dry.
2. Use only 100% flannel for wiping the surface; avoid synthetics and paper towels as these tend to cause scratches.
3. Always work in a straight-line pattern, crossing 90° when you change grits.
4. Complete removal of damage is necessary to obtain the best finish.
5. Remember to match the finish of the reworked area to the rest of the countertop. (e.g. matte, satin, gloss)
6. The severity of the original damage will determine your starting point. All of the original damage must be removed in the first step. Make certain to wipe away any sanding debris prior to continuing on with the next step to avoid contamination scratches. Also check the scratch pattern left to make certain the sanding pattern is consistent.
7. Each additional step should be used for approximately 1-2 minutes per square foot or until the previous scratch pattern is completely removed. Gloss finishes may require additional time.

### Part II - Instructions

1. Determine the extent of the damage. If your counter is satin, gloss or high gloss and only slightly damaged, begin in the higher grades, 600 or 800. If the counter has more severe damage begin with the 300 and work up through the grades.
2. Begin by sanding at a 90° angle across the damage. Sand in a straight-line pattern. Do not sand in a circular motion. Check damage removal every 2-3 minutes. Wipe the surface clean with a soft flannel cloth.
3. If damage has been completely removed proceed to the next grade. **IMPORTANT!** Check surface for correct finish, make sure the repair area is blending with the existing surface finish.

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**IMPORTANT NOTICE:** Micro-Surface Finishing Products, Inc. ("Micro") MAKES NO WARRANTIES, EXPRESS OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. User is responsible for determining whether this product is fit for a particular purpose and suitable for user's method of application.

**LIMITATION OF REMEDIES AND LIABILITY:** If this product is proved to be defective, THE EXCLUSIVE REMEDY, AT MICRO'S OPTION, SHALL BE TO REFUND THE PURCHASE PRICE OF OR TO REPAIR OR REPLACE THE DEFECTIVE PRODUCT. Micro shall not otherwise be liable for loss or damages, whether direct, indirect, special, incidental, or consequential, regardless of the legal theory asserted, including negligence, warranty or strict liability.

## **TECHNICAL BULLETIN MICRO-MESH AO (ALUMINUM OXIDE)**

**DESCRIPTION:** A scientifically engineered series of cloth-backed, cushioned abrasives.

Our MICRO-MESH AO was originally developed to polish solid surface countertops. It will remove the milling marks and provide all finishes from matte to high gloss without the need for using buffing compounds.

MICRO-MESH AO is also used for polishing aluminum instead of the silicone carbide. AO works better for this application because the AO crystals are shaped so that they do not imbed into the aluminum as silicone carbide crystals tend to. The AO crystals break down and polish easier, however, do not last quite as long as our silicone carbide material.

**MATERIALS:** Aluminum Oxide crystals on a resilient layer over a cloth back. The material back is stamped with the following grade number for easy identification:

|        |         |         |          |
|--------|---------|---------|----------|
| 300 AO | 1500 AO | 3600 AO | 8000 AO  |
| 600 AO | 2400 AO | 4000 AO | 12000 AO |
| 800 AO | 3200 AO | 6000 AO |          |

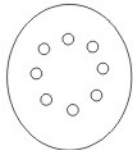
|                      |                |   |  |
|----------------------|----------------|---|--|
| <b>AVAILABLE IN:</b> | <b>Sheets:</b> | 3" x 6"<br>6" x 12"<br>12" x 12"              | <b>Discs:</b> 3", 4", 5", 6", 8", 9", 10"<br>11 1/4", 12", 14 3/4"<br>Loop and PSA backing available<br>Most hole patterns available |
|                      | <b>Rolls:</b>  | 4" x 50'<br>6" x 50'<br>6" x 25'<br>12" x 25' | <b>Soft Touch Pads:</b> 2" x 2"<br>3" x 4"   |
|                      | <b>Kits:</b>   | Countertop Repair Kit                         |  |

### **STORAGE &**

**HANDLING:** When stored between 0-120 degrees Fahrenheit and in a clean and dry environment, life is nearly unlimited. No special handling is required.

**APPLICATION:** MICRO-MESH AO is not an aggressive stock remover. Common sandpaper is required for the removal of deep scratches before using MICRO-MESH.

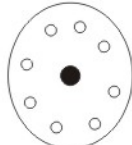
Complete instructions are available on request from MICRO-SURFACE at 1-800-225-3006. Special sizes and shapes are available, please contact MICRO-SURFACE. Kits can be made to specification.



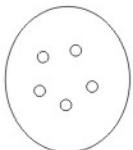
5" 8 hole



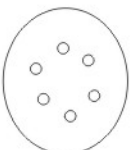
5" 9 hole  
Festool



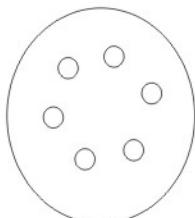
5" 9 hole  
Festo



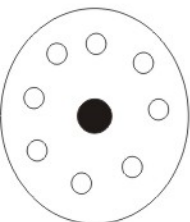
5" 5 hole  
Dynabrade



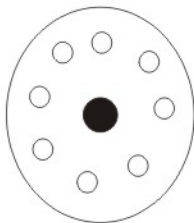
5" 6 hole  
Dynabrade



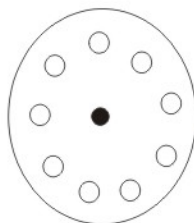
6" 6 hole



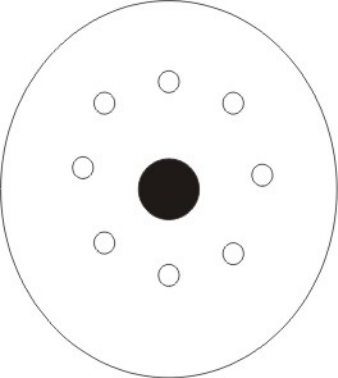
6" 9 hole  
Festo



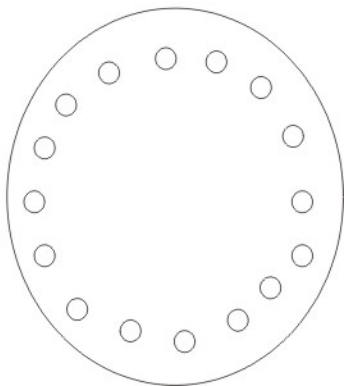
6" 9 hole  
Festool



6" 9 hole  
Fein



8" 9 hole  
Dynabrade  
(9/16" Center)



8" 16 hole  
Fein