Finishing Corian® is a critical part of the end consumer’s perception of your ability to fabricate Corian®.

**Tools required for effective finishing include:**
1. random orbital sander
2. microfinishing disks 100, 60, 30, 15
3. Scotch-Brite® pads (maroon and gray)
4. P grade sandpaper such as 120-180- and 220-grit may be used as an alternative

To effectively check for a uniform finish during sanding, install low-angle lighting behind the work station.

**Helpful Hints:**
Plan for control of dust at the installation site.
Several sanders are equipped for dust control that should be used on-site.
Several brands of large and/or multiple head sanders are available. They make sanding easier, faster and can help to keep the surfaces flat.

The vast majority of countertops should be finished in a matte finish to provide easy maintenance.

**Steps to Completion:**

If surface is free from scratches or defects caused during transportation, handling or fabrication, start with step 4.

1. Load the sander with a 100-micron abrasive disk.
2. Sand the entire top to a uniform finish. Be sure to overlap sanding strokes by at least 1/2 the pad diameter and cover the entire surface. See Fig. 18.2.A

Care must be taken not to concentrate too heavily over the seam area, as this may develop a different look in this area (particularly with particled colors).
3. When this is finished, wipe the top and inspect for leftover scratches and uniform finish.

4. Re-sand the top as in Step 2 with a 60-micron disk and repeat the cleanup procedure. Inspect top once again.

5. Wipe the top down with a wet cloth, then buff with a maroon Scotch-Brite® pad. This will give an attractive matte finish.

6. As an alternative, use 120-grit paper to remove scratches or defects caused during transportation, handling or fabrication, followed by 180-grit paper, then 220-grit followed by maroon Scotch-Brite®. Always sand “North - South, East - West” See Figure 18.2.B

Helpful Hints:
Mask off the work area if site dust control is crucial by using sheet plastic. The finishing process creates excessive dust that can lead to long cleanup time and dissatisfied customers. Never use alcohol to clean dust from the surface. Alcohol leaves a film that requires repeating several steps to remove.

Many installations will have quite a bit of ambient light falling on the countertops. This extreme lighting condition will highlight any seaming imperfection in the finish, including the pattern left by the sander. To minimize these patterns, after every sanding step produce very random motions such as circles and figure-eights as shown in Figure 18.2.C. These motions are conducted at a 45 degree angle and will criss-cross for every level of abrasive used. Only two passes are usually required. One pass at + 45 degrees and one pass at - 45 degrees. See Figure 18.2.C
1. Complete steps 1–4 from Section 18.2, which describes how to create a matte finish for Corian®. Do not use the maroon Scotch-Brite® pad.

2. Re-sand with a 30-micron disk.

3. Wipe top clean with a damp cloth.

4. Buff entire top with a gray Scotch-Brite® pad until uniform semigloss appearance is achieved.

Random orbital sanders lose their effectiveness if too much pressure is applied and the pads stops spinning. To assure that the pad is spinning, mark each sanding pad with four black lines at 0, 90, 180, and 270 degrees. See Figure 18.2.D. These marks will point out if even pressure is applied during sanding. If adequate pressure is applied during sanding, the pad markings will spin freely with a relative blur or "strobe effect". If too much pressure is applied, the "strobe effect" will stop spinning thus, not allow the pad and paper to perform as designed.
A gloss finish in the appropriate end-use application is probably the most aesthetically pleasing finish for Corian®.

However, this type of finish is more sensitive and requires constant care and attention to maintain its look. Do not install a countertop with a high-gloss finish in a high-traffic/high-use area, such as a kitchen. If requested to do so, you should clearly advise the consumer of the special care needed, to prevent unrealistic expectations.

**Steps to Completion:**
1. Complete the steps from Section 18.3, which describes how to create a semigloss finish for Corian®, but do not use Scotch-Brite®.
2. Re-sand the top with a 15-micron disk. Change disks often, as finer grits tend to clog quickly. Repeat cleanup step.
3. Using a low-speed polisher and compounding pad, apply an automotive rubbing compound. Do small areas, overlapping to ensure a uniform appearance.
4. If desired, repeat step 3, using a white car polishing compound.
5. Be sure to wash away any residual polishing compounds.

**Note:**
Any polishing compounds must be washed away thoroughly, as they are not food-safe.

**An alternative method of bringing the top to a high-gloss finish is:**
High-gloss finishes can also be obtained using successively finer grits of abrasive, such as wet or dry sandpaper or “MicroMesh” sanding abrasives by “MicroSurfaces.” Follow manufacturers’ instructions to obtain the desired gloss level.

A high gloss can also be achieved by using Trizact™ film abrasives. In order to be effective, Trizact™ films must be used wet. Due to the possibility of electrical hazards when using water with electric power tools, DuPont highly recommends against wet-sanding with electric powered sanders. Wet-sanding is only to be done with air powered tools.

**Note:**
Do not wet-sand using plug-in electric sanders. This presents an electrocution hazard.

Scotch-Brite® is a trademark of 3M Company, USA.
Tool Requirements:
- air-powered random orbital sander
- 100-micron abrasive film
- Trizact™ films: A35, A10, A5, 568XA
- water and spray bottle to “mist” surface

To sand most effectively, use “pattern sanding.” This involves sanding side to side, overlapping each successive pass by about one-third of the pad. When complete, sand front to back, also overlapping each pass by about one-third of the pad. Repeat this process before changing to the next finer abrasive film.

Steps to Completion:
1. Remove surface blemishes, fabrication scratches, etc., using the 100-micron film abrasive on an orbital sander. This step is done dry. Wipe surface of the countertop completely clean and inspect for defects and scratches. Re-sand if needed. Clean surface again and reinspect. Clean entire top before proceeding.
2. Install the A35 Trizact™ film abrasive on an air-powered random orbital sander. Use spray bottle to lightly mist surface. Pattern sand process the entire countertop as described above. Note: It is imperative to keep the surface misted during the entire sanding process. The Trizact™ abrasives are only effective when used wet. Be sure to sand the countertop twice. Wipe the surface clean and inspect for defects and scratches. Re-sand if needed. Clean entire surface clean before proceeding.
3. Install the A10 Trizact™ film abrasive on the air-powered random orbital sander. Use spray bottle to lightly mist surface. Repeat the pattern sanding process on the entire countertop. Be sure to sand the countertop twice. Clean entire countertop and inspect for defects and scratches. Re-sand if needed. Clean entire top before proceeding.
4. Install the A5 Trizact™ film abrasive on the air-powered random orbital sander. Use spray bottle to lightly mist surface. Repeat the pattern sanding process on the entire countertop. Be sure to sand the countertop twice. Clean entire countertop and inspect for defects and scratches. Re-sand if needed. Clean entire top before proceeding.
5. Install the 568AX Trizact™ film abrasive on the air-powered random orbital sander. Use spray bottle to lightly mist surface. Repeat the pattern sanding process on the entire countertop. Be sure to sand the countertop twice. Clean entire countertop and inspect for defects and scratches. Re-sand
if needed. Use clean water to clean off all mist and sanding residue from countertop. Wipe top dry and inspect. If any defects, splotches or scratches are present, go back to the preceding step and re-sand top. If scratches persist, keep going back to the step needed to remove the scratch or get rid of the splotches.

**Helpful Hints:**
When cleaning the surface between sanding steps, do not use a spray bottle to wet the surface. It’s best to use a bucket of water. Change the water when it looks milky.
A squeegee works very well to begin cleaning the surface when using Trizact™ abrasives and water. Wipe the squeegee clean after each pass.

Obtaining high quality, uniformly sanded finishes on dark colors of Corian® can be challenging at times. In addition, imperfections in the sheet finish can mask flaws in darker colors. This is most serious when adding a semi-gloss or high gloss finish. A new sanding procedure has been identified to obtain consistent finishes on darker colors of Corian®. The system employs new technology developed by sia Abrasives USA, Inc. Using the sia system and the sanding techniques outlined earlier in this chapter, consistent finishes on darker colors of Corian® are more easily obtained.

**Tool requirements:**
- GEM Industries 11” random orbital sander with vacuum shroud and dust removal system
- sia Abrasives USA Inc, sanding materials:
  - 11 1/4” direct mount donut backup pad with soft foam interface pad
    - matte finish: 120, 180, 280 grits, maroon siascuff
    - semi-gloss finish: 120, 180, 280, 400, 600 grits, grey siascuff
- Microfiber hand towels

**Steps to Completion:**

**Matte Finish:**
1. If sheet has deep scratches load the sander with a 120 grit abrasive disk. If no large or deep scratches are apparent, skip to step 4.
2. Sand the entire top to a uniform finish. Be sure to overlap sanding strokes by at least 1/2 the pad diameter and cover the entire surface. See Fig. 18.2.A.
   Care must be taken not to concentrate too heavily over the seam area, as this may develop a different look in this area (particularly with particled colors).
3. When this is finished, wipe the top with the microfiber cloth and inspect for leftover scratches and uniform finish.

4. Re-sand the top as in Step 2 with a 180 grit disk and repeat the cleanup procedure. Inspect top once again.

5. When this is finished, wipe the top and inspect for leftover scratches and uniform finish.

6. Re-sand the top as in Step 2 with a 280 grit disk and repeat the cleanup procedure. Inspect top once again.

7. Wipe the top down with a wet cloth, then buff with a maroon siascuff pad. Make only one pass using a random circular/figure eight motion as shown in Fig.18.2.C. Spray surface lightly with water and sand until water evaporates. Wipe surface clean using a clean microfiber cloth.

**Semi-Gloss Finish:**

1. Complete steps 1–7 from Section 18.6, which describes how to create a matte finish for Corian®. Do not use the maroon siascuff pad.

2. Re-sand with a 400 grit disk. Be sure to overlap sanding strokes by at least 1/2 the pad diameter and cover the entire surface. See Fig. 18.2.A

3. When this is finished, wipe the top with the microfiber cloth and inspect for leftover scratches and uniform finish.

4. Re-sand with a 600 grit disk. Be sure to overlap sanding strokes by at least 1/2 the pad diameter and cover the entire surface. See Fig. 18.2.A

5. When this is finished, wipe the top with the microfiber cloth and inspect for leftover scratches and uniform finish.

6. Buff entire top with a gray siascuff pad until semigloss appearance is uniform. Make only one pass using a random circular/figure eight motion as shown in Fig.18.2.C. Spray surface lightly with water and sand until water evaporates. Wipe the surface clean with a microfiber cloth.