

# Cutting Guide

## Acrylic Solid Surface Benchtops/Slab Tops

Cutting Acrylic Solid Surface Benchtops can be straightforward and manageable. In this guide, you will learn the correct technique, recommended tools and safety advice for a smooth-cutting finish.

### 1 Tools and Safety Gear

When cutting solid surface countertops, having the right tools and safety gear is very important. These items help make the job easier and guarantee safety while working. Here are the essential tools and safety gear needed:



Tool/Safety Gear	Definition/Use
Removable Marker or Masking Tape	Used to draw precise lines where cuts are to be made.
Straightedge	A tool used to make straight and accurate lines.
Circular Saw (40-tooth blade)	Used for making smooth cuts through solid surface materials.
Woodworking Soft-Jaw Clamps	Used to secure the countertop material firmly in place during the cutting process. Always use surface protectors.
Straight-Cut Guide Fence	Used to guide the circular saw to maintain straight cuts along the marked lines.
Respirator	Worn to protect against inhaling dust and particulates during cutting and sanding processes.
Eye Protection	Safety goggles or glasses to shield eyes from flying debris and dust particles during cutting.
Water	Consider using a water spray to cool the cutting area, especially for thicker acrylic sheets, to keep cutter cool.

### 2 Safety Considerations for Cutting a Benchtop

Cutting an acrylic solid surface benchtop requires careful attention to safety to prevent accidents and injuries. It's important to follow safety guidelines for a smooth cutting process. Here are the key safety considerations to keep in mind:

- **Proper Protective Equipment:** Wearing the right protective gear can reduce the risk of accidents. Safety glasses and hearing protection are essential protection from debris, dust, and loud noises.
- **Secure the benchtop:** The benchtop should be securely clamped down before starting the cutting process. This prevents it from moving or shifting, which can lead to uneven cuts or accidents.
- **Keep the Work Area Clean:** Maintaining a clean workspace by regularly sweeping away dust and debris is important. A tidy area reduces the risk of slipping or tripping.
- **Follow Tool Instructions:** Reading and following the manufacturer's instructions for all tools used is crucial. Proper use of cutting tools offers safety and helps achieve the best results.
- **Work Slowly and Carefully:** Working slowly allows for more control and precision, reducing the chance of mistakes or injuries.

### 3 Steps on How to Cut Acrylic Solid Surface Benchtop

Following the correct steps will help achieve the desired results and maintain safety throughout the process. Here are the steps to follow:



#### Step 1. Measure and Mark the Cut Line

First, measure the area where the countertop will be installed to determine the size needed. Use a measuring tape to get accurate measurements, then mark the cut line on the countertop using a pencil and a straightedge or masking tape. Double-check the measurements before proceeding to make sure the line is accurate.



#### Step 2. Secure the Countertop

Place the countertop on a stable work surface and use soft jaw clamps to hold it firmly in place. Ensuring the countertop is secure will prevent it from moving during the cutting process. Use surface protectors to avoid damaging the top surface. Double-check the stability of the setup before starting. This step is crucial to achieving a clean and straight cut.



#### Step 3. Prepare the Saw

Attach a fine-toothed blade to a circular saw, as this type of blade is best for cutting solid surface materials. Adjust the saw's cutting depth to match the thickness of the countertop. Make sure the saw is in good working condition and fully charged if it is cordless. Proper preparation of the saw offers smooth and efficient cutting. Note: Triple Chip or Triple Point Blades work best.



#### Step 4. Make the Cut

Position the saw along the marked line and start cutting slowly and steadily. Keep a steady hand and follow the line carefully to create a straight cut using a track guide for straight cuts if possible. If a curved or complex cut is needed, switch to a jigsaw for better control. Take breaks if necessary to maintain focus and control. Do not allow the blade to get hot as it will start to stick.



#### Step 5. Smooth the Edges

After cutting, use a sanding block to smooth the edges of the countertop. Sand in a circular motion to remove any rough spots or uneven areas. Sand to 600 Grit to get comparable semi-gloss surface finish. This step is important for achieving a polished and professional look. Once the edges are smooth, clean the countertop to remove any dust or debris.

### 4 Common Mistakes to Avoid

Cutting a solid surface countertop can be tricky, and making mistakes can ruin the project or cause injury. Knowing what to avoid is just as important as knowing what to do. Here are the common mistakes to avoid:

#### Incorrect Measurements

One common mistake is not measuring the countertop accurately. Using incorrect measurements can lead to a countertop that doesn't fit properly. Always measure twice to confirm the dimensions before marking the cut line. This guarantees the countertop will fit perfectly in the designated space.

#### Not Securing the Countertop

Another mistake is failing to secure the countertop properly before cutting. If the countertop moves while cutting, it can result in uneven cuts and potential accidents. Fortunately, there's a simple solution: always use clamps to hold the countertop firmly in place. This provides stability and offers a clean, straight cut.

#### Using the Wrong Blade

Using the wrong type of blade for the saw is a common error. A coarse-toothed blade can cause chipping and rough edges. Always use a fine-toothed blade designed for cutting solid surfaces. This helps achieve a smooth and precise cut.

#### Ignoring Safety Precautions

Many people overlook the importance of safety gear and precautions. Not wearing safety glasses, a dust mask, or hearing protection can lead to injuries. Always prioritize safety by wearing the appropriate gear and following safety guidelines.