

What Are Rubber Rocks?

Welcome to Cripplebush Valley Models, home of Rubber Rocks!

We offer the quickest and most realistic way to make bedrock outcrops and quarry faces for model railroad layouts, military models, and other dioramas.

Nature takes millions of years to create the rock exposures we see around us. With rubber rocks, you can model them in a few hours!

What's a Rubber Rock?

Let's start with what they are not. Rubber Rocks are **not** molds. We sell textured, natural rubber castings that are ready to paint and install.

The castings are stiff enough so they require minimal support, but flexible enough to bend around curves. Because the castings are flexible, the details bounce back when touched and don't break. So we can reproduce a level of fine detail that cannot be produced in plaster or other commonly used brittle materials.

Sizes range from 3 by 5 inches to 36 by 14 inches. Rubber Rocks can be easily trimmed with heavy scissors to fit any required space. Anything trimmed off can generally be used elsewhere on the layout, so there's no waste.

Who we are

I'm Gardiner Cross, and Rubber Rocks are my invention. With over 20 years experience in the mining, petroleum, and environmental fields, I have conducted geologic investigations in over 30 states throughout the US, and several Canadian Provinces as well.

Over the years, I've occasionally found small pieces of natural bedrock surfaces that contain so much fine detail that they have the appearance of miniature outcrops. I have collected dozens of samples, hoping to reproduce these intricate textures in plaster.

Reproducing this detail in plaster has proven impossible—the detail is often so fine that the resulting plaster castings are too fragile to stand up to ordinary use. Even casual contact chips pieces loose, leaving white plaster showing underneath. And large plaster castings are heavy and unwieldy: some of these castings would weigh more than 30 pounds! Many pieces would have to be deliberately broken in order to install them on curves or in small areas.

After several years of experimentation, I developed a method for reproducing bedrock surfaces in natural latex rubber. Adapted from the Halloween mask business, the process is labor intensive and time consuming for us, but results in highly realistic castings that

can be trimmed to fit any available space, and are flexible enough to bend around curves. For you, they are very quick and easy to use!

Leave Plaster in the Dust!

Most modelers make their rocks by either carving plaster by hand or by using plaster molds to produce castings that are repeated endlessly throughout the layout. This has a number of disadvantages:

Mess: Nobody likes plaster dust. It flies around the room and settles as dust in hard-to-clean places far removed from your layout. Plaster dust is one of the finest and quickest ways to annoy your spouse or anyone else living in the house.

Fragility: Despite the legendary strength of some plasters such as Hydrocal, plaster simply is not durable enough to reproduce the level of detail that some rock surfaces have. Even if you do manage to create extreme detail, those details will readily break off if you accidentally brush the casting with your hand or a piece of equipment.

Artistry: Face it—although some of us have done a pretty good job of carving plaster to resemble what we see outdoors, few of us can match Mother Nature for sheer artistry. At CVM, we let Mother Nature do our sculpting for us—we search the outcrops of the US and Canada, looking for rocks that will look good on your layout—regardless of what part of the country you're modeling!

Repetition: Although there's nothing wrong with repeating the same bedrock shape several times (we do it ourselves when we install Rubber Rocks) it does become obvious after a while. We offer several different pieces in each of our product lines, allowing you to cover large areas before you have to repeat a casting. In many cases, you can do all the rock surfaces on an entire layout without repeating anything.

What, Exactly, Do I Get?

Currently, we don't use much in the line of sexy packaging. As a matter of fact, we hardly use packaging at all. When your Rubber Rocks arrive, you'll see a plain, gray sheet of stiff, but still flexible rubber.

Please note that our “kits” are sold without instructions as to which pieces go where. Trimming and splicing Rubber Rocks together is largely a matter of personal taste, convenience, and the arrangement of hills on your layout. Although we do make some “serving suggestions” on how the individual pieces can be combined, the creative aspects are really up to you.

What Kind of Rock Should I Use?

The easiest thing to do is to look at the real rocks in the area you're trying to model (or if you're free-lancing, any area that strikes you as interesting). Look through our products and see if we offer something similar. Or just browse until something appeals to your taste.

Stumped? Send us an e-mail with details as to what you'd like to do.

How do I Use These Things?

Cutting

Rubber Rocks can be trimmed with sturdy scissors or with a utility knife. Care must be taken when using a utility knife to avoid slipping and cutting your fingers.

Once the Rubber Rocks have been cut, the pieces can be rearranged in any pattern that strikes you as realistic. Some of the pieces have a natural “up” side, but most contain at least some sections that can be inverted and mounted on the layout upside down if you desire. Cutting along the low spots in each casting makes hiding the seam lines easy. Low spots on rock outcrops are often hidden by soil or debris, so the joints in these areas can be easily covered.

Attaching to the Layout

Attach the Rubber Rocks to your layout using a hot glue gun (our favorite method) or any rubber-compatible adhesive such as Liquid Nails for Projects. Ordinary white glue does not hold very well, and takes quite a while to set up, since the Rubber Rocks do not absorb water from the glue. Avoid any adhesive containing petroleum distillates or solvents.

Often times you will want to attach the Rubber rocks to irregularly shaped surfaces on your layout. This is quite easy—just tack the rubber sheets in place at a few spots, and then fill in behind them. Rubber Rocks are moderately stiff and can easily “bridge” over small irregularities. We recommend that any large voids behind the rubber castings be filled in. This helps hold the rubber castings tightly in place, and minimizes the chance of having cracks appear along the edges of the castings.

Many modelers now use foam insulation panels to build their scenery supports. In this case, small scraps of insulation foam can be “landfilled” into the voids behind the castings once they have been tacked in place.

If you're unsure just how you want to arrange things, you can use pins to temporarily tack the Rubber Rocks to the layout—the hole will seal up when you pull the pin out. And if you hot glue the rocks in place and change our mind later, it's normally pretty easy to peel them loose—the rubber is far stronger than the hot glue.

Splicing

One of the best things about using Rubber Rocks is that you can readily cut them to any size you need. You can't do that with plaster. Now, use your imagination a bit and rearrange the pieces you've cut loose. There's an infinite variety of ways to put your outcrop back together.

The most realistic splices are done in low spots, where the joint can be readily hidden. Just look at a real outcrop—the low spots are often filled in with soil, or rock debris called talus. If you splice your Rubber Rocks together in these areas, it's a snap to hide them with fillers (we prefer Sculptamold), soil cover and vegetation.

Painting

We recommend acrylic paints. Their ability to stay stuck on flexible rubber is truly remarkable. Poly Scale's military and model railroad paints work very well, and come in a variety of brown and gray colors that are well suited to coloring rock surfaces. For larger projects, the thick acrylic paints sold in artist's supply stores are very good, and far cheaper as well. However, these require that you blend your own colors, and you need to be careful not to allow thick globs of paint to dry on the surface.

You must avoid any paints that are not water based. The solvents in other paints will soften or deteriorate the rubber surface, sometimes permanently. Acrylics work so well that there's no need to use solvent based paints, anyway.

There are three basic techniques to use to achieve realistic looking coloring in a short time: **dry brushing** the high spots, brushing **dry pigments** into the low spots, and using **dilute washes** to put subtle coats of colors over wider areas. All three of these techniques are familiar to anyone who has painted plaster rocks in the past, or has applied weathering to locomotives and rolling stock. Both techniques are easier to use on the workbench, but they can be performed after the castings are installed as well.

Dry brushing refers to a technique in which a fairly stiff, short-haired brush is used to apply paint only to the high spots on a model. It's pretty easy to master. Dip only the tip of the brush into the paint, and then apply most (but not all) of the paint to a piece of scrap. Just as you notice the paint is no longer coming off the brush evenly (that is, when you start making streaks on the piece of scrap, rather than a smooth coat of paint), then it's time to apply the rest of the paint to the model. At this point, there isn't much paint on the brush, so as you brush the irregular surface of a rock casting, the paint only adheres to the high spots. That's just what you want.

Typically, the colors dry brushed onto the rock will be a shade or two lighter than the overall color of the outcrop. There are some exceptions to this, so let your own eye be your guide. Of course, if you have photos of the area you want to model, that will help guide your selection of colors.

At least some of your dry brushing should be from up to down, simulating the effects of rainwater and mud dripping over the face of the outcrop. However, it is often easier to give individual beds a distinctive color if you brush from side to side, parallel to the bedding. Either way, you'll only be able to dry brush a small area each time you load up the brush.

Don't try to rush this step. The most common mistake made in dry brushing is to leave too much paint on the brush. You'll recognize this problem immediately, because you end up painting the low spots as well. The solution is simple: either put less paint on the brush to begin with, or remove more of it before painting it on the model.

As you work, you'll notice that paint makes its way from the tips of the brush bristles farther up. Once this happens, it's time to dip the brush in water and clean it. Pat it with a paper towel to get it properly dry before continuing.

If you want to really emphasize shadows in the low spots, you can use **dry pigments** from an art supply store or very fine-grained, dried soil that you prepare yourself. Burnt Sienna pigment is particularly good at establishing dark shadows in a hurry. Use a thoroughly dry paint brush to apply these powders to the surface, then spray the surface with wet water. The water will redistribute the powders into the natural low spots on the casting. It's a very realistic effect, and a nice way of covering up any mistakes you may have made during dry brushing.

Applying **thin washes** of slightly different colors of paint is very easy, and it helps tone down any excessive contrast you may have introduced when dry brushing. We use Poly Scale diluted about 1:4 (paint:water) or Woodland Senics Liquid Pigments diluted about 1:2. The secret here is to wet the rubber surface beforehand by spraying it with a thin mist of “wet water”, which is simply tap water with a drop or two of detergent added. You want to just barely moisten the surface, without leaving a mobile layer of water there.

When a paintbrush carrying dilute acrylic paint is touched to a wetted surface, the paint seems to jump off the brush and rapidly disperse onto the surface. The result is a “feathered edge”, a gradual fall-off in color where the paint gets progressively thinner with distance away from the brush. Let the paint dry before you put too much on the surface, then go back and apply a wash of a slightly different color. Remember that you're not trying to cover the surface evenly each time.

If you produce an effect you don't like, don't worry. As long as you use dilute paints that don't build up to obscure detail, you can always keep applying different washes and pigments until you get it right. Some of our best results have come after several different techniques were applied in succession. After all, that's how nature colors rock surfaces. The last technique worth mentioning is the use of **felt tip pens** (such as magic markers). One of the most effective ways of emphasizing the bottom of a rock overhang is to simply run a black magic marker along the bottom. Poof—instant shadows! Artists' supply stores often carry a variety of more expensive markers in more subtle gray and brown colors as well. These can be used to either add highlights or darken shadows.

Why Are They Such Odd Shapes?

Many of our Rubber Rocks are reproduced directly from irregular pieces of rock we found in nature. The irregular shape you see is what we found in the field.

Some of the larger pieces are basically rectangular, either because we got lucky and found a big rectangular rock, or because we've done some "editing" and made a composite of other, smaller pieces. Either way, the larger pieces can create extensive areas of realistic scenery in just minutes—well worth the higher cost!

But I've Already Done the Rock Work on my Layout...

Buy Rubber Rocks anyway. Our castings can be easily installed over your existing scenery. The increase in realism will be quite noticeable and immediate.

The most important thing to leave enough clearance for trains to pass once the rubber rock is installed. Use an NMRA clearance gauge to make sure your trains will still have enough room to get by.