

you are able to make size adjustments to have the roofing look proportionally better on your model, all the better for you.

You will find that the standard prototype size of metal roofing is anywhere from 16" wide to 24" wide and sometimes even 48" wide. Metal roofing material can be as wide as 60"; however, this is very rare, and unless you are building a huge structure, you should stay away from material exceeding 48" wide.

As for the prototype lengths of metal roofing material, logistics and the material's end destination have a lot to do with the length. Lengths are typically no shorter than 6 feet and no longer than 20 feet. NOTE: The standing-seams/ribs should run parallel to the length of the roofing material and NOT the width. Many modelers make this mistake and wonder why the roof looks odd and why Contest Judges subtract points from the contest model in the Prototype Category for this oversight.

After you have decided upon the size of the individual metal roofing strips, and before you cut them, here is a preparation tip that will save you some work later on: Use a lint-free paper towel or a cotton swab to wipe down both sides of the roofing material with a cleaner (such as rubbing alcohol), and allow the surfaces to dry. If you just can't wait, you can hurry things along with a hair dryer. If you are going to use the painted/ weathered technique on this roof, then apply a couple of coats of Doctor Ben's Aged Driftwood Weathering Stain (#1097/#1080) as an adhesive/sealer and allow the stain to dry. This Doctor Ben's product has polymer binders that enable it to stick to most surfaces; and it dries really fast, too!

After the stain on the metal roofing material is dry, use an X-Acto® knife and a new #11 blade to cut the material to the predetermined sizes.

Applying the roofing material

The next step is the preparation of the surface that the roofing material is to be applied. Begin by sanding smooth any protruding or loose particles that may leave unwanted "bumps" on the surface where the roofing material is to be applied and removing any debris or dust. And if the surface is too porous or has heavy grain, you should consider some sort of primer, such as applying a couple of coats of Doctor Ben's Aged Driftwood.

Next is one of the best-kept non-secrets in the hobby: Doctor Ben's Super Sticky Adhesive (#2924). This product comes in a 1/2" by 36-yard roll, and it practically sticks anything to anything—really! It works with sealed porous material and non-porous material, so it is very easy to laminate plastic to wood; wood to plaster: metal to wood; and just about any other application you might need. Therefore, it is perfect for attaching metal roofing



material to roof substrate made of cardstock, wood, plastic, etc.

After all the above preparation has been completed, begin by un-rolling the Doctor Ben's Super Sticky Adhesive, measuring out how much you need for a single application across the surface of your roof substrate. Then cut enough strips to cover the material from bottom to top. It doesn't hurt to let Super Sticky Adhesive hang over the edge about 1/16" or so. You will cut this off later.

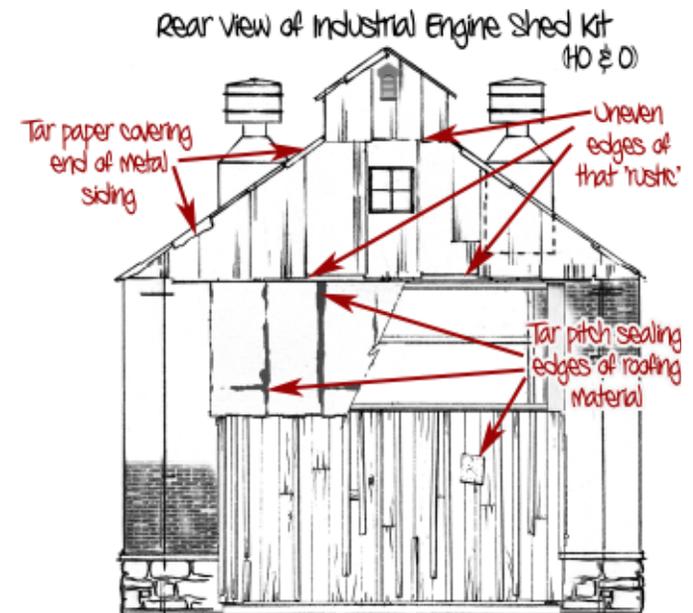
Apply one of the pre-cut strips, sticky side down, on the surface of your material. Carefully burnish the adhesive down, pressing firmly on the protective waxed strip still attached to the Super Sticky Adhesive. When you apply each additional strip you do NOT need to overlap. All that is necessary is to rest the next strip of Super Sticky Adhesive up against the previous piece and continue the in the same way until you have the desired area covered. Then peel off the protective paper and start applying the pre-cut roofing material. As you apply the individual pieces of the pre-cut roofing material, very little overlap from one piece to the next is needed. In fact, less is better, resulting in less chance of having an overlap that looks too obvious and out of place. After one row is in place, begin the next row up, and so on to the roof peak.

If you make a mistake and the material that you are applying is very thin, try to strip it off and reapply the Doctor Ben's Super Sticky Adhesive. If you are gluing something that is thicker, you can try using a heat gun to soften the adhesive. You can also use a lacquer thinner if the lacquer thinner will not ruin your materials.

Coloring & Staining

The following is an excerpt from the Scale Model Masterpieces Industrial Engine Shed Instructions for finishing and weathering metal roofing. The process is the same for whatever color you would like to use on your roof.

After all the metal roof pieces are attached into position, use short strokes with a 1/4" round brush to apply Doctor Ben's Nautical Teak Industrial Weathering Stain to the Corrugated Metal Section: Continue applying multiple layers of the Nautical Teak until all of the roofing material has been covered with this stain. Try to overlap some areas and leave just a thin stain on others. To the layman's eye, this technique may look



horrendous at first, but this method requires a leap of faith. Allow the Nautical Teak Stain to dry to the touch.

Now, using Doctor Ben's Primer Red Industrial Weathering Pigment and a small cup of water/rubbing alcohol, wet the 1/4" brush—dabbing off most of the moisture onto a paper towel, and repeat the above technique, dry brushing the Primer Red Pigment on the roofing material. After the dry brushing, look for any shiny spots and dry brush them with just enough Primer Red Pigment so that the shiny metal does not show through. Apply several coats of 50/50 Doctor Ben's Instant Age Weathering Solution (#1152/1153) and alcohol with a Doctor Ben's Micro Blaster (#1490) or fine mister to the roofing material. The Instant Age should set the Primer Red Weathering Pigment so that it does not rub off. However, if the pigment comes off when handled, use some pump hair spray or dullcoat product as a fixative and set aside.

You may consider adding "tar pitch" to areas where the roofing material meets up against the side of a building or when one piece of roofing material is used to "patch" another area of a roof. This is easily done by mixing white glue with Doctor Ben's Weathered Black Industrial Pigment (#1103). Just a small spot of white glue and just a minor amount of pigment is needed. Mix the two together with a toothpick, apply and allow the "tar pitch" to dry overnight.

Thank you for trying our product!

Please send questions, inquiries & comments to:

DEBENLLC Publications & Products

910 Millvale Place SW
Lawrenceville, GA 30044-6239
Customer Service.: 770/ 666-8100
www.DEBENLLC.com

Doctor Ben's Corrugated Material Instructions

(HO, S & O Scales)

Many manufacturers offer scale model corrugated and standing-seam roofing materials for hobby and craft use. These are offered in many scales/gauges and available in many materials, including aluminum, plastic, and paper. Unfortunately, not all manufactures are exactly accurate with the dimensions of their products, nor do they provide ample instructions for the application and finishing of these products. We hope that the information that we provide here will solve many of the questions you have about the fastest, easiest way to apply corrugated material, as well as a quick and easy technique to apply finishes and weathering.

About the material

As mentioned above, the roofing material that you have previously purchased may be of no particular size and orientation. What this means is that in any scale that you model, there is a quasi-standard prototype size by which the material is manufactured. The hobby manufacturer has left it up to you to cut your scale material into the appropriate size and shape. This is both good and bad. The bad is that this work is left up to you, and you may find it a challenge to evenly cut these materials. The good is that many times prototype size looks too big or too small on a scale model. Therefore, if

