Basics for building dioramas

*Modeling by Scott T. Hards*

Great modelers can make it look easy. Fortunately for the rest of us, sometimes it really is easy – not to mention fun.

Naturally, we all want to build the best, most accurate models we can. We strive to make each model a little better than the last.

But they don’t all have to be masterpieces. And sometimes the best way to take your modeling to the next skill level is to experiment. Necessity may be a mother of invention, but so is goofing around.
With plan in hand, Scott’s off to the store for materials. A thin, easy-to-saw sheet of plywood will be the base; trim molding will frame it. Scott also picked up a couple sheets of styrene foam to serve as bedrock for the terrain.

Shopping in Tokyo, Scott chose Dufix for groundwork material. An American product with similar properties would be Durham’s Water Putty, which can be mixed with water to form a batter that’s easy to shape before it solidifies.

Common household items can come into play, such as this strainer (later used for sprinkling soil). Scott’s expert advice is to stay on the good side of housemates: “Don’t use your wife’s or mother’s kitchenware,” he says.

Nor could spend days, weeks, perhaps even months building the perfect display base for a model. Or it could be a just-for-fun weekend project. That’s what modeler Scott T. Hards had in mind when he decided to throw together a 1/35 scale diorama using some extant models and materials you could pick up in one trip to your local hobby shop or hardware store. Sure, Scott’s one of those advanced modelers who make it look easy. But here’s a chance to look over his shoulder and pick up the basic steps to building a display base for almost any sort of model.

A project like this can be a lively way to get kids involved (appropriately aged and protected according to the ingredients, of course). Or you can just while away some time with a low-pressure, relaxing project – which really is the big idea. If you find yourself too much caught up in the pursuit of perfection, take a break and have some fun! FSM

Modeler Scott T. Hards, with help from friends Naoki Nakamine and Masahiro Doi, built a 1/35 scale scene from the savage battle for Saint-Lô during the Allied breakout from Normandy. Featured in the display are a Tamiya M4 Sherman, Modelkasten PaK 40 gun, and Verlinden wall and foliage. The skewed telephone pole is a refugee from an Italeri set.
Scott glued the frame and base together, filling gaps with putty. Epoxy is fast and strong, but wood glue gives you more time to square the corners and clamp the frame. Let the frame dry on a level surface so it won’t twist.

Gaps and nicks in the wood can be filled with putty, but putty (or stray glue) won’t take stain. You can repair a spot like this by sanding off the glue, painting the spot to match the stain, or blending it in with a furniture-repair product such as Old English Scratch Cover.

After cutting the foam to the desired shapes and layers, Scott glues it in place. Use a toothpick to verify the glue is set before proceeding.

After gluing, Scott brushes on an oil-based stain. Let the frame dry on a level surface so it won’t twist.

After the frame dries, Scott builds a styrene-foam bedrock foundation for the groundwork. A keen knife is the best way to get quick, smooth cuts. However, these foam steps will be smoothed when the groundwork is poured.

Spread the plaster with a trowel or spatula. If you’re using Durham’s Water Putty, you have about 20 minutes before it sets up, and 45 minutes before it becomes rock-hard. Durham’s instructions suggest adding a little milk or vinegar to slow the cure, giving you more time to work.

Before the groundwork dries, Scott sifts finely powdered soil on the still-moist surface. Tip: If you want a smoother surface (or your groundwork dries too fast), you can finish with a layer of premixed spackle; add a dash of white glue to the spackle to improve adhesion.

Remember that advice about preserving domestic peace? Scott thoroughly mixes the groundwork material in a clean, disposable container. Use a good piece of Tupperware for this and you’ll never get out of the kitchen alive.
Still modeling against the clock, Scott and friends work together to embed pebbles, stones, bricks, etc.

Let your fingers do the landscaping to get realistic groundwork. A gentle, sweeping touch works best.

Making a good impression: Scott marked the location of the tank …

… then pressed tracks into the still-liable surface. He used spare track links to avoid mucking up the finished model.

Applying a coat of Liquitex matte medium to the groundwork makes it a receptive surface for acrylic paints.

Moistening the medium with water provides a tacky surface for static grass.
While everything on the groundwork was drying, Scott turned his attention to painting a tank crew mustered from his spares.

This Modelkasten PaK 40 white-metal kit suffered cruel modification before being painted and weathered.

Local color: Scott painted the groundwork with Tamiya flat earth, desert yellow, red brown, and flat black.

Like the kits, the wall and other major elements of the diorama were painted before placement.

The grass was airbrushed with a mixture of olive green and desert yellow, then dry-brushed with lighter shades of the same to accentuate detail.

After painting, Scott carefully removed the masking tape from the base. Stay close and go slowly to avoid marring the frame.
The results: Victorious Allied forces break out from Normandy, and Scott and his friends have a ball making a diorama base that lends life to a static model. Try some of the techniques for yourself and you’ll have a ball, too!

Scott T. Hards is owner and president of HobbyLink Japan, Ltd.

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The trees are transplanted in holes Scott dug out with a pin vise.

While the painted foliage was still wet, Scott rolled it in “scenery powder.”

The vegetation looked sparse for July in France, so Scott added more branches and leaves.

Scott planted Verlinden shrubbery in a styrene-foam painting stand and sprayed it from above.

A generous dab of glue at the base of the trunk ensures the tree is firmly rooted.

Scott drilled a hole in the base, pushed a bolt through, and secured the Sherman with a nut.

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Project at a Glance

Kits and pieces: Tamiya M4 Sherman; Modelkasten PaK 40; Verlinden wall and foliage; Italeri telephone pole; tank crew figures.

Materials and tools: Plywood sheet; trim molding; miter box; fine-toothed saw; wood stain; filler putty; Dufix (try Durham’s Water Putty); premixed spackle; styrene foam; trowel or spatula; hobby knife; white glue; wood glue (or epoxy); masking tape; disposable mixing containers; strainer; soil, pebbles, etc.; static grass; power drill; pin vise; brushes; Liquitex matte medium; Tamiya acrylic paints.

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