Modeling Asphalt Roads – by Steve S.
From a blog posting on Model Railroad Hobbyist

I've been working on a small mockup to test some ideas for asphalt and street trackage.

I used 1mm black craft foam on code 100 track. You can go the full width of the rails and not interfere with the flanges, as long as they aren't pizza cutters. The stuff at Michael's is 2mm (Hobby Lobby's is even thicker), which is fine for roads without track, but for street trackage you'll need to order some 1mm. An eBay seller named Wandy-Foam sells it.
The white foam underneath is Readiboard from the Dollar Tree store. While you're there, get some LA's Awesome spray cleaner. Spray it all over the board, wait a minute, and then peel off the paper layers. Do both sides or it may warp. You'll be left with a foam sheet that's a few millimeters thick. I sanded the white foam to give the road a crown. I also sanded in some dips and ruts, though they don't show up very well in the photos. They need to be exaggerated.

The paint is water-based craft paint from Michael's or Walmart. You can buy shades of gray paint, but if you want to mix your own, mixing black with white will result in a blueish tint. I mixed black with a light tan (suede) to remove any tint. I dabbed it on using a damp kitchen sponge. Look for a sponge that doesn't have any sort of pattern embossed into it. I also cut the sponge in half, using one half to apply the paint. The other was kept clean and damp and was used to remove paint if needed, such as the dark areas down the middle of the lanes. You want to dab the sponge on something else first, such as a piece of cardboard, to remove some paint (sort of like dry brushing.)
After the paint is dry, you can create patches and large cracks by tearing the craft foam. If you want fairly straight lines, score the underside of the foam with an X-Acto before tearing it. If you want more irregular lines then don't bother scoring first. To darken the patches I just ran them under the faucet for a minute and rubbed them with my finger to remove paint. Some patches are lighter than the road, so mix up a batch of light gray and dab some onto the patch.

For the small cracks I took a straight pin, clipped off the head, and chucked it into my Dremel mototool. I also used the grinding wheel on my Dremel to file a flat spot on the side of the pin point to give it a bit of a cutting edge. Then just etch the cracks into the craft foam. You can control the width of the cracks by how deep the pin penetrates. It helps to have some reference photos when drawing cracks. The street view on Google maps is good for this. You can paint tar lines on some of the cracks with a long thin brush. Use very dark gray instead of black because even tar fades.

For the white lines, I didn't want to use decals or chart tape because those would be too perfect for an old worn road. I used masking tape to mask off the lines. I reduced the stickiness of the tape by pressing it to the floor and pulling it up a few times. Even after doing this it took up a little bit of paint which really didn't look that bad. It gave some random wear to the pavement. If you don't want the tape to pull up any paint you should probably seal the foam with clear flat spray paint first.

I used the sponge to dab the white paint for the lines. The water in the sponge apparently allowed the paint to bleed a little under the tape making the edges a little messy in spots. I probably should have used a cosmetics sponge for this. Those don't need to be moist to be kept soft.

I brushed some real dirt onto road to make it look better.

I attached the craft foam to the white foam using spray adhesive.

Mon, 2014-03-31 01:19 — Stevem S

Since older pavement is generally lighter than newer pavement those light colored patches might look a bit strange unless they are representing concrete patched areas? .....DaveB

I see lots of light colored patches around town, and it's asphalt, not concrete. I'm not sure why it's lighter.
ETA: I should give credit where credit is due. I originally tried a technique described by Dan Crowley where he brushed tinted plaster on top of craft foam. The rigid plaster wasn't suitable for between the rails, and it didn't really allow for cutting out patches, but it got me to experiment with the craft foam.

Thanks for all the comments.

1- Sounds like the base layer material you are using is Foamcore?

Yeah, it's Dollar Tree's version of foamcore. It differs from other brands because the outer layers are just paper rather than heavier boxboard, so it's easy to soak the paper off. It's also really cheap ($1 per sheet.) If you don't have any Dollar Tree stores near you, see if you LHS has Depron sheet.

2 - Is the "Craft Foam" essentially the same stuff as the core of the foamcore base, minus the paper facing?

No, craft foam is very soft and flexible. You could tie a strip of it into a knot. If you have a Michael's or Hobby Lobby near you, they both carry it, but it's a little too thick for code 100 rail. If you're just doing roads with no track, than theirs should work fine. I've never found 1mm locally. You might get lucky if you have a good art supply store nearby.

Wandy-Foam has a number of 1mm and 0.5mm think options, but would like to know what it actually is,

The technical name is EVA foam (don't know if that helps.) The 0.5 mm should be suitable for N scale.
3 - is there need to carve any form of flangeway, or are stock-weight HO cars heavy enough to run thru as-is?

The 1mm foam should be fine on most code 100 track. I used Atlas code 100 track for the test which doesn't exactly have the smallest spike heads. If for some reason your foam is interfering with the flanges, you could always sand down the edges of the craft foam. You'd probably want to sand the underside so you don't change the texture of the top surface.

4 - have you tried cleaning the track post-foam+paint application? Any risks in tearing up the surfaces?

I haven't tried it, but as long as you keep everything below the railhead it shouldn't be a problem. The foam between the rails should be okay, and you may need to shim up the track (or sand down the white foam) to keep the railheads above the outer pavement. Or just use white foam of a different thickness for the outer stuff. My local hobby shop sells Depron foam in various thicknesses. It's just a lot more expensive than the Dollar Tree stuff. Do some tests to see what works best for you.

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Have you attempted to model an in-street turnout using this method?  I'd be interested to see pictures!

My first test with this stuff was on a turnout. It was with the 2mm stuff which is too thick. But it should work fine on turnouts.

If you do it like I did above, the foam is soft enough to bend with the points. Or you could do like the pic below so that it doesn't move at all.
But I have a problem modeling intersections. And hiding joining points. Most asphalt roads appear seamless. Curves also present problems.

How do you handle that?

Thanks again for all the comments.

To hide the seams you could do like Fuzzy said above. Make it look like a crack. Tear a fairly straight line near the edge of one sheet, then overlap that on top of the next sheet (you want these both to be face down.) Use an X-acto to scribe a line in the bottom sheet along the crack. (see pic below) Then tear along that line. The two edges should match up pretty well. You could also add a few other long cracks at random places just to break up the repeating pattern.

It's worth noting that if asphalt has been laid on top of a pre-existing concrete-slab road, you'll often have a repeating pattern of cracks that corresponds to the edges of the concrete slabs.
You could also do something

Wed, 2014-04-02 22:24 — Steven S

You could also do something like the pic below. Just make a patch that goes across the road. The line is straight because they probably used a big circular saw to cut the pavement.
1) What do you use to adhere the layers together?

I used Uhu (or Elmers) to glue the white foam down. Then I used spray adhesive to glue down the asphalt. The foam between the tracks doesn't really need to be glued down. There should be enough friction against the rails to hold it in place.

2) What role does the foam play on the sides of the track?

That's just supposed to be a shoulder.

Why does the paper need to be removed?

So you can sand a crown shape.

3) What is that unmentioned layer beneath the track?

I forgot to mention that I shimmed it up. It's either that or sand down the foam more.