KITBASHING A PHOTO - REALISTIC CARD MODEL

Lynn Zelmer describes the techniques he uses to create convincing card models.

Readers of other Australian modelling magazines and followers of my Capricorn Sugar Rail Museum (CSRM, www.zelmeroz.com/csrn) will be aware that I have designed and built several Queensland prototype models using photorealistic card techniques. For the uninitiated, these models have been developed using optimized and scaled photographic images printed on card or paper, cut out and assembled. Multiple copies of timber siding, window frames, doors and other elements are assembled in layers to achieve a very realistic three dimensional model. For this model I used a 210gsm card print as a construction base, reinforced with heavier mat board or foamcore as appropriate, and a visible surface layer printed on [Epson] photo quality inkjet paper.

As part of my learning process I've used a number of the US-based Clever Models LLC photorealistic kits and textures, initially downloaded 'freebies' and then purchased on disc (www.clevermodels.net). The process included assisting Clever with a modeling project, following which they named a new warehouse kit after me. I had provided suggestions for the structure and, while it took a couple of years for the kit to be developed, I received 17 pdf files (77.1 Mb) comprising the kit earlier this year.

Having received the kit files, including the computer-generated assembly drawing, I decided to do a trial build so that I could see what the structure really looked like. However my current modeling needs—remember that I mostly work with small dioramas and micro layouts—suggested that a background flat would be more useful than a relatively large building.

Building the Model

The kit includes a variety of door options, including the small annex shown in the assembly drawing. I've previously built other background flats and a slice roughly four scale feet in depth off one end of the warehouse seemed about right for this model. I left the annex off as its inclusion would extend the model too far into the module/diorama, and in any event it didn't seem appropriate for a Queensland structure. Using Adobe Acrobat and Photoshop I extracted the appropriate images from the kit files and prepared new pages (cut and paste) containing just the required components for my kitbash.

I decided to retain the cut rock foundation, although either a poured concrete or rendered brick foundation might be more appropriate for Central Queensland. After all, some stone is available locally and might have been used by a contractor building a warehouse for a small town merchant. However, the foundation prints in the kit all end at the building corners, whereas stones obviously extend around a corner. This was relatively easily resolved in Photoshop using a cut and paste technique, cloning some stones and modifying others.

Card model construction techniques and tips are readily available, including from the Clever web site and my published articles. I use a self-healing cutting board, a steel straightedge, a scalpel with a pointed blade and
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white glue for most of my card modeling. My only non-standard technique, aside from the Photoshop kitbashing, is the use of the photo quality paper print for the visible surfaces. This results in a more realistic appearing model because of the crispness of the print as compared to one on a somewhat rougher card surface.

This is not the first model where I've included a view of the interior, but it is the first where I've used a photo of a building's interior for that purpose. The shelving photo was taken in a Caboolture Museum shop and is placed about two scale feet inside the window, with enough surrounds so that the edges cannot be seen while looking through the window. The window 'glass' is cut from the packaging for another model and is held in place by the extra layer of reinforcing (1/4" foamcore) behind the wall. The LED light is powered by a 3.2 volt 'button' battery and is turned off by removing the battery.

The BP and SGIO signs help locate the building in Queensland and come from the outside of the same Caboolture building which provided the interior photo. They were straightened and scaled in Photoshop before being printed on photo grade paper.

My model was built in O scale (1:48) but the techniques are similar for any scale. Card kits are typically available in several scales and can be reduced/enlarged when printing (print dialogue box) for other scales. It is more difficult to do individual board construction in the smaller scales, but photo quality paper prints with selected 3D details—perhaps just an extra layer of door and window frames—makes a very realistic model in the smaller scales. And photo realistic kitbashing, in whatever scale, results in a unique model without requiring you to build from scratch.

The Clever kits are available from their web site. The Queensland-oriented models I've designed (structures, QR camp wagon and miscellaneous items) and others from Jim Fainges are available as free downloads from the Modelling the Railways of Queensland Convention web site (QldRailHeritage.com/mrqc).

While I do have permission to use some of Clever's textures in my kits, the files for this kitbash will not be available from me as the kit itself will be available from Clever Models in the near future so you can do your own kitbashing.

Happy modeling, whatever your scale or interest!
The photo above is a good example of how effective this method is in producing cost effective and very convincing models using Lynn’s techniques. The photo at left shows the method described in the text of how to light the building using LED’s. The fact that LED’s do not generate a lot of heat and use very little power means that this is a great way to light model buildings on your layout. If you have not had a chance to visit Lynn’s website you should take the time to have a look especially if you are interested in narrow gauge modelling.

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