HO SCALE MODEL ROAD CASE

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Introduction

Acquiring ready to run models, building model kit, scratch building models and kit bashing can be enjoyable. It is great to place the models in a case for display where no harm can come to them. Transporting the same models without doing any damage can be tricky. The packaging provided for ready to run models will only last so long before disintegrating. We have to make our own packaging for transporting models we have built from scratch or kits. I was at a gathering of modelers one weekend and one of the modelers opened up a metal tool case, not much larger than a brief case, to get his models. He had used ready made foam racks to protect his models. I was impressed with the concept and decided to try something a little different. The result is a method of transporting HO scale model railway stock without destroying it. My solution allows for two levels of trains in the metal case. The bottom level is basically the case lined with foam. The top level is a plywood tray lined with foam on the inside and padded with bubble wrap on the bottom. The following is an outline of how the case may be modified and how an upper level tray may be constructed. Cases available in stores might vary in size and the instructions, dimensions, etc. shown herein may not apply. Check the dimensions of your case before cutting any timber for the upper level box.

Materials Required

One metal tool case
50x9mm foam
7mm ply for the edges of the upper level box
3mm ply for the bottom of the upper level box
Plastic bags to wrap carriages

All the materials were obtained from one of the big hardware outlets.

The case used in this article is a Craftright Aluminium Tool Case, it cost $23.88. The foam is Ormonoid Ableflex Handipak 10mm x 50mm x 6m zipped expansion joint and cost $4.88 per roll. The 6m roll of foam was enough to make three complete road cases. I used some scrap 7mm and 3mm plywood. The bubble wrap was some I reused. The plywood and bubble wrap may also be purchased at one of the big hardware outlest.

Preparing the Case

Strip the interior of the case of all dividers tabs and tool pouch. Do not discard the two long dividers that come with the case.

Lining the Case Bottom with Foam

Cut foam to fit the entire bottom of the case so the strips run along the length of the case.

Glue the foam to the bottom of the case with PVA glue. Place a piece of plywood over the foam, place a weight on the plywood and allow drying over night.

Trimming the Dividers

The dividers have a flat and rounded edge. Trim the dividers from the flat edge so the will be 52mm tall when standing in the lower level of the case. The dividers will be supporting the upper tray and keep pressure off of the models placed in the bottom of the case.


The dividers are then inserted in the slots. Place them in slots within 100mm of the ends of the case. In some instances I have placed the dividers in the slots at the very ends of the case (see pictures of examples at the end of the article).

Note: I encountered a problem whilst using a table saw to trim the dividers. The portion being trimmed off had a tendency to find its way into the saw. The padding on off cut produced enough friction to stop the saw from spinning. If your table saw has no overload protection be prepared to shut it off when the blade stops spinning. Somebody probably has a common sense solution to this or will point out I need some safety training before operating a table saw again.

Upper Level Tray Plywood Construction

The upper level box is constructed with 7mm plywood for the sides and 3mm plywood for the bottom. The 7mm thick sides are made from strips 61mm wide. The finished plywood box (for my cases) is 64mm high (61mm strip side and 3mm bottom) 435mm wide and 304mm deep.

When placed on the trimmed long dividers (see page two for divider trimming instructions) there should be 3mm clearance between the face of the plywood box and the padded interior faces of the metal case.

435

304

TOP

64

FRONT
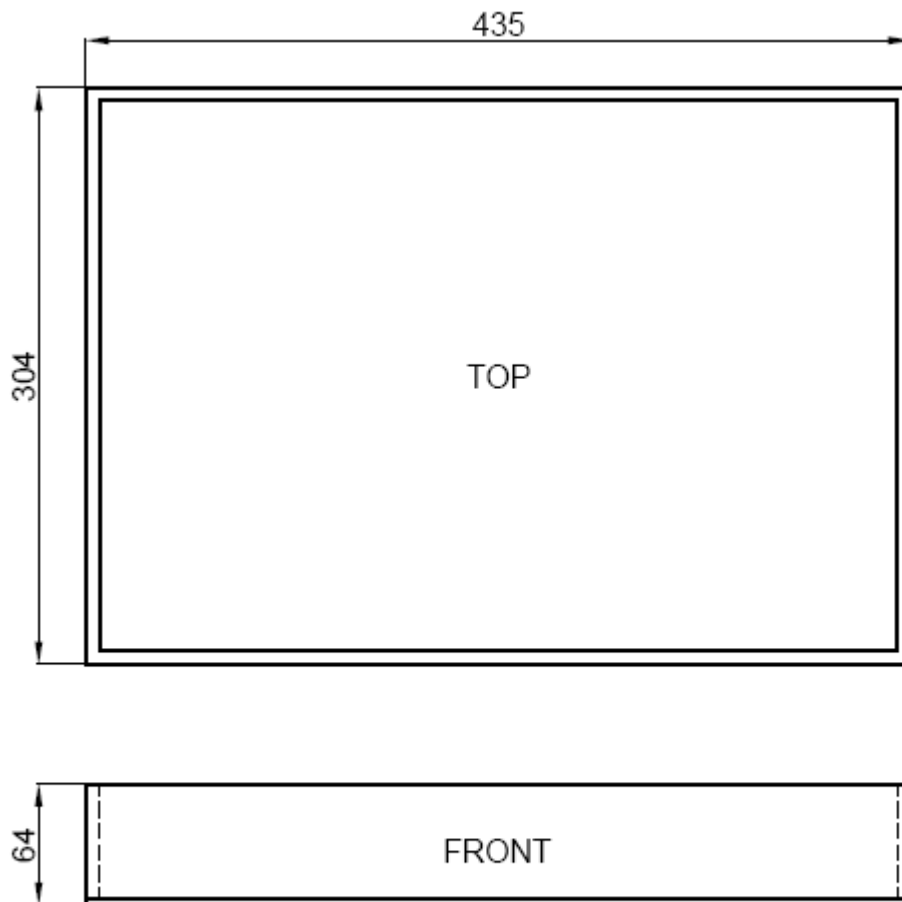
DRAWING #1
UPPER TRAY PLYWOOD CONSTRUCTION

Lining the Inside of the Upper Level Tray

Cut foam to fit the entire bottom of the tray so the strips run along the length of the plywood. Glue the foam to the bottom of the tray with PVA glue. Place a piece of ply over the foam, place a weight on the ply and allow drying over night.

Cut foam to fit along the inside faces of the plywood tray sides. Glue the foam to the sides of the tray with PVA glue. Clamp strips of plywood to hold the foam in place and allow drying over night.

FRONT

9MM FOAM
7MM PLYWOOD

3MM PLYWOOD
9MM FOAM

DRAWING #2
UPPER LEVEL TRAY FOAM LINING

Lining the Bottom of the Upper Level Tray

Cover the bottom of the upper level tray with thin bubble wrap. Use a piece/s of bubble wrap that can be folded up over the bottom 20mm of the box sides. Wrap packing tape completely around the box, covering the top 15mm of the bubble wrap.

SECTION SHOWING UPPER TRAY
OUTTER BUBBLE WRAP APPLICATION

FRONT

PACKING TAPE

15
20

3MM BUBBLE WRAP
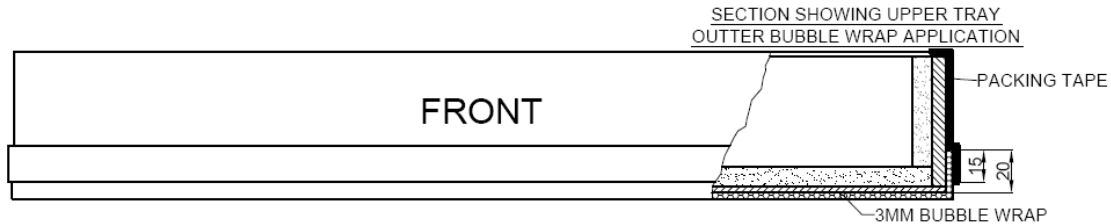
DRAWING #3
TRAY BOTTOM LINING

Lining the case top with foam

Cut foam to fit the entire top of the case so the strips run along the length of the case.

Glue the foam to the inside top of the case with PVA glue. Place a piece of ply over the foam, place a weight on the ply and allow drying over night.

Arranging models in the case

Fiddly bits of models have a way of getting snagged on something and breaking. I wrap models (with fiddly bits) in plastic bags. A local plastic bag supplier may be located with Google. Enter "plastic bag packaging" and your locality for a search. You will eventually find a supplier of the bags that work for you. I have been using 120mm x 340mm plastic bags that were intended to hold retail merchandise. I believe the last lot of 500 bags cost me $20-$30. These bags will protect small bits from being ripped off by the foam and as buffers at the ends of carriages.

Experiment with placing models in the upper and lower levels of the case until you have as many models that can fit between layers of foam. Allow space between the ends of carriages and other carriages. Allow space between the ends of carriages and the sides of the case (in the lower level) or sides of the upper level tray. In some cases you might want to cut lengths of foam to fill in larger gaps. The trick is getting a snug fit around the models, not a crushing forced fit.

Examples of Model Arrangments

Upper tray arrangements:
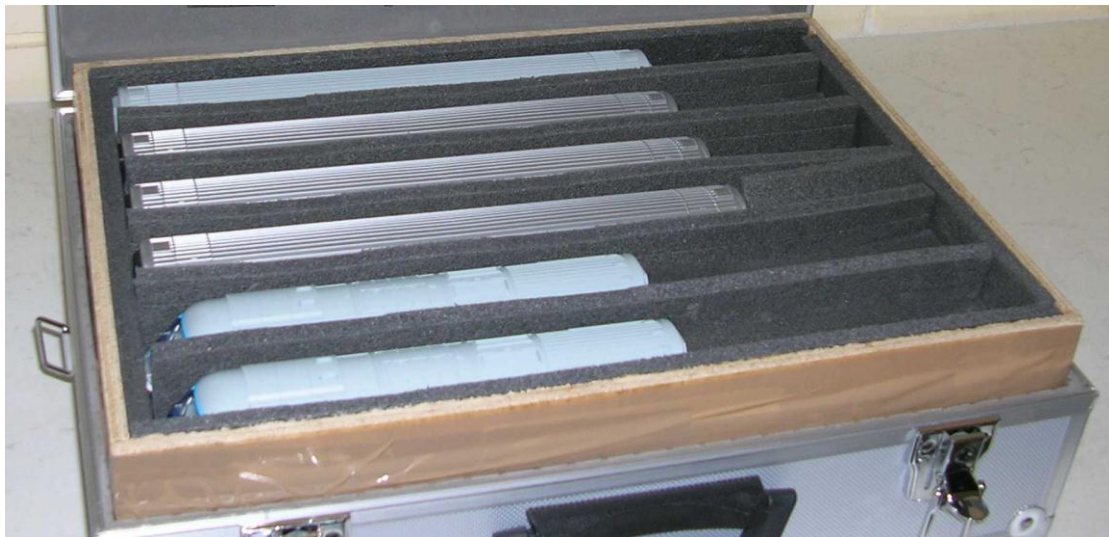
Lower level arrangements:

Note the different locations of the trimmed dividers in the pictures below.