

A Guide To Making Buildings From Plastic Storage Containers

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A Guide To Making Wargame Buildings From Plastic Storage Containers.



Scratch building terrain is a major feature of tabletop wargames and many different materials may be used to construct. This document looks specifically at using some of the many different types of plastic containers available to construct simple model buildings. It cannot be possible to cover every type of container so instead this is a general guide to what is possible.

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Materials and Tools.

This document focuses on using various sizes and shapes food storage containers as well as CD/DVD spindles. While lightweight, these are reasonably durable while still being easy to cut without the need for specialist or powered tools.

While simply painting a container to resemble a building is perfectly acceptable the models will look much better if they are also physically detailed. The examples given in this document use a mix of card, plasticard, balsa wood and various spare parts to create these details. Another useful is a fake CCTV camera. These are available cheaply and can be used to create domed sections on the roofs of buildings.

Basic side cutters and a scalpel blade are enough for making small cuts in the containers but larger cutting uses a small saw. Ordinary plastic glue meant for use on model kits will not work on these containers, therefore super glue is used for attaching details to the models while some joints are reinforced with hot melt glue.

Example 1: Circular Food Container.

Basic Components:

Single small food container, in this example circular.

The most basic of the buildings presented here uses a single food container as its base. To begin with the rim that is used to fix the lid in place is removed while leaving the lip around the edge. So that paint and glue will stick to the surface better it is lightly sanded.



Figure 1.1 The sanded container.

Details may now be attached to the basic structure. Of particular note here is the doorway, this will be a protruding arch scratch built from plasticard and a section of pipe for the top. Part of this will be set into the basic structure so a hole needs to be marked out and cut (this is visible in figure 1.1). Marking this out requires just an ordinary pencil. The tip of this is placed against the side of the doorway arch while placed beside the container. When dragged around the arch the outline is marked on the container and may be cut out.



Figure 1.2 Marking the hole for the doorway arch.

Once the door is cut the details are glued to the basic structure. Hot melt glue is used for a stronger join on the larger parts such as the doorway.



Figures 1.3 – 1.5 Details glued to the container

Any gaps left are filled with milliput before the model is painted.



Figures 1.6 – 1.8 The painted and finished building

Example 2: CD Spindle/Fake CCTV Camera.

Basic components:

CD Spindle (25 disc capacity).

Fake CCTV camera.



Figure 2.1 The basic parts for the building

This produces a simple domed building from a CD spindle combined with a fake CCTV camera. The size of the camera means that it fits neatly on top of the spindle. The internal parts are removed from the fake camera and as with the food container both the camera casing and the sides of the CD spindle are sanded for easier painting and gluing. For added strength the base of the CD spindle will be left in place and a hole is cut for the doorway. In this case it will be inset into the building.

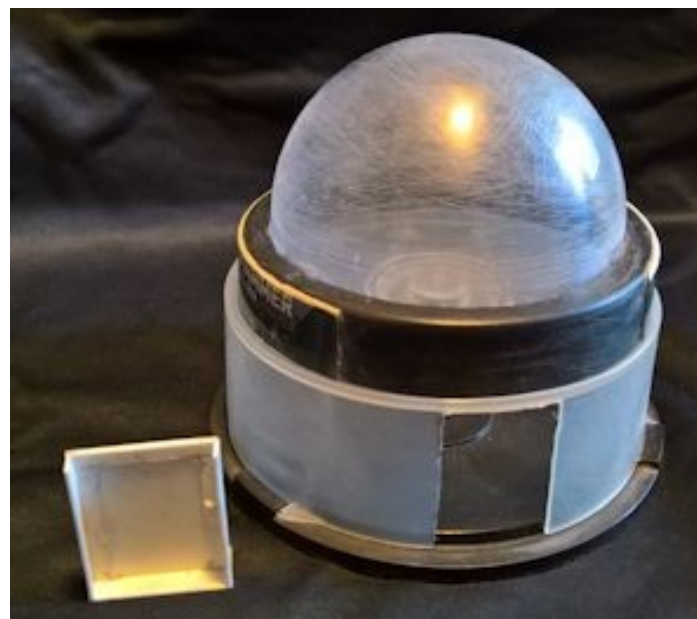


Figure 2.2 The sanded building components and doorway

The dome is glued to the top of the spindle and details including the doorway can now be glued to the basic structure. In this example these include small buttresses made from strips of balsa wood that can be anchored to the base of the CD spindle.



Figures 2.2 – 2.5 Details glued to the basic structure

The building can now be painted.



Figure 2.6 The painted and finished building

Example 3: Combining Two Containers Of Different Sizes.

Basic Components:

2 food storage containers of different sizes (different shapes may also be used).

A building with an irregular shape can be created using two containers of different shapes and sizes. In this example both containers are roughly rectangular in shape but the same concept will work for any shape of container.

To begin with the rim where the lid attaches is removed before each of the containers are cut in two with a saw. If cut exactly in half then two identical buildings can be produced from the same pair of containers. As with previous examples these are sanded to make painting and gluing easier.

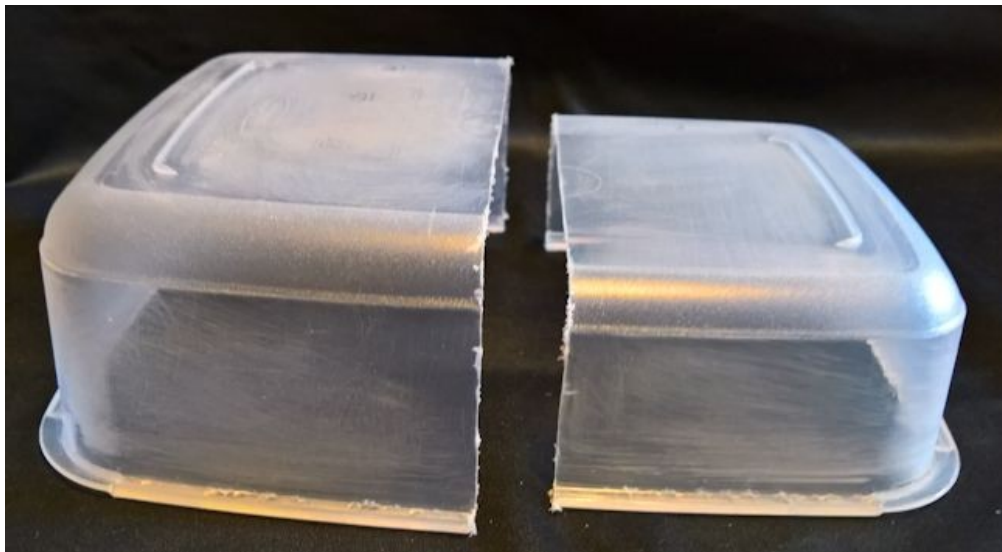


Figure 3.1 Two halves of differently sized containers.

To attach these together a plasticard plate is glued across the end of the large part. This can be roughly cut before being glued into place and then trimmed more accurately. At this point the smaller part should be glued to the other side of the plate. This example glues it centrally but it can be attached at any point desired. For a good strong joint between the container halves and plasticard plate superglue is used for an initial join, including gluing small strips of wood inside so that they can be glued to the inside of the container and the plate. After this hot melt glue is used all around the inside to reinforce the join and remaining gaps filled with milliput.



Figures 3.2 – 3.3 The two halves glued to a plasticard plate, outside and inside.

With the basic structure complete details can now be fixed to it. These can be of the same style of balsa wood strips and spare parts used on the previous examples. Here the doorways are flat against the outside of the containers and the surrounding sections are cut from plasticard.



Figures 3.4 – 3.5 The detailed model from front and back.

The model can now be painted.



Figures 3.6 A pair of painted and finished buildings.

Example 4: Food Container Building With Domed CD Spindle.

Basic Components:

Food storage container.

CD spindle (50 disc capacity minimum, must be taller than food container).

Fake CCTV camera.

A more radical blending of different containers is possible by using a taller CD spindle, again topped with a fake CCTV camera to create a building with a domed tower attached.



Figure 4.1 The basic parts used for the building.

As with previous examples the insides of the fake CCTV camera and the rim of the food container are removed and the main parts are sanded for easier painting and gluing.

A quarter circle section matching the curve of the CD spindle is then removed from the food container. If the base of the spindle is being kept then this will need to be slightly wider at the bottom to accommodate this.



Figures 4.2 – 4.3 The cut and sanded food container and CD spindle.



Figure 4.4 The basic parts placed together prior to gluing.

The CD spindle is glued into the cut section using the same combination of super glue, balsa wood and hot melt glue as the plasticard plate in the previous example and the fake CCTV dome glued to the top of the spindle. Remaining gaps are filled with milliput.

The building is now ready to have details attached. Again I have used a door that is flat against the container.



Figures 4.5 -4.6 The detailed building.

The detailed building can now be painted.



Figure 4.7 The finished building.