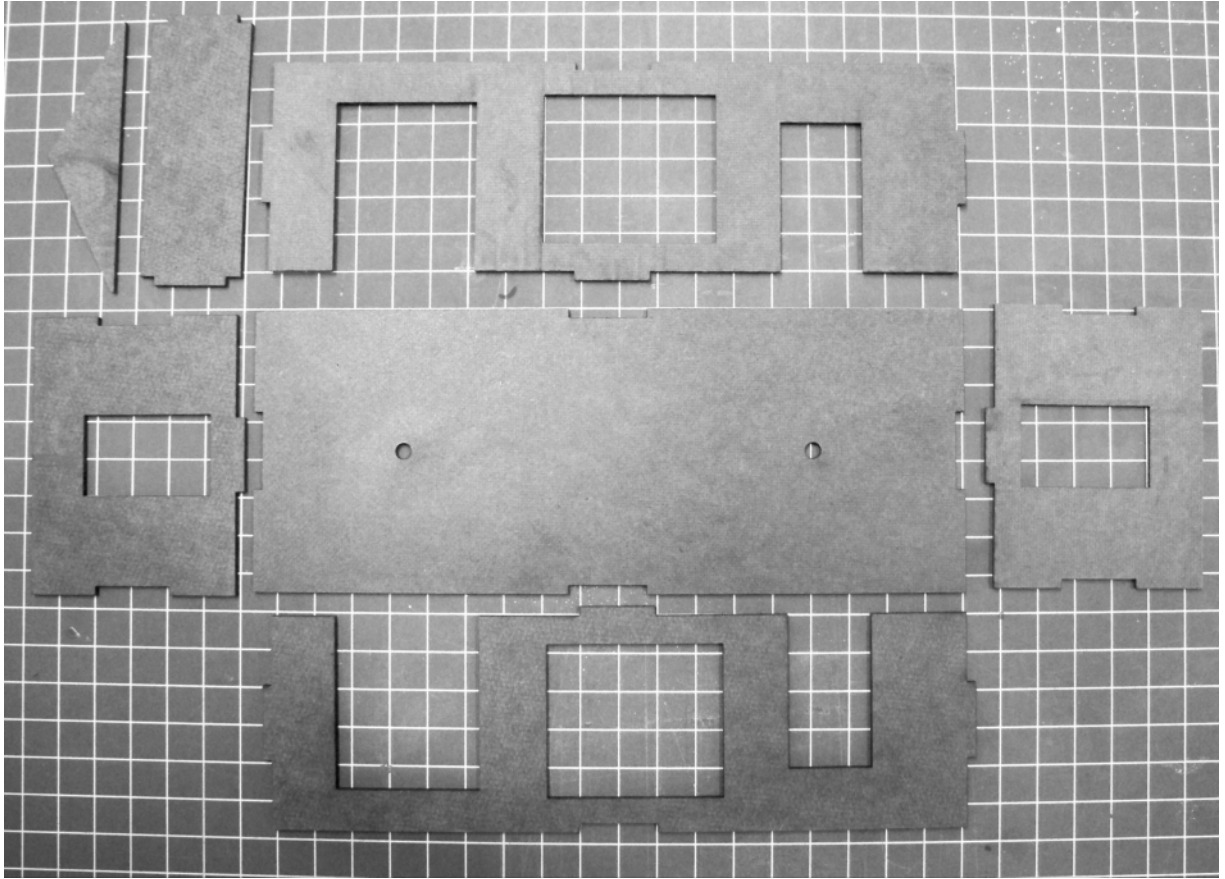


# Chapter 1

## **Assembly of Masonite/Sub-structure**

This is an in depth article on building the Altoona Model Works O-scale Branchline Station. This Series will cover the construction in much detail to assist you. We will cover from box to layout the process of creating a museum quality model.

## Chapter 1 : Assembly of Masonite/Sub-structure



We start by laying out the Masonite sub structure walls and braces, inspecting all parts.



We prepare our work area: First make sure your work area is level and flat. Second we place wax paper or plastic in the area we intend to work with glue.

## Chapter 1 : Assembly of Masonite/Sub-structure

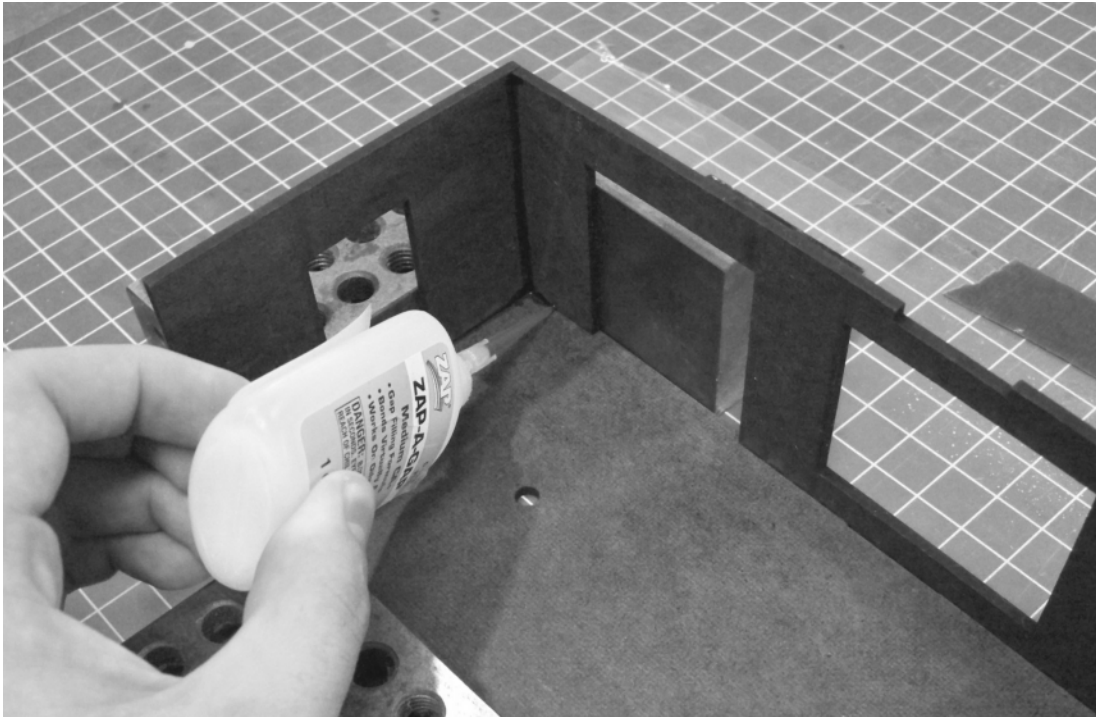


For this step we will be using Zap-A-Gap medium CA+ to glue the Masonite sub-structural parts and braces. We will be using our 1-2-3 blocks or a weight found around the house or shop to hold walls in place.



As shown here, we use multiple squares and blocks to make sure all parts are square and flush.

## Chapter 1 : Assembly of Masonite/Sub-structure

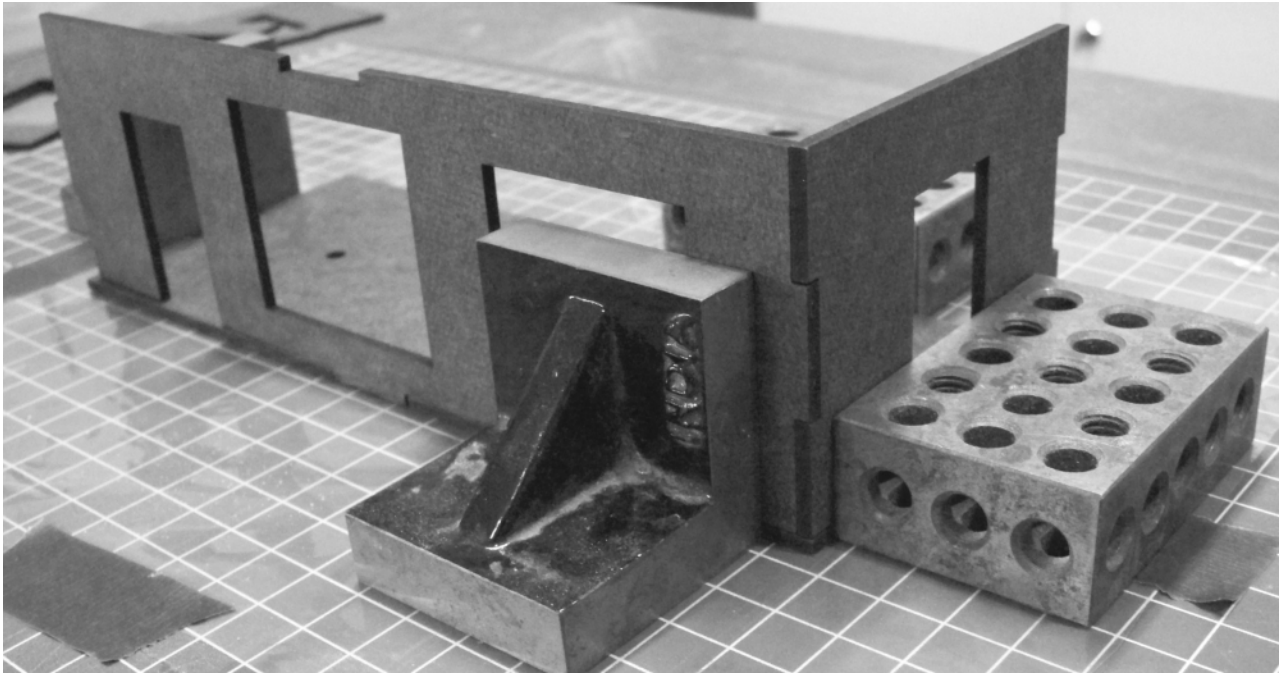


After walls are braced; we cautiously apply the Zap-A-GAP medium CA+ to the inner corners of the walls. Before applying the Zip Kicker, double check your walls for squareness and fit. You will want to do only two walls at a time to ensure proper fit and better support for the following two walls.

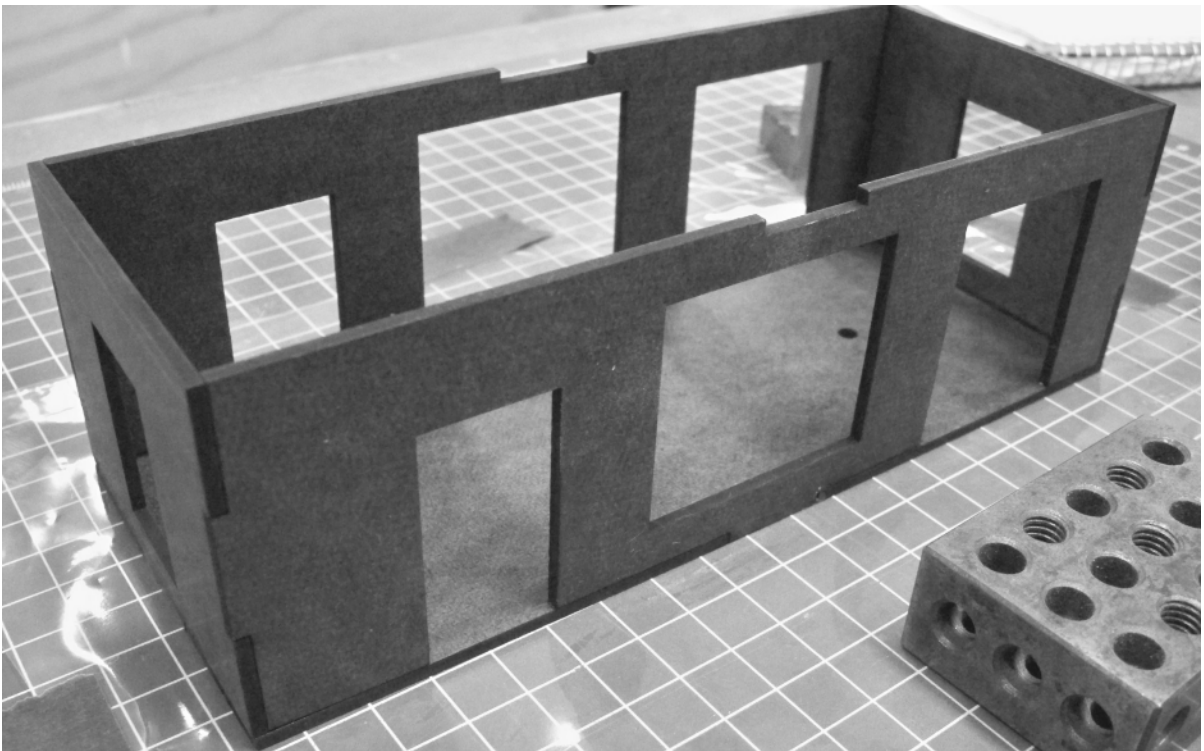


Apply the Zip Kicker by spraying it over the glue seams. Once this is sprayed it will create a permanent bond, so double check all parts before spraying. If you mess up I recommend using an X-acto Knife to cut along the seams and sanding the affected area before a new application. Zap-Kicker is not required, it is used as an accelerator.

## Chapter 1 : Assembly of Masonite/Sub-structure

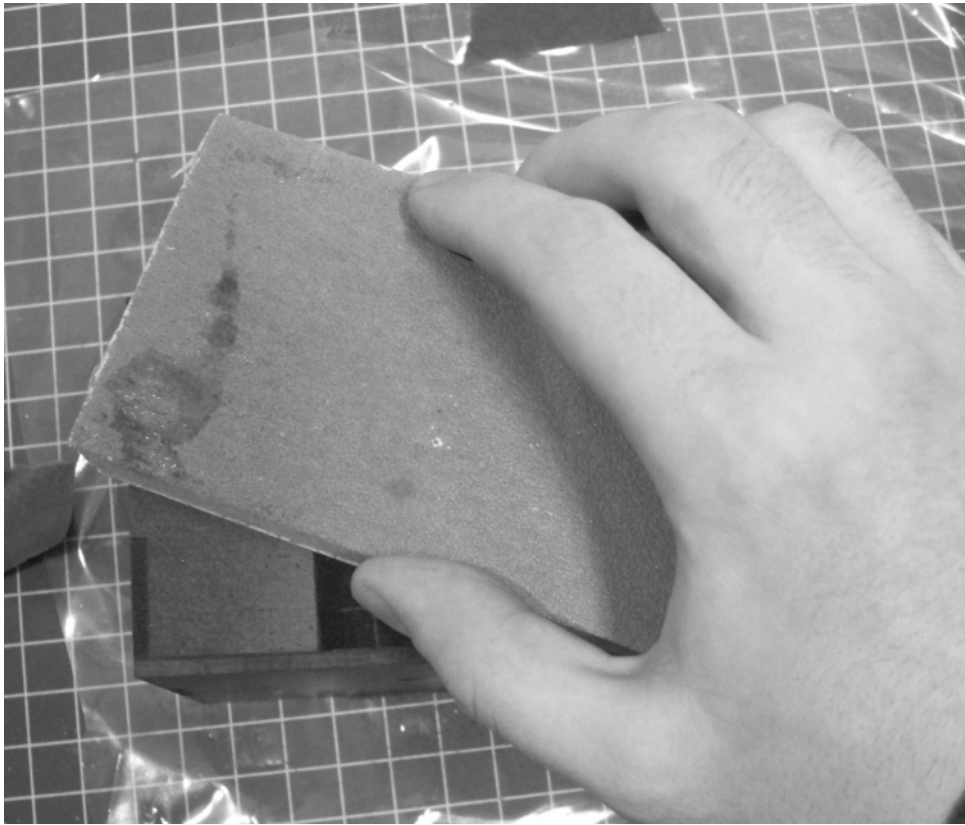


Using the bracing; we prepare the remaining two walls for installation. Repeat as shown on the previous page applying the Zap-A-GAP medium CA+, then double checking, then applying the Zip Kicker.

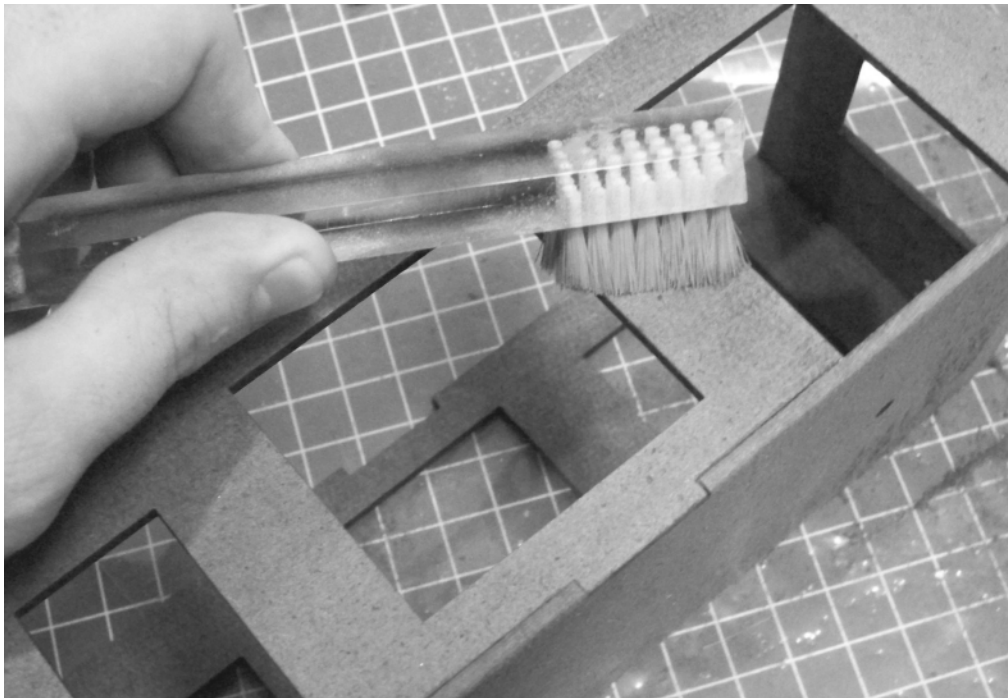


Once glued your walls should look like this.

## Chapter 1 : Assembly of Masonite/Sub-structure

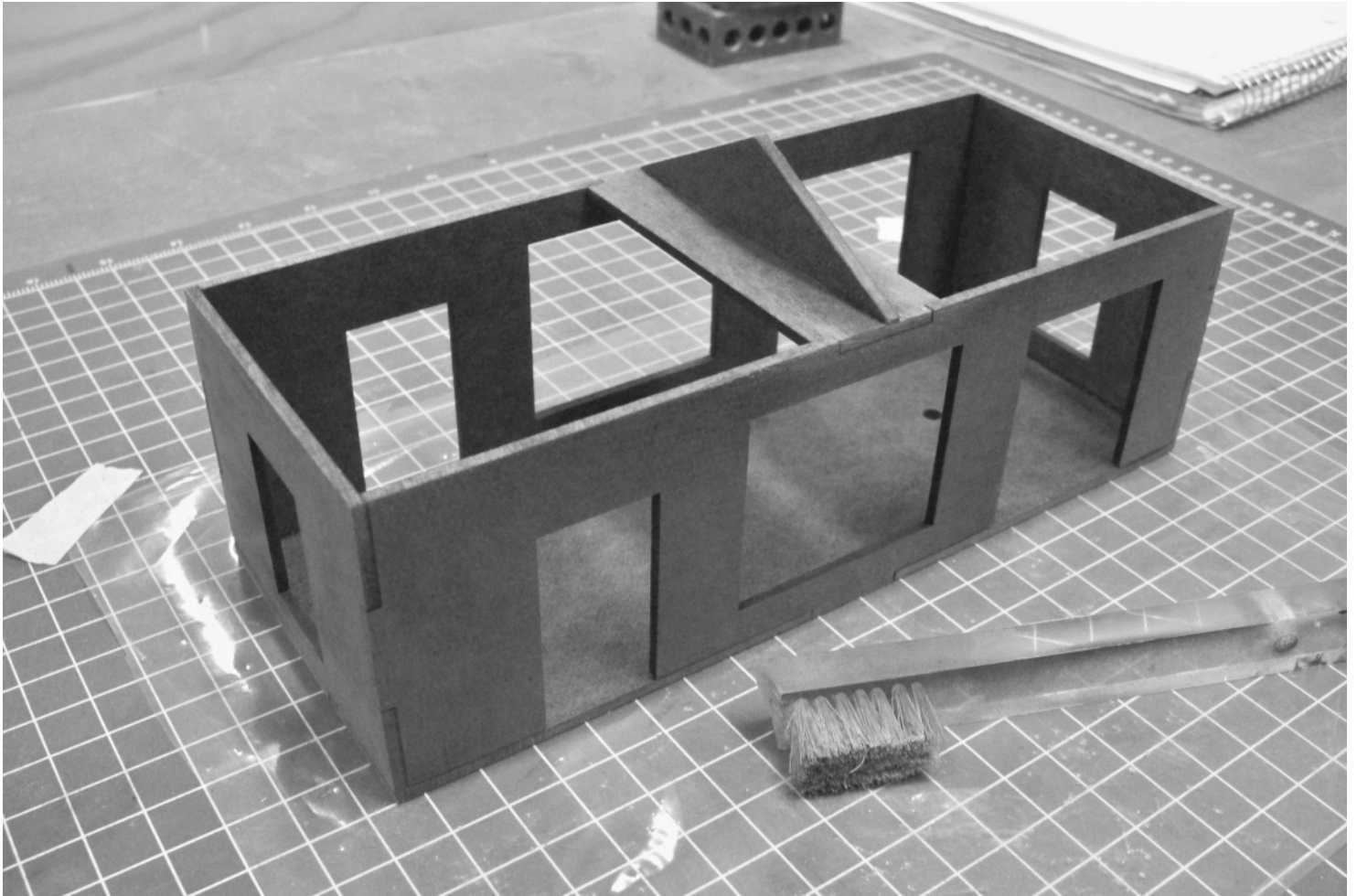


In this step we begin by turning the building on each side, sanding using our sanding block using 8-180 grit sand paper, we smooth out each corner. We do this to prevent applied siding from having a warped or ajar application resulting in gapped corners. We will sand in one direction using single strokes, pushing away from our body; this is to prevent rough finishes.



Once sanding is complete we will use our brush to wipe away all debris. Again it is important to maintain a clean surface and a clean work area to ensure quality results.

## Chapter 1 : Assembly of Masonite/Sub-structure



\*Note the installation of the brace, not all models will have such brace. However, the brace in this model helps keep the sub-structure square from all sides.

Once all walls and supports are applied you are ready to sand the corners and sides of the walls to ensure a smooth surface for your siding to adhere to.

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