

# Tools and Materials

For assembling the trays I suggest the following tools and materials.

Print out of the tray on thick card, I recommend 65#-100 GSM - 110# - 200 GSM weight cover stock card.

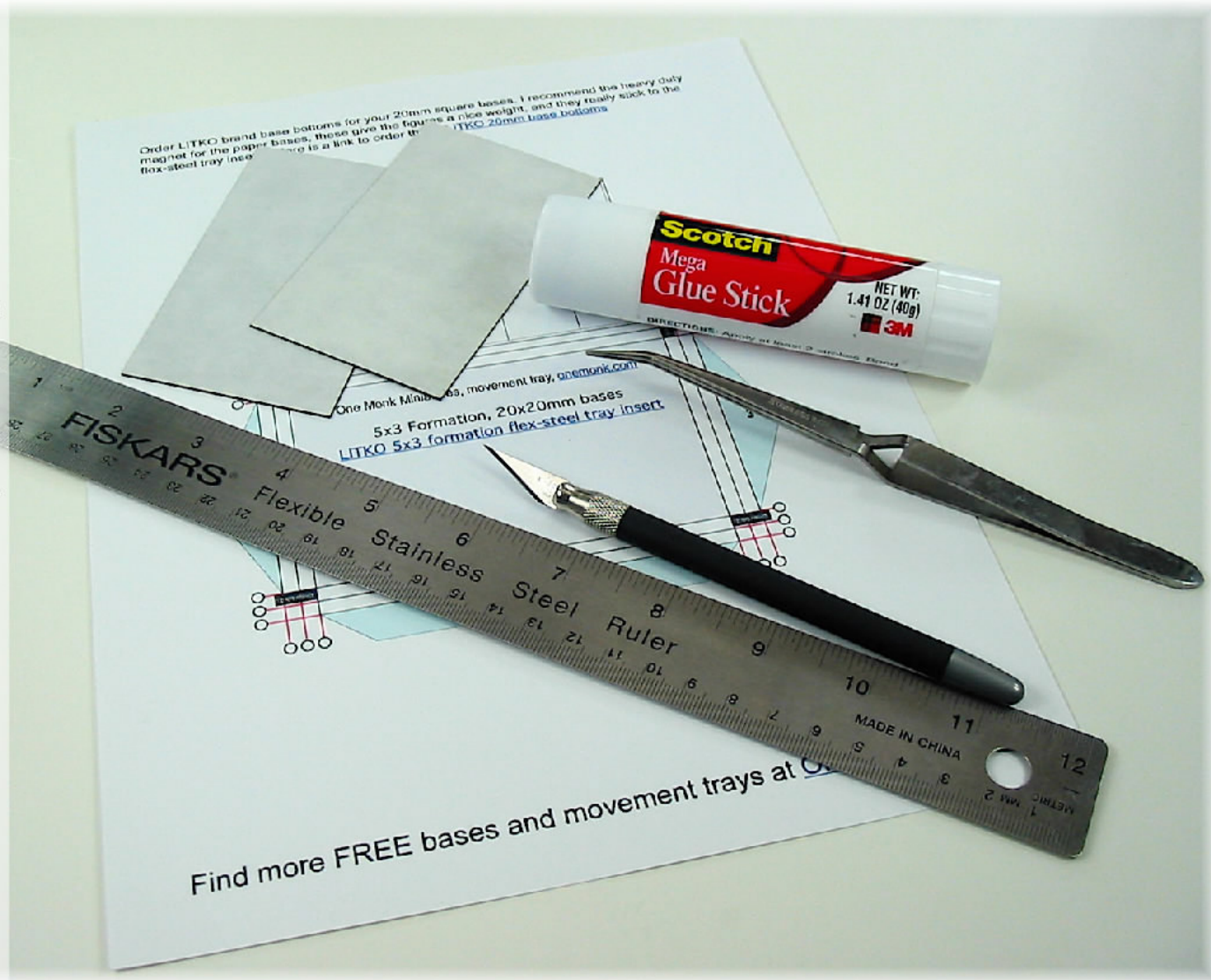
Glue. I recommend glue sticks, they are clean, easy to use, are tacky for quick assembly, and dry quickly. They do dry out over time, but you can seal the tray with clear spray acrylic paint to protect and make the tray more durable.

Hobby knife, If your blade is worn or dirty, change it. Using fresh and sharp blades will make your cutting easier and more consistent.

Metal ruler. This will make it easier to cut and score straight lines.

Tweezers. These are optional, but do help with squeezing the short tray sides together after gluing.

Tray inserts. For this project, I'll be showing you how to integrate [LITKO](#) tray inserts into the tray. I recommend Flex-Steel™ for the insert, and magnet for the tray base. You can then use magnet bases with your figures, and they will stay firmly in place. Each tray PDF includes links to order the tray inserts for the size and formation of the tray you are constructing.



# Scoring & Pre-folding

Scoring and pre-folding the tray will make it much easier to assemble. Score the fold lines marked with the red lines ending with the small circles. Be sure not to score over the small side tabs, as these are important to keeping your tray square.

I recommend scoring these heavily, normal scoring is lightly cutting the surface, but with these, you will be using valley and peak folds, so I recommend scoring at least half way through the card. It may take some practice to get good at this, but will make assembly much easier.

Once the fold lines are scored, cut the tray from the page. With the tray cut, pre-fold all of the fold lines. This means to just fold over the fold lines on each other and crease them. This will weaken the fold, and make these very thin sections easier to glue in place.

Once your all cut and pre-folded, your ready for the next step.

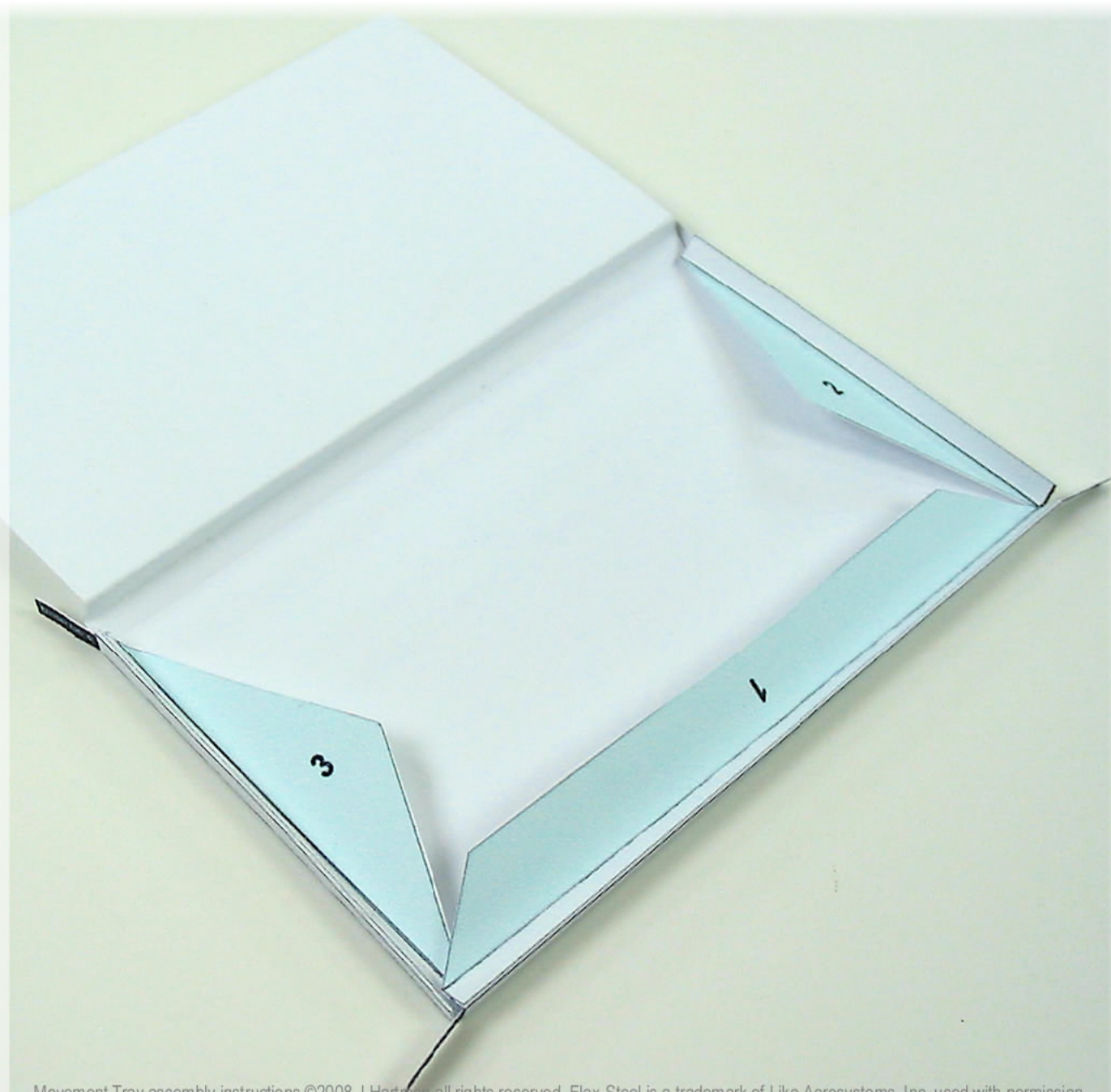


# Dry Assembly

Dry assemble the tray to make sure your folded sections are folded fit squarely and are in the right direction, peak or valley.

Don't worry about the small side tabs right now, just get the tray to assemble easily, this will really help with gluing.

Once all the sections of the tray fit properly, your ready for the next step.



# Apply Glue to Tab 1

Now your ready to start gluing the tray.  
Unfold the tray from the dry assembly, and  
place printed side down.

Apply glue to the number 1 tab and the  
short side wall sections of the same tab  
area.



## Fold over Tab 1

Fold the small tray side section over gluing them back to back. Now fold down the number 1 tab, while folding the side wall upward so it's at a 90 degree angle from the tray bottom. Firmly squeeze the tray sides together to make sure they are glued securely. Use tweezers to go along the sides and squeeze them together.

Now firmly press the number 1 tab in place to the bottom of the tray. Readjust the side walls so they are 90 degrees. Finish off by folding in the small side tabs that go under tabs 2 and 3.

Now your ready to repeat this for tabs 2 and 3.



# Apply Glue to Tab 2

Apply glue to the number 2 tab and the short side wall sections of the same tab area.

Be sure to apply glue to the small side tab, and fold it into place as shown.

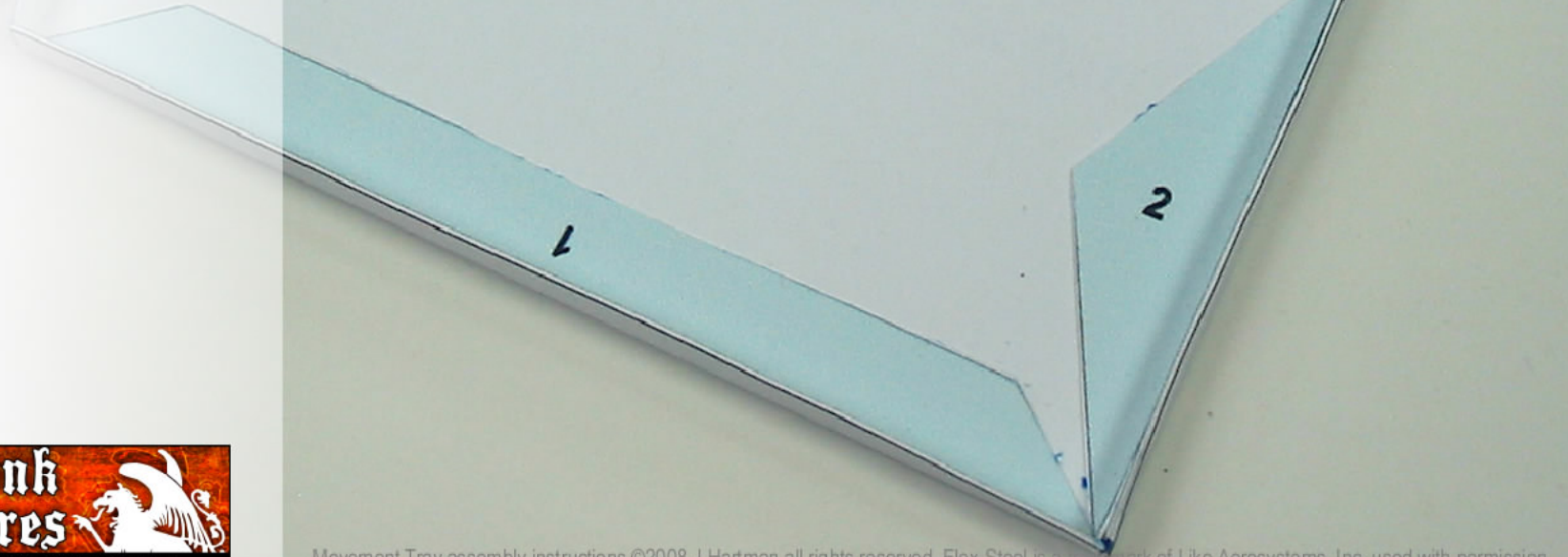


## Fold over Tab 2

Fold the small tray side section over gluing them back to back, be sure to have the side tab in place and in between the two side wall sections.

Now fold down the number 3 tab, while folding the side wall upward so it's at a 90 degree angle form the tray bottom. Firmly squeeze the tray sides together to make sure they are glued securely. Use tweezers to go along the sides and squeeze them together.

Now firmly press the number 1 tab in place to the bottom of the tray. Readjust the side walls so they are 90 degrees. Finish off by folding in the small side tab that go under tab 4 (the tray top).



## Apply Glue to Tab 3

Apply glue to the number 3 tab and the short side wall sections of the same tab area.

Be sure to apply glue to the small side tab, and fold it into place as shown.



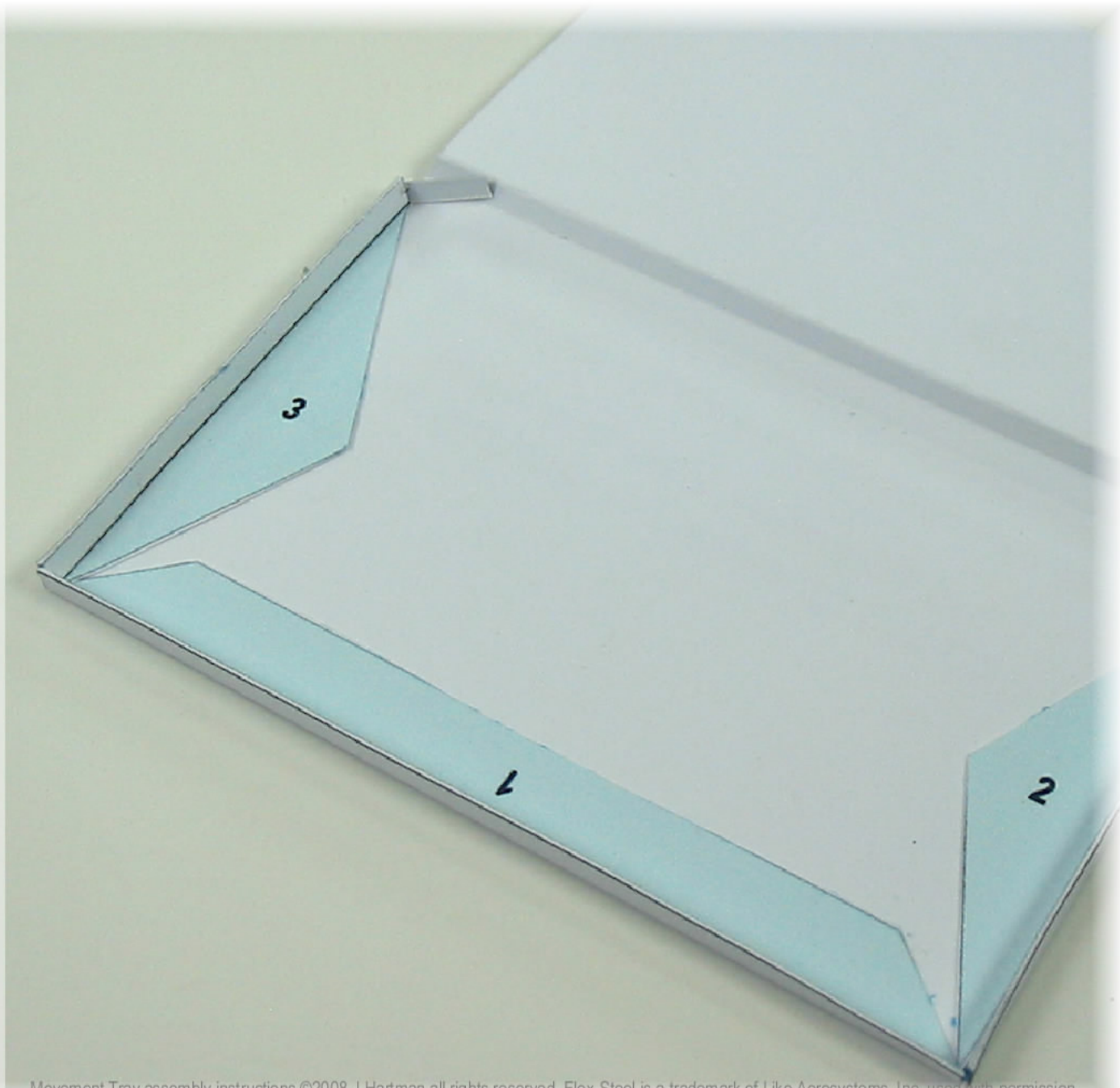


## Fold over Tab 3

Fold the small tray side section over gluing them back to back, be sure to have the side tab in place and in between the two side wall sections.

Now fold down the number 3 tab, while folding the side wall upward so it's at a 90 degree angle form the tray bottom. Firmly squeeze the tray sides together to make sure they are glued securely. Use tweezers to go along the sides and squeeze them together.

Now firmly press the number 3 tab in place to the bottom of the tray. Readjust the side walls so they are 90 degrees. Finish off by folding in the small side tab that go under tab 4 (the tray top).



# Prepare Tray Insert

Prepare tray insert. [LITKO](#) tray inserts are sold with a removable paper backing covering a really strong adhesive. Carefully peel back the paper backing. You will be gluing the tray insert adhesive side down.

The tray inserts are completely optional, but are important to this set if you plan to use them. The tray inserts are a very affordable way to make life easier later on. The combination of Flex-Steel™ trays and magnet base bottoms, really do keep the figures in place, you can even flip the try upside down and the figures will stay in place.

Each tray PDF includes links to order the tray inserts for the size and formation of the tray you are constructing.



## Placing Tray Insert

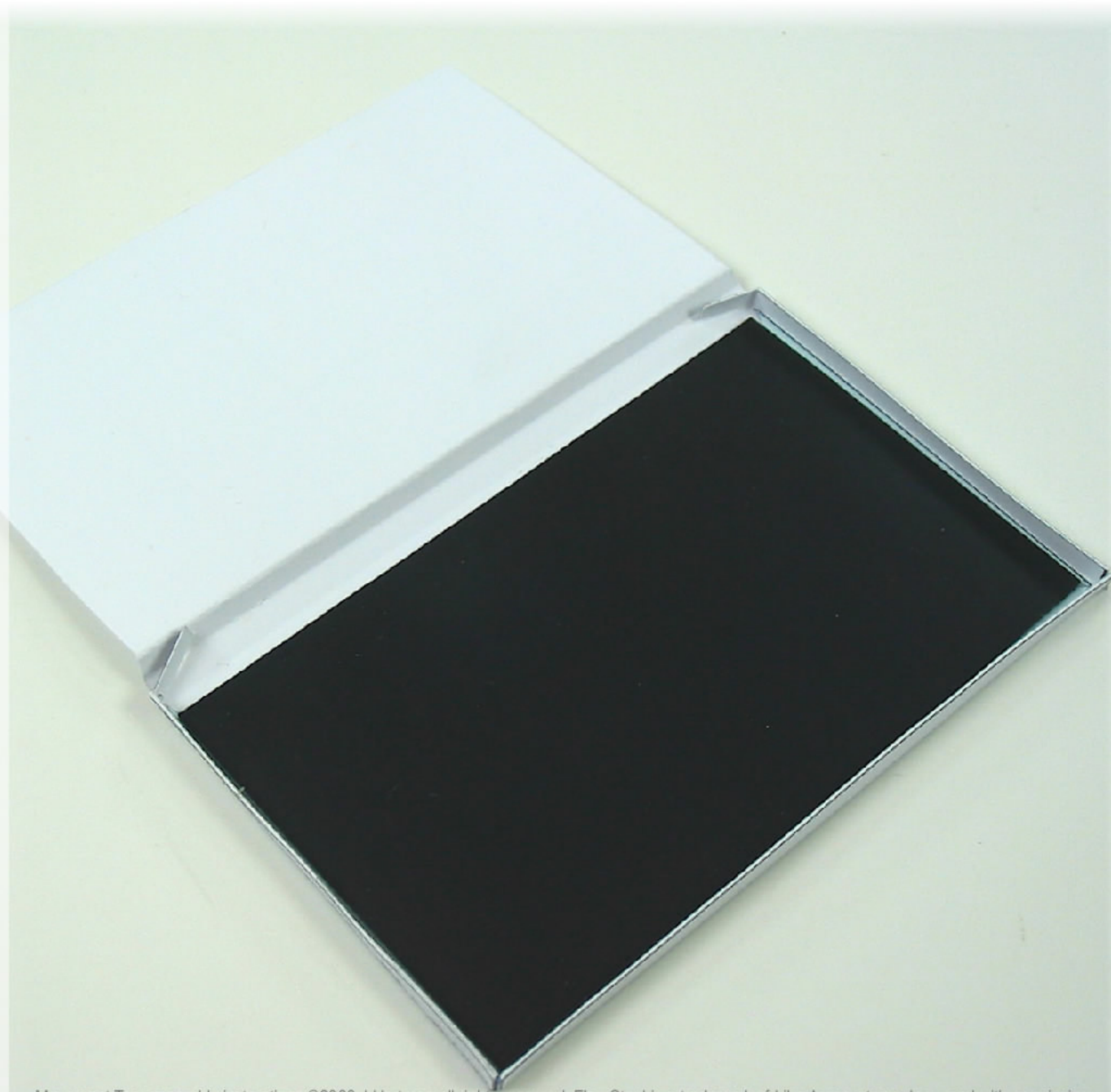
Take the peeled tray insert and flip it so the adhesive side is down. Center the insert in the tray bottom section. It will be a loose fit because the tray is a couple millimeters wider and deeper than the insert.

It doesn't have to be absolutely centered, but try to get as close as you can. Do not drop the insert into place until you have it lined up. I suggest aligning the front side edge, then lowering the insert the rest of the way.

### **\*WARNING\***

The adhesive used on the tray inserts is very strong, and will bond with the paper instantly! Take extreme care when placing the insert.

Once the insert is in place, gently rub it down. You are now ready to glue the last section in place.



## Apply Glue to Top

Now you are ready to glue the final section of the tray, the tray top.

First, make sure that the small side tabs (under tab 4) are folded in so they can be glued between the tray side sections.

Apply glue liberally over this section of the tray. Once glue is in place you are ready to place the top section.



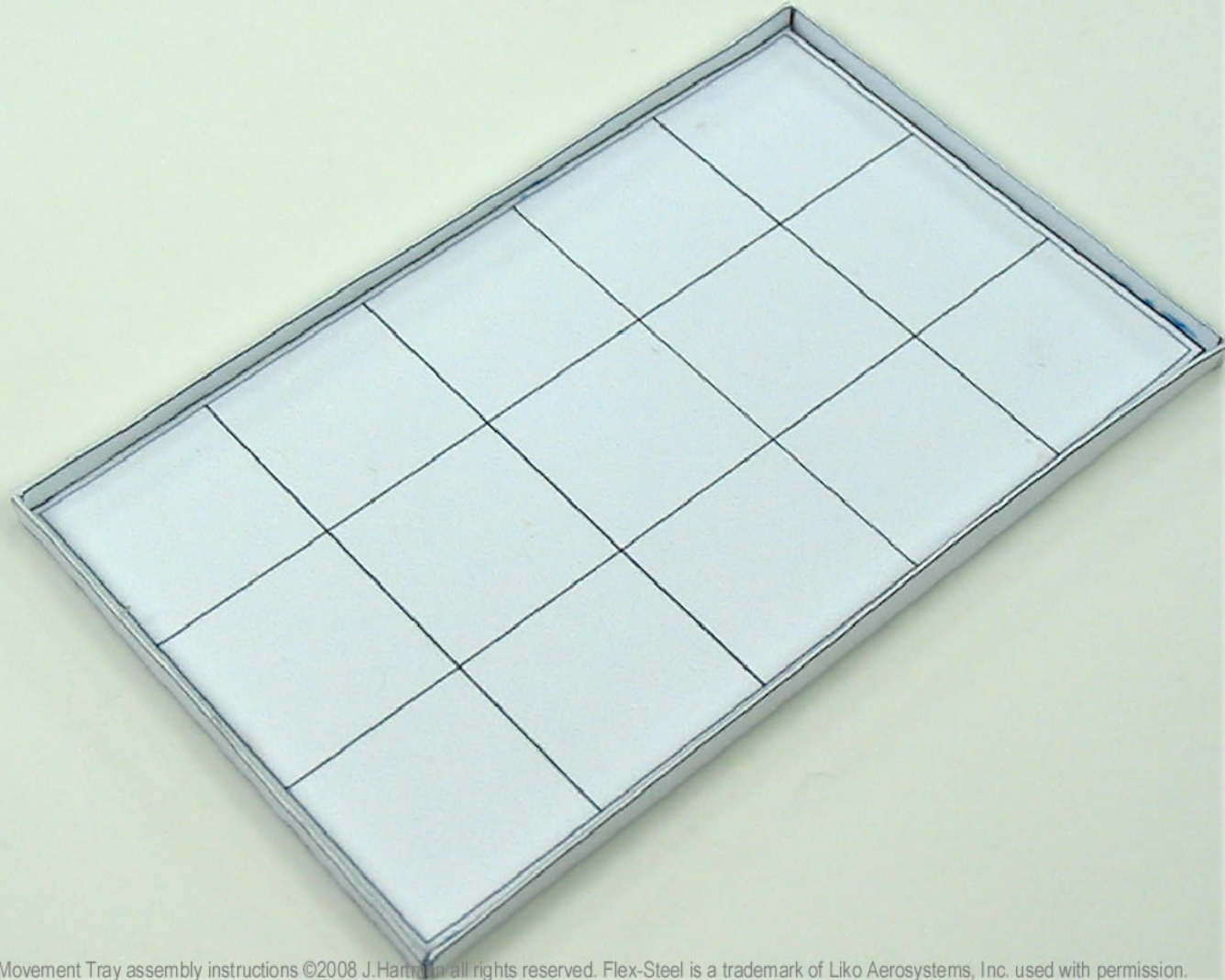
# Placing Tray Top

Start off by placing the small side tabs in between the two tray side sections, and squeezing them together. Once the tray side is firmly glued, then gently lower the tray top section into the tray until it sits squarely inside all of the tray side wall sections. gently rub down the tray top section into place.

The tray is now finished. Allow the tray to dry for a few hours, or better yet overnight before using. Once dry, you can use a black marker and edge all of the exposed paper sides on the tray. This helps blend in the tray edges and makes the tray look like a clean finished product. You can also spray the trays with clear acrylic spray paint, this will lock in the the ink jet print and make the tray very durable and resistant to moisture and greasy pizza fingers.

I hope these instructions helped, and that building more of these will be much easier, and faster!

The next steps for the tray include an optional magnetic tray base. This magnet tray base makes storage and transport easier with the use of flex-steel™ sheets in your travel boxes. Visit [LITKO](http://LITKO) to see all of the base bottoms, tray inserts, steel and magnet sheeting, and tons of other hobby related supplies and accessories.



## Prepare Tray Base

Prepare tray base. The tray base uses the same size insert as the tray insert, we are just using it here as a tray base instead of an insert.

**LITKO** tray inserts are sold with a removable paper backing covering a really strong adhesive. Carefully peel back the paper backing. You will be gluing the tray insert adhesive side down.

The tray inserts are completely optional, but are important to this set if you plan to use them. The tray inserts are a very affordable way to make life easier later on. The combination of Flex-Steel™ trays and magnet base bottoms, really do keep the figures in place, you can even flip the try upside down and the figures will stay in place.

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# Tray Base Placement

Take the peeled tray insert and flip it so the adhesive side is down. Center the insert in the tray bottom section. It will be a loose fit because the tray is a couple millimeters wider and deeper than the insert.

It doesn't have to be absolutely centered, but try to get as close as you can. Do not stick the insert into place until you have it lined up.

## **\*WARNING\***

**The adhesive used on the tray inserts is very strong, and will bond with the paper instantly! Take extreme care when placing the insert.**

Once the insert is in place, gently rub it down. The tray is now finished and ready for battle!

JIM

