

## Lego Printing Information

Lego printing is so fun with kids and it can be easy with the right tools. Here is a compilation of info that I have gathered over the years. Many of these are copy/pasted from email correspondence with customers and curious printers:

### Lego Dots

My favorite Dots set for printmaking is the [Lettering Tiles set](#), especially if you want to make words. It has basically every piece we have. The "2x2 w/ bow" (see attached picture, for some reason Lego won't let me link it) is a great piece to have, I use it all the time. If you have specific tiles you want, the Lego.com [Pick-a-Brick page](#) is a good place to start. They are a bit expensive there but you can get the pieces' specific name/ID number to search for them in bulk on eBay or [BrickLink](#).

Lego has unfortunately discontinued many Dots sets. I got a few [Lots of Dots sets](#) when they were readily available, you may be able to find them still - that link is for eBay, which is a great place to look for flat tiles in general.

One thing we did in the beginning was go to an actual Lego store and see if they have flat tiles on their back wall, where you can fill up a container for like \$8. Definitely the cheapest way to do it, but they are always rotating the pieces they have and it isn't guaranteed they will have what you're looking for.

Also as I've been checking these links I noticed some listings on Amazon for off-brand flat tiles, which I've never used but would theoretically work. Just a heads up that things [like this](#) exist.

### Baseplates

It looks like the plates you have are the stackable kind with the ability to put blocks on the backs of them, which are too thick to use for printing on the press. You need true baseplates with a smooth back. They are thinner and able to accommodate the thickness of the tiles while printing on the press. I will send a picture of the back of the ones we have. You can also get them in bulk online. They are called "[classic baseplates](#)." A bunch of different lego-compatible companies make them. The ones we have are from the Dollar Tree. They come in 10x10" so in order for them to fit in the press 3 rows of pegs need to be cut off of one side, making them 9x10". Steve uses a bandsaw, you can also score them with a utility knife and snap off the edge.

I attach the base plate to the grid base using blue painter's tape to keep it from sliding around while printing. I used to use "permanent" double sided Scotch tape but I left it sitting a bit too long one time and it peeled the smooth white melamine off the top of the grid base when I removed it. The painter's tape is gentle and works well when folded over! Double sided tape will work in a pinch but don't leave it on for too long!

### Paper

I always use regular cardstock at kids' workshops. It's cheap, smooth, and it works well. I have 60 LB but you can go up if you want sturdier prints. I would also recommend getting a piece of felt to go on top of the paper while printing. The felt really helps to get consistent pressure and keeps the paper from slipping too much on the slick tiles. The craft felt I use is leftover from a halloween costume I made for my son - not super fancy! You can also use a piece of blue painter's tape to tack down your paper to the grid base while printing.

## **Inks**

Oil based printing ink is great for printing on Legos. If you are working with kids I would recommend stamp pads, though. They are washable, dry on the paper almost immediately, and you can quickly clean them with a baby wipe so they can be reused for the next kid. We use [these stamp pads](#), but any washable pad that is raised up so you can stamp down onto the pieces is good.

I tend to stay away from water based printing inks because they dry very quickly and will dry onto your tiles. It's pretty easy to clean off with soap and water but it may cause problems gumming up the tiles while printing. If you're doing a fast project this could be ok.

I mostly use oil based inks when doing a lot of prints, specifically Cranfield Traditional Relief Inks. They come in lots of nice colors and will stay open for a long time. When I'm done printing I will print the excess ink off onto scrap paper (I use phonebook pages) a few times to get as much off as I can. Then I'll use a tiny bit of vegetable oil or mineral spirits on a rag to wipe off the rest. Too much mineral spirits will warp the tiles but if you're printing with kids you probably won't want to use chemicals anyways. Cranfield also makes a safe wash oil based ink that you can clean up with soap and water. I haven't personally used those but I hear they work well.

Every once and a while I'll do a deep clean by mixing warm water with dish soap and vinegar and soak the tiles. Then you just rinse and let air dry. This is especially helpful to get all the ink from in between the tiles.

## **Adjusting the Provisional Press for Lego Printing**

The actual bed of the Provisional Press is not adjustable, so if your matrix feels tight (this is true for any 1/8" thing you are trying to print) you can remove steel plate from underneath the grid base to make more room for your Lego. You can also add flat cereal boxes or cardstock underneath the grid base for a customizable printing height. Make sure to leave room for some felt - a piece of felt is a must for even Lego printing - see the note about felt under "Paper"

## **Extras**

One more thing I will recommend is to get a good brick popper. We literally just use a small flat head screwdriver, which is so much better than the orange brick separators they give you with lego sets. It helps a lot when you are trying to move pieces around or just clear a base for the next user. Someone said [this one](#) is really good but I never got it.