## Make Your Own Interlocking Toy Blocks

Suggestions by Bill Atkinson



I bought a stacked dado blade from Home Depot. It has two outer blades, a series of chipper blades, and a number of thin shims that allow you to fine-tune the width of the notches to fit the thickness of your board. Adjust the depth of cut to about 0.75 inches, such that two 1.5 inch notched pieces fit together cleanly.


Using only a table saw and a miter saw, you can make your own set of interlocking wooden toy blocks.

I made my blocks from half inch MDF (medium density fiberboard) that I purchased in $2 \times 4$ foot sheets at Orchard Supply and Home Depot. You can get larger sheets, but the smaller ones are easier to transport and handle on the saw.

You could also use ash or birch plywood if you prefer, but MDF costs less and has more consistent thickness. All the boards should be the same thickness to fit the notches.

The basic module is a $3 \times 3$ inch square, with 0.5 inch wide by 0.75 inch deep notches cut using a dado blade in the table saw. In addition to the $3 \times 3$ inch square blocks, you will want to make multiples, such as $3 \times 6,3 \times 9,3 \times 12$, and $3 \times 15$ inch blocks. I also found it useful to make some half-height pieces, 1.5 inches instead of 3. With the miter saw, you can also cut some angled pieces.


I added a small board to my table saw's T-square to help me easily and safely push blocks through the dado blade and back. To save time, I usually ganged up four to six blocks and notched them all together.

I first installed the normal cutting blade in the table saw, and used it to slice up my sheets into 3 inch and 1.5 inch strips, then I installed the dado blade into the table saw. I used the miter saw to chop the lengths I wanted, while using the table saw with dado blade to cut the notches.


## Rectangular Blocks

You can make any mutiples of the basic $3 \times 3$ square and 1.5 inch half-height blocks.
Since they are all on the same three-inch grid, they will all interlock correctly.


## Angled Blocks

Using the miter saw, you can play around with various angled pieces. The 30-degree pieces were favorites, with three of them completing a right angle, or six making a half-circle or arch.


## Joining Pegs

I found 0.5 by 1.5 inch joining pegs very useful. I cut them at a one-degree angle so they wedge firmly in place. The little pegs are too small to hold with your fingers, so I used a scrap of wood as a spacer block and held the remaining 1.5 inch stick, flipping the stick after each cut to make a symmetric wedge angle. Once I got everything setup, I made over a hundred joining pegs in a pretty short time.


These interlocking wooden blocks can provide a fun shared activity when friends visit you. I hope my suggestions help you make your own set of blocks, and I hope you and your friends enjoy playing with them.

I do not sell or make these blocks for others. I am just passing along what I have learned while making and using these blocks myself.

If you have any questions or suggestions, you may email me at bill@billatkinson.com

Best wishes, Bill


