# **Dice Box**

#### **Kit Inventory**

- o Front, Left, Back, Right and Bottom Inner Box Panels
- Spacer (left), Sliding Piece (left), and Left Outer Panel
- Spacer 1 (back), Spacer 2 (back), Sliding Piece (back), and Back Outer Panel
- Spacer 1 (right), Spacer 2 (right), Sliding Piece (right), and Right Outer Panel
- o Spacer 1 (front), Spacer 2 (front), Sliding Piece (front), and Front Outer Panel
- o Spacer 1 (bottom), Spacer 2 (bottom), Sliding Piece (bottom), and Bottom Outer Panel
- o Holder Panel (top), Runner Panel (top) and Top Outer Panel
- Two (2) rails and a Front Piece
- o 5 metal washers
- 0
- Bag of Black (.280") alignment pegs (20+)

#### **Other Items Needed**

- Glue I use a "craft" type tacky glue such as "Aleenes Tacky Glue" which can be found at craft stores like Michael's.
- Sandpaper to smooth any rough edges and make parts slide easier.
- Wax/parrafin also to make parts slide better.

### **General Notes:**

- All writing on parts is oriented the same way on each side unless otherwise noted.
- This puzzle is assembled with the writing on the plywood pieces facing out except for the bottom inner panel. When the outer layer pieces are glued on the writing on those pieces faces inwards.
- The alignment pegs are of different lengths depending upon the number of layers that are being placed together. Be careful to use the correct length. The pegs are easier to push through the holes if you start them on the side of the piece that has writing.
- Check the fit before gluing and sand/file any pieces that do not slide smoothly
- I find that light sanding of the faces of sliding pieces makes for better boxes. I also use paraffin/candle wax on the surfaces to get smoothly moving pieces.
- I use Aleene's tacky glue for gluing parts. I glue the pieces and then hold them together for ~15 seconds and they will stay in place until the glue dries.
- Be careful when attaching outer sides, spacers and covers to keep glue away from areas where it might squeeze out underneath and get on any of the sliding parts. If possible glue those parts without the sliding pieces in place so you can clean up any glue squeeze out.
- Clean up glue squeeze out while the glue is still soft as it is much harder after it dries.
- When sanding flat sides it is better to place the sheet of sandpaper on a flat surface and move the puzzle piece over the sandpaper. This keeps the face flat and prevents rounding over the edges.
- If tabs seem too fat to fit in slots then sand them with a couple of passes of 100 grit sandpaper on each side of the tabbed piece.
- If tabbed pieces do not seat fully in the pocket areas, then sand the ends of the tabs .

#### **Assemble Inner Box**

Start by gluing the front, left, back, right and bottom panels together. The writing on the side panels should be facing outwards and the writing on the bottom panel should face towards the inside of the box/towards the top. This is important for making sure the peg holes are oriented correctly.



After the glue is dry sand the four sides of the box with 100 grit sandpaper to remove any ridges and make it smooth for any sliding pieces. Then sand it with 180/220 grit sandpaper to make it really smooth for the sliding panels.

#### **Add Spacer Pieces**

Using the black (.280") pegs add the spacer pieces to the front, back, right, left and bottom sides of the box. The pegs should be flush with the inside of the box.



## The Middle Section included in the full plans.

#### **Apply Finish**

If you are going to apply finish to the puzzle that should be done now. Sand the box and lid with 180/220 sandpaper and put on your favorite stain/finish or paint the boc/lid. Be careful when applying finish on the front of the box so that the sliding pieces do not get stuck by the finish. Many light coats of finish and making sure the slider still moves between coats works best. After the finish is dry you can assemble your puzzle and you are done.

The "dots" for the dice are put on as follows:

- Top panel has six
- Front panel has five
- Right panel has four
- Bottom panel has three
- Back panel has two
- Left panel has one.



