

## INSTRUCTIONS FOR DOORFRAMES:

**STEP 1: MARK THE CENTER...** Identify where you want to place your doorway. The center of the doorway in the image is 2 ½" from the edge. Using a pencil and combination square, draw a vertical line as the center of the doorway on the 1" x 6" board.

**STEP 2: MARK THE DRILL POINTS...** Using a pencil and combination square, mark 2 3/8" from the top and 1 3/8" from the bottom of the vertical line. This will mark your two drill points. If you are using a board taller than the 5 ½" height (actual height of a 1x6 board), then measure 3 1/8" from the bottom for the top hole.

**STEP 3: DRILL THE HOLES...** You will need a 2" (51mm) arbored hole saw drill bit to drill the holes for the top and bottom of the holes for each doorway.

**STEP 4: CUT THE DOOR OPENING...** You will need a jig saw to cut out the excess wood between the two holes you have drilled. Use the 3D printed doorframe and mark the side edges with a pencil.

**STEP 5: TEST THE DOORFRAME FIT...** Insert the doorframe into the opening. Make sure the flat side of the door frame is on the bottom.

**STEP 6: PAINT THE WALL...** Adobe and Sherwin Williams both have apps for your smartphone to color match any section of the USS Flagg. Remove the doorframe and paint the walls.

**STEP 7: INSERT THE DOORFRAME...** It should be a tight fit. I use E6000 glue to hold the frames in place.

## INSTRUCTIONS FOR PORTHOLES:

**STEP 1: DRAW THE LINE...** Using a pencil and combination square, draw a horizontal line from the top of the wall at least 2" from the top. This horizontal line will be the center of each porthole.

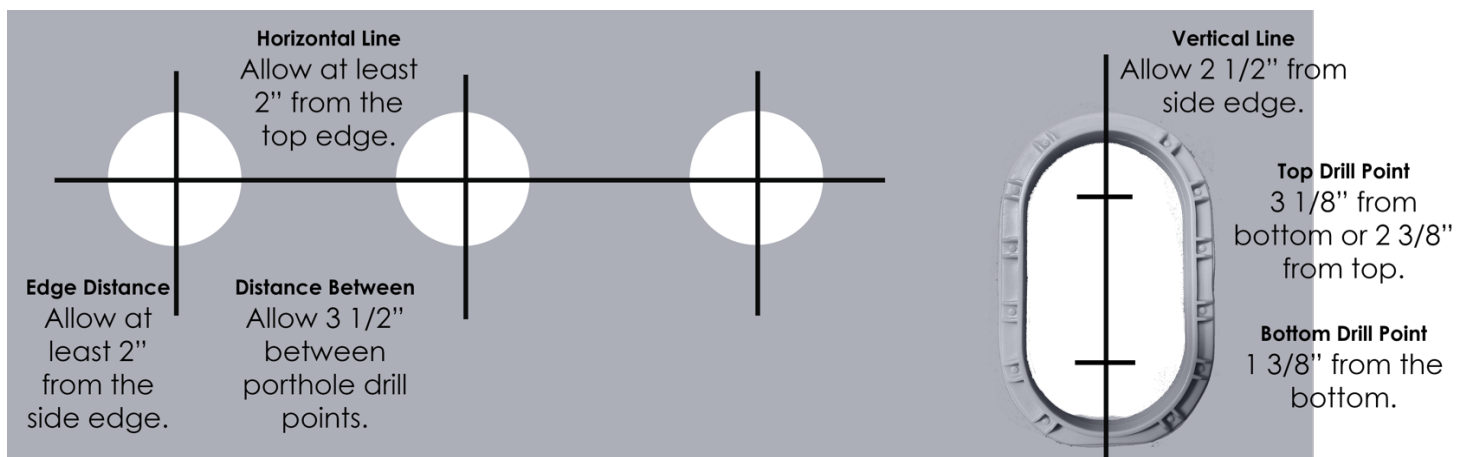
**STEP 2: MARK THE DRILL POINTS...** The image shows three portholes. The left is marked at 2" from the left side of the board with 3 ½" between drill points. As a general guideline for a 1"x6" board, place the drill point at least 2" from the top and leave 3 ½" between porthole drill points.

**STEP 3: CUT THE PORTHOLE OPENING...** You will need a 1 3/4" (44mm) arbored hole saw drill bit to drill the holes for each porthole.

**STEP 4: TEST THE PORTHOLE FITTING...** Insert the porthole into the opening on one side only. Remove and test the other side. Don't insert both sides at this point as it may be difficult to remove them.

**STEP 5: PAINT THE WALL...** Remove the portholes after testing and before you paint. Adobe and Sherwin Williams both have apps for your smartphone to color match any section of the USS Flagg.

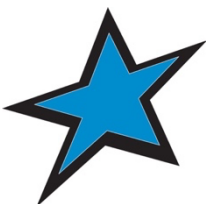
**STEP 6: INSERT THE PORTHOLE...** Insert the portholes and use a small amount of E600 adhesive if needed or desired.



## **INSTRUCTIONS FOR PIP HINGED DOOR & FRAMES:**

Follow the same instructions as the doorframes. However, the hinged doors have less flexibility. Make sure to check the fit of the door before painting the walls.

NOTE: PIP stands for "Printed in Place." It is a hinge that is not intended to be removed. The only way to remove the door from the frame is to break the hinge.



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Visit my website and select "USS Flagg" on the menu to find additional resources. If you have any questions, don't hesitate to email me at [chris@chrisdortch.com](mailto:chris@chrisdortch.com).