

Build Your Own Projector Screen with These Step-By-Step Instructions:

These instructions demonstrate building a wooden fixed-frame projector screen which will be permanently mounted to the wall. Our method is like a giant artist's canvas: a wooden frame with the screen material stretched over it, and with a black contrast-boosting border placed around the edges for a professional look.

- *The staple technique (steps 8-14) should be used for ALL our screen materials, unless of course you are building a roll down screen. Unfortunately, we do not currently carry roll down mechanisms.*
 - *The staple technique (steps 8-14) should also be used when mounting directly onto drywall.*
1. You have chosen your aspect ratio, size and screen material & gathered your tools ([View Images](#))
 2. Determine viewable dimensions ***** This example for a (16:9) 5x9 Foot Screen. *****
 - The material we have chosen is 110" wide. We will leave ourselves 5" of fabric to stretch over our wooden frame, so we'll have a viewable width of 105". Using the aspect ratio, we must determine the height.
 - i. $105" \times 9/16 = 59.0625$ or $59 \frac{1}{16}"$
We have our viewable dimensions of $105" \times 59 \frac{1}{16}"$
 - An aspect ratio of 4:3 would be $105" \times \frac{3}{4} = 78.75$ or $78 \frac{3}{4}"$
 3. Calculate dimensions of wood frame ***** This example for a (16:9) 5x9 Foot Screen. *****
 - Measure the black felt tape (It should be approximately 2".)
 - Measure the back-band trim (It should have an overhang of approximately $\frac{3}{16}"$ though this varies.)
 - Take the viewable dimensions and add the width of the black felt tape and the overhang on the back-band trim all the way around.
 - i. Taking our viewable width of 105" and adding 2" twice and $\frac{3}{16}"$ twice, we get a total frame width of $109 \frac{3}{8}"$.
 - ii. Taking our viewable height of $59 \frac{1}{16}"$ plus 2" twice and $\frac{3}{16}"$ twice we end up with $63 \frac{7}{16}"$.
 - iii. Our frame dimensions are $109 \frac{3}{8}" \times 63 \frac{7}{16}"$
 4. Cut two pieces of pine that are exactly as long as the frame (our width is $109 \frac{3}{8}"$)
[FAQ—How-To Tips Section](#)
 5. Cut three boards that are 7" (twice the width of the 1x4's: $3 \frac{1}{2}"$) shorter than the exact frame height (these will measure $56 \frac{7}{16}"$) - one piece will go in the center for stability
([View Images](#) - www.carlofet.com/build-your-own-projector-screen - Bottom of Page)
 6. Assemble the frame using your joinery method of choice. We prefer to use pocket screws and a simple [pocket hole jig](#). ([View Images](#))
 7. Fasten the floor joist braces in each corner for added strength (optional) [View Images](#) | Continued...

8. Lay the screen material over the frame ([View Images](#))
9. Using heavy duty staples, start on the top and place **several staples** in the center (1). Move to the bottom and place **several staples** in the center (2), stretching the fabric straight across.
10. Move to the right side of the frame and place **several staples** in the center (3), stretching the fabric out from the center. Move to the left and place **several staples** in the center (4), stretching the fabric straight across.
11. Take your time; make sure the staples are close together and work out all ripples before stapling to the frame (or onto drywall).
12. At the top add a couple staples, about 2-3 inches to each side of the original staples (5 & 6). Make sure to stretch with even tension out from the middle. Repeat at the bottom (7 & 8), right (9 & 10) and left (11 & 12) sides.
13. Add 3 staples, again 2-3 inches apart, at the top of the frame (13-15 & 16-18). Repeat at the bottom (19-21 & 22-24), right and left sides. Again, make sure to stretch with even tension out from the middle as shown in the diagram. ([View Images](#))
14. Continue adding 2-4 staples, evenly spaced and rotating to opposite sides until the screen is completely secured all the way around the frame. Do not staple in a circle around the frame, always rotate to the opposite side with even tension. ([View Images](#))
 - The staple technique, demonstrated here, is just one way to mount our materials. Some customers choose to wrap the material around the frame.
 - **Do NOT wrap our thicker, stiffer, non-tensioned materials. Folding or crimping a thick material will cause permanent damage to the material. If you want to wrap the material over your frame, be sure to select a tension-mounted material.**
 - This great video was made by one of our satisfied customers. Thanks Rick! You did a great job. [Watch DIYwithRick Build a Projector Screen with Carl's FlexiWhite.](#)
15. Cut the [Back Band Trim](#) with a Miter Saw or [Miter Box/Saw](#) to fit your frame. Back Band Trim is a piece of wood moulding that surrounds the exterior edge of the screen to create a professional looking frame. ([View Images](#))
16. Spray paint the back band trim black and allow to dry
17. Nail the back-band trim to the frame
18. Add the black felt tape, on top of the screen material, cutting with a scissors or utility knife
 - do NOT stretch the tape
19. Hang on the wall using the picture hangers of your choice ([View Images](#))