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.
     - 105" x 9/16 = 59.0625 or 59 1/16"
     - We have our viewable dimensions of 105" x 59 1/16"
   - An aspect ratio of 4:3 would be 105" x ¾ = 78.75 or 78 ¾"
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 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.
     - Taking our viewable width of 105" and adding 2" twice and 3/16" twice, we get a total frame width of 109 3/8".
     - Taking our viewable height of 59 1/16 plus 2" twice and 3/16" twice we end up with 63 7/16".
     - Our frame dimensions are 109 3/8" x 63 7/16"
4. Cut two pieces of pine that are exactly as long as the frame (our width is 109 3/8")
   - FAQ—How-To Tips Section
5. Cut three boards that are 7" (twice the width of the 1x4's: 3 ½") shorter than the exact frame height (these will measure 56 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)