A Different Kind of Design Wall.

The problem.

Building your quilt can take days or months, depending on what else is happening in your life. I don't know too many quilters who can spend hours working on their art without interruption. Sometimes it's helpful to put your work out of sight. Especially if you are having difficulty finding just the right fabric or you're building a quilt you don't want someone else to see. Having a design wall that is out of the way and can hold your quilt until you're ready to work on it again is priceless. I was in desperate need of something like that.

Scoping out the possibilities.

I didn't have enough space in my sewing room. Except behind a wire shelf, which, even with the wheels, I didn't want to move each time I wanted to design a quilt. It couldn't be heavy or need a lot of structural support because my walls can't handle that. I did have a doorway that was taking up valuable wall space. I could cover the door, but then I'd have no way to get out of the room, unless it was a curtain, not ideal. Looking over the situation I realized I could move the wire shelves away from the wall enough to tuck a design wall behind it. I am lucky enough to live alone and didn't have any resistance when I thought to remove the door, so I did.

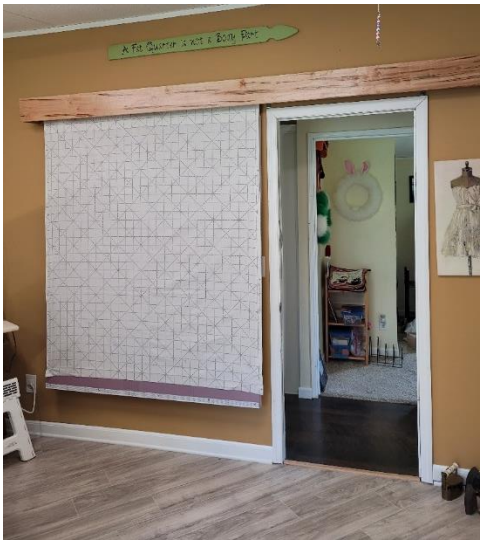
The solution.

I had a plan, which I subsequently overengineered, it's what I do. I would make a moveable design board that I could pull out when I needed it and tuck away when I didn't.

Wall advantages.

There are several best things about this wall. It's lightweight, it moves easily on the rod without mechanisms or electricity. There is a lot of surface area, it can be put up or taken down by one person, and it takes a lot of "pinning". It's great for auditioning fabric and you can leave the design on the wall for a while. If you don't have enough room for it to slide you can make it stationary.
One drawback - if you want to hang something on the space behind it, it will need to be low profile.

Take a peek at the finished project.....



1: Design wall – finished.

2: Finished wall, tucked away

Decisions/Materials List

Decide where you're going to hang the wall and if you want it to move. Then use this chart to help you determine the amount of materials you'll need for the wall, rod box, and cornice. Abbreviations of YM, (Your Measurement), and YN, (Your Number) are used to help you make this wall fit your space.

I've included an example list if you choose to make it stationary.

	Component	48 wide	56 wide	Stationary
Horizontal space needed		100"	110"	60"
Insulation panels	Wall	1	1+8"	1+12"
Tape, 2" roll	Wall	---	1	1
Perforated vinyl corner bead, 8'	Wall	6	6	2
#6 machine screws, nuts, washers*	Wall	20	22	4
Robe hooks, single hook	Wall	2	2	2
Flannel grid yd (56 wide)	Wall	2	2	2
Floral "greening" pins (pkg)	Wall	1	1	1
2 ea Pine boards 1x4x YM	Rod box	106"	112"	64"
Closet rod, adjustable	Rod box	72-120"	72-120"	48-72"
Corner braces	Rod box	11	11	7
#8 x 1" screws (if not with braces)	Rod box	22	22	14
#8 x 1.75" or 2"	Rod box	6	6	3
TP 15 Tie Plate	Rod box	3	4	3
Wood of choice 1x6x YM	Cornice	102	112	64
Wood of choice 1x4x YM	Cornice	102	112	64
Wood of choice 1x6x5	Cornice	2	2	2
Corner braces (every 10")	Cornice	9	9	7
#8 x 1" screws (if not with braces)	Cornice	18	18	14
Heavy duty corner brace 4"	Cornice	2	2	2
#8 x ¾" screws	Cornice	21	21	19

Notes

Foam Insulation: needs to be 1" or 1 ½ " or you risk breakage. I advise against getting the plastic covered Styrofoam as it is difficult to cut accurately, makes a mess, is too thin, and doesn't take as well to pinning as the pink or green stuff. I have tried both types. If you do use Styrofoam because you already have it use duct tape around the edges to protect them (I didn't and was sorry.)

Corner bead: The reason for the perforated corner bead across the top is to give it strength and keep the holes from getting bigger during use. On the sides it protects from damage when it's handled. I like that it has holes, giving flexibility in placing the screws/nuts.

Washers: the finishing washer just gives more surface area to prevent sinking the screw head into the insulation.

Other items you will need to complete this project

Drill with small drill bit for pilot holes and a Phillips screw bit
Level, the longer the better
Pencil/marker
Chop/miter saw, if you don't have the wood cut to length where you buy it
Tape measure
Heavy duty scissors (to cut the corner bead)
Clamps – 5" jaw minimum
Straight edge – I like a metal yard stick
Box knife (put in a new blade)

Sharpe awl or long, thin nail - to poke pilot holes in the insulation
Stud finder
Wall anchors as needed
Screws #8 at least 1.75 (attaches rod box to wall)

Wall Construction

Materials

Rigid insulation
Perforated vinyl drywall corners
Screws, finishing washers, and nuts
Robe hooks
Tape – to tape insulation
Straight edge and knife
Awl
Heavy duty scissors
Gridded flannel
Floral pins

Construction

Main Wall

Work in a large flat, area – preferably an uncarpeted floor. If that's not an option, do your best to keep it as flat as possible, especially if you need to tape sections together.
Cut the insulation to your width measurement using the straight edge and box knife. If you need extra width cut it, abut factory edges, and secure with tape on front & back.
Choose a side to be the front (it's not going to show)
Mark all edges approximately every 18 inches, keeping ½ to ¾" from the edge
Cut 4 lengths of corner bead to width, set 2 aside
Cut 4 lengths of corner bead to height minus 4 inches, set 2 aside
For each edge: (Perfection is not necessary, close is good.)

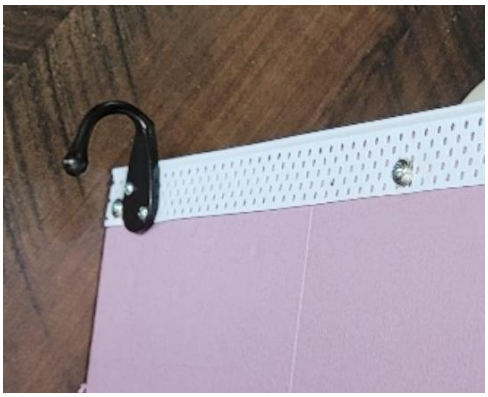
- Lay the section along the edge
- Using the awl or nail, make a hole through the bead, close to each of the marks
- Insert a screw/washer through the bead & hole, extending through the back

3: Wall edges

Turn the piece over, front side down (don't worry, the screws won't fall out)
Place the correct corner bead on each edge, placing the bead onto each screw. They may not line up well, but close is good. The beads overlap on the edge, this is exactly what you want. The goal is to protect the edges and it will be covered with the flannel anyway. Don't overthink this, perfection is not needed.
Put a nut on each screw (no washer)
Turn piece over, front side up

Attach robe hooks

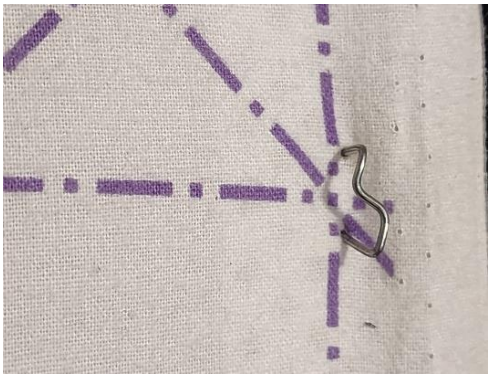
On the top, mark approximately 2" from each edge for the robe hooks.
Carefully make holes for the screws to secure the hooks – the hooks need to be at the same level and facing forward
Attach with screw/nut combination (no washer)



4: Robe hooks

Attach flannel

Lay the gridded fabric or flannel onto the front, don't stretch it
Starting at the top, pin a floral pin through the fabric and the corner bead



5: Floral pin

Secure across the bottom, keep the lines as straight as possible
Secure the sides in the same manner, refer to the very first photo as an example

Congratulations!! Your wall is complete.

Stand the wall up, step back and admire your handywork!!! Take a picture. Take a break.
When you're ready, it's time to construct the rod box.

Rod Box

Materials

2 ea Pine board 1x4x (YM)
2ea Pine board 1x4x5"
(YN) Corner braces (use #8 x 1" wood screws if none come with the braces)
Closet rod (YM) length
(YN) Flat mending plates
Wood glue
Clamps (at least 5" jaw)
#8 x 1 ½" wood screws
Stud finder
Level
Drill with small bit for pilot holes
Screws

Work on a flat, protected surface.

Top & back

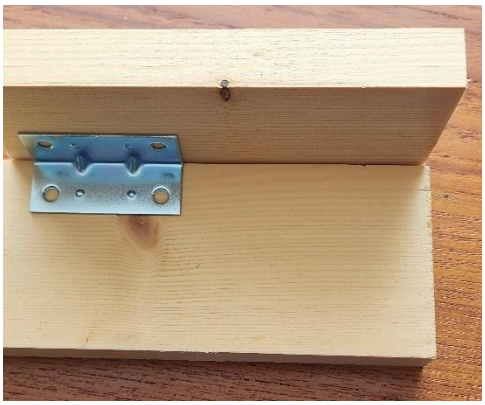
Lay 1x4x(YM) flat, this will be the top board
Mark and drill 4-5 pilot holes equidistance along the edge, about ½" from the edge
Turn the board over
Spread a bead of wood glue along the side of drilled edge
Place the edge of the second 1x4x(YM) board on the glued edge, making an L. This board will be the back which will attach to the wall.

6: Top and wall boards

Place clamps to hold the top to the bottom
Secure with wood screws, let it dry
Remove clamps if you haven't already

Install corner braces along the length of the box about every 24 inches

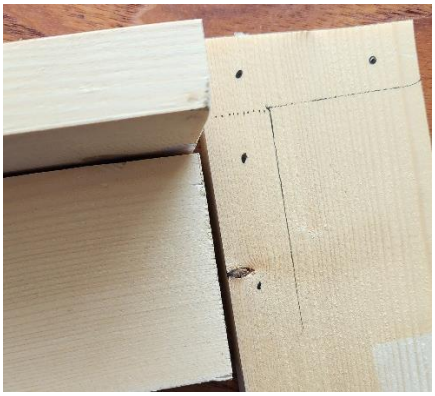
Do not attach the top board to the wall, it won't be as strong or stable. Just as you put the sides on the quilt before the top/bottom, the sides act as "supports" for the top/bottom. In this case the back supports the top.



7: Corner braces

End caps & corner braces

Orient the 1x4x5 to cover the ends of both boards
Trace the inside of the L onto the end cap
Drill pilot holes within the line
Glue end cap in place
Place screws to secure



8: End cap

Install corner braces inside the end caps

9: End cap corner braces

Cornice supports

If you're making a cornice, secure the tie plates to the top of the box. Make certain they extend to the front, they will provide more stability to the cornice once it is placed on top of the rod box.

10: Cornice supports as seen from below

Rod installation

Install the rod between the end caps per rod instructions

11: Rod installed

Hang the box

Find studs and use the level to mark placement
If you can't find studs make sure you use wall anchors
Measure distance and transfer to the wall portion of the box
Drill pilot holes and attach the box to the wall using screws

Cornice Construction

I used an ambrosia maple for the cornice that I found at a specialty hardwood shop in Birmingham. I paid a little more to have them mill it and cut the boards to length. I learned that the wood is called ambrosia maple because the ambrosia beetle bores into the tree and eventually dies. It leaks causing the blue stains that travel along the grain. I think it's amazing and I love the story.

Make the cornice

You don't have to make a cornice, this is your choice, aka "design enhancement".

Wood of choice measuring 1 x 6 x [your desired width + 12"]
Pine 1x6x [your width]

Wood stain or paint
Corner braces
Heavy duty corner braces
#8 x 1" wood screws
Drill (pilot holes are imperative if you're using hardwood)

To make the side sections of the cornice you'll need to miter cut a 6" section off each end.
You now have 2 options –

1. If you don't have a specific front to the board, exchange the ends and attach. This method puts the "front" of the main board on the inside of the side pieces.
2. If you need the front all around cut another miter from the end, taking off a small Vee of material.

12: Miter to keep best side of the board on the outside

Constructing the Cornice

Construct with glue and corner braces, you'll get a very long U shape
Lay the pine board inside the cornice and move it so it is flush with one edge. This is now the top and the portion that rests on the rod box.

13: Pine board inside of cornice

Place a heavy duty triangular corner brace in each corner – helps keep the box square.
Place corner braces every 10 inches
Apply a finish to the cornice now – either paint or stain

Hang the cornice and from below secure with screws through the tie plates to the top board of the rod box.

There you have it, you're done. You have a lovely design wall that will make building your own quilt easier and more fun.

I have since moved my sewing space to a bigger room, where amazingly, I have even less wall space. I do have a little alcove that I don't mind covering up but still need to access, this is where the wall hangs now. It was easy to move to its new digs.

Did you make one? Post a picture of your finished project.