



HOW TO CREATE A FLOATING PROJECTION SCREEN

**WITHOUT DRILLING A HOLE IN YOUR
A-VELVET FIXED FRAME SCREEN.**

BEAMAX

▶ FOREWORD

It was Tony who called me one day about advice on how to hang his A-velvet from a sloped ceiling. Asked if I had any ideas.

His original idea was to build a supporting frame, onto which the projection screen would be hung.

I offered him the idea of hanging it from steel wires and drilling holes in the top of the frame so that brackets could be attached. These brackets are standard items, so it would be a relatively easy installation.

Tony bought the screen and went on a search for the right parts. Parts that would allow him to install the screen, without having to drill holes.

The result from this search can be found in this "manual". It shows you how to create a floating screen like Tony and which parts to use.

At the same time, you'll see images of the home theater and of every step along the way. This will make it very easy to re-create the installation.

I tried to make it as easy for you to follow as possible, but if anything is unclear, send me an e-mail at otto@beamax.com and I'll help you out.

Enjoy!

Otto Tromm

BEAMAX

▶ CONTENT

1. 3 OPTIONS TO INSTALL YOUR PROJECTION SCREEN WHEN YOU HAVE SLOPED WALLS	4
2. THE FIXED FRAME PROJECTION SCREEN	6
3. CAN YOU USE A DIFFERENT PROJECTION SCREEN THAN THE BEAMAX ONE?	7
4. FIXING THE SCREEN TO THE FLOOR AND TO THE CEILING	8
5. HOW TO FIX THE FRAME SCREEN TO THE WIRES	9
6. CONCLUSION	10
7. RESOURCES	11

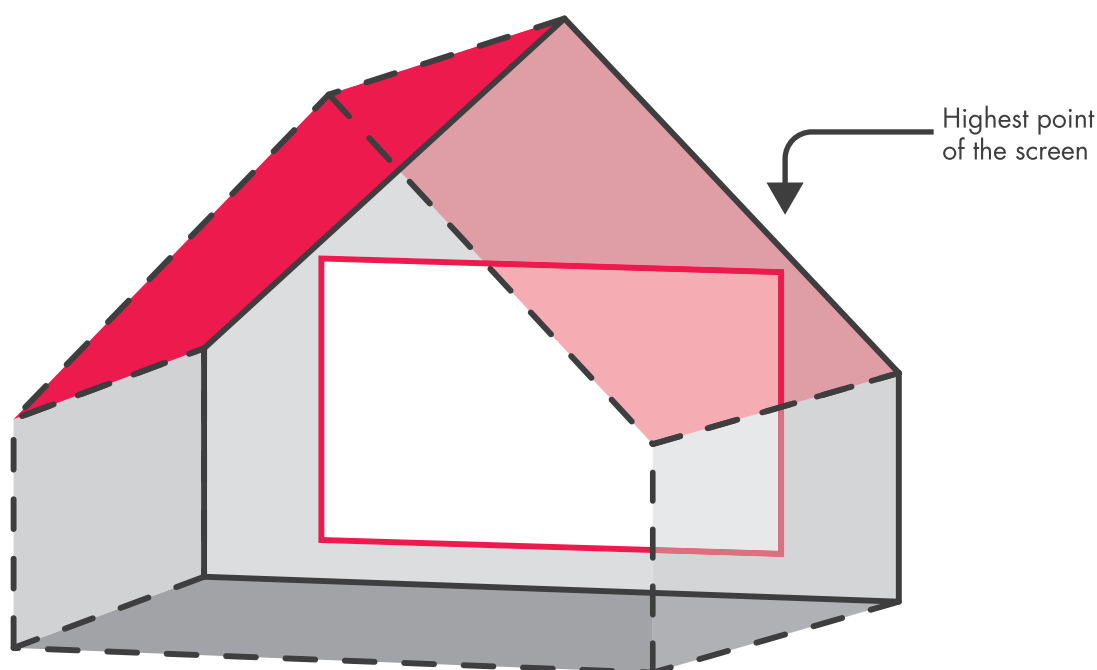
▶ 1. 3 OPTIONS TO INSTALL YOUR PROJECTION SCREEN WHEN YOU HAVE SLOPED WALLS

A fixed frame projection screen is ideal when you want a perfectly flat projection surface. Most of these screens find their way to a dedicated room, which is often above a garage or in the attic.

Such spaces often have sloping walls. And there are various to deal with these walls when it comes to placing your projection screen:

1. Place the screen on the short wall. This allows you to mount the screen as you would normally. The only restriction is the wall width. The highest point of your screen will be the point where the wall width equals the screen width.

You can see a drawing of this concept below ▼



- 2.** The second option is to build a false wall. This false wall will be the structure onto which the projection screen can be hung.

A big benefit here is that you can hide all sorts of stuff behind that wall. Like cables. Or integrate speakers. In-wall ones, so you virtually don't see them, nor the wires.

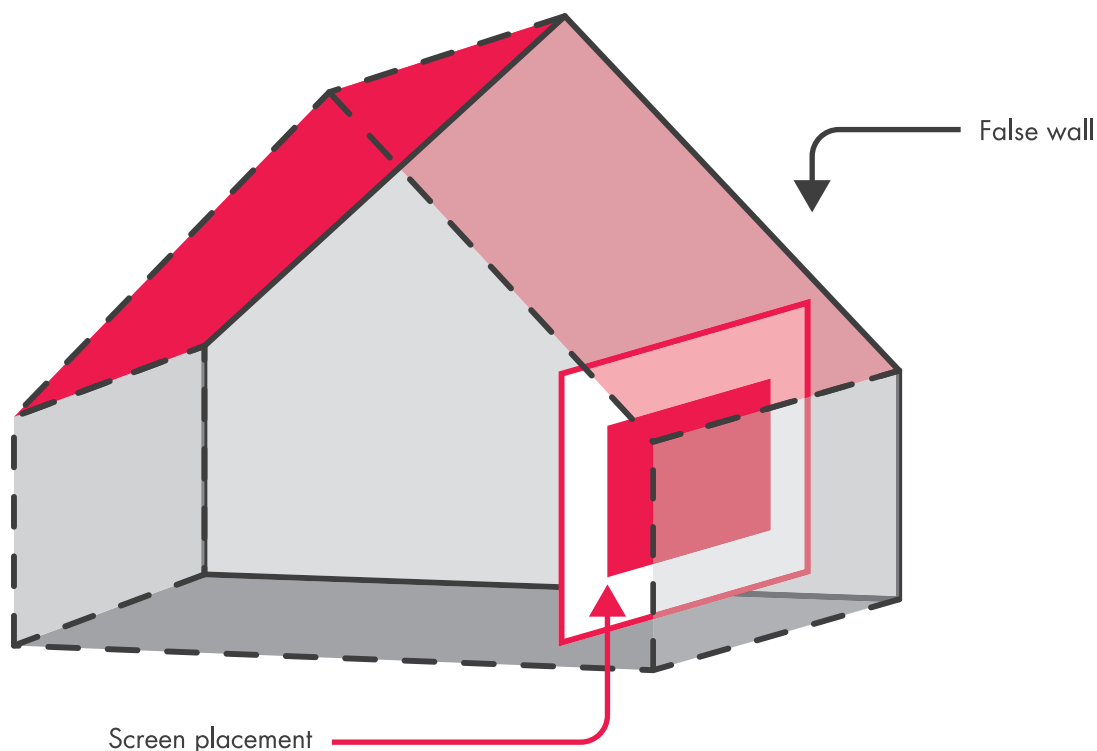
You can see a drawing of this concept below ▼

The drawback is that you will lose a lot of space. So if you can use some of the space effectively, you can win some back.

- 3.** The third option is creating a floating screen. And that's what we'll look at in depth here.

First off, let's look at a few factors that you should keep in mind when going for such an installation:

- 1.** Such a clean looking installation asks for your room to be relatively clutter free. If that's not you, either don't be bothered about it or go for the false wall installation.
- 2.** Projection works best when there's as little ambient light as possible. When looking for the right place for your screen, ensure there's no window close to your screen.



► 2. THE FIXED FRAME PROJECTION SCREEN

The screen is a fixed frame projection screen. This is an ideal screen for home cinemas, as it has tension on 4 sides. This 4-way tension ensures the projection fabric is perfectly flat. An absolute must-have if you want to enjoy a distortion-free projection.

The model in the picture is the Beamax 10564 A-Velvet. It's a velvet-covered frame of 8 cm wide (just over 3 inches) and has a diagonal of 211 cm (that's almost 84").

The screen has a matt white fabric with a gain of 1.0 This is a good set-up for a room with little ambient light.

The frame has a width of 8 cm (just over 3 inches wide). The frame parts are joined and fixed in at the corners with a bracket. This bracket is fixed by screws and these are the key to creating a floating screen without any modifications to the screen.



▶ **3. CAN YOU USE A DIFFERENT PROJECTION SCREEN THAN THE BEAMAX ONE?**

Yes, you can. The method used below can be used for different brands as well. There's no guarantee though, that you can do it without drilling the screws.

So when you are looking for the right screen, try to find out how it's assembled. This will tell you whether it would be possible to fix the mounting system for the wires in the same way.

It would be good to check whether the frame is sturdy enough to hand from wires. Some manufactures use very thin frames. That's OK when there's a wall behind the screen to support the structure, but a thin-framed screen can become twisted due when hung on wires.

► 4. FIXING THE SCREEN TO THE FLOOR AND TO THE CEILING

Let's start off with the parts that have to be screwed in: the ceiling and floor fixtures.

You need these because you don't want a screen to be moving. It'll ruin the movie experience and potentially damage your screen.

Now how would it be moving when it's just hanging there? Here are a few potential reasons

- People walking in the room and touching or walking into the screen (children in particular)
- Air displacement because of a draft
- Air displacement from speakers
- Other "accidents", while cleaning or using the room in general

To ensure the projection screen was securely fixed, the wires are attached to the roof and the floor. This was done on both sides of the screen, so it would be secured in 4 positions.

This is the part that is fixed to the floor: (Image 1)

You can see here which part was used for the ceiling: (Image 2) (all of them came from Shopkit (which has an on-line. shop) [HERE](#)).

The brackets have joints that allow you to place it in virtually any angle you want. So no matter what the angle of your sloped ceiling, you can run the wires down perfectly straight.

What that means is this (seen from the front). As you can see, it's a very clean-looking connection, that's hardly visible. (Image 3)

This is what that looks like from the back: (Image 4)

You can see how the projection screen is attached to the wires already, so let's look at that in greater detail.



▲ Image 1



▲ Image 2



▲ Image 3



▲ Image 4

► 5. HOW TO FIX THE FRAME SCREEN TO THE WIRES

The great thing about attaching the frame to the wire connector from Shopkit was the fact that there was no drilling required. The predrilled holes in the A-velvet projection screen.

Here's the parts that connects the screen to the frame: (Image 1)

As you can see there are three pieces.

First, you fix the left 2 to the frame, by driving the screw into the corner bracket of the screen's frame: (Image 2)

And that's the great part of this installation. In stead of drilling holes in the back of your frame, you use the existing screw holes.

You locate the part for the wires at the position of the fourth screw of the bracket.

Seen from the back, the drawing shows where the 4 connectors of the wire system would be: ▼

Next, the third part is driven in and the wire is run through. This last part has a small screw inside, which is loosend and then tightened to run the cable through and fix it in the right position.

Here's the third piece installed, but the wire not run through it yet. (Image 3)

When fixing the screen to the wires, make sure your screen is level, so you can easily align the image of your projector to the screen. If the screen isn't level, your image won't fit the screen and will be partly on the black border.



▲ Image 1

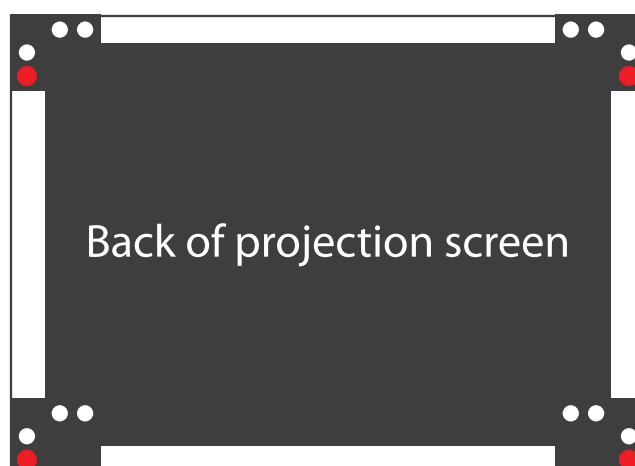
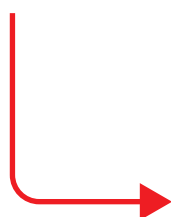


▲ Image 2



▲ Image 3

Red dot indicates where the fixation point for the wire system should be



▶ 6. CONCLUSION

The result is a cool looking installation that makes the most of the sloped walls.

It also keeps your projection screen as it is. That's important when you move and want to take your screen with you. Or when you want to sell it.

It's also an inexpensive way to install your screen, compared to building a false wall. Again, this is also a big benefit if you want to move or repurpose the room. It's a lot less work to take the screen out compared to removing a false wall.

▶ 7. RESOURCES

- ▶ www.beamax.com
- ▶ www.beamax.com/A-velvet
- ▶ www.shopkit.com/products/cable/

BEAMAX