

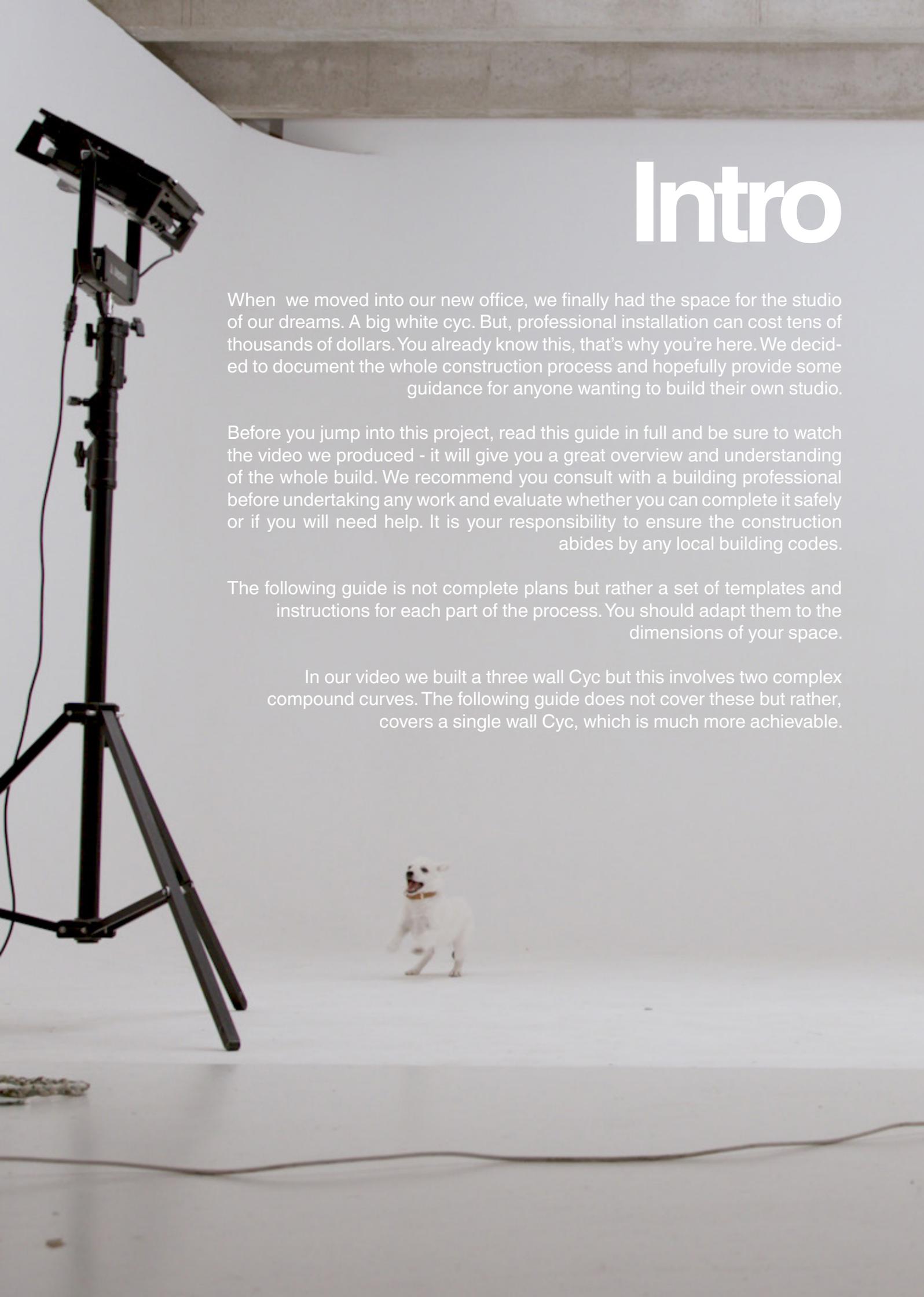
# DIY CYC

Syrrp

Version 1.01 - 01/02/2020

*Before you start:*

This guide is provided as is, for free, with no guarantee or warranty.  
Before starting any project you should consult with a registered building professional and follow appropriate safety procedures.



# Intro

When we moved into our new office, we finally had the space for the studio of our dreams. A big white cyc. But, professional installation can cost tens of thousands of dollars. You already know this, that's why you're here. We decided to document the whole construction process and hopefully provide some guidance for anyone wanting to build their own studio.

Before you jump into this project, read this guide in full and be sure to watch the video we produced - it will give you a great overview and understanding of the whole build. We recommend you consult with a building professional before undertaking any work and evaluate whether you can complete it safely or if you will need help. It is your responsibility to ensure the construction abides by any local building codes.

The following guide is not complete plans but rather a set of templates and instructions for each part of the process. You should adapt them to the dimensions of your space.

In our video we built a three wall Cyc but this involves two complex compound curves. The following guide does not cover these but rather, covers a single wall Cyc, which is much more achievable.

# Walls

Step one is to look at the walls you have in your new studio space - this will determine the amount of construction necessary, the rib design (A or B) and the overall cost of the installation. If you have concrete or block walls, you'll need to build a frame inside the wall to hold your ribs and a new drywall exterior. If you already have drywall, you're in luck! It's much easier to affix ribs to an existing drywall so construction will be less involved.

## **For concrete or block**

With concrete or block walls, you'll be building a frame inside the existing wall. It is best to construct this as a standard stud wall from 2x4 timber. Standard plans and construction guides can be found online if you have never done this before.

Once you have a frame, it will need to be securely fixed to the concrete wall and floor with Masonry Anchors. This should be done according to manufacturer instructions to ensure a secure fixing. We got our from a local hardware store as they are relatively common.

With the frame installed and secured, you will need to Gib-stop or drywall the flat surface. This is done by affixing sheets of drywall to the stud frame using regular drywall screws. Once complete, any gaps between the sheets and screw holes are to be covered using 'bog' or plaster filler. This is a fast drying sand-able solution that will result in a smooth surface. It can be bought in individual tubs for small projects or more cost effectively in large bags.

For the next step, you will be using Rib design A.

## **For existing dry wall**

You're in luck! You can skip the whole process of building a wall as rib design B will affix directly to the existing wall. It may pay to give the wall a quick sand as you'll be painting the whole wall when it comes to finishing.

For the next step, you will be using Rib design B

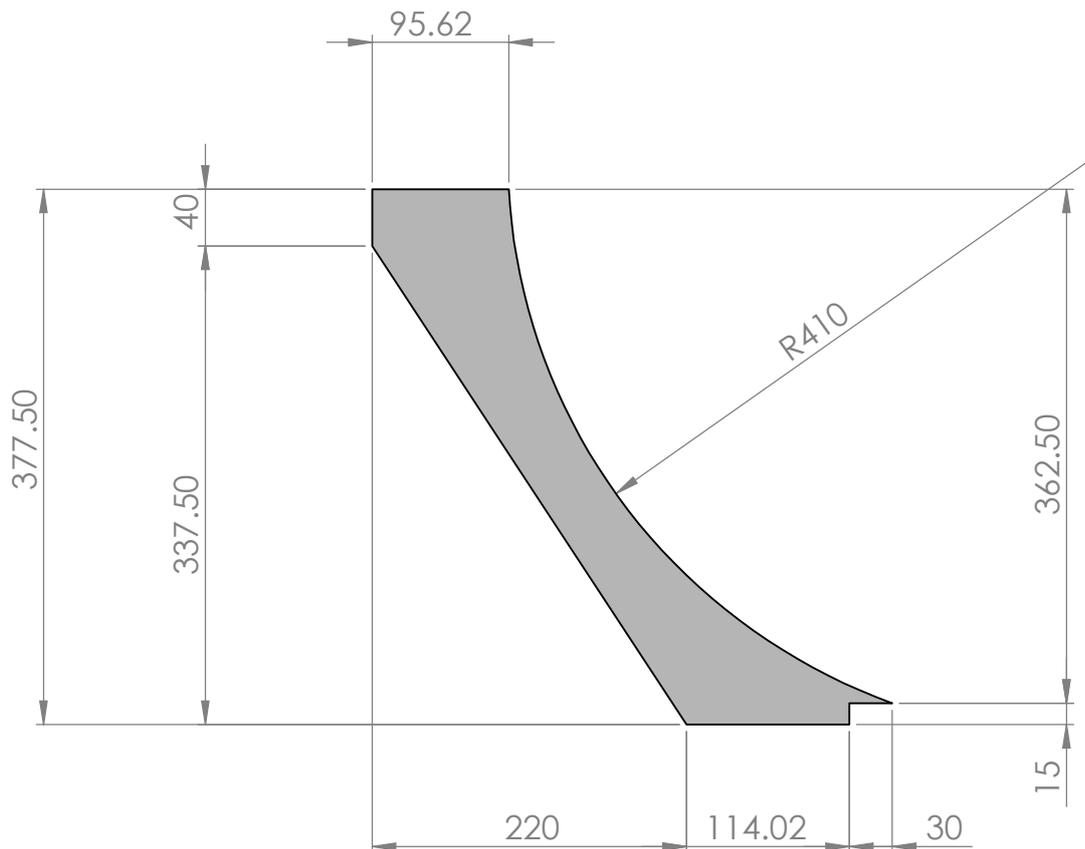
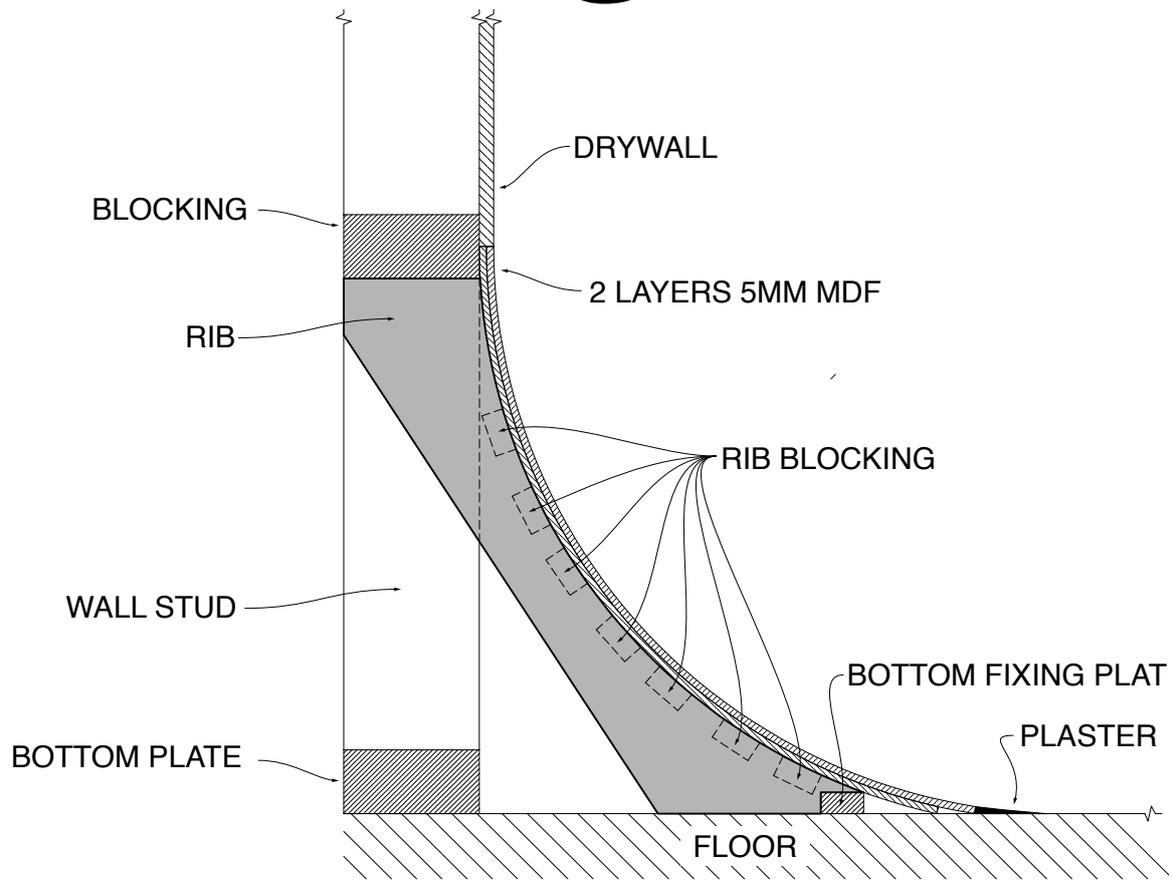
# Ribs

You've got your wall sorted, now it's time to actually create your curve. This is achieved through ply ribs covered in 2 layers of MDF. The ribs should be cut by printing the correct template for your wall (A or B) and using this to cut a master from which you'll mark all further ribs.

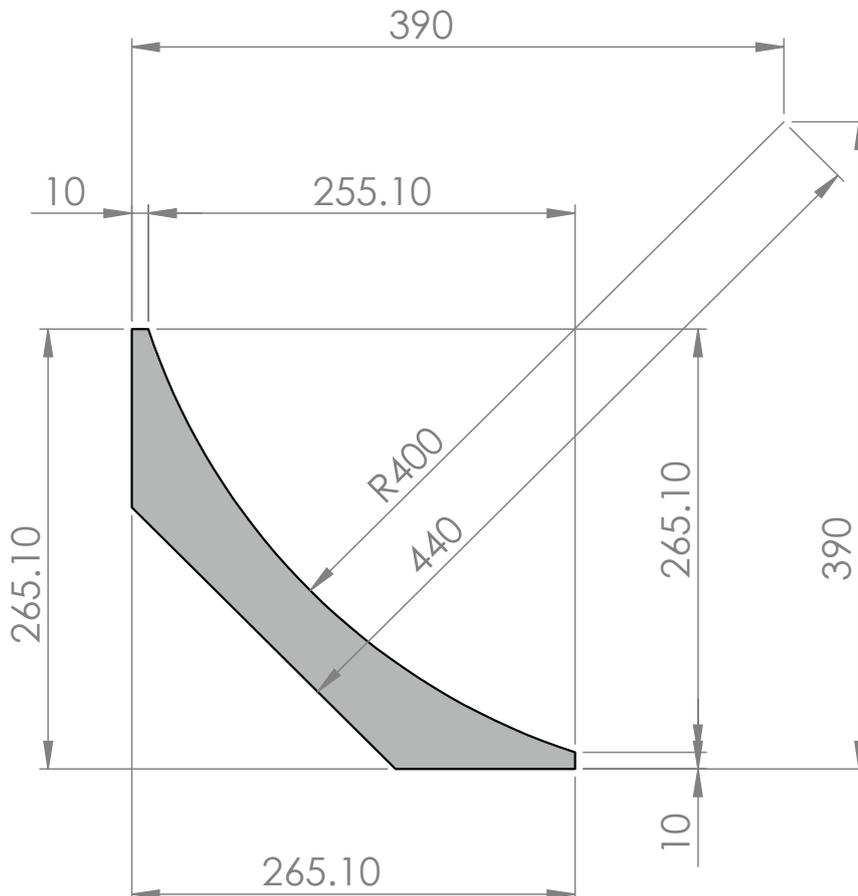
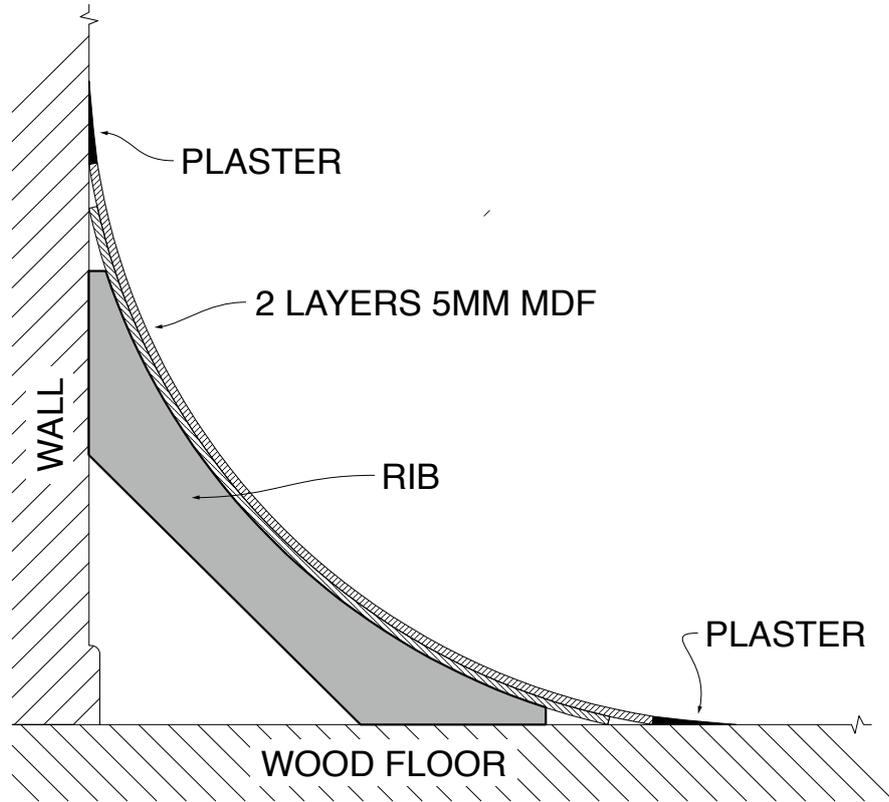
We recommended ribs are constructed from 18mm ply. Its easiest to cut these using a CNC if available but a jigsaw was what we used for this project. You will need a rib every 600mm and they should be secured to either your stud wall of the dry wall directly over a stud.

With your ribs in place, they should be braced horizontally with XxX timber ensuring the top angle of the wood does not protrude above the curve. It should be as flush as possible as the MDF will be screwed to it as well as to the ribs themselves. The spacing of 600mm allows for a 1200mm long sheet of MDF to span 3 ribs with adequate support. Accordingly, every second rib should be a double that are affixed to each other. This will allow the sheets to butt up against each other and have enough Ply to screw into.

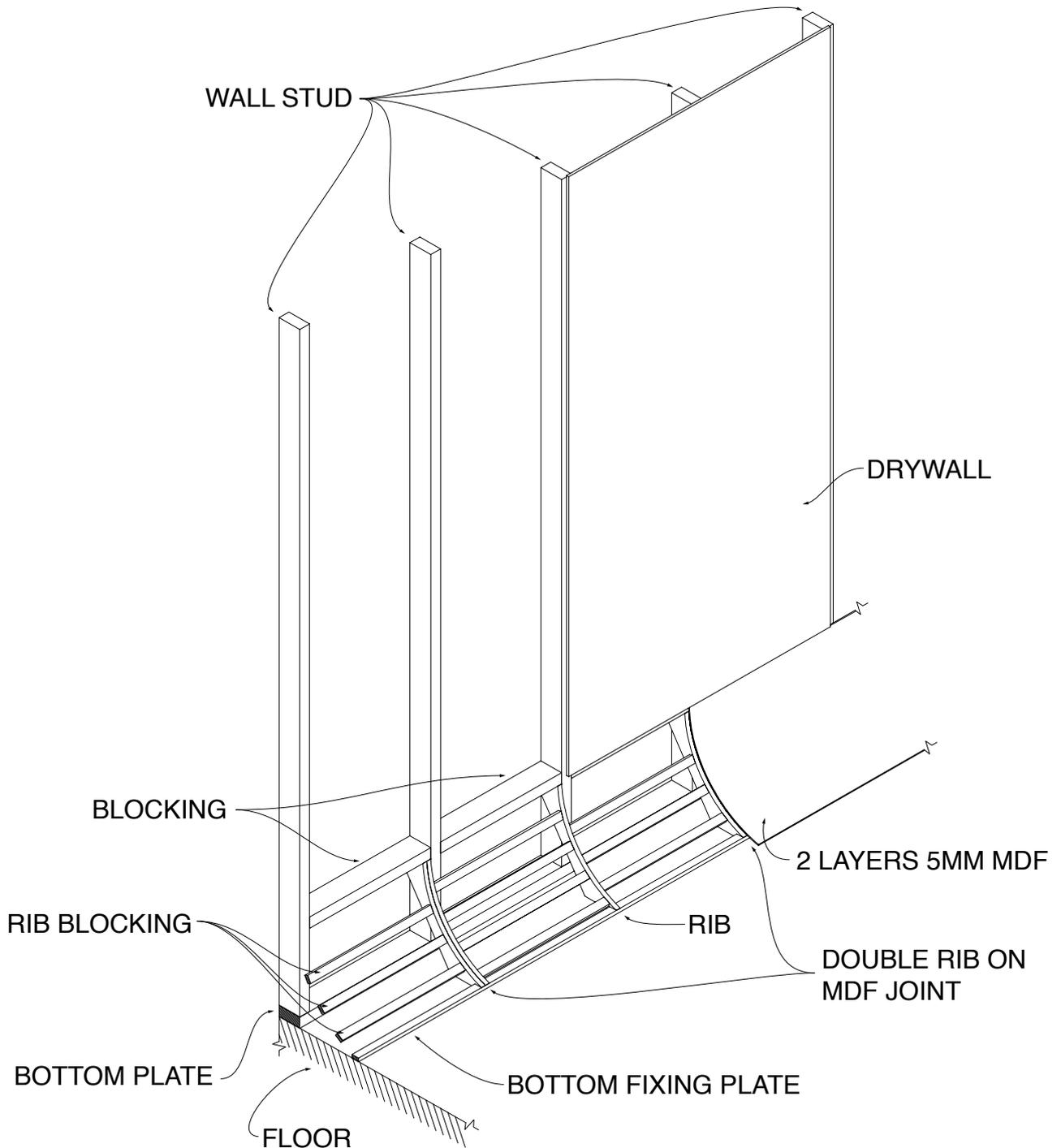
# Rib Design A



# Rib Design B



# Installation



# Curve

Now the ribs and bracing are locked, it's onto the curve. This is achieved by screwing a sheet of flexible MDF to the frame when bent in place, covering it in wood glue, and then screwing a second sheet on top. This is to form a strong lamination that holds its curve well but also allows us to create a curve that better blends with the floor and wall.

We recommend 5mm MDF as two layers will match the thickness of drywall. Your two layers should be slightly offset vertically to provide the smooth transition to the floor (and wall if you're working with an existing dry wall).

# Finishing

You're onto the final step - finishing the studio! Our goal here is to remove any uneven joins and gaps that will cast a visible shadow. This means each screw hole, joint and material transition will need to be filled with plaster and sanded back until perfectly smooth.

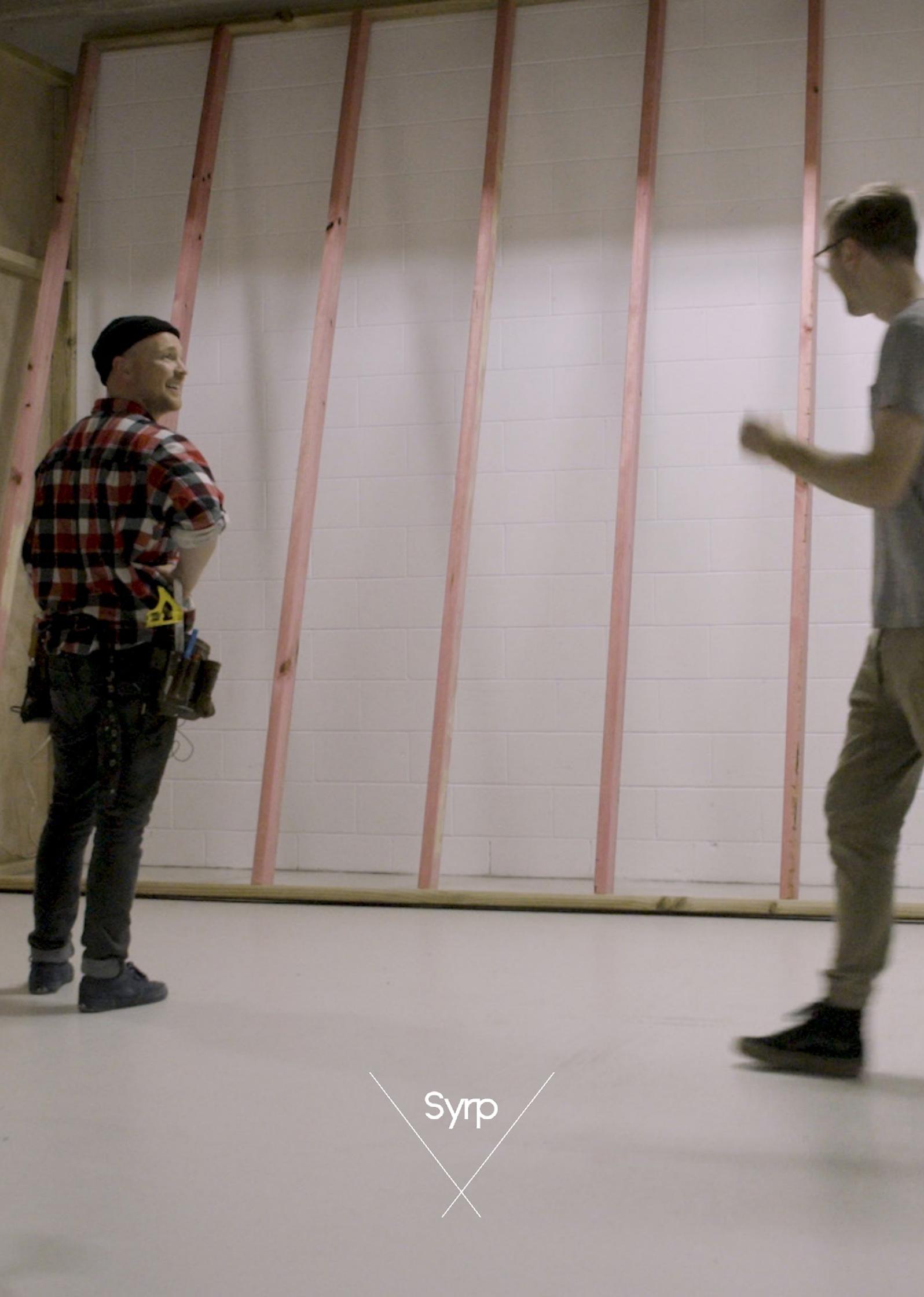
This process is time intensive but determines the quality of the overall studio. Remember to use proper safety procedures such as ventilation and face masks; following the manufactures instructions regarding curing times etc.

When smooth, you're onto painting. We used a super matte true white paint intended for ceilings. Any gloss should be avoided as it will create shiny spots that will make shooting very difficult. We repaint our studio after major shoots to ensure a clean surface and have found this to be easier and more reliable than washing it back to white.

# Thanks!

Thanks for reading this guide. If you use it to create your own studio, we'd love to see the finished result! Flick us an email at [support@syrp.co.nz](mailto:support@syrp.co.nz) or tag us (@syrp\_) on Instagram.





Syrp