HOW TO SERIES - MAKING A SAMPLE TO DETERMINE THE SHRINKAGE

I've been asked several times how you determine the shrinkage for a wet felting project.

Well, it's actually very easy. You should **make a sample and measure it before and after felting**.

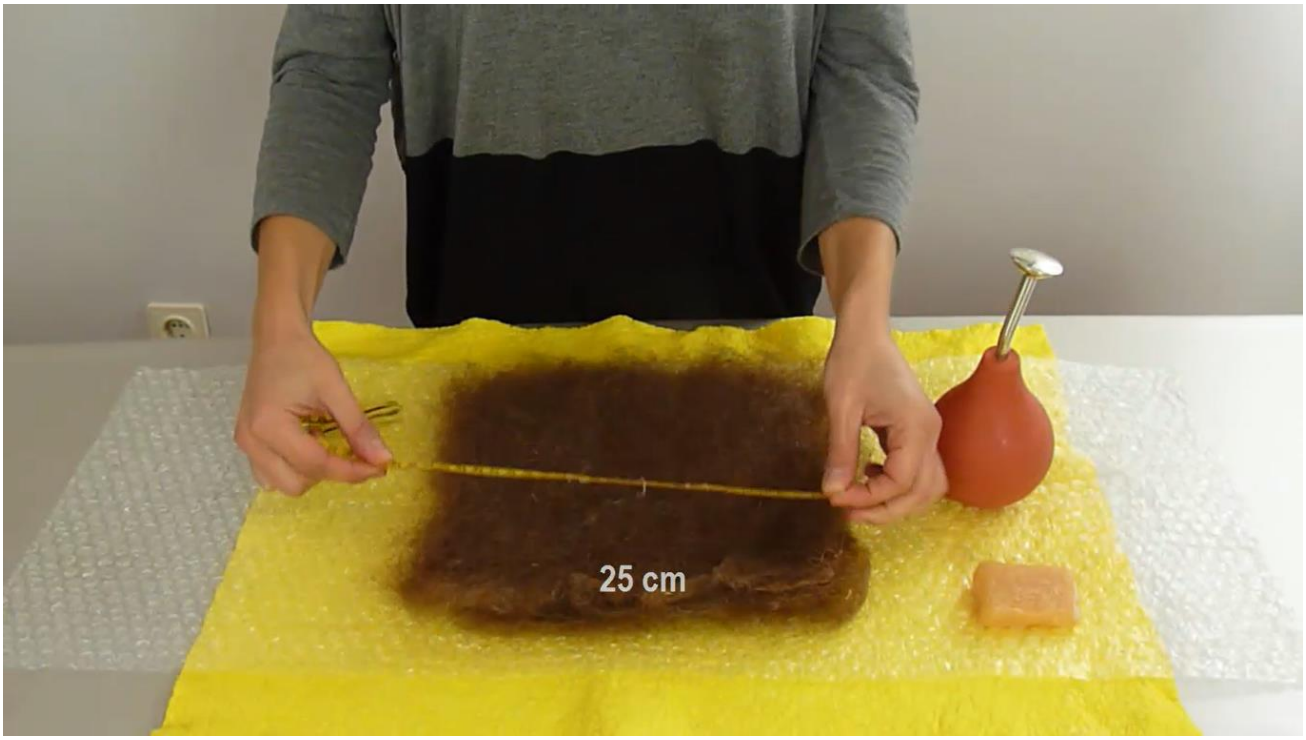
THERE ARE THREE FUNDAMENTAL FACTORS TO TAKE INTO ACCOUNT THOUGH:

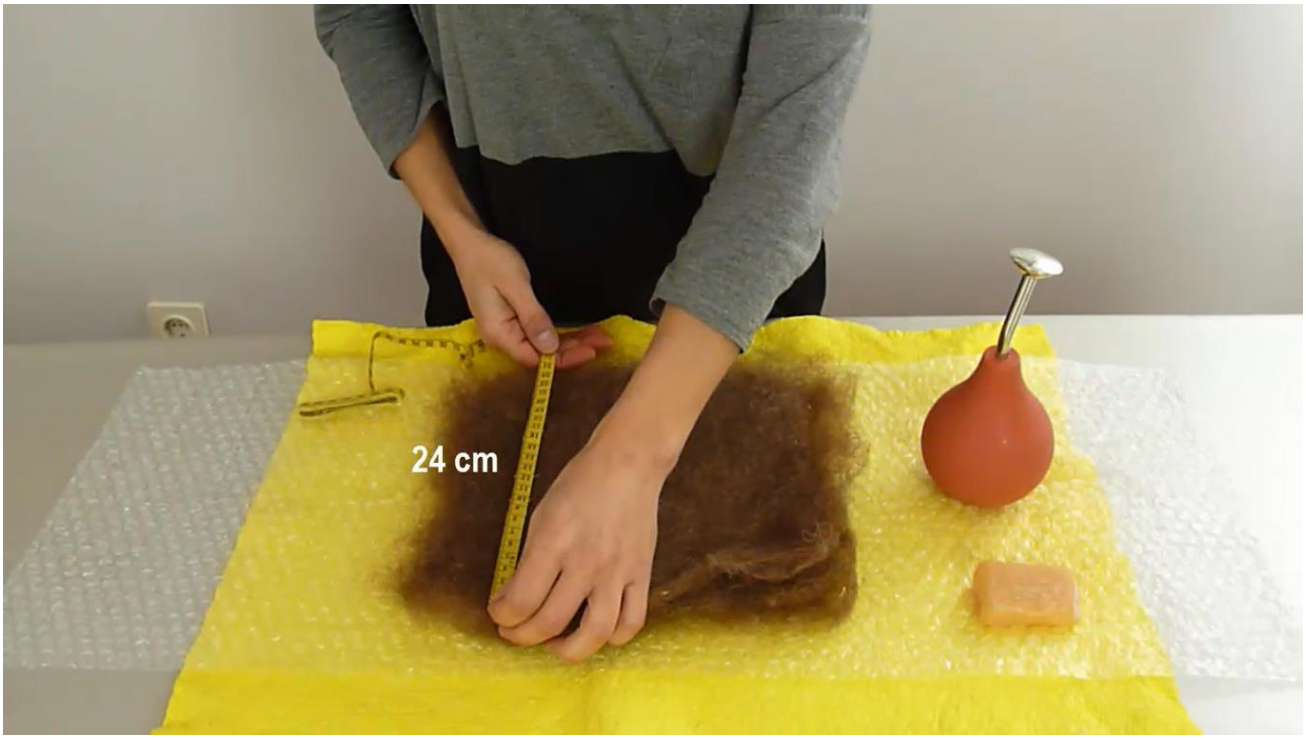
1. **Use the same type** (or types) **of wool for your sample and project**, since **not all wool types have the same shrinkage**.
2. **Use the same number of layers and equally thick ones for your sample and project**, since **the thickness of the layers influences the shrinkage**.
3. **Felt the sample and your project to the same degree**, since **the more you felt, the more the piece will shrink**.

You'll only get a correct sample if you follow these rules. And this becomes particularly important, if you want to felt a pair of slippers, gloves or a hat, because in these cases, size does matter ☺

So, let me show you an example.

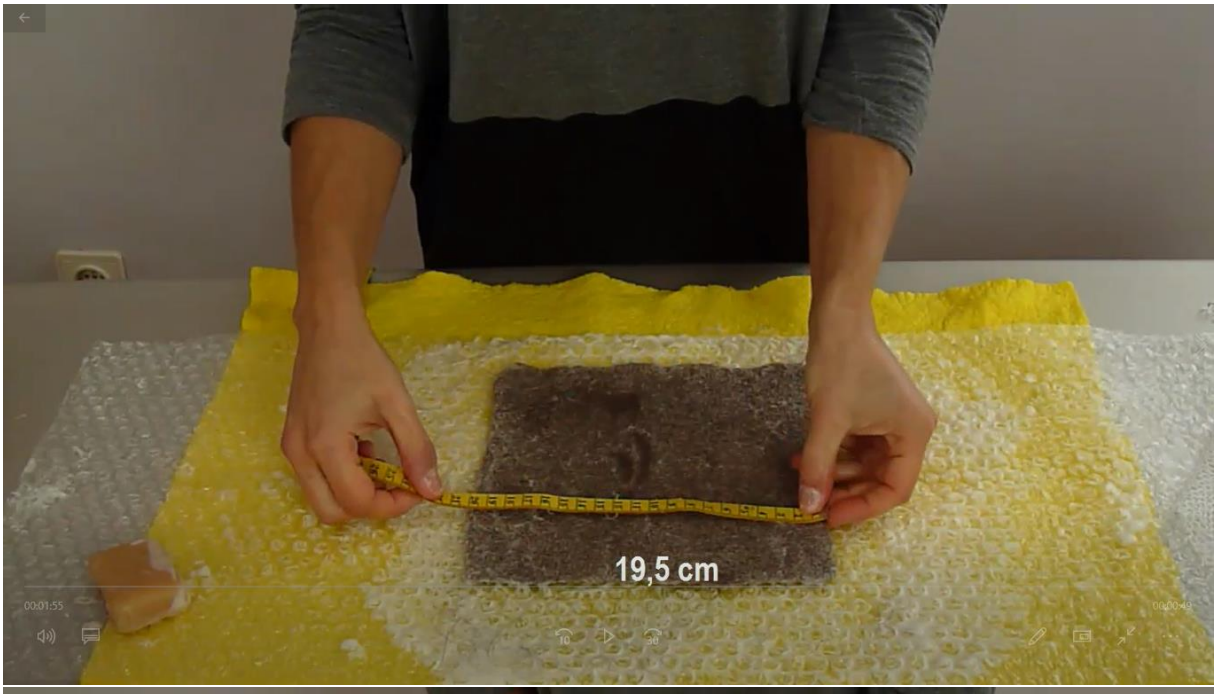
I´m using this wool to felt a hat and I know I'll need three layers. Here they are.

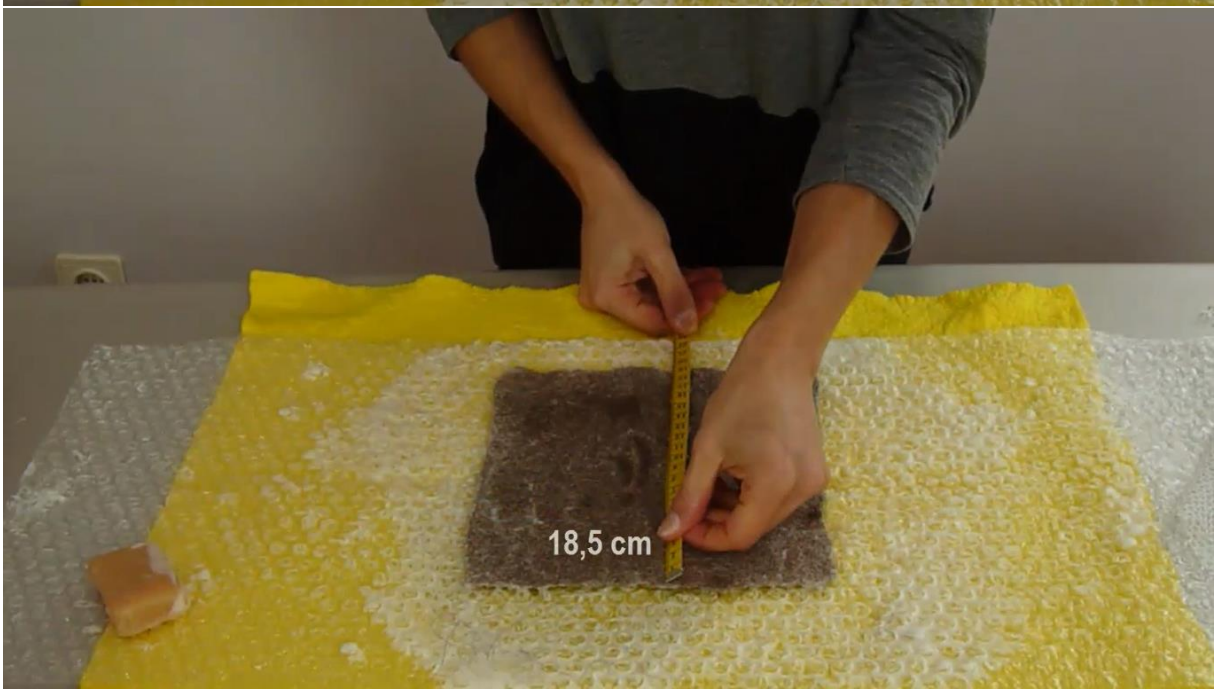




Now I'll measure them.

After this, I'll felt normally to the degree I want my hat to be felted. **Keep in mind your sample should be felted equally in all directions.**





Now I'm done with the felting, I'll measure my sample again. And, based on the before and after measures, I determine the shrinkage of the piece.

We **initially had 25cm x 24cm and after felting we got 19,5cm x 18,5cm**. This means **we need our resist to be approximately 30% bigger than the final piece**. Now, when you make the resist for your project, you just have to **add 30% to all your measures**.

If you're still having problems understanding how this works, here's a formula to help.

HOW TO CALCULATE THE SHRINKAGE RATE

Formula:
(Length or width) Before felting / (Length or width) After felting = X

Example:
Width = 25 / 19.5 = 1.28
Length = 24 / 18.5 = 1.29

If you're good at math, you'll understand the logic behind this formula. If math's not your thing, **just consider the number after the dot as the shrinkage rate**. So, if we round it up, we have a shrinkage rate of 30% in our example.

Now we know our shrinkage rate. But, based on that, how do we calculate the size of the resist?

Let's say we want to felt a piece with the final size of:
Width = 40 cm
Length = 30 cm

How big should the resist be?
Width = 40 cm * 1.30 = 52 cm
Length = 30 cm * 1.30 = 39 cm

(I've rounded up the numbers to 1.30)

Hope it all makes sense to you now 😊

Talk soon!

Vanda

P.S.: If you want to learn more about how to wet felt, check out the available tutorials here.