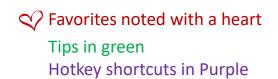
CLO: TOOLS FOR FITTING

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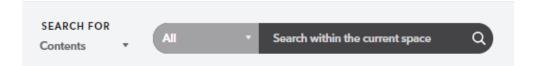


Clo file type = **ZPRJ** - opens in Clo Only – File is everything: pattern, fabric, trims, avatar, etc.

Imported/Exported Pattern file type = **DXF** – works in Bamboo Rose, Clo, or Optitex: File is pattern only

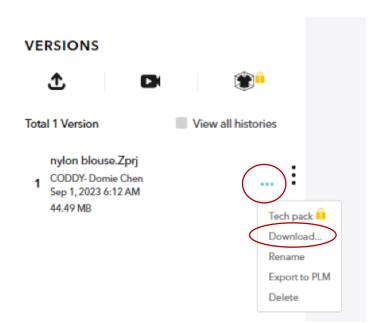
To download a clo file from vendor click on link or go to vendor rooms and search style#

Link to Vendor Rooms in clo-set https://style.clo-set.com/brand/50948



Once link opens hover over the 3 dots on the right of the file name

Click on download then open file



1) Create Assortment / Add Contents

✓ Create Assortment



• Create Assortment in Season page

- 1. Click icon on the top of the Season page.
- 2. Enter Assortment name and click 'CONFIRM' button.

· Add Style to Assortment in Workroom page

- 1. Put the mouse cursor on the desired Style and click the *** icon.
- 2. Click 'Add to Assortment'.

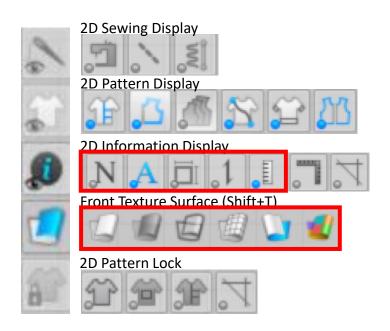
· Add Style to Assortment in Assortment page

- 1. Click to add into Assortment.
- 2. Select the desired style from EXPLORER or add the style you recently worked on from RECENT.

Tools inside the (Gray) 3D Window



Tools inside the (Gray) 2D Window

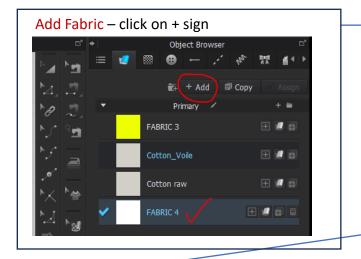


Tip: Icons outlined in red are the most common to use to prepare a file for fit

Tip: To find Hotkeys - Hover over tool (not all have a hotkey)

Add Set Up Page or Image

To bring in a picture to your clo fit



Create a Rectangle piece:
Go to the Solid rectangle tool, hold down, select rectangle or hotkey: S. Click and drag

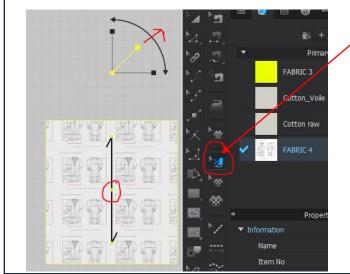
Polygon H

Rectangle S

Ellipse E

Spiral

Scale Image size: go to the texture tool in the black toolbar in the 2D window. Click on the grainline, then drag to increase size with the pop up tool in the corner of the 2D window



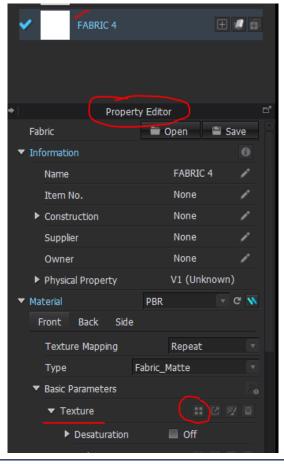


Go to the texture tool, click on grain line, hold down Left mouse button and move image within the rectangle



Tip: same for positioning a print texture

Add Image: click on the newly added Fabric. Go to property editor, click on The texture icon, open image from your computer







Position

1















Select Avatar – click with left mouse button Rotate Avatar – hold right mouse button Pan Avatar – hold down middle mouse button Zoom in/Zoom out – roll middle mouse button

Fit Poses for URBN do girl - Add Fit Poses to your Clo Library



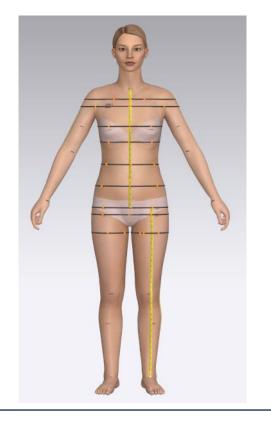
Measuring Tape added to Avatar to show on body lengths

Show pre-measured marks on Avatar
Marks Match tick marks on the Alva form
Find Tools in the 3D Window to show/hide

OFF







Tools in the black tool bar



Edit Measure on Avatar

Touch circumference line with this tool to see measurement or delete line

Measure circumference Avatar

Use this tool to measure around avatar

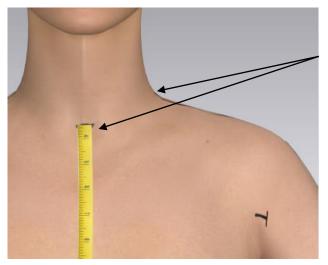
Measure on Avatar

Use this tool to measure on avatar

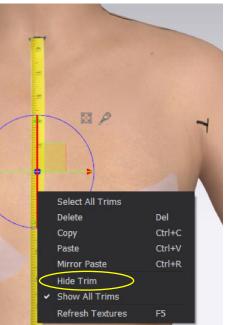


Circumference Measure Garment

Use this tool to measure a garment circumference – ex. good for quick sweep measurement



Tape is placed on Center for easy view of Neck drop. Tape is set as if from HPS

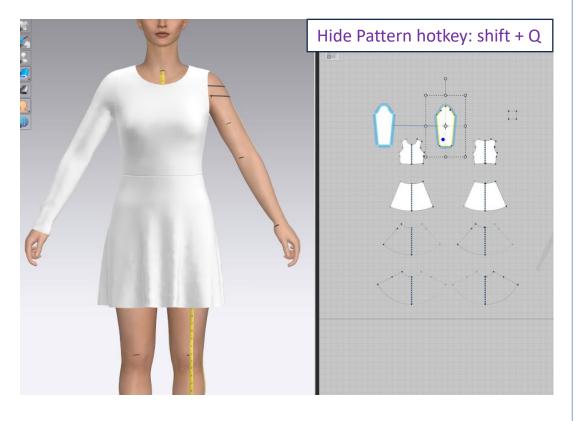


To hide tapes
Select CF tape, right click, hide trim

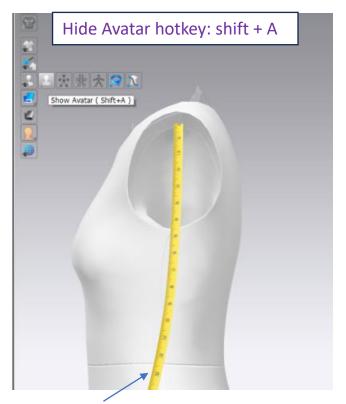
Hide/Show/Sheer: Pattern Pieces & Avatar



To hide a pattern piece left click on the piece in either the 2D or the 3D window, then right click and select "hide 3D pattern"



To hide the Avatar – go to tools in the 3D window Click on the Avatar Icon to bring up row of options – turn off show avatar

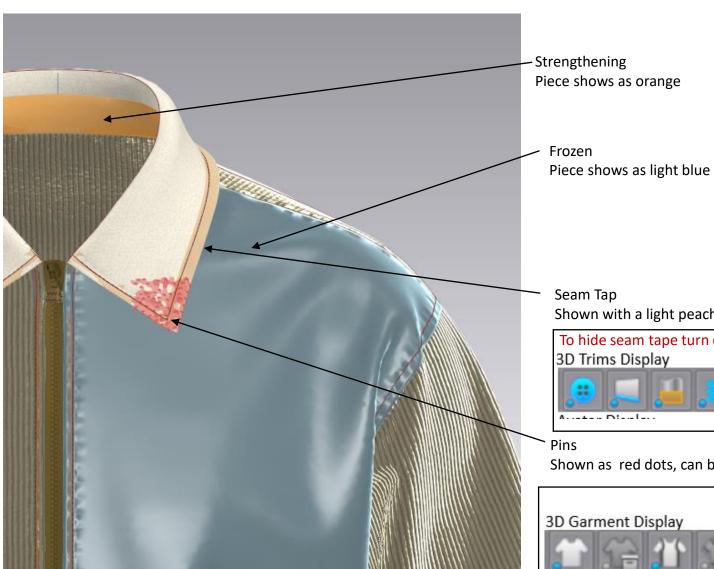


To hide tape: click on tape Right click – Hide Trim To re-show Trim: Ctrl + Z - Undo

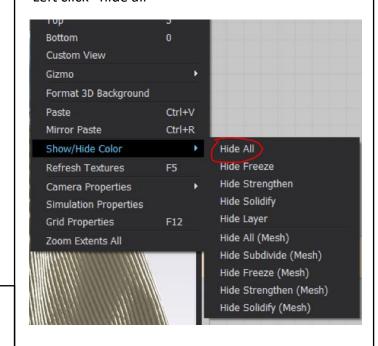
To make fabric sheer – go to tools in the 3D window. Click on the fabric roll Icon to bring up row of options. Click on sheer fabric



Common garment features should be hidden during fits



To Hide strengthened and Frozen pieces right click in Gray space of 3D window Left click "hide all"



Shown with a light peach color around edge

To hide seam tape turn off this icon

Shown as red dots, can be single or cluster



Drawing/Annotation

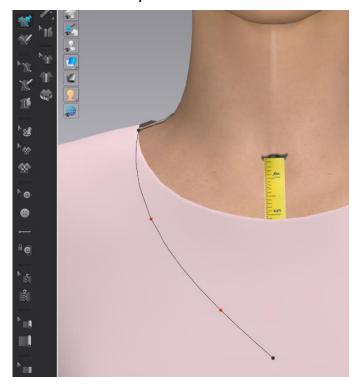
Tool in 3D window



Edit 3D Pen Garment

3D Pen Garment

Use to draw lines on garment to Confirm style lines



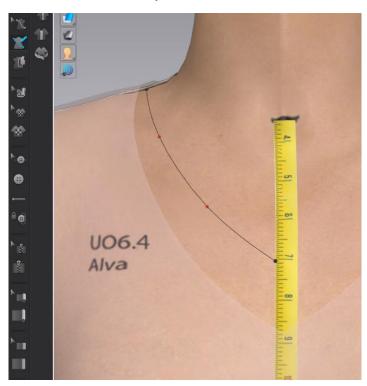
Tool in 3D window



Edit 3D Pen Avatar

3D Pen Avatar

Use to draw lines on the Avatar to confirm Style lines



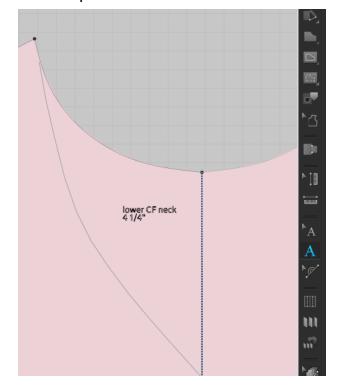
Tool in 2D window



Edit Annotation

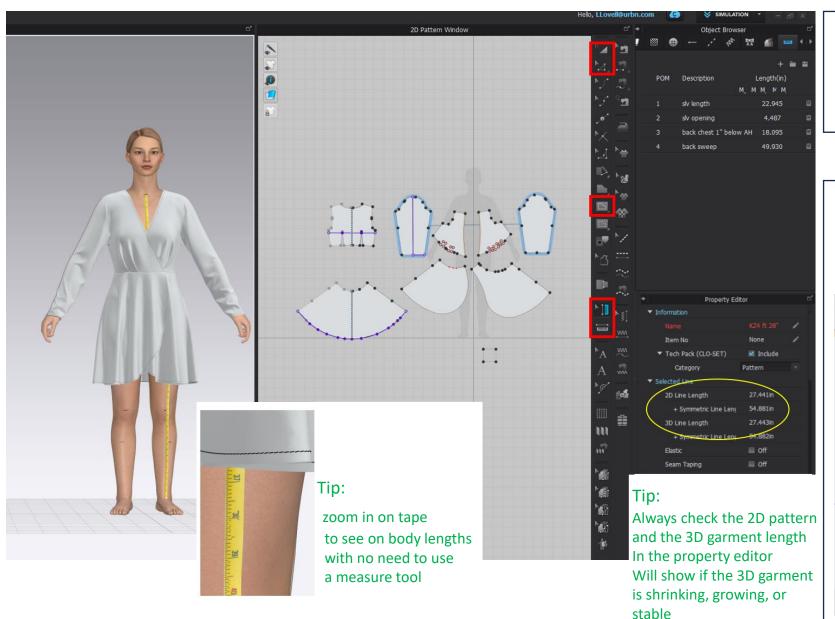
Annotation

Use annotation tool to write notes on a Pattern piece



Measuring Pattern







Whole piece selection

Point or line selection

Use line selection tool

Touch line to see length Hold shift for multiple lines See length of each line and/or total

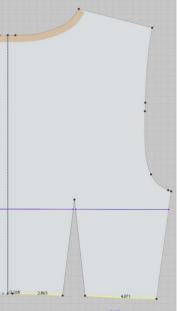


Draw line Click 1x to start/ Click 2x to end Hotkey: G



Edit POM

Measure POM Click 1x to start/Click 2x to end



Tip: You do not need To hold shift to Measure across Multiple pieces in The POM tool Click 1x edge to edge Over multiple pieces Click 2x to add all together

Measuring Pattern

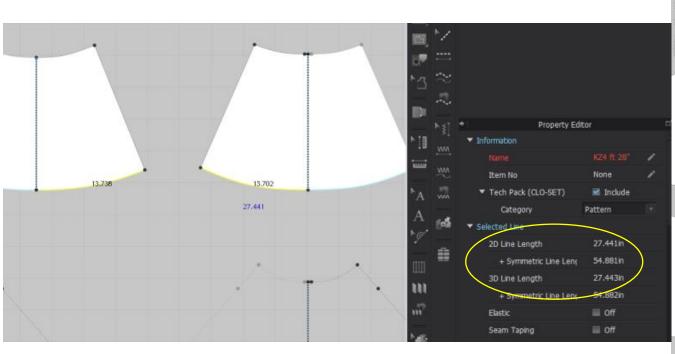


4

Temporary quick measure

Use point/line selection tool, hold shift, click on ft hem and bk hem See each in black, see total in blue

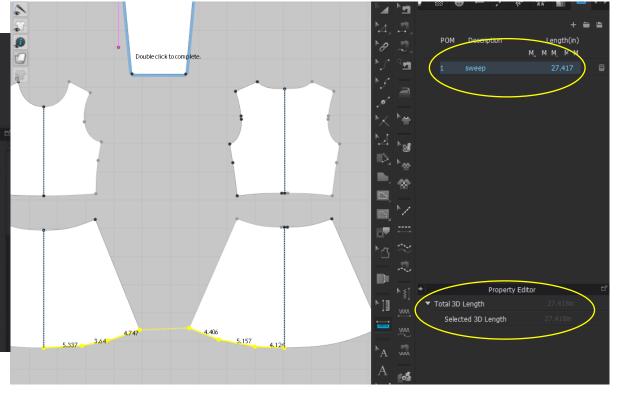
Look at property editor to see the 2D total and the 3D total



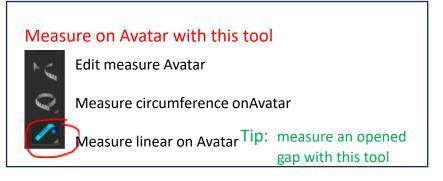
Saved POM

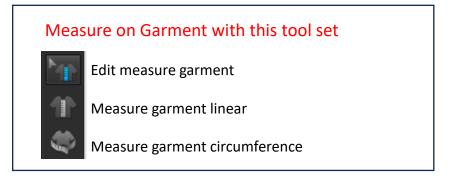


Use the POM tool, click 1x on curve as
Below example click along curve, start 2nd piece
Continue with 1x click, to end click 2x
Name POM = 2D length
Below in property editor see 3D length



Measuring – Garment/Avatar





Basic Tape Measure Avatar has multiple choices Click and hold triangle in corner of Icon to bring up choices



Tip:

quick measure garment circumference
with this tool to check chest, waist, sweep



Tip: Suggest to use these tools after a live fit and not during due to fit time and computer speed while in zoom. These tools can help you determine more accurate fit comments



To cut at seam

delete sewing with Edit sewing tool

and re-simulate





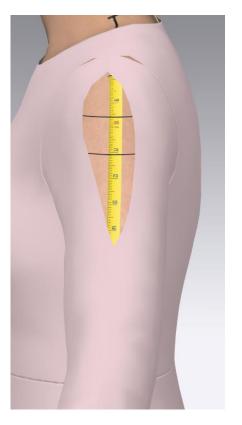


To open and measure gap
Turn simulation off and on with this icon
or by the hot key (space bar)

Measure Gap with this tool



To cut in a piece



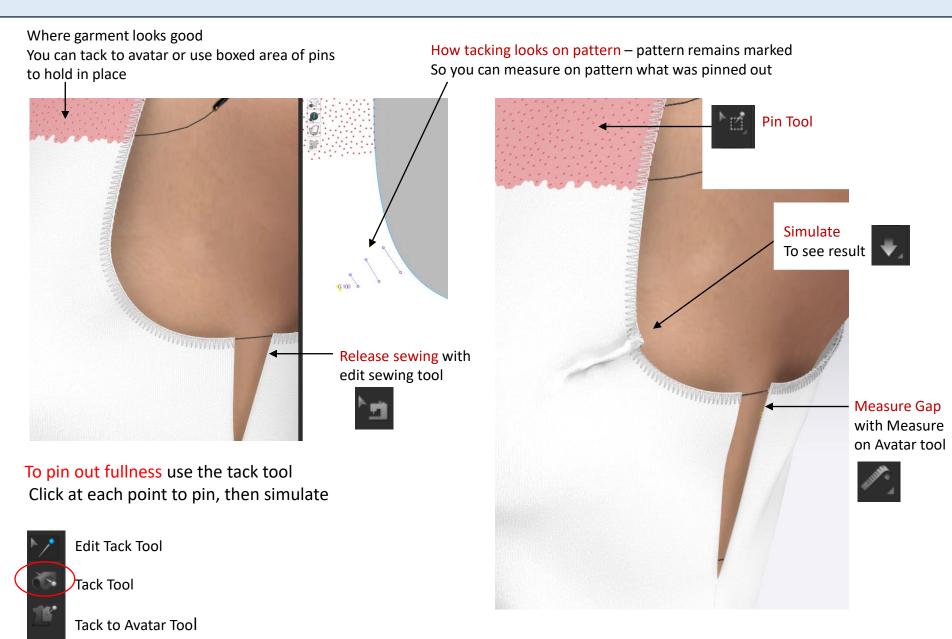


Draw a line to cut with
Internal polygon/line tool – hotkey: G



Use the selection tool to select the drawn line, then right click, Then choose Cut Turn on simulation to see cut opening

Armhole with Gaping

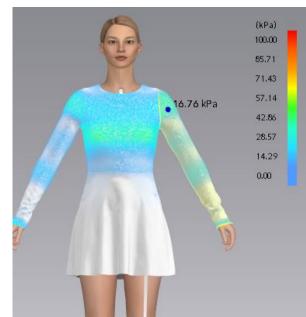


Fit Maps

Link to online lesson: https://www.youtube.com/watch?v=Z6EiCcuoYzY



Stress Map (alt+6)

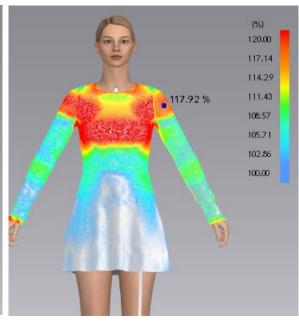


Displays the force per unit area in kPa applied to a garment by external stress

kPa = pressure units



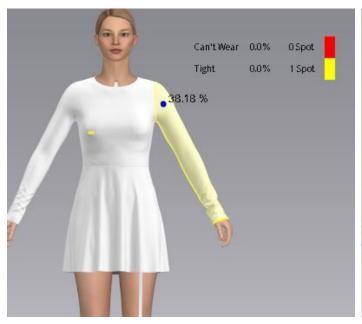
Strain Map (alt+7)



Displays how much a garment is stretched, in percentage relative to a non-stretched state



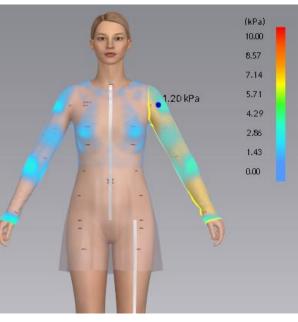
Fit Map (alt+8)



Displays how many sections fo the garments have reached the limit strain of the fabric on the avatar

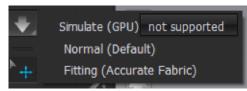


Pressure Map (alt+9)



Displays contact points between the avatar and the garments

Simulation modes

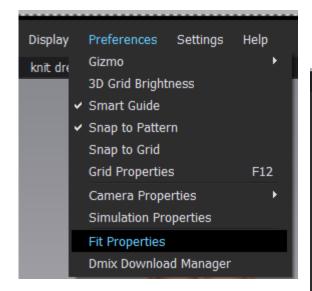


Tip:

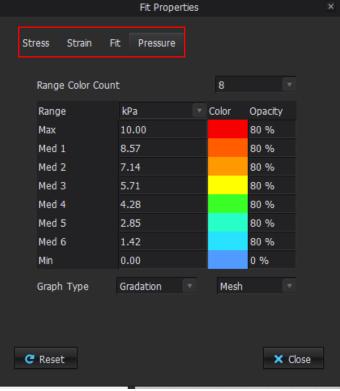
Fit maps work best when garment has been simulated in fitting accurate fabric mode

Where to adjust fit Map Information per Fabric Type

Go to Preferences, then click fit properties



Click on map type, adjust as needed per Stretch percentage of fabric



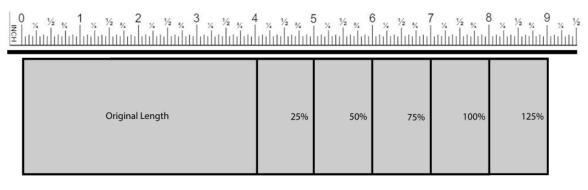
Know your stretch percentage

Stretch Percentage Guide

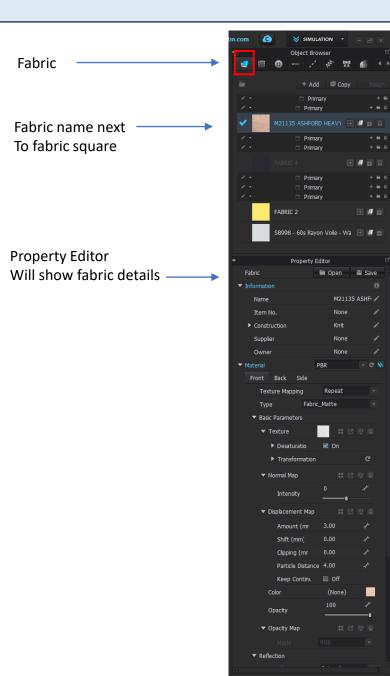
Goal: Use the guage tool below to measure the amount of stretch and recovery the fabric has.

Steps:

- 1. Find the maximum stretch direction, usually crossgrain.
- 2. Fold the fabric in hald along he gain. Try to avoid te edge. Add pins to mark the original length.
- 3. Stretch the fabric until it starts resisting. Do not overstretch. Record is nature stretch max.
- 4. Hold the left pin and let the right one relax to record the recovery.
- 5. Measure both direction for 4-way stretch.



Weft (crossgrain) Max Stretch Percentage: Recovery Percentage: Warp(grain) Max Stretch Percentage: Recovery Percentage:



Digital Fabric is comprised of:

Texture = print or color

Normal Map = surface

Opacity Map = sheerness to opaque range – can be manually adjusted

Drape = based on fabric test

Grain = can affect drape, must be applied correctly to each pattern piece.

Fabric appearance can look different based on:

Particle distance of mesh

Light – in clo can look flat, when rendered out can show depth sheer fabrics, fur, velvet will only show when rendered out

Tools in the 3D window to change fabric appearance:



In Order as shown above:

show face on wrong side, all white, face side/wrong side, sheer, mesh, show wrong side on face, multi color

Tip:

Most common used: Double blue side icon shows face and wrong side of fabric as the same

Blue/white icons will show difference in face and wrong side of fabric – when you see a black collar Change to double blue icon

Use Quick Render to show fabric textures such as sheerness, fur, velvet, etc.

Plain view in Clo



Quality render (3D Window)



Turn on Quality Render to show more shadows and detail – For Viewing in the 3D window Only



Schematic render (Alt+0)





Quick Render Apx time 1-2 minutes



A Quick Render will make all garment Details look more realistic. It is the only way to show fabric depth on a high/low fabric surface. Examples: sherpa, fur, velvet, Corduroy. It will also make Sheer Fabrics look more realistic

Image Snap Shots

Create front, side, back image





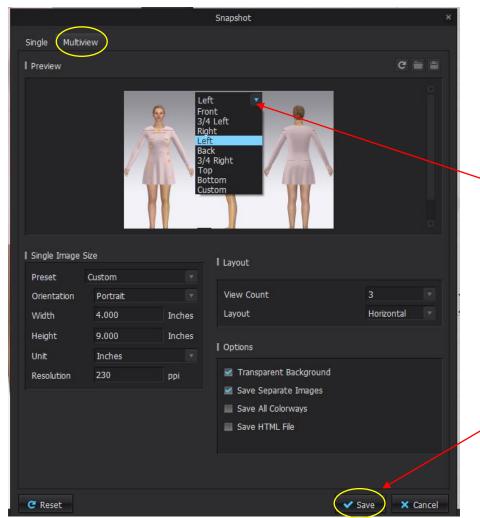
Go to File -> Snapshot -> select 2D or 3D window



Save Image name in folder of your choice, then this window will pop up.

Choose Single Image or Multiview for front, side, back image. Read through setting and check off

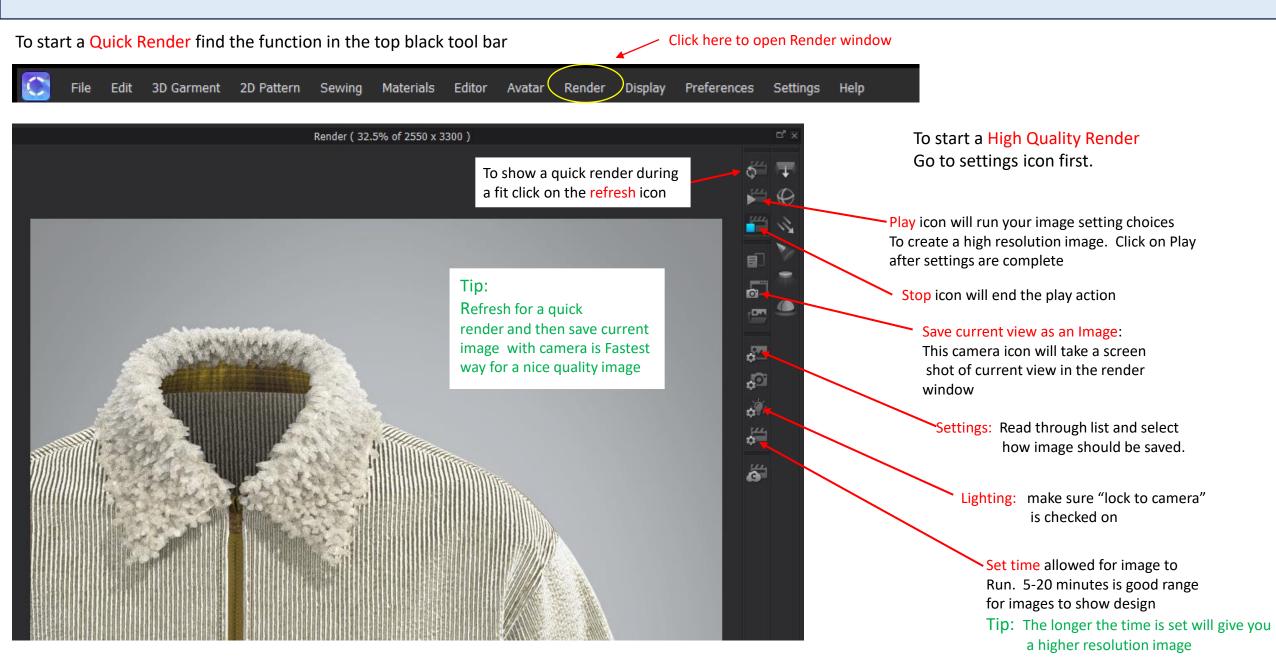
Image settings.



Tip: most common settings
Portrait
Width 4 x height 9
Multiview View count 3
Layout horizontal
Letter Landscape
Resolution default 230 ppi
Transparent background

Click above each to chose your views

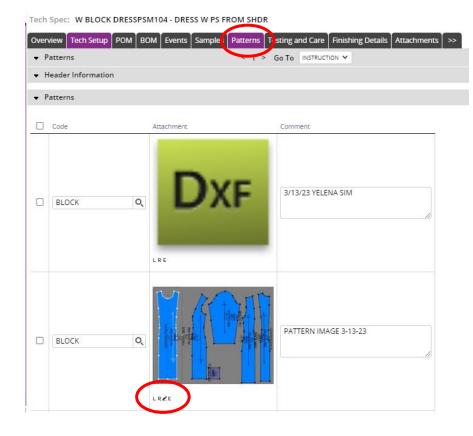
Click save to process images



How to Open a DXF Pattern File in Clo

To download pattern from Bamboo rose:

Go to pattern Tab – hover over the "L" – the pattern file will save to your download folder

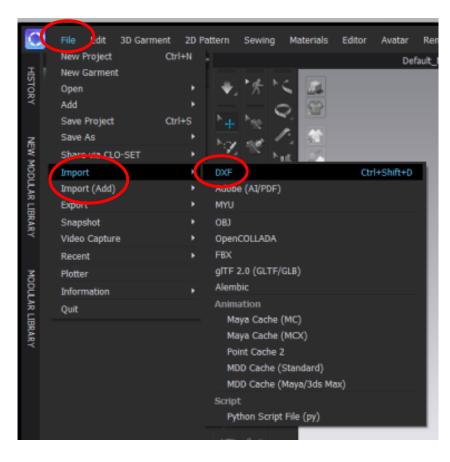


Tip:

Clo will only open DXF format You can reach out to 3D team or pattern room to convert MDL or other file type to DXF

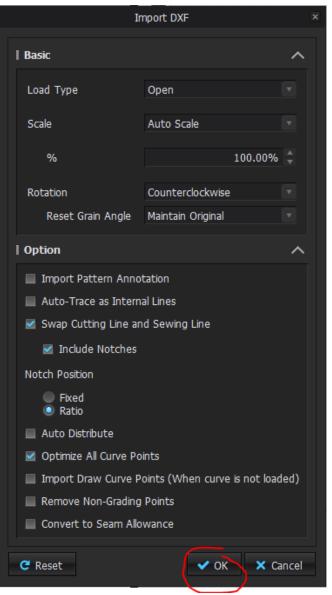
To open DXF Pattern in Clo:

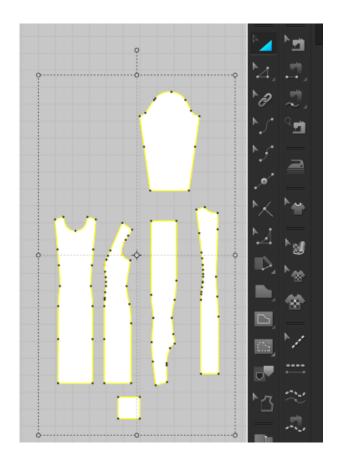
Go to File > import > DXF Find DXF in your download folder



Tip: use Import if pattern will be only item in your clo window use Import Add to bring in another pattern or other clo assets

This window will appear Click OK to open pattern



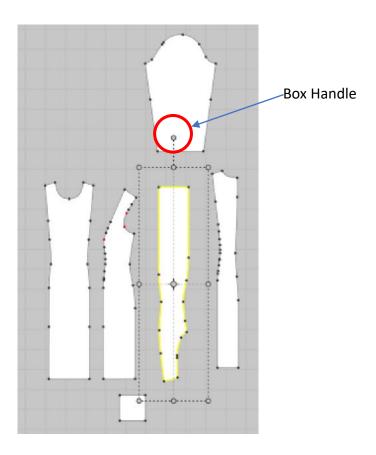


To select all pieces: hold down left mouse button, drag box around pieces or – hotkey Ctrl + A



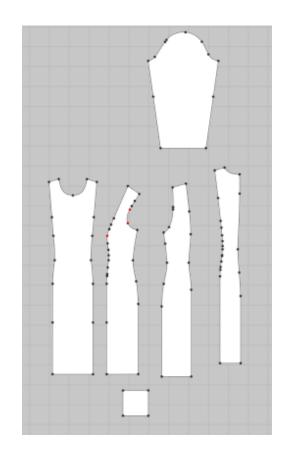
Solid triangle selects whole piece

Open triangle selects a point or a line segment

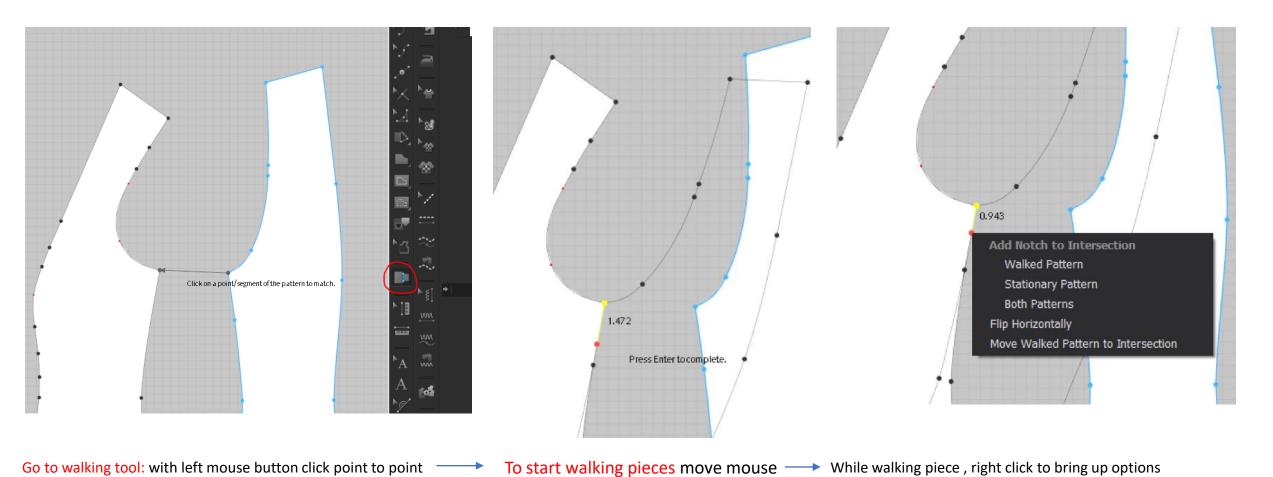


To select one piece: Go to the solid triangle (whole piece selection tool), click on desired piece a box will appear around the piece

To select multiple pieces but not all: Hold the shift key



To turn a piece over click on the box handle hold left mouse button + shift key Rotate move mouse in desired direction You will feel a light click at 45 and 90 degrees Release left mouse button to set piece in desired direction



In direction you want to go

Other options are for pattern making

To keep piece in place, select Move walked pattern to intersection

All Topics in Clo - Clo YouTube Online Learning Channel: https://www.youtube.com/c/CLO3D

How to use Fit Maps: https://www.youtube.com/watch?v=Z6EiCcuoYzY

How to use soft body avatar: https://www.youtube.com/watch?v=CwB8_ad328M&t=42s

How to use Clo-Set: https://style.clo-set.com/service/features

S: Drive/Production/3D = Internal Resources - Where to Find