

Detax
Freeprint Crown
Guideline for
Formlabs

2026

General Information



Created for the 3D printing of permanent crowns, denture teeth and long-term bridges.

Wide range of shades with natural aesthetics (according to VITA classical A1–D4 shade guide) due to perfectly matched translucency and opacity.

Optimum dimensional stability of the restorations due to maximum bending and abrasion resistance.

No tendency to discolor thanks to low water absorption. Colors: A1, A2, A3, A3,5, B1, B3, C2, D3, BL

General Information



Digital Light Processing (LCD / MSLA) Printer

- *Formlabs Form 4B*
- *Formlabs Form 4BL*

Slicer Software

- *Formlabs Preform (3.45.0)*

Wash Unit

- *Formlabs Formwash V2*

Curing Unit

- *Formlabs Form Cure V2*

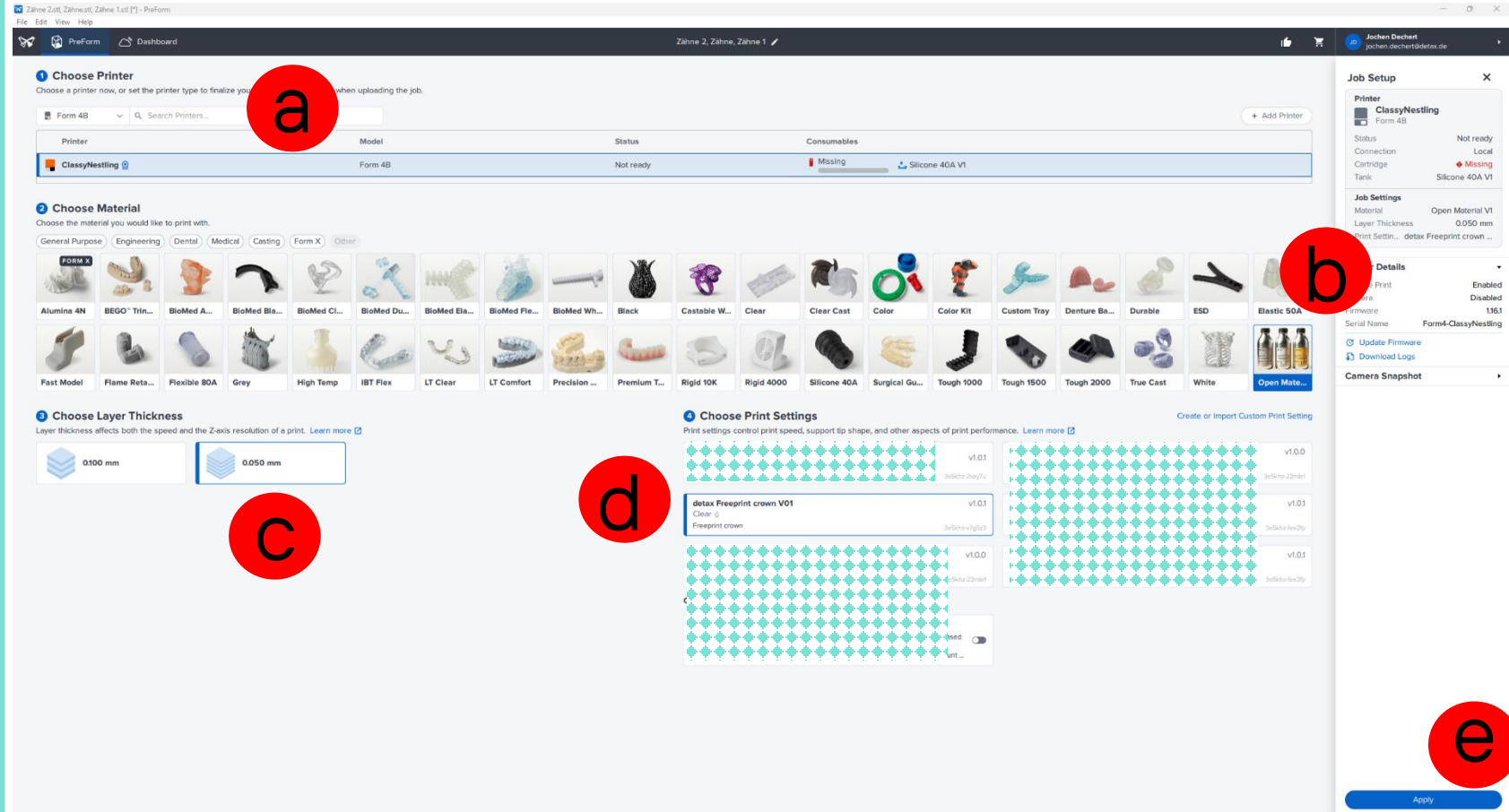
A full validation matrix you'll find on the Detax website:

[Detax Validations Matrix](#)

FL Preform

1) Select Material

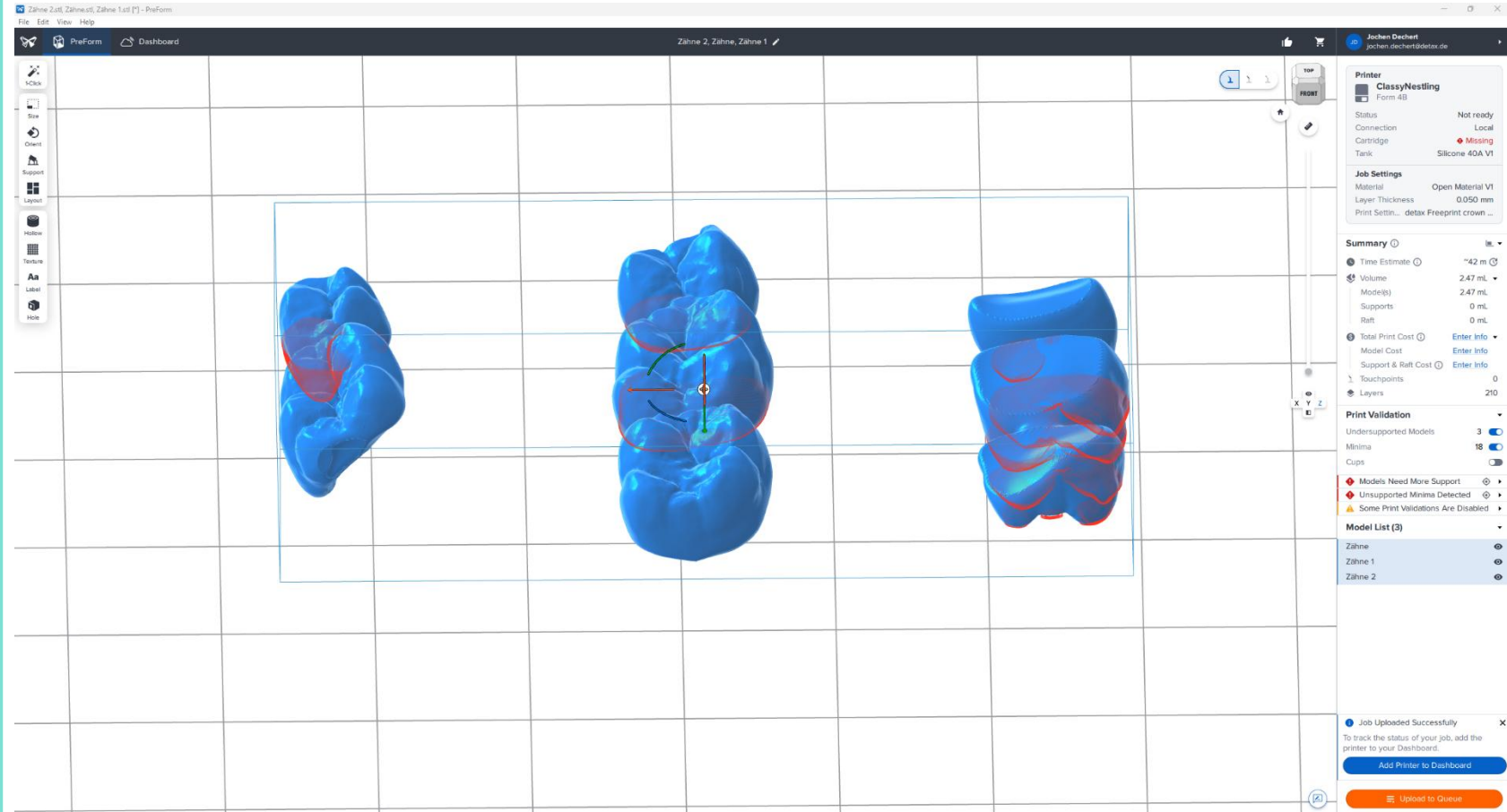
- Select your printer
- Go to open material mode
- Select Layer Thickness 0.050 mm
- Select the latest version of **detax** Freeprint crown
- Apply Settings



FL Preform

2) Import Teeth

You can either import your teeth or drag and drop them.

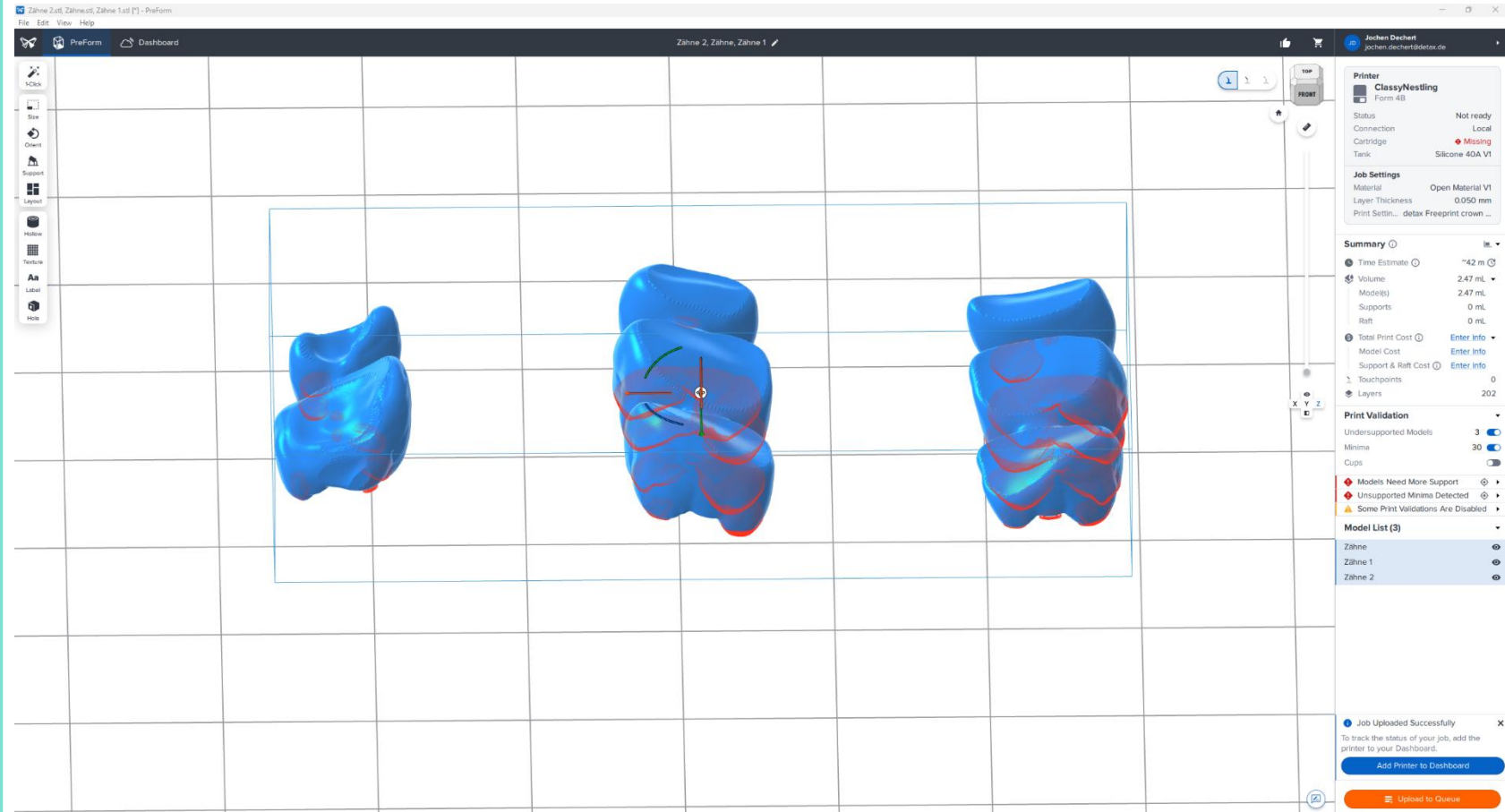


FL Preform

3) Orient Teeth

Orient the teeth with the occlusal area to the print platform

Note: The occlusal area down avoids support connections in the bonding area. The connection points can cause misalignment and gaps.



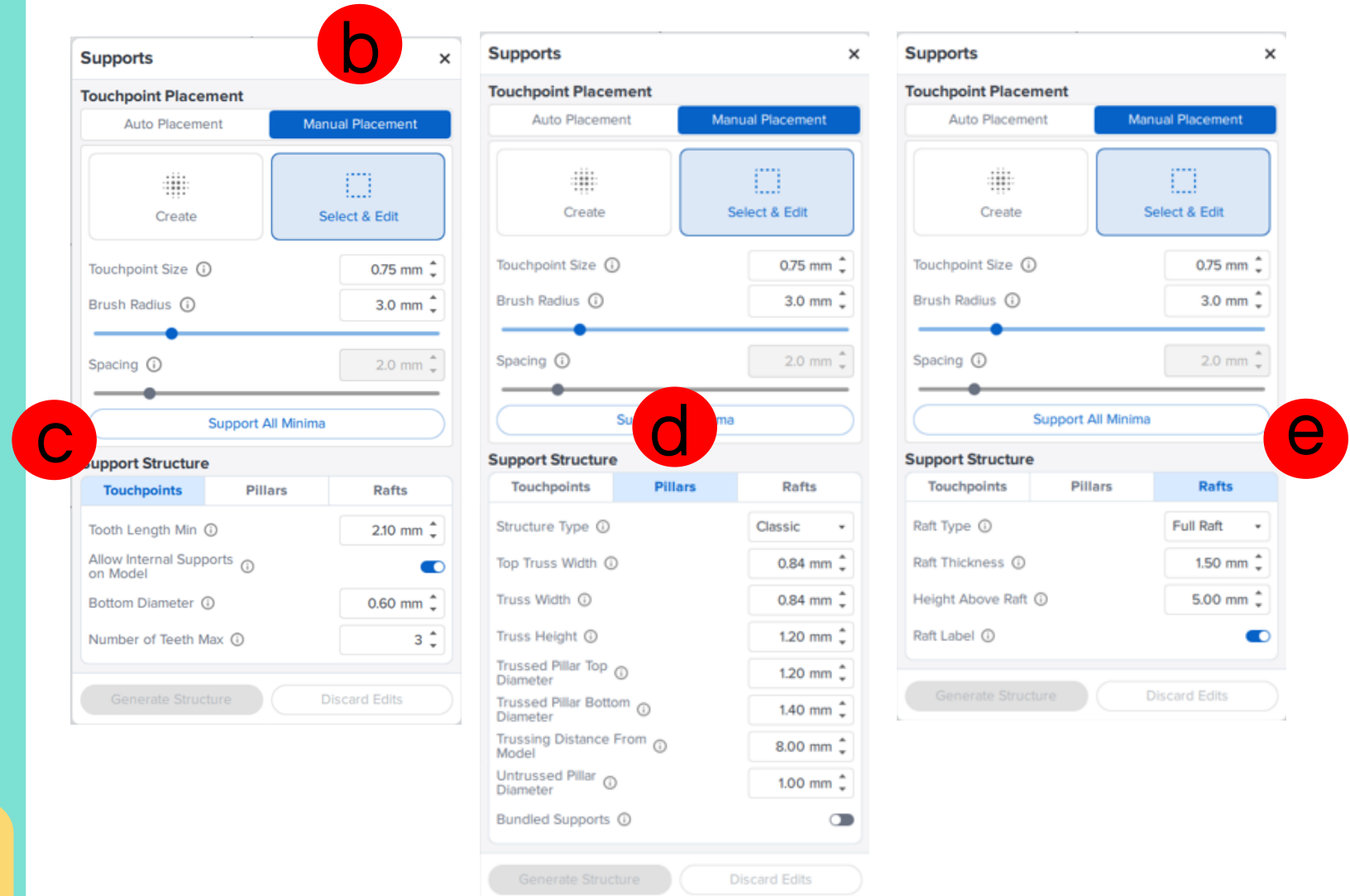
FL Preform

dx

4) Support Settings

- Press on "Support" on the left side to open the support settings.
- Press on "Manual Placement" in the window.
- Set the Parameters for "Touchpoints" according to the image.
- Set the Parameters for "Pillars" according to the image.
- Set the Parameters for "Rafts" according to the image.

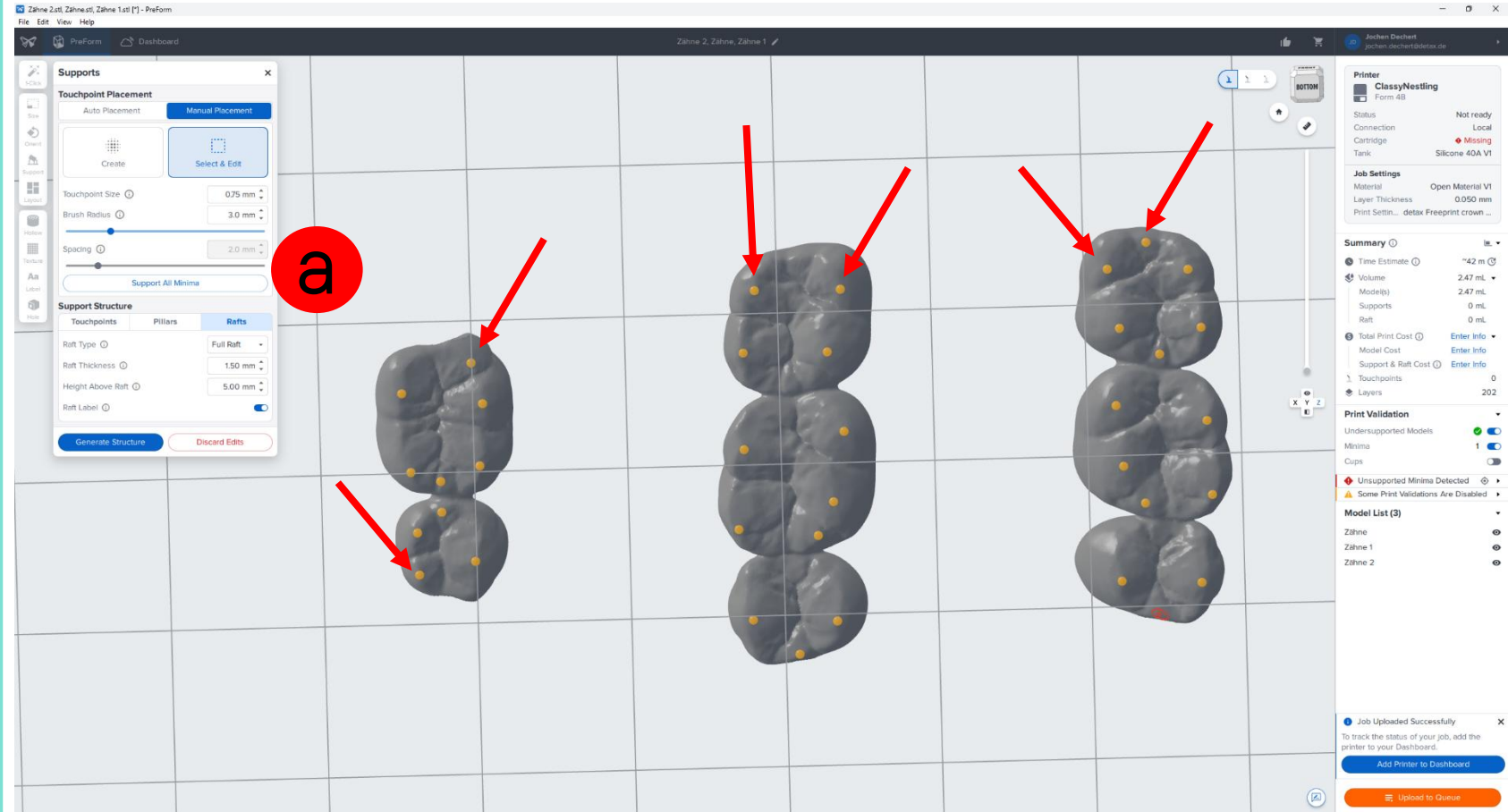
Note: Auto Place function could lower the print quality by adding supports randomly which could cause more work in the post process.



FL Preform

5) Support All Minima

- a) Press on "Support All Minima".
Preform is adding now contact points to the lowest points of the parts.

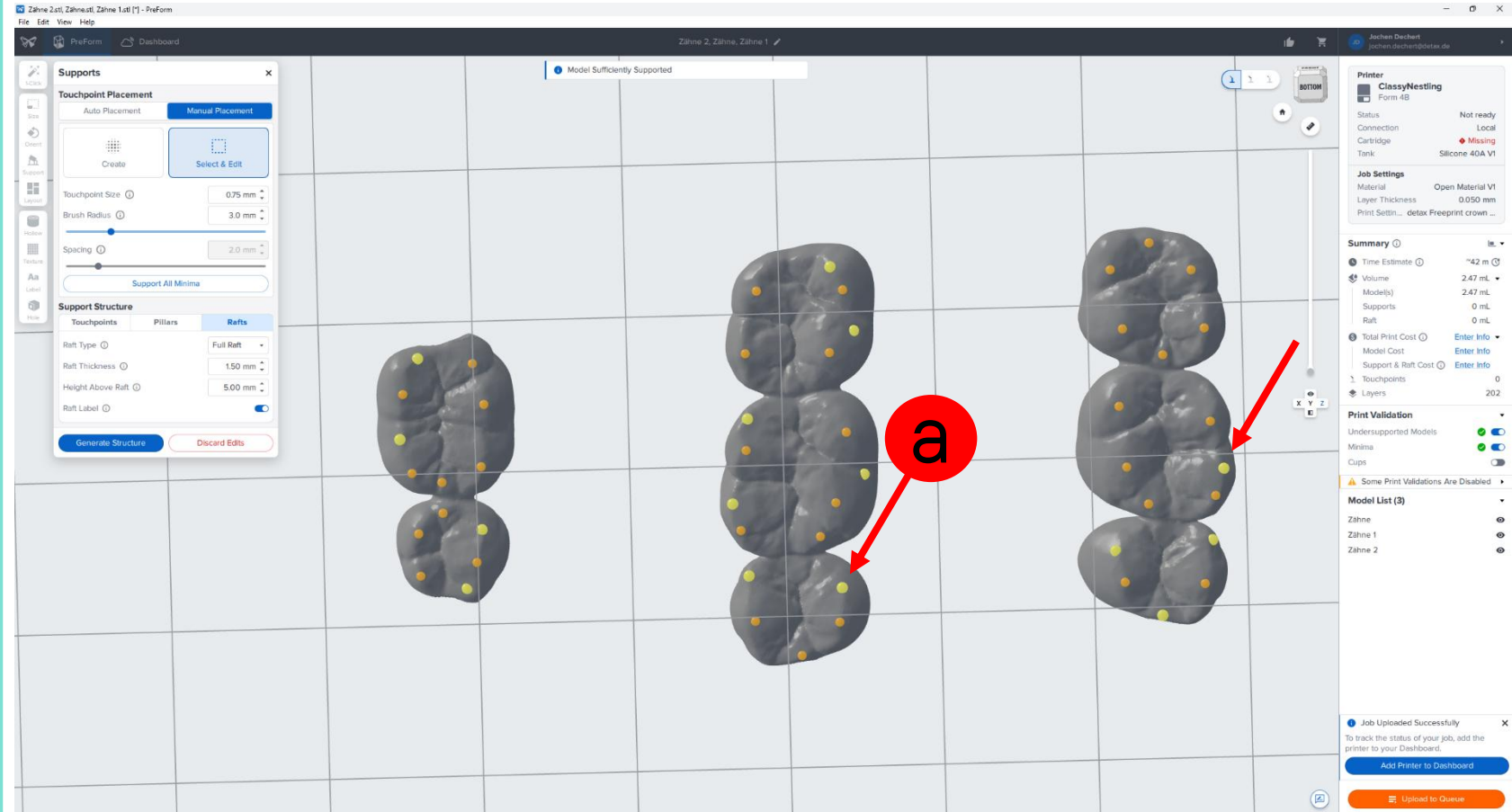


FL Preform

6) Manual Support

- a) Add some more support connection points manually. Avoid placing them in the fissures, it will make the post process more difficult.

Note: A red area on the teeth will mark areas with too less support. The red mark will disappear by adding supports.



FL Preform

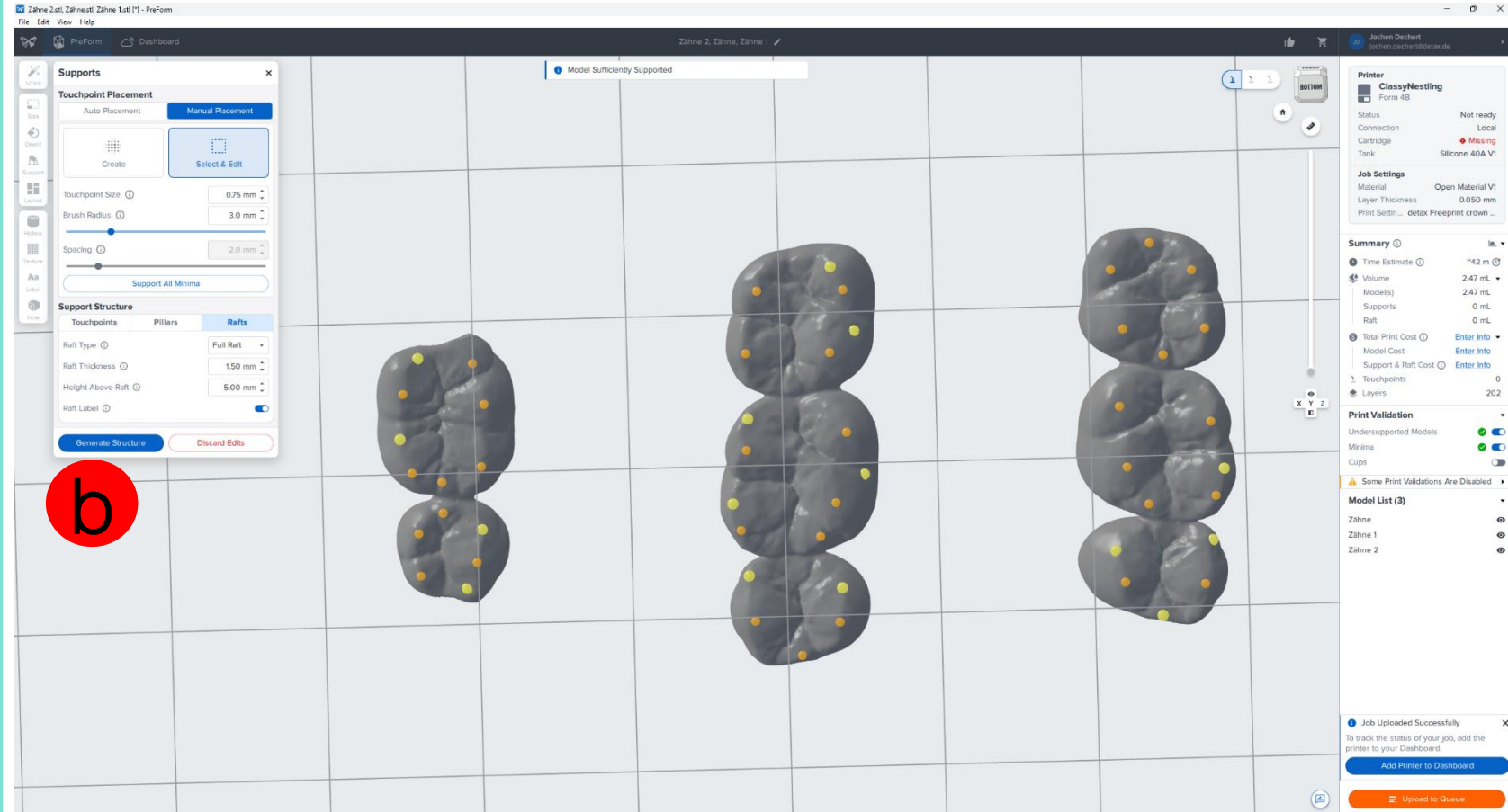
7) Manual Support

The teeth should look like shown in the image

Note: Too less support can cause print failures, if the part gets loose.

Too much support can be difficult to remove.

b) If you are set up all your support connections press "Generate Structure"

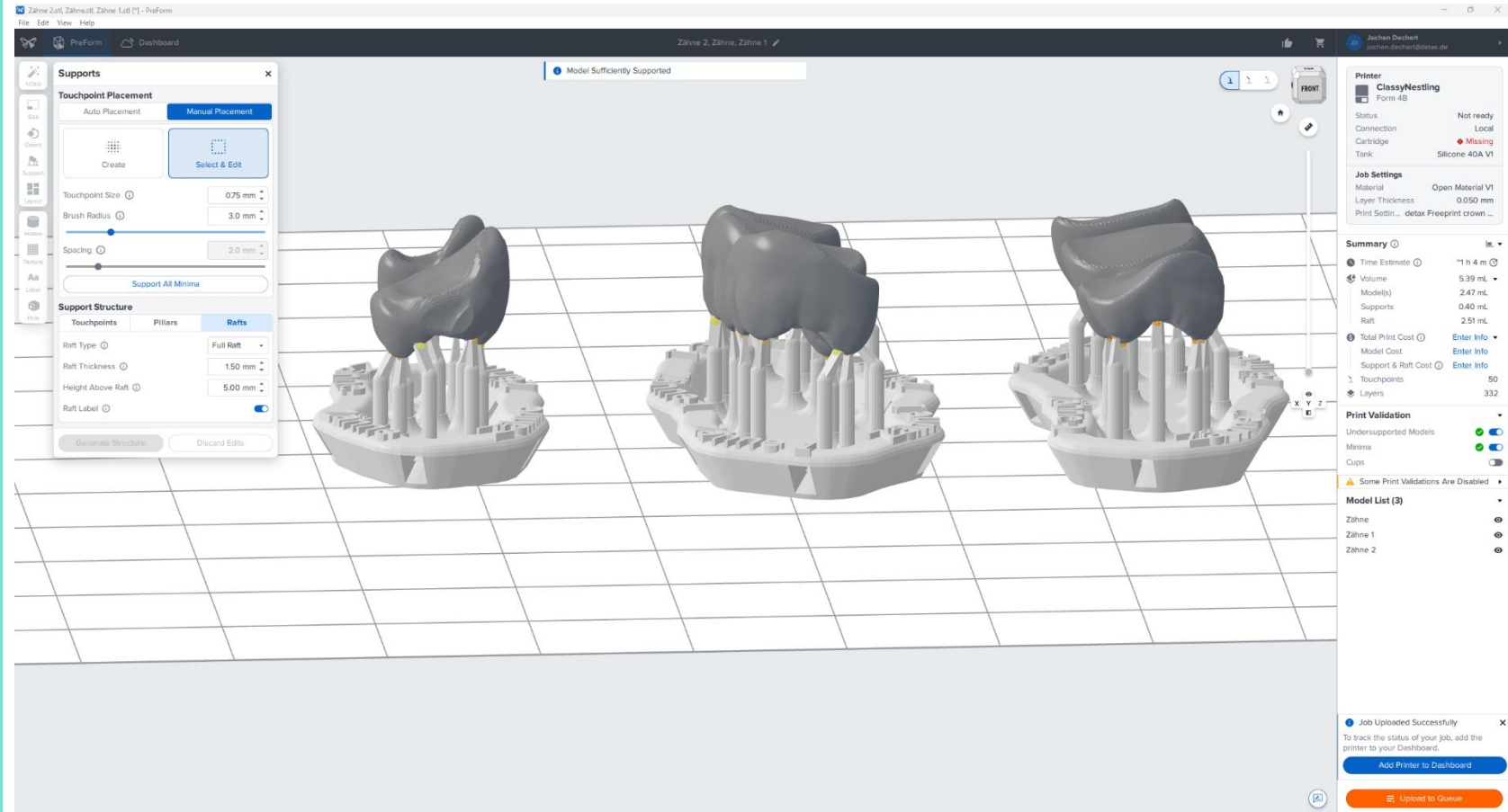


FL Preform

8) Manual Support

Preform will create a raft and the support structure. The raft is important to hold the support structure in position.

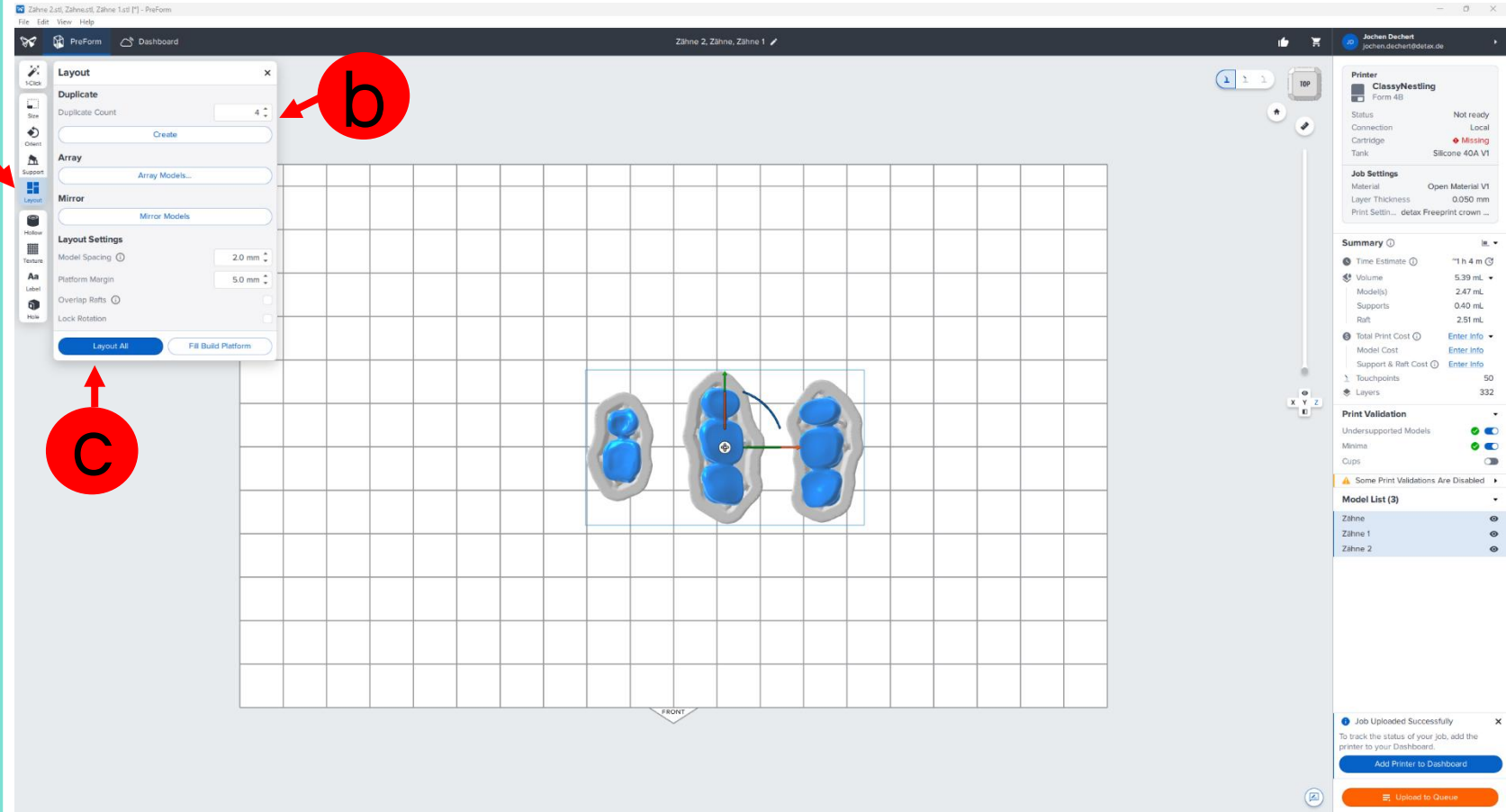
You can also write a signature on the raft which is helpful for identifying the bases later on.



FL Preform

9) Layout & Nesting

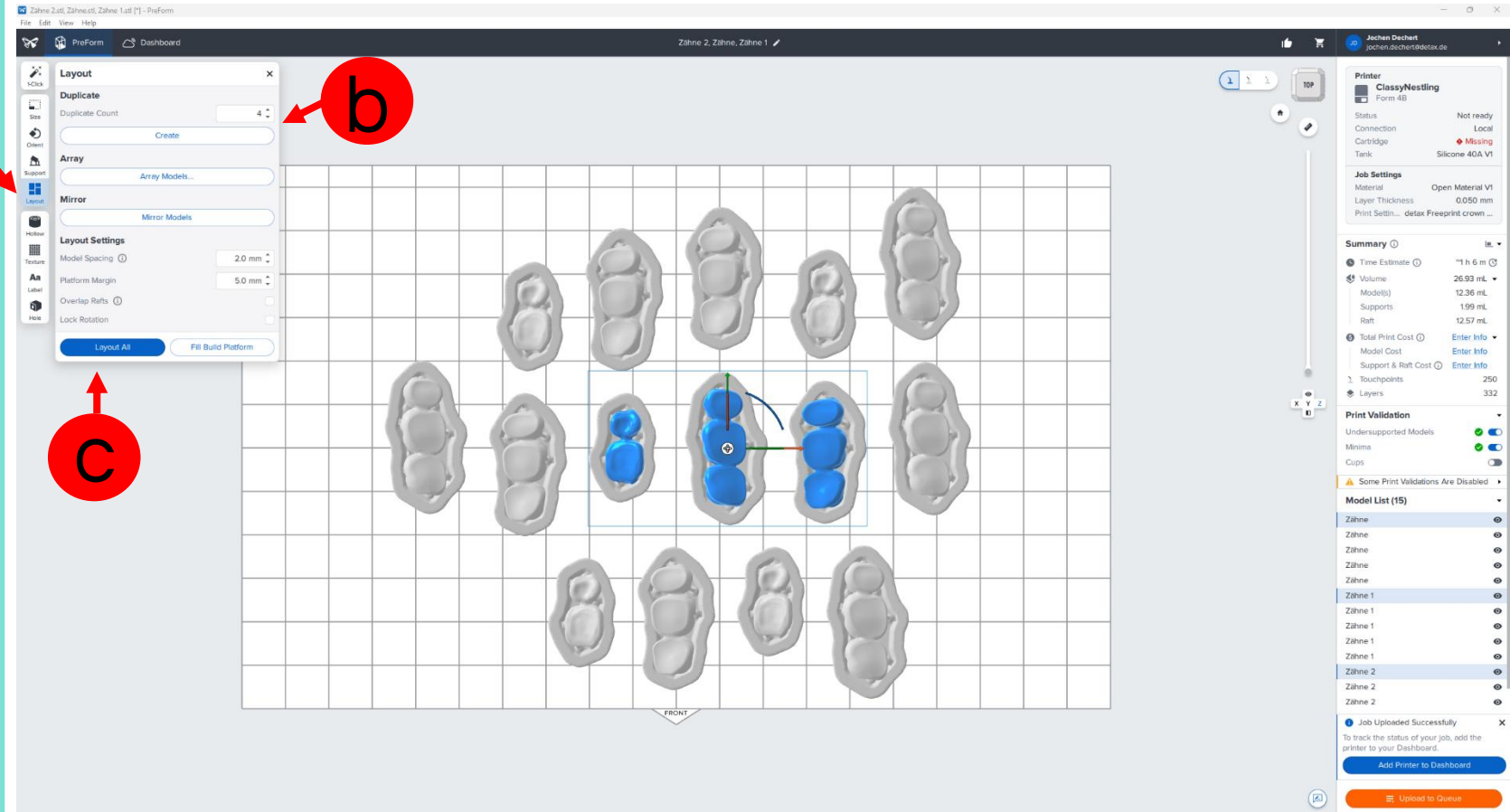
- a) Press "Layout" to open the layout window.
- b) You can duplicate your teeth.
- c) By pressing "Layout All" Preform will nest the parts on the build platform.



FL Preform

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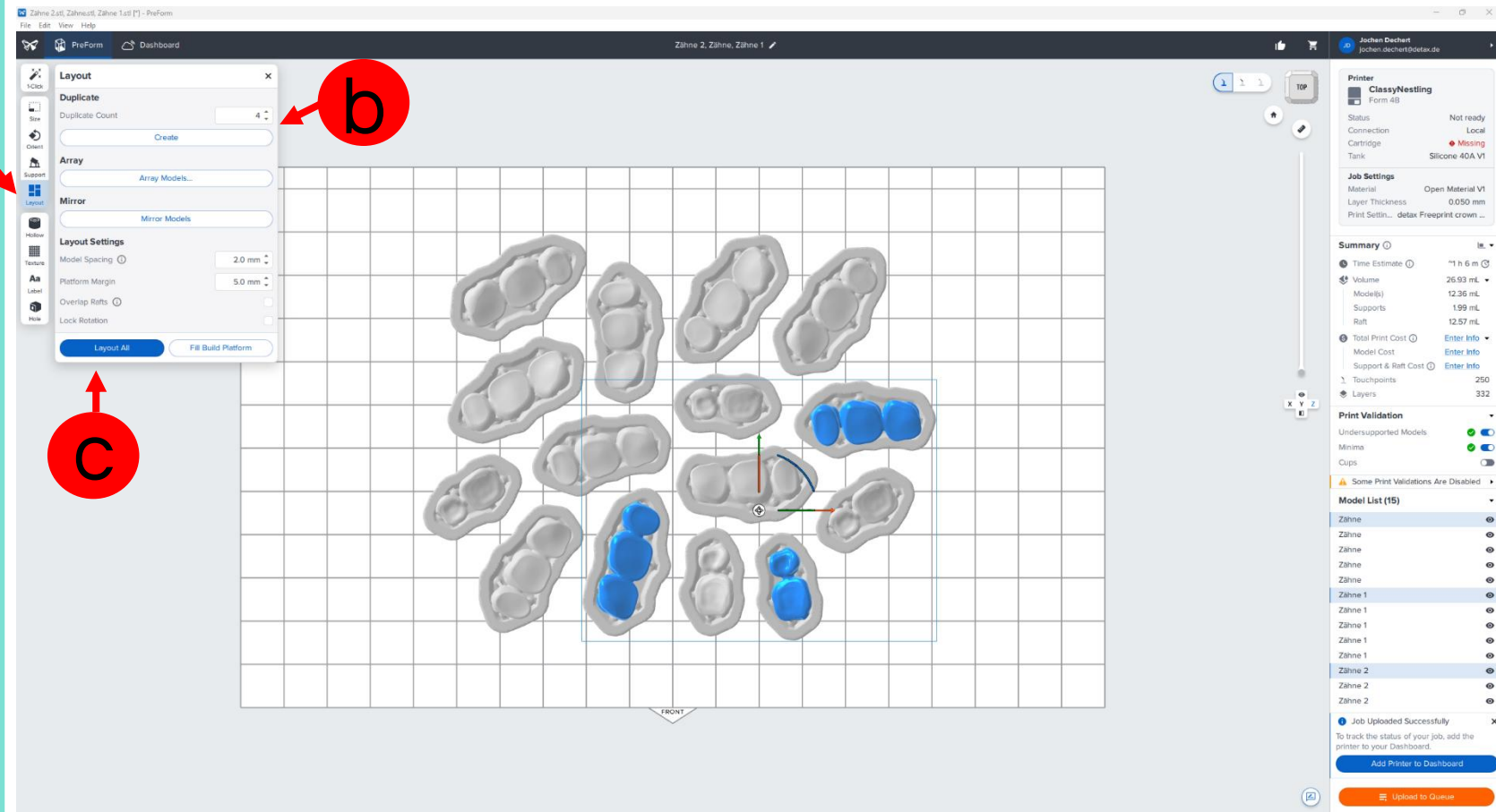


Duplicated Teeth

FL Preform

9) Layout & Nesting

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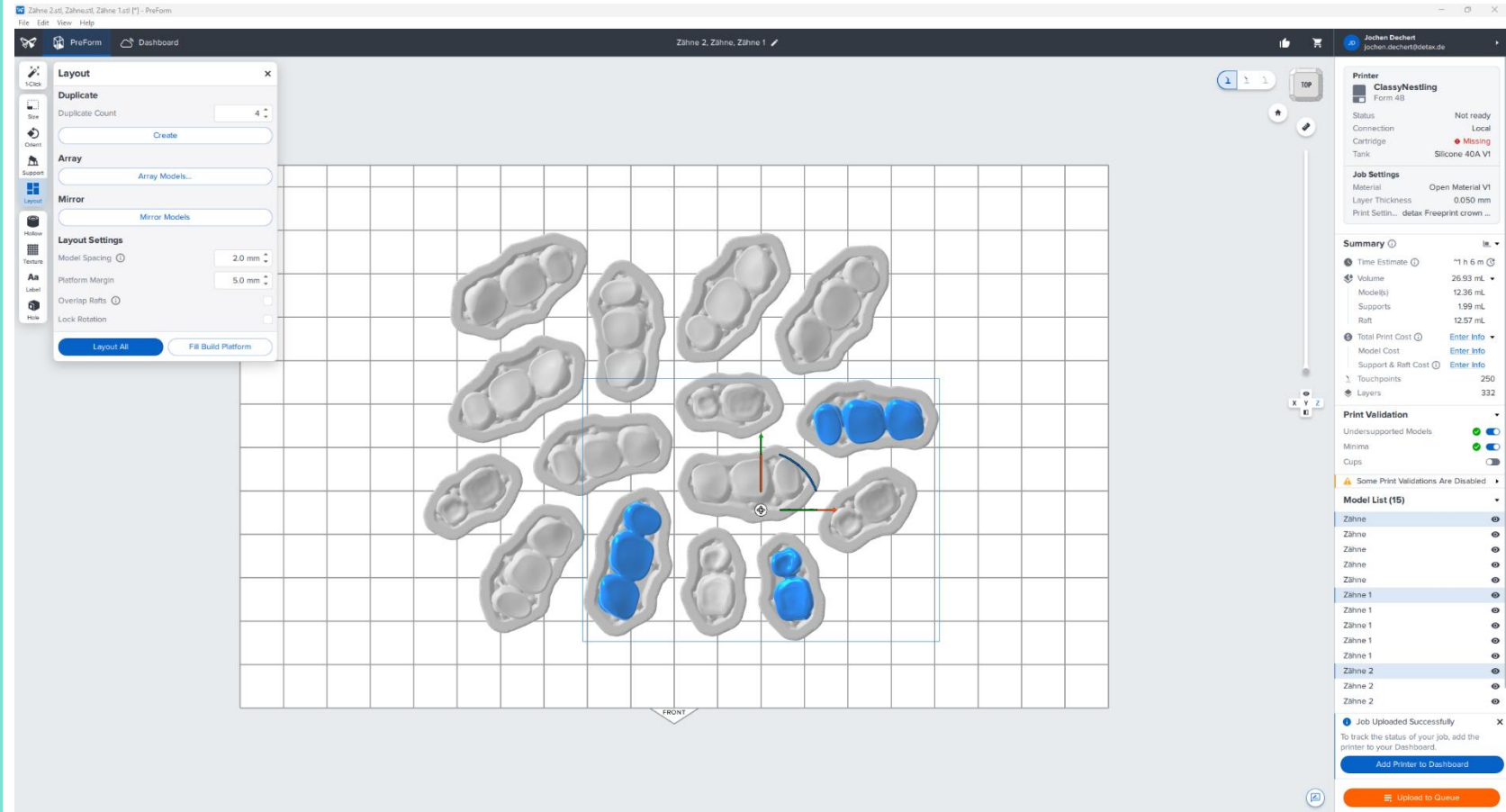


FL Preform

10) Print

- a) Now you are ready to print. Press “Print Now” or “Upload in Queue” for sending the print job to your printer.

We are done with using Preform for this print job. The printer will now print the job, and we will continue with the post process.

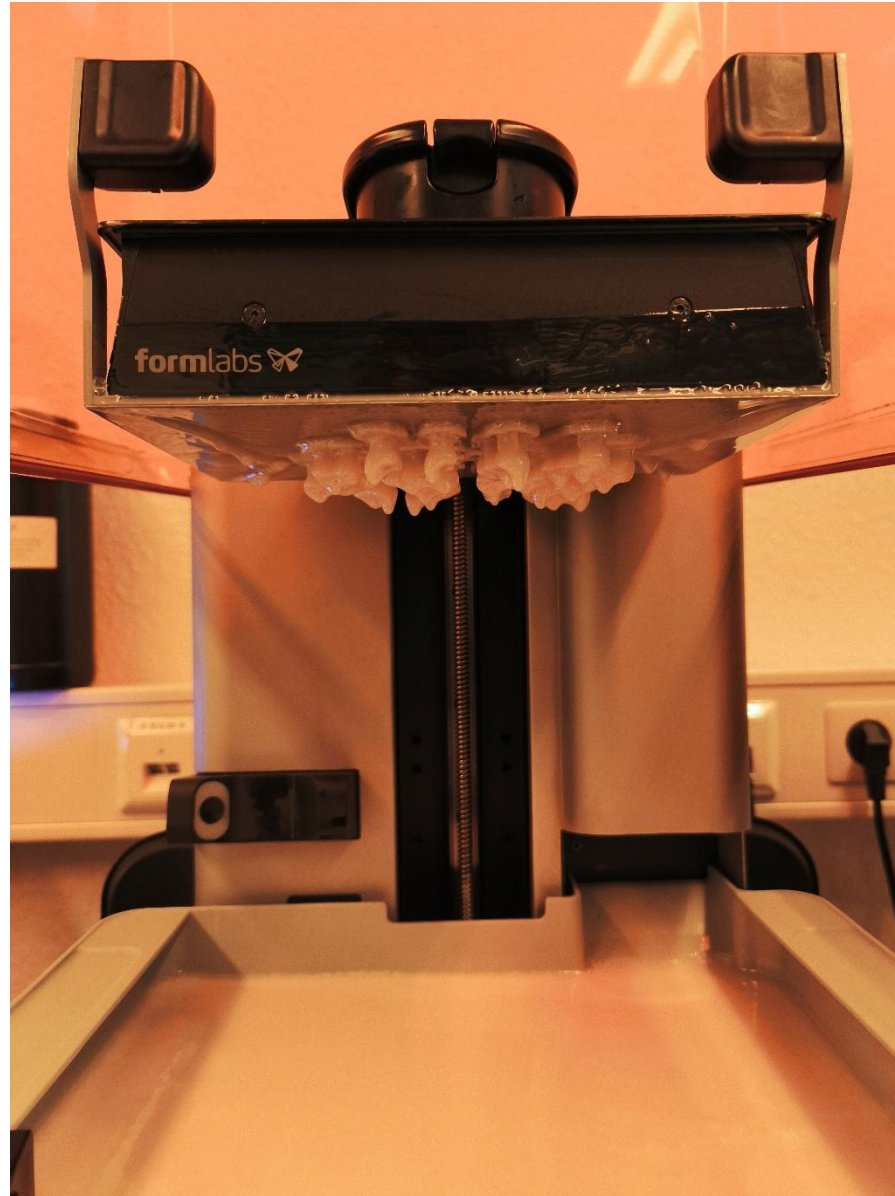


Post Process

1) Remove Teeth

Remove the teeth from the print platform. You can either pop them off by using the Formlabs release system.

Or you remove them with a spatula.



Post Process

2) Remove Support Structure

Tear the support structure off the teeth. Be careful – too much force might break the teeth.

If the support is too strong, you can also use a side cutter for cutting it off.

The connection points will be polished off in the polishing process.



Post Process

3) Washing

You can wash the teeth in the Form Wash V2 with IPA:

- 1) Remove resin with compressed air
- 2) Wash them for 1 min
- 3) Thoroughly clean the openings, cavities and gap areas with compressed air
- 4) Wash them again for 1 min
- 5) Check cavities and gap areas for residues. Then blow off with compressed air

Note: Too many parts in the basket could reduce the cleaning. Put only one print job at the time in the Form Wash.



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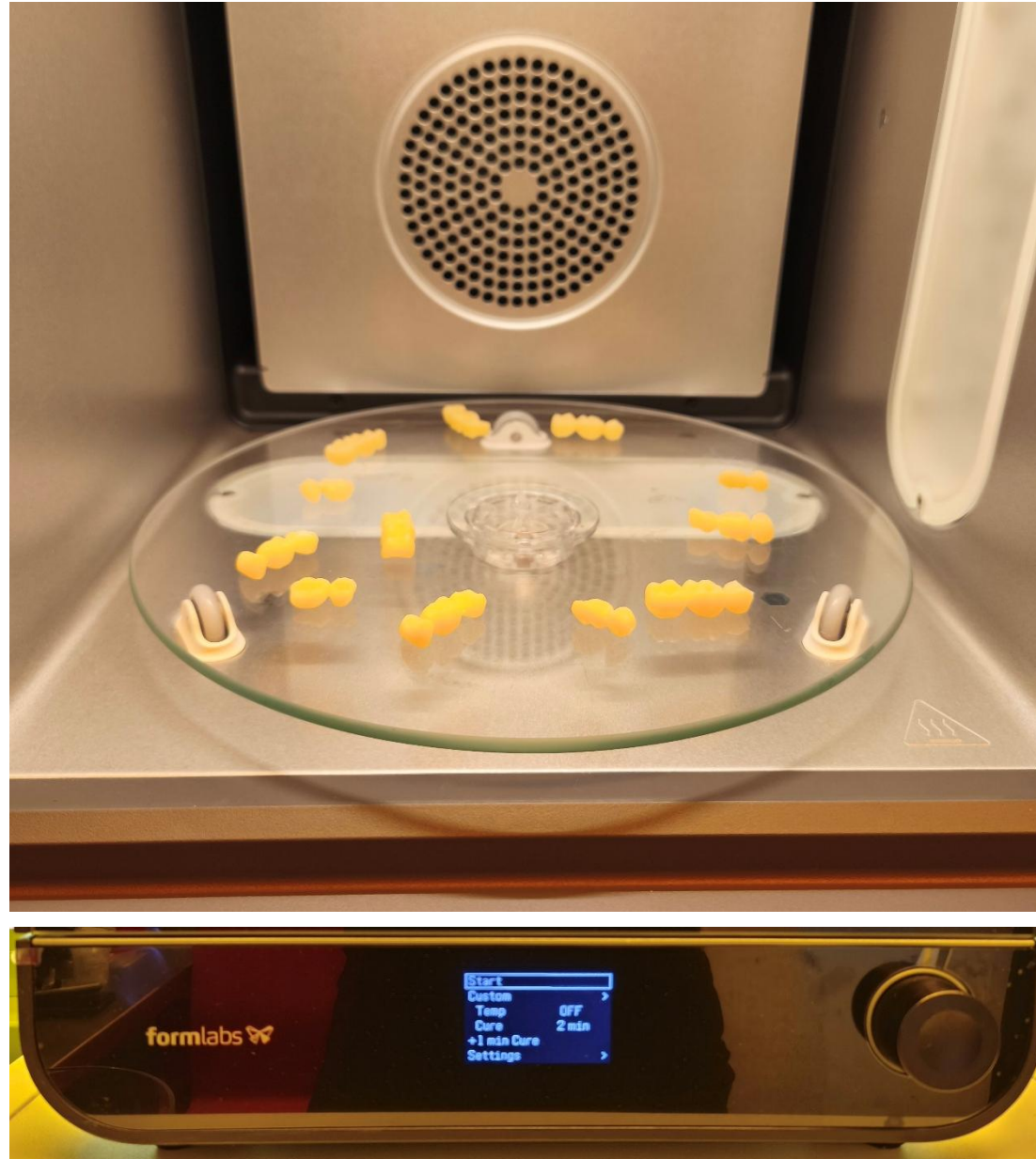


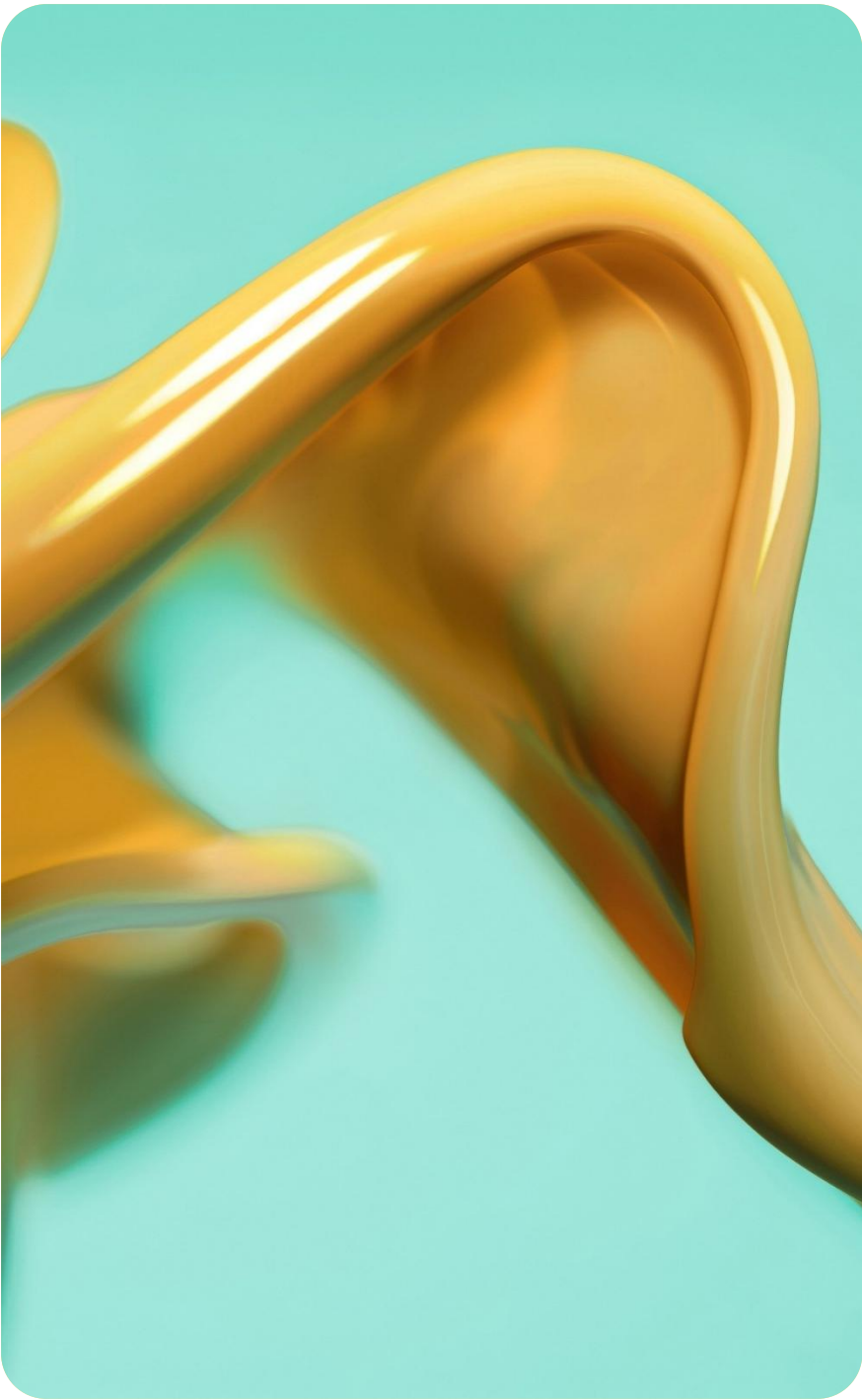
Post Process

4) UV Curing

Note: Skip this part, if you want to bond dx crown dentures with dx denture flex as bonder and continue with the **Detax Bonding Denture Flex & Crown Guideline for Formlabs**

If you want to bond teeth with a 2k bonder like Vita Vionic Bond, cure the teeth for 2 min in the Form Cure V2 without temperature.





For more information on these materials, see the links below

[dx.crown](#)

If you have any additional questions, please contact us:

support@detax.com

Formlabs Detax parameter sets can be downloaded on the Formlabs Detax download center:

[Formlabs Detax Download Center](#)

Materials that matter

If you have any further questions,
please contact us: support@detax.com

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