

3D Printing is showing tremendous promise in the O&P field and can deliver fantastic benefits to the patient and the practitioner. However, volume changes often occur in both the long and short term, requiring patients to manage their fit on a daily basis. Integrating RevoFit adjustability is the easiest way to overcome this on-going challenge and has been used successfully for years in both orthotic and prosthetic devices.

Here is how to get started integrating RevoFit® into your designs

1. Integrating reel mounting geometry into the device CAD:

RevoFit Kits (SKU PK2000-320-05) currently come supplied with a Boa Reel and a RevoFit mounting collar. It is necessary to either:

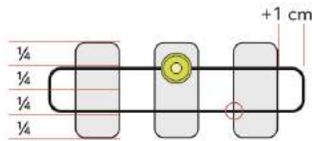
- Integrate a void in device for the RevoFit Mounting Collar so that you can rivet on the collar and mount the Boa Reel.
- OR
- Scan the plastic RevoFit Mounting Collar geometry to generate the CAD for integrating the reel directly into the 3D printed device wall.

Note: unfortunately, the CAD file for the mounting collar is considered proprietary and cannot be shared. You will need to scan a RevoFit mounting collar for this geometry.

2. Integrating Tubing Geometry into the device CAD:

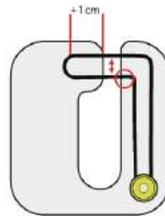
- Integrating lacing pathways in the wall of the device will be necessary.
- Please follow the RevoFit design rules below to effectively route the lace through the device.

Design Options



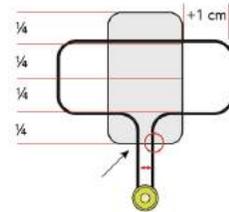
PANEL DESIGN RULE:

- $\frac{1}{4}$ rule = length of panel \div 4. Tube must be $\frac{1}{4}$ distance from top/bottom edges.
- Tubes must cross panel parallel to each other.
- Tube must cross panel at a perpendicular angle to edge.
- Tube must extend 1 cm on the frame before turning.



GAP DESIGN RULE:

- Tubes must cross gap parallel with each other.
- Tube must cross gap at a perpendicular angle to edge.
- Tube must extend straight 1 cm on the frame before turning.



HINGE DESIGN RULE:

- Tubes must cross hinge base parallel to each other.
- Tube must cross hinge at a perpendicular angle to edge.
- Use $\frac{1}{4}$ rule to determine where to route closure points.
- Tube must extend 1 cm on the frame before turning.
- Hinge must be at a different level (in the transverse plane) than closure points.

- Dimensions and tubing requirements:
 - a. Click Medical tubing must be inserted into the tubing channels to mitigate lace friction throughout the system and maximize lace life.
 - b. The Dimensions for the tubing are:
 - Outer diameter: 3.3 mm
 - Minimum bend radius: 1.5"
 - c. Tubing must be inserted into the lace channels and can be secured in place with glue.

Designing your Adjustable Device:

We recommend enrolling in Click Academy (www.clickacademy.co) and to take the RevoFit courses to learn about devices designs:

Gap Design: Best for creating global compression/expansion by closing a cut out (gap).

Panel Design: Best for creating targeted compression/expansion with movable panels.

Hinge Design: Best for easy donn/doff or suspension with a hinged door.

FUTURE DIAL CHANGES:

Now through March 2023, RevoFit Kits with Boa dials will be available to integrate adjustability into your 3D printed devices.

After March 2023, Click Medical will provide a new 3D print specific RevoFit Kit that will contain the new Click Reel, Reel attachment geometry, and instructions to integrate RevoFit parts into the device.

Please contact your local distributor to purchase RevoFit Kits or any Click Medical products.

To receive support on device designs, using the kit components, and creating proper lacing channel geometries, please contact Click Medical for support:

www.help@clickmedical.co, Tel: +1.970.670.7012