

Thank you for the opportunity to be a part of your business. Our goal at Life-Like Laboratory is to work with the Prosthetist to fabricate custom made silicone prostheses for their patients and help restore self-esteem, confidence and comfort.

Enclosed is our Prosthetist packet which includes:

- The Four Corners in the "Life-Like Process"
- Life-Like Laboratory Impression Techniques
- Product Description and Procedures
- Patient Information Work Order
- Life-Like Laboratory Background Sheet

This packet is intended to help a Prosthetist complete the necessary steps in order for Life-Like Laboratory to fabricate a quality custom-made silicone restoration prosthesis which is identical to your patient's sound side.

If you have any questions as to our procedures, please call our Director of Operations, Crystal Fancher at 972-620-0203.

Again, thank you for the opportunity. We look forward to helping your patients through our relationship.

Regards, Life-Like Laboratory

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## THE FOUR CORNERS IN THE "LIFE-LIKE PROCESS"

There are four cornerstones in the "Life-Like Process". These procedures are necessary for the Prosthetist to aid Life-Like Laboratory in the delivery of a quality prosthesis in a timely manner. Any deviations or omissions can seriously jeopardize the timeline and accuracy of your order.

- 1. Accurate and well positioned impressions are the first cornerstone in the "Life-Like Process". These impressions are an important tangible reference for our technicians. Therefore, following our supplied "directions for impression taking" is crucial. We suggest practicing these techniques several times to completely understand the material used and the process. Quality impressions help to ensure a proper fit and a natural appearance. Please inspect your impressions prior to shipping them to us. The prosthesis can only be as "Life-Like" as the impression.
- Achieving an accurate color match is the second cornerstone of the "Life-Like Process". The patient's skin
  must be observed under good lighting and in a state of medium profusion. Observing the skin when it is too
  pale or too flushed can lead to an inaccurate color match. Compare the patient's skin to the numbered
  color samples on the Life-Like Laboratory Background Sheet. Choose and record the matching color
  number on the Patient Information Work Order form.

When ordering a cosmesis for upper extremities, we will need color matches for the fingernail, finger tips, between the DIP and PIP, MCP, dorsal, wrist and forearm.

When ordering a cosmesis for lower extremities, we will need color matches for the toe tip, toenail, MTP, dorsal and heel.

3. The third cornerstone in the "Life-Like Process" is the Prosthetist supplying Life-Like Laboratory with *quality pictures* taken on the **Life-Like Color Background Sheet**.

Quality pictures provide us with not only a color reference for fabrication and painting, but they also serve as a visual for our sculptors. The patient's uninjured limb should be photographed on the Life-Like Laboratory Background Sheet. Please note fingernails and toenails should be unpainted when photographed. Additional photos of both limbs are always helpful. A wide variety of angles and distances provide the technicians with even more reference by which to fabricate the cosmesis. Please inspect the pictures with the patient. When you have chosen the pictures that best represent the patient then email them to us at <a href="mailto:pictures@lifelikelab.com">pictures@lifelikelab.com</a>. (See LLL Background Sheet for details on photos and color matching.)

Remember, we are creating an identical Life-Like prosthesis for your patient. The more detailed and quality the photos, the higher quality and accuracy of the prosthesis.

4. The fourth and final cornerstone of the "Life-Like Process" is the Prosthetist thoroughly completing the Patient Information Work Order. Any and all pertinent information should be included on this form. (i.e. shoe size, sound side measurements and any special needs of the patient.) This form needs to be filled out completely and sent in with all orders.

By completing the Four Cornerstones in the Life-Like Process, the Prosthetist is helping Life-Like Laboratory create a solid base upon with to design and fabricate a quality custom silicone prosthesis. Your attention to the quality and accuracy of the impressions, color matching, photography and documentation is vital to the fabrication process. Your business and your cooperation is greatly appreciated.



### LIFE-LIKE LABORATORY IMPRESSION TECHNIQUES

Quality, well-positioned impressions are a must. The techniques and materials described below will help you to achieve the necessary quality and detail required for the "Life-Like Process".

### **Materials**

1. <u>Alginate:</u> Quality alginate mixed thoroughly to the consistency of thick lumpy yogurt. A thinner mix creates air bubbles and a generally weak impression.

<u>Silicone Elastomer:</u> A silicone elastomer may be used for upper extremity casts only.

2. <u>Yellow Dental Stone:</u> Yellow dental stone mixed thoroughly to the consistency of pancake batter. A "watery" mix creates a generally weak stone copy. A thicker mix increases the chances of the material not reaching the bottom of the alginate impression. Once poured into the alginate impression, it may be necessary to tap or bump the container on the counter to reduce air bubbles. Allow it to dry to "fingernail hardness" (when you scrape the top of the stone and it doesn't leave a scar). This generally takes 30 minutes. Next, slowly cut away the alginate in small amounts. Do not try to pull the impression out of the alginate all at one time. This will cause the mold to break. Allow the stone to dry 24 hours before shipping to Life-Like Laboratory.

NOTE: Please do not use white stone or plaster. Plaster has a tendency to swell. It also does not have a high enough psi for our fabrication techniques. If plaster impressions are sent we have to take an impression of that impression and pour it up in dental stone and then use that cast which could cause fit issues. This will cause untimely delays in the "Life-Like Process".

3. <u>Container:</u> You will need a container large enough to accommodate taking an impression 2" past the intended margin of the prosthesis. This step is crucial for achieving fixation in the mold fabrication portion of the "Life-Like Process". For lower extremities, we often use cardboard boxes with trash bag liners. The cardboard should be rigid enough so as not to lose its shape once the alginate has been poured. If the box expands, secure or re-enforce with electrical tape across the top and around the sides to bind it back into shape. The trash bag liner works well for material conservation and quick disposal. When taking a foot impression an additional piece of rigid material (linoleum tile cut to fit works best) is required to be placed between the foot and the liner at the bottom of the container. This tile provides a uniform flat surface necessary for accurate foot impressions. For upper extremities, we find that a 6" pvc pipe with a cap on the end works best. You can cut the pipe from 12"-18" long. This allows for a natural hand impression 2" past the margin.

#### **Positioning**

- 1. <u>Hand/fingers:</u> Hand/fingers should be in a natural, slightly curved position with space between the fingers. The thumb should be in a relaxed position away from the palm and index finger. It is best to take these impressions with the patient's hands at their side, in the position described with the wrist as straight as possible. The "Life-Like Process" cannot be achieved using impressions with hyper extended or curled digits, bent wrist, or impressions that are not 2" beyond the desired margin.
- 2. <u>Impressions of the feet must be weight bearing:</u> Prepare your container, liner and piece of rigid material. Pour just enough to cover the rigid base. Instruct the patient to step into the container, putting normal standing weight on the foot. Fill the container to 4" above the desired margin. Make sure the patient is not locking their knees or shifting their weight to their heels.



# **Product Description & Procedures**

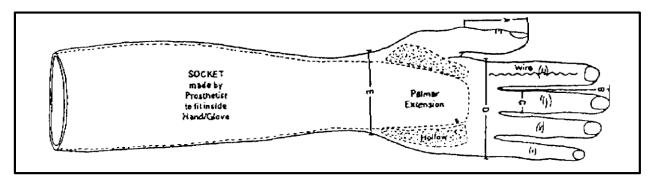
Life-Like Laboratory prides itself in being able to offer an extremely wide variety of quality custom silicone prosthetics. All of our pieces are fabricated with reinforcement around the stump for strength and longevity. We fabricate fingers and toes of all shapes and sizes. We craft custom hands, arms, feet and legs that cover any socket or prefabricated mechanisms. We also offer facial prosthetics. All of our prosthetics are hand sculpted in wax, fabricated with reinforced silicone and then custom painted to match the patient. The prostheses are held in place through suction or medical adhesive depending on the individual need of the patient. Detailing includes: knuckles, veins, hair, freckles, scars and age spots.

<u>Fingers</u> can be whole or half-lengths depending on the amputation. They are sculpted as mirror images of the sound side impression. For shorter stumps the patient may supply a solid loose fitting ring without stones. The ring will be attached to the prosthesis and worn on the next finger. The prosthesis and especially the thin margin are reinforced for longevity. For a finger, the patient generally needs 1.5cm left of the finger.

<u>Partial Hands</u> are fabricated for amputations that remove at least one finger. This prosthesis will be worn as a glove with the margin approximately 2" past the ulna. Any existing fingers will extend through holes in the glove.

<u>Passive Hands with skinned sockets</u> are created for both below elbow and above elbow amputations. Life-Like Laboratory must be supplied with an accurate quality socket. The socket must have a solid palmer extension that extends to approximately 1" below the palmar digital crease of the middle finger. The socket should be 2mm smaller globally than the sound side to allow for the Life-Like skin. Life-Like Laboratory will fabricate a silicone hand with poseable fingers. The margin will extend to the end of the socket. The prosthesis will be painted to match the patient's sound side.

The Prosthetist should also include a tracing of the sound side. Measurements of the forearm, wrist and the distance between the inside elbow to the fingertips should be noted.



<u>Custom Myoelectric Coverings</u> are also available. Life-Like Laboratory must be supplied with an entire myoelectric mechanism, including the socket. The socket should be globally 2mm smaller than the sound side to allow for the Life-Like skin. The tension of the blades should be adjusted to allow for the 3mm of silicone on each of the fingertips. This adjustment adds significantly to the life of the prosthesis. If the myo is allowed to close completely, the glove is subject to unnecessary stress and material displacement.

<u>Toes</u> are made for either suction or adhesive application depending on the amputation. Complete amputations are addressed with a margin that extends onto the top and bottom of the foot. These "flaps" allow for the adhesive retention of the prosthesis. Shoes, socks and/or nylons also help to keep the toe prosthesis in its place.

<u>A Foot</u> replaces amputations above the metatarsus. Depending on the degree of amputation, this prosthesis is fabricated with a margin that extends to just below or just above the ankle. This one-piece prosthesis, together with the reinforcement,



surrounds the entire remaining foot and replaces the missing parts. The close fit unites the remaining foot and the prosthesis as one unit. The silicone allows for flexible keel and dynamic response. **Life-Like Laboratory must be supplied with an outline drawing of both feet and the patient's shoe size**. The foot prosthesis is fabricated approximately ½ shoe size smaller than the sound side to help allow to fit into shoes. If the patient has any sensitive areas on the remaining foot, please mark on the cast indicating where.

<u>Below Knee and Above Knee feet and socket skins</u> can also be fabricated. The Prosthetist should select the smallest possible foot paddle. Any factory made foot can be covered. Life-Like Laboratory must receive the entire prosthesis if a silicone skin is required. The prosthesis should be shaped and downsized 2mm smaller globally than the sound side. The Prosthetist should also note the patient's shoe size including a tracing of the sound side.

<u>Lower leg build-ups</u> are sculpted to replace amputated or loss mass. Impressions of both the injured limbs are required. They must extend 6" beyond the desired margin of the prosthesis.

### **Process**

- 1. Upon receiving your quality impressions and Patient Information Work Order (filled out completely) our sculptors create a wax model of the desired prosthesis. Time varies depending on the size of the order but normal turnaround time is 2 weeks.
- 2. We send you the wax model. The patient and the Prosthetist inspect the model for size, shape and characteristics. The model cannot be tried on and does not represent the final color of the prosthesis. Any changes can be indicated on the "Patient's wax approval" form. We will also include a color background for you to take pictures on at this time as well.

Please have the patient sign the wax check form and return it with the wax.

- 3. Upon the return of the wax model, the technicians mold the wax model and fabricate the silicone prosthesis.
- **4.** The prosthesis is painted either in the presence of the patient or by the quality pictures that were approved by the patient and that were emailed by the Prosthetist.
- 5. Once the prosthesis has sufficiently dried, it is shipped to the Prosthetist for try on and color approval.

Once the prosthesis has been fabricated in silicone, no changes can be made to the size, shape or characteristics. It is crucial that both the patient and the Prosthetist scrutinize the wax model and note any changes prior to molding.

### Time

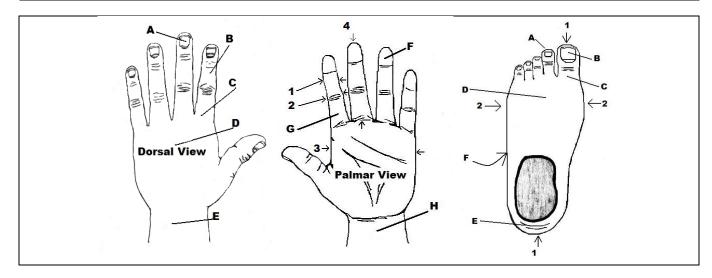
Provided that Life-Like Laboratory receives quality stone impressions and a completely filled out Patient Information Work Order form, a hand sculpted custom made wax model will be delivered in 10-15 business days.

After receiving the approved wax model and pictures, Life-Like laboratory will fabricate, paint and ship the completed custom made prosthesis within 10-15 working days.



## **Patient Information Work Order**

Company Name:	Patient Name:	
Practitioner:	Age:	Male (circle one) Female
Shipping Address:	Type of Prosthesis:	
Phone Number(s):		
Special Requirements/Comments:		



Hand Measurements	Hand Colors	Foot Colors
Sound side	A. Fingernail	A. Toe tip
Between PIP & DIPmm	B. Between PIP & DIP	B. Toenail
2. PIP mm & DIPmm	C. MCP joint	
3. Across MCPmm (hand only)	D. Dorsal	D. Dorsal
Injured side	E. Forearm	E. Heel
Between PIP & DIPmm	F. Fingertip	F. Bottom
2. PIP mm & DIPmm	G. Between PIP & MCP	Foot Measurements
3. Across MCPmm (hand only) H. Wris	t	1.Lengthmm
4. Tip of injurymm		2. Widthmm
5. Margin linemm		3. Below Anklemm
6. Above Ulnamm & Below Ulna	mm (hand only)	4. Shoe size

- Stone Impression of the Injured Limb: note sore spots, bone spurs, breakdowns, etc. and mark on the stone impression.
- Outline Drawings of the Injured Foot & Non Injured Foot: (required for any type of foot prosthesis)