# Powerstep Introduces Innovative Technology for Producing Custom Orthotics

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**Powerstep**<sup>\*</sup> recently introduced a revolutionary technology for producing custom orthotics in just minutes by molding a lightweight, light-curing composite material directly to a patient's foot. **Light Orthotics**<sup>\*\*</sup> technology offers the most advanced composite plate in custom orthotics today, and practitioners can now provide immediate relief to their patients in one

office visit with a superior, customized product. Standing in the way of industry acceptance, however, is the mainstream thinking that traditional custom-molding methods, such as plaster casts, foam impression boxes and digital scanners are superior. But are they? Here's a closer look at how Light Orthotics improves upon traditional forming methods.

## Light Orthotics Accurately Captures the Foot Shape

Light Orthotics represents a new type of casting method. The Light Orthotics method uses a seated, semiweight bearing position, with the foot and flexible Prethotic" pressed against an elastic fitting film. The Prethotic includes all the materials used to make the custom orthotic; however, the composite plate is not yet cured and is still flexible. The elastic film provides resistance against the foot, conforming the Prethotic directly to the plantar surface of the foot during molding. By curing the Prethotic directly on the patient's foot, Light Orthotics enables an accurate medial and lateral arch fit and more consistency when capturing arch height and heel cup shape, as compared to other methods.

Traditional methods do not offer elastic, reactive forces against the foot during the molding process. Nonweight bearing methods like plaster casting must be done slowly and methodically to achieve the subtalar neutral position. Even slight movement by the patient can jeopardize an accurate cast. While weight-bearing and semiweight bearing digital scans and crush boxes can quickly capture the patient's arch, without an elastic reactive force, achieving proper alignment with these methods is difficult and prone to errors. With Light Orthotics the elastic reactive force enables the practitioner to make adjustments before the curing process begins while still ensuring an accurate molding.

#### **Light Orthotics Molds Orthotics in Minutes**

Existing techniques for custom orthotics have long lead times, leaving the patient without relief in the interim. The



application of plaster for slipper casts is tedious and time-consuming with a prolonged dry time, which ties up the practitioner with one patient for an extended appointment. The molds, scans or crush boxes are then sent to an orthotic manufacturer who produces the custom orthotic—a process that takes up to 2 weeks to 3D print or lab manufacture.

Light Orthotics uses safe UV technology to mold a flexible, light-curing composite material into a rigid orthotic in under 5 minutes.

With minimal training, custom forming can be conducted by a resident or trained assistant, freeing up valuable time for the practitioner to see other patients. The patient receives custom orthotics in one office visit for immediate relief of foot pain.

## Light Orthotics is a Clean and Safe Method of Forming Custom Orthotics

Light Orthotics eliminates the messy casting process. Instead, the clean, direct-to-foot molding process only requires one pair of light-curing Prethotics. Practitioners no longer need to purchase, supply and store casting materials or bulky foam boxes. And Light Orthotics eliminates the hassle of paperwork and lab fees since these custom orthotics are formed in-office.

#### Light Orthotics are Designed for Comfort

Patient compliance is improved by a lightweight orthotic that is comfortable for longer wear. The Light Orthotics have breathable PORON\* Foam for full-foot cushioning with a shock-absorbing heel pad. The lightweight, semi-rigid composite design includes unidirectional, non-woven fibers and light-curing resin for strength and flexibility without bulk, and the resulting orthotics can be easily modified as needed for the patient.

Some practitioners may be hesitant to forgo traditional methods, but doctors who have incorporated the Light Orthotics method are already impressed.

Dr. Gregory Mowen, DPM of Ventnor City, NJ has seen immediate success since introducing Light Orthotics to his practice. "Light Orthotics have given us a chance to provide patients with an instant, perfectly fitting orthotic. Patients are so busy these days they appreciate a one-visit solution to a variety of foot problems. Because these devices are so comfortable and convenient we have been able to increase our output of orthotics by about 400%."

Learn more at https://www.powersteps.com/ lightorthotics or click here.