



## Five Variables that differentiate Certified Orthotists CO(c) as the Premier Orthotic Professionals

### 1: Foot pathology, ailments and complaints

The requirements and preparation to become a Certified Orthotist CO(c) are the most extensive and demanding of any profession that works in orthotics. Requirements begin with a Bachelor of Science degree, followed by acceptance and two years education at an accredited prosthetic and orthotic clinical program, two years' experience in a residency program, and finishes with the successful challenge of national written, oral and practical examinations. The process towards Certification provides a comprehensive understanding of normal and abnormal foot mechanics, normal and abnormal gait dynamics and of all neuro-musculo-skeletal diseases in general.

This comprehensive preparation is critically important due to the wide variety chronic or acute foot ailments that health care professionals will routinely be asked to treat. This includes the extremely wide variety of painful conditions such as plantar fasciitis, Morton's neuroma and bunions and the myriad of foot pathologies that etiologies such as diabetes mellitus, OA and CMT engender within secondary clinical manifestations of these diseases.

### 2: Impression taking; measurement and cast taking methods and techniques

The Certified Orthotists CO(c) livelihood depends on a sound understanding of the forces that are being applied to help offload, align or support a body segment or segments. The evidence is displayed through the casting or impression taking process, which is critical to proper orthotic design. CO(c) share a large toolbox of possible casting methods and sound validation behind the techniques that are used.

### 3: Materials; the understanding of the science of materials for construction for these devices

Certified Orthotists CO(c) study material sciences including the properties of metals and metal alloys. Comprehensive materials knowledge is required to understand when to apply rigid materials and forces to flexible deformities and when to apply softer more accommodative materials on more rigid deformities. Dozens of plastic, leather and foam combinations are worked with extensively and on a regular basis. Certified Orthotists CO(c) pick and choose each material with a sound knowledge of the properties that each material possesses. This knowledge allows for much better patient outcomes.

### 4: Orthosis fitting and Footwear concerns

A Certified Orthotist CO(c) understands how an orthosis applies static and dynamic forces onto the body and also how a device is best incorporated into a client shoes. This knowledge is at the core of a Certified Orthotists CO(c) main competency. From day one, schooling has a strong component dedicated to fitting orthopaedic devices. CO(c)s know that the function of an orthosis is enhanced by the utilization of specific footwear which also includes custom footwear modifications.

### 5: Follow up and warranty work

Facilities employing Certified Orthotists CO(c) are established with the ability to fabricate orthotic devices on location. This provides the opportunity to make the necessary modifications to ensure a properly and appropriate device for each patient. It also allows for regular servicing and maintenance for custom made orthoses provided by a Certified Orthotist CO(c).