

# **KOHL'S**

**How to Measure Guide: Footwear**

**Footwear Technical Design**

**\*Updated May 2023**

# Last Name/Number

Enter last name/number

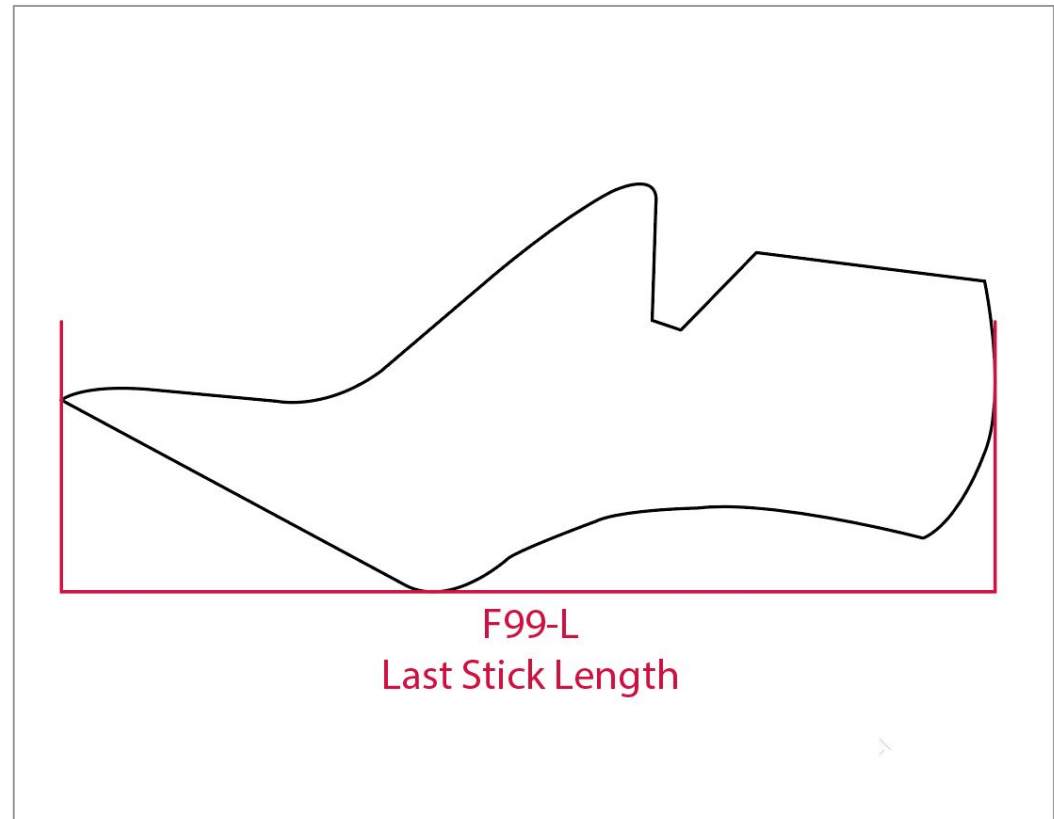
**Tolerance: -2.00/+2.00**



# Last Stick Length

Measures the longest last points from toe and heel.

**Tolerance: -2.00/+2.00**



# Last Ball Girth

To find ball girth, measure flat along the bottom of the last from center back heel toward the toe:

Wmns 6M - 160mm

Mens 9M - 178mm

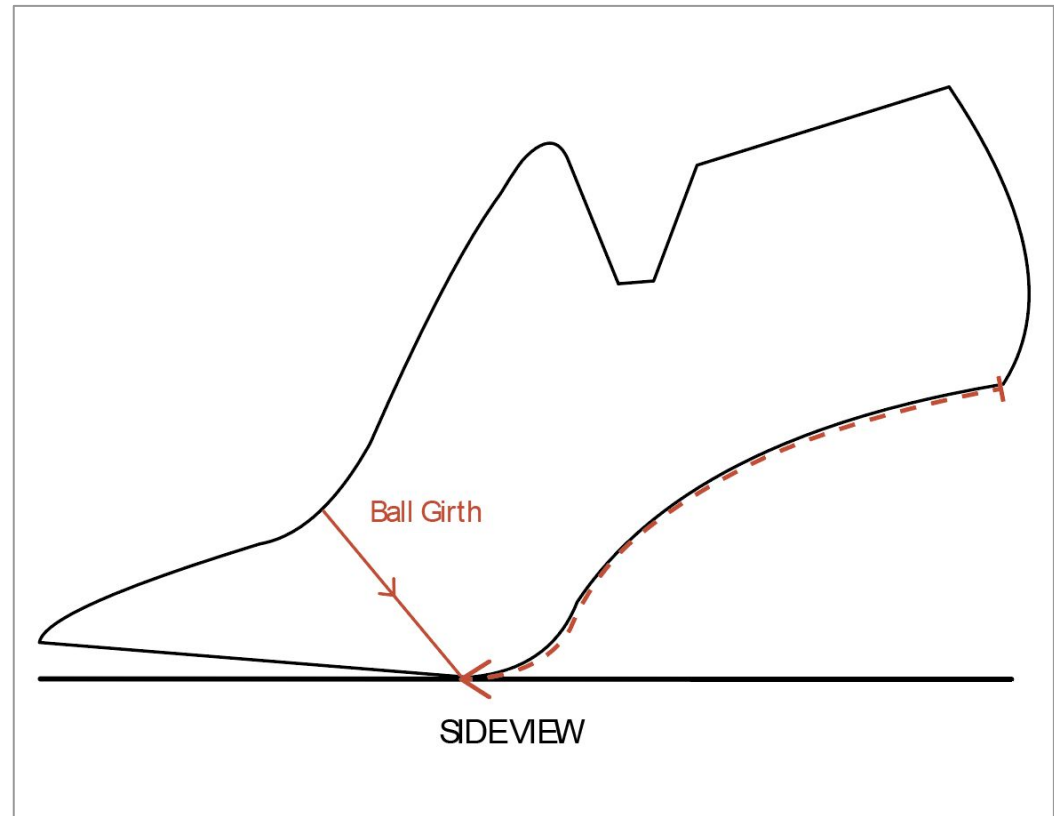
Kids 4M - 157mm

Kids 13M - 125mm

Toddler 7M - 90mm

**Tolerance: -2.00/+2.00**

Then measure at the widest point across inside and outside ball



# Last Waist Girth

To find waist girth, measure back from ball girth:

Wmns 6M - 25.4mm

Mens 9M - 30mm

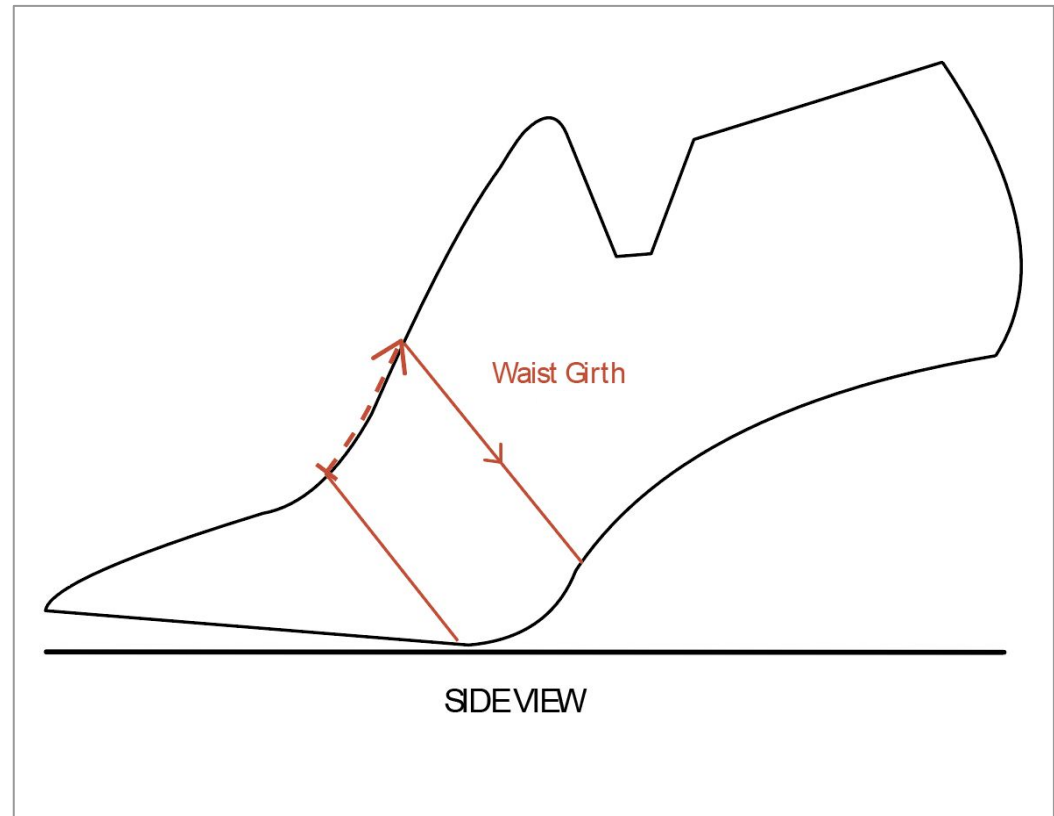
Kids 4M - 25.1mm

Kids 13M - 25mm

Toddler 7M - 20mm

Then measure around the last

**Tolerance: -2.00/+2.00**



# Last Instep Girth

To find instep girth, measure back from waist girth:

Wmns 6M - 25.4mm

Mens 9M - 30mm

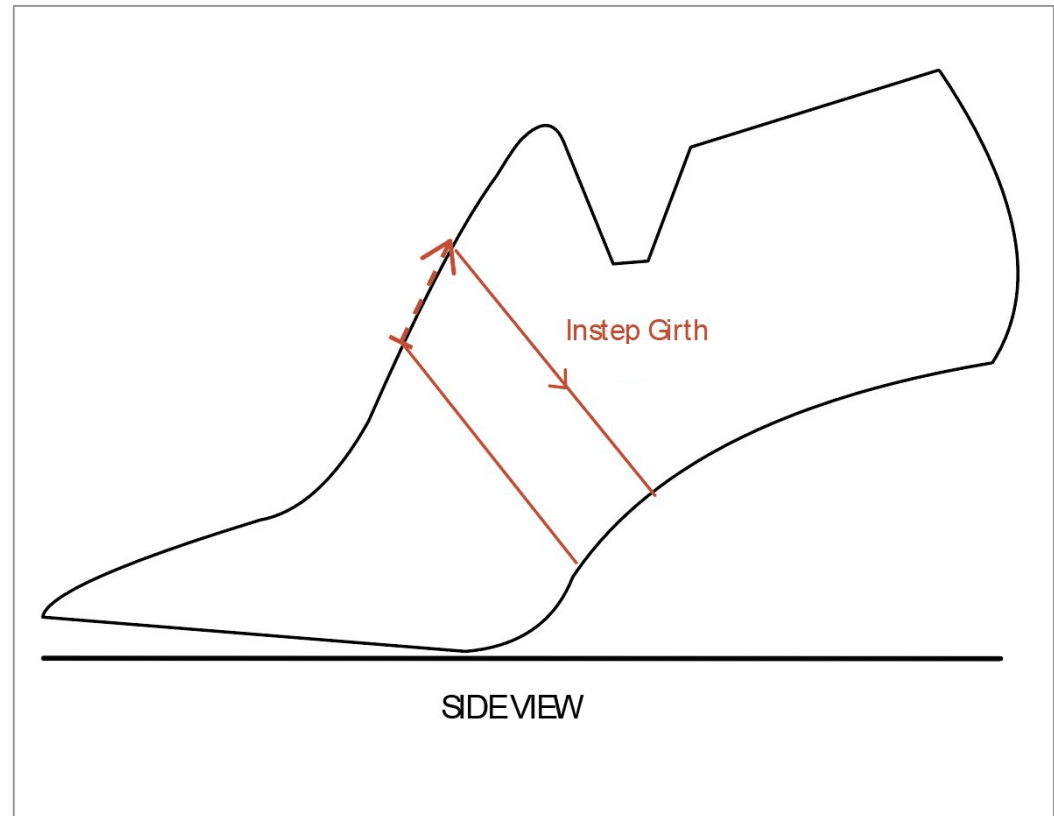
Kids 4M - 25.1mm

Kids 13M - 25mm

Toddler 7M - 20mm

Then measure around the last

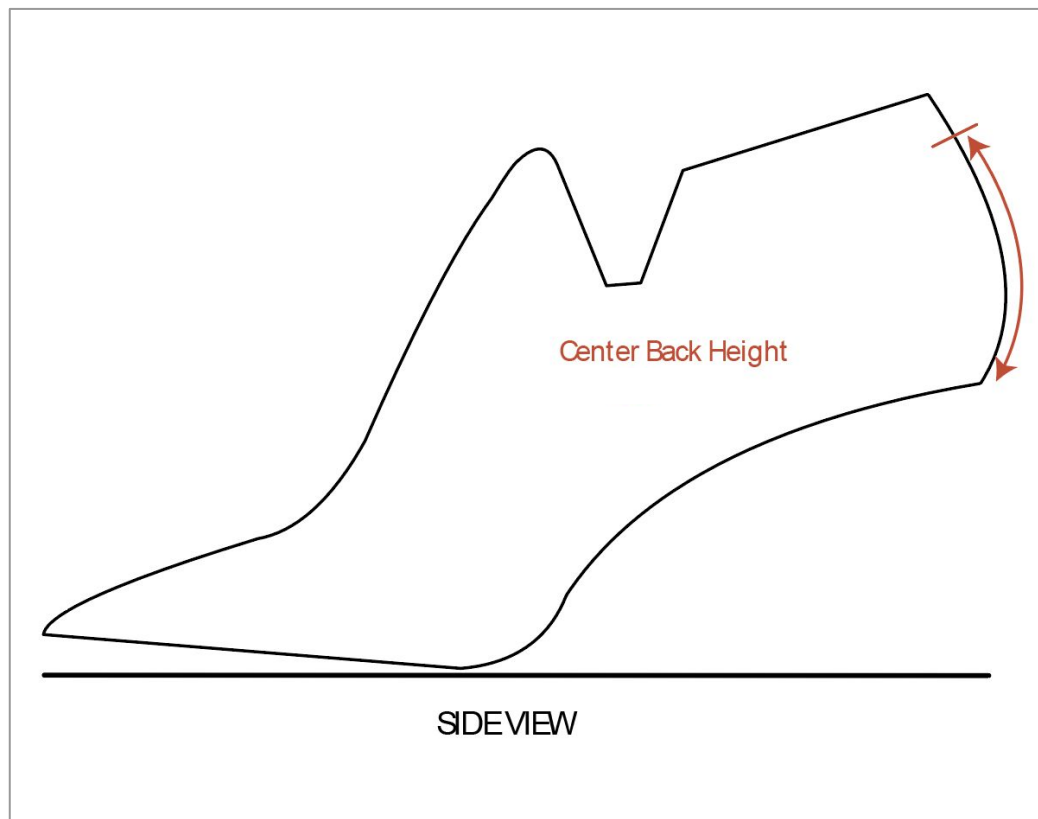
**Tolerance: -2.00/+2.00**



# Last Center Back Height

Measure along center back from bottom of heel to topline

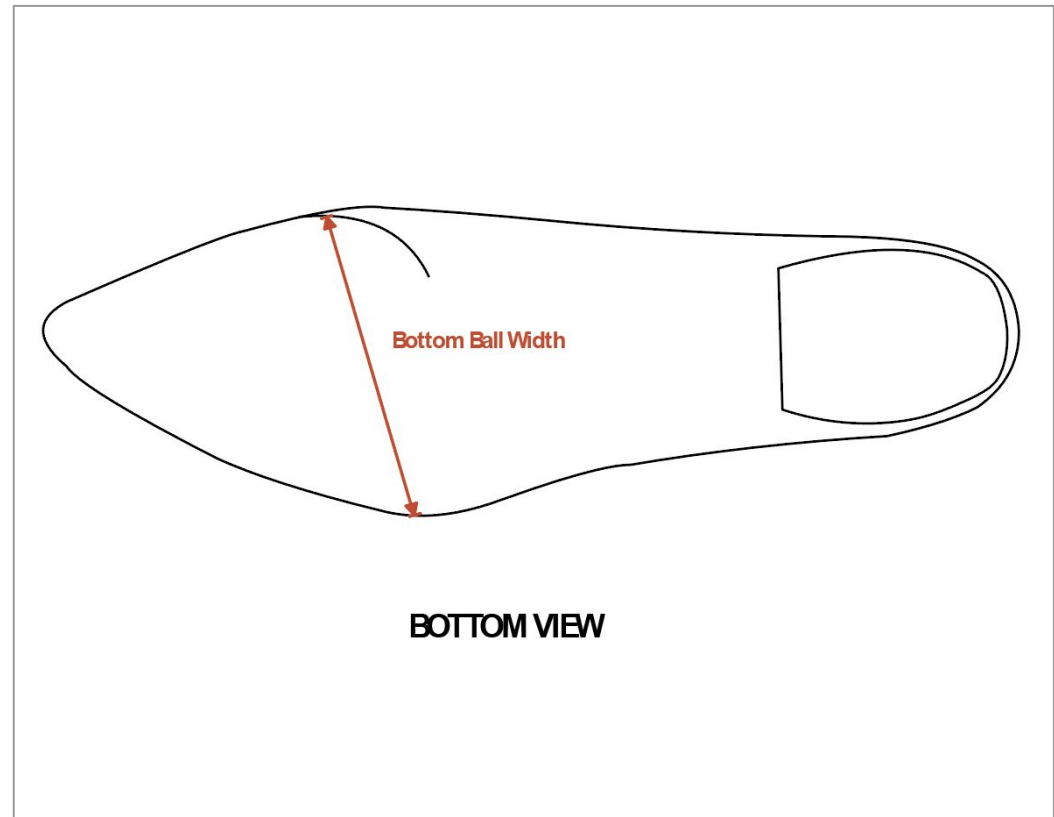
**Tolerance: -2.00/+2.00**



# Last Bottom Ball Width

Measure at the widest point across inside and outside ball

**Tolerance: -2.00/+2.00**

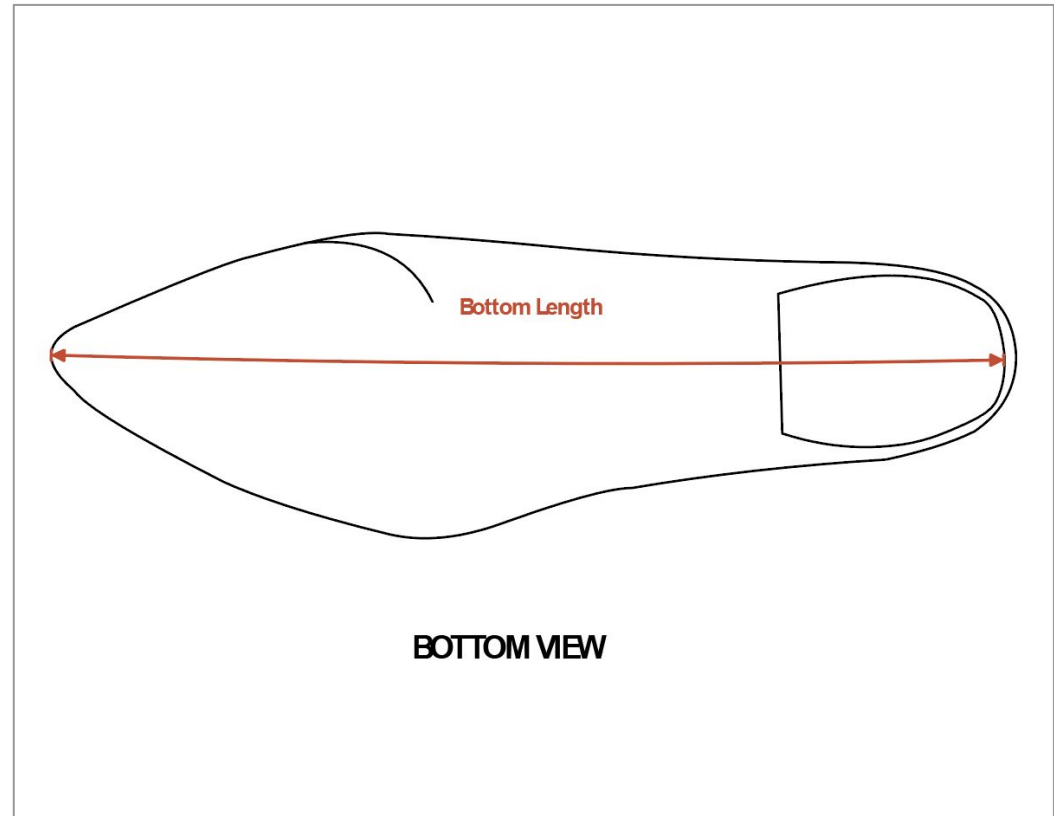




# Last Bottom Length

Following the bottom shape of the last, measure at the longest point from toe edge to heel edge

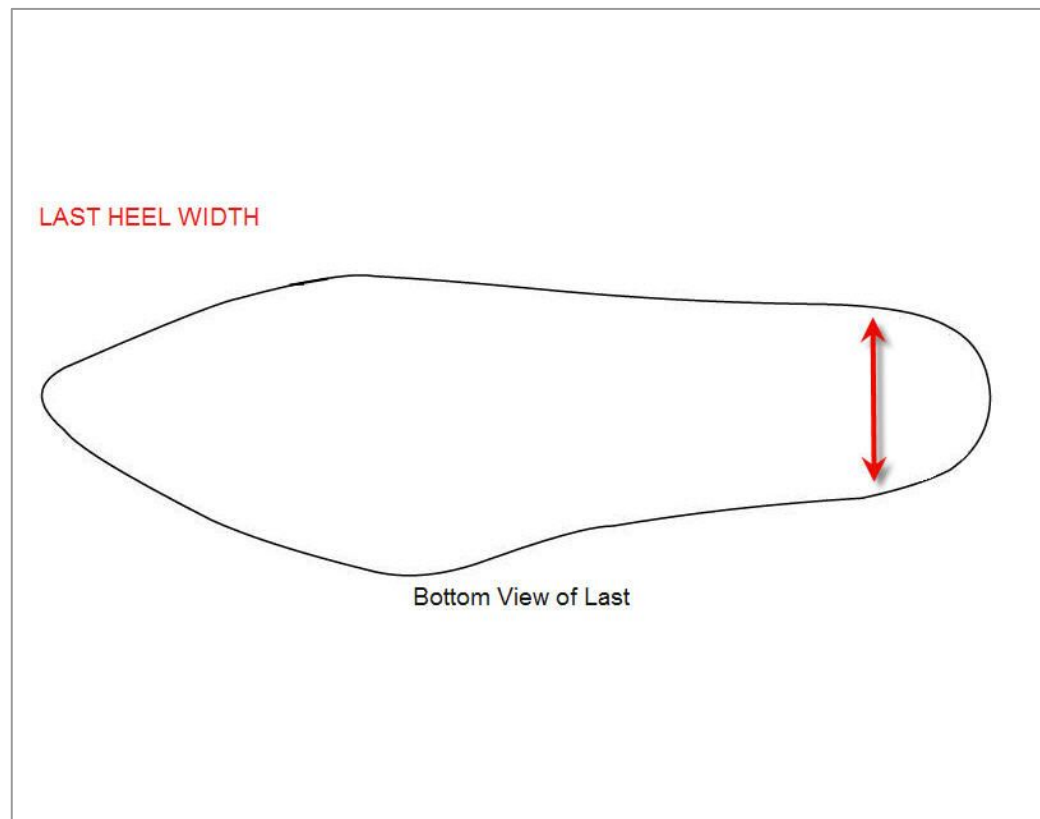
**Tolerance: -2.00/+2.00**



# Last Heel Width

Measure from heel edge to edge

**Tolerance: -2.00/+2.00**



# Last Toe Thickness

To find toe thickness, measure flat along the bottom of the last from center back heel toward the toe:

Wmns 6 - 229mm

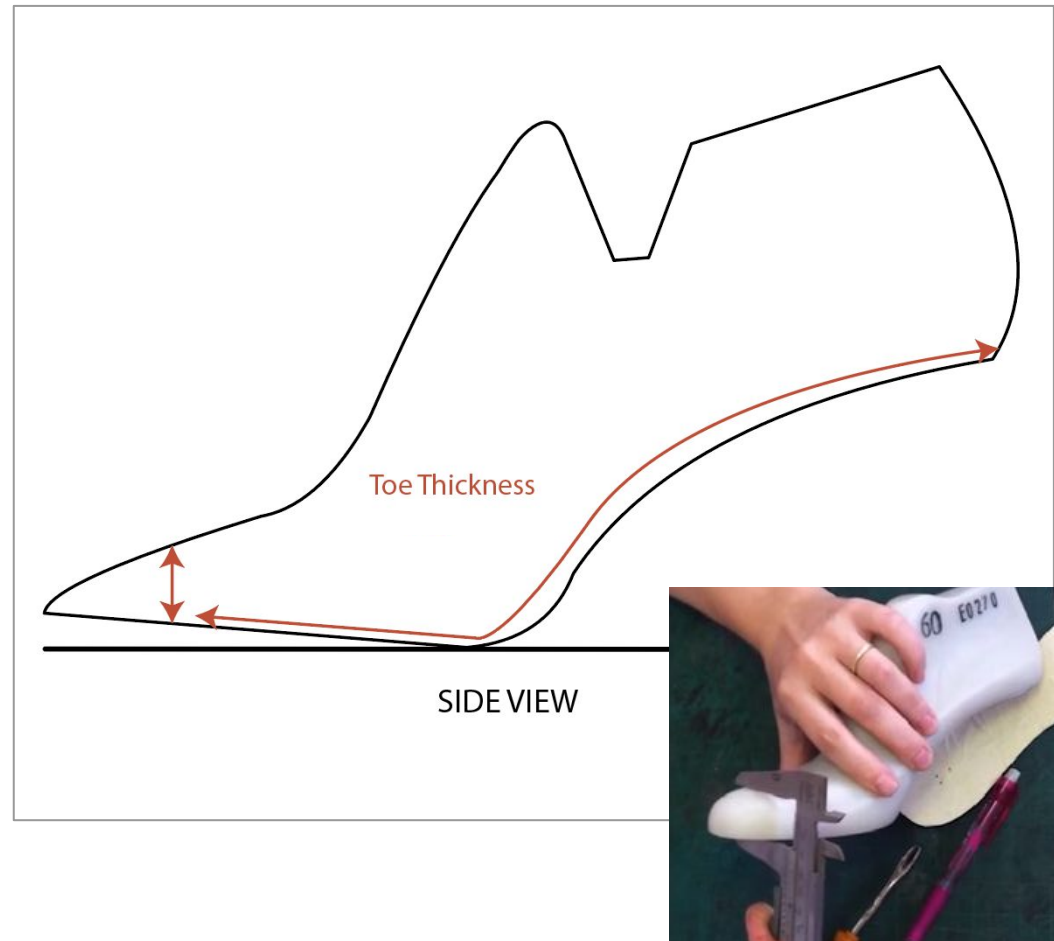
Mens 9 - 257mm

Kids 13 - 191mm

Toddler 7 - 140mm

Then using a caliper, measure the thickness of the toe

**Tolerance: -2.00/+2.00**



# Last Heel Height

Using a last measuring step, measure the heel height from floor to bottom of heel

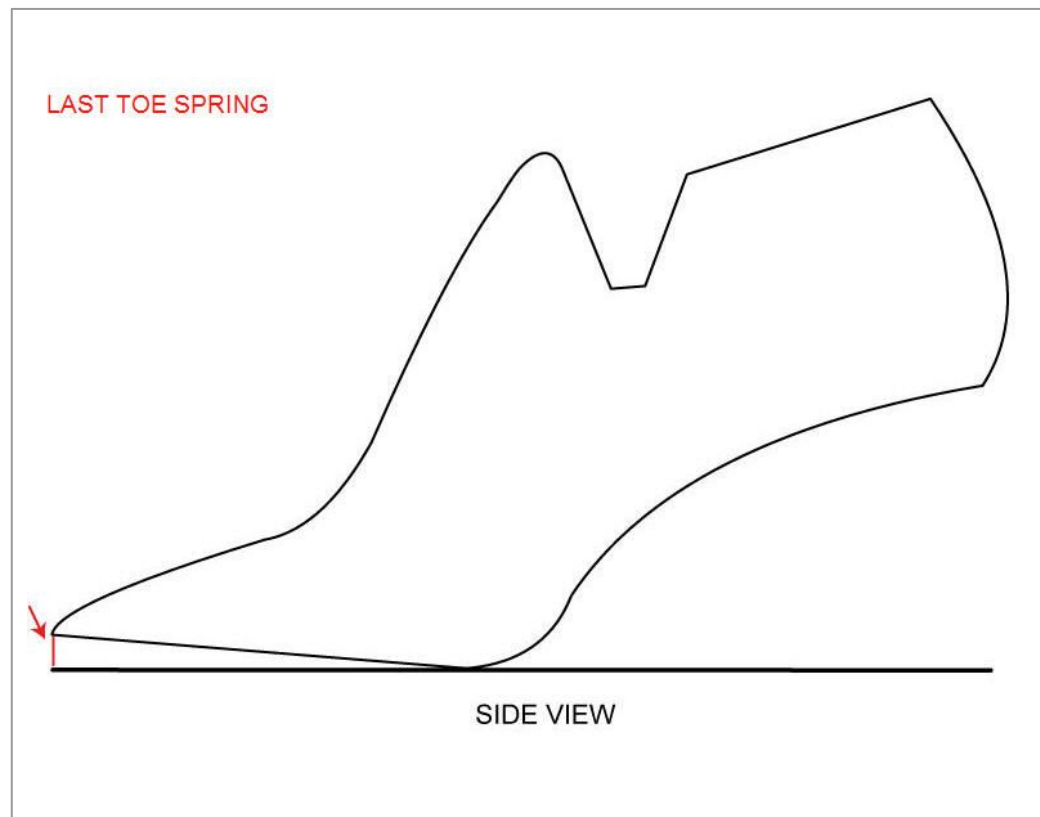
**Tolerance: -2.00/+2.00**



# Last Toe Spring

Measure from floor to the bottom of toe edge

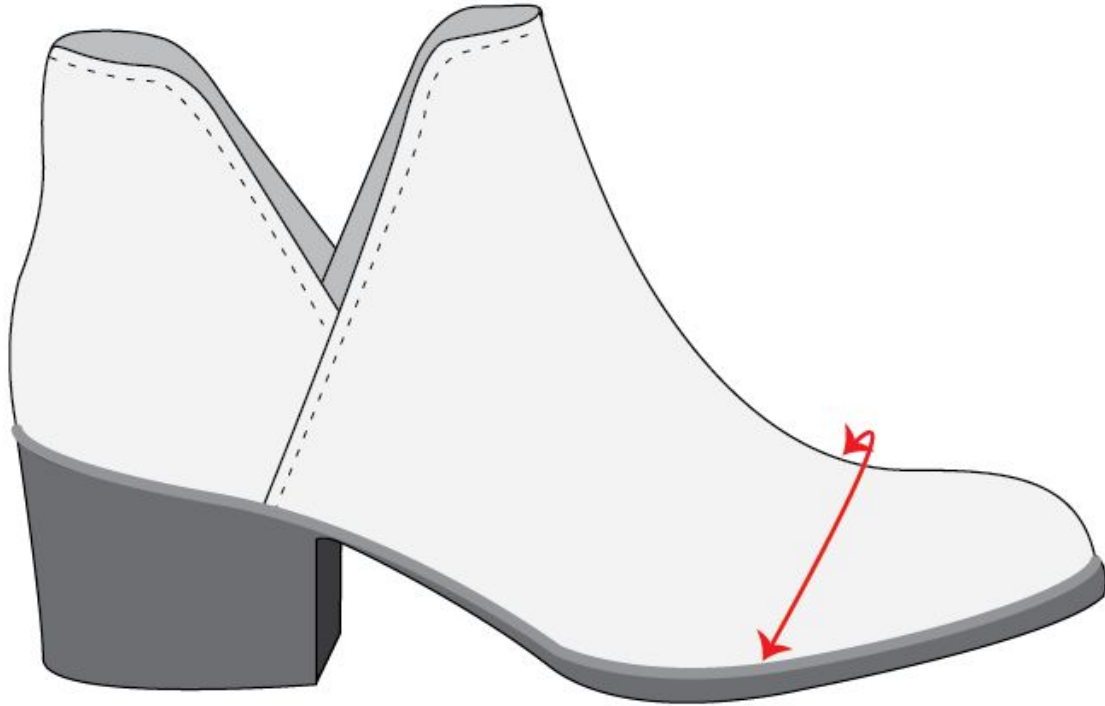
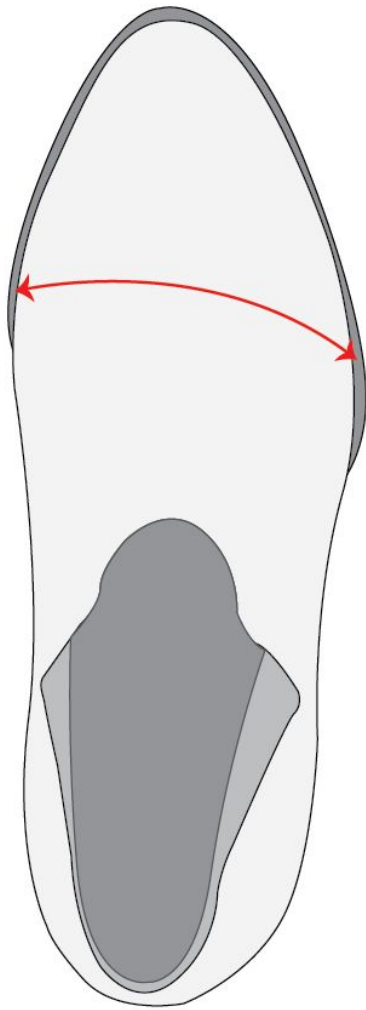
**Tolerance: -2.00/+2.00**



# Ball Width

At the ball of the finished shoe, measure the width from one side of outsole to the other.

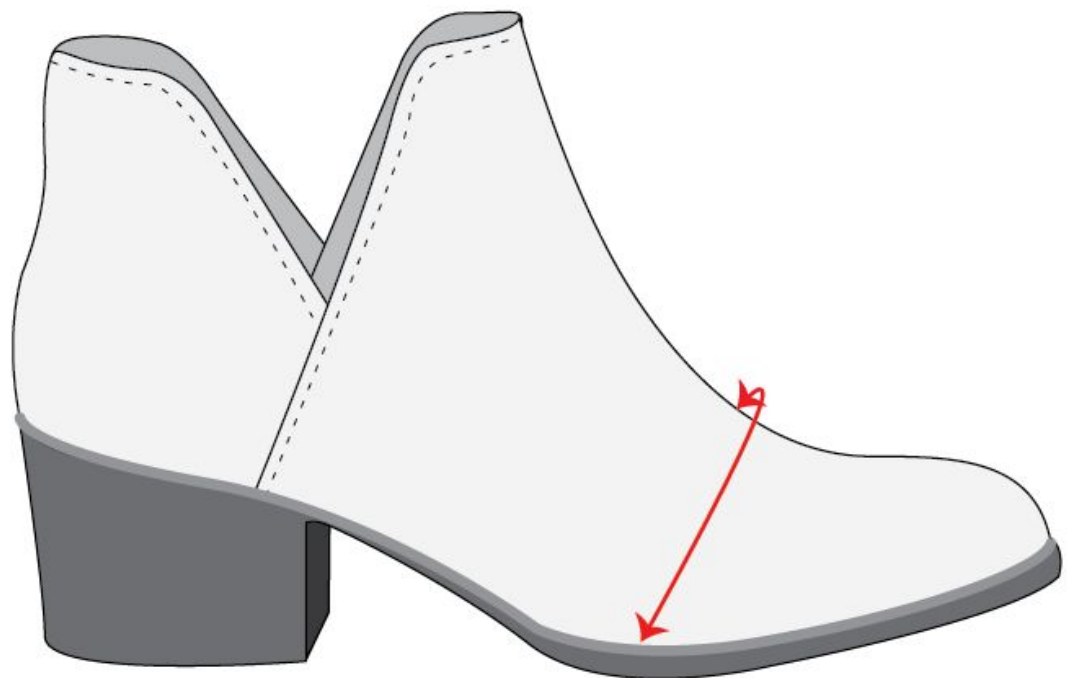
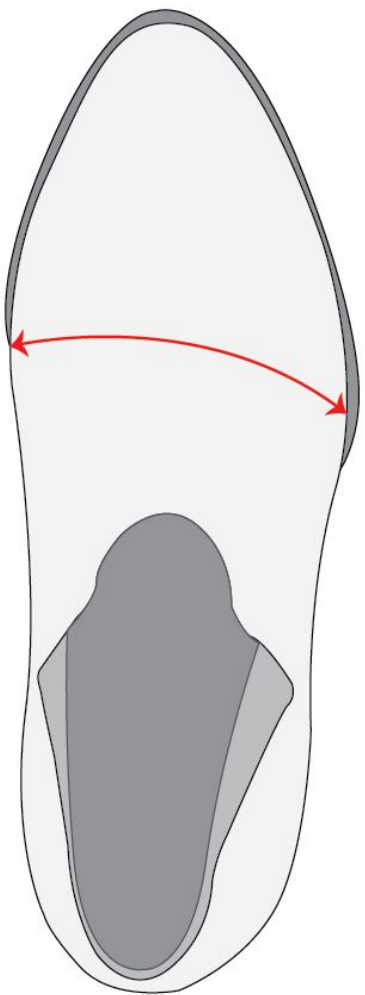
Tolerance: -3.00/+3.00



# Waist Width

At the waist of the finished shoe, measure the width from one side of the outsole to the other.

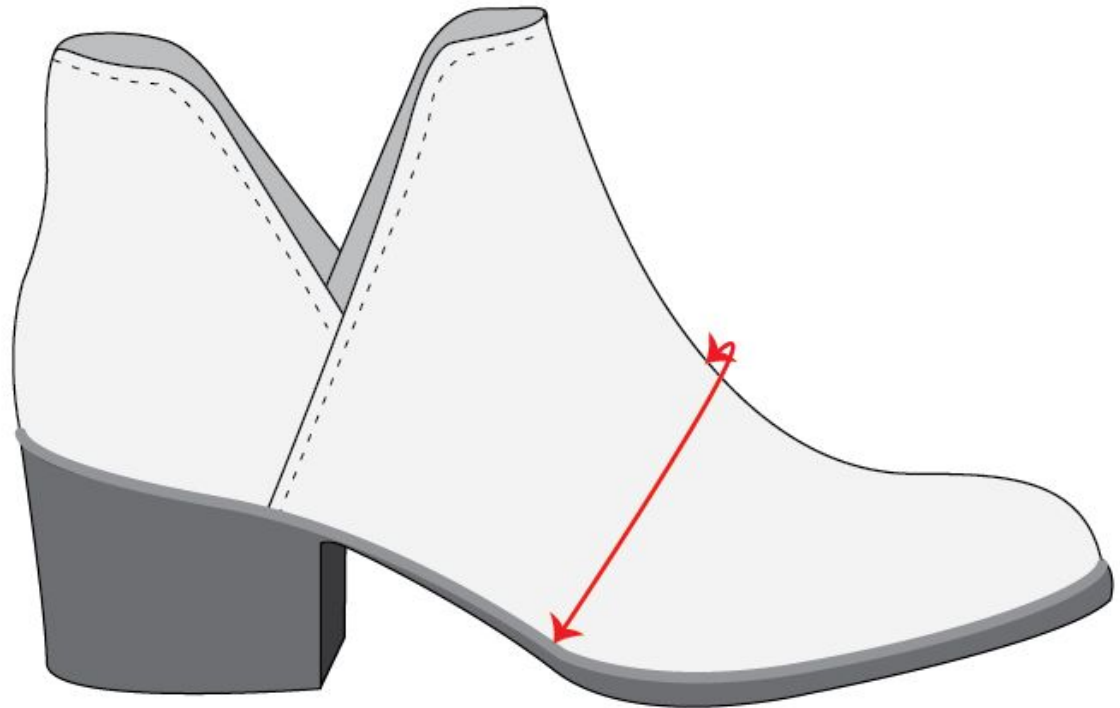
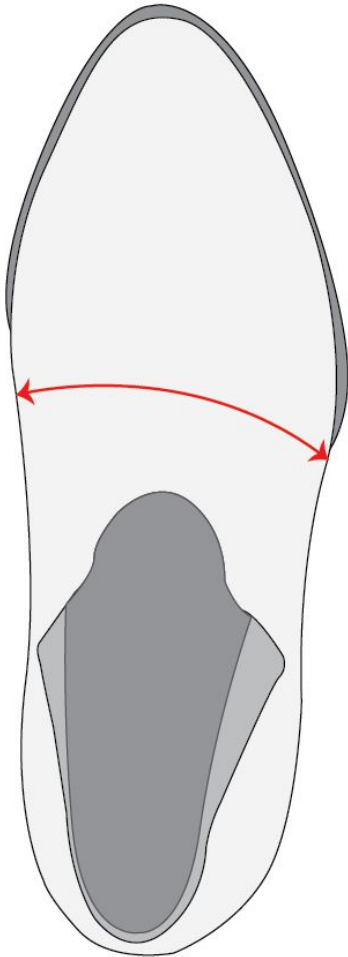
Tolerance: -3.00/+3.00



# Instep Width

At the instep of the finished shoe, measure the width from one side of the outsole to the other.

**Tolerance: -3.00/+3.00**

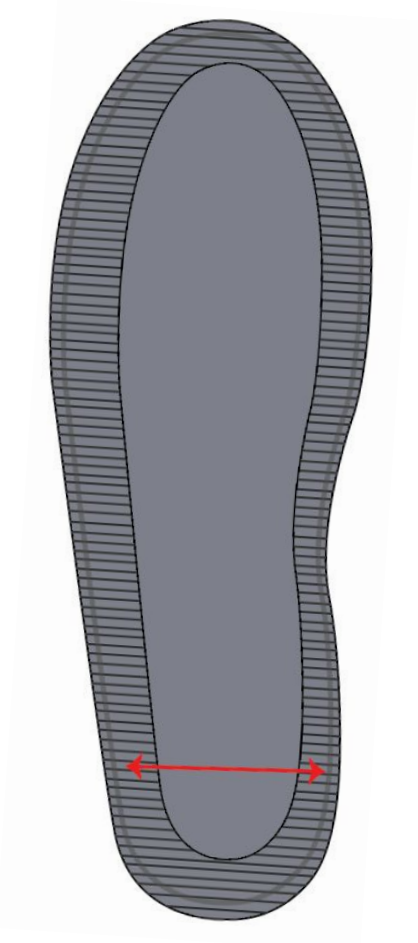
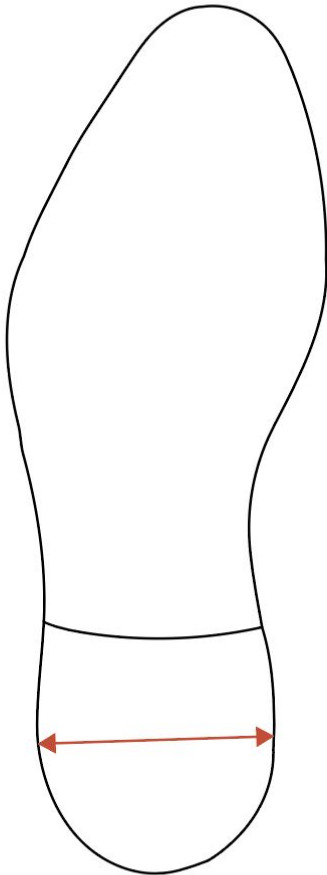




# Heel Width on Actual Sample

Measure flat along the widest point of the heel

Tolerance: -2.00/+2.00

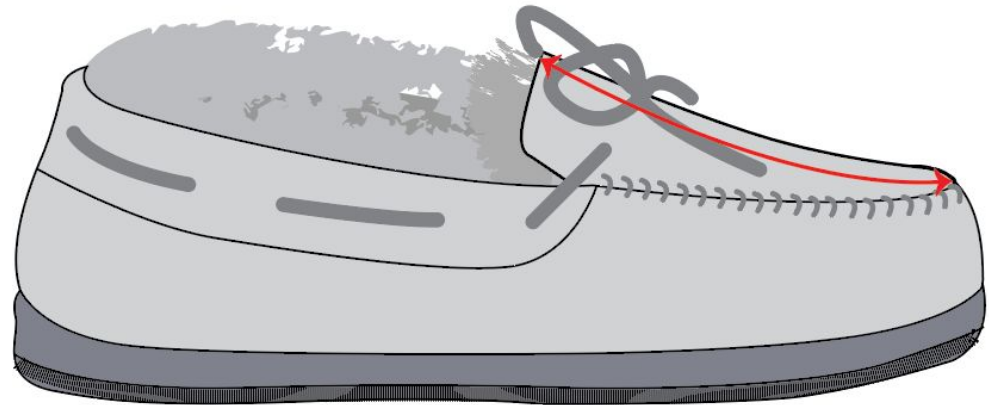
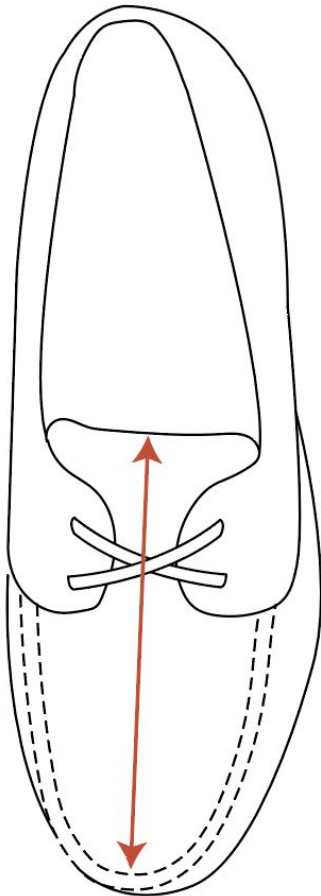


# Plug Length on Actual Sample

Measure from topline to plug seam

\*Marked "Primary" on POM tab

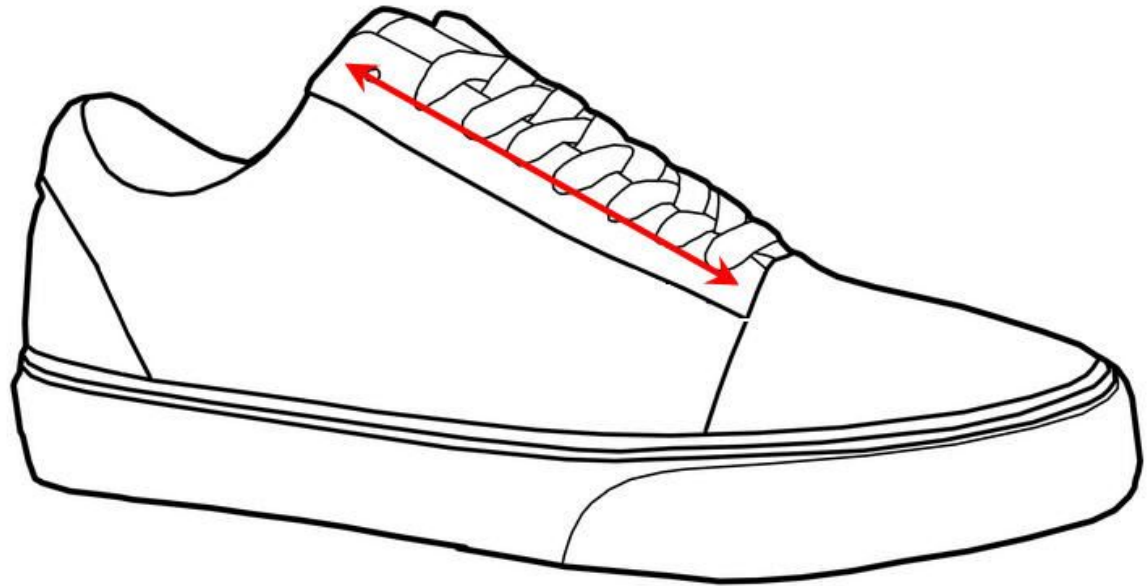
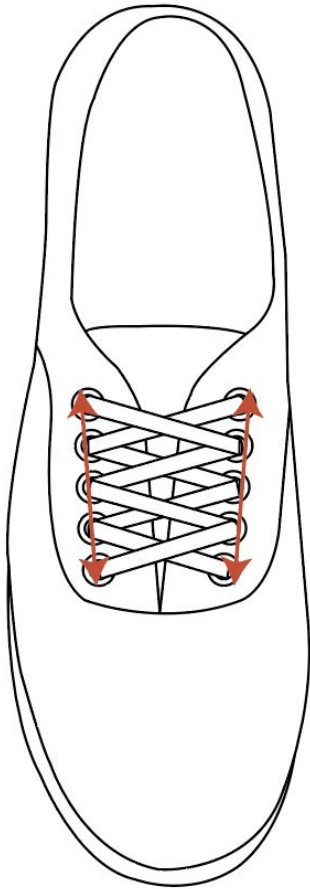
Tolerance: -2.00/+2.00



# Eyewrow Length on Actual Sample

Measure from top of first eyelet to bottom of last eyelet

Tolerance: -2.00/+2.00

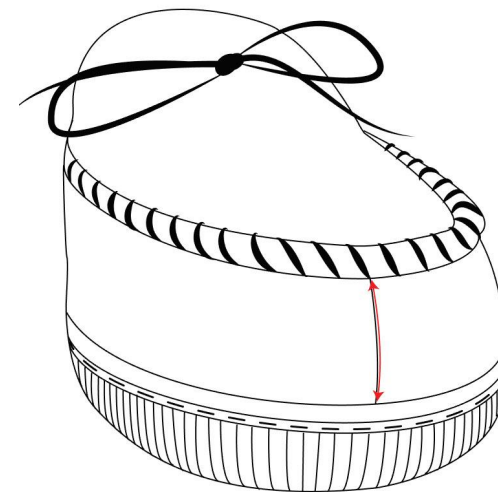
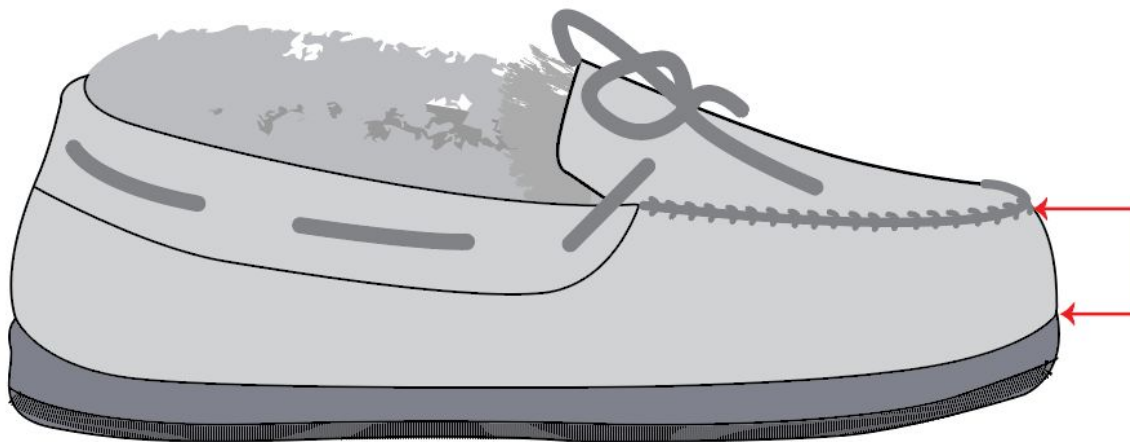


# Center Front High Point Toe

From high point toe, measure from top of outsole to bottom of vamp

\*Marked "Primary" on POM tab

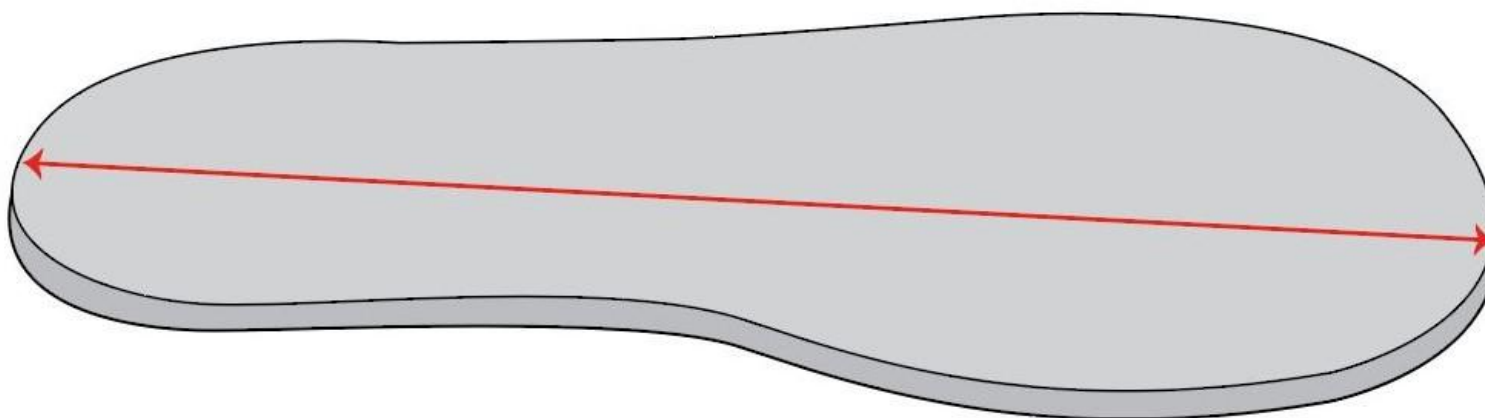
Tolerance: -1.50/+1.50



# Sock Length

Measure at the longest point from toe to heel

Tolerance: -2.00/+2.00

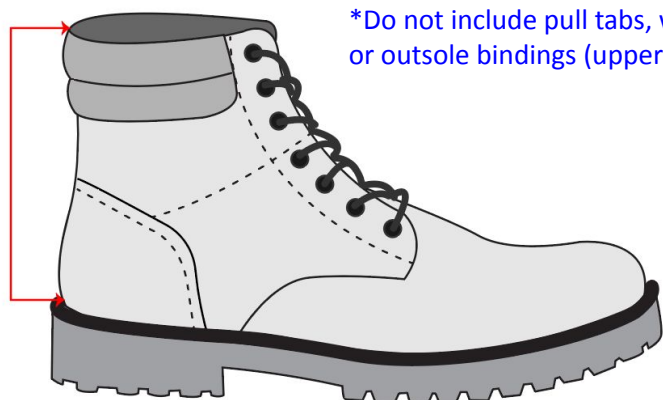
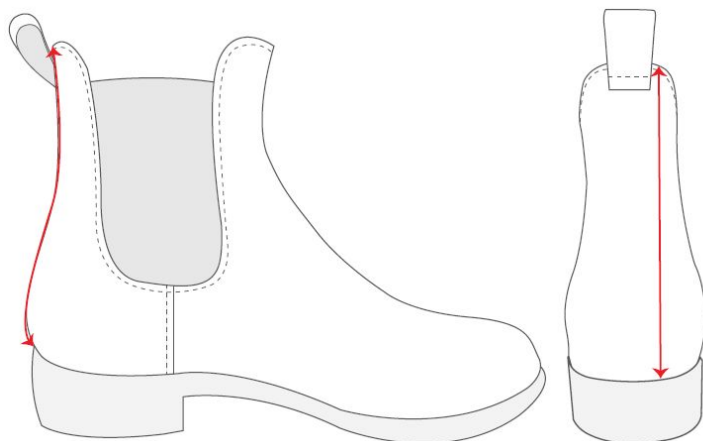


# Center Back Height on Actual Sample

Measure along center back from top of heel/outsole to topline.

\*Marked "Primary" on POM tab

Tolerance: -2.00/+2.00

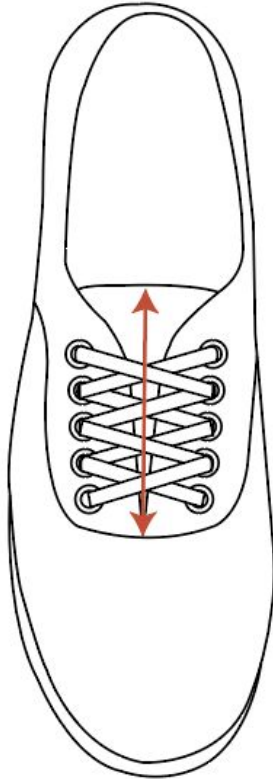


\*Do not include pull tabs, welts or outsole bindings (upper only)

# Tongue Length on Actual Sample

Measure from topline to base of tongue

Tolerance: -2.00/+2.00

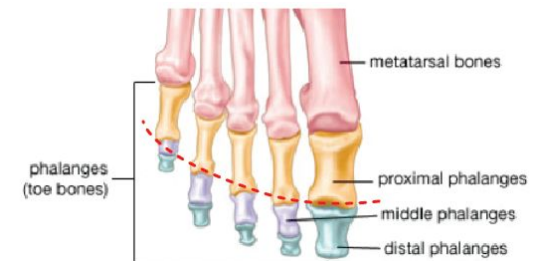
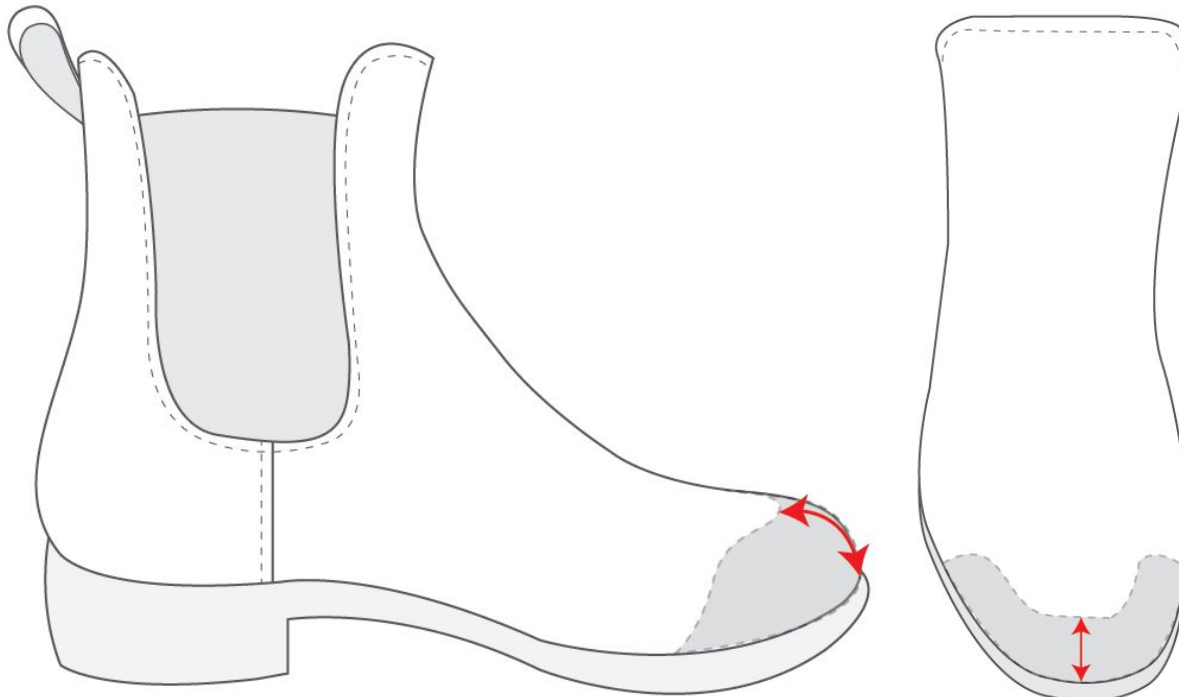


# Toe Box Length

Measure High Point Toe to edge of toe box -

**Tolerance: -2.00/+2.00**

Toe Box is to stop on top of the foot at the Middle Phalanges, it is meant to protect the toes with leaving flexibility at the ball of the foot



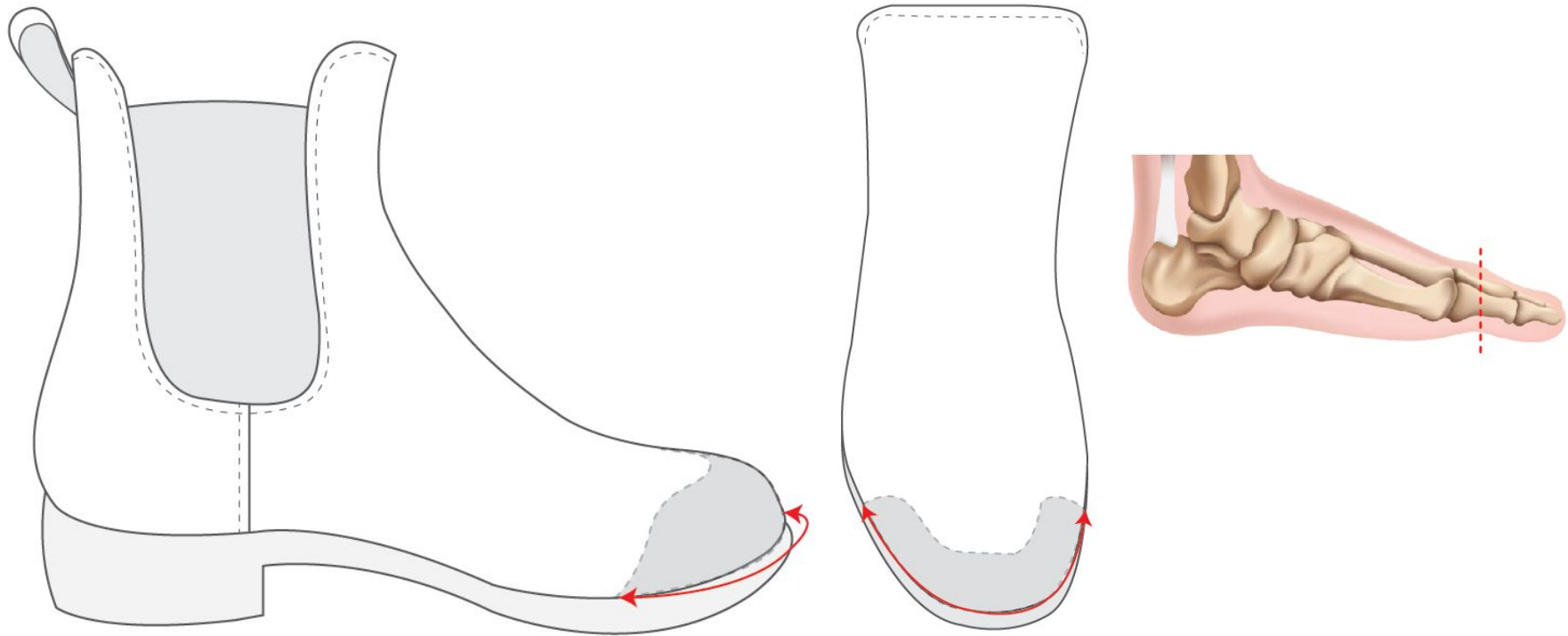


# Toe Box Sweep

Ends & starts at mid Proximal Phalanges, measure where upper meets outsole -

Toe Box Sweep should not be pass the ball of foot, meant to protect the toes with leaving flexibility at the ball of the foot

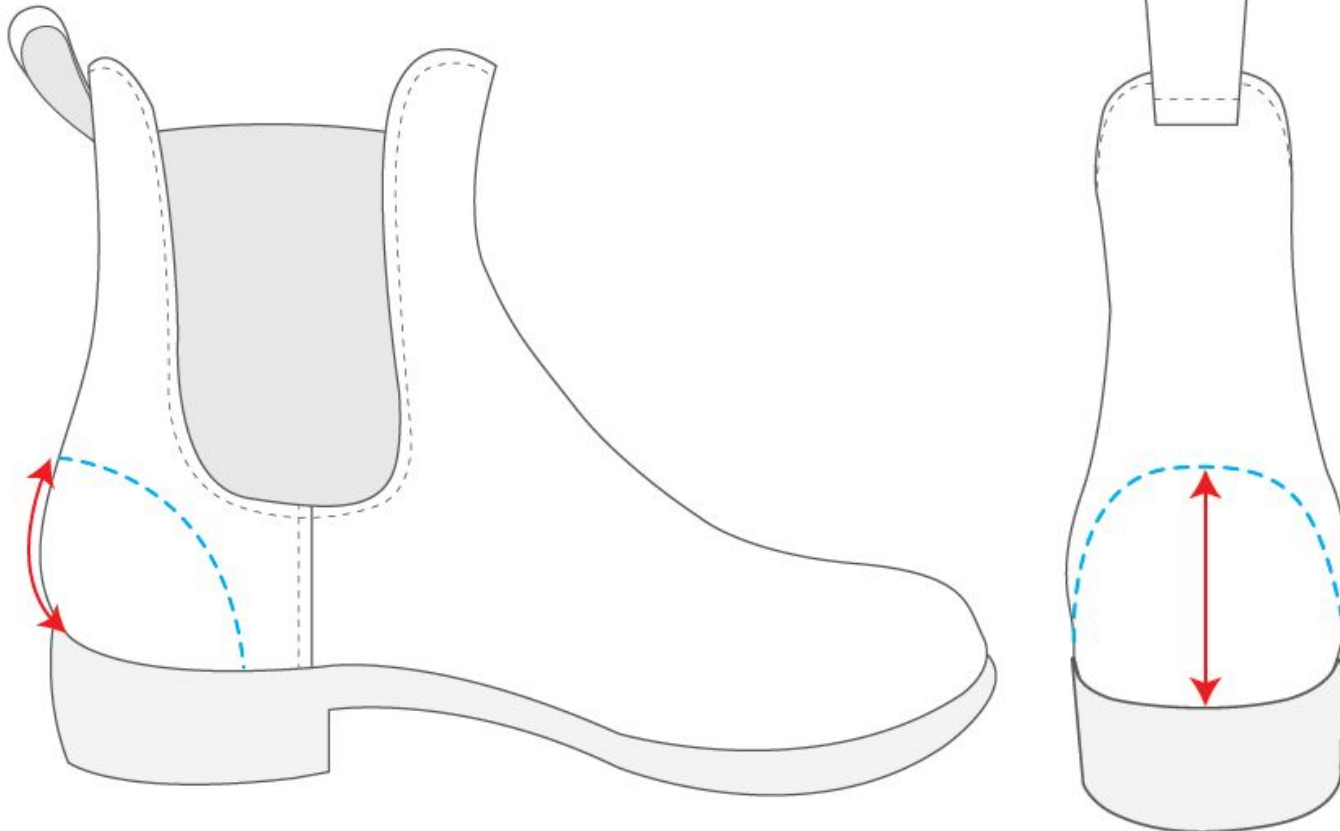
Tolerance: -2.00/+2.00



# TP Counter Height

Top of outsole to top edge of heel counter. Measure TP heel counter from outside of upper. You may need to feel for x-raying edges.

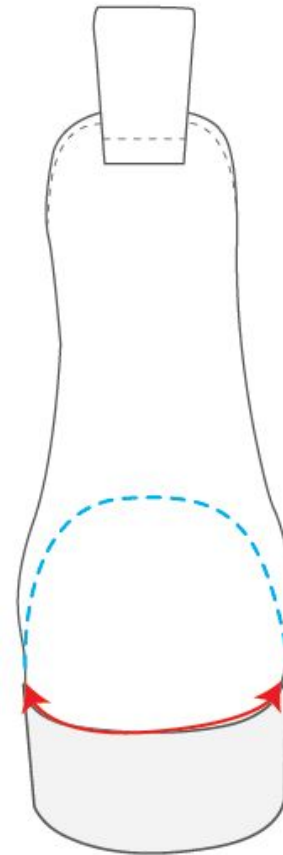
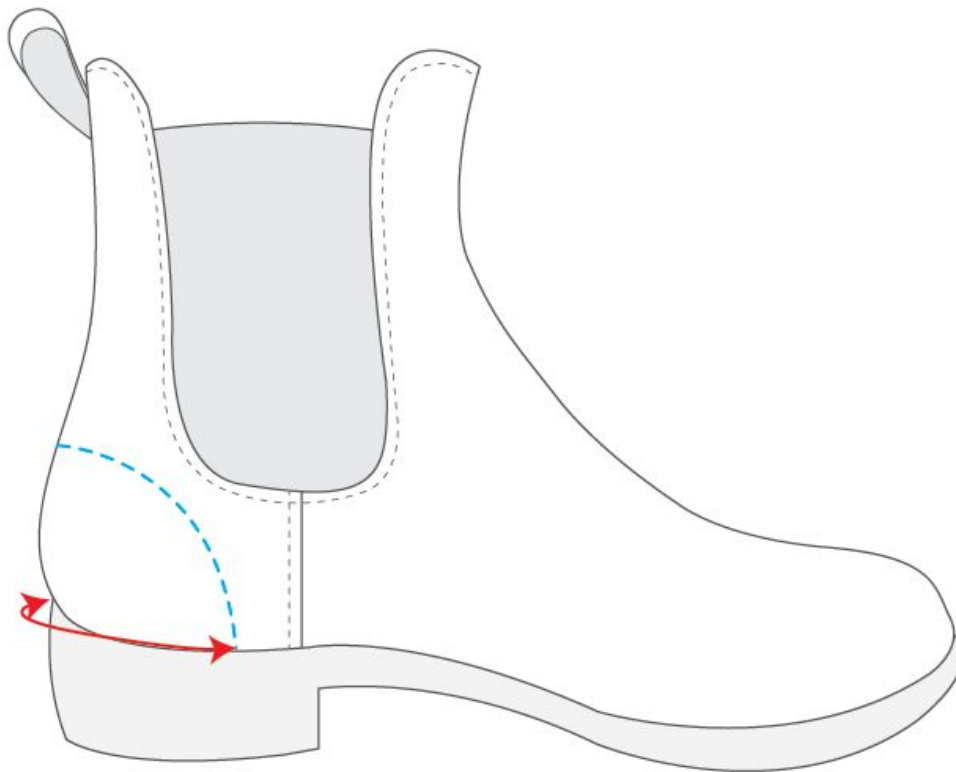
**Tolerance: -2.00/+2.00**



# TP Counter Sweep

Follow top edge of outsole, side edge to side edge. Measure TP heel counter from outside of upper. You may need to feel for x-raying edges.

**Tolerance: -2.00/+2.00**

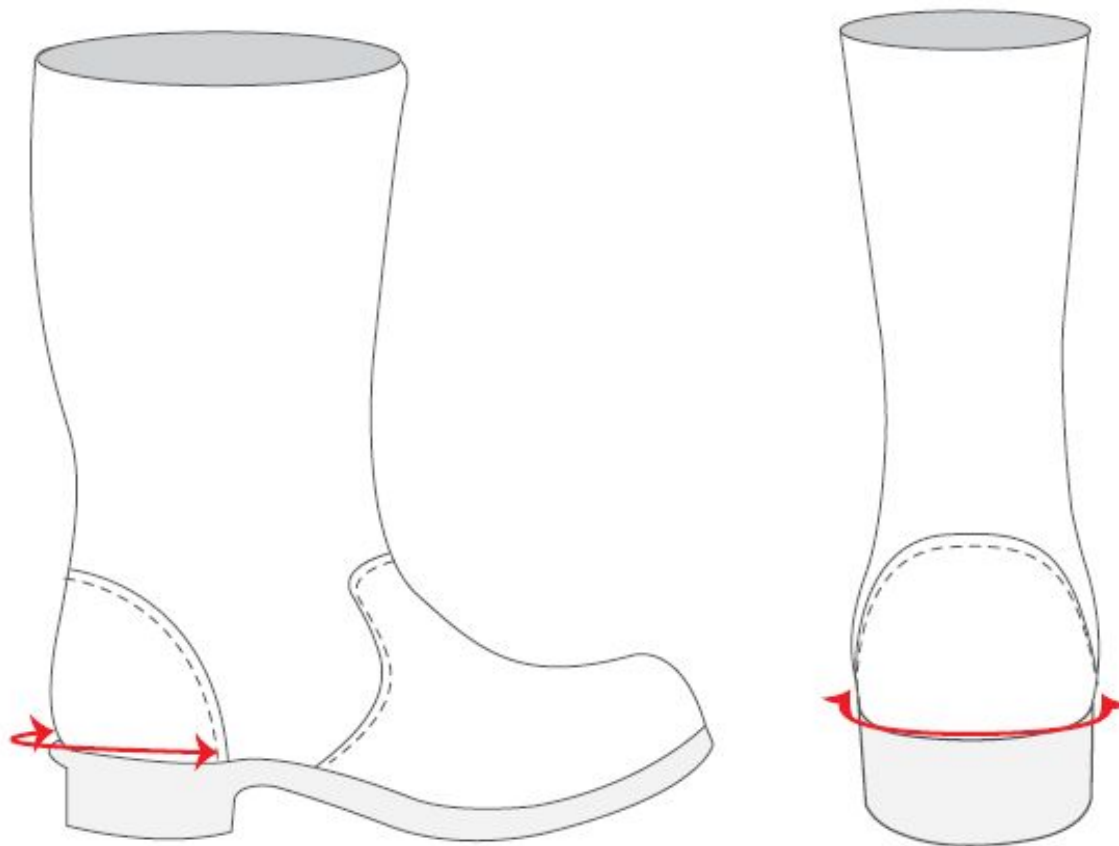


# Heel Kick Sweep

Heel Sweep is the Upper counter.

For sweep - Measure along top of outsole, seam to seam

**Tolerance: -2.00/+2.00**



# Heel Kick Height

Heel Kick is the Upper counter.

For Height - Measure from top of outsole to the seam

Tolerance: -2.00/+2.00



# Inside Length on Actual Sample

With a metal tape measure, measure from inside end of toe to heel

Tolerance: -2.00/+2.00

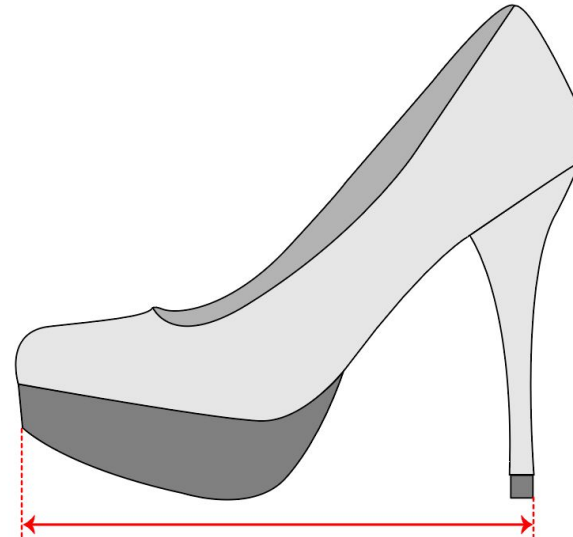
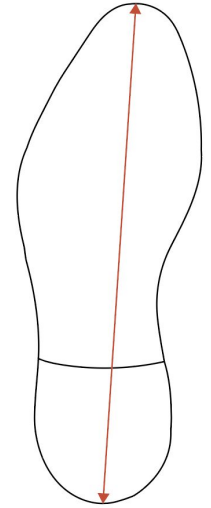
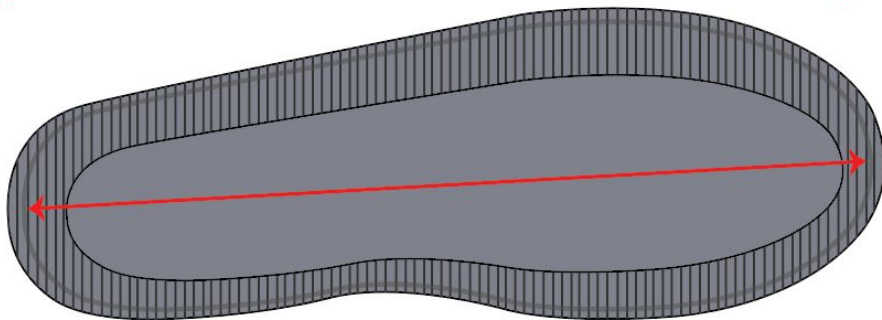
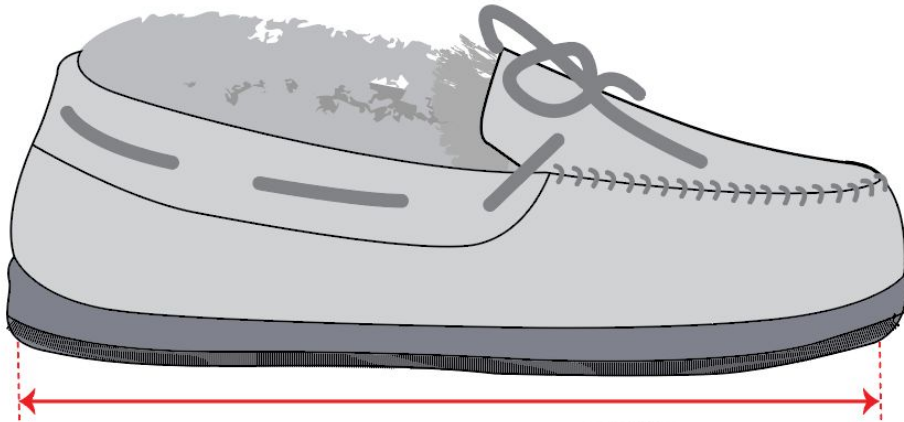


# Outsole Length of Actual Sample

Tolerance: -2.00/+2.00

Measure outsole at the longest point from toe to heel that touches the ground

\*Marked "Primary" on POM tab

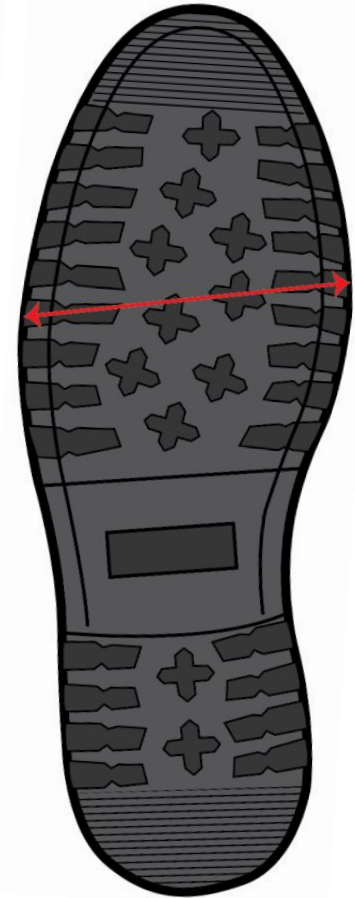
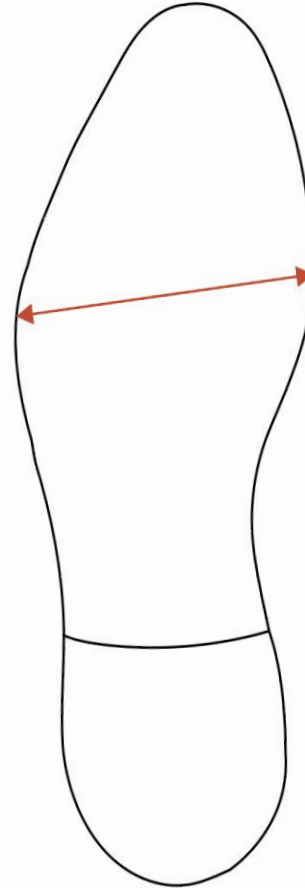
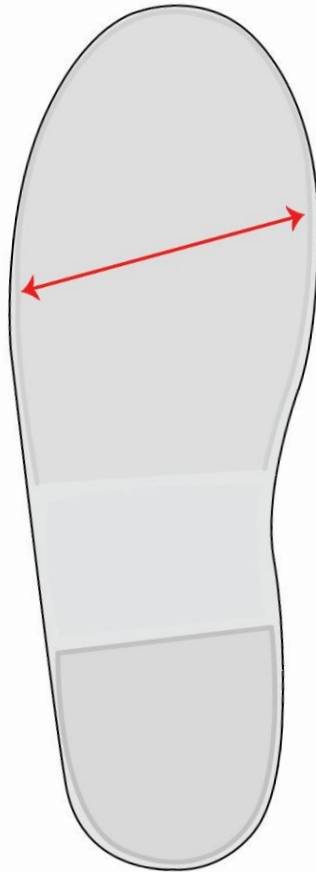
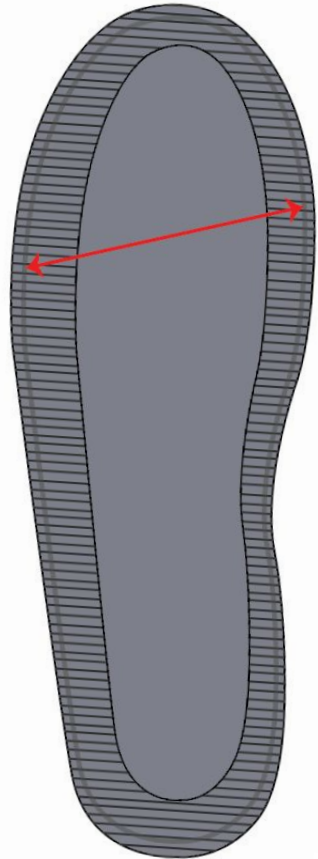


# Outsole Width of Actual Sample

Measure at the widest point across inside and outside ball that touches the ground.

\*Marked "Primary" on POM tab

Tolerance: -2.00/+2.00

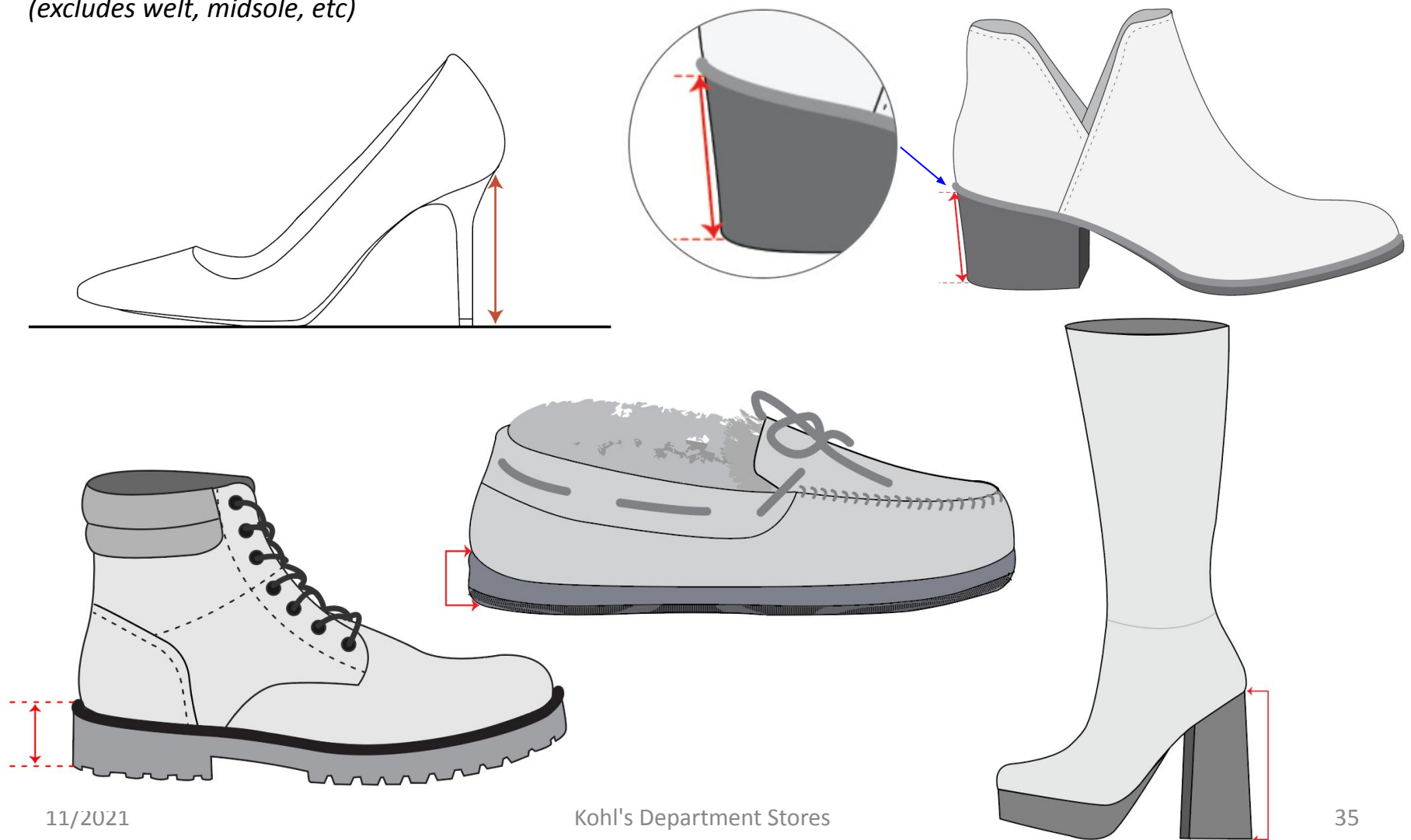




# Heel Height

Measure heel height from floor to bottom of center back  
*(excludes welt, midsole, etc)*

Tolerance: -2.00/+2.00

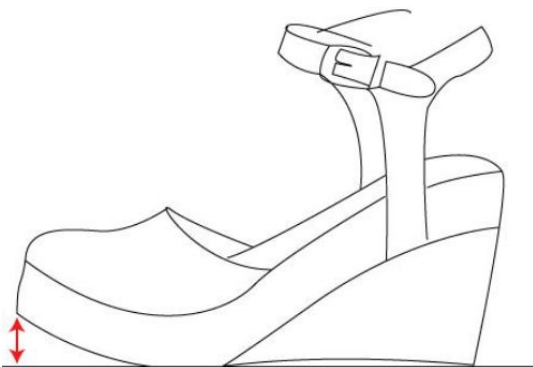
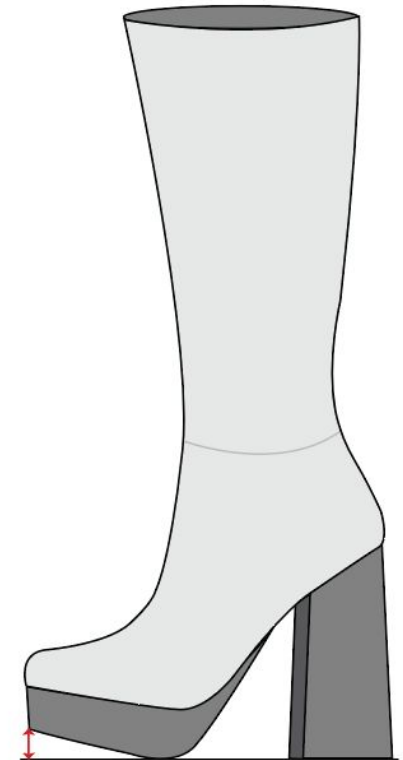
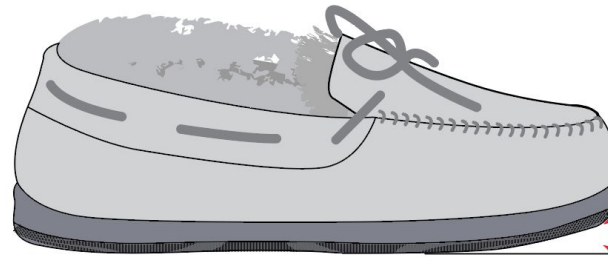


# Toe Spring on Actual Sample

Measure from floor to bottom of toe

\*Marked "Primary" on POM tab

Tolerance: -2.00/+2.00



# Shoelace Length

Measure end of lace to end of lace.

**Tolerance: -2.00/+2.00**



# Boot Shaft Ankle Girth Outside Circumference

Find ankle girth by measuring up from bottom of center back/top of heel/outsole:  
Here, measure outside circumference. (Wmns 6M - 103mm)

Tolerance: -2.00/+2.00

\*Marked "Primary" on POM tab

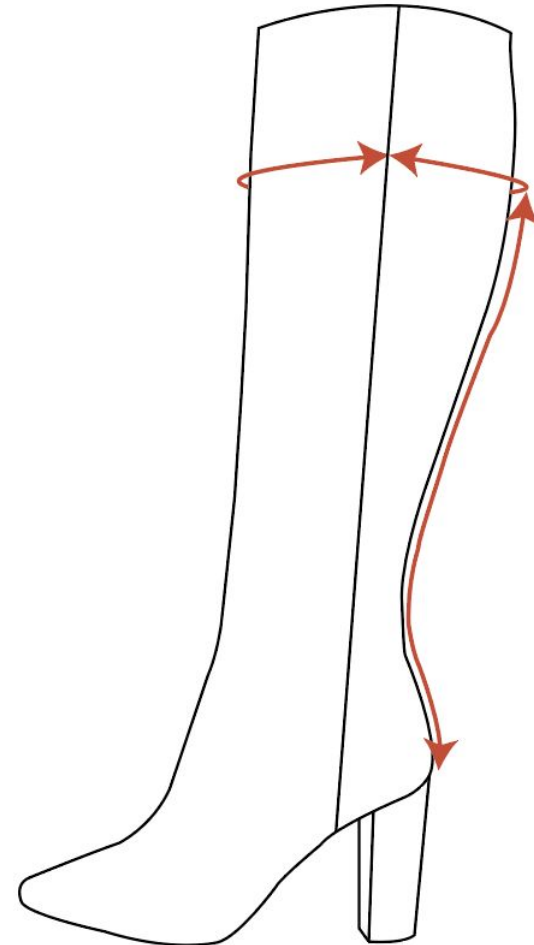


# Boot Shaft Max Calf Girth Outside Circumference

Find the maximum calf girth by measuring up from bottom of center back/top of heel/outsole: Measure outside circumference. (Wmns 6B - 300mm)

Tolerance: -2.00/+2.00

\*Marked "Primary" on POM tab

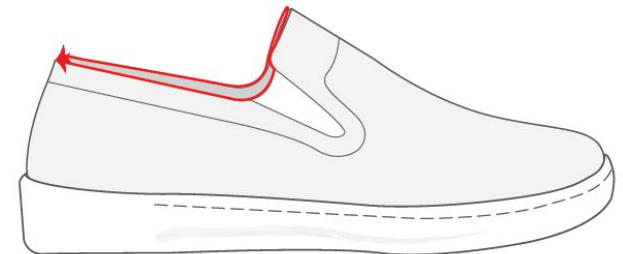
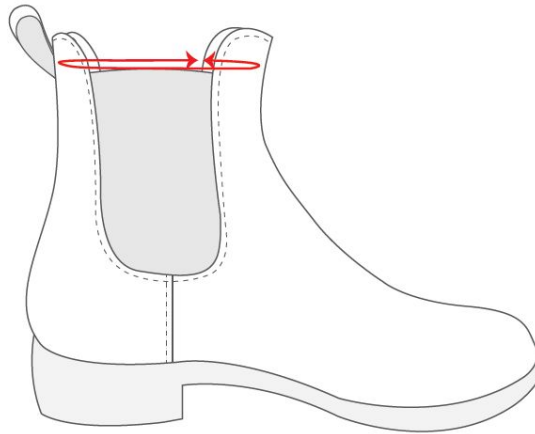
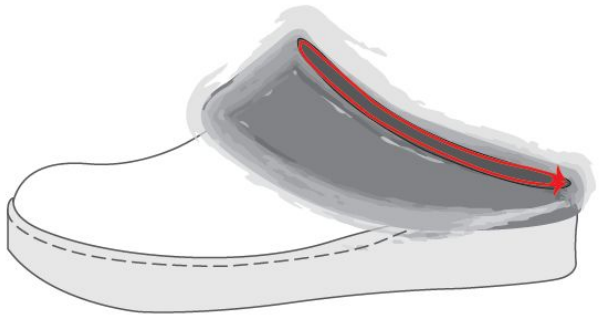


# Topline Circumference

Tolerance: -2.00/+2.00

Measure topline of leg or foot opening.

Walk tape measure around the inside topline - start & end at a center back seam or side seam

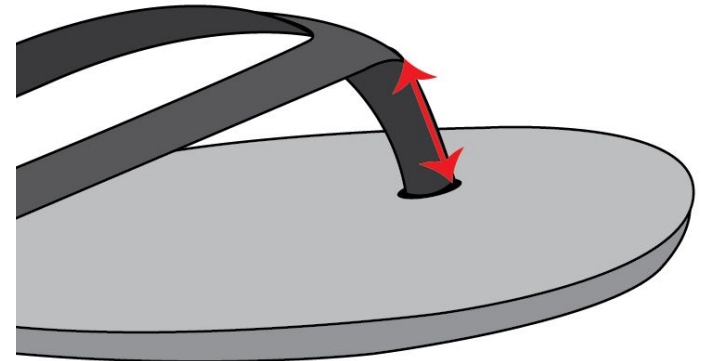
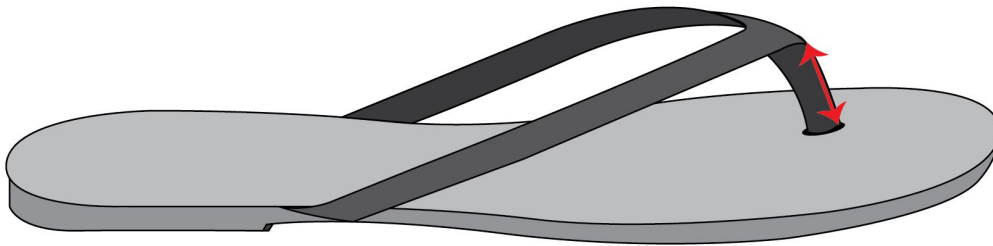


# Toe Post Height

Measurement taken from insole surface of footbed to point of attachment to strap.

\*Marked "Primary" on POM tab

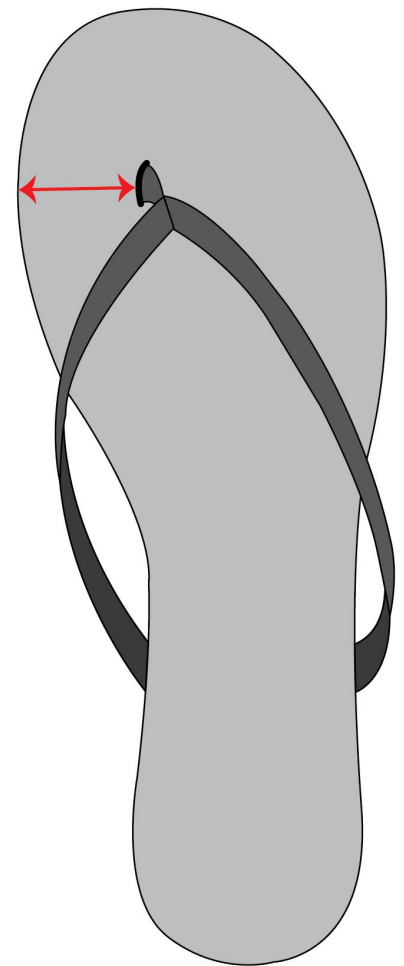
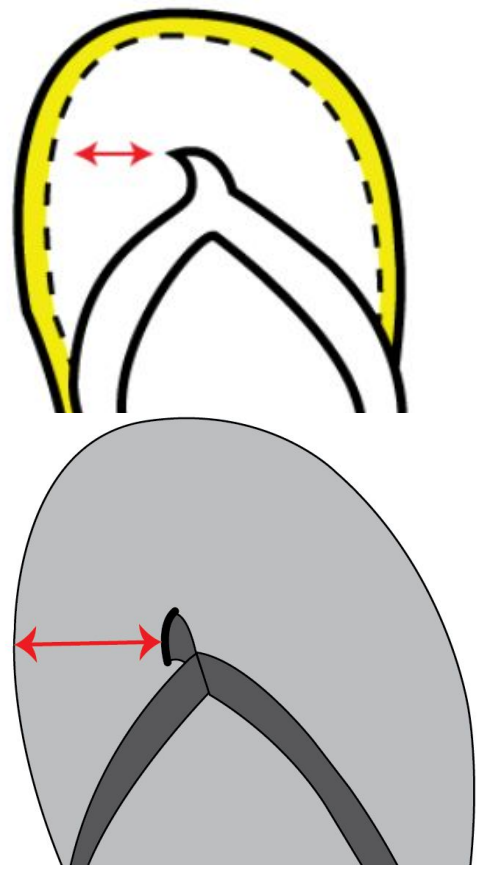
Tolerance: -1.5/+1.5



# Toe Post Placement from Inside Footbed

Measurements taken from toe thong post to inside edge of footbed or edge of binding

Tolerance: -2.00/+2.00





# Sock Thickness

Measure sock thickness at edge of sock.

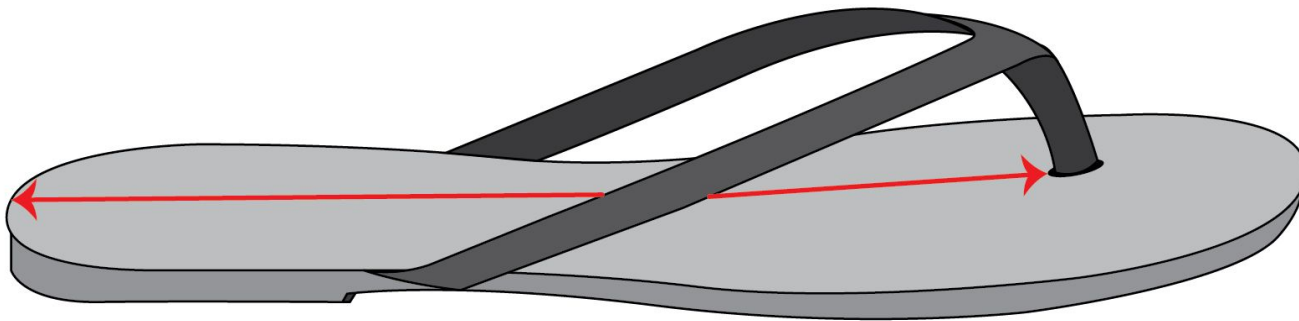
Tolerance: -1.00/+1.00



# Toe Post Placement from Back Heel

Take measurement at the insole from high point heel to the toe post.

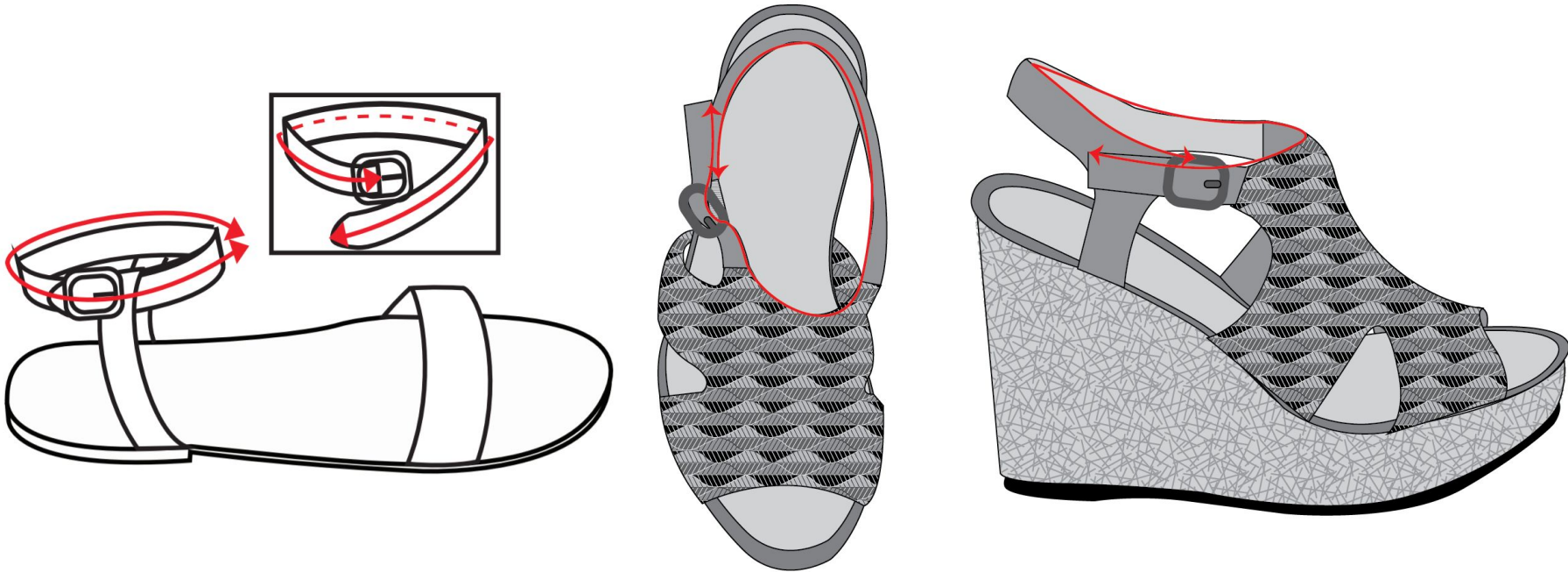
**Tolerance: -2.00/+2.00**



# Ankle Strap Circumference

Measure the length of the strap at the topline of the strap.

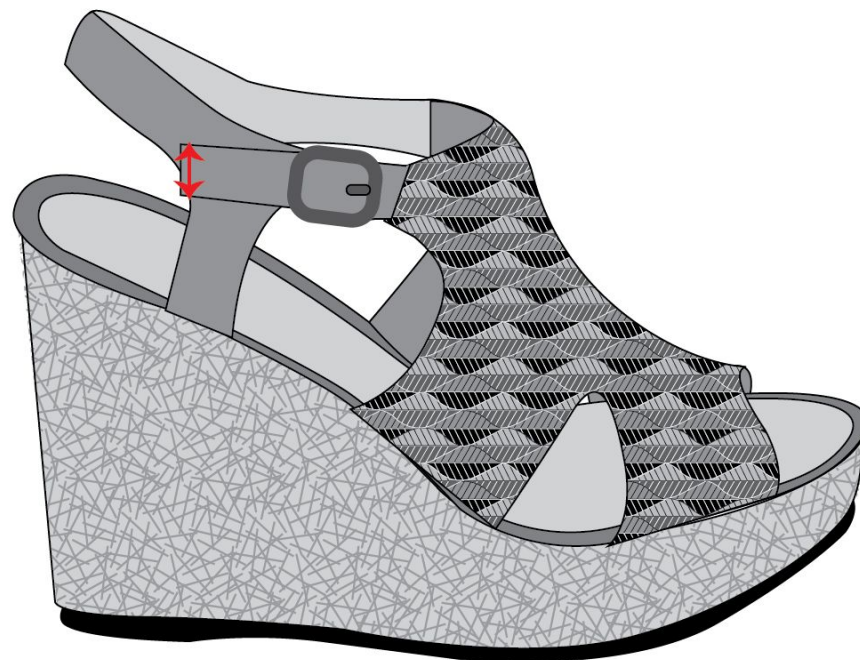
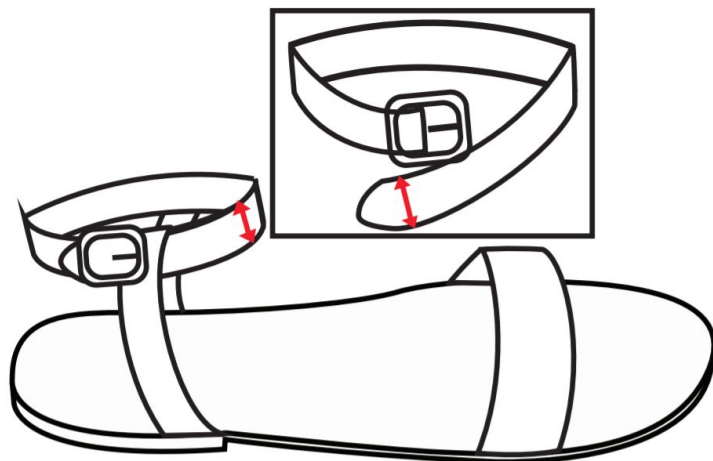
**Tolerance: -2.00/+2.00**



# Ankle Strap Width

Measure the strap width at the edge of hole strap

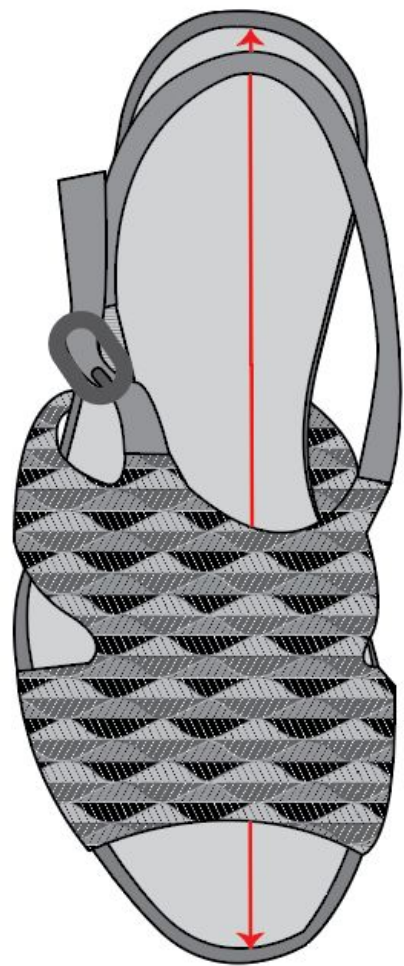
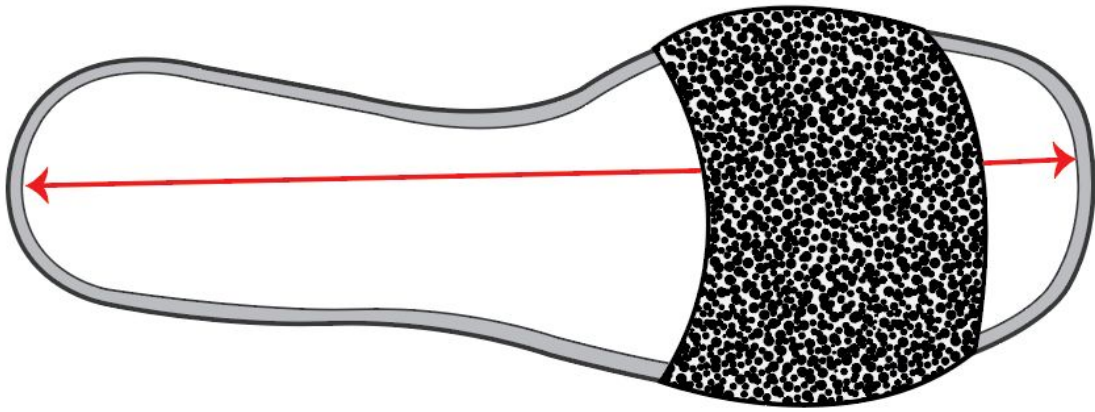
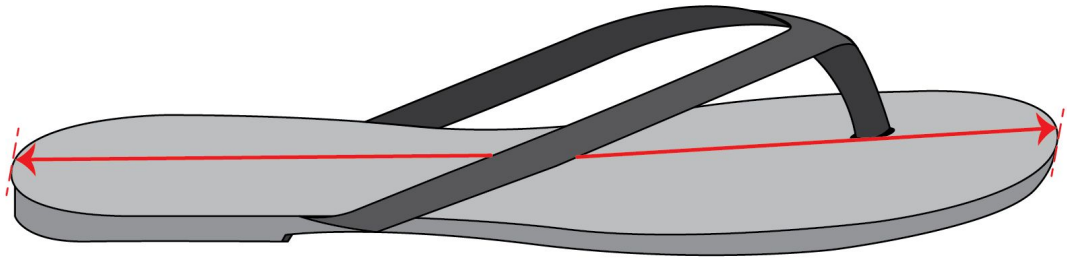
Tolerance: -2.00/+2.00



# Sandal Footbed Length

Measure footbed length from high point toe to high point heel.

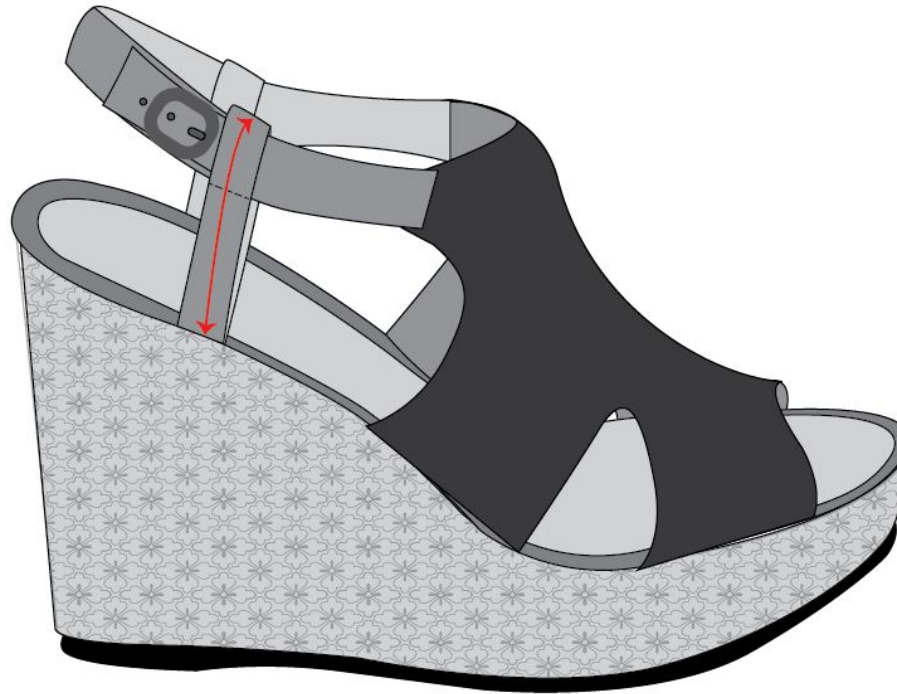
Tolerance: -2.00/+2.00



# Sandal Quarter Post Height

Measure the post from edge of outsole to the edge of the topline.

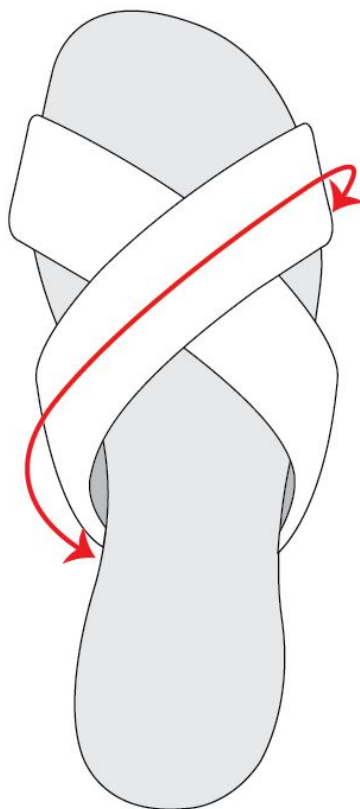
**Tolerance: -2.00/+2.00**



# Vamp Strap Length

Measure strap length from one side of the outsole to the other.

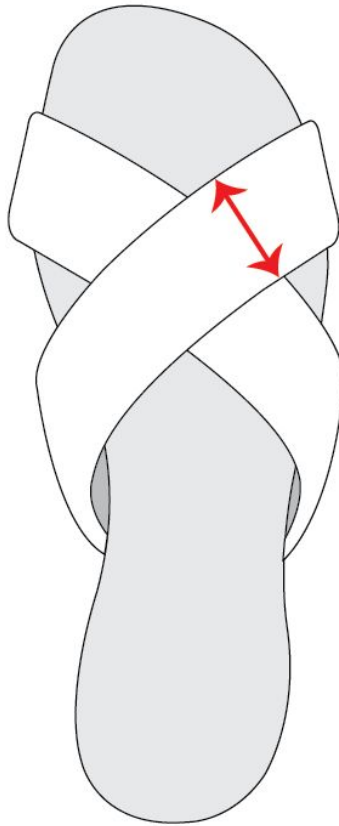
**Tolerance: -2.00/+2.00**



# Vamp Strap Width

Measure the strap width from edge to edge.

**Tolerance: -2.00/+2.00**



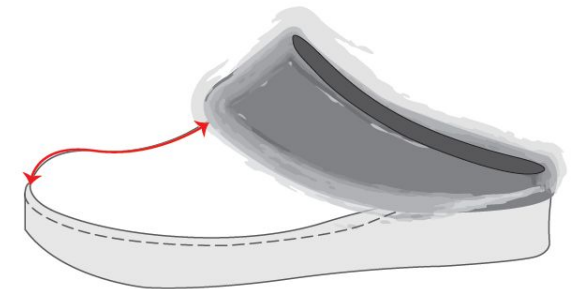
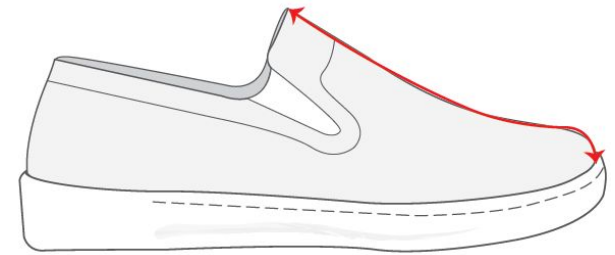
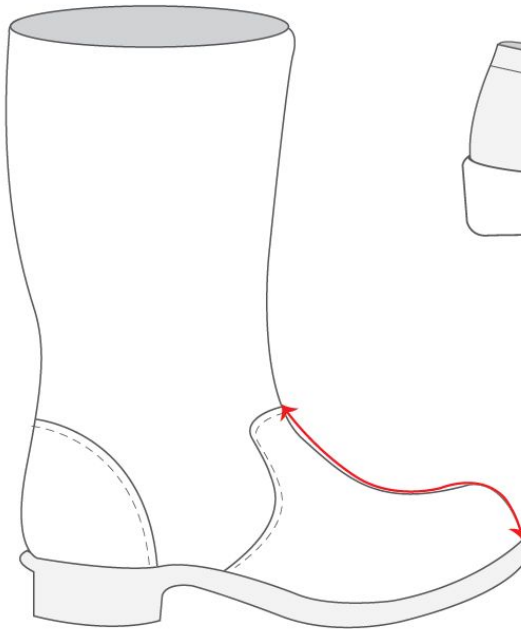
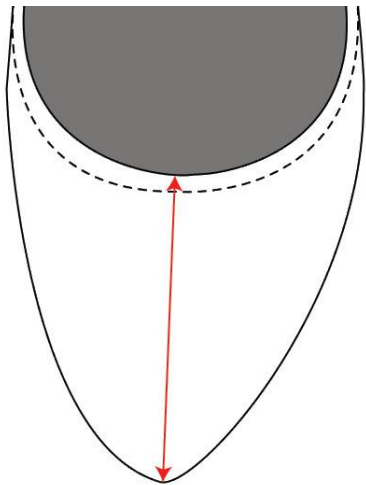
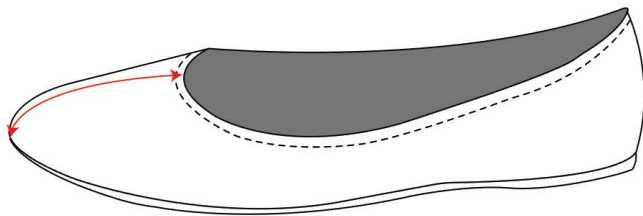


# Vamp Length

Measure vamp length of pattern piece - from top edge of outsole (at high point toe) to edge of vamp seam

\*Marked "Primary" on POM tab

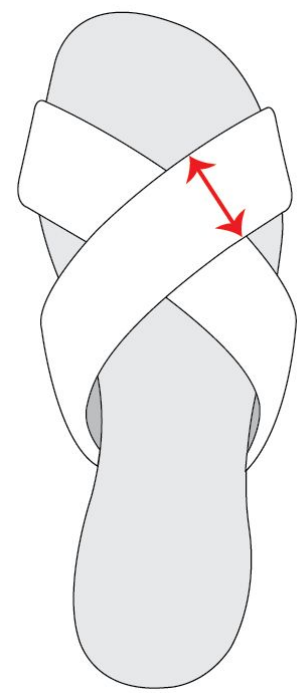
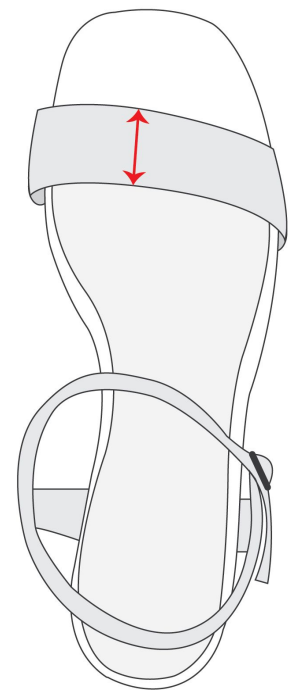
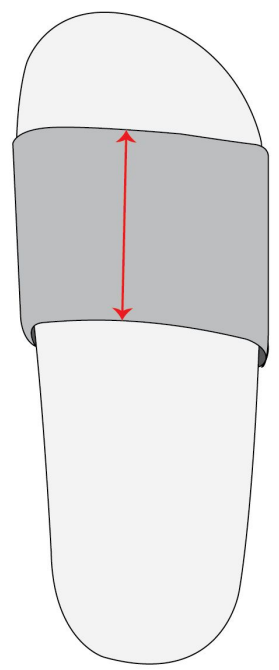
Tolerance: -2.00/+2.00



# Sandal Vamp Strap Width

Measure the strap width from edge to edge.

Tolerance: -2.00/+2.00

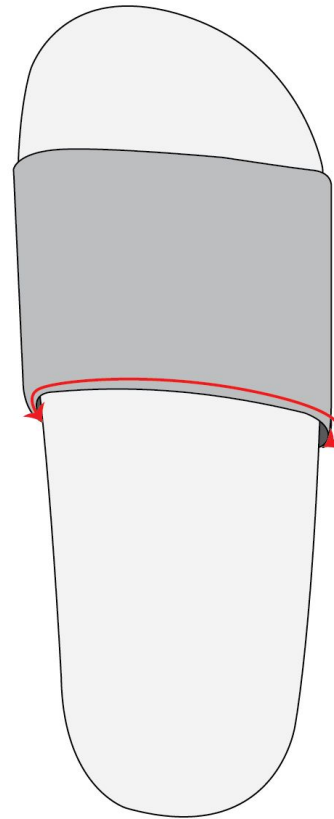


# Sandal Vamp Instep Width

At the instep of the finished shoe, measure the width from one side of the outsole to the other.

\*Marked "Primary" on POM tab

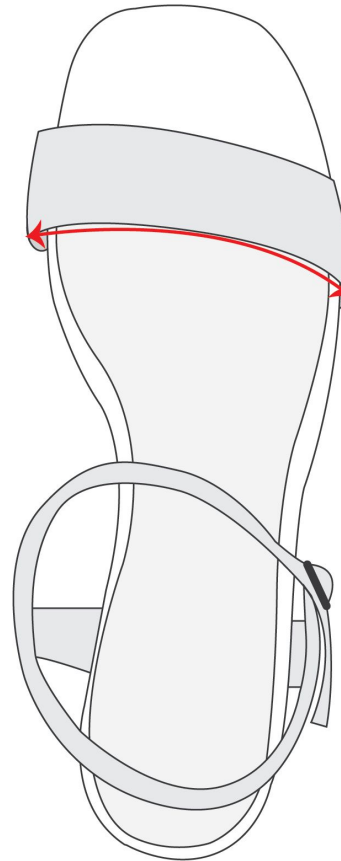
Tolerance: -2.00/+2.00



# Sandal Vamp Ball Width

At the Ball of the finished shoe, measure the width from one side of the outsole to the other.

**Tolerance: -2.00/+2.00**

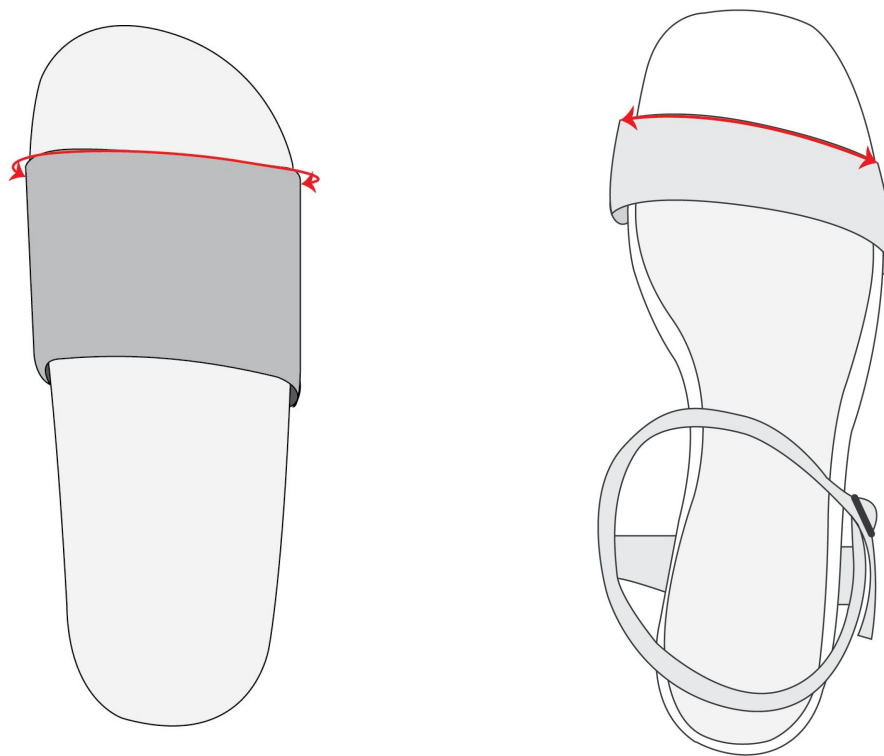


# Sandal Vamp Toe Opening Width

At the toe opening of the finished shoe, measure the width from one side of the outsole to the other.

\*Marked "Primary" on POM tab

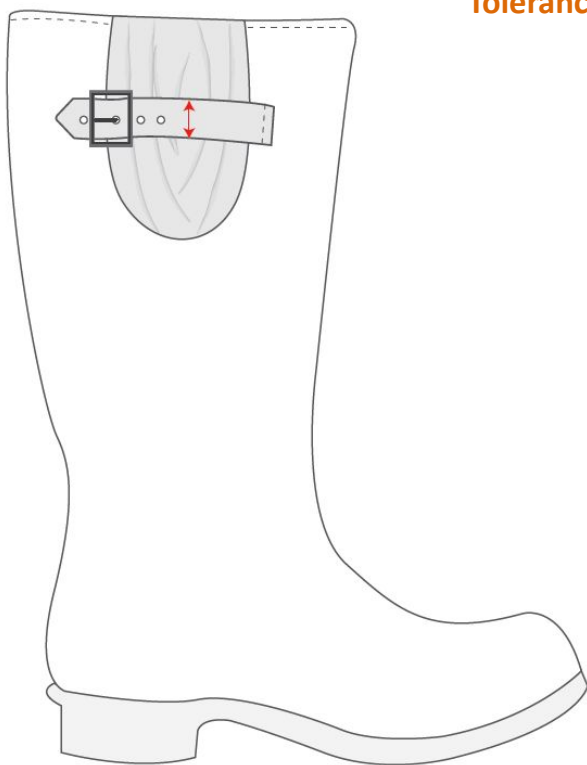
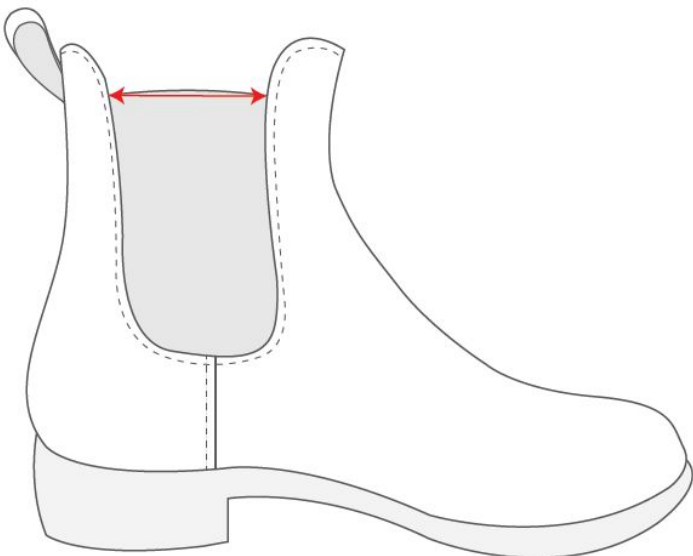
Tolerance: -2.00/+2.00



# Trim Width

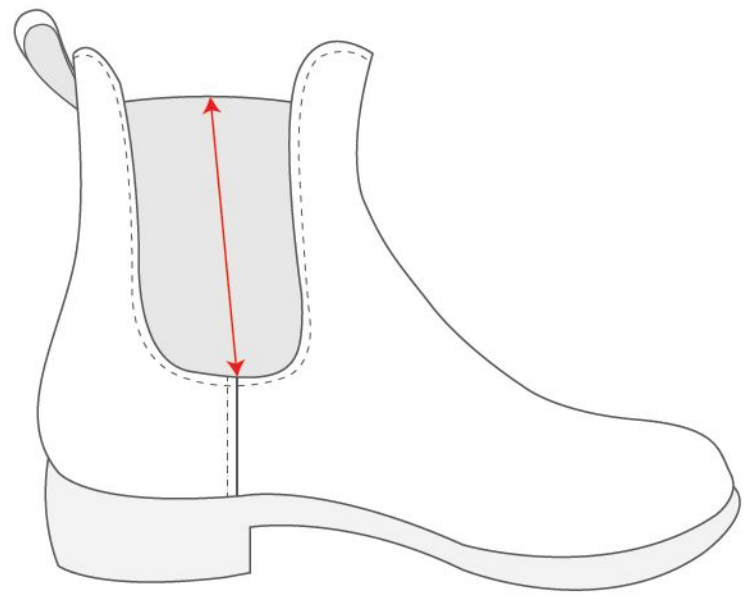
To Measure the trims widest side (shortest side)

Tolerance: -1.00/+1.00



# Trim Length

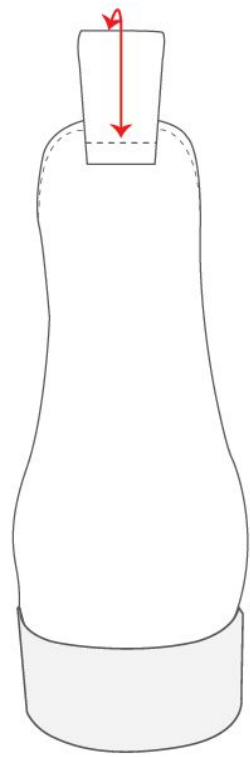
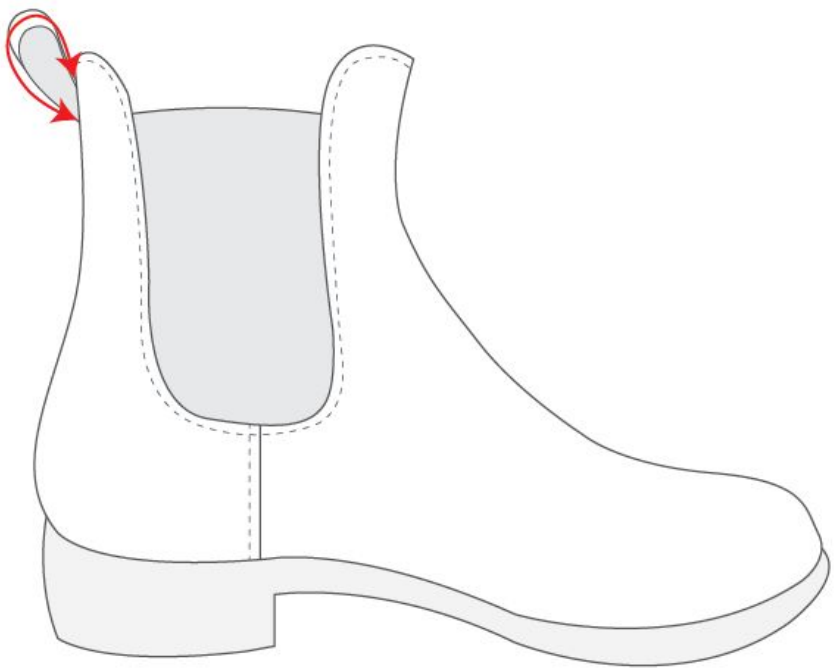
To Measure the trims Linear side (longest side)



# Keeper Loop Height

Measure Stitch line to Stitch line

Tolerance: -1.00/+1.00





# Keeper Loop Width

Measure width above stitch line

Tolerance: -1.00/+1.00

