

# ZONE3 RX3 PERFORMANCE COMPRESSION TIGHTS TESTING

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### OVERVIEW

The key benefit to wearing the Zone3 RX3 Performance Compression Tights is the garment's ability to increase the flow of blood around the body and muscles towards the heart. It is therefore very important that the level of pressure (measured in milligrams of mercury, mmHg) offered by the compression garment is correct and suitable for the body's specific muscle groups and biomechanics. It's very important that the garment offers graduated compression.

Graduated compression refers to the varying levels of pressure throughout a compression garment. To improve venous bloody flow to the heart, our compression tights have been designed and tested to have a descending amount of pressure as the garment gets closer towards the heart.

To ensure our compression tights provide the correct level of graduated compression, we asked Progressive Sports Technologies based at Loughborough University to conduct the necessary lab testing.

Zone3 has also conducted numerous other tests over the last four years, which were combined with a wide range of real-life tests with amateur and elite athletes, to better judge how the tights looked and performed when in action. Our overall RX3 Performance Compression Tight design was led by athletes and then backed up and validated by lab-testing.

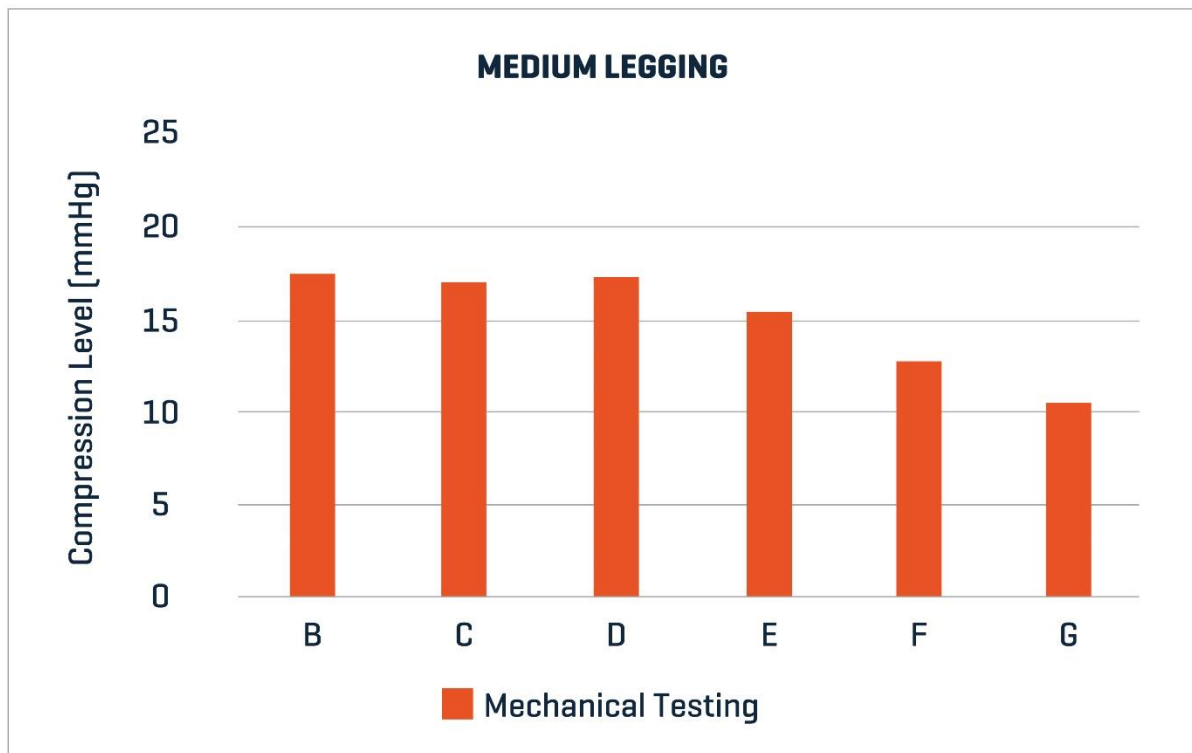
A combination of test methods have been used to measure several key points on the leg as per the below table:

<b>B</b>	Ankle at point of its minimum girth
<b>C</b>	Calf at its maximum girth
<b>D</b>	Just below tibial tuberosity
<b>E</b>	Centre of patella and over the back of the knee
<b>F</b>	Half way between crutch and the centre of its knee
<b>G</b>	5cm below crotch

Only a few research papers describe a target compression level in sports garments to provide increased venous blood flow. The industry has accepted the [Sigel profile](#), which concluded that the average femoral vein blood flow is increased to 138.4% base line with a graduation of compression of 18mmHg at the ankle and 8mmHg at

the thigh. The results show that the Zone3 RX3 Performance Compression Tights provide pressure ratings consistent with this target.

The graph below shows the pressure ratings at each point of the leg for the Zone3 RX3 Performance Compression Tight, which confirms that our tights offer graduated compression from the calf to the thigh at the correct level.



It's important to remember that if compression tights are too tight or too loose, then the key benefits will be lost. Subsequently, an important aspect to consider is the material used to ensure that the graduated compression garment offers support, endurance, durability, comfort and breathability. Zone3 has ensured the RX3 Performance Compression Tight provides all of this, enabling the user to comfortably wear the garments and experience the great benefits during training, racing or for prolonged periods during recovery.

The Zone3 compression wear range are made from a mixture of two innovative circular knit fabrics from Italy, the RX3 and Revolution Energy. They are designed to maintain the correct levels of compression over an extended period, whereas a lower cost pair of compression tights may feel tight at the beginning, but soon lose its compression qualities.

#### NOTES ON THE SIGEL PROFILE:

*The Sigel profile does not provide a sporting goods industry target for compression wear. Provided the ankle or lower calf provides more than 10mmHg, you can class the garments as compression. Compression tight sizing and pressure on individuals varies considerably across the population, even if the tights are "one size". Two people wearing medium length garments (due to leg length and waist size) may have different ankle, calf and thigh circumferences; therefore, compression testing such as this should not be used to get an exact measure of graduated compression. Lab testing is only used to confirm that there is compression (>10mmHg) and that it is graded (graduated).*

*Aside from this, there is no standard in the sporting goods industry for guidance and the discretion is left to the sporting goods brand.*