

THE SCIENCE BEHIND THE SURFACE

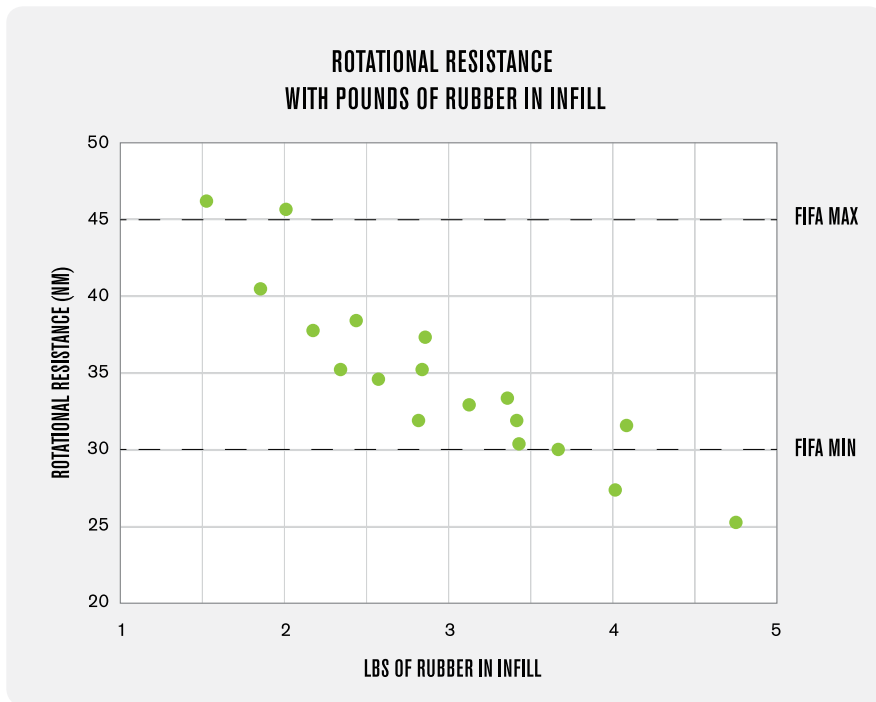


WHAT IS ROTATIONAL RESISTANCE?

Rotational Resistance is the torque required to rotate a set of cleats through synthetic turf. Testing the interaction between the field and the player is an important factor for safety and performance. A resistance against rotation that is too high or too low can cause a hazardous playing surface for athletes.

HOW IS IT MEASURED?

Rotational Resistance is measured using a set of cleats under a 100 lb weight which is dropped on to the turf; a torque wrench is then used to measure the maximum force required to rotate the weight 90 degrees through the turf. According to FIFA, the rotational resistance should read between 25 Nm – 50 Nm.



The amount of rubber infill used will affect the Rotational Resistance of your field, we make sure that each field has the specified amount to provide adequate safety and performance.

WHAT DOES THIS MEAN FOR MY FIELD?

Rotational resistance is very important for the safety and performance of your athletes. When the rotational resistance is too low, it can result in insufficient grip and cause a player to slip and fall and become injured. A rotational resistance that is too high will cause too much stress to be placed on the athlete's joints.

Shaw Sports Turf uses this test to carefully engineer our turf surfaces for better safety and performance delivering a playing surface that reacts more like natural grass.