

## **Geofabric Quality Testing Methods**

### **Tensile Strength Test**

Standard: ASTM D4595, ISO 10319

Purpose: Measure the strength and elongation of geofabric under tensile load.

Method: Using a tensile testing machine, gradually apply force until the sample breaks, recording the maximum load and elongation.

### **Tear Strength Test**

Standard: ASTM D4533, ISO 13434

Purpose: Measure the ability of geofabric to resist tearing.

Method: Make a small cut in the sample, use a tear testing machine to apply force until the sample tears.

### **Puncture Strength Test**

Standard: ASTM D4833, ISO 12236

Purpose: Measure the ability of geofabric to resist puncture.

Method: Using a puncture testing machine, gradually apply force until the pointed end pierces the sample, recording the maximum load.

### **Permeability Test**

Standard: ASTM D4491, ISO 11058

Purpose: Measure the permeability of geofabric under water pressure.

## **Geofabric Quality Testing Methods**

Method: Fix the sample in a permeability tester, measure the water flow and pressure loss through the sample.

### **Durability Test**

Standard: ASTM D4355, ISO 12956

Purpose: Evaluate the durability of geofabric when exposed to environmental conditions such as UV light and temperature changes.

Method: Expose the sample to accelerated aging conditions, then perform mechanical performance tests.

### **Thickness and Unit Area Weight Test**

Standard: ASTM D5199, ISO 9863

Purpose: Measure the thickness and unit area weight of geofabric.

Method: Use a thickness gauge to measure the sample's thickness, weigh the sample, and calculate its unit area weight.

### **Air Permeability Test**

Standard: ASTM D737, ISO 9237

Purpose: Measure the air permeability of geofabric.

Method: Use an air permeability tester to measure the rate of air passing through the sample under a certain pressure.

## **Geofabric Quality Testing Methods**

### **Filtration Performance Test**

Standard: ASTM D5141, ISO 12956

Purpose: Measure the particle retention performance and flow rate of geofabric in filtration applications.

Method: Filter a particle suspension through the sample, measure the particle passage rate and water flow rate.