



Summary
IS 17730 (Part-2):2021

**Agro-Textiles-Hail Protection Nets for Agriculture and Horticulture Purposes-
specification (Woven Hail Protection Nets)**

Woven Hail Protection Nets are specially designed nets used in agriculture and horticulture to protect crops from hail damage. These are manufactured from mono filament yarns to avoid fruit or flower drop/damage. Based on the mass, the woven hail protection nets are classified as two types:

a) Type I — Having mass of 60 g/m²; and b) Type II — Having mass of 70 g/m².

The nets are designed to absorb the impact of hailstones, preventing damage to crops, while also allowing adequate sunlight and airflow to reach the plants. The nets should provide reliable protection against hail damage, ensuring crops and plants are shielded from potential harm. The nets should be made of high-quality materials that can withstand various weather conditions and last for multiple seasons. Despite being durable, the nets should be lightweight to avoid damaging the plants or making the installation process cumbersome. The nets should be tested for UV exposure to ensure they maintain their integrity and performance over time. The nets must meet specified dimensions and mass requirements to ensure uniformity and ease of installation.

The **IS 17730 (Part 2): 2021** standard outlines several tests required for woven hail protection nets to ensure they meet safety and quality requirements:

1. **Dimensions and Mass:** Measurement of the net's dimensions and mass to ensure they conform to specified standards.
2. **Breaking Strength:** Testing the net's breaking strength to ensure it can withstand hail impact and other stresses.
3. **Bursting Pressure:** Determining the bursting pressure to ensure the net does not rupture under stress.
4. **Shading Percentage:** Measuring the shading percentage to ensure the net provides adequate protection while allowing sufficient light penetration.
5. **Cold Crack Resistance:** Testing the net's resistance to cold cracking to ensure it remains effective in various weather conditions.
6. **UV Exposure:** Assessing the net's performance after UV exposure to ensure it maintains its integrity over time.
7. **Stitching Material:** Ensuring the stitching material used in the nets conforms to specific standards for durability and strength.

These tests ensure that the hail protection nets are safe, durable, and effective in protecting crops and plants from hail damage. By adhering to **IS 17730 (Part 1): 2021**, manufacturers ensure that the woven hail protection nets meet quality and performance standards, offering effective and reliable protection for agricultural and horticultural applications.