Solarig: Benefits over Traditional Greenhouse Covers

Solarig woven plastic sheeting is the strongest and longest-lasting film made today. It is made from high quality coated poly woven to the highest standards. This premier greenhouse covering is designed for all types of cultivation.

The weave of Solarig fabric is designed to diffuse the sunlight as it passes through the fabric. Diffused light hits plant material inside the greenhouse from all angles and sides. As a result, plants do not reach or “stretch” for sunlight; they grow more compact and then proceed to their next stage more quickly than under traditional greenhouse covers.

The weave also gives Solarig its strength. Traditional poly has a breaking strength of 22 lbs per sq. ft., Solarig 182 has a breaking strength of 300 lbs per sq. ft. and Solarig 156 has a breaking strength of 265 lbs per sq. ft. Added strength makes it hail and tear resistant.

Solarig can be used as a single or double roof layer. Single roof layers can be of either 182 or 156. The difference is the warranty period. Double layer roof covers should be Solarig 182 on top and 156 on the bottom. Double roof layers of 182 and 156 receive a 6-year warranty for both layers.

When either Solarig 182 or 156 is used as a single layer roof it is recommended that batten strips be used between greenhouse bows. Use of batten strips helps reduce slack in the roof cover. This in turn reduces wear from contact between the roof cover and the greenhouse bows when wind inflates and deflates the structure.

Solarig 182 and 156 comes with AF and IR coatings. AF is a dripless coating on one side of the roof cover. The roof cover is marked to identify which side points up and which points down. Traditional greenhouse poly does not include dripless properties. The intent of dripless coating is to force condensation, which forms on the underside of the roof cover, to run-off to the side instead of continuing to collect until it forms water drops large enough to fall down on the plants below. The IR (Infra Red) coating slows the retained heat inside the structure from leaving through the roof cover during cold nights. IR also keeps the temperature lower during the daytime high temperatures, by about 6 to 9 degrees F. Traditional poly is available with IR at an additional cost.

Solarig 182 (not 156) also has an additional benefit not found in traditional greenhouse poly films. It has a UV coating that blocks light rays in the ultra-violet range beyond human sight. Many insects see in this light range. On a clear bright sunny day insect can see clearly in daylight outside a greenhouse covered with Solarig 182 but when they fly inside it is the darkest night for them. The UV blocking reduces the spread of fungal disease (botrytis) and deters insects (such as aphids) from entering the house. Insect populations are repelled because it is easier for them to forage in daylight rather than the dark of night.

Pollinating bees’ eyes see at three different light levels. Two-thirds of their eyes can see in the same light level as human sight, making it so that Solarig 182 UV blocking properties do not hinder the sight of bees.

All of these benefits —- diffused light, increased strength, AF and IR, and increased poly life —- lead to increased crop performance under Solarig compared to traditional greenhouse poly. The durability of Solarig further results in savings on cover-replacement costs and installation labor, incurred with traditional poly.

Solarig: Double Layer Poly Installation

Prior to installation, metal structures and frames should be carefully checked and any sharp corners repaired or covered with protective material prior to installing poly sheets.

IMPORTANT: Printed instructions identify the inside layer of each sheet. Solarig plastic must be installed in the correct direction: the writing on the Solarig sheets "**INSIDE**" must be readable while standing inside the greenhouse.

When installing the sheets on the structure, be sure to stretch them tight, with no folds or flaps. Flapping of the sheets against the structure because of wind can damage the product. A good way to check if the cover is stretched tight enough is to drop a coin on the cover after the installation: if it bounces back, it's fine.

Roof poly film has been supplied as four separate sheets (two for inner layer and two for outer layer). When two grades of poly film are supplied, Solarig Roof 182 is to be installed as the top layer, and Solarig 156 is to be installed as the bottom layer.

Pull the first sheet of inner layer poly over the frame taking care not to snag the film on any exposed edges of the framing.

Square the sheet of poly on the frame with excess poly hanging over the base, sides, and up to the peak. Starting with the wirelock track on the top ridge, start the wire insert into the track with a wig wag motion of your wrist, inserting one corrugation of the wire at a time into track while firmly pulling the poly flat with your free hand to remove any wrinkles.

Continue locking the poly in place down the length of the ridge, followed by the base of the frame and gable arches in the same manner. With all poly locked in place, trim excess poly leaving 1" to 2".

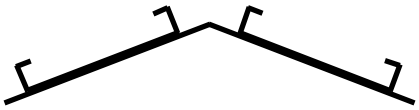

Figure 1. Side view of poly-saver ridge with two parallel runs of wirelock track installed.

Repeat the above step, for the remaining sheets, overlapping the outer sheets over the ridge.

Figure 2. illustrates a recommended layering of the four sheets of Solarig, with each wirelock track holding three layers of plastic and two runs of zig-zag wire. Use a blunt tool, such as the rounded handle of a screwdriver, to help 'tuck' in the outer layers of plastic to wire-lock them into the track.

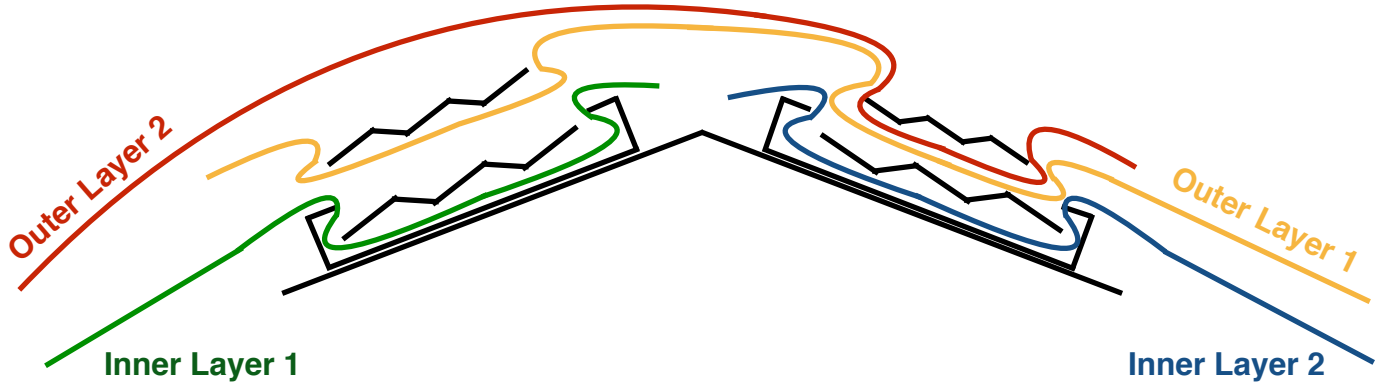

Figure 2. Recommended layering of the four sheets of Solarig plastic, with each wirelock track holding three layers of plastic and two runs of zig-zag wire.

Solarig: Warranty Information

Saving a Sample:

After attaching the sheets to the greenhouse, a 1' x 1' sample should be cut from the remnants.

The code number which is printed on the back of the supplied sheets should be kept. In the event that there is no serial number marked on the sample, the number should be marked with an indelible marker along with the location from which the sample was taken.

This sample should be stored in a cool place.

Upon discovering a defect in any one of the sheets, please contact an authorized Solarig representative. In order to determine the cause of the defect in the sheet, a 1' x 1' sample should be taken from an area near the damage (but not the damaged area itself), and sent to the representative, together with the first sample which was taken at the time of the installation.

These samples will be subjected to a tensile strength inspection. If the comparison shows a loss of strength of 50% or more, the factory will supply a new sheet to replace the damaged one within a reasonable time in accordance with the warranty.

Manufacturer's Warranty (Pic Plast):

Non-transferable 6 year Limited Warranty for Solarig Roof 182: This product is guaranteed to be free of defects in materials and workmanship for 6 years following the original date of purchase. This warranty relates solely to the first installation of the product, provided that it has been precisely executed according to the manufacturer's instructions and is limited only to the product's tensile strength, which should not be less than 50% of the original strength according the specifications of the company. This warranty does not include indirect or consequential damage to any person, property or crops, damage caused by force major, accident, misuse, overheating, exposure to or contact with chemicals (i.e. sulfur), which might cause damage to the product according to the installation instructions.

Non-transferable 4 year Limited Warranty for Solarig Classic 156: This product is guaranteed to be free of defects in materials and workmanship for 4 years following the original date of purchase. This warranty relates solely to the first installation of the product, provided that it has been precisely executed according to the manufacturer's instructions and is limited only to the product's tensile strength, which should not be less than 50% of the original strength according the specifications of the company. This warranty does not include indirect or consequential damage to any person, property or crops, damage caused by force major, accident, misuse, overheating, exposure to or contact with chemicals (i.e. sulfur), which might cause damage to the product according to the installation instructions.

Non-transferable 3 year Limited Warranty for Solarig Roof 182 (In "Chemical Environment"):

This product is guaranteed to be free of defects for 3 year following the original date of purchase. This warranty relates solely to the first installation of the product. Provided that it has been properly installed according to the installation instructions and is limited only to the product's tensile strength, which should not be less than 50% of the original strength according the specifications of the company. This warranty does not include indirect or consequential damage to any person, property or crops, damage caused by force major, accident, misuse, overheating or usage not according to the installation instructions.

Limited usage with Chemicals. In case of exposure to or contact with chemicals – this warranty will cover only up to 150 ppm of Chlorine (Cl) & up to 1500 of Sulfur (S). If the product should become defective within the warranty period, the manufacturer will elect to repair or replace it on a pro-rate Price-List basis. To obtain your warranty rights, please contact a Solarig representative with information detailed in the "Saving a Sample" section above.