

Klerks Hyplast is the largest greenhouse film rewinding facility in North America

Our Chester, SC North American headquarters has millions of pounds of finished stock rolls as well as master rolls which we rewind for made to order requests. Normal lead times are 10 working days, and 15 working days during August 1 through October 1.

Tips For Using Klerks Hyplast's Greenhouse Films

- Chlorine, Sulphur, and other chemicals shorten the life of greenhouse films by deactivating the film's ultraviolet inhibitors. Sulphur burners, used for disease prevention, are the most common source of elemental Sulphur buildup on film surfaces.
- 2) Inflating double layer greenhouse installations with cooler, drier outside air reduces moisture accumulation between film layers, and also prevents harmful greenhouse chemicals from coming in contact with inside film layers
- 3) Growers can reduce heat buildup on greenhouse frame members coming in contact with film by applying white latex paint. Painting frame members along with poly lock channels will reduce surface friction and reflect excessive heat that accelerates film degradation.

- 4) PVC pipe is not compatible with UV stabilized greenhouse film and voids the greenhouse film warranty
- Using air deflectors attached to air inflation fans will prolong film life
- 6) A good rule of thumb for air inflation levels in double layer installations is to have 8-14" of air space between the layers. The only way to really know if you have the correct air pressure is to use a manometer, available from your local distributor. Air pressure between the two layers should be .2" for hot days to .45" on cold windy days.
- 7) Visit the Klerks Hyplast website: www.klerksusa.com to download helpful tips on handing greenhouse film





K50 Clear

- > Tri-layer extrusion with strong EVA copolymer resin for excellent outdoor durability
- > 92% PAR light transmission per layer of film
- > Anti-dust additive that resist dirt and dust buildup
- > Ultraviolet light stabilized for long life outdoor exposure
- > Bee friendly film: Transmits a small portion of the ultraviolet light spectrum used in bee navigation

K50 White 55% Opacity

- Made with the same K50 Clear EVA copolymer resin and UV light stabilizers
- The film's white opacity provides reduced light transmission and heat build up for use in retail sales sites, and greenhouse holding areas

K50 IR-AC (Infrared Heat Retention, Anti-Condensate & High Light Diffusion Benefits)

- > Special IR additives absorb and re-radiate nighttime infrared heat back down to the crop saving up to 15% on nighttime heating costs
- > Two directional anti-condensate control means you never have to guess if the drip control side is facing the crop. Grower proven longest acting anti-condensate control reduces water droplet formation and sheets condensed water down the curvature of the film.
- > High light diffusion (52% of transmitted light per layer) means uniform plant growth and crop dry down times
- > PAR light transmission of 88% through a single layer of K50 IR-AC
- > Tri-layer extrusion with strong EVA copolymer resin for excellent durability
- > Ultraviolet light stabilized for long life outdoor exposure
- > Bee friendly film

KoolLite Plus

New advanced technology allows higher light transmission (84% PAR) plus the same great daytime heat reduction that growers have depended on with KoolLite 380. KoolLite Plus will typically lower greenhouse air temperature by 10 degrees compared to traditional greenhouse films. Cooler



hot weather and decrease crop production times.

> Special IR additives absorb and re-radiate nighttime infrared heat back down to the crop saving up to 15% on

temperatures lengthen daytime growing periods during

- nighttime heating costs
 Reduced water droplet formation Grower proven longest lasting 2 sided anti-condensate control in the industry
- > High light diffusion (53% of transmitted light per layer) means uniform plant growth and crop dry down times
- Reduces the need for greenhouse shading while providing improved PAR light transmission
- > Ultraviolet light stabilized for long life outdoor exposure
- > Bee friendly film

K4 IR-AC Four Year Layflat Tubing For Venlo Style Greenhouse Structures

- > 4 year, 4 mil, greenhouse film available in 14.4' & 15.4' layflat tubing widths
- > Ultraviolet light stabilized for 4 years of outdoor exposure allows growers to keep their film roofs on longer, reducing labor costs and risks associated with film installation
- Special infrared heat additives save growers up to 20% in nighttime heating costs
- Long lasting anti-condensation control reduces water droplet formation by sheeting condensed water down the curvature of the film
- > High light diffusion (53%) leads to reduced overhead shadowing, and uniform plant growth & crop dry down
- > Bee friendly film

Overwinter Clear & White Opacity Films

- > One season UV stabilized films are available as clear or white in 3, 4, 5, & 6 mil thicknesses
- > White films are produced in 35%, 55%, & 70% opacities

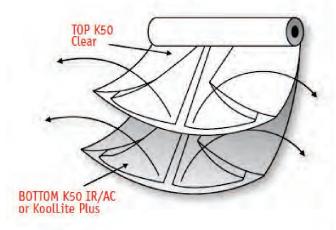


> Tri-Layer extrusion of tough copolymer resins provide needed protection to endure harsh winter environments

Klerks Hyplast Two In One

> Klerks Hyplast is the only greenhouse film manufacturer to offer Two In One rolls. Each Two In One roll is comprised of 2 separate sheets rolled together in one roll, reducing labor needed in installing double layer film. Two In One rolls are available in 20' & 24' width sheets enabling growers to install K50 Clear as the top layer and either K50 IR-AC or KoolLite Plus as the bottom layer in half the time. Two In Ones allow installers to pull the bottom layer a little tighter than the top sheet as they secure the film in the poly lock (almost impossible to achieve using a tube). This helps remove belly ripples running down the length of the film and improves the flow of the anticondensate feature in drip control films.

Two In One Roll Configuration



Klerks Hyplast Specialty Film Features Make a Difference

Anti-Condensate

Film surface water droplets reduce light transmission by as much as 10% during daylight hours. Water dripping on crops increases foliar & root diseases, along with washing out small celled plants. Klerks Hyplast's



patented drip control additive outlasts other film competitors because we put more drip control additive throughout our films, meaning you never have to worry about "what sides up". This all adds up to long lasting, consistent release of our drip control additive over the life of the film.

Thermal

Are your heating bills going through the roof? Save money by holding in nighttime radiant heat with our infrared additive films. Heating is the number one expense most growers have after labor. The use of one layer of IR



film in a double layer air inflated installation can lower nighttime heating cost by 15% and keep more dollars in your pocket.

Diffusion

Klerks Hyplast's high light diffusion films break the direct light angle by scattering light particles throughout the greenhouse. Crops receive more even light exposure with less heat load on the plant's canopy, resulting in faster uniform



growth. Traditional clear films have a high percentage of direct light which creates shadows as shown in the top picture. High light diffusion eliminates shadows and spreads the light over the entire growing area as shown in the bottom photo.