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Create the Perfect Growing Environment with a Sancell UV400 Greenhouse Cover

Following many years of successfully manufacturing polyethylene bubble for solar pool covers to heat swimming pools by solar radiation, an improved version of this material was developed for the use as a greenhouse cover.

Sancell's UV400 is manufactured in 1.5M x 100M rolls and can be fabricated into sheets to suit any size structure. The material is flexible in one direction yet semi ridged in the other and can be easily formed around igloos and is ridged enough to use on gable roofs.

UV400 is similar to polyflute but with superior light transmittance, greater thermal resistance and is easier to install.

UV400 is a triple laminate flexible sheet with cells of trapped static air creating a highly efficient barrier against conductive heat loss (equivalent to twin skin air inflated covers).

The triple laminate construction gives the material an extremely high impact and sheer strength and is resistant to hail.

Physical Properties

Transparency:

The UV400 has a high degree of transparency. Tests conducted indicate a light transmission of 80%. This is only a guide as the angle of incidence affects these findings.

The material has the advantage of eliminating shadows, as light is evenly defused through the bubble creating an even light distribution.

Insulation:

UV400 is a triple laminate honeycomb flexible sheet, with cells of trapped static air creating a highly efficient barrier against conductive heat loss.

Thermal conductance values measured in 'Watts per meter squared per degrees Kelvin (Celsius)' indicate a heat loss of 3.9, thermal conductance values for some other greenhouse materials are set out in table below.

Structures in a commercial situation with a complete covering of UV400, indicate a potential saving in the vicinity of 40%.

Weight

The UV400 is light weight, just 400 grams per m², compared with other covering and glazing materials.

| | Kg / m2 | | Kg / m2 |
|---------------------------|------------|--------------------------|---------|
| Sancell UV 400 | 0.4 | Acrylic 900g (acryflute) | 0.9 |
| Glass 2mm | 5.5 | HD Polythene (polyflute) | 0.75 |
| Glass 3mm | 7.3 | UV 100 | 0.1 |
| Acrylic 1600g (acryflute) | 1.6 | Fibreglass 1200g | 1.2 |
| Acrylic 1200g (acryflute) | 1.2 | Polythene film 150um | 0.15 |

“Sancell has your greenhouse needs covered”

Energy Saving

Structures in a commercial situation with a complete covering of UV400 indicate a potential energy saving in the vicinity of 40%, compared to single skin greenhouse film.

Custom made covers for any greenhouse from small domestic to large commercial greenhouses.

Check out our website at www.sancellenvirocovers.com.au to see Sancell's complete range of Environmentally friendly covers.

Thermal Conductance Values for Greenhouse Materials

| Single Glazing Sheet & Films | U - W/m2K | Double Glazing Combinations | U - W/m2K |
|------------------------------------|------------|---|-----------|
| Glass - 3mm | 8.1 | Glass with poly film liner - 25 mm air gap | 3.6 |
| Polythene Film - 150 micron | 8.2 | Double skin poly film 50 mm air gap | 3.7 |
| Fibreglass - 1200 gsm | 6.5 | Fibreglass with poly film liner - 25 mm air gap | 3.3 |
| Double Skin Sheets | | Wall Materials | |
| Acrylic - 1600 gsm (Acryflute) | 4.8 | Single brick | 3.2 |
| Acrylic - 1600gsm (Acryflute) | 4.9 | Double brick 50mm air gap | 2.8 |
| Acrylic - 1600 gsm (Acryflute) | 5.2 | Concrete block | 1.5 |
| HD Polythene - 750 gsm (Polyflute) | 5.7 | Double concrete block | 0.5 |
| Sancell UV400 | 3.9 | | |