

APPLICATION OF SOLARFILM. Plan your covering so that the small difficult areas (complex shapes, inside corners etc.) are covered first, and finish with the larger easier parts. For a beautiful, long-lasting finish slightly different methods of applying Solarfilm are used to suit the type of surface to be covered.

IRON TEMPERATURE – MUST be correct for successful covering with Solarfilm. Too low and the Solarfilm will not stick. Too high and the Solarfilm will wrinkle up and bubble later on in the life of the model. To test the temperature of your iron, cut some 2" squares of Solarfilm (without the clear liner), placing a square on the sole of the iron (adhesive side up) to see how the heat affects the film. When the heat just makes the square dimple slowly – the iron is at **LOW**. Check by ironing a strip of film onto smooth balsa – it should stick and when cool will pull a few fibres off the balsa when it is peeled off. Mark this **LOW** setting on the iron thermostat. Turn the iron up slightly and a fresh square should wrinkle up quickly – see diagram 5. Mark this as **HIGH**. If you have a modeller's thermometer **LOW** is 100°C and **HIGH** is 120°C.

OPEN FRAMEWORK wings (spars and ribs) and fuselages (framework of strips and cross members). Cut the Solarfilm 1" oversize all round, peel off the plastic liner and lay the film adhesive side down on the framework. Set the iron at **LOW** and **SPOT TACK** at a few places round the edges, with light pressure from the toe of the iron – see diagram 6. Pull the Solarfilm gently to get a snug fit. If the film gathers into large wrinkles, untack with the iron, pull gently to remove the wrinkles and retack. Next **SEAL EDGES** all round the framework or wing, resting the sole of the iron flat on the edge of the framework and using a rocking movement around the edge of the frame. Next, increase the iron heat to **HIGH** and **SHRINK** the Solarfilm gliding the iron very lightly over the surface from the edges towards the centre. Work slowly and let the heat tighten the film. Finally, trim the surplus film from round the edges with a sharp blade. Iron down the trimmed edges firmly.

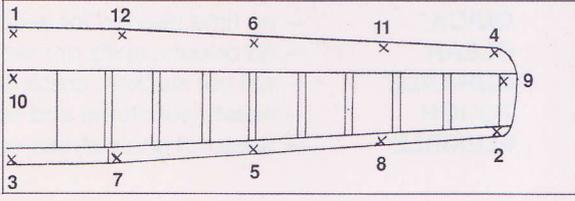
COLOUR SCHEMES are easy with Solarfilm and other Solarfilm finishing products as follows:

Panelling in different colours of Solarfilm e.g. rear part of wing to mainspar in one colour, then front part of wing back to mainspar in a different colour. Arrange the overlaps at panel edges to face 'downwind' when the model is flying.

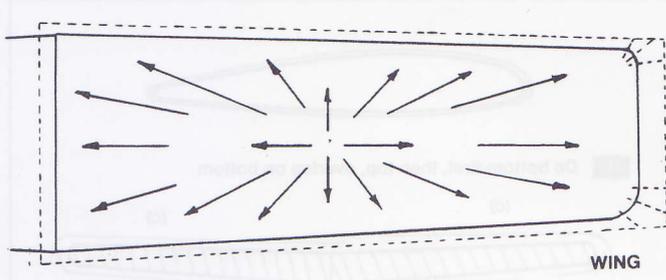
Trimming by applying shaped pieces of Solartrim on top of the main covering. Solartrim is a self adhesive colour sheet which can be cut out to make stripes, designs, insignia, letters etc. which adhere securely to Solarfilm just by being pressed into position on the smooth, glossy surface – heat is not needed.

Painting SOLARLAC paint (matched to the Solarfilm colour) is ideal for those parts and small areas that are difficult to cover with Solarfilm – cowlings, struts, wheelpant, fairings.

OVERLAPS e.g. at leading and trailing edges of a wing or corners of a fuselage. With the first piece of Solarfilm in place, apply a very thin coat of PRYMOL on the area of the first piece that will be covered by the second piece. Allow to dry for a few minutes. Then iron on the second piece. The PRYMOL ensures a strong overlap joint between the two pieces. Apply the PRYMOL with a soft brush or a cotton wool pad and use only enough to wet the surface.



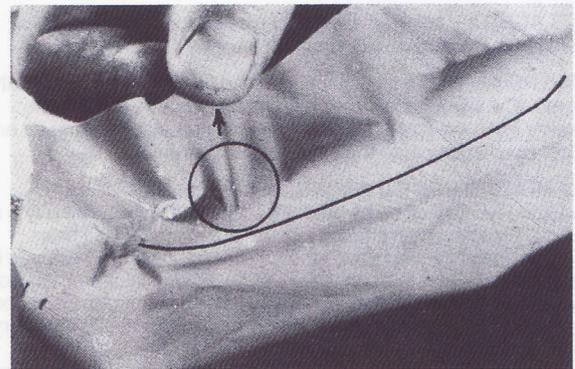
6 'Spot' Tack in the numbered order – Open Frame Wing



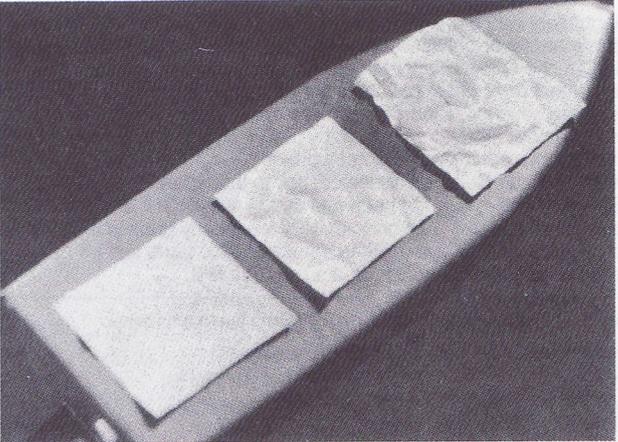
7 Solid surface wing

COMPLEX SHAPES e.g. wingtips. Use Solarfilm at least 3" oversize all round the part to be covered. Set the iron heat to **HIGH** and seal the Solarfilm along the highest part of the curvature – along the black line in diagram 8. Then grip the edge of the Solarfilm and pull it over the shape until wrinkles form. Heat the wrinkles and pull in the direction of the arrow in diagram 8. As the hot film stretches the wrinkles will disappear, and the film can then be ironed down onto the surface. Work to and fro along the tip, heating and stretching small areas until the tip is completely covered. Never press down on a wrinkle with the iron – it would make the wrinkle permanent.

SOLID SURFACES – sheet balsa, veneered foam wings etc. Cut the Solarfilm oversize by at least 1" and place it on the surface to be covered. Set the iron heat to **LOW**. Start at the centre and iron down, at the same time gripping the Solarfilm at the edge and pulling it outwards to stretch out any wrinkles and make it lie flat on the surface – then iron that part down. Continue working outwards from the centre as though along the spokes of a wheel, until the entire surface is covered. Then increase the iron heat to **HIGH** and reheat each part of the Solarfilm in turn, rubbing it down with a soft cloth whilst it is cooling, so that the Solarfilm is firmly stuck to the surface at all points. Do not use the Open Frame method to cover a solid surface.



8 Moulding to shape – remove wrinkles (circled)



5 Iron temperatures:
 at **LOW** film dimples very slowly
 at **MEDIUM** film puckers slowly
 at **HIGH** film wrinkles quickly

Other Solarfilm finishing products are:
CLEARCOAT – clear resin solution for use on wood *before* applying iron-on coverings – toughens and fuelproofs. Also used as a clear finish on Solartex. Not for use as a fuelproof on paints.
SOLARLAC – fuelproof paint matched to Solarfilm and Solarspan colours. Recipes available for mixing matt and camouflage colours.
SOLARTEX – extra strong, easy-to-use, iron-on fabric covering material, 18 colours including black and silver.
SOLARTRIM – self adhesive, press-on colour trim sheets for cutting your own trim designs, insignia, lettering, stripes etc. Matched to Solarfilm and Solarspan colours.
BALSALOC – resin emulsion that dries to a clear heat-seal coating – used on plywood, foam and other 'hard-to-stick-to' surfaces before applying iron-on covering materials.
LITESPAN – iron-on material in place of tissue and dope – looks exactly like doped tissue but is much stronger. Totally fuelproof and waterproof. Super lightweight at one ounce per square yard.
GLOSTEX – iron-on fabric with a coat of high gloss paint. Apply just like Solartex for a superb high gloss fuelproof finish.
SUPERSHRINK POLYESTER – high shrink, very easy to apply. Resists all fuels including Glo, diesel and petrol. Is very durable. Can be painted or trimmed with Solartrim.
PRYMOL – an etch primer for many plastic and metal surfaces. Use to improve the adhesion of iron-on materials, paints and adhesives to the plastic or metal surface.