COVERITE™

Microlite™

- Only 0.6 oz per square yard!
- The lightest iron-on covering available
- Perfect for all park flyers and light fly aircraft
- Beautiful high-gloss finish

Made in England

Thank you for purchasing 21st Century® Coverite™ MicroLite™. Because MicroLite is ultra-thin and lightweight, it is intended for park flyers and indoor models. With MicroLite the adhesive is already applied, so there's no need for brushing on glues or solvents. Painting MicroLite is not necessary or recommended. MicroLite **CANNOT** be painted with Coverite 21st Century or Top Flite® LustreKote®spray paint. Please read completely through the instructions to become acquainted with MicroLite's properties and techniques for application.

PREPARATION

Recommended Tools

Following is a list of tools and supplies recommended for covering your model with MicroLite.

- ❑ 21st Century sealing iron (COVR2700)
- ❑ 21st Century iron cover (COVR2702)
- ❑ 21st Century trim seal iron (COVR2750)
- ❑ Hobby knife (HCAR0105)
- ❑ #11 Blades (5-pack – HCAR0211, 100-pack – HCAR0311)
- ❑ Single-edge razor blades (10-pack – HCAR0212, 100-pack – HCAR0312)
- ❑ Metal straightedge (HCAR0460)
- ❑ 24" x 36" [460 x 910mm] Builder's Cutting Mat (HCAR0456)
- ❑ Coverite covering thermometer (COVR2410)
- ❑ Scissors
- ❑ Masking tape
- ❑ Sandwich bag containing led or steel shot

Surface Preparation

Make sure the airplane is sanded smooth and ready for covering. Remove glue bumps or other imperfections. Use a dust brush or compressed air to remove all balsa dust from the framework. Clean your workbench and work area too–static electricity that occurs when peeling the backing from the covering will attract dust.

Iron Temperature

Use the correct iron temperature to apply MicroLite. Too much heat may cause the structure to warp, or cause the covering to discolor, creep, crinkle or even melt. Not enough heat will reduce adhesion and shrinkage. The **ideal temperature** for applying MicroLite to both open framework (wing ribs, leading/trailing edges, fuselage stringers, etc.) and to sheeted surfaces is about **175° - 195°F** [80° - 90°C]. Increase iron temperature to **230° - 250°F** [110° - 120°C] for tightening the covering over open framework. A Coverite Covering Thermometer is perfect for accurately determining your iron's temperature. An alternate way to determine iron temperature is to conduct the following tests:

Square Test

Cut a 2" [50mm] square of covering from the roll and remove the backing. Place the square, adhesive side up, on the iron. Observe the effect.

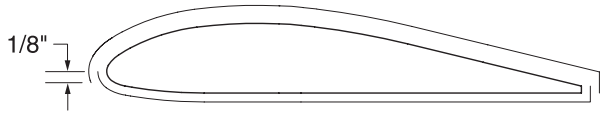
- From 160° - 175°F [70° - 80°C] the square lies flat or slowly curls.
- At approximately 195°F [90°C] the square forms shallow wrinkles and curls.
- At about 210°F [100°C] the square forms distinct wrinkles.

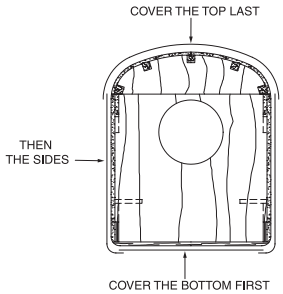
Strip Test

Iron a 1" [25mm] wide strip of MicroLite onto a smoothly-sanded balsa sheet (don't forget to remove the protective backing first!).

- At 175°F [80°C] the strip of covering will adhere to the balsa. After cooling, the strip can be peeled off taking a few balsa fibers with it.
- At 210°F [100°C] the strip is more firmly attached. When peeled off, it lifts even more balsa fibers with it.
- At 250°F [120°C] the strip is firmly attached to the balsa sheet, but the adhesive has melted into the wood and the color is uneven and speckled.

Seams

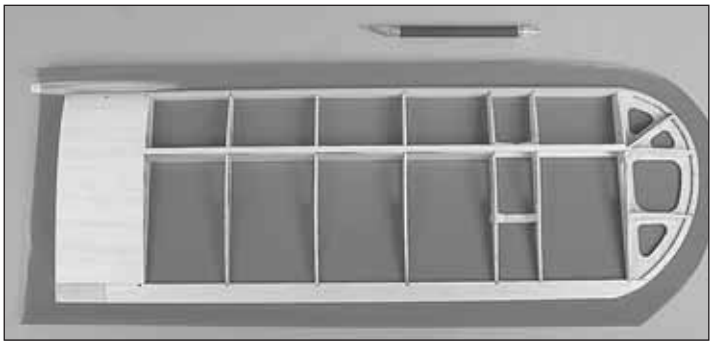




One way to a good covering job is to conceal seams where two pieces of covering overlap. Cover the bottom first, then wrap the top (or side if covering the fuselage) down around the bottom. When covering the fuselage, start with the bottom, then the sides followed by the top. Seams should overlap approximately 1/8" [3mm].

APPLICATION

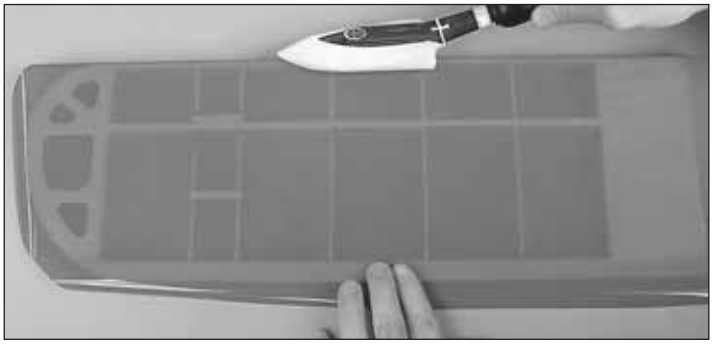
The following instructions illustrate the methods used to cover a wing. Similar techniques apply to any part of your model.



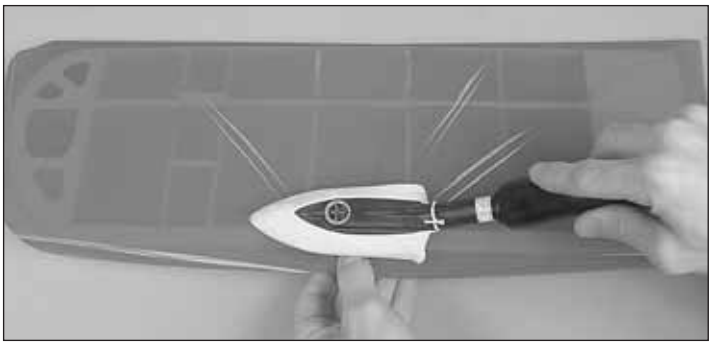
❑ 1. Start by covering the underside of the wing. Partially unroll the covering and lay the wing over it. Since the adhesive is on the back, and we are starting with the bottom of the wing, the covering should be upside-down, adhesive side up. Cut a piece of covering approximately 1" [25mm] larger than the wing all the way around.

❑ 2. **IMPORTANT:** Use a hobby knife to peel the clear, protective backing from the covering, or use a piece of masking tape stuck to the covering and another piece of masking tape stuck to the backing to separate the two.

❑ 3. Lay the covering, adhesive side down, over the bottom of the wing. If you ever forget which side is the adhesive side, it's the side that is slightly less shiny. You could also quickly touch the iron to the covering. The iron will stick to or "grab" the adhesive side of the covering.

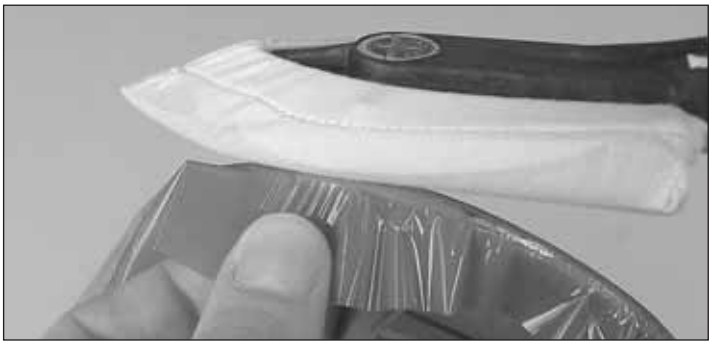


❑ 4. With your iron set to 175° - 195°F [70° - 80°C] start by bonding one edge of the covering to the framework–to the leading edge of the wing in this example.



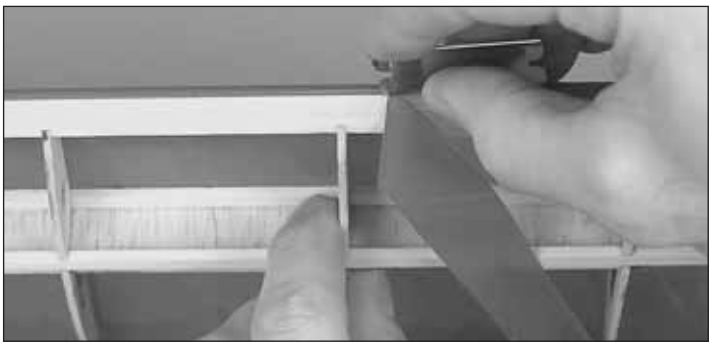
❑ 5. Lightly tug on the covering to pull out most of the wrinkles, then bond that area to the opposite side–in this example to the trailing edge. Perform the same procedure moving up and down the trailing edge until it is bonded to the wing.

❑ 6. Bond the covering to the ends of the wing over the tip and the sheeting at the root.



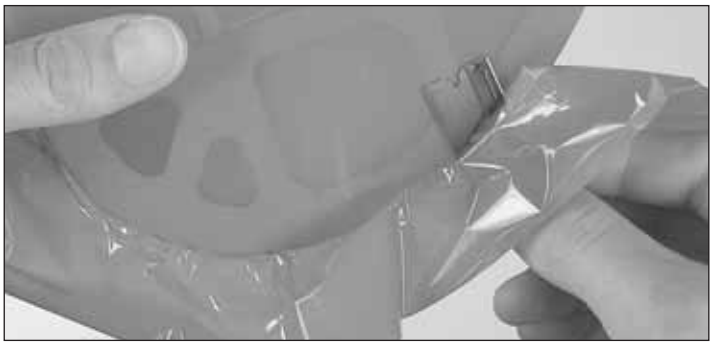
❑ 7. Use the iron to drag the covering up over the leading and trailing edges. When you get to curved areas like the wing tip, stretch the covering by pulling on it, then seal it to the framework. Don't let go until the covering has cooled for a few seconds and the adhesive has taken hold. Do little sections at a time.

Note: Do not use heat to tighten the covering and take out the wrinkles until instructed to do so. The top and bottom will be tightened simultaneously to reduce the tendency of introducing warps to the structure.



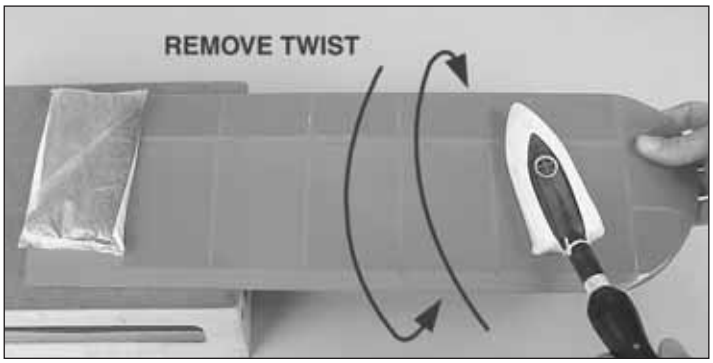
❑ 8. Use a sharp #11 blade or a single-edge razor blade to trim the excess covering from all the way around the framework. Re seal all the edges you cut to make sure it is thoroughly bonded to the framework.

❑ 9. The same as was done for the bottom of the wing, cut another piece of covering for the top and use the same techniques to iron it down. When you get to the wing tip, pull on the covering to remove wrinkles and iron that area down. Use the same procedure working all the way around the tip until most of the wrinkles have been removed.

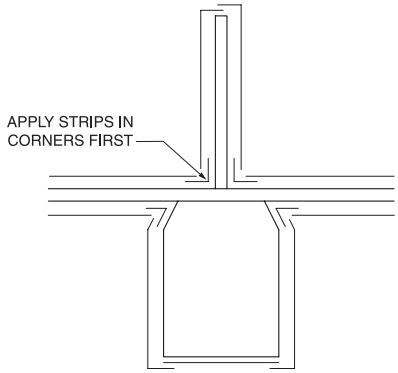


❑ 10. Use a sharp blade to cut the excess covering from the wing. Retrace your steps and iron down the seams all the way around.

❑ 11. Now it's time to shrink the covering. Increase iron temperature to 230° - 250°F [110° - 120°C], then slowly glide the iron over the covering. Do a little at a time on both sides to tighten the covering evenly.



❑ 12. After the model has been covered, check the wing and tail for any undesirable twist. Twist can be removed (or added if desired) by using weight to hold one end down and twisting the other end in the opposite direction. Heat the covering on the top and bottom until the wrinkles have disappeared. Check the result. Repeat if necessary.



When covering horizontal and vertical stabilizers that have already been joined to the fuselage, fold a small strip of covering in half by making a crease down the middle. Use a trim iron to bond the strip to the stab and fin.

To keep delicate, stick-built structures such as tail surfaces flat, apply the covering evenly without wrinkles. Use as little heat as possible to tighten the covering and heat both sides simultaneously. Another method for keeping delicate parts flat is to pin them down while tightening the covering.

Great Planes Distributors
P. O. Box 9021
Champaign, IL 61826-9021
www.coverite.com
Made in England