

	<h2 style="margin: 0;"><i>Antelope Valley Tailwinds Technical Info</i></h2>			
	Subject	Covering with Monokote		
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I will start off with a disclaimer; this is my personal experience with Top Flite brand Monokote over a period of 32 years and is not an official document or instruction manual, just my personal methods learned over years of working with Monokote. I like Monokote over other brands mostly due to the fact that they offer many more colors and there is even Monokote paint available for the basic colors that match's very well.

In order to cut and apply Monokote here is a basic list of the required tools.

- 1- A sheet of VERY clean glass aprox 32 inches wide and 20 to 24 tall. This is necessary to make sharp clean cuts on Monokote.
- 2- 3 or 4 foot metal scale for cutting the Monokote on the glass.
- 3- Lots and Lots of #11 X-Acto blades, I have even learned to re-sharpen them but it is a pain and hit and miss, new blades are better.
- 4- Good USA made Razor blades for trimming and making straight cuts on glass sheet.
- 5- Sharpie brand Pens of various colors, fine point for detail cutting and the regular Sharpie can be used for rough trimming. Sharpies work great because they are visible and can easily be wiped off with rubbing alcohol after you are finished covering provided you don't cover the marks with Monokote.
- 6- Very Sharp pair of Scissors for rough cutting Monokote.
- 7- Small 6inch, 12inch and 18 inch scales for measuring and making small Monokote pieces.
- 8- Monokote brand Iron or similar, with a Teflon shoe in good condition, I replace Irons and Shoes often as the Teflon wears quickly.
- 9- Monokote brand or similar Heat shrink gun and supply of clean, soft Microfiber rags for rubbing the heated Monokote.

I consider this list the absolute minimum to do a covering job with Monokote. One of the most important things is to start with a nicely sanded airframe, be sure to blow it off with compressed air then use a 2 or 3 inch paint brush with grain to "clean" out the dust then use compressed air again, also if the parts sit for a while before being covered blow them off again right before covering.



A word on covering schemes, don't be afraid to try something different! Monokote is very versatile and with all of the colors available the only limit is your imagination. For this job, just assume we are covering the whole model with a basic color like White or Yellow. Always start on the bottom, then sides and then the top. This lets you control where your seams are and results in a better looking job. The same applies to all parts of model, Wings, Elevator/Stabilizer. Obviously this does not apply to Rudder/Vertical stabilizer. Starting with the fuselage, cut a piece of Monokote

approximately 2 inches larger all round for the bottom, With Monokote Iron turned to about 95%, tack the edges only all the way around without using the iron in the center or open area. I usually trim the Monokote edges at this point by using a sharp razor blade or new #11 X-Acto blade, try to make the cut by using the fuselage side as a guide and coming up the side of the fuselage to the top side of the rounded curve, doing so will cause the seam to sort of disappear due to being in the rounded part of fuselage. Thoroughly seal the edges down all the way around and double check. Now you can set the Iron aside and use your Heat Gun, I use the nozzle supplied with the heat gun (just my preference) keep the heat moving always and watch the Monokote as it will expand slightly then contract as it cools, try to use your microfiber rags BEFORE it cools to "press" the Monokote into the wood grain, this will assure good adherence and it takes some practice but the result is a scratch free Finish.

Continue the sides of the fuselage and try to do it in one piece, if this isn't possible give some thought to where you want the seam and be sure to work from back to front so as not to have seams facing forward if possible. Then to the Top making sure the seams overlap approx an 1/8th of an inch yet still trying to keep the seams in the sanded curve area where possible. Trimming will take time to develop a knack and there are also trim tools available that I keep meaning to try... just remember if the blade drags or grabs it is time to change it! Not doing so will result in a rip or jagged edge, trust me I know...

The Wings and Stabilizers are similar, do the bottom first and here is where you will see how the heat gun really shines! Generally shrink the Monokote to remove wrinkles before you press with the microfiber rag to adhere it to structure. Sometimes the wing tips can be challenging, it is important to have enough excess Monokote to pull on to remove the wrinkles while heat is applied, this is where experience will help as Monokote stretches AND shrinks, it takes a lot of heat to work it around the edges sometimes. The Ailerons, Rudder and Elevator are the same and can be tedious. I usually use the flex hinges so I can just cover the individual parts and then locate my hinge slots and cut through the Monokote on final assembly.

Trimming for Appearance

After deciding your trim scheme, this can be the place where an eye for detail and design will make a big difference. For beginners I suggest basic stripes or triangle type designs with Monokote colors of your choice. Don't be afraid to make marks with your Sharpie where your trim goes and don't be afraid to make seams where needed in the trim. I often grab bottles, tin cans or whatever to use as a cutting guide on my glass to achieve a curve rather than just having straight lines intersect. You can also cut the trim out and set it aside to apply later, I often use tracing paper and cut through it and the Monokote to make a complicated shape. Only your imagination limits you here after you master the basics of Monokote application.

Applying Trim

I could spend a huge amount of time on just this subject but for purposes of keeping it short and simple there are a couple of ways to apply the trim. Most can be applied by just peeling the backing off and rubbing it down with your fingers and applying heat from the middle out making sure to seal the edges. Another method is the "Windex method", Windex contains ammonia and ammonia is known to activate the adhesive in Monokote, it is simple and assures a no bubble finish to your trim over Monokote. Liberally apply Windex to the section to be covered and apply the trim over the Windex, at first it will easily slide around to help assure proper location. I use an old credit card or a small squeegee to begin pushing the Windex out from under the trim piece and using a paper towel to sop the excess up. After removing most of the Windex the trim will be somewhat adhered to the surface, when

you are happy that there are no more bubbles and the trim is in correct location just let it sit for 6 hours or better yet overnight. The next day you can take your iron and go around just the edges to assure adhesion.

This is just the basics and it takes some time to become comfortable enough with Monokote to get a perfect covering job, Monokote also adds much to the structural strength of your model, this is why it is important to make sure it is adhered properly everywhere especially to the ribs of the wings and the structural parts of an open frame fuselage etc. If anyone has any questions or needs any help I am available to get you through the project, I would also be open to a class if there is enough interest.