

## Dew Shield Construction Using Reflectix Insulation

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### Dew Shield Construction – Meade SN 8

#### Materials

- 16"x25' Roll of Reflectix – 1 Roll, Can be found in your Home Center Insulation section
- Duct Tape – I used Dark Blue – Ensure you get the heavy duty kind, not the “Easy Remove”
- 2" wide Industrial Strength Velcro – I got black
- 1 Can Spray Glue – Ensure this is quick drying and will apply well to cloth and plastic
- 1 Dark piece of cloth – I purchased an inexpensive navy blue sheet for \$6
  
- A straight edge for cutting edges
- A very sharp utility knife

Total cost for everything I didn't already have (Reflectix, Sheet, Velcro) ran me all of about \$30. You will have enough supplies with these materials to do several Dew Shields for scopes between 8 and 12 inches. You might want to get together with a few friends and all make some. 4 or 5 people could get very nice dew shields for about \$5 - \$6 each, not bad.

#### Construction:

The Reflectix comes in a roll, so when you unroll it, it is already shaped to roll back so it only makes sense to use the side that is naturally shaped that way for the inside of the dew shield. I simply used a small tape measure to measure the circumference of scope at the point where the dew shield will attach and added to inches (for the Velcro). Then, using my straight edge, I cut it at that point. If you use firm pressure and slightly angle the blade, you will get a nice clean cut.

Since the Reflectix comes in 16" widths, also decided to cut this down a bit to about 12". For this, I again simply cut it with the straight edge.

The next step was to apply the Velcro. Make sure that you have held this up to the dew shield to ensure you are putting it on the right sides. I wanted the softer fabric part to be up against the scope if the dew shield does not wrap all the way around (dew heater added underneath, etc.) so I put the part with the hooks (plastic) on the side that will face out as seen below:



Note: The industrial strength is super sticky and will not come back off of any little section it touches, so be very careful. I cut it an inch or so longer than needed and then trimmed it afterwards.

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Next, flip the dew shield over so you now have the inside facing up and put the fabric section of the Velcro at the opposite end. Again, be very careful and cut it longer than needed. Trim after application.

The next step was to apply the dark material to the inside. While this dew shield will work fine without this step, I was concerned about reflection from the "aluminum" finish which is very shiny since I do a lot of astro-photography.

Ensure you have the inside facing up and cut a piece of your fabric a few inches larger than you will require. Next, cover the Velcro and about another half inch in from the Velcro with something to stop the glue and fabric from getting on it (some masking tape will do this fine). Also, at the other end, cover about ½ inch or so with some masking tape or something else. Using your spray glue, spray the entire area smoothly, not a lot is needed, you don't want to soak this. Allow the glue to setup for 30 seconds or so, just to get tacky.

Now, starting at one end, begin to lay the material on the glue ensuring the first area is firmly attached and smoothing as you apply the remaining fabric. Next, trim the two ends of the fabric with a pair of scissors (or your knife) over the areas that were covered to stop the fabric from sticking. Remove any masking tape, etc. I then placed another board on top and some weights to press it down for about 15 minutes. I also had some warm air from a hair dryer blowing on it for another 20 minutes after I removed the weights. Allow this to setup for about an hour.

The next step is to trim the remaining parts of the material. I used the straight edge and a knife for this which worked well. Use firm pressure and draw the knife across the material quickly to prevent fraying.

Finally, apply two pieces of your industrial duct tape over the two areas that you left open to help hold the fabric in place. You can see the final result in the image below. Note, the fabric is not shiny, it just looks that way from the flash and the shiny material underneath.



At this point, the dew shield is pretty much done. If you need to due to frayed edges or just a little more durability, you may want to edge the dew shield with strips of Duct Tape. I may still do this. The image on the next page shows the completed dew shield on my SN8.

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As can be seen, there is still plenty of room to put a dew heater underneath the dew shield if needed. It is also very adjustable with respect to the width of the dew shield at the top and bottom using the Velcro.

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