## SINGLE SEAM Activist Fly—both regular (60") and tall versions.

A stormproof rainfly can be crafted from 7m piece of waterproof fabric, using a home sewing machine and a Speedy Stitcher.





## Materials/Tools

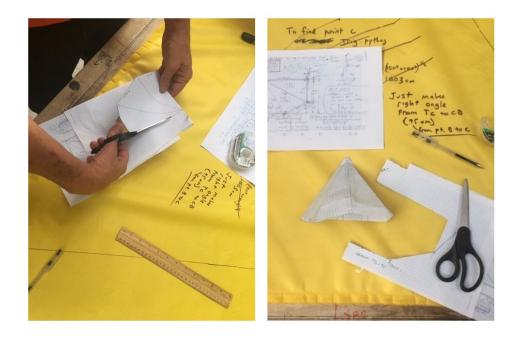
- Home sewing machine.
- 7m waterproof fabric (best is ripstop with PU (polyurethane) coating.
- QuickDraw from climbing shop (\$5-\$10).
- Speedy Stitcher (for sewing QuickDraw to fly).
- Various webbing straps to secure fly to ledge (based on frame choice).
- Long straight edges, marker, sissors.

Concept: The fly design is informed by the Plains Indian teepee, using a single seam, wrap around pattern (A5 was the first to implement this idea for rectangular portaledges—the single seam design is simpler and more waterproof than multi-seam designs). The pattern is easy to make and can be drawn directly on the fabric, and cut out. Total patterning/sewing time: less than 2 hours.

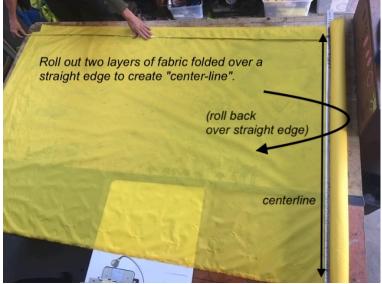
STEP 1. Measure the sit frame (length and width):



Step 2. Make a paper model (optional). Follow the same steps below to make a paper pattern, or just go for it right away with marker on the fabric (stack two layers of folded fabric to start).



Step 3. The pattern you lay out is a half-pattern, as the fly is symmetrical. So fold over ½ your fabric, and create a center-line (this center line will be the coming from the top to the center of the "wall-side" of the ledge. The fly is designed for a vertical wall (or tree) situation, where the ledge is leaning against a support. You can modify the angles if the ledge is mainly being used in a fully overhanging setting.



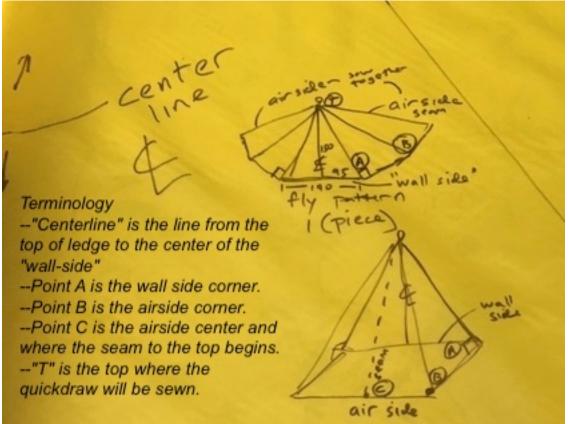
Step 4. Mark the Centerline—this will help with identifying triangles on pattern as you mark and sew.



Step 5. Lay out Point A. Measure away from centerline  $\frac{1}{2}$  the length of the sit. Add 3cm depending on how tight you want the fly to fit. For example, if the sit is 190 x 100 cm, measure 190/2= 95cm (tight fit) out from centerline to mark Point A, the wall side corner. DRAW A LINE FROM THE TOP TO POINT A.



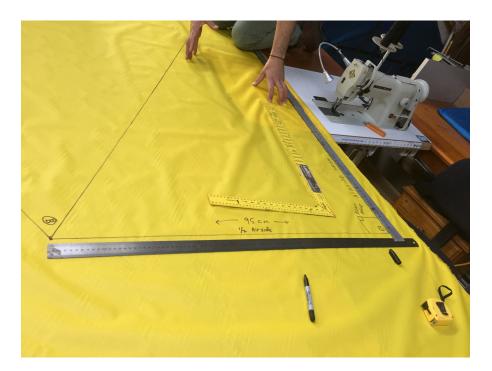
## Terminology:

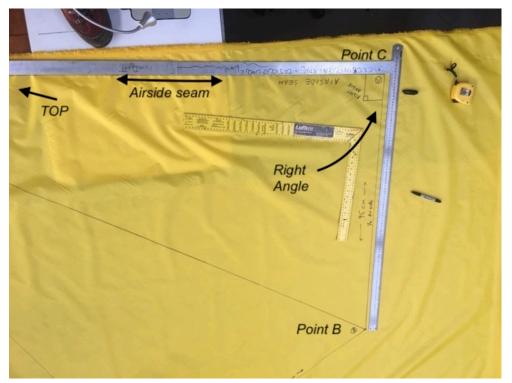


Step 6. Layout Point B: The triangle from the top to Point A and B is a right angle triangle (this is the SIDE of the fly), so simply lay out a point perpendicular from the line from the top to Point A you drew in step 5, and measure out the WIDTH of the sit (in this case 100cm). Again, add a few centimeters depending on how tight you want the fly to fit. Adding 3cm to each side is a good rule of thumb. Now, Draw a line from the top to Point B.



Step 7. Layout Point C. The line from the top to point C is the center "airside", and the two layers will be sewn together here to create the wrap around fly. The line from the top to Point C makes a right angle to Point B (as the triangle Top-B-C is half of the airside of the fly). DRAW A LINE FROM TOP TO POINT C.







Step 8: Cut out the pattern! Note you are cutting two layers here.

Step 9: Create a "Skirt" from long strips of fabric about 20cm wide. The pattern cut out above will fit the ledge from top to corners. The skirt will be sewn along the bottom edge of the fly to allow the fly to drape over the frame of the sit. The skirt needs to be as long as the circumference of the frame (length x 2 + width x 2).



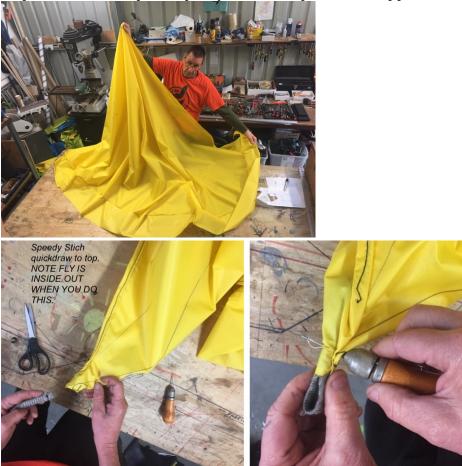
Step 10. Sew the skirt on the bottom (From Point C to B to A and also on other half).



Step 11. Sew the main seam (from TOP to Point C on the two layers). Note on seams: any choice of seams can be used—a simple rollover seam is adequate—all seams will need to be seam sealed for full waterproofing. Hem bottom edge of skirt.



Step 12. Find the top and speedy stitch the quickdraw support:



Turn the fly inside out—you are finished. Note that the top needs to be seam sealed well—Shoe-Goo is a urethane product and works well.



Test out and admire your handiwork.

Usually first one will lead the way to perfection and final design. Add reinforcements if necessary, and straps to secure your fly to your sit.

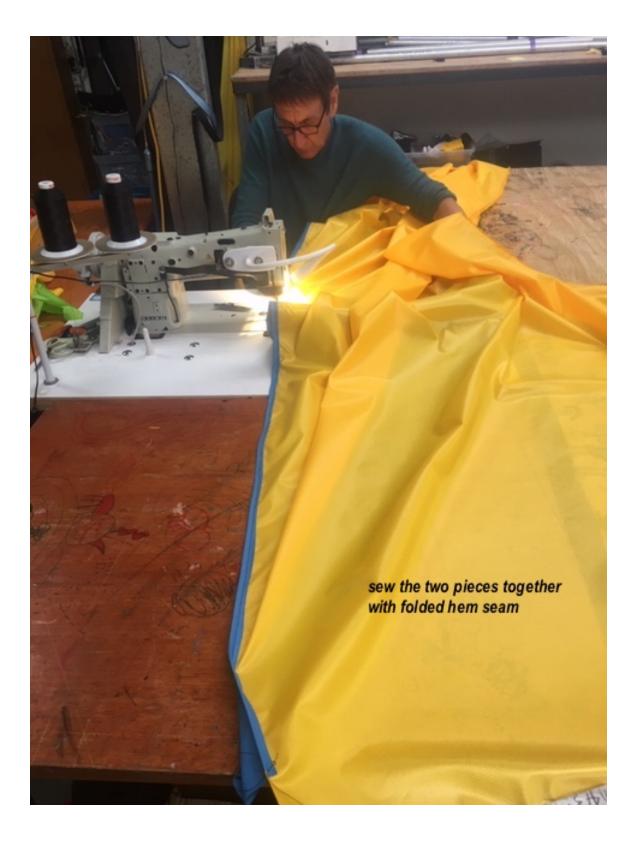


VERSION 2: Tall Activist Ledge (80" high fly) For this version, you must sew an additional section onto the bottom of the fly prior to marking out. We used a piece 2m long by 50cm wide sewn centered on the "wall side" to make the effective width 198cm (2cm seam allowance).

— This sequence was for a sit designed to fit a 2m x 1m frame (standard abandoned bed frame with plywood top).

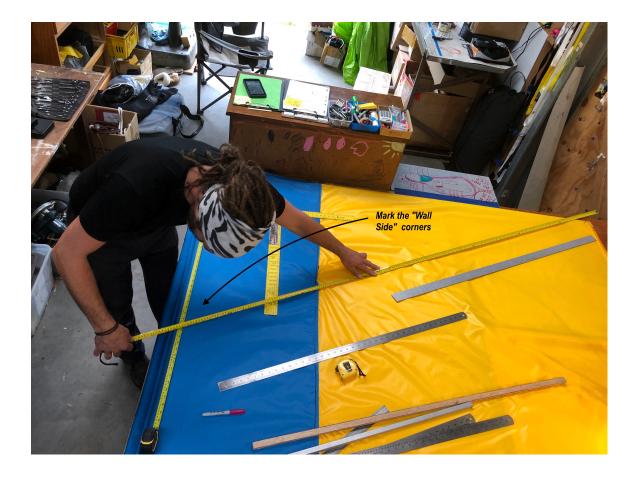
—Then, follow the exact same steps as above for the patterning.















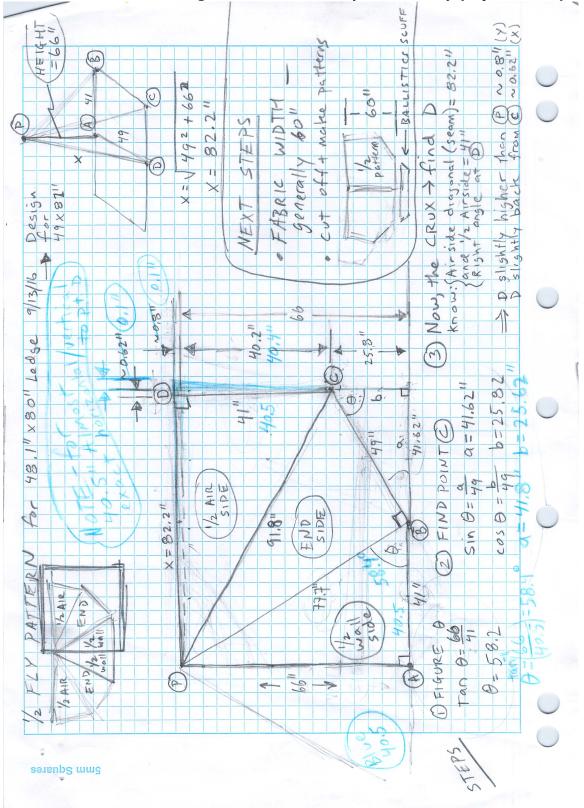






sew super strong top clip in, same as before

pretty much it. Hem the bottom and add patches to corners 11



For those who like to do things more mathematically, here is a way (imperial units):

