

LytW8™ Catenary Cuben Tarp - C²T

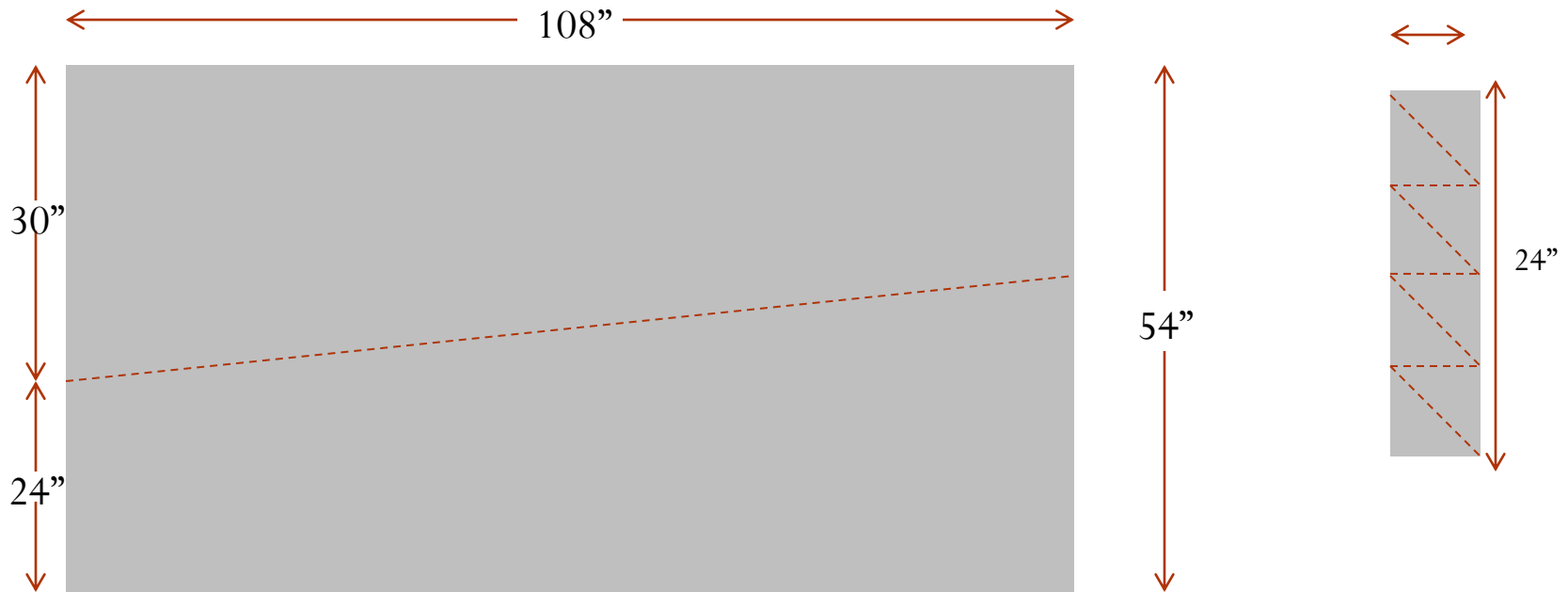
Materials

- .51 oz Cuben Fiber x 3 yards + 6" strip for making corners
- 3/4" Grossgrain – (4.5") x 6 + (6 x 2") tie outs = ~40"
- Hysol Loctite U-09FL (adhesive)
- Masking tape
- Gutterman thread
- Paper for making ridgeline curve pattern

Tools

- Exacto Knife & Cutting Mat
- Scissors
- Steel Ruler
- Sewing Machine
- Tooth picks (mix adhesive)
- Masking Tape
- Foam Brush (apply adhesive)

Cutting the Pieces



Notes:

Bond ridgeline with Hyosol with 1" overlap

Double fold edges at 1/2"

Results in finished tarp dimension of (108-2") by (60-2"-1") by (48-2"-1") or 106" x 57" x 45"

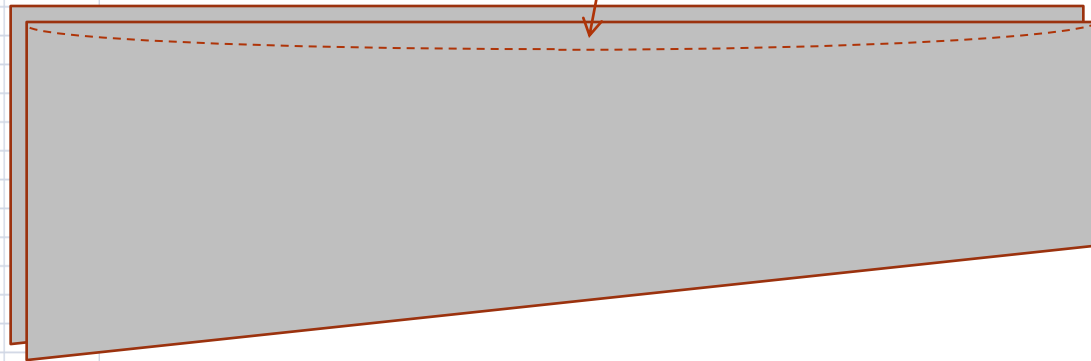
Steps:

1. Mark pieces with a silver sharpie as shown
2. Cut pieces using an Exacto knife with straight edge on self healing pad

Cutting the Catenary Ridgeline

| | | | |
|--|-----------|--------------|--------|
| Enter ridge length in inches: | | | 108.00 |
| Enter degree of severity (400 is good starting point): | | | 490 |
| Calculated deflection at midline in inches: | | | 3" |
| | | | |
| | Distance | | |
| Running | from | | |
| Length | Midpoint | Deflection | |
| 0" | 54" | | 0" End |
| 3 10/16" | 50 6/16" | -6/16" | |
| 7 3/16" | 46 13/16" | -12/16" | |
| 10 13/16" | 43 3/16" | -1 1/16" | |
| 14 6/16" | 39 10/16" | -1 6/16" | |
| 18" | 36" | -1 10/16" | |
| 21 10/16" | 32 6/16" | -1 15/16" | |
| 25 3/16" | 28 13/16" | -2 2/16" | |
| 28 13/16" | 25 3/16" | -2 5/16" | |
| 32 6/16" | 21 10/16" | -2 8/16" | |
| 36" | 18" | -2 10/16" | |
| 39 10/16" | 14 6/16" | -2 12/16" | |
| 43 3/16" | 10 13/16" | -2 14/16" | |
| 46 13/16" | 7 3/16" | -2 15/16" | |
| 50 6/16" | 3 10/16" | -2 15/16" | |
| 54" | 0" | -3" Midpoint | |

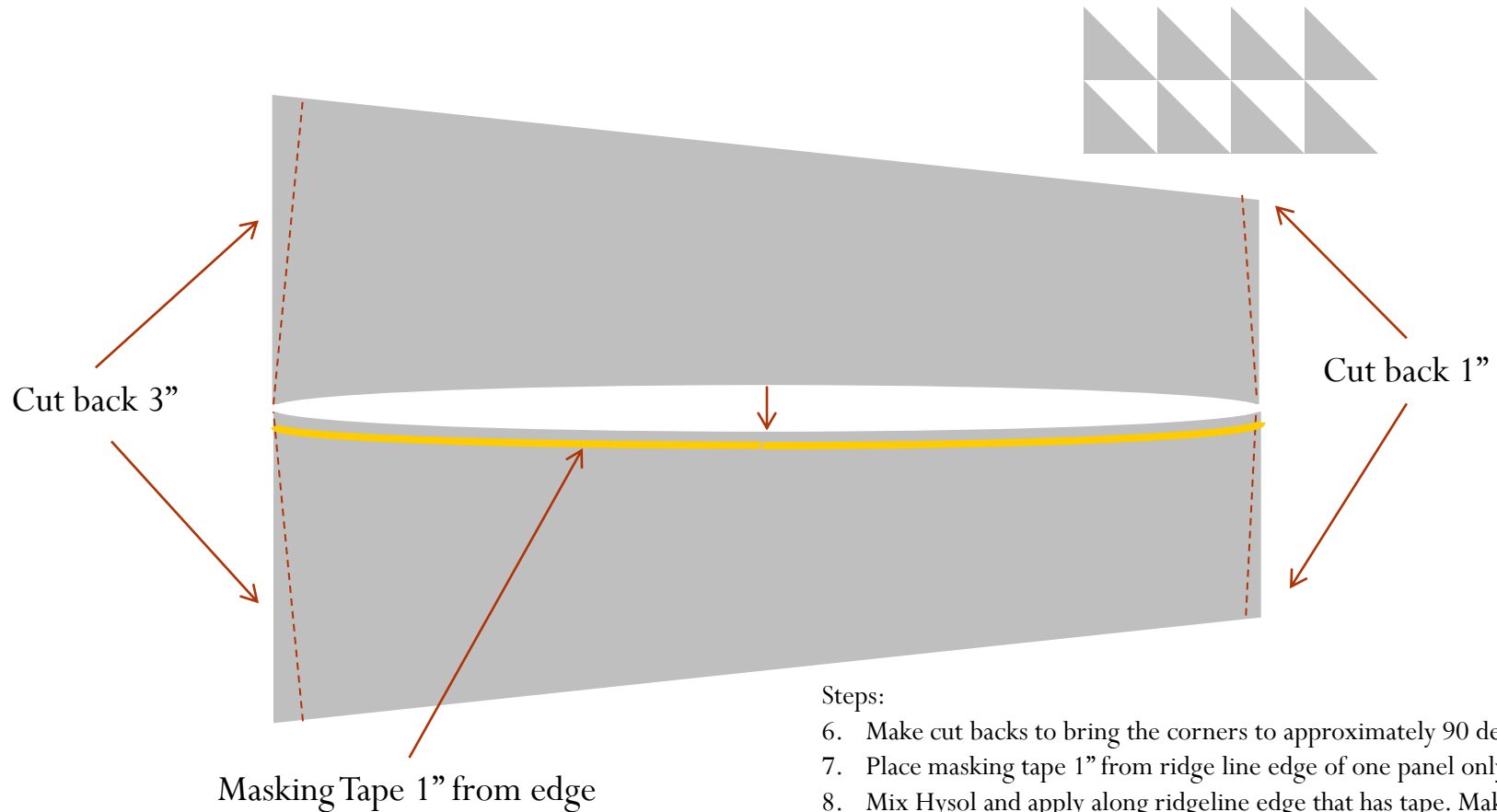
3" deflection



Steps:

3. Make a paper pattern for curve
4. Place the 2 panels on top of each other, line up the curve pattern, and mark curve with silver sharpie
5. Cut Catenary ridge using an Exacto knife with self healing pad underneath

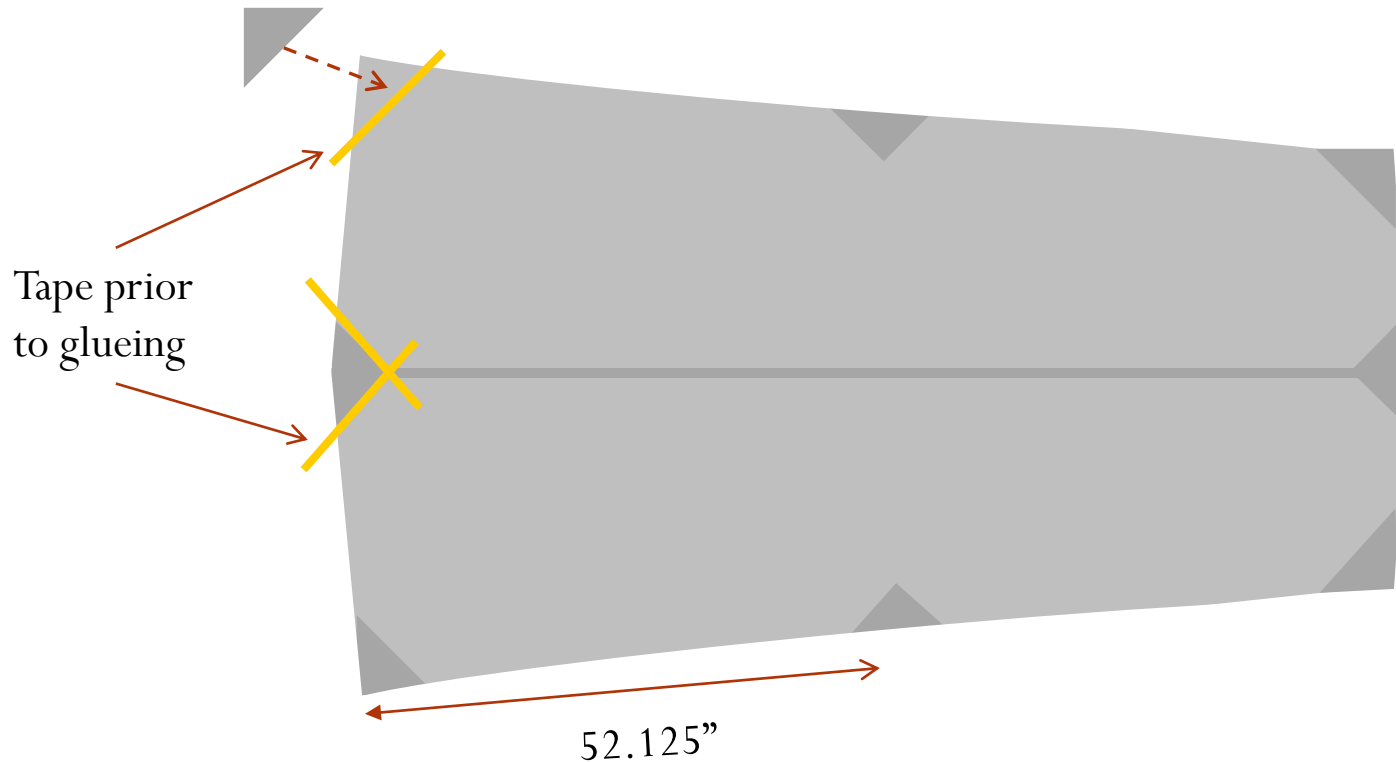
Bond the Ridgeline



Steps:

6. Make cut backs to bring the corners to approximately 90 degrees
7. Place masking tape 1" from ridge line edge of one panel only
8. Mix Hysol and apply along ridgeline edge that has tape. Make sure to cover entire 1" width.
9. Adhere the ridgeline together in 1-2 foot sections working to straighten out the curve. Allow to dry 12+ hours.

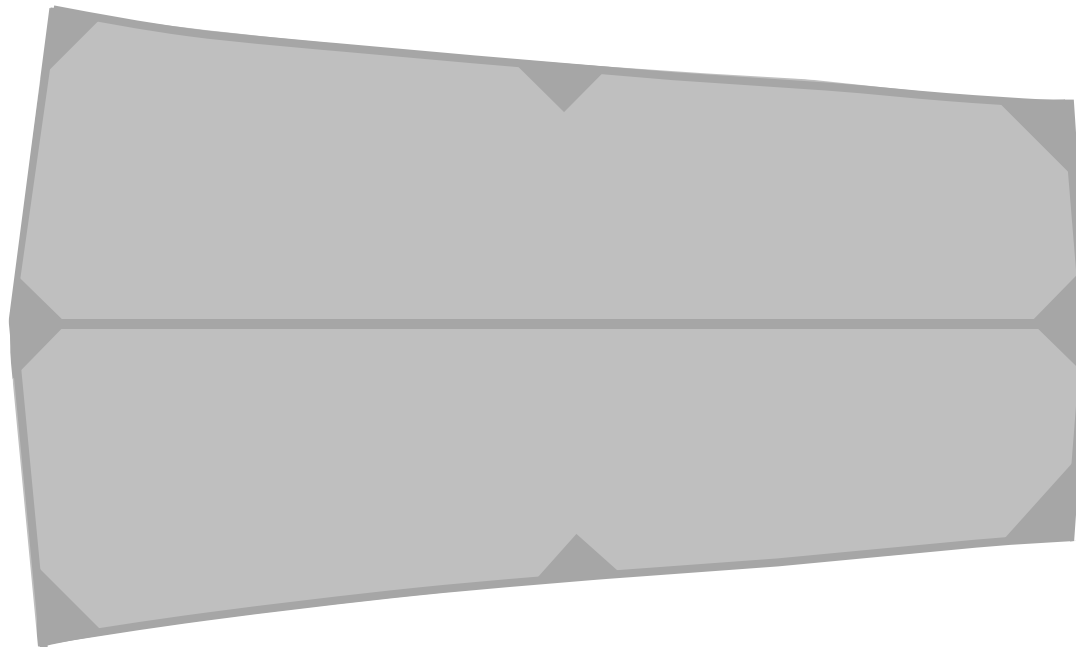
Add Reinforcement Patches



Steps:

10. Tape edges of all eight corner location with masking tape
11. Using Hysol, bond the 8 corner reinforcements in place as shown.
Allow the patch edges to extend over any areas that are not exact lines of square
12. Using Exacto knife trim any excess patch edges.

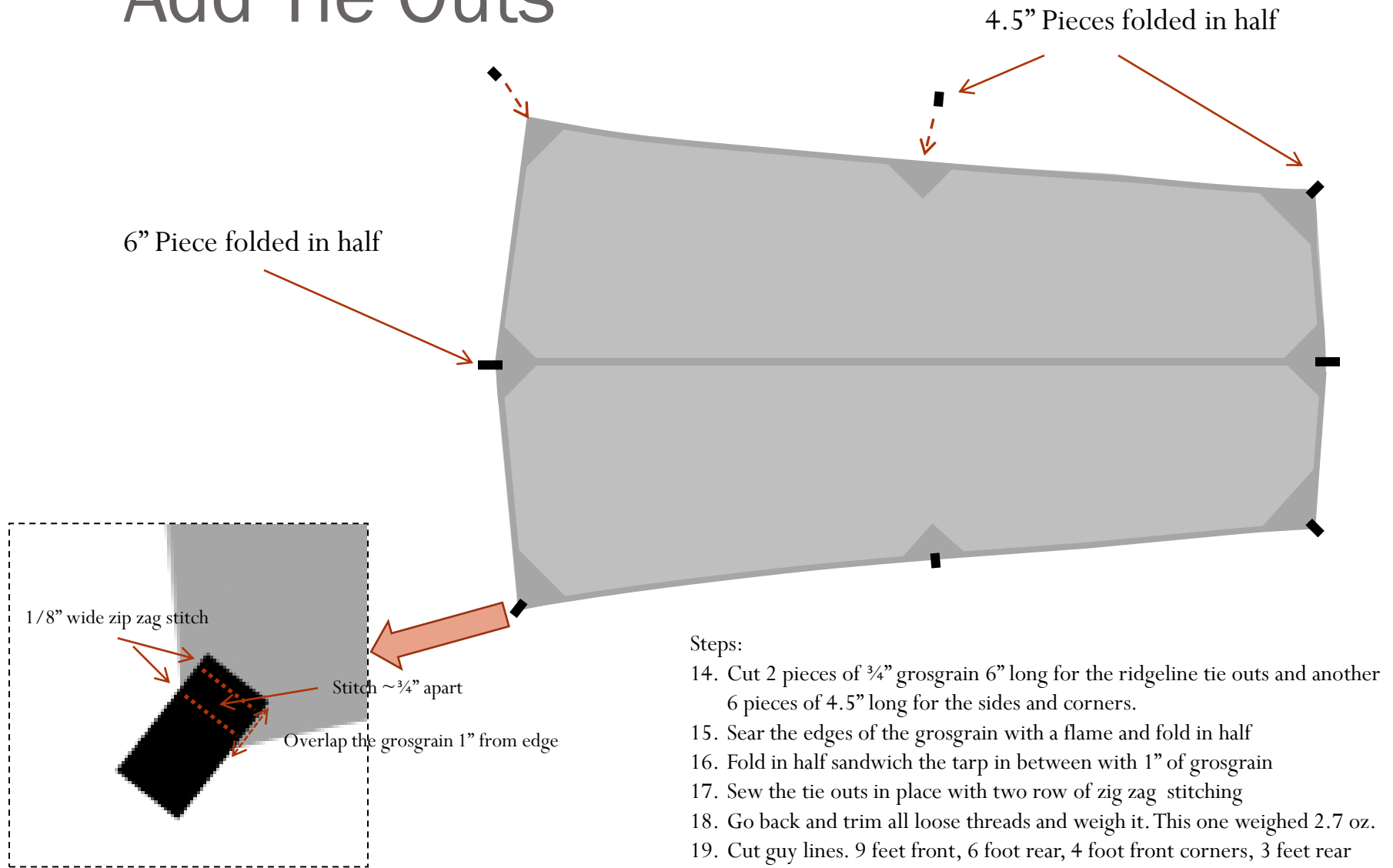
Hem the Edges



Steps:

12. Double fold the edges over $\frac{1}{2}$ " inch for hemming
13. Hem the edges $\frac{3}{8}$ " from the edge

Add Tie Outs



Steps:

14. Cut 2 pieces of $3/4$ " grosgrain 6" long for the ridgeline tie outs and another 6 pieces of 4.5" long for the sides and corners.
15. Sear the edges of the grosgrain with a flame and fold in half
16. Fold in half sandwich the tarp in between with 1" of grosgrain
17. Sew the tie outs in place with two row of zig zag stitching
18. Go back and trim all loose threads and weigh it. This one weighed 2.7 oz.
19. Cut guy lines. 9 feet front, 6 foot rear, 4 foot front corners, 3 feet rear corners, and 26" for sides.

Finished Tarp

