

JackPack v2

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1 Description

The JackPack is a "Jack-of-all-trades" backpack. I designed it out of a need for a moderately sized, well-structured backpack I could use when traveling overnight or over a weekend. It isn't specifically ultralight, isn't specifically meant for backpacking, isn't specifically meant for day use, it's just a well-rounded backpack.

Dimensions: 11" x 7" x 20"

Total Capacity ~30L

Weight: 21 oz.

Features:

- Top zipper pocket
- Interior zipper pocket
- · Main body zipper
- Compression straps
- Large side stretch pockets
- Sternum strap
- Interior lining
- Rigid foam back
- · Back panel with spacer mesh and air channels

2 Materials

2.1 Fabrics

| Name | ID | Approximate Size | Example Materials |
|------------------------|-----------|------------------|---------------------------------|
| SHELL FABRIC | F1 | 1 linear ft. | 420D ROBIC® |
| LINING FABRIC | F2 | 1 linear ft. | 1.9 oz. PU-coated Ripstop Nylon |
| STRETCH FABRIC | F3 | 8" x 24" | Spandura |
| SPACER MESH | F4 | 24" x 20" | 1/4" Spacer Mesh |
| INTERIOR POCKET LINING | F5 | 10" x 18" | 3.4 oz. Pocket Mesh |
| THIN FOAM | F6 | 11" x 22" | 4mm (or 1/8") EVA Foam |
| THICK FOAM | F7 | 24" x 20" | 6mm (or ¼") EVA Foam |

2.2 Patterns

| Name | ID | Quantity | Fabrics |
|-----------------------|-----|----------|--|
| BOTTOM PANEL | P1 | 1 | 1x F1 |
| BACK FOAM LOWER | P2 | 1 | 1x F6 |
| BACK FOAM UPPER | Р3 | 2 | 1x F6 |
| BACK PANEL FOAM | P4 | 1 | 1x F7 |
| BACK PANEL LINING | P5 | 1 | 1x F2 |
| BACK PANEL LOWER | P6 | 1 | 1x F1 |
| BACK PANEL UPPER | P7 | 1 | 1x F1 |
| BACK SPACER LOWER | P8 | 3 | 2x F1 , 1x F4 |
| BACK SPACER UPPER | P9 | 6 | 2x F1 , 2x F1 (mirrored), 1x F4 , 1x F4 (mirrored) |
| FRONT PANEL | P10 | 2 | 1x F1 , 1x F2 |
| INTERIOR POCKET LOWER | P11 | 1 | 1x F5 |
| INTERIOR POCKET UPPER | P12 | 1 | 1x F5 |
| SIDE PANEL LINING | P13 | 2 | 1x F2 , 1x F2 (mirrored) |
| SIDE PANEL UPPER | P14 | 2 | 1x F1 , 1x F1 (mirrored) |
| SIDE PANEL LOWER | P15 | 2 | 1x F1 , 1x F1 (mirrored) |
| SIDE POCKET | P16 | 2 | 1x F3 , 1x F3 (mirrored) |
| SHOULDER STRAP | P17 | 2 | 1x F1 , 1x F1 (mirrored), 1x F4 , 1x F4 (mirrored) |
| SHOULDER STRAP BASE | P18 | 2 | 2x F1 |
| SHOULDER STRAP FOAM | P19 | 2 | 2x F7 |
| TOP PANEL BACK | P20 | 2 | 1x F1 , 1x F2 |
| TOP PANEL FRONT | P21 | 2 | 1x F1 , 1x F2 |
| TOP PANEL LINING | P22 | 2 | 2x F2 |
| ZIPPER TAB | P23 | 6 | 4x F1 , 6x F2 |

2.3 Components

| Name | ID |
|----------------------|-----|
| SHOULDER STRAPS | C1 |
| STERNUM STRAP | C2 |
| HAUL LOOP | C3 |
| SHOULDER STRAP BASES | C4 |
| FRONT CORDAGE | C5 |
| COMPRESSOR STRAPS | C6 |
| TOP ZIPPER | C7 |
| INTERIOR ZIPPER | C8 |
| BODY ZIPPER | C9 |
| SIDE POCKETS | C10 |

Total Components

| Part | Number | Size |
|-------------------------|--------|-------|
| ¾" WEBBING | - | 136" |
| ¾" LADDER LOCK | 4 | - |
| ³ 4" BUCKLE | 1 | - |
| ¾" STRAP SLIDER | 2 | - |
| ³ 4" ELASTIC | - | 7.5" |
| 1/8" (3mm) CORDAGE | - | 70" |
| CORDAGE LOCK | 1 | - |
| BEASTEE DEE RING | 6 | - |
| #5 YKK ZIPPER COIL | _ | 18.5" |
| #5 YKK ZIPPER SLIDER | 2 | - |
| ZIPPER PULL | 4 | - |
| #8 YKK ZIPPER COIL | 1 | 36" |
| #8 YKK ZIPPER SLIDER | 2 | - |
| 1" ELASTIC BIAS TAPE | 2 | 8" |

2.3.1 SHOULDER STRAPS

| Part | Number | Size |
|----------------|--------|------|
| ¾" WEBBING | 2 | 18" |
| ¾" LADDER LOCK | 2 | - |

2.3.2 STERNUM STRAP

| Part | Number | Size |
|-----------------|--------|------|
| ¾" WEBBING | 1 | 4" |
| ¾" WEBBING | 1 | 9" |
| ¾" BUCKLE | 1 | - |
| ¾" STRAP SLIDER | 2 | - |

| ¾" ELASTIC | 1 | 2.5" |
|------------|---|------|
|------------|---|------|

2.3.3 HAUL LOOP

| Part | Number | Size |
|------------|--------|------|
| ¾" WEBBING | 1 | 7" |

2.3.4 SHOULDER STRAP BASES

| Part | Number | Size |
|------------|--------|------|
| ¾" WEBBING | 2 | 18" |

2.3.5 FRONT CORDAGE

| Part | Number | Size |
|------------------|--------|------|
| ¾" WEBBING | 6 | 3" |
| ⅓" (3mm) CORDAGE | 1 | 70" |
| CORDAGE LOCK | 1 | - |
| BEASTEE DEE RING | 6 | - |

2.3.6 COMPRESSOR STRAPS

| Part | Number | Size |
|----------------|--------|------|
| ¾" WEBBING | 2 | 10" |
| ¾" WEBBING | 2 | 3" |
| ¾" LADDER LOCK | 2 | - |
| ¾" ELASTIC | 2 | 2.5" |

2.3.7 TOP ZIPPER

| Part | Number | Size |
|----------------------|--------|------|
| #5 YKK ZIPPER COIL | 1 | 11" |
| #5 YKK ZIPPER SLIDER | 1 | - |
| ZIPPER PULL | 1 | - |

2.3.8 INTERIOR ZIPPER

| Part | Number | Size |
|----------------------|--------|------|
| #5 YKK ZIPPER COIL | 1 | 7.5" |
| #5 YKK ZIPPER SLIDER | 1 | - |
| ZIPPER PULL | 1 | - |

2.3.9 BODY ZIPPER

| Part | Number | Size |
|------|--------|------|

| #8 YKK ZIPPER COIL | 1 | 36" |
|----------------------|---|-----|
| #8 YKK ZIPPER SLIDER | 2 | - |
| ZIPPER PULL | 2 | - |

2.3.10 SIDE POCKETS

| Part | Number | Size |
|----------------------|--------|------|
| 1" ELASTIC BIAS TAPE | 2 | 8" |

3 Assembly

IMPORTANT INFO

Most seam allowances in this project are 3/8". However, 1/4" is used for zipper tape seams. All seam allowances are marked on the patterns.

Many patterns have annotations. Some dashed lines indicate cuts to be made (such as relief cuts and alignment triangles) and others indicate placement (such as the stitch and webbing placement).

3.1 Shoulder Straps

- 1. Cut out patterns P17 (SHOULDER STRAP) and P19 (SHOULDER STRAP FOAM). Gather supplies for component C1 (SHOULDER STRAPS).
- Place one SHOULDER STRAP of fabric F1 (SHELL FABRIC) and F4 (SPACER MESH) right sides together. Sew seam allowances, leaving top open. Trim down and/or make relief cuts around the curves, within the seam allowances, to help with foam insertion. This new part will be referred to SHOULDER STRAP SHELL.
- 3. Place SHOULDER STRAP FOAM inside the SHOULDER STRAP SHELL. The best method I found to do this is to act like you are trying to get a duvet in its cover by reaching inside the wrong side out SHOULDER STRAP SHELL and pulling the SHOULDER STRAP FOAM through. It will take a lot of effort to "unroll" the shell over the foam, but you should end up with the foam not peeking out from the shell.
- 4. Repeat for the other shoulder strap. Try to get the location of the foam relative to the opening of the shell the same for both shoulder straps.
- 5. For both shoulder straps, trim the foam down so that there is 3/8" of shell extending past the end of the foam.
- 6. Use the SHOULDER STRAPS component parts, loop a small amount of webbing through the first rung of the ladder lock and secure with a bar tack. Then position the ladder lock so that it slightly hangs off the shoulder strap and bar tack the lowest point through the entire shoulder strap (see P17 pattern annotations). Sew the rest of the bar tacks up the shoulder strap. Trim the webbing so that it aligns with the top of the SHOULDER STRAP SHELL. Refer to these two shoulder straps as FINISHED SHOULDER STRAPS.

3.2 Sternum Strap

- 1. Gather supplies for component C2 (STERNUM STRAP).
- 2. Loop and bar tack the shorter webbing through one strap slider and the non-adjustable side of the buckle.
- 3. Loop and bar tack the longer webbing through the other strap slider. Loop the other webbing end through the adjustable side of the buckle. Finish end of the webbing by folding over ~1/2" and bar tacking in the middle, and over the raw end of the webbing.
- 4. Take the elastic and fold halfway over itself. Sew a little past the 3/4" mark, and trim extra material. Place elastic loop over longer webbing side to hold down the extra adjustment webbing. Refer to this sternum strap as **FINISHED STERNUM STRAP**.

3.3 Back Panel

- Cut out patterns P2 (BACK FOAM LOWER), P3 (BACK FOAM UPPER), P5 (BACK PANEL LINING), P6 (BACK PANEL LOWER), P7 (BACK PANEL UPPER), P8 (BACK SPACER LOWER), P9 (BACK SPACER UPPER), and P18 (SHOULDER STRAP BASE). Gather supplies for components C3 (HAUL LOOP) and C4 (SHOULDER STRAP BASES).
- Place two BACK SPACER LOWER of fabric F1 (SHELL FABRIC) wrong sides together. Baste stitch within seam allowance, leaving the side open as annotated on P8. On this part, place wrong side of BACK SPACER LOWER of fabric F4 (SPACER MESH). Baste stitch within seam allowance, still leaving the side open as annotated on P8. Refer to this part as BACK LOWER PAD.
- 3. Place two **BACK SPACER UPPER** of fabric **F1** (**SHELL FABRIC**) wrong sides together. Baste stitch within seam allowance, leaving the side open as annotated on **P9**. On this part, place wrong side of **BACK SPACER UPPER** of fabric **F4** (**SPACER MESH**). Baste stitch within seam allowance, still leaving the side open as annotated on **P9**.
- 4. Repeat for both left and right **BACK SPACER UPPER** parts of the same respective materials. Refer two these two parts as **BACK UPPER PADS**.
- 5. Make relief cuts in BACK LOWER PAD and BACK UPPER PADS as annotated. Sew BACK LOWER PAD to lower cutout of BACK PANEL LOWER, right sides together. Sew both left and right BACK UPPER PADS in the left and right cutouts of BACK PANEL LOWER. Refer to this bottom back part as BACK LOWER PANEL.
- 6. Baste stitch **HAUL LOOP** webbing to the top of the **BACK LOWER PANEL**, using the edge of the spacer mesh and shell as the outside alignment of the webbing.
- 7. Baste stitch the **FINISHED SHOULDER STRAPS** to the top of the **BACK LOWER PANEL**, directly to the outside of the haul loop (on the spacer mesh portions). Make sure the bottom of the shoulder straps curve to the outside of the bag.
- 8. Align BACK PANEL UPPER to the top of the BACK LOWER PANEL, right sides together (the baste stitched haul loop and shoulder straps will be between the two). This may require making relief cuts at the hard angles (see P7 annotations). Sew the two parts together. Make bar tacks on the haul loop webbing, as well as the shoulder straps, for added strength. Refer to this as OUTSIDE BACK PANEL.
- 9. Place both BACK FOAM UPPER and BACK FOAM LOWER foam into pockets made by SHELL FABRIC for each of the pads. Baste stitch closed. Make sure the foam edge is ~1/2" from the fabric edge to ensure the eventual 3/8" stitch does not go over foam (plus margin). Trim down foam if needed.
- 10. Fold the bottom seam allowance of **SHOULDER STRAP BASE** (as annotated) wrong sides together. Top stitch close to the edge (<1/2"). Trim extra material from bottom corners. Fold in half vertically (as annotated). Take the webbing from **SHOULDER STRAP BASES** and feed © **2023 Anthony Needles**

- one end inside the folded material, starting from the top-stitched side, until the end of the webbing reaches the back edge. The webbing should be flush with the fold. Box stitch the webbing in between the material. Repeat for the other base.
- 11. Place **OUTSIDE BACK PANEL** wrong sides together with **BACK PANEL LINING** and baste stitch except at the top. Baste stitch both **SHOULDER STRAP BASE** as annotated on **P6**. Refer to this as the **FOAMLESS BACK PANEL**.

3.4 Top Panel

- 1. Cut out patterns P20 (TOP PANEL BACK), P21 (TOP PANEL FRONT), P22 (TOP PANEL LINING), and two P22 (ZIPPER TAB) each of fabric F1 (SHELL FABRIC) and F2 (LINING FABRIC) (a total of four). Gather supplies for component C7 (TOP ZIPPER).
- 2. Place both **TOP PANEL BACK** patterns wrong side together. Baste stitch inside seam allowance. Repeat for both **TOP PANEL FRONT** patterns.
- 3. Place two **ZIPPER TAB** of either material wrong sides together. Baste stitch around the perimeter, in the seam allowance. Repeat for remaining two zipper tab pieces.
- 4. Construct the top zipper panel by following the guide described in <u>Appendix A Zippers</u>, using TOP PANEL BACK, TOP PANEL FRONT, ZIPPER TAB, and TOP ZIPPER. The right side of the TOP PANEL BACK and TOP PANEL FRONT parts are the SHELL FABRIC sides. Trim the extra material of ZIPPER TAB. The resulting top zipper panel should be the same overall size of the TOP PANEL LINING. Refer to this part as OUTSIDE TOP PANEL
- 5. Place both **TOP PANEL LINING** patterns wrong sides together and baste stitch within seam allowance. On this part, place wrong side of **OUTSIDE TOP PANEL**. Baste stitch inside seam allowance. Refer to this top panel as **FINISHED TOP PANEL**.

3.5 Side Panels

- 1. Cut out patterns P13 (SIDE PANEL LINING), P14 (SIDE PANEL LOWER), P15 (SIDE PANEL UPPER), P16 (SIDE POCKET). Gather supplies for components C6 (COMPRESSOR STRAPS) and C10 (SIDE POCKETS).
- 2. Take elastic bias tape elastic for **SIDE POCKETS** and fold over the top side of the **SIDE POCKET**, sewing into place by using a wide and long zig-zag stitch (to allow stretching of the stitch, see **P16** annotation).
- 3. Find **SIDE POCKET** with a top sloping the opposite direction of the right side each **SIDE PANEL UPPER** (the slope of the side pocket should match the slope of the tension strap annotations on **P15**).
- 4. Place **SIDE POCKET** wrong side to right side of **SIDE PANEL UPPER**, aligning the bottom and sides. Baste stitch inside seam allowance.
- 5. Align top of **SIDE PANEL LOWER** and bottom of **SIDE PANEL UPPER**, right sides together. The stretch fabric of the pocket should be between the two layers. Make sure to match the sides annotated with "TO BACK" and "TO FRONT" on **P14** and **P15**. Sew the parts together. Fold the seam allowance up towards the upper part and top stitch ¼" from the previously created seam (this will be on the pocket stretch material). The resulting side panel should be the same overall size as the **SIDE PANEL LINING**. Refer to this part as **OUTSIDE SIDE PANEL**.
- 6. Take the shorter webbing and ladder lock from **COMPRESSOR STRAPS**. Make loop around first rung of the ladder and baste stitch to the **OUTSIDE SIDE PANEL** as annotated in **P15**.
- 7. Take the elastic from **C6** and fold halfway over itself. Sew a little past the 3/4" mark, and trim extra material. Place elastic loop over longer webbing side to hold down the extra adjustment webbing. Take the longer webbing and loop through the ladder. Baste stitch to the other side of **OUTSIDE SIDE PANEL**. Finish end of the long webbing by folding over ~1/2" and bar tacking in the middle, and over the raw end of the webbing.
- 8. Place **OUTSIDE SIDE PANEL** and **SIDE PANEL LINING** wrong sides together and baste stitch. Repeat all steps for other side panel. Refer to these side panels as **FINISHED SIDE PANELS**.

3.6 Front Panel

- Cut out patterns P10 (FRONT PANEL), P11 (INTERIOR POCKET LOWER), P12 (INTERIOR POCKET UPPER), and six P23 (ZIPPER TAB): four of fabric F2 (LINING FABRIC) and two fabric F2 (LINING FABRIC). Gather supplies for components C5 (FRONT CORDAGE), C8 (INTERIOR ZIPPER), and C9 (BODY ZIPPER).
- Construct the interior zipper panel by following the guide described in <u>Appendix A Zippers</u>, using <u>INTERIOR POCKET LOWER</u>, <u>INTERIOR POCKET UPPER</u>, <u>INTERIOR ZIPPER</u>, and two <u>ZIPPER TAB</u> of <u>LINING FABRIC</u>. Afterwards, trim the extra material of <u>ZIPPER TAB</u>. The resulting interior pocket panel should be the same overall size of <u>FRONT</u>. Refer to this part as <u>INTERIOR POCKET</u>.
- Feed each of the six pieces of webbing for FRONT CORDAGE into corresponding Beastee
 Dee ring (other D-rings, tri-rings, or simple webbing loops would also work), then fold in half
 and baste stitch as annotated for P8. Place FRONT and INTERIOR POCKET wrong sides
 together and baste stitch within the seam allowance. Refer to this front panel as
 COMPLETED FRONT PANEL.
- 4. Place two **ZIPPER TAB** of either material wrong sides together. Baste stitch around the perimeter, in the seam allowance. <u>Do not place these on the zipper coil yet.</u>
- 5. Mark the midpoint of the zipper coil and align with the midpoint of the top of the **COMPLETED FRONT PANEL**, right sides together. Following the zipper guide, start the 1st stitch at this midpoint and going up until ~2 inches away from the end of the coil. Start back at the midpoint and sew the other side down to approximately the same stop point.
- 6. Feed both zipper sliders onto either end of the zipper coil. Take both **ZIPPER TAB** and to both ends of the coil, according to the zipper guide. Try to match each side in length of zipper tab material that hangs off the ends of the zipper coil.
- 7. Trim down the two front/back facing sides of each zipper tab so that the width matches the zipper tape (and is parallel with the zipper tape long edges). Do not trim the side of the zipper tabs that extends passed the bottom edge of the **COMPLETED FRONT PANEL**.
- 8. On both sides, continue sewing the zipper stitch until the end of the front material. This will extend passed the end of the coil and continue to part of the zipper tab.
- Perform zipper top stitch, going over the 6 webbing loops (push them towards the inside of the front panel). After the top stitch is finished, bar tack each webbing loop (going over the top stitch). Refer to this front panel and body zipper part as FRONT PANEL BODY ZIPPER.

3.7 Top, Sides, and Front Unification

- 1. Gather FINISHED SIDE PANELS, FINISHED TOP PANEL, and FRONT PANEL BODY ZIPPER.
- Sew one FINISHED SIDE PANELS right sides together with its corresponding side of FINISHED TOP PANEL, matching the front and back directions as annotated on P13. Since the end of this stitch on the back side will be a part of a 3-D corner, start/stop the stitch exactly at the seam allowance (leaving 3/8" before the edge). See guide described in Appendix B - 3-D Corners. These 3-D corners will be finished when the back panel is added.
- 2. Repeat for other **FINISHED SIDE PANELS**. Refer to this part as **UNIFIED SIDE TOP**.
- 3. Mark the midpoint of free side of the zipper in FRONT PANEL BODY ZIPPER. Align with the midpoint of the front side of the UNIFIED SIDE TOP, right sides together. Following the zipper guide described in <u>Appendix A Zippers</u>, start the 1st stitch at this midpoint and going up until the end of the UNIFIED SIDE TOP. Start back at the midpoint and repeat the other side.
- 4. Perform zipper top stitch. After the top stitch is finished, bar tack tension strap ladder lock webbing and pocket elastic.
- 5. Trim off extra material that extends from the zipper tabs to match the bottom of the **SIDE POCKET** on one side and the bottom edge of the front part on the other. Essentially, there should be a continuous edge starting at the bottom of the side pocket **F3** (**STRETCH FABRIC**) material, through the zipper tab edges, through the bottom edge of the front.
- 6. Rip out the stitching within 3/8" of the two bottom edges of the where the side parts meet the zipper tab material. Since these two corners will become a 3-D corners, the stitch needs to end at the seam allowance start (3/8" from edge). This 3-D corner will be finished when the bottom panel is added.
- 7. Refer to this part as **UNIFIED TSF**.

3.8 Bottom and TSF Unification

- 2. Cut out patterns P1 (BOTTOM PANEL). Gather UNIFIED FRONT TOP SIDES.
- 3. Place both **BOTTOM PANEL** patterns wrong side together. Baste stitch within seam allowance. The **F1** (**SHELL FABRIC**) side is the right side. Make relief cuts as annotated in **P1**.
- 4. Right sides together, match the midpoint of the "TO FRONT" side of the **BOTTOM PANEL** and the bottom side of the front part of **UNIFIED FRONT TOP SIDES.** Sew at seam allowance. Start and stop the stitch exactly at the seam allowance (leaving 3/8" before and after the stitch). See guide described in **Appendix B 3-D Corners**. This completes the 3-D corners.
- 5. Continue out from the corner to complete stitching the bottom to side panels. Since the end of this stitch is for a 3-D corner, stop stitch at the 3/8" seam allowance (leaving 3/8" before and after the stitch). The relief cuts should help lining up the rounded corner. Make flush the back edges where the bottom and sides meet by trimming down material, if necessary. Refer to this part as **UNIFIED BTSF**.

3.9 Back and BTSF Unification

- 1. Cut out patterns **P4 (BACK PANEL FOAM).** Gather **FOAMLESS BACK PANEL**, and **UNIFIED BTSF**.
- Place BOTTOM PANEL portion of UNIFIED BTSF and FOAMLESS BACK PANEL right sides together, aligned on bottom edge (see annotation on BOTTOM PANEL). Sew at seam allowance. Since each corner of these panels will be a 3-D corner, start and stop the stitch exactly at the seam allowance (leaving 3/8" before and after the stitch). See guide described in <u>Appendix B - 3-D Corners</u>.
- 3. Align sides of both back and front parts right sides together and sew at seam allowance. Since each corner of these panels will be a 3-D corner, start and stop the stitch exactly at the seam allowance (leaving 3/8" before and after the stitch). This completes the bottom two 3-D corners.
- 4. Within seam allowance, bar tack tension strap webbing and pocket elastic, on both sides, for added strength.
- 5. Attempt to place **BACK PANEL FOAM** into open top of **FOAMLESS BACK PANEL**. It may take a lot of massaging to get it to lay flat. Trim off excess foam from the sides if it won't stay flat. When satisfactory, make sure the foam top edge is ~1/2" from the fabric edge to ensure the eventual 3/8" stitch does not go over foam (plus margin). Trim down foam if needed.
- 6. Align top side of the back panel and the back side of the top panel right sides together. Sew at seam allowance. Since each corner of these panels will be a 3-D corner, start and stop the stitch exactly at the seam allowance (leaving 3/8" before and after the stitch). This completes the top two 3-D corners.
- 7. Refer to this as the UNIFIED JACKPACK.

3.10 Finishing the Pack

- 1. Feed cordage through front cordage loops, into cordage lock, and trim down to desired length.
- 2. Apply zipper pulls to each zipper slider.
- 3. Finish the internal raw edges. My preferred method is to use a zig-zag/overlock stitch.

Appendix A - Zippers

The method I use for doing zippers with zipper tabs is from LearnMYOG (check out his awesome patterns and guides at www.learnmyog.com). The guide can be found here: Pro-level zippers for your gear projects the easy way (starting at 1:17 for zipper tabs, then starting from the beginning for the top/bottom panels).

The patterns are sized so the when the panels are aligned the first stitch is made ¼" from the edge of the zipper teeth. Then, when flipping the material back over and top stitching, the top stitch should be ½" from the edge of the zipper teeth.

It's recommended that after the first stitch but before the top stitch, the raw edges of the zipper coil/fabric are finished with a zig-zag/overlock stitch.

The zipper tab pattern (**P21**) is oversized and meant to be trimmed after being sewed onto the zipper coil. Don't forget to attach zipper(s) before closing off the ends of the zipper coil!

Appendix B - 3-D Corners

A good guide on doing 3-D corners can be found from LearnMYOG (check out his awesome patterns and guides at www.learnmyog.com). The guide can be found here: Trick to sewing crispy 3D Boxed Corners for MYOG backpacks.