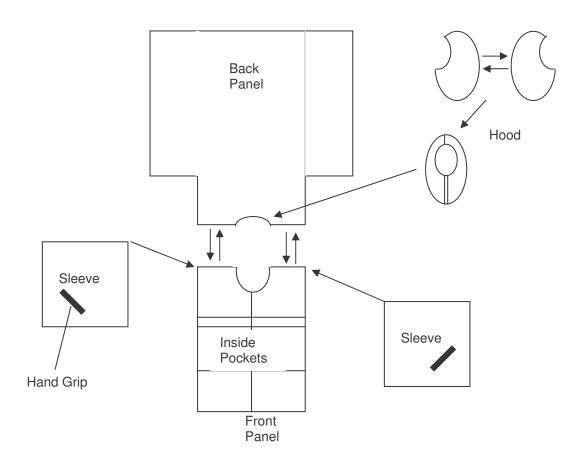
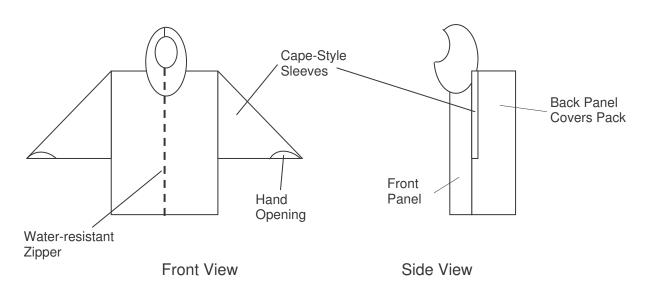
Figure 1. Schematic Assembly of the Parcho "Lightweight Backpack" model illustrated.





**Finished Parcho** 

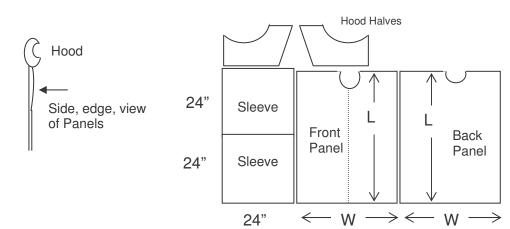
# Figure 2. Three Back Panel Configurations & Silnylon Layouts

The three models vary only in the shape and dimensions of the Back Panel needed to cover No Pack, a Lightweight Backpack, or a Large Backpack. They are illustrated schematically (sleeves omitted for clarity) and dimensionally below. The dimensions of width, W, and length, L, are fitted to your height and weight. D is the depth of your pack, and H its height above your shoulders. Those 4 dimensions, explained on Page 4, set the minimum quantity of silnylon for the main body.

### Material Layout for "No Pack"

OK for small pack, fanny pack or hydration pack

Minimum material required:



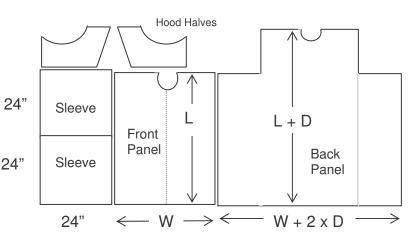
## Material Layout for

# "Lightweight Backpack"

Pack depth = D. Pack projects less than 5" above shoulders. Most vesatile, and easy to layout and sew.

Minimum material required:

$$24" + 2 \times W + 2 \times D =$$



# Material Layout for

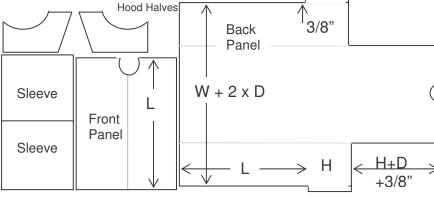
## "Large Backpack"

Pack projects above shoulders by H inches. Pack depth = D. Complicated. A cost of heavy packs.

Min. mat'l required: 24" + W + L + 2xH + D + 3/8" =

Н

24" Sleeve Sleeve 24"



24" L + 2xH + D + 3/8"

#### **Materials List**

(3 to 4½ yd.) 1.1 oz. ripstop nylon, silicone-coated, ("silnylon"), main, body color

3 yd. maximum for "No Pack" model

4 yd. maximum for "Lightweight Backpack" model 4½ yd. maximum for "Large Backpack" model

2/3 yd. (2 ft.) silnylon, trim color, for Pockets and Hood Visor backing

(Gray or silver is best - identifies inside & top of Parcho quickly & easily.)

2 yd. 1/2-inch Grosgrain ribbon

1 each #5 coil zipper, YKK Uretek H<sub>2</sub>O resistant, one way separating

38" length from Quest Outfitters, 800-359-6931,

46" length from Outdoor Wilderness Fabrics, 800-693-7467

You will cut the zipper to L-2" (i.e., 2" shorter than the length of the Front Panel). Actually the zipper

can be a few inches short of this ideal, calculated length; it only leaves the front bottom open

(unzipped) above the knees.

1 each double tab slider for #5 YKK coil zipper

4 each (2 extra) top stops for #5 coil zipper

2 yd. drawcord

2 each cordlock (minitoggle)

1 yd. 3/4-inch hook and loop fastener (like Velcro)

110 yd. Thread, 100% polyester or nylon - main, body color or black

Parcho Pattern and above materials available from:

www.questoutfitters.com, 800-359-6931 www.seattlefabrics.com, 206-525-0670.

Other fabric suppliers are www.therainshed.com, 541-753-8900; Outdoor Wilderness Fabrics, www.owfinc.com, 800-693-7467.

#### **Rain Pants**

Simple rain pants that can easily be pulled over clothes and shoes are recommended. When made out of silnylon they weigh only ~3 oz. and easily store inside the Parcho pocket making them handy and easy to slip on and off as needed. One good pattern example is the generously-sized Rain Shed RS500, Pullover Pants (requires about 1 to 2 more yards of silnylon and 1.25 yards of 1" elastic).

Generally, wear the rain pants with the cuffs fully open to provide ease of use and a little ventilation to minimize moisture buildup. When you are hot in the rain, simply remove rain pants and hike in shorts underneath the Parcho. When you are cold in the rain, wear wind pants or long-john underlayer underneath the rain pants. Velcro closures for the cuffs may be useful in snow, or when standing around, inactive, in really cold weather - probably not too useful in 3-season hiking conditions.

## Sizing the Parcho

The Parcho can be ideally-sized (a rare opportunity) to both your body and your pack to keep it from being either 1) too small or 2) too large, unwieldy and subject to blowing up in the wind. To obtain this custom fit, you must determine the 4 basic measurements discussed and illustrated on the previous page. These 4 measurements will be used to determine the dimensions of the Parcho parts by simple addition, on the drawings for each part.

Now, we determine the two measurements that <u>adjust the Parcho size to your body</u>; they are a function of your height and your weight. Using the chart below, pick out the length, L, and width, W, for your height; then add to them both 1 inch for every 25 lbs. your weight is above the "ideal". Two examples:

- 1) 5' 3" / 120 lbs. Rounded up to 5' 4" to assure roominess. L=37" and W=27". No weight adjustment required because weight is close to ideal.
- 2) 5' 10" / 285 lbs. From chart below L = 40" and W = 30". Body weight is 131 lbs. greater than "ideal" weight of 154 lbs. (285 – 154 = 131). 131 lbs. divided by 25 lbs. per inch = 5.2" to add to both L and W; round off to even 5". Final L = 45" and W = 35". Be assured that these body measurements work. The previous two examples are actual, successful, fittings that have been made for real people. If dimensions are borderline, go to next inch larger.

For my body,  $L = \underline{\hspace{1cm}}$  inches, and  $W = \underline{\hspace{1cm}}$  inches.

Personal Height	Length / Width	"Ideal" Body Weight	Personal Height	Length / Width	"Ideal" Body Weight
5' 0"	35" / 25"	109 lbs.	6' 0"	41" / 31"	162 lbs.
5' 2"	36" / 26"	118 lbs.	6' 2"	42" / 32"	171 lbs.
5' 4"	37" / 27"	127 lbs.	6' 4"	43" / 33"	180 lbs.
5' 6"	38" / 28"	136 lbs.	6' 6"	44" / 34"	189 lbs.
5' 8"	39" / 29"	145 lbs.	6' 8"	<b>45</b> " / <b>35</b> "	198 lbs.
5' 10"	40" / 30"	154 lbs.	6' 10"	46" / 36"	207 lbs.

Ideal body weights reccomended by Steven B. Halls, www.md/idealweight/body. Values for women and men were averaged here for simplicity.

Now, let's <u>decide on the pack size</u>, if any, we will be wearing under the Parcho. Measure the depth, D, by laying the loaded pack on a flat surface. Since the pack space in the Parcho covers the whole width of the Parcho back, small high points can be ignored; something near the average depth of the pack is probably best. If in doubt, a little larger is better than too small.

My pack Depth, **D** = \_\_\_\_\_ inches for no pack usage.)

Next, put on the pack and see if it projects over your shoulders more than a few inches. Anything up to about 5 inches could be ignored for simplicity of sewing and ease of use with and without a pack; almost all lightweight backpacks do not require a vertical projection of the Parcho's Back Panel. If your pack projects far above your shoulders, accept the extra complication of the sewing.

My pack top is above shoulders by Height, H = inches. (Ignore anything less than ~5 inches and use a value of H equal to 0 inches.)