

## ***COAT SPECIFICATIONS***

### **1. PATTERNS**

- a. Patterns are to be marked, graded, and cut using a computerized system to insure accuracy.
- b. Patterns are to cover a full range of sizes, including male, female, short, regular, long, and extra long from size 26 to 60.

### **2. INNERLINING**

- a. The innerlining is the foundation of the coat and is to carry with it a complete limited lifetime warranty.
- b. The innerlining is to consist of 4 layers.
- c. The principle layer of the coat front is formed of preshrunk highly resilient natural hair canvas of 7.5 ounce per square yard. The hair content is 32% with 36% rayon, 29% cotton, and 3% polyester. The weft and filling yarns are spun from 45% hair, 50% rayon, and 5% polyester to provide superior shaping resilience and bounce. The Hymo canvas is cut and individually shaped to fit each coat, both the left and right coat fronts.
- d. The second layer is an additional chest piece of 4.53 ounces per square yard Monoflex. It is to be 6 " x 7 1/2" in dimension and darted in armhole area. This piece is specifically designed as a shoulder reinforcement in finely tailored garments to maintain the shape of the shoulder and chest area of the coat.
- e. The third layer is unique, being of the same natural hair canvas as the coat front, deeply darted in the upper armhole area to provide natural shape. It is wider than the Monoflex and extends deep into the coat front for resiliency in this area.
- f. The fourth layer, or felt chest piece area, is a heavy 4.2 ounces per square yard needle punched, supported felt. It extends 14" or more from the shoulder seam. Its shrink proof, non-woven characteristics adds more resilience to the chest and area below the armhole.
- g. The entire four-layered innerlining is sewn together with 18-21 rows of zigzag stitching.
- h. For white and translucent light colors of shell fabric, the innerlining is to be constructed as above with an additional top layer of white Poly-sil. This layer is used to prevent shadowing of the natural canvas through the outer shell fabric. It is to be 2.9 oz./sq. yd. and a construction count of 78 warp x 54 fill with a fiber content of 50% poly/50% preshrunk cotton.

- i. Under no circumstances is the Hymo and sewing operation to be substituted with a fusing or gluing operation.
- j. Under no circumstances is a white synthetic coat canvas to be used as an innerlining, in lieu of the specified Hymo/Monoflex layers.

### **3. SHOULDER PADS**

- a. Shoulder Pads are to consist of heavy density, 100% PREMIUM grade preshrunk "Harsh" quality combed Indian cotton ("Harsh" quality being resilient, bouncy).
- b. It is a large semi-oval shape, approximately 10" x 7" on extended shoulder patterns. Dimensions for regular shoulder patterns are to be approximately 4 1/2" x 7 1/2".
- c. The entire pad is covered with a print cloth, and quilt stitched throughout to prevent wadding.
- d. Shoulder Pads consisting of multiple layers of needle-punched preformed polyester are not acceptable.
- e. Stay cloth is not acceptable for the shoulder pad, due to stiffness.

### **4. SLEEVEHEAD PAD**

- a. There is a 1 3/4" sleeve head pad composed of a 65/35 Poly/Cotton woven cover sewn into the armhole of the coat assembly.
- b. It is reinforced with soft white 100% Polyester needle punch filler.
- c. Strips of coat canvas are unacceptable for use as sleeve-head padding.

### **5. LINING**

- a. Coat linings are to be cut from a separate set of patterns designed specifically to fit the particular style of coat. Linings are not to be cut from coat patterns and then cut down.
- b. Lining material is to be the highest quality polyester twill; non-toxic, perspiration resistant, color fast, and non-shrinkable. It is to be fully dry-cleanable.
- c. Its composition is to be 124 warp x 72 fill and it is to meet government specifications.
- d. There is a pleat down the center back in the shoulder area to allow fullness.
- e. The lining is COMPLETELY sewn around the armhole, NOT just tacked.

### **6. PERSPIRATION SHIELD (see illustration #1)**

- a. The perspiration shield is secured in the lower part of the armhole and is approximately 4" square.
- b. It is made of an absorbent wool flannel, consisting of 85% wool and 15% nylon material. It is to be double sponged to prevent shrinkage.

- c. The shield is edged all around with a pre-shrunk bias poly/cotton finishing tape and completely sewn into the armhole area. Merely "tacking" the shield to the lining is not acceptable.
- d. Shields made of scraps from cutting the outer coat whipcord fabric are not acceptable.

## **7. POCKETS (see illustration #2)**

- a. All inside pockets are to be cut, sewn, and turned automatically with a double piped lock-stitch machine and reinforced with a non-woven fabric.
- b. Pockets are to be constructed with hidden inside bartacks with welts of the same outer fabric as the coat.
- c. There is a 1 1/2" whipcord fabric extension down into the pocket, from the opening edges.
- d. Pocketing material is to be 70/30 poly/cotton, 50/50 in the warp and 100% poly in the fill.
- e. Pocket is to be "bagged" with no open seams at the bottom.
- f. Pockets made of lining or lightweight material are not acceptable.

## **8. TAPING**

- a. Seams which are subject to usual stress, are to be taped with a preshrunk cross-wound cotton tailoring tape.
- b. Areas to be taped are down the inside coat front, extending around bottom sides and back, and around the armhole. There must be a 3-4" area at the upper back shoulder area of each sleeve seam, where the cloth tape is omitted. This allows proper "Stretch" across the shoulders during arm lift maneuvers.

## **9. SLEEVES**

- a. The sleeve is to be "felled" into the top of the armhole, using a special felling stitch which allows fullness, evenness, flexibility and strength.
- b. The bottom half of the armhole is machine lock-stitched to give the greatest strength in this high stress area.
- c. Sleeves are to be cut utilizing a 60/40 pattern per fine tailoring. They will be pitched forward 3-4 degrees in the armhole to allow for the arm-lift associated with playing a musical instrument.
- d. The cuff, or hem, is to have a generous 2 1/2" turn-under consisting of fabric and lining secured and constructed to allow easy altering of sleeve length. This is done utilizing an "easy alter" chain stitch.

## **10. SHOULDER LOOPS**

- a. Shoulder loops are to be die-cut to insure uniformity and are cut in two pieces.

- b. Shoulder loops are to be reinforced on each layer with heavy Pellon.
- c. They are sewn together on the inside, turned, and top-stitched all around the edge for body and durability.
- d. All buttons for attachment of shoulder loop and accessory items will be reinforced with backing buttons.

## 11. TRIM

- a. Coat front trim (braid, welts, appliques, embroidery, etc.) is to be applied only through the outer fabric. That is, it is NOT to be sewn through the chest piece four layer innerlining, nor the polyester twill coat lining. All trim is to be sewn before the lining is joined to the coat.
- b. Any trim using 1/4" unfilled tubular braid is to be applied with a FB or FBN corn straight 2 needle machine, then it is applied in cloverleaves, turned edges or other circular designs. The benefits of such application provide that the trim (A) lays flat to the fabric surface, and that (B) the stitching is equidistant from each edge along the entire border of the trim. Using a single needle stitch sewn twice is not acceptable. Trim applied with only one single needle stitch in the center is not acceptable.

## 12. HARD COLLAR (see illustration #3)

- a. The inner core foundation of the standing collar is .014 Mylar.
- b. There is a laminated layer of non-woven Pellon P15 on the inboard side of the entire foundation.
- c. A stainless steel riveted hook and eye is to be the front closure. The hook and eye are riveted through the Mylar, Pellon and two layers of collar lining material. It is to be placed at the optimum angle to insure proper tension and comfort.
- d. A "sewn" hook and eye is not acceptable.
- e. The collar lining consists of two layers of Burlington Mills Cramerton fabric, which is 65% polyester and 35% combed cotton, pre-shrunk and non-wicking.
- f. Seven male gripper snaps are placed through both layers of the collar lining material. The snaps are supported on the inside by the laminated non-woven Pellon which also serves as a protective layer between the Mylar and the snaps. Female gripper snaps applied to the collar lining are unacceptable.
- g. The outboard side of the standing collar is to be covered with a whipcord fabric, as specified by the design specifications.
- h. The top edge of the Mylar base is bound with Cramerton fabric and has a finished welted seam on each side. The whipcord fabric is doubled over the top of Mylar base, along with the two layers of collar lining, and stitched along the top edge. This 5-layer construction results in a "beaded" edge and serves as a protection all along the top edge of the liner. This is accomplished with a SINGLE row of locked stitching through the Mylar base.

- i. A single layer of fusing tape or bridle-tape is not sufficient protection in this area and is not acceptable.
- j. The bottom edge of the standing collar is to be sewn through and through, to attach the double layers of Cramerton lining to the outer layer of whipcord. This row of stitching is immediately below the bottom edge of the Mylar foundation.
- k. Construction of the collar in this manner provides the most dimensionally stable garment, without the additional rows of needle holes.
- l. Braid trim, fabric welt, and embroidery are to be applied to the outer fabric of collar before assembly. This prevents sewing the trim “through” the Mylar core with additional rows of needle holes.

### **13. COLLAR LINER (see illustration #4)**

- a. The fabric used in the construction of the washable snap-in, replaceable liners is two layers of VISA treated polyester whipcord. The VISA treatment offers soil release properties in this washable part of the garment.
- b. The liner is to be die-cut in a curve to allow it to lie properly against the neck of the wearer.
- c. There are seven female gripper snaps evenly spaced and secured through both layers of liner fabric. These are to match up with male gripper snaps on collar lining.
- d. The top, bottom and rounded side edges of collar liner is to be bound with a finished binding of non-absorbent Cramerton fabric.
- e. There is to be a bartack at each end of the binding.
- f. The liner is to be positioned to extend 1/8" above the whipcord collar fabric.
- g. Each liner is to be sized to corresponding collar and numbered to match coat size.

### **14. SOFT COLLAR**

- a. Soft collars, lapels, and outer pocket flaps are to be hand shaped and cut according to fine quality tailoring practices.
- b. Bridle tape is to be placed at the lapel roll, to retain smooth lines and afford a permanent shape.
- c. Under-collar felt is to be pre-biased 50% wool/50% Rayon composite.
- d. All edges are to be topstitched (with the exception of satin lapels) through and through, from the facing edge through coat front lapels and collar to the opposite edge. Topstitching is to be 1/8" from edge.

### **15. SEAMS**

- a. Coat is to be completely machine stitched except in areas where specific tailoring requires other methods.

- b. The ends of all seams are to be backstitched not less than 1/4".
- c. Coat back is tailored with either a 2-piece back or 4-piece back, if needed, to facilitate insertion of contrasting color panels, trim, etc.

## **16. THREAD**

- a. Threads for seaming are to be 50/3 cotton wrap core thread, 70/2 poly wrap core thread, or 100/2 poly wrap core thread based on the strength requirements of the type of seam.
- b. All threads are to be heat resistant, vat dyed, sun-fast, dry-cleanable and moisture proof.

## **17. BUTTONS / BUTTONHOLES**

- a. High-quality metal buttons are to be used where specified and are to be attached by sewing, ring and washer, or toggle and washer.
- b. Buttonholes are to be manufactured using the cut-first method. The hole is to be cut-first, and the edge is to be covered with gimp and twist to cover the fabric and inner canvas edge. The back of the buttonhole is to be closed with a bartack reinforcement.

## **18. ZIPPERS**

- a. Zipper is to be heavy-duty brass with an auto-locking pull-slide. Tape is to be 9/16".
- b. Zipper is to be bartacked top and bottom and sewn to facing surface, not sandwiched in between shell fabric and facing.

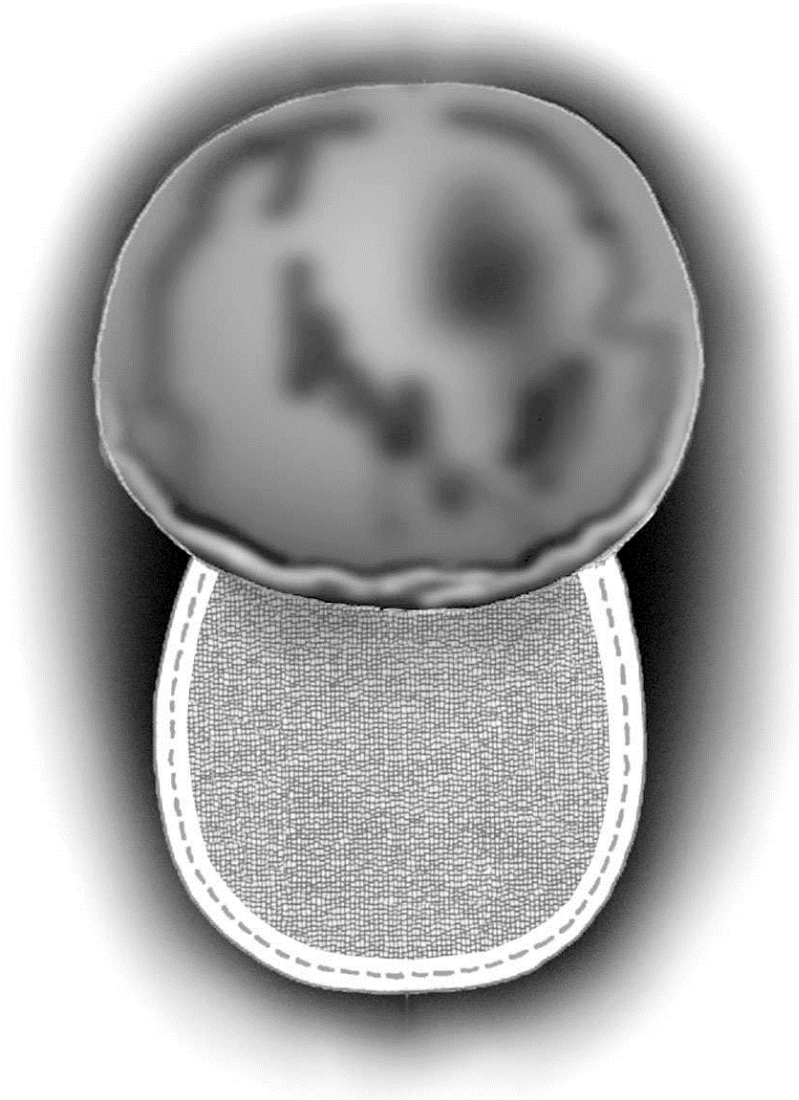
## **19. FUSING**

- a. Certain trim designs call for added reinforcement. This is to be done with Pellon 8557 engineered dot fusible. It is guaranteed against delamination and dry-cleaning. It is to "tear away" from areas not covered with braid or other trim.
- b. Use of Pellon SF134 as reinforcement for trim is unacceptable.
- c. The entire coat front outer fabric is to be reinforced, in addition to the "traditional" sewn innerlining, whenever looped braid designs are specified.
- d. When sleeve cuff trim is utilized, the lower sleeve is to be reinforced from the cuff bottoms, up as needed.

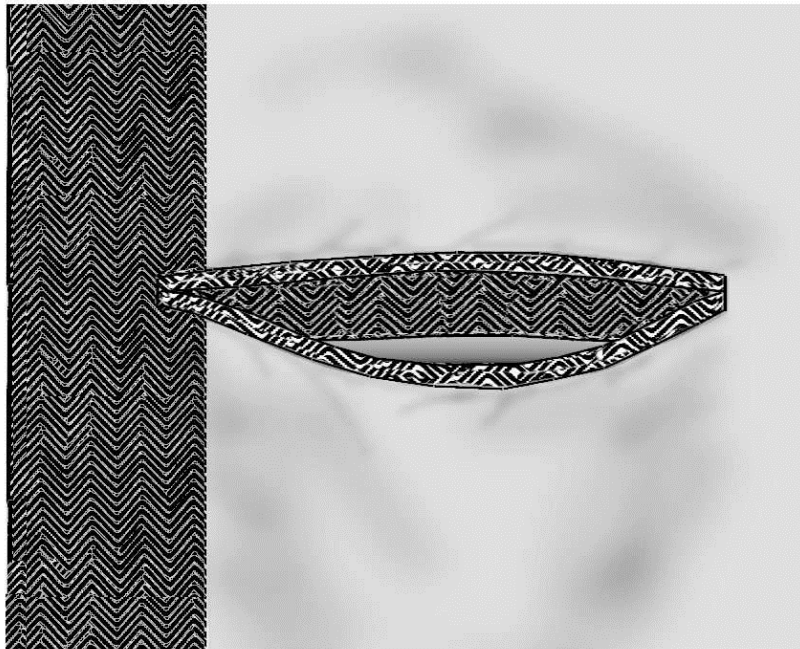
## **20.**

- a. Buyer may opt to change the coat specifications to be a washable item. The coat will have washable shoulder pads and will be fully lined. Front inner foundation, sleeve heads, and underarm shields may be omitted.

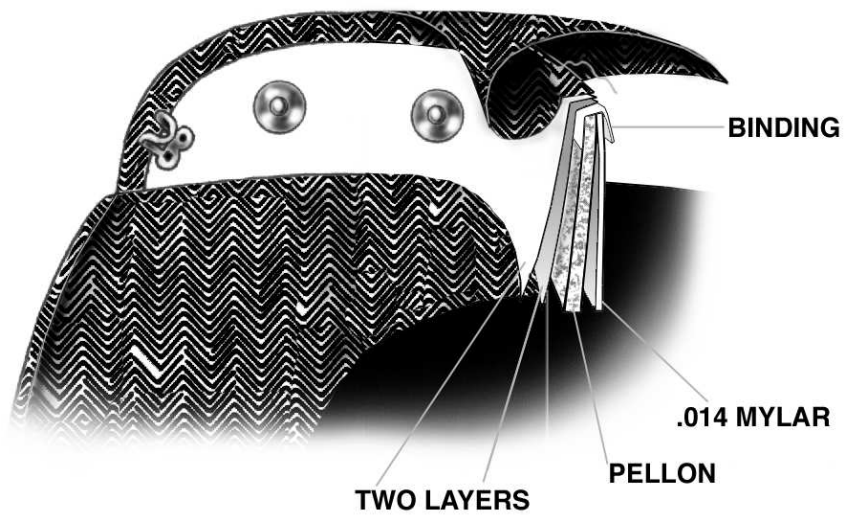
**Illustration #1**



**Illustration #2**



**Illustration #3**



**Illustration #4**

