

**URBAN OUTFITTERS**  
**MINIMUM QUALITY AND CONSTRUCTION STANDARDS:**

Urban Outfitters Inc. produces and sells high quality garments and accessories. All vendors manufacturing products for UOI must adhere to “best practice” industry standards regarding all aspects of product development & production.

This list does not include all of our standards; however, it does highlight the most important details. **Any deviation from these standards must be approved by the Technical Designer prior to the start of bulk production.**

**Urban Outfitters reserves the right to cancel, charge back or enforce repairs on any order if our minimum construction standards are not strictly followed.**

*All fit samples should be made using the approved quality fabrics, trims & wash treatments. If substitute qualities are used to make a fit sample and that sample is then approved for production then the vendor must assume full responsibility for testing & comparing all approved qualities against the substitute qualities to ensure the production garment will have the same feel, function, fit & appearance as the approved fit sample unless otherwise noted.*

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#### **ADJUSTERS–**

- Do not use plastic adjuster hardware.
- Must be set with 2” between center of slider and top inside edge of the “o” ring.
- Refer to the Tech Pack for required placement details.
- Refer to the “TRIMS” section for more details

#### **BARTACKS–**

- Use at all stress points (i.e. top and bottom of pocket openings) as specified on Tech Pack.
- Use reinforcement behind all bar tacks on inside of the garment:  
Reinforcement may be one of the following:
  1. Patch of specified quality interfacing
  2. Garment facing
  3. inside pocket bag
- Must be without broken, uneven, repaired or missing stitches
- Bar tack SPI must **not** compromise strength of the garment. Body fabric must not tear or rip when stress is applied to the body fabric around bar tacks.

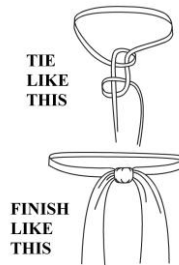
#### **BEADS/SEQUINS–**

- Must be attached with a maximum float of 1”. Floats must be double knotted every 1” unless specified otherwise.
- Include a minimum of 6 (medium to large) or 12 (small) extra beads for each quality used on the garment. Refer to the Tech Pack for required extra bead bag quality & placement specifications.
- Use appropriate reinforcement behind all embellishments as needed to prevent puckering / wrinkles in body fabric.
- Refer to “TRIMS” section for more details

## **BELTS–**

- Refer to the Tech Pack for required length, placement & construction requirements
- Must be finished at both ends according to the specifications in the Tech Pack.
- When Tie Belts are used & no bow is required the belt should be tied in a square knot as sketch below shows:

**SQUARE KNOT BELT**



- Tied belt tails should be equal length on each side of center knot unless otherwise noted.
- All belts should be hidden tacked to garment at either the side seam or at CB to prevent loss of belt on the sales floor. Tacking must be easily removed by customer and must not cause damage to garment or belt once removed.
- The tie / pack method of belt must prevent belt tail ends from hanging below the hem level of the garment when garment arrives for display on the sales floor.
- Refer to the “RIBBONS & GROSGRAIN” section of this manual for cautions regarding end finish if this type of trim is required for belt.

## **BELT LOOPS–**

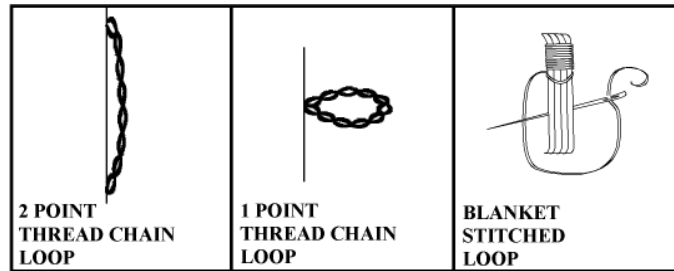
- Refer to the Tech Pack for required length and placement

### **Cut & sew loops :**

1. Must be clean finished & securely tacked. Any loose or hanging threads must be clipped.
2. Turned back (*under*) seam allowances (*tails*) at top and/or bottom must be trimmed to = maximum length of ¼” from fold edge.
3. Set waistband loops into bottom waistband seam unless specified otherwise.

### **Thread chain loops:**

1. Create using 2 ply (strands) of thread & a minimum SPI of 16 unless otherwise noted.
2. The thread denier (tex #) used to create the chain must compliment the weight of the body fabric. Refer to the Tech Pack for minimum denier specification.
3. Must support the weight of the coordinating belt without breaking the loop or causing damage to the garment.
4. Must be securely joined to the garment along a seam unless otherwise noted.
5. 1 or 2 point attachment may be used. Refer to the Tech Pack for specification.



## BUTTONS-

- Do not attach to a single ply. All buttons must be sewn through a minimum of 2 ply (layers) of fabric (i.e. body & facing or body with a re-enforcement patch set on underside).

### Hand Stitched Buttons-

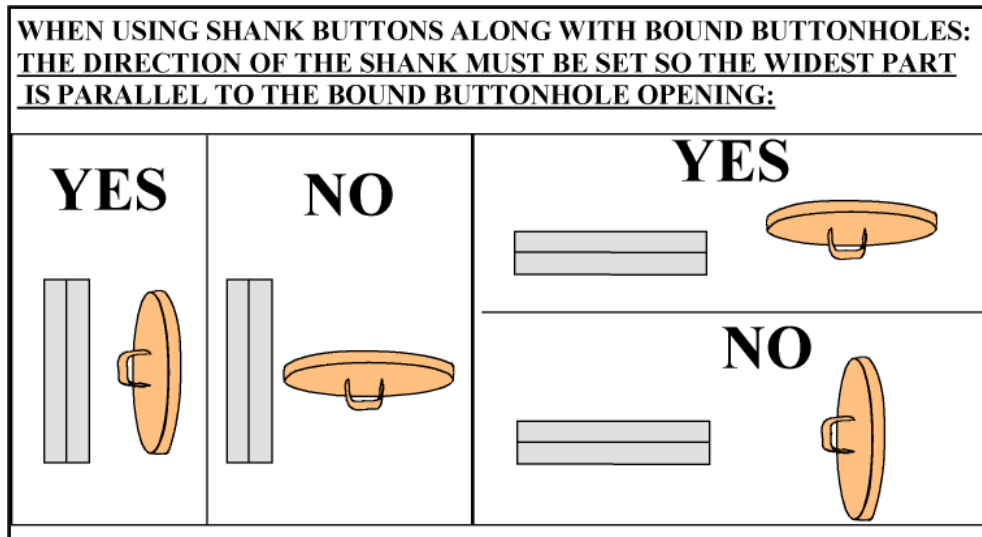
- Use needle threaded with **maximum** of 2 ply (thread strands).  
**Caution:** DO NOT thread needle with more than 2 ply.
- Use a **minimum** of 4 passes (stitches) thru each hole.  
The total # of required stitches may increase as combination of thread denier (TEX) & size of the actual hole in the button permits.
- Wrap shanks a **minimum** of 2 times & double knot securely for all functional buttons.
- The length of all thread shanks must = the total thickness of the finished body fabric & facing layers combined.
- Thread knots must be secured to fabric. Do not secure only to threads.

### Machine Stitched Buttons-

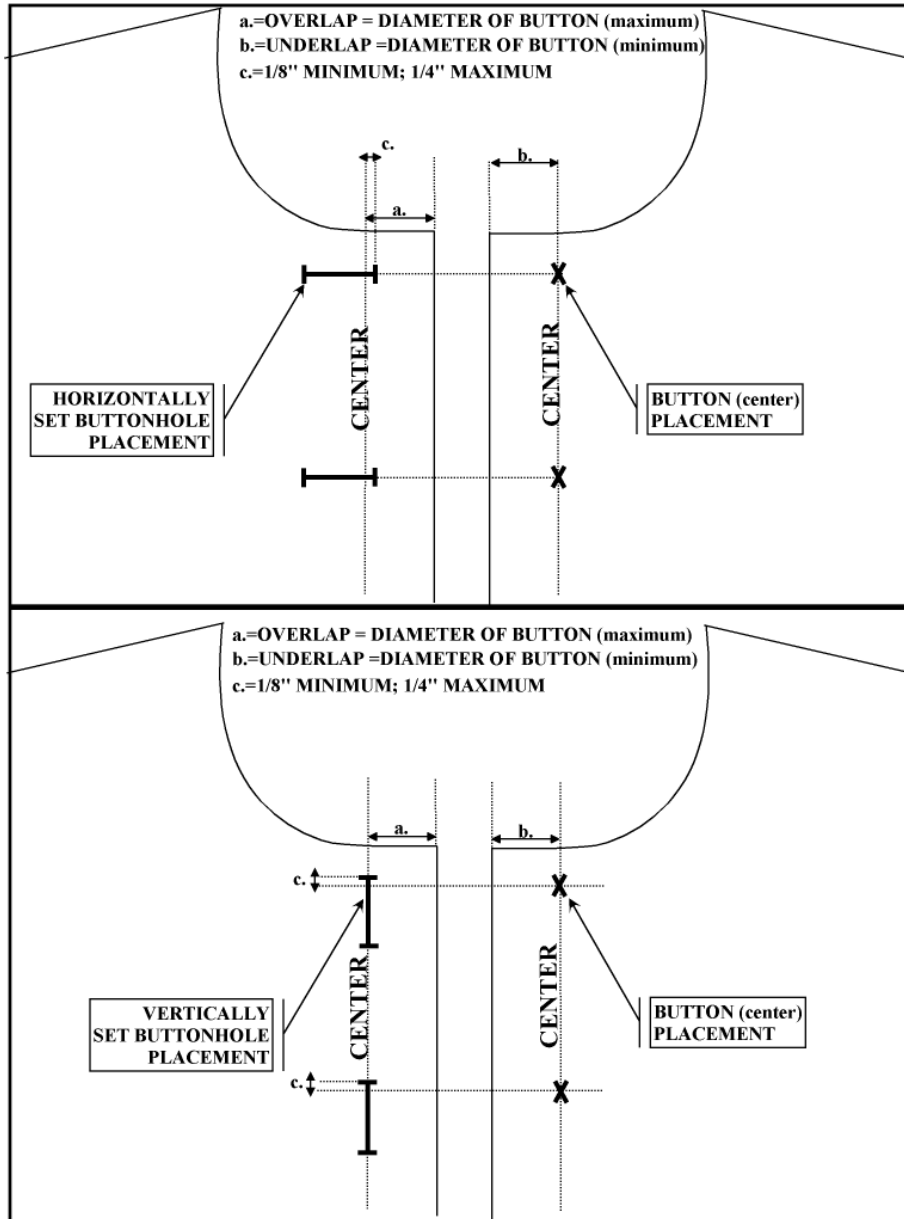
- Use Lockstitch 304 Button sewer (this machine interlocks the needle thread with a bobbin thread so that it will not unravel)
  - Each hole gets a minimum of 4 passes (stitches) and must be knotted securely.
- “Reinforcement” buttons should be used inside / behind all functional front closure buttons on all outerwear garments unless specified otherwise on Tech Pack.
  - Include 1 extra button for each quality used on the outside of the garment unless otherwise noted. Refer to the Tech Pack for required extra button bag quality & placement specifications.
  - If stitching used to attach the buttons or stitch the buttonholes is contrast (*different than the body color*) then 1 yard of contrast color thread should be included in the extra button bag -- **except** if contrast color used is white or black.
  - Delicate buttons must be wrapped prior to shipping as needed to prevent any damage to button during shipping.
  - Do not use shell buttons.
  - Refer to “TRIMS” section for more details.

## BUTTONHOLES–

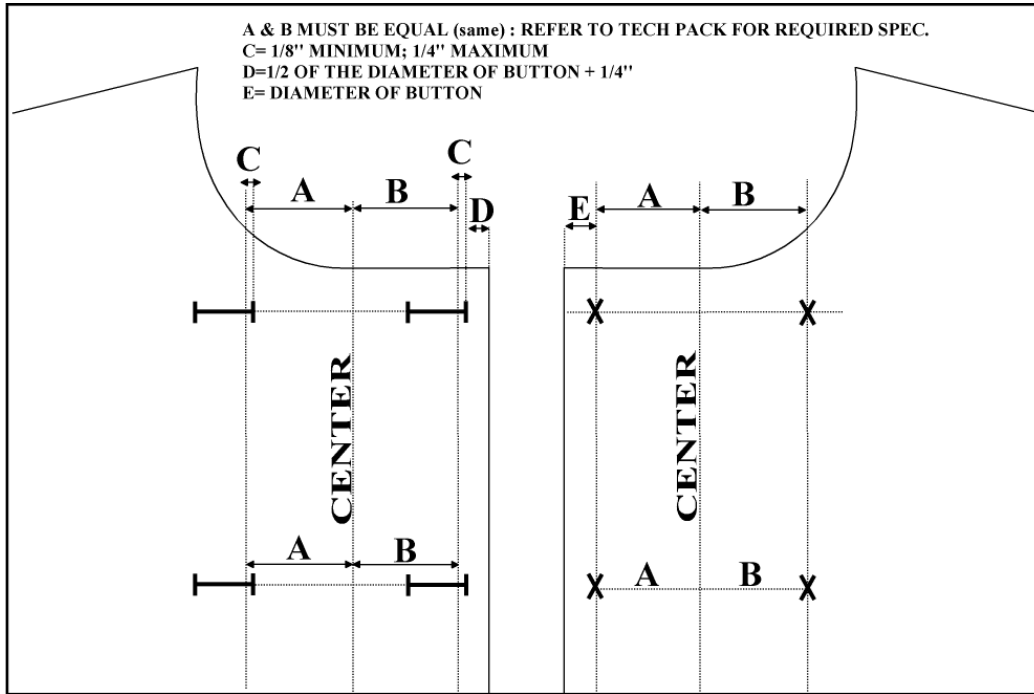
- Do not attach to a single ply. All buttons must be sewn through a minimum of 3 ply (layers) of fabric (i.e. body, facing & interfacing or body with a reinforcement patch set on underside).
- Buttonhole opening size must = Diameter of approved button plus the thickness of button (add an additional 1/8” to the buttonhole opening size when shank buttons or thick fabrics are used.)
- Buttonhole opening size for “Full Ball” buttons must = Distance around ½ of the total ball plus 1/8”.
- Buttonhole SPI must **not** compromise strength of the garment. Body fabric must not tear or rip when stress is applied to the body fabric around buttonholes.
- Must be without broken, uneven, repaired or missing stitches
- All machine stitched buttonholes must be cut open using sharp knives & trimmed to ensure no raw or frayed fabric; loose or hanging threads & interfacings must not be visible in the buttonhole opening.
- Must be correctly aligned and spaced for their size, location and end use (see sketches)
- SPI & interfacings used for Bound Buttonhole openings must be appropriate to the fabric to avoid frays and or holes at corners.



**Single Breasted Standard Button & Buttonhole Placement Requirements:**

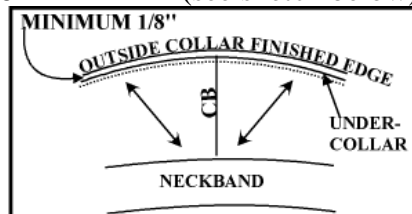


**Double Breasted Standard Button & Buttonhole Placement Requirements:**

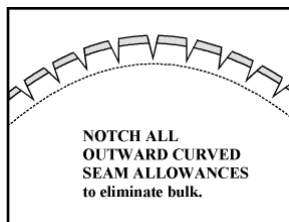
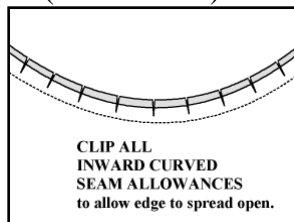


**COLLARS & LAPELS–**

- Under collars must **NOT** roll to outside (*become exposed*). The seam along the outside collar edge must be hidden; seam must roll to the under side of collar a minimum of 1/8" all around (see sketch below).



- Under collars must be interfaced unless otherwise noted. Refer to the recommended interfacing qualities as listed separately by product category.
- Do not use interfacing on Top collar unless specified otherwise.
- All seam allowances must be trimmed, notched and or clipped **as needed** to reduce bulk. (see sketches)



- Points must not be bulky. Seam allowances must be trimmed & points must be fully pushed out.

## **DARTS–**

- Darts on left & right sides of garment must have identical, size, shape and angle unless otherwise noted.
- Must not have dimples or bubbles at dart apex (point).
- Ends must be securely knotted / backstitched. Knot must not create bulk visible on the outside of the garment. All hanging threads must be trimmed.
- For Vertical darts, press “intake” toward the center of the garment unless otherwise noted.
- For Horizontal or French darts, press “intake” toward the bottom opening.
- For all darts having a flat intake greater than 1 1/4”: must trim seam allowance to 3/8”, finish edge & press as specified in Tech Pack unless otherwise noted.

## **DRAWSTRINGS –**

- Must be finished at both ends according to the specifications in the Tech Pack.
- Must be tacked to the garment in at least one location to prevent string from pulling out of tunnel. Tacking must be hidden unless otherwise specified.
- Drawstring tunnel opening must either be clean finished or have securely placed grommets, or buttonholes.
- Lining or interfacing layers inside tunnel must not be visible thru the tunnel opening hole.
- Knots in drawstring ends must be permanent
- Refer to the “RIBBONS & GROSGRAIN” section of this manual for cautions regarding end finish if this type of trim is required for drawstring.

## **ELASTIC & RIB–**

- Must extend to the fullest fabric width without breaking stitches or binding the body.
- Elastic must not roll over on itself. Tunneled elastic must be caught in the seam or tacked at the seams. If specified as “Full Elastic”, set circular.
- Elastic must be stretched evenly during application.
- Seams in the elastic, if present, must be lapped a minimum of 3/8” with 2 rows of secured stitching.
- Elastic quality used for production must be the same as used in the approved fit sample unless specified otherwise.
- Woven or Knitted elastics may be sewn directly to the garment or inserted in a casing (*since woven & knit elastics maintain their original width when stretched*).
- Braided elastic should not be sewn directly to the garment & should only be used inside casings (*since braided elastic becomes narrower when stretched*).

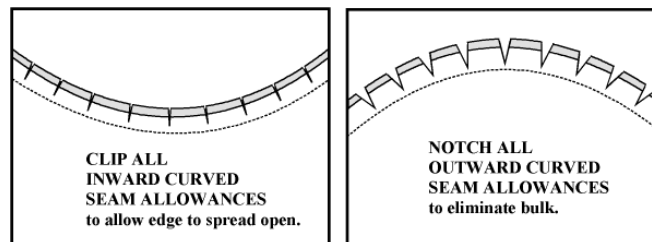


## **FABRIC & LINING–**

- Must pass all required performance tests.
- No fabric defects or shading within the garment allowed.
- Must not have repair to body, lining fabric or component parts.
- Must not have miscellaneous weaving defects.
- Must not break in print pattern, have poor print registration or dye streak.
- Must not have bow in fabric more than ½” in any 6” horizontal measurement or more than 1” over full body width.
- Must not have skewing (torque) in fabric more than 5% (on the length).
- Must not have substitutions, poor color match or print pattern as compared to master swatches.
- When different fabrics are combined within a garment: must ensure differential shrinkage does not exceed 2% unless otherwise noted.

## **FACINGS–**

- Must be interfaced unless otherwise noted. Refer to the recommended interfacing qualities as listed separately by product category.
- Must not “roll out” (*show on the outside of garment*). The seam allowances must be trimmed, clipped and or notched prior to pressing & under stitching. (see sketches)



- Must have under stitching (*set no closer than 1/16” away from the seam*).
- Must not ripple, pucker or toque.
- Must be securely tacked to body at all seams unless otherwise noted.
- Must be clean finished to the lining (*whenever lining is used*) unless otherwise noted. If there is no lining, the free edge of the facing must be finished with an appropriate seam finish to prevent raveling such as with a merrow (ISO#504), clean finish turnback or bound finish. Refer to the Tech Pack for specification.

## **FILL (outerwear)–**

- Must be attached to shell fabric so that it will not move or bunch. It must be consistent in feel/thickness thru out the body.
- Fill must not come through to the shell fabric intended to encase it.
- Fill should be trimmed out of all seam & hem allowances to reduce bulk.

## **FLY–**

- All raw edges must be finished to prevent raveling such as with a merrow (ISO# 504), clean finish turnback or bound finish. Refer to the Tech Pack for specification.
- The WB closure must be aligned/centered above the zipper teeth.

- The teeth must be completely hidden by the fly overlap when stress is applied to the WB & fly closure. (*Minimum 1/8" overlap required*).
- For button fly closures: the CF seam must not become exposed when buttons are fastened /closed & stress is applied.

#### **GARMENT DYED/PIGMENT DYED GARMENTS–**

- Must adhere to crocking standards unless specified otherwise.
- All efforts must be made to ensure fabric is stabilized to prevent crocking.
- If a garment fails the crocking test, the Technical Designer must be notified so that they can update the Tech Pack to include the appropriate disclaimer hangtag information. (Refer to the Tech Pack for approved tag design & wording.)

#### **HANGER LOOPS–**

- Required for all strapless garments or garments with wide necklines over 10".
- Refer to Tech Pack for required length, make and placement.
- Ends joined to the garment must be finished. Refer to the "RIBBONS & GROSGRAIN" section for more details.
- Quality & attachment method of loop must support the weight of the garment without causing damage to the garment or to the loop.
- Quality must not deteriorate due to normal use or after garment is cleaned according to recommended care.

#### **HEMS/BANDS & CUFFS -**

- Finish circular and clean finish unless otherwise noted.

#### **HEMS & EDGE FINISHES –**

- Must be smooth and flat with no pulling, ripples, puckers, pleats or skewing (torque).
- Hemline must be equal distance to the floor all around when worn unless garment design requires an uneven hemline.
- Thread covered edges (*i.e. purl merrow*) must be smooth, well covered and free from fray or hanging thread. Stitching along edges must not pull off or become free from fabric during normal wear or after garment is cleaned according to recommended care.
- Top stitching on hems must be set equal distance from the edge / bottom opening all around. (*Maximum tolerance for hem stitch height allows no more than 1/8" variance within a span of 6" for hems 1" or over. Maximum tolerance for hem stitch height allows no more than 1/16" variance within a span of 6" for hems under 1"*).
- Multi-needle top stitching tension must be properly set to prevent fabric "roping" between rows.
- Blind stitching tension & depth of bite must be properly adjusted to ensure stitches are hidden on the outside of the garment.
- Blind stitching must be secure; it must not fall out during normal garment use or after garment is cleaned according to recommended care instructions. (*Refer*

to our separate Knits, Soft Woven's or Structured Woven's construction standards sections for blind stitching SPI requirement.)

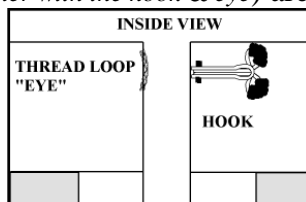
- Sleeves and bottom openings must be hemmed circular so that no seam allowances show.
- Stay stitching must be used if raw cut edges are requested unless specified otherwise. Refer to the Tech Pack for required placement.

### **HOOK FLEX –**

- The hook must align with the bar properly to ensure all garment edges & seams (*which are held together with the hook & bar*) are aligned & level.
- Do not set through single ply. Must be attached through a minimum of 2 layers of fabric (i.e. body & facing or body with re-enforcement patch set on underside).
- Refer to the “TRIMS” section for more details

### **HOOK & EYE**

- Attach using needle threaded with 2 ply (strands); each hole gets 4 passes (stitches), wrap shank minimum of 2 times, double knot securely. Caution: DO NOT thread needle with more than 2 plys.
- The hook must align with the eye properly to ensure all garment edges & seams (*which are held together with the hook & eye*) are aligned & level.



- Refer to the “BELT LOOPS” section for thread chain standards if thread chain/loop “eyes” are used.
- Refer to the “TRIMS” section for more details.

### **INTERFACING –**

- Refer to the interfacing section within the separate construction standards section in this manual for Knits, Soft Woven's & Structured Woven's for all standard interfacing specifications.
- Must be securely attached following manufacturer's instructions.
- Must not become loose or fall off during normal use or after garment is cleaned according to the recommended care instructions.
- Must be used on all inside plys of collars, lapels, neckbands, cuffs, plackets, waistbands, facings, & tailored hems unless otherwise noted.
- Must be smooth and flat without bubbling or puckering.
- Must be compatible with shell fabric in weight and shrinkage standards.
- Must not show through to right side of garment.
- Care requirements of the interfacing must be compatible with those of the garment fabric.
- Heavy interfacings should not be caught in seam unless specified otherwise.

- Woven interfacings must be cut on the same grain as the garment piece it is attached to & should be caught in the seams & trimmed to end max 1/8” past the seam line.
- Use interfacing in any areas requiring shape, body, support and reinforcement, and where seam impressions may be a problem.

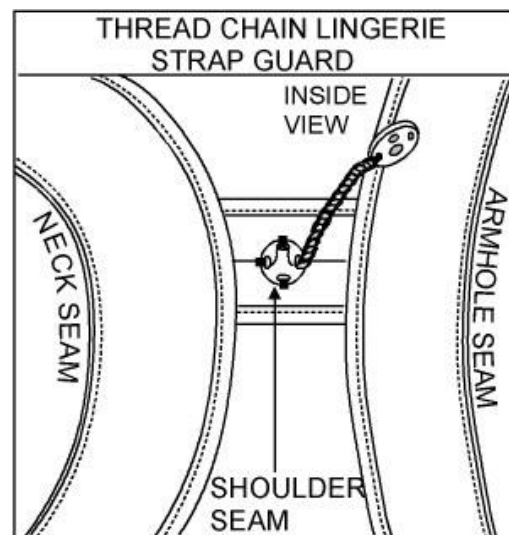
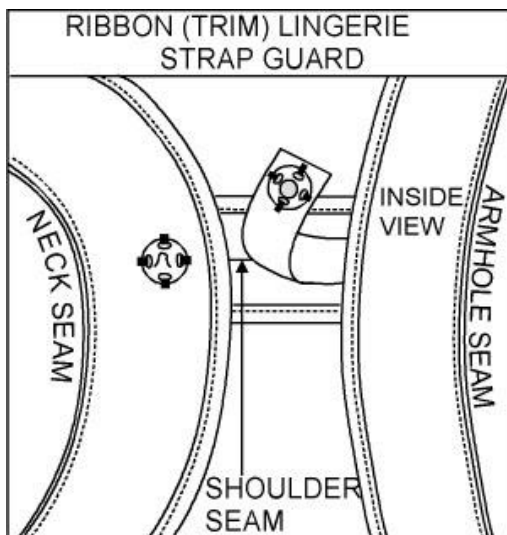
#### **LABELS–**

- Must be neatly and securely attached, according to Urban Outfitters standards and details listed in Tech Pack.
- Thread color used to attach the label should match the label color unless otherwise noted.
- If thread used to attach the label will be visible on the outside of the garment then the outside thread color must match the outside body color unless otherwise noted.

#### **LINGERIE STRAP GUARDS–**

- Refer to the Tech Pack for all construction & placement specifications.
- Refer to the “TRIMS” section for more details if trim is used to make strap guard.
- Refer to the “RIBBON & GROSGRAIN” section if ribbon or grosgrain trim is chosen to create the strap guard.

#### **Basic Lingerie strap guard options:**



#### **LINING–**

- Must not hang below the outside finished hem line; must finish a minimum of 1/2” above the outside finished hemline. Refer to the Tech Pack for exact specification.
- Must allow sufficient ease for body movement and differential shrinkage.

- Lining fit must conform to outside layer.
- Must be tacked to the body seam allowance at the shoulder and at the under arm.
- Free hanging lining must be joined to the body in at least 1 location (*along a seam*) using thread chain “swing tacks” with minimum 1” length. Swing tacks must not hang below the finished hem level.
- Seams must be finished so that there are no raw edges.
- Lining should be attached (clean finished) to the garment facings & hems whenever possible to ensure the appearance of the inside of the garment is neat and clean.
- Jacket/Coat linings must have 1” deep ease pleat at center back which should be stitched closed for 1 ½” from center back neck seam unless otherwise noted.

#### **LOCKER LOOPS–**

- Refer to the Tech Pack for required construction & placement.
- Quality & attachment method of loop must support the garment weight without causing damage to the garment or loop.
- Refer to the “TRIMS” section for more details if trim is chosen to create loop.
- Refer to the “RIBBON & GROSGRAIN” section if ribbon or grosgrain trim is chosen to create loops.
- See “Structured Woven Standards” section for more locker loop details.

#### **LOOPS–**

- Refer to “TRIMS” section if trim is chosen to create loops.
- Refer to “RIBBON & GROSGRAIN” section if ribbon or grosgrain trim is chosen to create loops.
- If loops are used for button closure, the opening size within the loop must be appropriate to the size of the button. Refer to the “BUTTONHOLES” section for details.
- Must be securely set into a seam (*i.e. between the body & facing or body & lining layers*). Loops must pull out of seam during normal use or when garment is cleaned according to the recommended care instructions.

#### **NAP FABRICATIONS–**

- All pieces of one garment must be cut with the nap running in the same direction.
- Cut all pieces “Nap Up” unless specified otherwise.
- Use needle board or “self” fabric press cloth when pressing to avoid damage to nap.
- Must ensure packing & shipping method will not crush or damage nap in any way.

#### **NEEDLE–**

- Needle size and type must be applicable to the operation and fabrication. (*i.e. ballpoint needles must be used in knits*)
- Routine needle changes are required during production to avoid possible fabric damages.

## **PACKING**

- Refer to the Tech Pack for all product specific requirements.
- Elevated trims (*i.e. flower brooches*) must be supported / protected as needed to prevent crushing or damage during shipping.
- Heavy weight packing tissue must be under all collars & lapels on all jackets & outerwear unless otherwise noted. Tissue must be twisted to form a minimum  $\frac{3}{4}$ " diameter log. The log ends must be taped together to ensure log will remain securely in place under the collar & lapel during shipping.
- Sleeves must be stuffed with tissue as needed to prevent over arm creases. (*Must avoid creases created by packing pressure during shipping*).

## **PATTERNED FABRIC**

- Must match all stripes, plaids or prints along the center front and center back seam lines (or rises for pants) unless otherwise noted.
- Patterns must be balanced on all collars, sleeves, cuffs and pocket pairs.

## **PLACKETS–**

- Always clean finish unless otherwise noted.
- Buttonhole stitching must not cross over any placket topstitching or seam line.
- Refer to the “INTERFACINGS” section for more details.
- See “Structured Woven Standards” section for more placket details.

## **PLEATS–**

- Knife pleats in the hems of skirts & coats should be tacked closed with loose x tack unless otherwise noted.

## **POCKETS–**

- Pocket bags must be finished so that there are no raw edges.
- Internal pocket bags must not extend below finished hem level.
- Pockets must be evenly aligned on left & right sides of garment unless specified otherwise.
- Any pocket placement markings must not be visible.
- Pockets must lay flat without pulling, twisting or rolling.
- Angled & curved shape pocket openings must lay smooth & flat. Must use appropriate reinforcement inside along seam as needed to prevent stretching & gapping.
- Pocket facings must not be set into clean finished bag seams in order to avoid excess bulk. (see sketch)
- Topstitching on pockets must be smooth & symmetrical unless otherwise noted.

- Hidden (interior) welt or besom chest pockets (*used for jackets & outerwear*) must not cross over the seam between the facing & lining unless otherwise noted. (*Hidden chest pockets must be fully set within either the facing or lining to reduce cost*).
- Horizontally or diagonally set welt or besom pockets should be basted (temporarily sewn) closed 1 ½” (*centered on pocket opening*) using maximum 5 SPI unless otherwise noted. (*The basting stitches must not be locked & should be easily removable by customer without causing damage to the fabric. The basting stitches should not prevent dye from adhering to facing fabric.*)
- See “Structured Wovens Standards” section for more pocket details.

#### **PRESSING–**

- Pressing instructions will be specific to Brand and/or style. Refer to the Tech Pack for details.
- A “press cloth” should be placed between the iron and garment or between the seam allowance & garment as needed to prevent damage to the fabric (i.e. shine or ridges at seam allowance edges.)
- Do not press a crease into the center of any sleeve or pant leg unless noted otherwise on the Tech Pack.
- Refer to the “NAP FABRICIATIONS” section for more pressing details.

#### **RIBBON & GROSGRAIN–**

- When used for straps, side seam ties, neck ties or hanger or locker loops: the ends that are set into the seam must either be clean finished (*with single needle*) or heat sealed to ensure trim will not unravel & pull out of the seam.
- Ends must be finished to prevent fraying. Refer to the Tech Pack for required specification.
- Refer to the “TRIMS” section for more details.

#### **SEAMS & TOP STITCHING–**

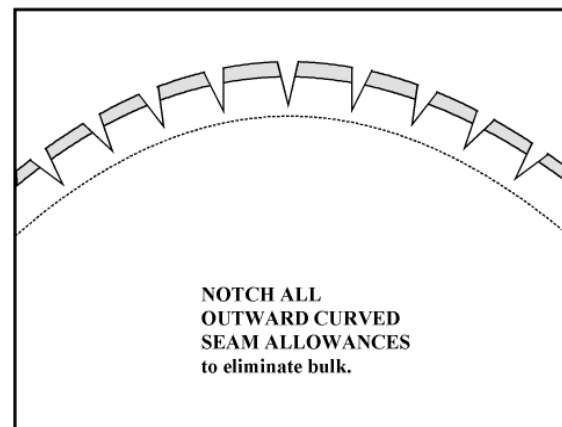
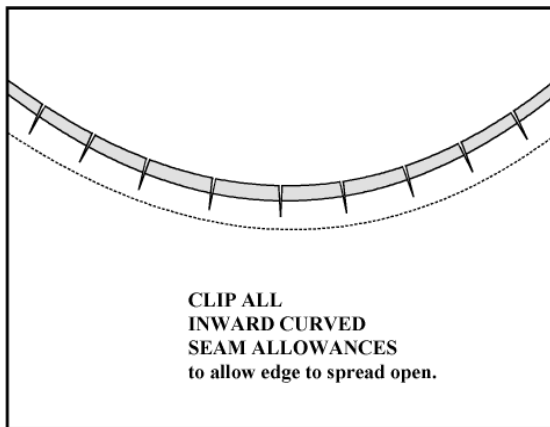
- All products must be sewn using the specified number of “stitches per inch” (SPI) according to our standard SPI requirements which are listed separately for the following categories:

1. ***Knits***: see Knit Standard
2. ***Woven’s***: see Soft or Structured Standards

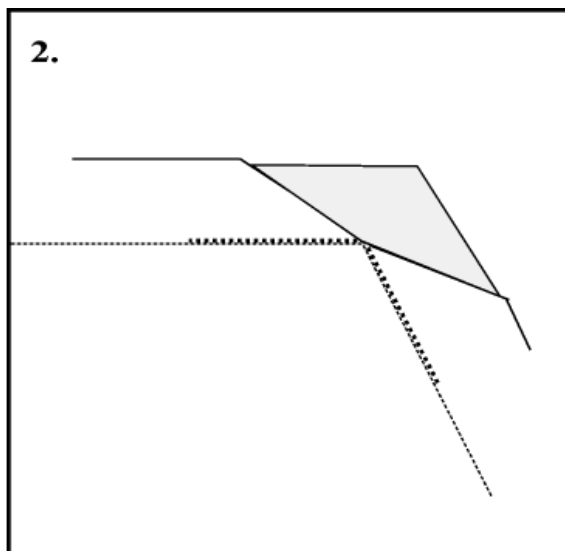
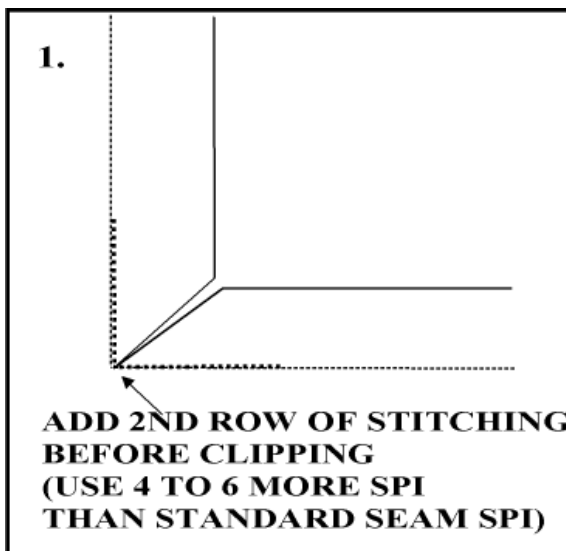
#### **All Seams, Topstitching, Buttonholes & Bartacks-**

- Must be without broken, uneven, repaired or missing stitches.
- Tension must be properly set to avoid puckers, unintentional “zig zag” stitch line appearance, pleats, roping & torque.
- Stitching should be evenly spaced from the seam edge for the entire length of the seam.
- Must be smooth & flat with no puckers or pulls unless design dictates otherwise.
- Do not use raw edges unless specified otherwise.
- Must not have conspicuous seam repair.

- Must ensure natural stretch of fabric is not restricted on all seams with stretch unless specified otherwise.
- For Pants– Join the rises in the round after joining inseams unless flat fell seams are required or noted otherwise on the Tech Pack.
- All seaming & topstitching must be locked by sewing it into a seam or hem or by tacking or backstitching.
- Refer to “STITCHES” section for more details.
- All inward curved seam allowances should be clipped & all outward seams should be notched **as needed** unless otherwise noted. (see sketches below)

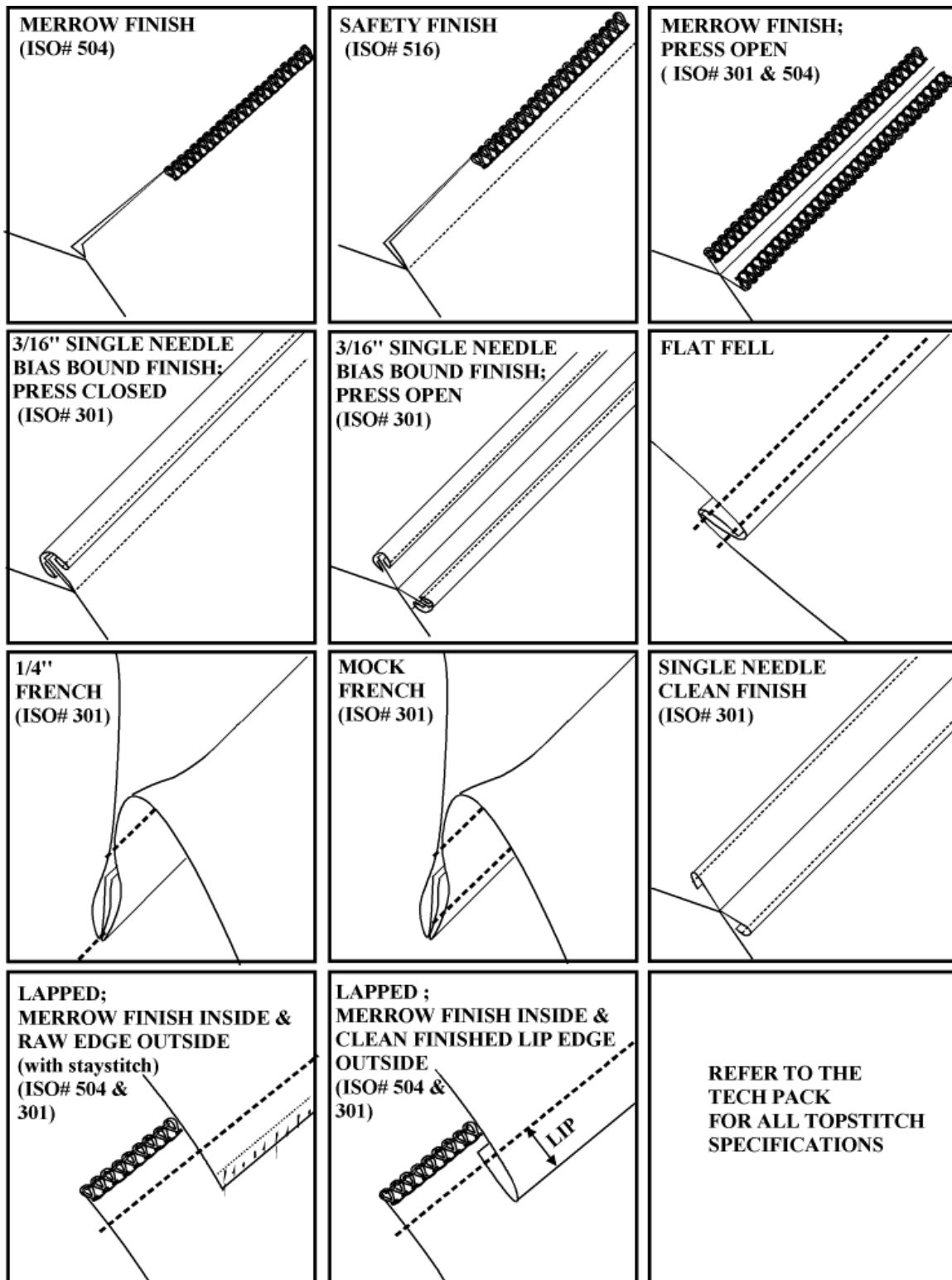


- All corners should be reinforced with interfacing & double stitched using 4 to 6 more SPI than required for standard seaming. (see sketches)





**SEAM STANDARD CONSTRUCTION OPTIONS:**



### SHIRRING–

- Fullness must be evenly distributed.
- Stitching used to create shirring must be cracked.
- When shirring is used at the top of the sleeve cap- total shirring width must be centered over the shoulder seam. For example: if 3” total shirring is required then 1 ½” of it must be forward and backward of the shoulder seam.

### SHOULDER PADS–

- Pads in unlined garments must be covered in a specified quality fabric unless otherwise noted.
- Must be centered over inside shoulder seam with the thickest edge of the pad aligned with the edge of armhole seam allowance. (Do not align with actual armhole seam stitching)
- Must be tacked with a minimum of two (¼” long) swing tacks. (*Tack along inside shoulder seam allowance -1 tack at each end of pad*).

### SLEEVE HEADERS–

- Use either *Purchased Felt* or *Custom Made Lining* sleeve headers only when noted on the Tech Pack.



- See the “Structured Woven Standards” section for more sleeve header details.

### SMELL–

- Garments must not have a detectable odor.

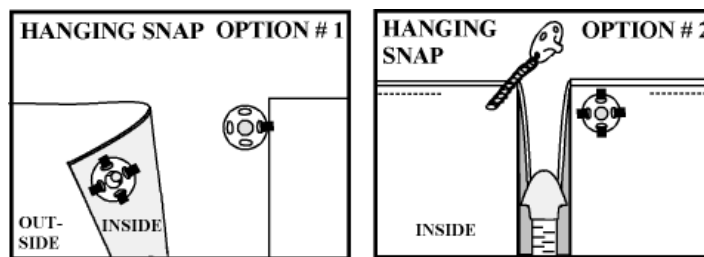
### SMOCKING–

- **Elastic smocking stitch:**
  1. Use one of the following Multi-needle standards:
    - TAJMAI
    - TAIS
    - KANSAI
  2. Use ¼” spacing & 2:1 shirring ration unless specified otherwise on the Tech Pack.
  3. Must be set thru 2 ply (layers) of fabric

- If smocking is intended to fully support/hold the garment on the body then elastic must be inserted in the top tunnel (*Set the elastic in the 2<sup>nd</sup> tunnel from top edge if a ruffled top edge is required*). Refer to the Tech Pack for required finished specs.

#### **SNAPS–**

- Must be attached through minimum of 2 layers of fabric (body & facing or body with re-enforcement patch set on underside).
- All snaps must stay closed during stress caused by normal wearing. (i.e. center front waist snap closures must stay closed during sitting & bending)
- Covering on covered snaps must not pull off or fray around the edges.
- Refer to the “TRIMS” section for more details.
- ***Hanging Snap options are as follows:***



#### **RIVETS/GROMMETS–**

- Must be attached through minimum of 2 layers of fabric (body & facing or body with re-enforcement patch set on underside).
- Refer to “TRIMS” section for more details

#### **THREADS–**

- Must be colorfast.
- Only polyester core or 100% spun polyester thread is to be used throughout garment construction. Only use monofilament thread when specified by the Technical Designer.
- Use cotton wrapped poly core thread for all garment dyed items.
- Refer to the Tech Pack for the denier (tex #) specification.

#### **TRIMS–**

##### ***Trims & Trim Coverings -***

- Must be securely attached following the manufacturer’s instructions.
- Must not become loose or fall off during normal use or after garment is cleaned according to the recommended care instructions.

##### ***Trim Appearance / Finish -***

- Must be colorfast & without defects.
- Must not deteriorate (*i.e. chip, scratch, rust, tarnish, corrode or fade*) during normal use or after garment is cleaned according to the recommended care instructions.
- Must function properly considering the end use of product.

## **VENTS & SLITS–**

- Always clean finish unless otherwise noted.
- Use miter finish the inside bindings at the top edge of all bound slit openings.
- Must use appropriate SPI & interfacings as needed at the top edge point of bound slit openings to avoid frays and or holes.
- See the “Structured Woven Standards” section for more details.

## **WAISTBANDS–**

- Refer to the “Structured Woven Standards” section for standard waistband construction sketches.

## **ZIPPERS–**

- Must lie flat and smooth with no bulging, easing or puckering.
- The pull must slide smoothly along teeth.
- Must not get stuck on fabrics or trims: the body, facings & linings must be set minimum 1/16” from the teeth. For bulky or napped fabrics, the body, facings and linings must be minimum 1/8” from the teeth.
- If setting zippers into “hairy” fabric, the length of the hairs should be trimmed so hairs will not get caught in the zipper.
- Zippers used in Fly closures must lock.
- Use YKK zippers. If YKK is not available then the following substitute suppliers may be used:
  1. Valiant
  2. Union
- Zipper length measuring procedure  
Metal & Molded Plastic Zippers measure from top of zipper pull to bottom of stop.  
2-way Separating Zipper measure top zipper pull to top zipper pull  
Invisible Zipper measure opened from top tooth stop to zipper pull at full opening.  
Tape length should be no more than 1 ½” longer than zipper