

Titan Activewear Leggings

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Garment Type: Stretch Leggings | Difficulty: Beginner | Provenance: FreeSewing | License: MIT / CC BY 4.0

PRINTER CALIBRATION & SCALE VERIFICATION

Measure both test squares with a rigid ruler before cutting fabric. Print at 100% scale without shrinking.



- Scale Rules:
- 1. Open in Acrobat Reader
 - 2. Select Actual Size 100%
 - 3. Do NOT Fit to Page
 - 4. Verify dimensions above

SIZE SELECTION & EASE RECOMMENDATIONS

Select size corresponding to natural waist and full hip/seat measurements. If between sizes, choose the larger size and adjust side seams.

Negative ease -10% to -15% for close compression and second-skin fit in 4-way stretch fabrics.

STANDARD BODY MEASUREMENTS CHART

Size Range	XS	S	M	L	XL	2XL	3XL
Natural Waist	64 cm	72 cm	80 cm	88 cm	96 cm	104 cm	112 cm
Full Hip / Seat	90 cm	98 cm	106 cm	114 cm	122 cm	130 cm	138 cm

FINISHED MEASUREMENTS & MATERIALS

FINISHED GARMENT MEASUREMENTS (INCLUDES DESIGN EASE)

Dimension	XS	S	M	L	XL	2XL	3XL
Finished Waist	56 cm	61 cm	66 cm	72 cm	80 cm	88 cm	96 cm
Finished Hip	80 cm	85 cm	90 cm	96 cm	105 cm	114 cm	123 cm
Inseam Length	70 cm	70 cm	70 cm	70 cm	70 cm	70 cm	70 cm

FABRIC REQUIREMENTS (45 IN / 115 CM & 60 IN / 150 CM BOLTS)

Bolt Width	XS	S	M	L	XL	2XL	3XL
45" / 115 cm Fabric	1.55 yd	1.55 yd	1.55 yd	1.75 yd	1.75 yd	2.1 yd	2.1 yd
60" / 150 cm Fabric	1.2 yd	1.2 yd	1.2 yd	1.4 yd	1.4 yd	1.65 yd	1.65 yd

RECOMMENDED FABRICS & STRETCH PROPERTIES

Recommended Substrates: Cotton twill, chino, denim, linen, or wool suiting,
 Pocketing cotton for pocket bags. Stretch Requirement: 20-40% Stretch.

NOTIONS & SEWING TOOLS CHECKLIST

- ☐ Matching all-purpose polyester or cotton sewing thread
- ☐ Universal sewing needle size 80/12
- ☐ 7 inch metal or nylon trouser zipper
- ☐ Trouser hook and eye or 18mm button
- ☐ Interfacing for waistband
- ☐ Sharp fabric shears
- ☐ Measuring tape
- ☐ Iron and pressing ham

PATTERN INVENTORY & CUTTING LAYOUT

STANDARD SEAM & HEM ALLOWANCES

Use the seam and hem allowances printed on each pattern piece. Verify every allowance label before cutting fabric.

PATTERN PIECE INVENTORY & CUTTING SCHEDULE

Piece Name	Cut Quantity	Material / Interfacing
Seamless Leggings Leg	Cut 1 Pair (1 Left, 1 Right)	Main Fabric
Double High Waistband	Cut 2 on Fold in Stretch Knit	Main Fabric
Crotch Gusset	Cut 1 in Self or Cotton Knit	Main Fabric

FABRIC PREPARATION & CUTTING RULES

- Cut with highest stretch direction running crosswise around the body.
- Use rotary cutter and weights on slippery athletic knits.
- Transfer gusset alignment notches accurately.

MULTI-PAGE TILE ASSEMBLY INSTRUCTIONS

1. Check Sheet 1 calibration square before printing the remaining pattern sheets.
2. Trim right and bottom border lines along the dashed perimeter frame.
3. Match corner crosshairs, such as A1 to A2 and B1 to B2, without overlapping.
4. Tape sheets securely on both sides before cutting paper pieces.

STEP-BY-STEP SEWING INSTRUCTIONS

Step 1: Insert Diamond Crotch Gusset

Pin diamond crotch gusset into front crotch curve of both legs right sides together.

Stitch with 4-thread overlock or stretch stitch, then repeat for back crotch seam.

Step 2: Stitch Continuous Inseam

Align front and back leg inseam edges right sides together from ankle hem, across

crotch gusset, and down to opposite ankle. Stitch continuous inseam in one pass.

Step 3: Assemble Double High Waistband

Stitch side seams of outer waistband right sides together. Repeat for inner waistband

facing. Fold waistband in half wrong sides together along top edge.

Step 4: Attach Waistband to Leggings

Quarter-mark waistband ring and leggings waist opening. Slip waistband over leggings

right sides together, match markings, and serge raw edges in the round.

Step 5: Hem Ankle Openings

Turn up specified 20 mm hem allowance at each ankle. Stitch with a stretch twin

needle, coverstitch, or zigzag stitch, and press.

TROUBLESHOOTING & PRO SEWING TIPS

Issue: Seams puckering along stitch line

Fix: Insert fresh needle and test balance on fabric scrap.

Issue: Wavy edge along curved perimeter

Fix: Staystitch immediately after cutting and use walking foot.