

ELF BIB - DIGITAL ENGINEERING AUDIT

Scope: new digital sewing-pattern draft compared to the approved elf bib mockup. This is not a sewn-sample or product compliance test.

Digital geometry checks

Check	Status	Basis
Bib raw outline	PASS digitally	Vector geometry bbox 10.75 × 13.00 in.
Open neckline	PASS digitally	Two separate unconnected free tips; U cutout is empty.
Strap overlays	PASS digitally	T1/T2 clipped to actual body cut outline.
Pattern inventory	PASS digitally	21 fabric appliqué cut pieces, each appears on one B/C sheet.
Lower fan	PASS digitally	Nine wedges. Eight adjacent pairs share edges without overlap or gap. All sectors inside the body.
Collar / flat embellishments	PASS digitally	Separate red collar shape; embroidered circles/bells, red disk and flat holly.
Hat-to-neck clearance	PASS digitally	Hat crown moved below deepest U contour; no hat cut into the U.
Tiled master	PASS digitally	Four 5.5 × 6.75-in frames; body laid across 11 × 13.5-in assembled area.
US Letter format	PASS digitally	16 pages; 8.5 × 11 in, with 1-in drawn test square.
Instructions vs template	PASS digitally	Piece IDs, colors, page numbers, layering and stitch methods reconciled.
Sewn fit / closure strength	UNVERIFIED	Requires bound physical muslin and fastening evaluation.
Actual home-printer sizing	UNVERIFIED	Measure 1-in squares after real printing.
Washing and durability	UNVERIFIED	Requires laundering the sewn sample.

Design integrity and material choices

The bib retains the approved green hat with red zigzag trim, pointed ears and embroidered elf face, green and ivory/sage fan, red pointed collar with gold X motifs, red button, green edging, wide U neckline and independent neck straps. The geometric fan uses sewn fabric appliqué, not a stiff quilt-block assembly or a removable skirt.

The red hat pom-pom and gold collar details are represented by flat fabric/embroidery rather than potentially detachable stuffed pompoms, hanging bells or metal ornaments. This is a necessary physical construction interpretation of the approved visual, not an originality-related redesign.

Required real-world tests before unqualified approval

- Check 1-inch print squares and tiled page assembly on paper.
- Sew a plain bound muslin; measure finished neck opening, strap overlap and front coverage.
- Test button attachment (or compatible snap) and observe whether the closure pulls or twists the tabs.
- Sew a complete sample to confirm applique-layer bulk, embroidered details and binding at each wedge tip.
- Wash/dry sample and inspect fraying, colorfastness, softness, stitch integrity and closure durability.

Decision: DIGITAL ENGINEERING PASS as a prototype sewing-pattern draft. PHYSICAL FIT AND FINISHED-APPEARANCE VERIFICATION OUTSTANDING.