

Grading zero-waste garments

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Building on previous research in both zero-waste pattern cutting and methods for grading zero-waste garments, this presentation will share a method used to resize zero-waste garments for a fitted top, skirt, and pants.

Designing zero-waste garments is not only a way to integrate sustainability into the work, it is also a wonderfully creative challenge for pattern cutters. Since the goal in zero-waste pattern cutting is to create garment patterns that leave no scrap behind once cut, most patterns have pieces that interlock like a puzzle with no gaps between cutting lines (Townsend and Mills, 2013). While the importance of zero-waste garments has been recognized in museum and gallery exhibitions and in academic settings, the overwhelming majority of apparel sold today is not zero-waste. Few designers have bridged the gap between creating a single zero-waste garment (as shown in an exhibition) and marketing multiple designs in the ready-to-wear market. One obstacle to integration of zero-waste designs into mainstream fashion could be the perceived aesthetic atypicality of many designs, according to Michaelson and Chattaraman (2017). Another obstacle to making zero-waste garments available to a range of consumers is producing the garments in a range sizes (Carrico & Kim, 2014, Rissanen, 2014). Figure 1 shows a zero-waste pattern for a sample size dress. The right half of the diagram reflects the original size. The left side shows transparent larger sized patterns on top, resulting in overlaps. The changes to the resized pattern pieces would prohibit them from interlocking like the original, and the larger dress could not be cut zero-waste.

A method for resizing garments without making changes to original pattern shapes has been developed by the author using narrow fabrics and trims. This method requires designs with seam placements that will allow trim insertion. Through strategic placement of the inserted trims, garments can be resized with no changes to the original patterns but instead by using different trim widths. This method has been proven effective in a women's blouse; to demonstrate the technique's applicability in other zero-waste garments, three additional garments will be presented in assorted sizes using narrow trims at strategically placed seams.

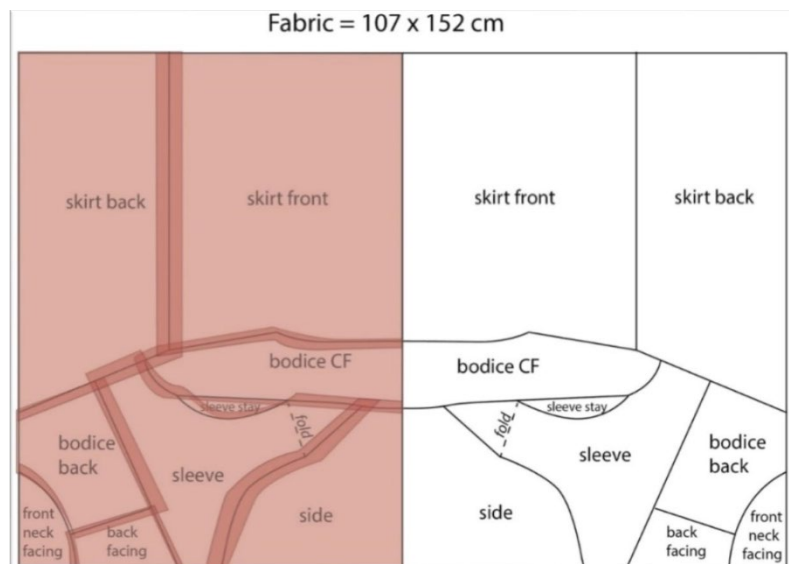


Figure 1. Overlapping resized patterns on left side, original interlocking patterns on right side.

References

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