

GARMENT APPLICATION GUIDE FOR EMBROIDERY

NEEDLE / THREAD / BACKING USAGE CHART

FABRIC / GARMENT	WT.	NEEDLE	THREAD	BACKING	COMMENTS
Canton Fleece	Med.	75/11 light ball point	Polyester Tkt.40 or Tkt.30	Light tearaway	Use polyester thread if the garment is subjected to extensive laundering & bleaching, chlorine, salt water or sunlight exposure. Tkt.30 thread may be used to decrease needle penetrations
Canvas	Lt. to Med.	75/11 sharp or new round point	Polyester Tkt.40	Light to medium tearaway	Sharp needles are better for longer runs
Childrenswear – Knits	Lt.	70/10 light or med. ball point	Polyester Tkt.40	Light to medium cutaway / washaway	Use polyester thread if the garment is subjected to laundering & bleaching. For a softer feel, use a T-21 spun polyester (matte finish).
Coated or Waterproof Fabrics	Med. Hvy.	75/11, 80/12 sharp or light ball point	Polyester Tkt.40 or Tkt.30.	Medium topping and light to medium tearaway	Tkt.30 thread may be used to decrease needle penetrations and provide the same coverage, thereby minimizing damage to waterproofing.
Corduroy	Med.	75/11 light ball point	Polyester Tkt.40 or Tkt.30.	Medium topping and light to medium tearaway	Tkt.30 thread may be used to decrease needle penetrations.
Cotton Sheeting	Med.	75/11 sharp or light ball point	Polyester Tkt.40; or T-21 Cotton or Spun Polyester	Heavy cutaway or tearaway / washaway	CF Polyester to give high sheen appearance. T-21 spun polyester to give soft hand and matte appearance.
Denim	Hvy.	80/12 sharp or new round point	Polyester Tkt.40 or Tkt.30.	Heavy cutaway or tearaway / washaway	Use polyester thread if the garment is subjected to extensive laundering & bleaching and other harsh materials.
Dress Shirt (Woven)	Lt.	70/10 or 75/11 sharp point or light ball point for small details	Rayon or Polyester Tkt.40	Heavy cutaway or tearaway / washaway	Polyester is best for white shirts that may be bleached.
Golf or Polo Shirt	Lt.	70/10 or 75/11 light or medium ball point	Rayon or Polyester Tkt.40; or T-21 Spun Polyester	Light to medium cutaway (water soluble)	Heavy knits require a medium to heavy cutaway; medium knits require a light cutaway.
Headwear	Med.	75/11, 80/12 sharp point	Polyester Tkt.40 or Tkt.30.	Medium to heavy tearaway	Polyester threads if headwear goes through a wash process. Use 3D Foam to get more dimension to the pattern.

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Leather and Vinyl	Hvy.	75/11 up to a 100/16 sharp point needle on stiff or spongy leather (luggage); 70/10, 80/12 sharp or new round point on soft, supple garment leathers	Polyester Tkt.40 or Tkt.30.	Light tearaway	Tkt.30 can be used to minimize the number of penetrations while achieving the same coverage.
Lingerie or Silk	Lt.	65/9 up to 75/11 ball point needle	Polyester Tkt.40	Light to medium tearaway (Water-soluble)	Recommend Polyester because it has a higher elongation and elastic recovery than Rayon. Also, Polyester has superior wash fastness.
Lycra® or Spandex®	Lt.	70/10 medium ball point	Polyester Tkt.40	Medium cutaway or water-soluble tearaway	Recommend Polyester because it has a higher elongation and elastic recovery than Rayon. Also, Polyester has superior wash fastness.
Nylon Windbreaker	Lt. to Med.	75/11 sharp point or new round point	Polyester Tkt.40	Light to heavy cutaway	
Satin Jacket	Lt.	75/11 sharp point or new round point	Polyester Tkt.40	Light to heavy cutaway	
Sweater	Med.	75/11, 80/12 light to heavy ball point	Polyester Tkt.40	Medium topping and light to medium cutaway	
Swimwear (Knit)	Lt. to Med.	65/9 up to 75/11 ball point needle	Polyester Tkt.40	Light to medium tearaway (water soluble); or medium cutaway	Use polyester threads for garments that will be subjected to extensive laundering & bleaching, chlorine, salt water or sunlight exposure.
T-shirt	Lt.	70/10 or 75/11 light or medium ball point	Polyester Tkt.40	Light to medium tearaway (water soluble); or medium cutaway	
Terrycloth	Med.	75/11, 80/12 light to heavy ball point	Polyester Tkt.40 or Tkt.30.	Medium topping and light to medium tearaway	Use polyester thread to maintain colorfastness. Tkt.30 can be used to minimize the number of penetrations while achieving the same coverage.

Notes:

- *Signature*® is the brand name for A&E's high performance polyester embroidery thread. (*Signature*®. *Metallic* is used when a higher sheen is required.)
- All apparel that will make direct skin contact should be backed with water-soluble backing, if possible, so the embroidery will become softer and softer with wear and laundering. These include golf or polo shirts, T-shirts, activewear, lingerie, towels, and bedding.
- Conversion from Metric Weights of Backing: Some companies display their backing in grams/meter and not in ounces/yard. To convert from grams/meter to ounces per square yard, divide the grams per square meter by 33.9. For example, 69 grams/meter divided by 33.9 equals 2.03 ounces per yard (or a 2 oz. backing).