



Custom Embroidered Emblems [ECE]

Technical Specifications
rev. 2011-01a

Product Details

Emblem Dimensions:

- **Minimum** emblem size is 1.00" x 1.75" (2.54cm x 4.45cm).
- **Maximum** emblem size is 13.00" x 17.50" (33.02cm x 44.45cm).

Design Lettering Dimensions:

The text within a design should not be less than 4mm (0.16") in height. Smaller text may need to be altered to embroider slightly larger. For designs requiring a lot of small text, Woven Emblems or printed emblems may be a viable alternative.



Fabric Type & Colours:

100% polyester twill. 45+ colours to choose from.

The fabric content is 100% polyester twill, constructed for embroidery processes. Choose from over 45 standard colours, which can be found on the [Emblemtek Embroidered Emblem Fabric Chart](#). GloDark™ and HiVis™ emblems are also made with 100% polyester materials. Separate TekSpec™ sheets are available for emblems with reflective or flame retardant base fabrics.

Thread Type & Colours:

100% polyester. 120+ colours to choose from. 15 colours per design maximum.

Emblemtek uses 100% polyester Madeira Polyneon™ thread. Choose from over 120 standard colours, which can be found on the [Emblemtek Embroidered Emblem Thread Chart](#). A maximum of 15 thread colours can be chosen per design. Extra charges are applicable when using metallic or glow-in-the-dark threads.

Custom Fabrics & Threads:

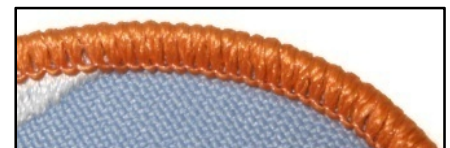
Customers wishing to supply their own fabrics or threads may do so for orders greater than 500 pieces. Extra charges may apply to track, convert, prepare and store these materials. Emblemtek will only use Madeira Polyneon™ or Isacord® polyester threads. Fabric must be at least 15" in width and preferably supplied in roll form. A Customer Service Representative will guide you through the evaluation process for custom materials, to determine required specifications and volumes relative to emblem size and order quantity.

Backing Types:

6 options. Hi-melt glue • low-melt glue • Velcro® • pressure sensitive "stick-on" • soft magnet • non-woven material (no-glue)

Border / Edge Styles:

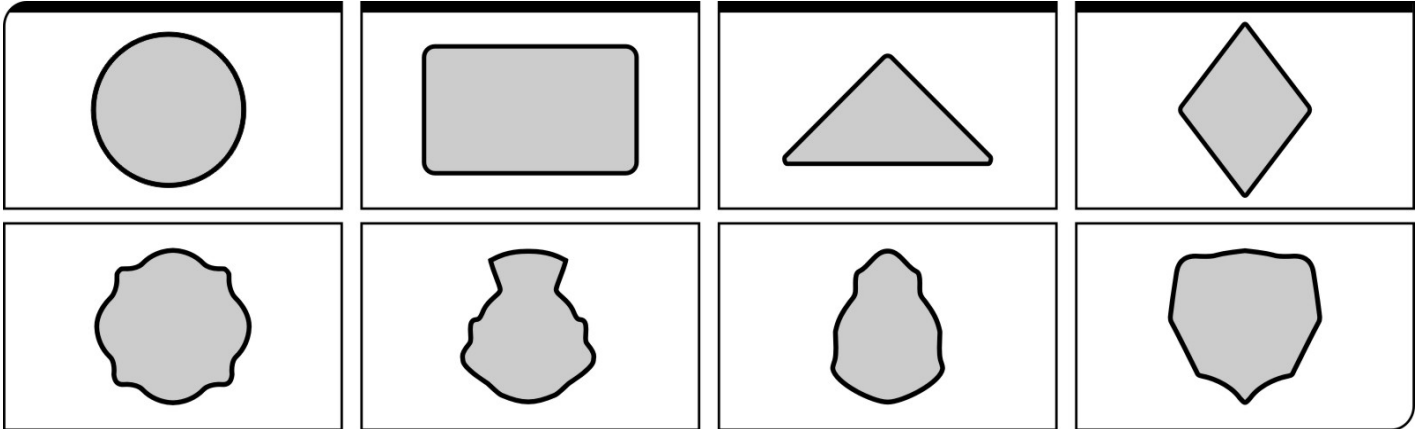
Merrowed border. Custom Embroidered Emblems are manufactured with merrowed borders, a separately stitched over-lock edge. The ability to sew a merrowed border onto an emblem is directly related to the emblem shape. Odd, intricate shapes may not be suitable for merrow application. Choose one colour of thread for the merrowed border from the [Emblemtek Embroidered Emblem Thread Chart](#). For emblems with no merrowed border, please refer to the LowProfile™ Embroidered Emblem product line and TekSpec™ notes.



Merrow Border Limitations:

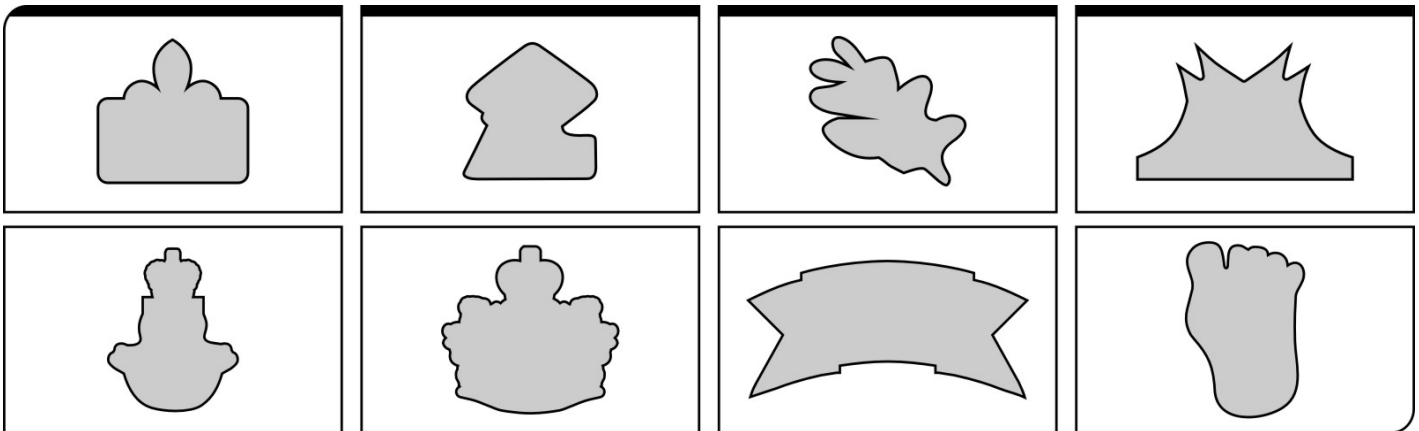
As noted above, Custom Embroidered Emblems are manufactured with merrowed borders. The edges of the emblem are guided through a surging, over-lock sewing machine by hand, and a heavy stitching is applied. Shapes with edges that are completely open and “exterior” are more easily merrowed. However, odd, intricate shapes with edges that angle back towards the interior of the emblem, generally cannot be merrowed.

Shapes that can be merrowed.



Images are not to size.

Shapes that cannot be merrowed.



Design / Emblem Treatment Options:

Custom Embroidered Emblems can be produced with **3D-puff** embroidery stitching to provide another element of texture and dimension. Emblems can also be configured as **double-sided** to create key-chains or pull-tags. Depending on the shape, double-sided emblems can be created in different formats such as:

- The same design on both sides.
- The same design on both sides, but using different colours.
- Two completely different designs on both sides.
- A design on one side and “blank” emblem fabric on the reverse side.



Accessory Attachment Options:

Custom Embroidered Emblems can be manufactured with a range of attachment options based on the following list.

Button Loop¹ • Butterfly Clutch Pin² • Push-Button-Snap³ • Fabric Loop & Split-Ring⁴ • Button Slit⁵ • Grommet & Split-Ring⁶ • Grommet & Chain⁷ • Plastic Strap & Plastic Sleeve (luggage)⁸ • Plastic Strap (luggage)⁹ • Half-Moon Clip (as pull-tag)¹⁰ • Grommet & Split-Ring (as pull-tag)¹¹ • Grommet & Swivel Split-Ring (as pull tag)¹² • Grommet & Split-Ring Coupling¹³ • Grommet & Swivel Clasp Hook¹⁴ • Grommet & Swivel Snap-Hook¹⁵ • Ornament String (gold)¹⁶ • Grommet¹⁷ • Bar Pin with Catch¹⁸



Application & Wash Guidelines

Application Methods:

Sew-on, heat seal or stick-on. The manner in which embroidered emblems can be attached to garments or other textile products relates directly to the type of backing used in the manufacturing process, the size of the emblems and the types of materials that the emblems will be attached to. Almost all emblems can be sewn on, and when it comes to heat seal application, smaller emblems are easier to work with. The chart below outlines the application options relative to backing types.

backing type	sew on application	hand application	hand iron application	heat seal application	temperature	pressure	cycle time
hi-melt glue	yes	no	no	yes	385°F to 405°F (196°C to 207°C)	80 PSI *	15 to 20 seconds
low-melt glue	yes	no	no	yes	365°F to 385°F (185°C to 196°C)	80 PSI *	15 to 20 seconds
Velcro®	no	yes	no	no	* These recommended settings are based on manually operated or air operated heat seal machines with top iron heat only.		
pressure sensitive “stick-on”	possible	yes	no	no			
soft magnet	no	yes	no	no			
non-woven material (no glue)	yes	no	no	no			

Heat Seal Notes & Tips:

- Emblems should be heat sealed to the garment using a complete cycle time on both the front side and the back side of the garment and emblem. Emblems with heavier embroidery may require longer heat seal application cycle times beyond the ranges noted above.
- **Thicker fabrics** may require longer cycle times beyond the ranges noted above.
- **Covering the emblem** with a sheet of Teflon® or paper towel prior to the heat seal cycle may help to reduce a “crushing” affect, and may help to protect the garment from scorching.
- **White materials** (knits or blends) may scorch if heat seal temperatures are too high. It is recommended that fabrics be tested first.
- **Pique knit and fleece** materials may be sensitive to heat and pressure, with the possibility of being crushed.
- **Rib-knit and stretch fabrics** may pucker or distort when emblems are heat sealed to them. It is recommended that these fabrics be tested first. For items such as toques and scarves, it is recommended to have emblems sewn on rather than heat sealed.
- **Terry knit materials** such as towels and bathrobes may not provide a smooth enough surface for proper heat seal application. It is recommended that emblems be sewn on to these types of products.
- **Treated fabrics** finished with coatings, sizing or repellants may not allow for proper heat seal bonding.
- Items made with leather, suede, nylon, synthetics, nylon-shell, interlinings, rubberized coatings and reflective fabrics, such as jackets and luggage, may react poorly to heat seal temperatures depending on thickness, weave, texture and weight. It is recommended that these fabrics be tested first, with possible heat seal time and temperature adjustments. In many cases, it may be better to have emblems sewn on to these materials.
- **Caps** can sometimes be difficult to work with for heat seal applications. To achieve a higher potential for heat seal application success on caps, it is recommended that emblems not be greater than 2-1/4” in height and 4” in width.

Washing & Drying Guidelines:

backing type	wash / dry type			
	industrial*	commercial	dry clean	home**
hi-melt glue	sew on / heat seal	sew on / heat seal	sew on / heat seal	sew on / heat seal
low-melt glue	sew on	sew on	sew on / heat seal	sew on / heat seal
Velcro®	no	no	caution	caution
pressure sensitive “stick-on”	no	no	no	no
soft magnet	no	no	no	no
non-woven material (no glue)	sew on	sew on	sew on	sew on

*It is recommended not to expose heat sealed emblems to wash or drying conditions exceeding 200°F (93°C).

**Emblems with accessory attachment options should be exposed to hand washing only.

Ordering Guidelines

Artwork & Set-up Fees:

No fees*. Emblemtek will provide artwork on new emblem orders for customer Approval prior to production. There are no artwork or set-up fees when existing, electronic or physical designs or samples are provided to Emblemtek. Artwork fees may apply when designs are created from scratch.

Order Quantities:

Minimum 25. The minimum order quantity is 25 pieces, including emblems with Velcro® or pressure sensitive “stick-on” backings, and emblems with accessory options.

Pre-production Samples:

Available \$. Electronic (scan) or physical pre-production samples (single unit) are available for approved designs. Samples fees are applicable, relative to design detail and emblem size. See price guide for more information.

Pricing:

Charted & quoted. Charted pricing is available up to a certain size threshold, with larger quantities and larger emblem sizes custom quoted. See price guide for more information.

Delivery Times:

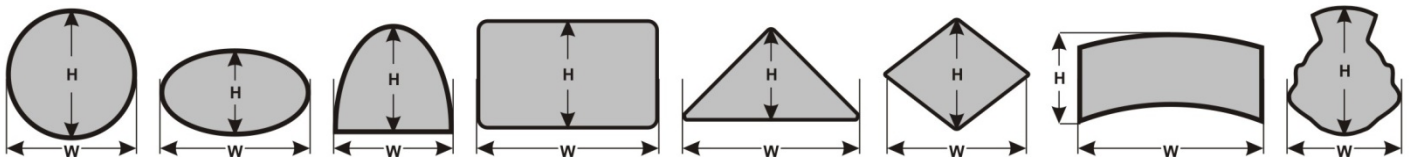
Delivery times are relative to order quantity and accessory options if chosen. Emblems greater than 6.00” x 6.00” (15.24cm x 15.24cm) may take longer to manufacture. See price guide for more information.

Ordering Guidelines:

Order specifics. During the design, artwork and ordering processes, there are specific details that we require in order to proceed with your request, such as:

- Emblem Type • Design Colours • Fabric Colour • Border Colour • Dimensions • Backing Type • Quantity • Special Delivery Needs

Emblem sizes are calculated by adding the height (h) and the width (w), then dividing by two. Example 2” (h) + 4” (w) = 6 divided by 2 = 3.



Accepted Design / Artwork File Types:

The chart below lists the various graphic and design file types that Emblemtek will accept for artwork and production purposes. Certain file types are preferred as noted.

Graphic File Types:

- CorelDraw ver.13 / ver.X3 (.cdr) **pref**
- Adobe Illustrator ver.CS3 (.ai) **pref**
- Encapsulated PostScript (.eps) **pref**
- Adobe Portable Document File (.pdf) **pref**
- Joint Photographic Experts Group (.jpg) **pref**
- Portable Network Graphics (.png) **pref**
- Adobe Photoshop ver.CS3 (.psd)
- Corel Photo-Paint ver.13 / ver.X3 (.cpt)
- Targa Bitmap (.tga)
- Tagged Image File Format (.tiff)
- Windows Bitmap (.bmp)
- CompuServe Bitmap (.gif)

Embroidery File Types:

- Tajima Stitch File (.dst) **pref**
- Wilcom EMB File (.emb) **pref**
- Pulse Embroidery File (.pxf)
- Tajima TBF File (.tbf)
- Barudan Stitch File (.dsb)
- Melco Expanded File (.exp)

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