

Zazzle Embroidery Design Guide

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Introduction

Welcome to Zazzle embroidery. You can now express your ideas in real threads. Customers can order your embroidery-on-demand products just as they would order Zazzle print-on-demand products. Just like print-on-demand, you can place your designs on products, offer them for sale in the Zazzle marketplace, and market your products the same way you do for print-on-demand products.

The product creation process for embroidered products is different from other Zazzle products in a number of ways. Unlike print-on-demand, not all existing products can take embroidery. Also unlike print-on-demand products, embroidery designs cannot be scaled up or down once converted to embroidery. But don't despair- Zazzle has introduced new product lines selected for embroidery, including polo shirts, hoodies, and jackets, each with multiple design areas.

Embroidery products are always tied to a particular piece of apparel and a particular design area or areas on that apparel. You may use no more than one image per design area. Unlike print-on-demand products, most embroidery products must be converted to a special embroidery format so that your art can be created in thread. Embroidery format conversion requires a one time fee.



1. Embroidery products offer a choice of design areas.

Zazzle embroidery is real embroidery. Your design is actually sewn onto a product using colored threads. To achieve this, your design is converted from a standard digital image format like JPEG, GIF, or PNG to a special file format designed for digital embroidery systems, which contains information on thread colors corresponding to real thread and instructions on sewing stitches and sequences. Because your design will be recreated in actual thread, some designs won't work. Computer graphics and cameras can do all sorts of things you can't do with a needle and thread. For example, you can't sew a transparency or a subtle shade gradation. This guide discusses designing for embroidery and suggestions for what might and might not work.

Creating Embroidery Products

Zazzle embroidery is stitched on industrial grade embroidery machines by skilled, experienced operators. These machines read your design from a file containing your image, along with instructions for sewing stitches and colors. Create your embroidery design following the guidelines in this guide to ensure that it will be successful as embroidery. You upload your design in your gallery in one of three popular graphics

file formats. Your design is reviewed to confirm that it can be reproduced in embroidery. It may be returned with suggestions.

Your Design File

You can upload your design files in any of three common computer graphic file formats, GIF, JPEG, and PNG, and we will take it from there.

Your images should have a minimum resolution of 150 dots per inch (DPI) and a maximum of 300 DPI. Your embroidery won't look any better if you send us an image larger than 300 DPI, since all images are converted at 150 DPI. Avoid scaling up low resolution images as they won't look very good when converted, due to blur or jagged edges.



2. A JPEG original, as submitted. This design was returned because it would not fit in the design area and the floral designs at the top are drawn with lines too fine for embroidery. **Tip:** crop your background as close to your design as possible. An unnecessarily large background could cost you more because it requires more stitches and might result in unexpected design placement.

Conversion Process

Embroidery conversion is not as simple as converting a computer image from one file format to another. The process of conversion translates your pixels into a physical object, with all the substance, beauty, and also the physical limitations of thread. Zazzle's trained embroidery professionals generate this specialized file, for which you pay the conversion fee.

Because the way embroidery thread is used to represent an image is fundamentally different from computer graphics in resolution and physical manifestation, some things you can do with your computer or your digital camera just can't be recreated in thread. For this reason, every design uploaded to Zazzle.com for embroidery will be reviewed by staff trained in embroidery conversion. Some images may be returned because they are too complex, too detailed, contain lines which may be too thin, or in some other way unsuitable for translation into embroidery thread. Returned images may be accompanied by suggestions for changes to make your image work better in embroidery. You will not be charged for returned designs.



3. The new JPEG, ready for conversion to embroidery. The image is clarified and the background is cropped to the image.

Embroidery Pricing

There are two fees you may encounter when creating embroidery products on Zazzle.com. The first is the one time conversion fee. The second is the stitch count fee, which contributes to the final prices of your product.

The overhead required to review images and translate them into embroidery makes necessary a conversion fee for most embroidery projects. This fee is a one time charge to you for the creation of your embroidery product. Your customers will be charged only the price of the item. There are two ways you can avoid the conversion fee:

- Text-only products

Products created entirely from the over 100 pre-converted fonts, including Greek language and monogram fonts.

- Existing OFM files

If you have designs which have already been converted to the format used for embroidery, OFM, you can upload them and use them for your Zazzle products at no additional fee. We cannot accept other embroidery file formats at this time.

The second fee which may be added to an embroidery product is on a per-product basis, and is rolled into the price of your product. The base price of your embroidery products is set like your other Zazzle products, by the cost of the product you offer. However, the price of an embroidery product also includes the price of the stitching required to create your design. Unlike print-on-demand, embroidery requires a varying amount of materials (thread) to create. The amount of thread required is determined in part by the content of your design and in part by the dimensions of your design. A sparse design does not require as much thread as a densely colored design and a larger design is likely to use more thread.

Pricing is based on 1000 stitch count increments. The first design and any text you add are included in the price of the product, as long as the total stitch count is under 10,000 stitches. Additional design areas and complex designs over 10,000 stitches raise the base price of your product. For more information and complete pricing information, see:

<http://www.zazzle.com/custom/embroidery>

Because price is based on stitch count, larger designs are not necessarily more expensive. A 1" by 1" design could have the same number of stitches as another that is 3" by 3" and therefore cost the same to convert. The same design at different sizes will not be the same price because it will require more stitches at a larger size and fewer at a smaller size.

There are examples of converted files along with their stitch count at the back of this guide intended to help you determine how many stitches your designs might contain. Keep in mind that files with a lot of stitches not only cost more to convert and to sew, they weigh more. As a result, consider avoiding large, heavy designs on t-shirts and childrens' apparel.



4. *The same design, converted to embroidery and sewn on a hoody, close up.*

Thread Color

Your design will be created using real thread and embroidery thread is available in specific colors. The next figure contains a complete selection of thread colors available to you. These are the specific colors available for your embroidery design. If you create your design using colors available in thread, it can be sewn using the same colors.

Some design software will allow you to choose the color palette for your design. Use sRGB colors with minimal compression applied and use minimum compression settings. Usually you can type in the RGB values, as they appear in the chart. With this feature you can assemble a selection of colors from the thread color chart you can use to draw your design. A design created from a palette of available colors can be embroidered using the precise colors you chose. If you aren't using software that allows you to specify colors or if don't know what this is about, don't worry. You are not required to use the colors in the thread color chart. When you use colors in your design which do not match thread color precisely, the closest colors available will be selected during conversion.

List #	Isacord 40 #	RGB Value	
1	0017	248,255,255	
2	0020	0,0,0	
3	3355	0,7,79	
4	3544	33,28,117	
5	3730	153,198,240	
6	5374	0,81,48	
7	5415	17,204,0	
8	3110	99,0,110	
9	2115	64,25,43	
10	1902	168,0,0	
11	1300	255,102,0	
12	0311	255,238,15	
13	1346	56,0,0	
14	0761	255,255,207	
15	1972	181,181,181	
16	0150	240,240,225	
17	0270	255,255,227	
18	0520	255,255,184	
19	0230	255,228,90	
20	0824	238,217,12	
21	0800	255,211,5	
22	1305	255,79,0	
23	1362	255,212,89	
24	1332	230,117,40	
25	1312	181,48,0	
26	1600	227,122,74	
27	1906	174,0,10	
28	1753	235,93,112	
29	1921	171,76,76	
30	2155	255,171,199	
31	2530	243,137,178	
32	2520	240,56,197	
33	2508	188,63,136	
34	1755	240,204,235	
35	2764	209,128,194	
36	2500	122,0,84	
37	2711	89,0,58	
38	2830	186,156,253	
39	2810	140,43,104	
40	2715	71,0,25	
41	2920	171,102,163	
42	2900	76,0,115	
43	3622	0,53,158	
44	3522	5,74,189	
45	3750	212,230,255	
46	3842	48,120,138	
47	3743	10,76,89	
48	3644	14,56,88	
49	3810	84,112,212	
50	3650	235,232,255	
51	3630	122,172,231	
52	4032	81,156,174	
53	3962	225,248,255	
54	3910	171,230,227	
55	3901	20,161,255	
56	4116	12,168,179	
57	4103	0,197,238	
58	4240	179,255,253	
59	4250	215,255,250	
60	4620	76,232,174	

List #	Isacord 40 #	RGB Value	
61	4410	10,166,130	
62	4515	0,81,81	
63	5050	194,255,225	
64	5220	168,255,204	
65	5210	30,235,110	
66	0220	249,237,60	
67	6011	190,205,63	
68	5531	89,230,64	
69	5613	76,250,43	
70	5233	2,174,110	
71	6051	168,255,120	
72	5833	102,215,33	
73	5944	25,104,17	
74	0352	197,232,102	
75	6133	153,209,71	
76	0453	133,174,76	
77	0221	240,255,66	
78	0542	217,215,30	
79	0345	140,151,46	
80	0651	255,243,176	
81	0832	240,215,76	
82	1141	253,232,181	
83	1134	122,71,30	
84	0822	232,222,64	
85	0811	255,217,48	
86	0922	227,192,28	
87	0672	230,240,189	
88	0873	202,197,143	
89	1375	43,35,48	
90	4071	232,248,255	
91	3971	232,232,230	
92	4073	156,156,156	
93	2674	166,181,179	
94	0138	82,91,96	
95	0105	173,180,185	
96	1903	222,0,5	
97	1805	222,17,85	
98	4111	51,235,240	
99	2521	225,33,181	
100	2550	240,115,245	
101	108	117,122,133	
102	1840	255,158,128	
103	2910	189,84,217	
104	1311	207,87,5	
105	1565	138,104,58	
106	776	128,112,94	
107	1123	192,174,94	
108	3541	104,0,146	
109	1102	255,156,10	
110	142	204,209,207	
111	722	197,181,128	
112	1351	255,187,125	
113	1532	255,180,155	
114	1061	220,184,110	
115	1115	204,115,10	
116	1154	143,79,0	
117	931	209,174,0	
118	747	97,99,0	
119	2011	153,33,58	
120	1874	84,66,69	

Designing for Embroidery

The first section discussed the basics of embroidery product creation. Successful embroidery products are designed with the strengths of embroidery in mind. In this section you will find examples of designs that do or do not work well in embroidery.

Always keep in mind that what you are designing will be sewn in thread. Have you ever seen a photograph recreated in thread? Probably not and for good reason. It doesn't work well. Fancy image processing filters also don't translate well. Avoid using images composed with noise, blur, or softening filters. Images with clean, clearly viewable edges work best. Avoid using low resolution images as they will pixelate when scaled upward and won't look good when embroidered. Also avoid soft edges on your designs as it's difficult to stitch them out accurately.

Your final image should be submitted with a transparent background unless you want a color, pattern, or design embroidered as the background for your image. Keep in mind that a solid color background requires a lot of stitches and a transparent background requires no stitches. Your image borders should be cropped close to your image to avoid any confusion about the dimensions or background you want for your image.

Templates

Yes, you can create template products using embroidery. However, you cannot create an image template object for an embroidery product. You can create only text template objects, using any of the many fonts already converted to embroidery.

Photographic Illustrations

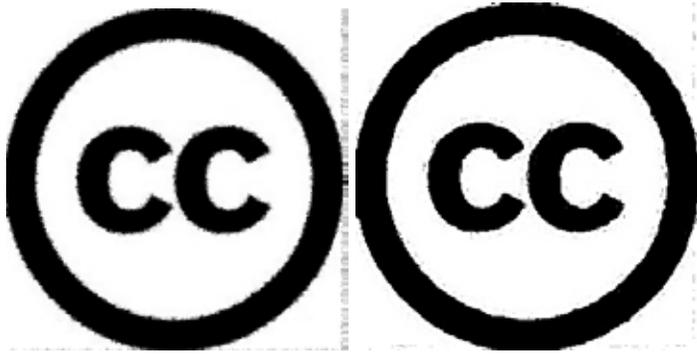
Photographic images don't work as embroidered designs. The detail in photos is too fine to duplicate using threads. Unless the images are posterized into a limited number of colors, photos just won't work. Posterized images with jagged or complex edges are also poor candidates for conversion to embroidery.



5. *Jagged edges and small areas of color detail make this posterized photographic image difficult to recreate in embroidery.*

Lines and Outlines

The lines in your design should be at least 2 points wide. Lines convert to thread best when they are 4 points wide or greater. Try to make sure all lines are clearly visible and not blurred. Avoid thin outlines around objects where possible.

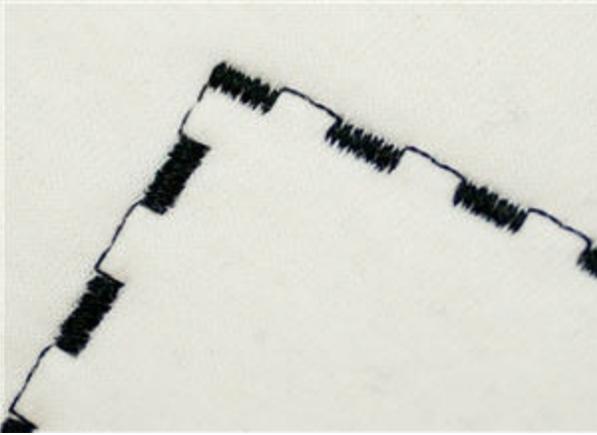


6. *Fuzzy and broken edges.*



7. *Just right: submitted design and embroidery close-up.*

Line thickness should be at least 2pt (pixels) wide. Images reproduce best when lines are 4pts in thickness or greater. Try to make sure all lines are clearly visible and not blurred. Avoid thin outlines around objects where possible. If your design requires an outline, make sure it's at least 2pts or greater. Avoid outlines around any text, and do not outline objects under .25" x 25". It's also best to avoid using one outline around another outline



8. *Example thin and thick stitch lines.*

Gradients

Gradients don't work well in embroidered images. Try reducing all gradients to solid colors.

Small Details

Avoid areas of color smaller than .25" by .25" or multiple colors in small areas. Embroidered design cannot represent this level of detail well.



9. *Too much fine detail and multiple colors in small areas.*



10. *Suitable level of detail.*

Line Art and Realistic Art

For embroidery, always use line art. Complex or realistic illustrations, which usually have blended edges or complicated detail won't look good in embroidery. This is because embroidery uses threads rather than the dots of ink used by printing. Threads represent solid colors and solid lines well.



11. *Line art converts to embroidery well.*

Use line art in all cases. Avoid using complex or realistic illustrations with blended edges or complicated details. Since embroidery uses threads rather than dots of ink, it works best when replicating solid colors and solid lines.



12. *Complex imagery does not convert to embroidery well.*

Shadow and Drop Shadows

Producing shadows in embroidery is difficult. Avoid narrow drop shadows less than $\frac{1}{4}$ " in width. It's best not to outline drop shadows and avoid using drop shadows on fonts less than $\frac{5}{8}$ " tall.

TEXAS RULES

13. *The shadows in black outside the letter outlines are very difficult to represent well in an embroidered image.*

DEEP BLUE

14. *The drop shadows behind this text will convert well because the shadow is well defined, is wide, and can be converted using a single thread color.*

Transparencies

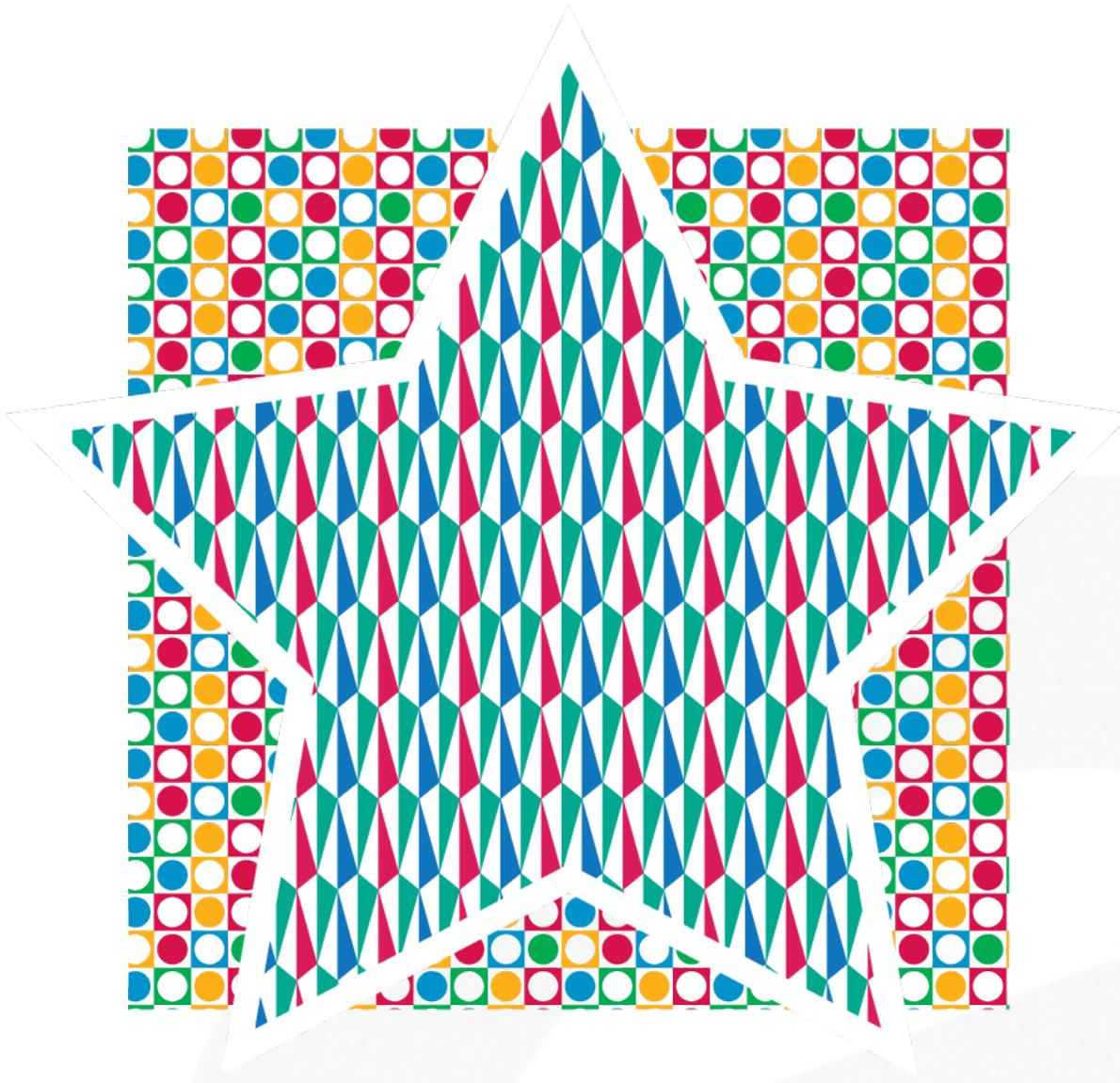
Color transparencies in images don't work in embroidery. Since threads are used to produce embroidery, a transparent effect in a graphic will be lost or muddled.



15. *This image cannot be converted to thread embroidery.*

Pattern Fills

Use solid fills in objects. Avoid patterns, specialty fills, fractals, geometric manipulations, skins, or other digital graphics techniques.



16. *Pattern with small detail. Not a good candidate for conversion to embroidery.*

Text

Choose from the many Zazzle fonts already converted to embroidery, in styles and sizes that work well stitched onto fabric. Use these fonts whenever possible. They are already converted and so do not incur a conversion fee and they are chosen because they look good in embroidery. If you include text within your design, remember that fine detail and very small sized fonts won't embroider well, if at all.

You can add text to your design after the image is converted and placed on the product. Your customer can add text within a template product, too. Remember that if your image and text combined exceed 10,000 stitches, the price of your product will go up.

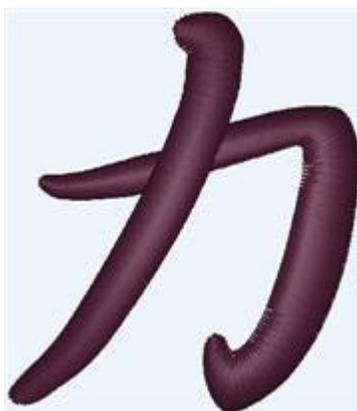
Text placement over embroidered images is not supported. For example, if you have a circle filled with color (thread) you will not be able to place text over this image. If you have a circle without colors inside, that is, without embroidered threads, you can place text within the circle.

Embroidery File Formats

If your designs have already been converted to the OFM embroidery file format, you can upload them to Zazzle using the same tool you use to upload files for conversion. There is no conversion fee for these designs. Other embroidery file formats are not supported at this time.

Stitch Count Examples

This section contains a few examples of converted embroidery designs. You can use these examples to get an idea of how many stitches are required to create a particular design at a specific size.



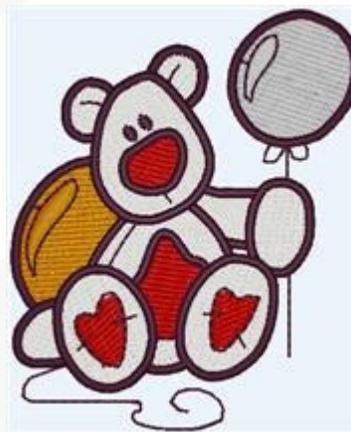
1,209 stitches, 1.76" x 2.00"



3,015 stitches, 1.06" X 1.73"



5,079 stitches, 1.76" x 2.13"



7,320 stitches, 1.75" x 2.11"



10,004 stitches, 2.51" x 1.85"



15,009 stitches, 4.84" x 2.13"