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The Importance of Garment Specification on Formal Dress: The Application of a Perfect Wedding Dress

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Abstract

Garment specification plays a critical role in the processing of manufacturing formal dress today, particularly wedding dress. However, wedding dress is usually white for the sake of purity, but today it is free to choose the form of color for wedding dress based on users' life, status and preferences. Hence, the aim of this study is to illustrate the critical role that fabric and garment specification plays in pursuing practical and aesthetic value of a perfect wedding dress. This study critically reviews the prior studies on the garment specification application in making wedding dress for today's customers from a few key aspects, including the design, size, measuring, draping and stitching, fabric specification, and textile testing of wedding dress. Furthermore, the case study of a Strapless Tight-fitting and Trailing Welding Dress indicates that garment specification includes requirements of the wedding and provide charting instruments, fabric description, fabric testing to the dress designer to better construct their wedding dresses, and ensure the quality and concept of wedding dress. This study calls on all brands to attach importance to garment specification and fabric testing to ensure sustainable use of wedding dresses.

Keywords: garment specification, formal dress, wedding dress, design, fabric testing, charting instrument, fabric description

1. Background Introduction

Playing a critical role in global value chains, it is particularly important for world-leading brands and retailers to conform to its strict limited quantity lists (RSLs). On the one hand, there are concerns that suppliers in some industries are facing a growing power of buyers who test their reliability by selecting high-quality products. On the other hand, more and more dependent on cooperation between procurement, in this kind of purchasing, suppliers to ensure the correct products conform to the specifications. Garment specification has an important role in the process of manufacturing products. It includes some styles, fabrics, and decorative details specification[1]. It is important to record the changes during the garment manufacturing process, including the date and time the changes occurred.

Networking and interaction are an important factor in each person life. When we received the invitation to any party or social meeting, Formal dress will show how important we consider the event means to us. Hence, one should always try to wear accurate dress to show the best personality. Formal dress refers to the clothes that people wear to a specific event or occasion such as a wedding, celebration, evening party, funeral, etc. Within centuries of changes, women's dress can be suitable for different occasions with different styles.[2] For example, there are day dresses, cocktail dresses and evening dresses when classified by time:

Figure 1.

Afternoon dress is a dress worn by women in the afternoon during the day. It is used for a wide variety of purposes, such as going out and visiting. The overall design fits the atmosphere of the afternoon, and is preferably of a high-class and graceful, ornate type. Its length varies with fashion trends and is generally a little longer than casual wear, but the more formal the occasion, the longer the dress is. For a typical daytime dress, accessories such as hats, gloves, shallow heels, small handbags, elegant earrings and necklaces, brooches, flowers, etc. are required.

A cocktail party is a simple meal or a simple form of gathering that takes place between 5 and 8 p.m., and the costume designed to attend such a party is a cocktail dress. The sleeves are fashionable, but they are usually sleeveless and have a wide neckline, which often leaves the shoulders exposed. The material is usually silk with an ornate design, and linen can be used in summer and wool in winter.

Evening gowns are night time social dresses, a general term for men's and women's dresses used for parties, dinners, theatre, and other occasions. The design principles are to consider the effect of light, to make the chest and back wide open, to expose the skin to reflect the light of the lamp, to be of appropriate length, and to be sleeveless and strapless. For the purpose of nighttime socializing, lustrous materials are required, as well as luxurious decorative designs suitable for a gorgeous atmosphere.[3]

If categorized different formal dresses in terms of use, there are mourning dresses and wedding dresses. Mourning dress is a dress worn during the period of mourning of a close relative (6 months~1 year), also called "deep mourning". Cotton, silk, georgette, and velvet are used to avoid glitter and glamour, and soft fabrics with a sense of weight are used. It is possible to use yarn at the neckline. Black should be used for accessories. Mourning dresses should express a sense of desolation to suit the mourning mood of the people, and it is important to keep a good sense of scale so as not to look too gorgeous or casual. Taking wedding dress as an example, the wedding dress is the dress worn by the bride in the wedding, with the change of time, although there are some changes in the wedding dress, but because the wedding ceremony is an important event in life, no matter what race or country, with the traditional and ceremonial elements, at the same time, mostly influenced by religion. In Europe and the United States, for example, the bride may wear the wedding dress that was once used by her mother or grandmother. The wedding dress is often white for the sake of purity.

[4]Nowadays, there is a tendency to choose a free form and colour according to one's life, status, personality and preferences. Usually, white is used for first marriages and lighter colours are used for second marriages. The time of the ceremony and the form (style) of the ceremony are sometimes diversified, and the length and sleeve length of the wedding dress are also individualized, resulting in a wide range of dresses such as cocktail dresses, dresses, and suits.

This article aims at illustrating the importance of fabric and garment specification[5] in pursuing practical and aesthetic value of a perfect wedding dress and help dress designers to better construct their wedding dresses.

Figure 2. Different styles of wedding dress

Source: vogue, 2020. Vera Wang Wedding Dress. https://www.vogue.com.tw/fashion/content-12196.

2. Designing and Measuring a Wedding Dress

2.1 The Design of a Wedding Dress

The design of wedding dresses is mainly X-shape, and its style composition is mainly double-stacked and see-through. The so-called overlapping style is that the external shape presses down on the internal shape to produce a rich sense of layering on the surface of the dress, while the translucent style uses transparent or semi-transparent fabrics to overlap and reveal a new shape, giving the dress a hazy and dreamy feeling. At present, the more common forms of wedding dress design include classical style, straight-body style and free-form style.[6] For example, classical style strengthens the three-dimensional shape of women by the skirt support, chest pad, hip pad, etc. This type of modelling often exaggerates the female chest and hips, forming a huge wedding dress volume to bring out the bride's noble temperament. While the straight body style (fishtail style) best shapes the curves of the bride's figure, from the bust to the hips. It is often recommended for taller brides. Free-form style draws on the characteristics of various types of clothing styling and form a unique wedding dress styling.

When looking at the design of skirt shape, there are type 0 skirt, type A skirt, and fishtail skirt. Type 0 skirt is characterized by the fittest upper body, which is bulky and spherical in shape. Type A skirt is known as the trumpet skirt which is simple and simple, and is a commonly used skirt in wedding dress design. Fishtail skirt is the shape of a fishtail tightening from the knees and opening downwards, often accompanied by a long trailing skirt design. On the other hand, when looking at the partial modelling of a wedding dresses, it could be vary and can greatly influence the overall styling of the wedding dress. The styling of a wedding dress includes collar, sleeve, waistline, sleeves, skirt and so on.

2.2 Size and Measuring

There are two methods used for drawing paper patterns. One relies entirely on dimensional data obtained from the human body, while the other obtains other dimensions and relationships through formulae based on one or two basic data obtained (mostly chest circumference, sometimes also checked with height). The following three points are very important in wedding dresses:

(1) Bust: Measure around the fullest part of your bust, ensuring the tape measure is straight across your back.

(2) Waist: Measure around the smallest part of your waist. To find this, bend to one side like a teapot and where the crease forms is your natural waist.

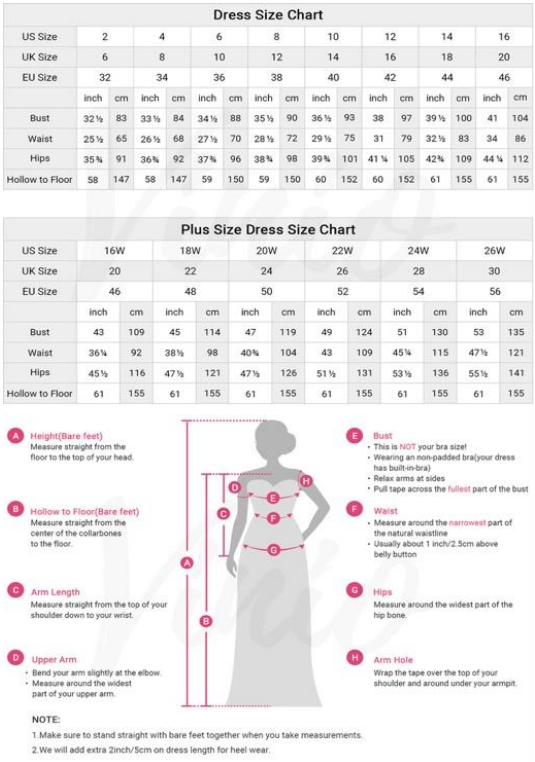
(3) Hips: With your feet together, measure around the fullest part of your hips, usually 20cm down from the natural waistline.

When speaking of sleeves, there are three points that should be focused on sleeve measurement:

(1) Upper arm circumference: The circumference is measured around the fullest part of the upper arm through the armpit and at 10-12 cm from the shoulder point. This measurement is influenced by fashion and is the one that is used more often.

(2) Arm length: Measure from the top of the arm, at shoulder point, to the wrist through the elbow joint, following the curvature of the arm. The arm should be bent during measurement. This measurement is more influenced by personal factors and less by fashion.

(3) Wrist circumference: The circumference measured around the wrist, which is generally required not to be too tight on the ruler.



Dress Size Chart

US Size	2		4		6		8		10		12		14		16	
UK Size	6		8		10		12		14		16		18		20	
EU Size	32		34		36		38		40		42		44		46	
	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm
Bust	32½	83	33½	84	34½	88	35½	90	36½	93	38	97	39½	100	41	104
Waist	25½	65	26½	68	27½	70	28½	72	29½	75	31	79	32½	83	34	86
Hips	35¾	91	36¾	92	37¾	96	38¾	98	39¾	101	41¼	105	42¾	109	44¼	112
Hollow to Floor	58	147	58	147	59	150	59	150	60	152	60	152	61	155	61	155

Plus Size Dress Size Chart

US Size	16W		18W		20W		22W		24W		26W	
UK Size	20		22		24		26		28		30	
EU Size	46		48		50		52		54		56	
	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm	inch	cm
Bust	43	109	45	114	47	119	49	124	51	130	53	135
Waist	36¼	92	38½	98	40¾	104	43	109	45¼	115	47½	121
Hips	45½	116	47½	121	47½	126	51½	131	53½	136	55½	141
Hollow to Floor	61	155	61	155	61	155	61	155	61	155	61	155

Figure 3. Size of wedding dress

Source: viniodresses, 2020. Size Chart. https://www.viniodresses.com/pages/size-guide.

Furthermore, speaking of ‘size’, it is important to distinguish whether it is the net size or the size of the final garment. The two are often confusing and make garment production and finished garment sales very difficult.[7]

However, in the case of ‘size’, the current trend is to relate directly to body measurements (e.g. bust, waist or height), which allows the cutter to make the most of his or her ability to judge whether the size is correct or whether the garment fits.

Attempts at Standardization—BS3666: BS3666 was produced in 1982, by the British Standards Institute, in an attempt to standardize British sizes for women’s clothes from the smallest size 8 to the largest size 32, however without any legal requirements for retailers to use the standard, it had little effect. It has since been superseded by EN13402 which uses body dimensions in order to size clothes and was created in order to provide a common set of European clothing sizes[8]. The standard was also quite lax giving ranges for bust measurements and hip measurements for each of the sizes as below:

Size	Bust		Waist		Hips	
	cm	in	cm	in	cm	in
8	81	31.9	61	24.0	89	35.0
10	85	33.5	66	26.0	93	36.6
12	89	35.0	71	28.0	96.5	38.0
14	93	36.6	76	29.9	101.5	40.0
16	97	38.2	81	31.9	106.5	41.9
18	102	40.2	86	33.9	112	44.1

Figure 4. Standard British Size

2.3 Draping and Stitching

Figure 5. Draping and stitch of the wedding dress

Source: Johndanatailoring, 2020. DISCOVER TRUE QUALITY. http://johndanatailoring.co.uk/.

Draping means natural pleating, draping, drape (fabric), etc. The drape of a fabric creates a beautiful pleating. The drape of the fabric creates a beautiful draping, which can be used to create pleated garments in three-dimensional shapes. Three-dimensional cutting is a styling technique for fashion design. Three-dimensional cutting and flat cutting belong to different cutting methods and are both important ways of completing the styling of a garment. A perfect wedding dress is made through dividing, folding, shrinking, stretching and other technical techniques to make a pre-conceived garment modelling, and will be converted into a more accurate and appropriate pattern, and then made into clothing. Compared to flat cutting, three-dimensional cutting and modelling has advantages such as intuitive, practical, adaptive, flexible, and corrective.

Stitching includes procedures such as false stitching, sample making and sewing. False stitching is a method of temporarily sewing a garment together in order to carry out a trial of the garment. This makes it easier to create the finished garment and to fold it back for structural corrections later on. Following is sampling. By putting the sample on the body, the shape of the garment is observed. The garment then is altered to fit the wearer's body as closely as possible, taking into account any deficiencies. Next is sewing. After a partial stitching process, the garment is sewn into place. For example, sewing darts is a fabric manipulation technique in which the fabric is folded to give it a three-dimensional contour and then stitched into place. It accentuates the curves of the body and narrow it to create a fuller body. The last step is to sew buttonholes, pinned buttons and ironing. And here, a custom-made garment will be completed.

2.4 Fabric Specification

As far as good dresses are concerned, style and colour are very important, but when it comes to specific design, how to choose the fabric of the wedding dress is even more important, because the design of the wedding dress is ultimately completed and reflected by the fabric, and good colour is also expressed through the texture of the fabric. [9]The wedding dress can make the bride the focus of attention, so when designing a wedding dress, not only should we pay attention to its shape and colour design, but the choice and design of the fabric is also very important. Wedding dresses often use silk, satin (silk satin, chiffon satin), yarn (mulberry yarn, georgette yarn, etc.), taffeta, silk and silk fabrics with embossing effect, etc., the current wedding dress design sometimes also uses fur, leather, feathers, knitting, brocade and other materials and other fabrics interspersed with matching,

highlighting the effect of fashion.

Figure 6. Fabric specification of the wedding dress

Source: Hillary Hoffower and Blair Donovan, 2020. Wedding Dress Fabric Guide: The A To Z Of Wedding Dress Materials. https://www.brides.com/story/wedding-dress-fabric-guide.

(1) The fabrics often used in wedding dresses

- Gauze material: Gauze material is one of the most commonly used materials for wedding dresses. It can be used for a variety of purposes, both as a material and as an accessory. It feels soft and elegant, and can express a romantic and hazy beauty, with a mystery hidden in its magnificence, which can be applied to all seasons. The gauze material is suitable for the design of cascading, princess and court wedding dresses to create an atmosphere.
- Satin material: Satin material is also one of the most commonly used materials for wedding dresses. It has a thick texture, a sense of line, good drape and have a sense of weight, more suitable for tall, plump type of people to wear. At the same time, it is suitable for designing wedding dresses for spring, autumn and winter because of its warmth retention. Satin is also suitable for A-line and fishtail wedding dresses, which express a sense of grandeur and line. In addition, satin is also commonly used for courtly or large tail wedding dresses with a lustrous feel.
- Lace material: When silk material is an essential accessory in the design of the wedding dress, it is usually used as decoration or point level at the edge of the wedding dress, but sometimes it is also used on a large scale in the body and hem of the wedding dress, giving a sense of luxury and reflecting the characteristics of the nobility and aesthetic romantic atmosphere. The lace material is often used in straight or small trailing styles, over other materials, to reflect the exquisite figure of the bride. If used as a material, any style can be used.
- Silk material: The special nature of the silk structure leads to a distinctive lustre of silk material, while its thin texture, soft and smooth, elegant and gorgeous, with a natural noble atmosphere, suitable for gorgeous court wedding dress design, is also the preferred material for summer wedding dresses.

2.5 Textile Testing

Fabrics are manufactured for many different end uses, each of which has different performance requirements[10]. Textile testing plays a vital role in measuring product quality, ensuring compliance and assessing the performance of textile materials.[11] Common properties of textiles include the appearance of textiles and the durability of textiles. The appearance of textiles is tested for defects and surface smoothness, colour shading and colour fastness, pilling, grip, stiffness, drape and wrinkle recovery.

2.5.1 Durability Testing

Figure 7. The machine for durability testing

Source: TESTEX, 2020. Martindale Abrasion & Pilling Tester TF210. https://www.testextextile.com/product/martindale-abrasion-pilling-tester-tf210/.

[12]Durability testing of textiles includes tensile breaking, tearing, abrasion resistance, dimensional stability, etc. The Martindale Abrasion Test is a test for the abrasion resistance of textiles. The Martindale Abrasion Resistance Test is a test performed on textiles according to the Martindale Standard System, by which the abrasion resistance of textiles is tested. Abrasion resistance is the resistance of a textile to repeated rubbing with other materials. The Martindale Abrasion Tester is used to test the abrasion resistance and pilling resistance of textiles. It is used by pulling out the fabric to be tested and loading it onto the lower plate of the machine (Martindale Abrasion and Tensile Tester TF 210). The abrasive is then applied (the abrasive can be a small disc of worsted wool or wire mesh). The abrasive is then rubbed against the sample to be tested on a vibrating ring. It is important to note that the standard friction cloth should be changed before testing each new sample or before completing 50,000 tests. Check that the standard friction cloth is not contaminated or worn (if any) and replace it. This method does not apply to fabrics thicker than 3mm. Samples can be washed or dry-cleaned prior to testing. Test results for Martindale machines are usually given in terms of 1,000 rubs or completed cycles. The higher the friction or cycle score, the more suitable the fabric is for heavier use. We basically classify fabrics according to the test results. Studies have shown that when results of less than 1,000 rubs are obtained, the fabric is recommended for decorative purposes and is therefore not recommended for general use. If the fabric yields 10,000 to 15,000 wipes, it is highly recommended for fine clothing, if the fabric is well constructed or if the fabric is made of fine yarn.

2.5.2 Stability Testing

Figure 8. The machine of stability testing

Source: Karia, 2020. MARSHALL STABILITY MACHINE. <https://geotechnical-equipment.com/product/marshal-stability-machine/>

The dimensional stability of a fabric refers to the variation in the size of the fabric when it is used or reworked due to the properties of the material and the potential for heat shrinkage during processing. A wedding dress should be a memorable gown, a gown with good dimensional stability can be worn and washed many times, the original folds and shape remain unchanged, and the dimensions do not shrink or stretch, which can affect the bride's enjoyment of her wedding dress. Fabrics with poor dimensional stability usually show shrinkage, for

example when sewing, ironing, washing, etc. The method of testing it is specific. The test method for this is to select a smooth sample, without visible creases, of at least 500mm * 500mm in size; if the width is less than 500mm, a complete sample of at least 500mm in length can be used. Make 3 pairs of markers along the longitudinal and latitudinal directions. If necessary, a 250mm * 250mm sample can be used and 3 pairs of marks made in the length and width direction of the sample, with a distance of 200mm between each pair.

2.5.3 Colour Fastness

Figure 9. The machine for colour fastness

Source: Salima Sultana Shimo, 2020. Colour Fastness of Textiles | Colour Fastness to Washing. <https://textilestudycenter.com/colour-fastness-of-textiles-colour-fastness-to-washing/>

[13]Colour fastness to washing is one of the most important tests for silk materials, as most silk materials are dyed with acid dyes and only proper dyeing can impart good washing fastness properties. At least three samples of 10 cm x 4 cm are taken for testing. Take two neighbouring fabrics, each measuring 10 cm x 4 cm. Prepare a composite specimen of the sample with a piece of the same fabric as the second, i.e. silk and cotton. Normally, test number of ISO 105 C10 is used for silk materials (BIS Standard - IS / ISO 105 C10: 2006, 2006). The test is maintained at a temperature of 40 °C for 30 minutes Preparation of a soap solution containing 5 g of soap per litre of water and heating it to 40 ± 2 °C. Filling the container with the soap solution so that the liquid ratio is 1:50. Colour fastness to perspiration stains is also a criterion for silk materials, as perspiration is the state in which humans produce sweat. The condition varies from person to person. However, all perspiration can be classified as either acidic or alkaline. Sweat reacts with certain dyes and disappears or changes colour. The sweat test (BIS Standard - IS 971:1983, 2004) is an important parameter; as sweat changes colour, it needs to be evaluated.

3. [14]Case of Study

Figure 10. The picture on the left represents the front side of the wedding dress, the picture on the right represents the back of the wedding dress

Source: Amazon, 2020. Wedding Dress. <https://www.amazon.es/CASEY-L-Vestidos-Vestido-Palabra-Princesa/dp/B07X3RXGP5>

Apply the above theoretical rationale to a practical test of a wedding dress, using a branded wedding dress as an example.

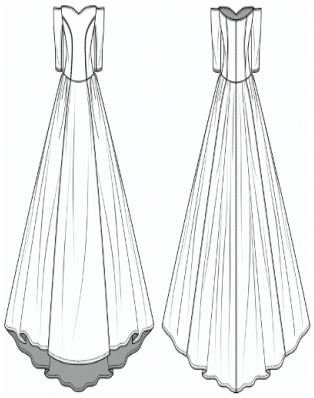
This is a Strapless Tight-fitting and Trailing Welding Dress, a super flattering silhouette in all shapes and sizes. Fitting to the bust to accentuate your narrowest point, this style gradually flows into an “A” shape while drawing the eye upwards to the beautiful waist. If you are unsure of the silhouette, an A-line wedding dress is a good starting point.

The balanced proportions do an excellent job of drawing the eye upwards and giving you the appearance of a pronounced waist, so it is flattering on all shapes and fits perfectly into any wedding theme. The wedding dress is strapless, with a rounded front and back topline, a centre back seam opening for a zip and short, seamless half drawstring sleeves, giving it a sophisticated aesthetic. In order to achieve the wide hemline of the skirt, additional support must be added to the skirt.

3.1 Measurements Instructions

(Co-existed Sample Garment and Sheet) Design Sheet (----)- Upper Garment Version

Development Date	2020/3/12	Sales Structure	TP √ A B C	Bulk Size	S/M	Supplier	N/A
Completion Time	N/A	Launch Date	N/A	Our Sample Garment Size	S	Category	Dress
Style#	N/A	Short Name	Strapless Tight-fitting and Trailing Welding Dress	Requirement of Duplicate Sample	S	Required Sample	1

***Design Model ***		
	Stereotype	Tight-fitting √ Fit Loose Ultra-loose
	Softness	Ultra-soft Soft Moderate √ Tough
	Elasticity	Nonelastic √ Micro Elastic Super Elastic
	Thickness	Transparent Slightly Thin Moderate √ Slightly Thick
	Main Label	CA- (1) (2) (3) CB- (1) (2) (3) CC- (1) (2) (3) CE- (1) (2) (3) CF- (1) (2) (3) Center back neck seam ( ) Left side of center back neck seam ( ) Left seam at bottom swing overlapped with the sewn-in label (√)
	Special Process	Required: Lining Process
	Color	White
	Color Code	(1) Colors

Size Path Details_Plate-making Garment Sample | ***Description of Sample Garment Design *** | Order Time: 2020/3/12

Size / Part	Measurement Method	Refer to color of original edition (white) Size (S)	Sample Garment Size: Required Size (s)	Paper Pattern Size (s)	Duplicate Garment Size ( )	QC Sample Garment Size ( )	Prototype Sample Size ( )	Required Bulk Size ( )
Date								
Handled by		cm						
Lenghth	Center front length	150						
Shoulder Width	Straight measure from two back shoulder point	41						
Bust	Circular measure from shoulder neck point down 24cm	88						
Recommended Bust	Net Bust	82						
Back Neck Drop	Vertical Height from neck point	12						
Front Neck Drop	Vertical Height from neck point	19						
Waistline	Across measure from waist line	68						
Hipline	Across measure from center back	98						
Bottom Width	Straight measure/circular measure	900						
Sleeve Length	Straight measure from mid sleeve	25						
Sleeve Width1/2	Across measure from underarm	19						
Sleeve Opening1/2	Across measure	17						

The content in this blank is shown below.

Designer	N/A	Order Supervisor	N/A	Sample Ready Time	N/A	Sample Garment	Yes No	Sample Color	White	Sample Quantity	1 pcs

Figure 11 (a). Self-made design sheet.

The content of the blank is shown below.

(Co-existed Sample Garment and Sheet) Design Sheet (---)- Upper Garment Version

Style #	N/A	Short Name	Strapless Tight-fitting and Trailing Welding Dress	QC N/A	Date N/A

PP Comments

1. Princess line and structure line seaming: BP point, accurate alignment with waist node, smooth and round stitching, consistent tightness of upper and lower cut-parts; the stitch length shall not be less than one inch (cut-parts: 11 stitches, waistline: 9 stitches, muffs: 11 stitches)
2. Please pay attention to the seam allowance according to the size chart, which shall not be less than the size chart or greater than 1/2inch.
3. Under-pressing: no mark is allowed at the opening seam; the seam shall be flat without any wrinkles.
4. Under-pressing: the collar will have sewing shrink, so do not be stretched. It shall fit with the original version after ironing; the lower fold part shall be smooth and flat without dimples.
5. Upper zipper: the tightness of shell fabric, lining fabric and zipper shall be consistent without any waves. In the event of upper seam, water soluble lace and corded piping etc, please leave the space of 1/16inch to prevent stuck zipper. The tail of zipper shall not have dimples or wrinkles with consistent tightness. The appearance shall be in a natural and uniform state.
6. Sleeve: the sleeve center seam at the upper sleeve shall be straight; the position of sleeve tolerance shall be correct;
7. Lining fabric: the waist line of shell and lining fabric shall be smooth without narrowing or too much tolerance. The seam tolerance at the tail of zipper shall be centered. Watch out the tightness of stitching; the floating thread or skipped stitch are not allowed. Pay attention to the teeth height, which shall not damage the lining fabric.
8. Pleats: please pay attention to spacing of pleats. According to the dart line marked during plate-making and the teeth mark, proceed the shirring based on the splicing size. The pleats must be straight and smooth without too much spacing.
9. Lower hem seaming: the seam tolerance shall be even without inconsistent space, blurred edge and double pleats. The line shall be smooth at the time of ironing the hem. Each seam shall be smooth without marks.
10. Sleeve: the welt of shoulder pad shall not be too tight or loose. The welt size shall be uniform and filled without emptiness, smooth and round without concave and convex shapes.

Estimated Procurement of Bulk Fabrics and Accessories

Fabric	6m
Lining	6m
Fusible Interlining	4m50D lining
Zipper	60cm hidden zipper (one)
Thread	DTM cotton thread
Button Holing	0
Sewing button	
Button	
Bag for Reserved Button	
Packing Bag	
Main Label	
Sewn-in Label	

Type of Material	Fabric Sample	Material Price	Fabric Width cm	Material Composition
A	Silk satin			
B	Taffeta			

Bulk Size

Part	Measure Method (Unit:CM)	Bulk Finished Size											
		XS		S		M		L		XL		ONE	
Lenghth	Center front length	150		150		150		150		150			
Shoulder Width	Straight measure from two back shoulder point	39		41		43		45		47			
Bust	Circular measure from shoulder neck point down 24cm	84		88		92		96		100			
Recommended Bust	Net Bust	78		82		86		90		94			
Back Neck Drop	Vertical Height from neck point	12		12		12		12		12			
Front Neck Drop	Vertical Height from neck point	19		19		19		19		19			
Waistline	Across measure from waistline	64		68		72		76		80			
Hipline	Across measure from center back down 54cm	900		900		900		900		900			
Bottom Width	Straight measure/circular measure	18		19		20		21		22			
Sleeve Length	Straight measure from mid sleeve	93		98		101		104		107			
Sleeve Width1/2	Across measure from underarm	18		19		20		21		22			
Sleeve Opening1/2	Across measure	15		17		19		21		23			

Figure 11 (b). Description of sample garment sheet: Continuing from the Figure 11 (a).

This figure showed the content of the blank in the figure 11 (a).

The details of the measurements are shown in the diagram and it is worth noting that when measuring, you should always stand with your heels straight and lower your arms down at the side of your body. The size must be selected from bust, natural waist, hips and hollow to hem. When measuring, wearing undergarments (bras, pads) that will be worn with the gown to fit snugly to the body. Place your thumb on the back of the tape. The tape should fit snugly but not too tightly. Finally, hollow to the hem. Wear shoes with the same heel height, just in case. Check the designer's measurement chart to see if your overall 'hem to hem' measurement requires any additional length.

3.2 Charting Instruments

This is a strapless shape, but because of the sleeves, a basic bodice prototype is used.

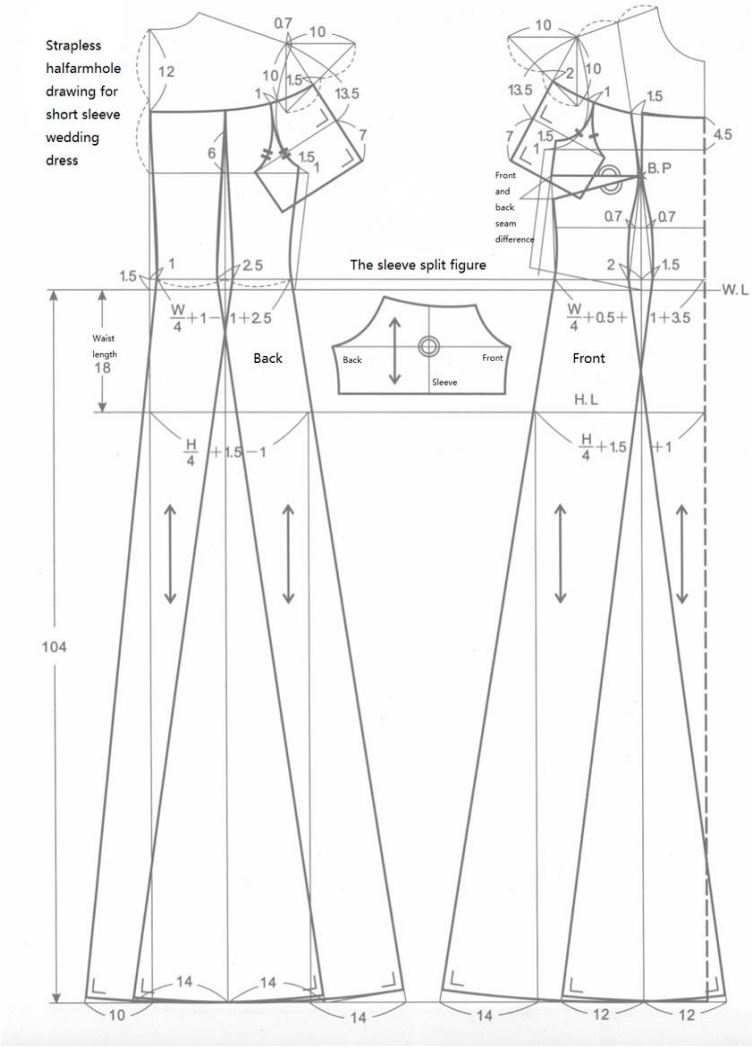


Figure 12.

(1) Skirt length: 104cm from the waistline down.

(2) Waistline: 1.5cm from the natural waistline upwards.

(3) Bust measurement: increase and decrease by 3cm. 1.5cm in front and 1.5cm in back from the prototype.

(4) Waist circumference relief: increase and decrease by 3cm. 0.5cm for the front waist and 1cm for the back waist.

(5) Hips: first add and release 6cm for charting, then add and release 1.5cm for the front and back hip widths respectively and make a plumb line to the bottom edge line.

(6) Front and rear side seam hem widths: 14cm respectively.

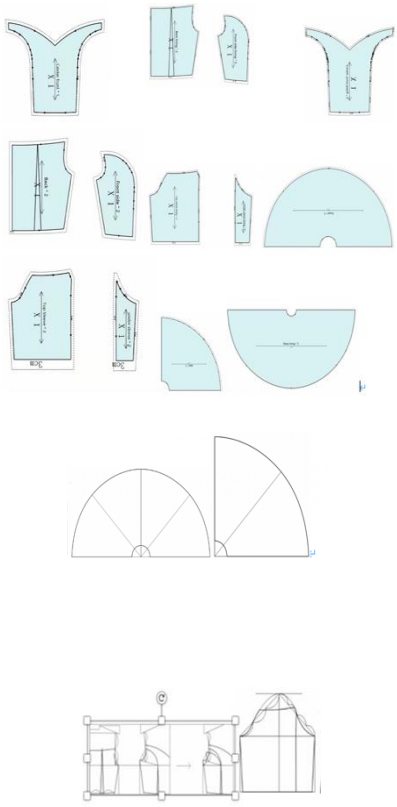


Figure 13.

(7) Front and back princess lines: Draw the front and back waistline, then draw the overlap of the princess lines on the skirt length line according to the vertical line of the waistline.

(8) Back centre seam hem: place the hem 10cm apart.

(9) sleeve mapping: according to the method of shoulder sleeve, but because the sleeve of the wedding dress is mainly fit, the shoulder end of the mapping is not as high as the principle of mapping to the outward release of the amount of arm lift 1.5cm, but directly according to the shoulder end of the triangle for mapping, the back shoulder by the prototype shoulder end into the 0.5cm and then make a triangle, before and after the slope of the sleeve line is also greater than the general sleeve by, the sleeve height of 13.5cm.

(10) Upper mouth line: the front centre is 45cm up from the bust line and the back centre is 12cm down from the back of the neck point, as shown in the picture.

(11) R and back widths: incorporate the lead, then draw the sleeve halves, sleeve halves and sleeve widths respectively as shown.

(12) Front upper sleeve line: for strapless styles, split 1.5cm in the princess line of the front upper sleeve line.

(13) The front and back pieces are combined into one sleeve.

3.3 Fabric Description

Shiny satin has always been the fabric of choice for most brides, the beauty of satin is in the shine, feel and drape. Satins are richly textured and made from silk and nylon fibres that produce a high count. Silk satin is one of the more traditional wedding fabrics, but as satin refers to a specific finish, it can also be made from polyester or blends. The durable weight of the fabric is suitable for all seasons, although thicker fabrics (such as Duchess) are best suited to the cooler months. The material is luxurious and sensual, and can provide good support, making it suitable for structural designs such as crinoline or evening dress styles.

Taffeta is available in a variety of styles and is made from silk or synthetic fibres. The stiffer the taffeta, the higher its quality. This crisp, versatile fabric has a winter air and is light in summer, and can be made in almost any colour, sometimes iridescent due to the weaving process. The soft fabric has a sense of structure, making it ideal for A-line wedding dresses and full-skirted evening gowns.

3.4 Fabric Testing

- Abrasion testing BSI: BS EN ISO 12947-1, -2, -3 AND -4[15]

The wear test measures the weight loss of the fabric as well as the pilling. Pilling occurs when a fabric is continuously rubbed against another fabric in an abrasive machine. This test measures 4 round, 1-3/8 inch diameter test samples from each fabric. The samples are first weighed and then placed in an abrasion tester. 20 samples are each subjected to 2000 cycles of abrasion. At the end of the cycle, the samples were observed for pilling and weighed again.

- Seam strength test BS EN ISO 13935-2: 2014

A seam strength test is carried out to test the strength of the regular seams between the many warp and weft threads in the sample.[16] After the test, the peak load, breaking strain and modulus of the fabric are determined. The peak load is measured as the maximum load recorded during the stretching of the fabric. The strain at break measures the percentage elongation of the specimen at break. The modulus measures the initial resistance of the material to tensile force. During this test, all warp or weft yarns are clamped. Since the entire width of the sample is fixed in the test machine, the strength is related to the width of the sewn seams between the fabric sheets.

- Colour fastness test

Wedding dresses are affected by the lighting in the venue, so it is particularly important to test for light fastness and perspiration fastness:

Light fastness to light BSI: BS EN ISO 105:

Exposure can be achieved using natural light or by applying artificial light from a light source that simulates natural light (e.g. a Xenon arc lamp that simulates a D65 light source).[17] ISO 105 Part B (as part of ISO 105-A01 (2010)) includes all test methods involving light as a fading or discolouring reagent: natural or artificial light, perspiration alone or in combination with rain or water, heat and water. Temporary effect on textile colours (e.g. photochromic).

Colour fastness to perspiration BSI: ISO 105 E04:

The colour fastness to perspiration stains reflects the self-colouring and colouring of the textile lining in different test solutions containing histidine under the combined effect of pressure and temperature.[18] The colour change of the samples and the staining of the lining fabrics were assessed using a grey card. The results are graded on five levels, of which five are the best and one is the worst. At a wedding event there is a great deal of movement and sweating and a brief contact between the textile and the sweat may have little effect on its colour fastness, but prolonged contact between skin and sweat will have a significant effect on some dyes. Unsatisfactory colourfast clothing can easily transfer dyes from textiles to human skin through perspiration, and the molecules and heavy metal ions of dyes may be absorbed by the body and through the skin, which can be harmful to health.

4. Conclusion

Dresses have different manufacturing specifications and measurement specifications, have different cuttings and special fabric applications in garments, and have different needs and uses in different situations. This article analyzed different cut measurements and special fabric styles that characterise wedding dresses and found that the importance of fabric testing and specification in the dress specification is that it ensures the quality of the dress and reflected the design concept of the wedding dress. Specific examples of wedding dresses illustrated how to make wedding dresses with high use value and sustainability. Therefore, the author calls on all brands to pay more attention to garment specifications and fabric testing in the future to ensure the sustainable use of wedding dresses.

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