



Daffodil
International
University

Faculty of Engineering

Department of Textile Engineering

REPORT ON **“Study on Sample Development Procedure for Knit** **Items”**

Course Title: Project (Thesis)

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This Report Presented in Partial Fulfilment of the Requirement for the
Degree of Bachelor of Science in Textile Engineering

Advance in Apparel Manufacturing Engineering

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LETTER OF APPROVAL

January 10, 2023

To

The Head

Department of Textile Engineering

Daffodil International University

Daffodil Smart City, Birulia, Savar, Dhaka-1216.

Subject: Approval of Thesis Report of B.Sc. in Textile Engineering Program

Dear Sir,

I am writing to inform you that ID: 193-23-5736 and ID: 193-23-5734 have completed their thesis reports, in preparation for the final evaluation of "**Study on Sample Development**". The data collected and their summary forms the basis for the preparation of this report. These students worked together with each other to produce their thesis report, which ended up being an important source of information for readers.

Thus, it would be greatly appreciated if you would kindly accept this report and take it into account for your last assessment.

Yours Sincerely,



Md. Abdullah Al Mamun

Associate Professor

Department of Textile Engineering

Daffodil International University

DECLARATION

We now sincerely proclaim that: All of the material included in this report is accurate. We talked about the procedures that go into developing a sample. We get all the sample development data when we are interning. This report has not been submitted or duplicated elsewhere, not even for credit toward a degree from another university. For this reason, full credit has been given to all the sources and materials used in this work.

 _____ Name: Al Amin Sagar Roky ID: 193-23-5736	 _____ Name: Md. Aman Ulla Aman ID: 193-23-5734
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ACKNOWLEDGEMENT

Firstly, we are thankful to Allah Ta'ala for giving us the ability to finish this report.

Our deepest gratitude goes out to Md. Abdullah Al Mamun, Associate Professor in the Textile Engineering(TE) Department at Daffodil International University, for giving us the golden opportunity to work on this thesis report and for his helpful advice and direction during the process. We were tremendously moved by his energy, vision, genuineness, and drive. Being able to learn under his direction was a priceless privilege and honour. We are quite appreciative of him as a result.

We express our gratitude to the organizations that offered us internships and to the supervisors who guided our training. We have been able to finish this thesis report as a result of the excellent data collection.

We also sincerely thank our esteemed parents, who have never wavered and have constantly prayed for us.

DEDICATION

This study is wholeheartedly dedicated to our beloved parents, who have been our source of inspiration and gave us strength when we thought of giving up. They continually provide their moral, spiritual, emotional, and financial support.

To our beloved teacher, Md. Abdullah Al Mamun, our training supervisor, friends, and classmates who shared their suggestions and encouragement to complete this study. Lastly, we dedicated this report to the Almighty Allah. Thank you for the guidance, strength, power of mind, protection, and skills, and for giving us a healthy life. All of these, we offer to you.

ABSTRACT

A sample development process begins with the buyer's order confirmation. It is difficult for the manufacturer to make ideal sample garments. A sample order serves as the buyer's means of identifying and evaluating the manufacturer's capabilities. After receiving the garment sample, they will decide whether to place the order with the manufacturer. The apparel industry works only when orders are received. Merchandisers help with orders. They contact the customer and get an order from them. But after the sample arrives, the customer verifies the order. After making sure everything is in order, they check everything they need for the clothes before placing the order. Because of this, both manufacturers and consumers place the biggest value on sample clothing. By the completion of this thesis, we hope to have an understanding of the sample development process from start to finish. What kind of documents need to be approved for the buyer and what are the necessary things to be taken into consideration are discussed here. While working on this thesis, we have had direct or indirect contact with every industry, and we have been able to gain amazing knowledge about the complete sample development. After completing it, we got the final sample. We learned how to develop a product step by step.

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ABBREVIATIONS

TNA: Time and Action

PO: Purchase Order

PPC: Production planning and control

L/C: Letter of Credit

B/L: Bill of Lading

CI: Commercial Invoice

PI: Proforma Invoice

P/L: Packing List

CAD: Computer-Aided Design

GPT Sample: Garment Performance Test Sample

PP Sample: Pre-Production Sample

TOP Sample: Top of the Production Sample

SMV: Standard Minutes Value

CHAPTER- 01

INTRODUCTION

1.1 Background of The Study

Bangladesh's garment industry is one of the world's most important industrial sectors. We are well-known throughout the world for our "Made in Bangladesh" label since customers have faith in us and our clothing products. In terms of creating jobs both directly and indirectly as well as net foreign exchange profits, it has significantly boosted the economy of our nation. Thus, in the last seven years, the yearly income of our clothing business has climbed by 80%, from \$42.61 billion to \$47 billion. The top exporter of clothing worldwide is China, followed by Bangladesh. Eighty4.58% of Bangladesh's total export revenue comes from this sector. Over 10% of the nation's GDP is generated by the apparel business, which employs 5 million people, mostly women. Export performance has a notable effect on a nation's growth and development. In Bangladesh's export industry, ready-made(Apparel) clothing is the main source of foreign exchange earnings. Clothing manufacturing enterprises must concentrate on mass production to fulfill these predetermined revenue targets while making sure that, given their limited resources, their products are high-quality and free of defects.

The Merchandising departments of buyers, suppliers, and merchandisers are crucial in the RMG industry. The tasks included in the merchandising process include interacting with the customer, obtaining orders for a particular quantity or design, creating samples and getting approvals, creating cost and expense sheets, negotiating with the customer, adhering to time and work schedules (TNAs), etc. A group of merchandisers manages the procurement of raw materials, setting up pre-production meetings, mass production, final product quality inspection and transportation. Merchandisers are required to have a solid understanding of company legal documents to execute merchandising procedures. These documents include bills of lading, packing lists, shipping documents, commercial invoices, pro forma invoices, and credit letters. For commercial reasons, they meticulously create clothing samples and oversee customer orders. To guarantee prompt delivery of the appropriate amount and quality, they keep an eye on the company's manufacturing activities. Throughout the past thirty years, managing time, money, and agility have been important goals of clothing supply chain management.

As a primary step in the clothing production process, sampling is essential for drawing in customers and securing orders. Customers typically place their orders after being pleased with the responsiveness and quality of the samples. In clothing merchandising, this is the most important phase. The buyer's demands and requirements are taken into consideration

when the sampling department creates samples. The term "merchandising sampling" can refer to "the concept, perception, and ideas of a fashion designer developed into product samples in systematic stages of product development, with technical and quality clarity in a development." Sampling will assist the exporter in obtaining the buyer's order, despite being a challenging and time-consuming operation.

The buyer wishes to ascertain whether the firm can produce the styles at the required quality standards before making any orders. The exporters' capacity to handle a certain style of garment is determined by the samples. Only with the assistance of samples can the buyer access the exporter's skills. Should the samples exhibit high quality, purchasers will be inclined to place an order with the manufacturing facility. Furthermore, sampling affects both the marketing and production sectors because it serves as a link between them. Thus, the samples must be creative and of the highest caliber.

1.2 Objectives of The Study

In this project, a merchandiser creates many excellent samples in accordance with the demands of various customers.

More objectives are given below-

- ❖ To know about sample development.
- ❖ To be aware of sample development flaws and how to fix them.
- ❖ To become familiar with various tech packs and evaluate the argument.
- ❖ To gain knowledge about the use of artwork build-up.
- ❖ To study sewing machine operation, stitch types, and seam comparisons between various clothing.
- ❖ To learn about the kinds of samples that the buyer requires.
- ❖ To be knowledgeable about technological fixes for various types of errors.

1.3 Significance of The Study

In thesis report, we have discussed the steps to be taken to create a merchandiser's sample development. So that a common student can learn some things from the report and understand the challenges taken by the merchandiser, Samples are very important to inform the buyer about the exporter's potential and allow the buyer to judge the exporter's production. First, we discussed how merchandisers collect the tech pack provided by the buyer and go through sample development step by step. Analyzing the tech pack is the first task of the merchandiser. Then get an estimate of the cost of making a complete sample, including fabric, measurements, sewing, accessories, printing, and the cost of a complete order. By looking at all the topics, a student can gain good knowledge about sample development.

1.4 Limitation of The Study

- ❖ Temporal restriction on this topic's research.
- ❖ Restriction on original data sources.
- ❖ Restriction on reliable data.
- ❖ Modifying the layout, style.
- ❖ Owing to confidentiality, the factory limits access to some information.
- ❖ Restriction of mobility around the element.
- ❖ Restriction on the number of working days in each sector, particularly retailing.

CHAPTER-02

LITERATURE REVIEW

2.1 Definition of Garment Sample:

A product used to assess a group or large number of products for measurement, design, quality, or any other reason is called a garment sample. The buyer certifies or offers feedback on any modifications to the product's quality based on the garment samples. Garment samples can be taken either before the start of production or after the final product is manufactured. When preparing the garment sample, extra caution is used. Different samples are prepared for every order or design to aid in obtaining the buyer's order. To create the precise result of a certain advanced mind, prototyping is done at different phases. An excellent sample gives both the buyer and the exporter or manufacturer a positive first impression.

2.2 Garment Sampling Process Flow Chart:

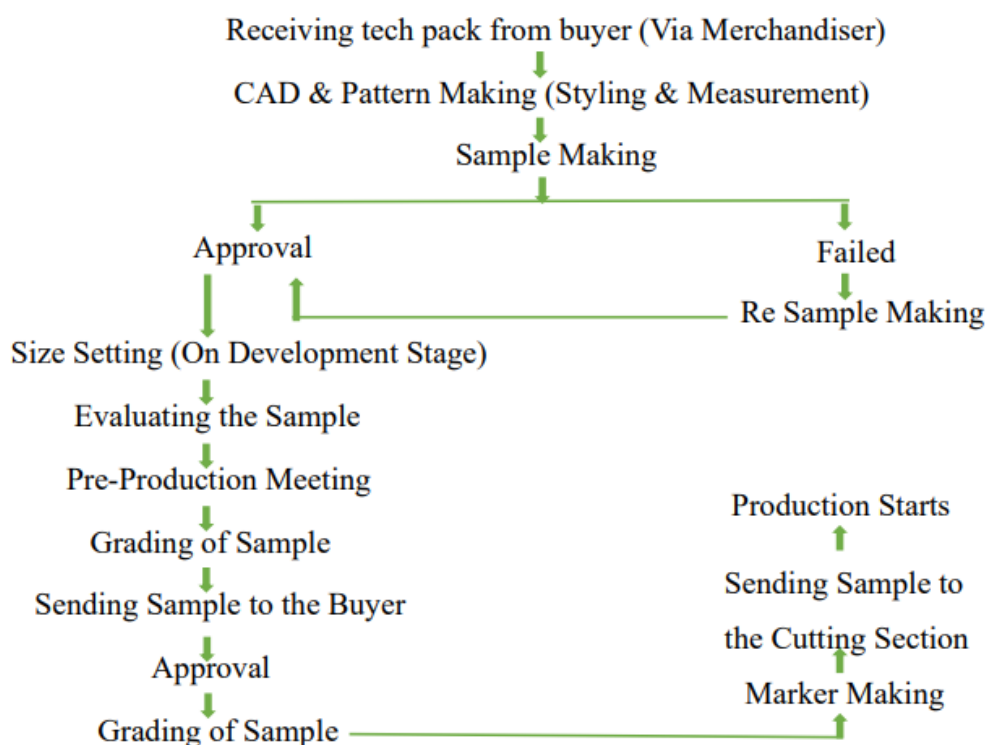


Fig 2.2 Garment Sampling Process Flow Chart

2.3 Sampling Development:

Sampling development is the process of creating fabric or garment samples, verifying the buyer's order, and finally selling the completed item. Two essential procedures in the apparel business are sampling and sample creation, both of which are crucial for drawing in customers. Considering that customers order the entire product after being pleased with the quality of the samples.

A sample contains information on the product or style code, also known as a reference number, colour specifications, fabrics type, composition, amount, report, and specifics about any accessories, such as buttons, zippers, or embroidery. A high-quality sample helps a clothing manufacturing or exporting company gain business by determining whether buyers will approve future purchases. In the garment industry, sampling is a major part of the pre-production phase.

Pre-sampling of the styles is carried out to obtain approval and initiate the garment-making process prior to a manufacturer placing a bulk order. For any kind of buyer, sample development consists of five fundamental processes. This is what we might refer to as the development process or the heart. that group-

2.3.1 Receive a Tech Pack:

A tech pack, sometimes known as a sheet of specifications. In order to transform this information into a finished garment, designers first construct the entire garment themselves and describe all the materials needed in a particular specification sheet. They communicate their design to a manufacturer in this way. All of the garment's specifications, including fabric type, color, yarn type, printing, embroidery design, measurements, and washing instructions, are spelled out in full in the specification sheet.

2.3.2 Material Sourcing:

All the raw materials, like fabric, fabric color, yarn specification, printing, embroidery design, measurements, washing details, etc., are collected for sample production. After collecting the sample, the sample department is informed about how to prepare the product so that it can be made according to the buyer's requirements.

2.3.3 Develop Print and Embroidery Design:

If a design for embroidery and printing is mentioned in the tech pack, then the design is sent to the embroidery and printing department for embroidery and printing.

2.3.4 Cutting Fabric and Garment Sewing:

When the fabric, patterns, and other accessories' are prepared, cutting come's next, and sample stitching then starts.

2.3.5 Measuring and Finishing:

After sewing, the goods is ironed so that the folded parts are neatly fixed. Then the sample is sent to the QC unit for checking everything, and the QC unit checks all the specifications of the sample accurately according to the tech pack. Later, the merchandiser's ensures the standard of the product.

A sample is meticulously created, but unfortunately, if the client finds something wrong, they identify it and describe the problem to the merchandiser. Later, it is necessary to fix it again and develop the sample.

2.3.6 Sampling Process in Apparel Industry:

In the beginning, pattern is made by the pattern maker according to the tech pack in the sampling process. After the pattern is made, the pattern paper is placed on the fabric surface, and the fabric is cut. The cut panel is then stitched to size on the swing machine. The stitched sample is then examined, and the process is completed.

2.4 Flow Chart of Sampling Process:

Following pattern creation, there are a few standard example methods that are as follows:



Fig 2.4 Flow Chart of Sampling Process

2.4.1 Types of Samples and Their Uses:

Serial No.	Sample	Use
01	Proto/Development Sample	To actually make a garment using the pattern.
02	Grade/ Size set/ Fitting Sample	To complement the garment's style.
03	Additional Sample (White Only)/ Photo Shoot Sample	These examples are all designed to display the clothing on the rack.
04	Contract Seal/ Seal Sample	To obtain authorization before to mass manufacturing.
05	Pre-Production (PP)/ Pilot run Sample	To obtain consent before to mass production.
06	Production Sample	To obtain authorization for the clothing's shipment.
07	Sales Man Sample (SMS)	To obtain authorization for large-scale production.
08	Rack Sample	To display the clothing item on the hanger.
09	Fabric Sample	To know the properties of fabric.
10	Accessories Sample	To know the accessories quality and features.
11	Counter Sample	To make a few additional samples.
12	Shipment/ Reference Sample	To check the quality of samples at the final stage.
13	Top of Production Sample (TOP)	To check product quality during production.

Fig 2.4.1: Types of Samples and Their Uses

2.5 Types of Samples Required for Completing an Order:

To complete an order for the export of garments, eight primary types of samples are required. These are-

- 1) Proto Sample
- 2) Fit Sample
- 3) Size Set Sample
- 4) Counter Sample
- 5) Salesman Sample (SMS)
- 6) Pre-Production Sample (PPS)
- 7) Top of Production Sample (TOP)
- 8) Shipment Sample

All of the aforementioned garment examples are covered in the following:

2.5.1 Proto Sample:

This is the first sample that the buyer has sent, and it has been made in accordance with the buyer's specifications. It is a trial sample that the product development team has developed. The purchaser is interested in seeing the sample once a fresh design has been applied to it. You can use any kind of fabric here, in any color. Clothing should be manufactured for a sample consisting of three to four pieces, with one piece being retained by the manufacturer and the remaining pieces being returned to the buyer for revision.

2.5.2 Fit Sample:

After proto sample approval, a measurement sheet is provided by the buyer following the appropriate sample. It can be manufactured as per the specifications given by the buyer in terms of fabric, color and nearest GSM material. Tailoring and measurements on fit samples must be 100% accurate and checked by Quality Control. Here any color can be changed but no changes or mistakes can be made in measurement and stitching. Fit samples use 3-4 pieces of garments where 1 piece is kept by the manufacturer and the rest is sent to the buyer for feedback.

2.5.3 Size Set Sample:

After getting fit sample approval, samples of different sizes are made based on the approved sample pattern. Samples of various sizes are sent to quality control for testing to ensure that the measurements are as per specifications. 3-4 pieces of sample are made. Merchandiser keeps 1 piece and sends 2-3 pieces to Merchandiser Buyer. Buyers observe and leave a comment after receiving the garments. Cutting is not done on the sample section until the size set is approved.

2.5.4 Counter Sample:

Counter samples are those samples that are kept in different departments of the factory as copies of the original samples provided by the buyer. In short, the counter sample is made in the same way as the original sample and sent to the customer. The counter sample is called the reference sample. Before pre-production, the counter sample is given to each department so that work can be started as soon as the buyer's comments are received.

2.5.5 Salesman Sample (SMS):

After the final design is completed, buyers can send samples to merchants or sales reps via SMS in order to collect pre-orders. Before size-set sampling occurs, this procedure sends the product to the retail outlet with the buyer's final design. Quality is always prioritized higher when it comes to the salesman sample because happier customers make greater recommendations. Depending on the client, who gives the clothing factory an order in a specific quantity. The first purpose of the SMS sample is to assess the client profile, market, response, etc.

2.5.6 Pre-Production Sample (PPS):

A pre-production sample is an important sample. Pre-production samples are made at the factory before going into bulk production. The pre-production sample is made on the same line as the sample that was initially made in the sample development department according to the specifications provided by the buyer. The buyer observes all tests of pre-production samples and gives comments for bulk production. Once the

pre-production department is involved, there is no way to acknowledge style changes. It is said to be a very critical stage compared to all other stages of the garment factory. Extra care is required here to ensure an order is placed correctly.

2.5.7 Top of Production Sample (TOP):

During the order process in the production line, the buyer wants to see a few samples in the garment factory to get his desired product. The sample is Q.C.ed by the buyer. It is seen as the top sample. If the TOP sample fails to meet its required quality, the entire order must be restarted.

2.5.8 Shipment Sample:

Samples Factory workers set aside a small number of samples as shipping samples; these samples are referred to as shipment samples until bulk production is completed, the shipment is completed, the packaging is completed, or the goods are ready to be shipped. Ensuring the quality of items in bulk is the goal. These look at the completed product as it reaches the customer (including the product's design, size, color, number, quality, and packaging). If quality control is done correctly, a lot of buyers will approve delivery.

2.6 Some more Samples:

There are other samples that a merchandiser keeps with himself and a buyer looks at if needed. Those are-

1. Production Sample
2. Photo Shoot Sample
3. Seal Sample

2.6.1 Production Sample:

Buyers receive a production sample from bulk manufacturing for approval. To confirm the product's quality and see how the sample looks, some purchasers request to see the sample. Many buyers often refer to this sample as a "gold seal sample" if the

production sample is correct. In the absence of this "Gold Seal Sample," the product is refused approval and is not shipped.

2.6.2 Photo Shoot Sample:

A photoshoot sample refers to all items within a complete sample. The sample contains details including design, color, size, price label, care label, and composition label, which are used to inform or show the buyer. Buyers usually ask for it as a photoshoot sample for photoshoots to promote new styles in the market.

2.6.3 Seal Sample:

A sealed sample means approved garment construction, approved trim attached to the garment and sealing of that particular sample for production. Placing a red tag on the customer's sample will be considered an approval for factory production. Different color tags are used on samples such as: green tag is used for size set samples and red tag is used for pre-production samples. During production in the garment factory, if there is any problem related to the construction of the garment, the production department refers to the red tagged samples.

2.7 Advantages of Product Development by Buying Specification:

- Since the buyer forecasts the market, there is a greater understanding of the market.
- The latest designs and trends that are available are decided by the buyer.
- Colors, prints, and patterns are usually created by buyers to create new markets and a thriving business environment.
- The buyer bears full responsibility for the produced style's success.

2.8 Disadvantages of Product Development by Buying Specification:

- Product development will be impeded if the purchaser is unable to adequately produce a sample entirely on his own.
- Many tests are needed for sample development, which necessitates a clothing factory. The buyer must therefore depend on the clothing maker to create the samples.
- If the buyer develops the sample, the cost is higher.
- Though this isn't always the case, the buyer's style frequently points the market in new directions.

CHAPTER-03

METHODOLOGY

For sample development, we took a deep analysis of the tech packs offered by various buyers from the merchandisers. Here we have studied about kid's outwear/nightwear and women's legging.

Different Types of Tech Pack with Specification:

As we know, different types of tech packs carry different types of information. There are different types of tech packs that we worked on during the internship, along with their specifications, which we present here nicely.

Buyer: Target (Australia)

The history of Target, a well-known Australian retailer, dates back to 1926, when George Lindsay and Alex McKenzie established a drapery business in Geelong, Victoria, emphasizing excellent quality and affordability. Target has expanded and changed throughout the previous ninety years, but the core values have not changed.

One of Australia's largest retailers, Wesfarmers, owns the Target brand. Target Australia has stores in over 300 locations and is staffed by 16,000 team members. Target Australia shipped 83,384 imports last year, with the top 3 sourcing countries being India, Bangladesh and Indonesia. The top 3 import product categories are: HSN Code 61102000, HSN Code 61091000 and HSN Code 39269069

Our goal is to offer our clients affordable, high-quality necessities and fashion for all budgets.

Industry	: Retail
Company Size	: 201-500 employees
Type	: Privately Held
Founded	: 1926
Sourcing Office	: Hong Kong, Shanghai, Dongguan and Bangladesh.
Head Office	: Melbourne
Annual Revenue	: \$928.6M per year

3.1 Children's Outerwear and Sleepwear:



Style 3700295263
Technical Brief - Apparel

Year & 2024 Quarter3
Style Desc: LITTLE GIRLS RIB PJ SET - PRINCESS

Revised Date: 07 SEP 2023 08:29
Department: 370 CH UNDWR SOCKS SLEEPWR

Brief Status: Sourcing (Without QM)
 Tech Pack Complete: No
 Tech Designer: Laura Gherbaz

Style No.: 3700295263
Previous Style No.:
Style Desc:
 LITTLE GIRLS RIB PJ SET - PRINCESS

Set: N/A
Year & Season: 2024 Quarter3
Brand Name:
License:
Style

Agent & Office: 4000 - No Agent Australia
Merchandiser:
Vendor Name: INTERSTOFF APPARELS LTD
Vend Style No.:
Issue Date: 23 AUG 2023
Revised Date: 07 SEP 2023 08:29
Est. On Show 02/01/2022
Design Source:

Track Status:
Red Tag Date:
FF Due Date: 14/11/2021

Quality Preview Comments:
 TECH PACK CREATED BY LAURA G - 6/9/2023
 REF STYLE 279256 ESSIE
 CAT 2 AS/NZS 1249:2014
 Children's nightwear and limited daywear having reduced fire hazard
 AS/NZS 1249:2014

Item / Style Image:


Sample Types/ Documentations:

Sample Type:	Sample ID:	Size:	Colour:	Version:	Request	Due Date:	Quantity:	Submit Date:	Submit	Overall Status:	Comment to Vendor:
Design Sample HIGH Indent	2309S00660	4		1	06-09-2023	13-09-2023	2			New	
Initial Test Report	2309D01937			1	06-09-2023	13-09-2023	1			New	

Fig 3.1.a: Introductory page of Children's outerwear and sleepwear.

This tech pack's introduction page provides some basic information about this style, including year and season: 2024; style number: 3700295263; style description: little girls' rib PJ set; quantity, issued and amended dates; buyer: Australia; designer: Laura Gherbaz is also included here. Merchandisers can easily grasp and begin working on sample development as a result. By doing this, merchandisers are able to determine which material is required to be ordered from an outside factory and which material is present in their own clothing based on the picture in the tech pack. The initial bit of data for sample development is provided by this.



Style 3700295263
Technical Brief - Apparel

Year & 2024 Quarter3
Style Desc: LITTLE GIRLS RIB PJ SET - PRINCESS

Revised Date: 07 SEP 2023 06:29
Department: 370 CH UNDWR SOCKS SLEEPWR

Brief Status: Sourcing (Without QM)

Tech Pack Complete: No

Tech Designer: Laura Gherbaz

Measurements

QA

Size Range: 1-7

Sample Size: 4

Grading Type: Key Shape
330-FLAknit-B1-8-B

Block Ref:

Set Item - Style

Set Item - Desc:

Graded Measurements(cm)													
Code:	Ref:	Point of Measure:	Final Meas	Sizes Per Template:								Tolerance	
				Factory Sizing								Brand Sizing	
				1	2	3	4	5	6	7	8	(+)	(-)
10B	A	Chest circ at underarm	56	50	52	54	56	58	60	62	64	1	1
10Y2	A	Across front at mid armhole	21	18	19	20	21	22	23	24	25	0.5	0.5
10Y3	A	Across back at mid armhole	22	19	20	21	22	23	24	25	26	0.5	0.5
11A	A	Shoulder breadth	23	20	21	22	23	24	25	26	27	0.5	0.5
12A	A	Neck width seam to seam	13.5	12	12.5	13	13.5	14	14.5	15	15.5	0.5	0.5
13A	A	Front neck drop from HPS seam to seam	7.5	6	6.5	7	7.5	8	8.5	9	9.5	0.5	0.5
13G	A	Back neck drop from HPS seam to seam	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.5	0.5
14A	A	Neckband width	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	MAX	MAX
15A	A	Neck opening min stretch	56	52	54	56	56	56	56	56	58	min	min
19B	A	Hem circ straight across	56	50	52	54	56	58	60	62	64	1	1
29F	A	Sleeve length from shoulder point - long	38.5	28	32.5	35.5	38.5	41.5	44.5	46.5	48.5	1	1
30K2	A	Armhole depth from HPS to underarm	15	13.5	14	14.5	15	15.5	16.25	17	17.75	0.5	0.5
31B	A	Upperarm girth 3cm below/arm (nightwear)	20	18.2	18.8	19.4	20	20.6	21.6	22.6	23.6	0.5	0.5
32F	A	Sleeve Opening - long	14	12.5	13	13.5	14	14.5	15	15.5	16	0.5	0.5
39ESLE EP	A	Front length from neck edge - Thigh	42	33	36	39	42	44.5	47	49	51	1	1
1	B	PANT											
16B	B	Waistband relaxed	50	47	48	49	50	51	52	53	54	1	1
16K	B	Waist stretched minimum	70	64	66	68	70	72	74	76	78	min	min
17A	B	Waistband width	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	2.5	0.3	0.3
18F	B	Hip 7cm above crotch	54	48	50	52	54	56	58	61	64	1	1
21B	B	Thigh circ 3cm below crotch point	34	31	32	33	34	35.5	37	39	41	1	1
24H2	B	Leg opening- ankle	17	14	15	16	17	18	19	20	21	0.5	0.5
40A	B	Front rise including wband	20	17	18	19	20	21	22	23	24	0.5	0.5
40B	B	Back rise including wband	22	19	20	21	22	23	24	25	26	0.5	0.5
46G	B	Outleg incl. wband - full length	65	49	54	59	65	70	74.5	79	83	1	1
48L-A	B	Hanger tape loop length maximum (TOTAL 18CM)	9	9	9	9	9	9	9	9	9	MAX	MAX

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Date Printed: 07 Sep 2023 14:53

Maherul Islam

Fig 3.1.c: Measurement Specification of Children's Outerwear and Sleepwear.

Here are the measurements of children's outerwear or sleepwear. Here are 8 different sizes or measurements of TOP and Bottom up to 8 years old. Reference A refers to the size of the TOP, and reference B refers to the size of the Bottom. Here, four samples are mentioned for making samples. On this page, Branding Sizes: 1, 2, 3, 4, 5, 6, 7, and 8 sizes refer to different measurements for children's clothing. A technical package's measuring sheet is a crucial and essential component. It provides an organized breakdown of the measurements for the various components of various garment styles. One size varies depending on the size of the person. Buyers provide measurement sheet so that there are no obstacles to making patterns during sample development. Without this development pattern, it is impossible.



Style 3700295263

Year & 2024 Quarter3

Revised Date: 07 SEP 2023 08:29

Technical Brief - Apparel

Style Desc: LITTLE GIRLS RIB PJ SET - PRINCESS

Department: 370 CH UNDR SOCKS SLEEPWR

Brief Status: Sourcing (Without QM)

Tech Pack Complete: No

Tech Designer: Laura Gherbaz

Set Item - Style No.:

Set Item - Desc:

SUPPORTING IMAGES

No.	Type	Description
1		
2		

FRONT

BACK

COLOURS

TOP

MAIN

TRIM

UNDER

EMBROIDERED

NEW

OLD

BOTTOM

MAIN

TRIM

UNDER

BRANDING - NOT TO SCALE

HANG TAG

SEW IN LABEL

BLOCK

SHAPE REF AS PER TO

NEW CLOTH BOARD STYLE

ARTWORK

REF TO FINISHED ART

FEATURES

N/A

NOTES

ALL THREAD CDM BASE IT IS ON

FABRIC

REFER TO CDM

TRIMS

N/A

LICENSOR DETAILS

DISNEY REF # 11073707

STYLE GUIDE REF N/A

ARTWORK REF

DEPT: 345

Q3/4 AW24

LITTLE GIRLS LETTUCE EDGE RIB PJ SET

3700295263

LICENSE

DISNEY - PRINCESSES

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Date Printed: 07 Sep 2023 14:53

Maherul Islam

Fig 3.1.d: Fabric Colors Information, Hang Tag and Label

Here on this page, the fabric color, hang tag, and label are highlighted. The type of color to be used for developing the sample is specifically shown, and the color code is also mentioned. So that the merchandiser can understand and work with the specific color provided by the buyer while developing the sample. 2 colors for the top sample: PANTONE® 11-0604 TCX (GARDINA) and PANTONE® 18-1755 TCX (ROUGE RED). On the other hand, only one color, i.e., PANTONE® 11-0604 TCX (GARDINA), is used for the bottom. Along with this, the type of hang tag and label to be used after the sample is made are mentioned along with the picture. It also mentions what will be written on the label.



Style 3700295263

Year & 2024 Quarter3

Revised Date: 07 SEP 2023 08:29

Technical Brief - Apparel

Style Desc: LITTLE GIRLS RIB PJ SET - PRINCESS

Department: 370 CH UNDWR SOCKS SLEEPWR

Brief Status: Sourcing (Without QM)

Tech Pack Complete: No

Tech Designer: Laura Gherbaz

Set Item - Style No.:

Set Item - Desc:

SUPPORTING IMAGES

No.	Type	Description
1		
2		



Page 8 of 13

Date Printed: 07 Sep 2023 14:53

Maherul Islam

Fig 3.1.g: Different Colour Print Art Work of This Tech Pack.

This page contains all the details about the artwork that will be placed on top of the sample. A total of 10 colors are used in this artwork. 1 color is used as the base print color, and 9 colors are used as the water-based print. Dimension of artwork: 230mm (W) * 230mm (H). While making the print, ensure that it is of soft-feel quality.

3.1.1 Working Process for Target Buyer:

F25

Fig 3.1.1: Fabric Booking Chart

It is a fabric booking chart where all the information about the fabric is mentioned. It includes fabric type, consumption, GSM of fabric, base fabric, color, and quantity. The first thing to do for sample development is to book the fabric. Initially, style no. 3700295263 is given, which the fabric department can easily identify. The amount of fabric required for any type of fabric is mentioned, e.g., a 4*2 elastic rib requires 6 kg of 11-0604 TCX (DARDINA) color fabric. Its GSM and consumption are, respectively, 210 GSM and 95% BCI cotton and 5% elastic. Again, for peached jersey, a 5 kg amount of 19-1217 TCX (MUSTANG) color fabric is required. Its GSM and consumption are 160 GSM and 100% BCI cotton, respectively. Similarly, it mentions the quantity and color of rib cloth.

3.1.2 Fabric Strike off Submission for Approval:

For Target Australian Official use only



MATERIAL SUBMIT FORM

☐ Approved
☐ Rejected
☐ Marginally Approved
☐ Resubmit

FABRIC SUBMISSION		LAB-DIPS/PATTERN		EMBROIDERY		TRIM		PRINT	
☒	1 st Submission	☐	1 st Submission	☐	1 st Submission	☐	1 st Submission	☐	1 st Sub.
☐	2 nd Submission	☐	2 nd Submission	☐	2 nd Submission	☐	2 nd Submission	☐	2 nd Sub.
☐	3 rd Submission	☐	3 rd Submission	☐	3 rd Submission	☐	3 rd Submission	☐	3 rd Sub.

ATTENTION: Outerwear/Sleepwear
 VENDOR/MILL: Interstoff Apparels Ltd.
 STYLE: 3700295263
 FABRIC CONTENT: 95% Cotton, 5% Elastic
 DESCRIPTION: Little Girls Rib PJ Set -
 ADDITIONAL COMMENTS: Fabric Sample

BRAND: Target
 COO: Bangladesh
 COLOUR: 19-1217 TCX Mustang
 FABRIC TYPE: Jersey
 Princess
Submission for Buyer Approval

SUBMIT DATE: 20 Sep. 2023
 RECEIPT DATE: _____
 PRINT/ARTWORK REF: _____
 WIDTH: 75
 WEIGHT: 180GSM



Fig 3.1.2: Fabric Strike off Submission for Approval

Before making a full sample, the buyer asks for a strike off to verify the quality of the fabric through the strike off. By observing the value of the strike off, the buyer makes a comment, depending on which further actions are taken.

3.1.3 Pattern Study:

A pattern is created by using flat, firm board paper to create a precise replica of every component of an article of clothing. Creating designs and building patterns for the design's component parts is the initial stage in the production of clothing. In addition, one of the most crucial jobs in the clothing manufacturing industry is creating patterns. Pattern-making transforms a sketch into clothing, so it functions as a link between design and production. Every component of an article of clothing has its own pattern. Before cutting the cloth, these patterns are used to draw every component of an outfit on the material or on marker paper. Patterns are also developed for lining or interlining, if it is utilized in the garment.

3.1.3.a Children's Outerwear and Sleepwear (Top Sample):

STYLE NO: 3700295263

STYLE DESC: Little Girls Rib Pj Set – Princess

VENDOR NAME: Interstoff Apparels Ltd.

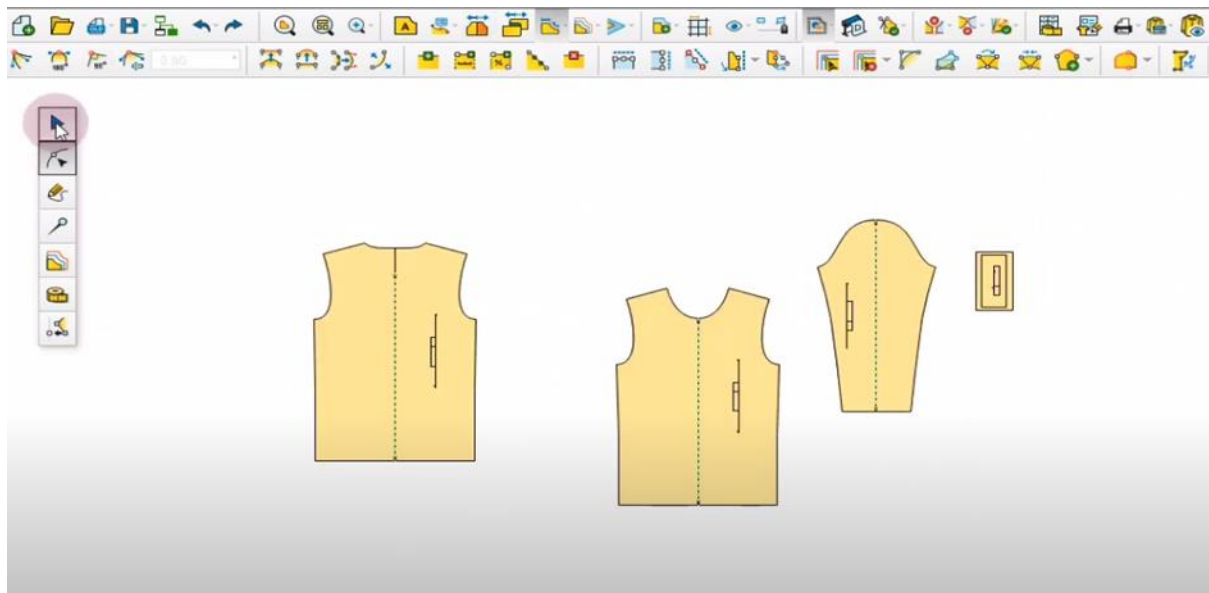


Fig 3.1.3.a: Picture of The Pattern of The Top Sample

This picture shows the pattern of the top sample. A long-sleeve top sample has 4 parts: the front part, the back part, the sleeve, and the collar. These four parts are made with precision according to measurements so that there is no error during sample making. If the measurement of any part is wrong during pattern making, the cut panel of the fabric will also be wrong and the sample will be considered invalid. So, make it very carefully. The pattern paper is placed on the fabric and the fabric is cut according to the measurement of the pattern paper.

3.1.3.b Children's Outerwear and Sleepwear (Bottom Sample):

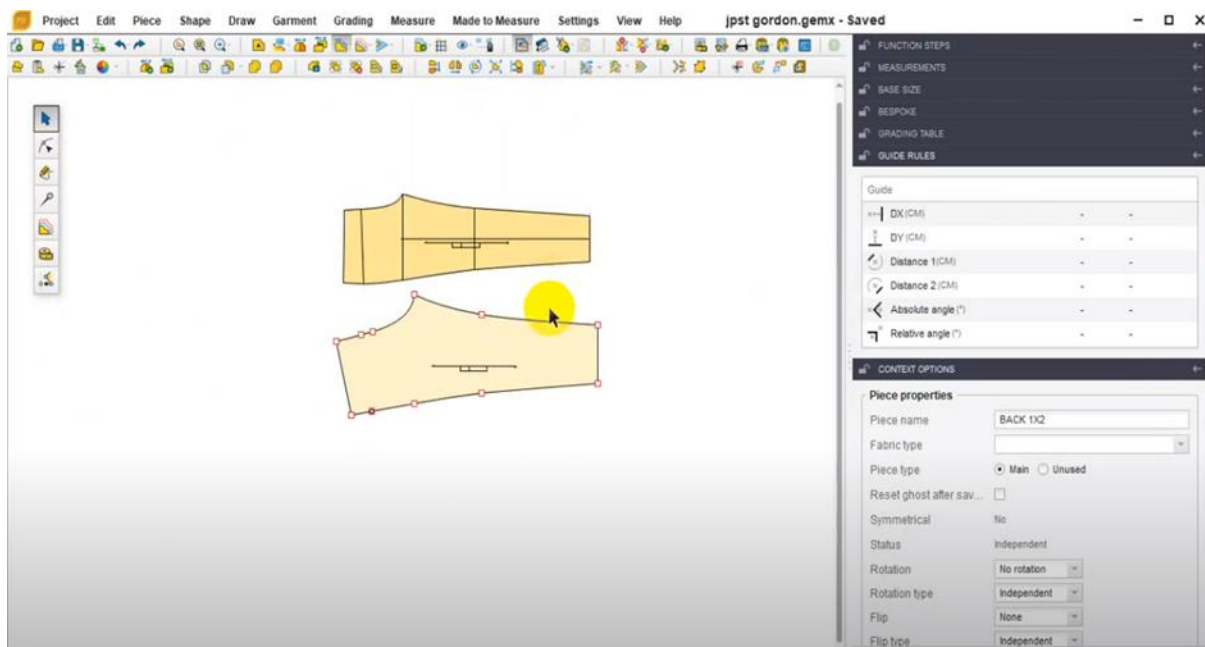


Fig 3.1.3.b: Picture of The Pattern of The Bottom Sample

Here in this picture, the measurements of the bottom are presented in pattern form as per the tech pack. The bottom is made according to the tech pack so that the measurement of the sample is obtained correctly while developing the sample. Here, the bottom pattern is made in two parts. This pattern is cut fabric on top of the fabric, and if the cut fabrics are combined by stitching, girls outwear or sleepwear can be easily made.

3.1.4 Cutting and Sewing Study:

At the initial stage, after the pattern is made according to the measurement of the tech pack provided by the client, the pattern papers are given to the cutting machine for sample cutting. The pattern papers are placed on the fabric used to make the sample, and the fabric is cut. Cutting is done with great precision, as a very small amount of fabric is initially used to make the sample. If any fault is found in fabric cutting, both cost and time are wasted, which may cause disruption in getting the buyer's order on time. During bulk production, the cutting department plays a major role in reducing fabric waste and saving large quantities of fabric. On the other hand, in the sample department, this is not the case because in the sample department, fabric cutting is done to make some samples. That is why the sample section does not contain any large changes or specific data to cut. The next important step after fabric cutting is sewing. Stitching of the sample is done as per the tech pack provided by the client. The tech pack contains the sewing details along with the machine. And the sample should be made according to all these details. We have discussed here some things about sewing details, including the machine name. Below are those topics with pictures:

3.1.4.a Children's Outerwear and Sleepwear:

STYLE NO: 3700295263

STYLE DESCR: Little Girls Rib Pj Set - Princess

VENDOR NAME: Interstoff Apparels Ltd.

Serial No.	Swing Code	Swing Position	Stitch Type	Thread & Needle Specification	Machine Used	M/C Picture
01	301	Attaching The Label with Neck Tape	Lockstitch	1 Needle & 1 Bobbin Thread	Plain Machine	
02	401	Neck with Back Neck Tape Attaching and Attaching the Elastic to The Waist Band	Flatlock Chain Stitch	1 Needle & 1 Bobbin Thread	Flatlock M/C	

03	504	Neck Attachment with Body and Baby Lock Lettuce Edge Hem	Overlock Stitch	1 Needle Threads & 2 Lopper Threads	Overlock M/C	
04	514	Solder, Side Seam and Bottom Side Seam Attaching	Overlock Stitch/ Mock Safety Stitching	2 Needle Threads & 2 Lopper Threads	Overlock M/C	
05	304	Reinforcing Areas of a Garment	Zig-Zag Lock Stitch	1 Needle & 1 Bobbin Thread	Zig-Zag M/C	

Fig 3.1.4.a: Stitch Details with Sewing Machine for Style: 3700295263

Machines for both top and bottom samples in this style are nicely specified in this chart. This chart easily shows the number of yarns and needles used in the machines, along with the name, picture, and code of the swing machine. A total of five machines are used for this style. For example: plain machine (301); flat lock machine (401); overlock machine (504,514); zig-zag machine (304). In the case of the TOP sample, the label is joined on a plain machine; a zigzag machine is used for sewing on the reinforcing area of the garment; and a flatlock machine is used for sewing with a back neck tape neck. On the other hand, the body and baby lock lettuce edge hem are stitched to the neck on the overlock machine. Again soldered on the overlock machine, side seam attached. Similarly, in the case of the bottom sample, elastic is joined to the waist band on a flat lock machine, and the bottom side seam is stitched on an overlock machine. Both the machines and stitches in this chart are internationally recognized and can be easily verified.

3.1.5 Sample Submission to Buyer for Approval:



Fig 3.1.5: Sample Submission to Buyer for Approval

After completing all the work according to the client's requirements, a complete sample is sent to the client so that the client can test his requirements and understand whether his product is manufactured correctly. The client makes a comment based on the sample. Based on the said comments, the sample is prepared for bulk.

Buyer: Ripzone (Canadian Tire)

Founded in 1993, Ripzone is a Canadian outdoor sports lifestyle company that aims to provide action sports enthusiasts with high-quality, practical, and technologically advanced products. At Ripzone, we have equal love for the sports and lifestyle that we play and live in as we do for the items we manufacture. Our goal is to create and produce the highest caliber, authentic products for action sports enthusiasts worldwide.

INA International Limited, a fully-owned subsidiary of FGL Sports Limited, is the owner of the trademark Ripzone. Canadian Tire Corporation Limited is the parent company of FGL Sports Limited.

Industry	: Retail
Company Size	: 12,735-13,000 Employees
Store	: Over 500
Founded	: 1993
Head Office	: Toronto
Annual Revenue of CTC	: \$12.44 B per year

3.2 Women's Leggings:

Cover Page		002 : F23- 72023R22				Page 1 of 15	
		Product Description:	Womens Killarney Solid Legging (72023R22)	Season Name:	Apparel Fall-Winter 2023	Date:	10/17/2023
Design #: AW1006075		Product #: 72023R22					
Brand:	Ripzone	Banner:	FGL	Product Category (L3):	Casual	Product Sub-Category (L4):	Bottoms
Class (L5):	High Rise	Sub-Class (L6):	Legging				
PRO Engineer:		Product Designer:	Pascale Rohan	TD Specialist:	Daria VanderGraaf	Product Developer:	Ashley Florey
		PRO Merch:					
 365 72023R22 BLACK BEAUTY 19-3911 TCX				Agent & Office: Corporate Office 2180 Yonge Street Toronto, Canada Merchandise: Vendor Name: Interstoff Apparel Ltd. Vendor Style No: Issue Date: 10/ 17/23 Revised Date: 19/ 17/23 Track Status: Licence:			
				Quality Preview Comments: TECH PACK CREATE BY KATE VENDER - 07/23/23 REF STYLE 673452 ESSIE WOMEN'S LEGGING WINTER PRODUCTS -Attach the heat transfer CB to the correct place on the inside. -Ripzone sew in CB label Construction: No -Trim: take care elastic band quality Mandatory required: No construction -Ripzone logo print (wearer's back right hip)			
The information, including but not limited to creative designs and technical specifications, contained herein is CONFIDENTIAL AND PROPRIETARY TO CANADIAN TIRE CORPORATION, LIMITED ("CTC"). Any disclosure to third parties of its contents, or use by the recipient other than in connection with purchase orders is a breach of confidentiality. In the event of a breach or threatened breach of confidentiality, CTC shall be entitled to end the business with the recipient and seek an injunction restraining any such breach, in addition to any other rights or remedies it may have.							

Fig 3.2.a: Introductory Page of Women's Leggings

This tech pack's introduction page provides some basic information about this style, including year and season: Fall-Winter (2023); style number: 72023R22; brand: Ripzone; style description: Women's killarney solid legging; issued and revised dates; buyer: Canada; designer: Pascale Rohan is also included here. The tech pack mentions some things to keep in mind while developing the sample. Merchandisers can easily grasp and begin working on sample development as a result. By doing this, merchandisers are able to determine which material is required to be ordered from an outside factory and which material is present in their own clothing based on the picture in the tech pack. The initial bit of data for sample development is provided by this.

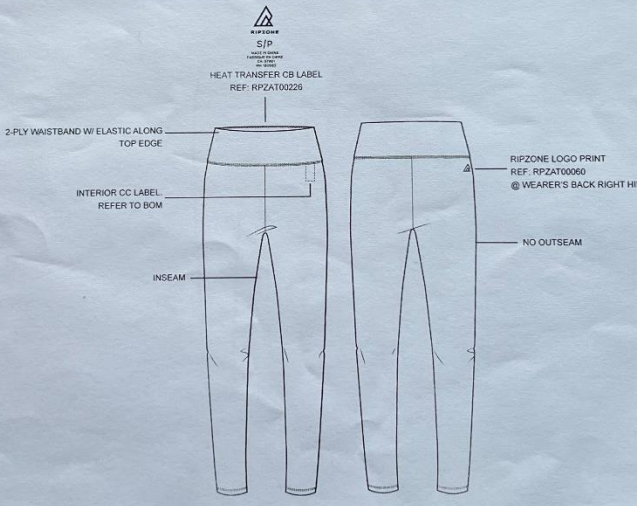
001 : 72023R22 B&W Cad Image:		002 : F23- 72023R22		Page 1 of 15		
		Product Description: Womens Killarney Solid Legging (72023R22)	Season Name: Apparel Fall-Winter 2023	Date: 10/17/2023	Design #: AW1006075	Product #: 72023R22
Brand: Ripzone	Banner: FGL	Product Category (L3): Casual	Product Sub-Category (L4): Bottoms	Class (L5): High Rise	Sub-Class (L6): Legging	
PRO Engineer:	Product Designer: Pascale Rohan	TD Specialist: Daria VanderGraaf	Product Developer: Ashley Florey	PRO Merch:		
 DESCRIPTION: WOMENS LEGGING TECH SKETCH  BRAND: RIPZONE LINE: WOMENS						

Fig 3.2.b: Construction Specification with Supporting Image.

The women's leggings are included in this page's construction. Where the aforementioned components can be found:

- ❖ 2-ply waistband elastic along the top edge.
- ❖ The bottom side seam seams will be visible on the inside; only the waist and bottom seams will be visible.
- ❖ The Ripzone logo print should be placed along the right side of the hip. REF: RPZAT0006
- ❖ Heat transfer label (REF: RPZAT00226) on the back part and care label along the right side bottom.

Graded Measurement: 001 : RPZN LEGGINGS

002 : F23- 72023R22

Page 15 of 15



Product Description:	Womens Killamey Solid Legging (72023R22)	Season Name:	Apparel Fall-Winter 2023	Date	10/17/2023	Design #:	AW1006075	Product #:	72023R22
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Brand:	Ripzone	Banner:	FGL	Product Category (L3):	Casual	Product Sub-Category (L4):	Bottoms	Class (L5):	High Rise	Sub-Class (L6):	Legging	
--------	---------	---------	-----	------------------------	--------	----------------------------	---------	-------------	-----------	-----------------	---------	---

PRO Engineer:	Product Designer:	Pascale Rohan	TD Specialist:	Daria VanderGraaf	Product Developer:	Ashley Florey	PRO Merch:
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Measurement Set: 001 : RPZN LEGGINGS , Sample Size: M , UOM: cm

POM #	Name	Tol (+)	Tol (-)	XS	S	M	L	XL
BT2-1	100 Waist Relaxed (Top of WB) Ladies/ V-Shape	1.000	-1.000	29.000	32.500	36.000	39.500	43.000
BT2-4	102 Extended Waistband	1.000	-1.000	45.000	48.500	52.000	55.500	59.000
BT1-1	103 Constructed Waistband Height	0.300	-0.300	9.000	9.000	9.000	9.000	9.000
BT3-2-A	106 Low Hip Position From Top Of W/B	0.500	-0.500	16.000	17.000	18.000	19.000	20.000
BT3-2	107 Low Hip Width	1.000	-1.000	38.000	41.500	45.000	48.500	52.000
BT4-3	108 Front Rise Including WB	0.000	0.000	23.500	25.000	26.500	28.000	29.500
BT4-4	119 Back Rise Including WB	0.500	-0.500	35.000	36.500	38.000	39.500	41.000
BT5-3-A	125 Knee Position from Crotch	0.500	-0.500	27.000	27.500	28.000	28.500	29.000
BT5-3	126 Knee Width	0.500	-0.500	13.500	15.000	16.500	18.000	19.500
BT5-4	129 Bottom Hem Opening Relaxed	0.500	-0.500	10.000	11.000	12.000	13.000	14.000
BT5-6	131 Inseam	1.000	-1.000	66.000	66.000	66.000	66.000	66.000
BT5-5	135 Hem Height	0.300	-0.300	2.000	2.000	2.000	2.000	2.000
BT5-1	Thigh Width	0.500	0.500	21.100	23.300	25.500	27.700	29.900

Fig 3.2.c: Measurement Specification of Women's Leggings.

Here are the measurements for women's leggings. This bottom has five different sizes. Here are five measurement samples for sampling. On this page, the branding sizes (XS, S, M, L, and XL) refer to different measurements for clothing. The measurement sheet is an important and essential component of a technical package. One's size varies depending on the person's size. Buyers provide measuring stools so that there are no obstacles to making patterns during sample development. Without this development pattern, it is impossible.

001 : 72023R22 Bom - BOM: Colorway - Material Color 002 : F23- 72023R22 Page 2 of 15

CANADIAN TIRE

Product Description: Womens Killamey Solid Legging (72023R22) Season Name: Apparel Fall-Winter 2023 Date: 10/17/2023 Design #: AW1006075 Product #: 72023R22

Brand: Ripzone Banner: FGL Product Category (L3): Casual Product Sub-Category (L4): Bottoms Class (L5): High Rise Sub-Class (L6): Legging

PRO Engineer: Product Designer: Pascale Rohan TD Specialist: Daria VanderGraaf Product Developer: Ashley Florey PRO Merch:

Section: Fabrics

Placement	Supplier	Supplier Material Ref. No.	Reference No.	Material	Description	Material Status	Pantone 19-3911 TCX Black Beauty	UOM	Image	Comments	Total
Fabric A: Body & Waistband	Interstoff Apparels Ltd.		RD# 909/21	107473 RD# 909/21 Jersey 95% Cotton, 5% Spandex 200.0000gsm		In Development	Pantone 19-3911 TCX Black Beauty	gsm		BCI Cotton	

Section: Trims

Placement	Supplier	Supplier Material Ref. No.	Reference No.	Material	Description	Material Status	Pantone 19-3911 TCX Black Beauty	UOM	Image	Comments	Total
Thread: All	COATS		2993080	100671 Thread Thread Coats Epic Tex 40 Poly Wrapped Poly Core	Coats Epic Tex 40 Poly Wrapped Poly Core	Active	Pantone 19-3911 TCX Black Beauty	each			
Elastic: Waistband	Factory Source		XXXAT00051	XXXAT00051 - Elastic 1.25cm (1/2") Wide	Elastic 1.25cm (1/2") Wide	Active	White	m			

Section: Labels

Placement	Supplier	Supplier Material Ref. No.	Reference No.	Material	Description	Material Status	Pantone 19-3911 TCX Black Beauty	UOM	Image	Comments	Total
Label 1: WRS Back Hip	Interstoff Apparels Ltd.		RPZAT00060	RPZAT00060 Ripzone Heat Transfer Logo 2cmx2.1cm	Ripzone Heat Transfer Logo	Active	Pantone 19-3911 TCX Black Beauty	pcs		1/2" Down From W/B Seam and 1/2" In from Side Seam	\$0.000

Fig 3.2.d: Information of Fabric, Trims and Labels

Fabric, trims, and labels are highlighted here on this page. Complete details of fabric, trims, label supplier, reference number, material details, and color for making samples are mentioned on this page. In the case of fabric, reference no: RD#909/21; material: 95% cotton and 5% spandex; GSM: 200; Color: Pantone E 19-3911 TCX Black Beauty and Supplier: Interstoff Apparels Ltd. Among the trims mentioned here are the features of thread and elastic. In the case of a thread, the supplier will be COATS, Reference No: 2993080, Material: Thread Coats EPIC TEX 40 Poly Wrapped Poly core and Color: Black Beauty. In the case of elastic, the Color is white, and the width of the material will be 1.25CM. Again, for the label Reference No: RPZAT060, Material: Ripzone Heat Transfer Logo, 2 cm*2 cm, and Color: Black.

001 : 72023R22 Bom - BOM: Colorway - Material Color

002 : F23- 72023R22

Page 3 of 15

CANADIAN TIRE

Product Description: Womens Killamey Solid Legging (72023R22) Season Name: Apparel Fall-Winter 2023 Date: 10/17/2023 Design #: AW1006075 Product #: 72023R22

Brand: Ripzone Banner: FGL Product Category (L3): Casual Product Sub-Category (L4): Bottoms Class (L5): High Rise Sub-Class (L6): Legging

PRO Engineer: Product Designer: Pascale Rohan TD Specialist: Daria VanderGraaf Product Developer: Ashley Florey PRO Merch:

Section: Labels

Placement	Supplier	Supplier Material Ref. No.	Reference No.	Material	Description	Material Status	Pantone 19-3911 TCX Black Beauty	UOM				Comments	Total
Label 2: Inner CB	Checkpoint Systems Ltd.,		RPZAT00226	RPZAT00226 - Ripzone Heat Transfer Label - Size /Made In	Ripzone Heat Transfer Label - Size /Made In	Active	Pantone 11-0601 TCX Bright White	each					
Label 3: WLS Inner Waistband	Factory Source		XXXAT00622	XXXAT00622 - Apparel Care Label	Apparel Care Label	Active	White	each				See CAD for placement	

Section: Processes

Placement	Supplier	Supplier Material Ref. No.	Reference No.	Material	Description	Material Status	Pantone 19-3911 TCX Black Beauty	UOM				Comments	Total

Section: Packaging

Placement	Supplier	Supplier Material Ref. No.	Reference No.	Material	Description	Material Status	Pantone 19-3911 TCX Black Beauty	UOM				Comments	Total
Hangtag: WLS Side Seam	X&D Garment Accessories Ltd.		RPZAT00232	RPZAT00232	Ripzone Medium Main Hangtag 10 cm H x 5.5 cm W	Active	White	each					
Swift: WLS Side Seam	Factory Source		XXXAT00031	XXXAT00031	Generic 3" Swift Tag	Active	Black	each					
Sticker: Back of Hangtag	Checkpoint Systems Ltd.,	CT-NJORD M750	XXXAT00725	XXXAT00725 - RFID + Price Sticker	RFID + Price Sticker	Active	White	each					
Polybag: Encase Garment	Factory Source		XXXAT00133	XXXAT00133	Polybag	Active	Clear	each					

Fig 3.2.e: Information of Labels, Processes and Packaging

Labels, processes, and packaging are highlighted here on this page. Complete details of labels, processes, and packaging for making samples, supplier, reference number, material details, and color are mentioned on this page. In the case of labels, the care label attached to the inner label and inner waistband is mentioned here. In the case of 2 labels, the color will be white; reference numbers: RPZAT00226 and XXXAT00622; material: Ripzone Heat Transfer Label-Size/Made in; and apparel care labels and suppliers are also mentioned here. The packaging also has four parts. In the field of the hangtag reference no. RPZAT00232, description: medium main hangtag 10cm (H) * 5.5cm (W) and color: white. SWIFT also has details so that merchandisers can act on the buyer's instructions. This page mentions RFID+Price Sticker Supplier: Checkpoint Systems Ltd., Reference No: XXXAT00725 and Color: White. On the other hand, the polybag reference number is XXXAT00133, and it well mentions everything.

003 : F23 72023R22 Colour Image:

002 : F23- 72023R22

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		Product Description: Womens Killarney Solid Legging (72023R22)	Season Name: Apparel Fall-Winter 2023	Date: 10/17/2023	Design #: AW1006075	Product #: 72023R22
Brand: Ripzone	Banner: FGL	Product Category (L3): Casual	Product Sub-Category (L4): Bottoms	Class (L5): High Rise	Sub-Class (L6): Legging	
PRO Engineer:	Product Designer: Pascale Rohan	TD Specialist: Daria VanderGraaf	Product Developer: Ashley Florey	PRO Merch:		


DESCRIPTION: WOMENS LEGGING

COLOUR OVERVIEW



72023R22
BLACK BEAUTY 19-3911 TCX

BRAND LINE | **RIPZONE WOMENS**

Fig 3.2.f: Colour Overview

Here is a picture of the complete sample on this page. It also mentions what the sample looks like and what colors are used in it.

3.2.1 Working Process for Ripzone Buyer:

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fx

Interstoff Apparels Ltd. Sample Fabrics requisition									
Ripzone (Canadian Tire)				Fabric Booking for new May DS		Date 17-Oct-23			
Description				MERCHANDISE Required By : Anim/Choyon					
SL	Style No.	Fabrics Type	Composition	GSM	Base fabric	Color	QTY(kg)	PICTURE	Remarks
1	72023R22	JERSEY	95% BCI COTTON 5% SPANDEX	200 GSM	SOLID	PANTONE 19-3911 TCX (BLACK BEAUTY)	6 Kgs		

Fig 3.2.1: Fabric Booking Chart

This is a fabric booking chart where all the information about the fabric is mentioned. It includes fabric type, cost, gsm of fabric, base fabric, color, and quantity. Initially, style no. 72023R23 is provided, which the fabric department can easily identify. The quantity required for any type of fabric is mentioned here, e.g., A jersey requires 6 kg of 95% BCI cotton and 5% spandex fabric. It is 200 GSM and is PANTONE 19-3911 TCX (BLACK BEAUTY) color fabric. Pictures are also added here so that the fabric booking department can easily understand them.

3.2.2 Fabric Strike off Submission for Approval:

MATERIAL SUBMIT FORM

For Canadian Tire Official use only

☐ Approved
☐ Rejected
☐ Marginally approved
☐ Resubmit

☒ FGL	☐ Mark's	☐ CTC	☐ USA	☐ Other _____
---	---------------------------------	------------------------------	------------------------------	--------------------------------------

LAB-DIPS/ KNITDOWN	STRIKE OFF/PATTERN	EMBROIDERY	TRIM	BULK QUALITY
☐ 1st Submission	☒ 1st Submission	☐ 1st Submission	☐ 1st Submission	☐ Hand feel/Quality ☐ 1st Submission
☐ 2nd Submission	☐ 2nd Submission	☐ 2nd Submission	☐ 2nd Submission	☐ Bulk lot Colour ☐ 2nd Submission
☐ 3rd Submission	☐ 3rd Submission	☐ 3rd Submission	☐ 3rd Submission	☐ Shadeband ☐ 3rd Submission
				☐ Weight

ATTENTION: Black Beauty BRAND: Ripzone SUBMIT DATE: 30th July -2023
VENDOR/MILL: Interstoff Apparels LTD COO: Bangladesh RECEIPT DATE: _____
STYLE#: 72023R22 COLOR/COLOR CODES: Black Beauty PRINT /ARTWORK REF: _____
MATERIAL REF #: RD#909/21 DESCRIPTIONS: Womens Killarney Solid Legging
FABRIC CONTENT: 95% Cotton 5% elastane FABRIC TYPE: Jersey WIDTH 74 WEIGHT: 206
FINISH: _____
ADDITIONAL COMMENTS: Fabric Submission for Approval.

INDICATE WHICH PART OF THE GARMENT THIS COMPONENTS/FABRIC IS FOR:

☒ FILL	☐ SHELL	☐ LINING	☐ SMALL INSERT	☐ SECONDARY FABRICS
☐ FULL BODY	☐ SLEEVE	☐ 1/2 BODY	☐ OTHER	

Fig 3.2.2: Fabric Strike off Submission for Approval

Before making a full sample, the buyer asks for a strike off to verify the quality of the fabric through the strike off. By observing the value of the strike off, the buyer makes a comment, depending on which further actions are taken.

3.2.3 Women's Leggings (Pattern Study):

STYLE NO: 72023R22

STYLE DESCRIPTION: Women's Killarney Solid Legging

VENDOR NAME: Interstoff Apparels Ltd.

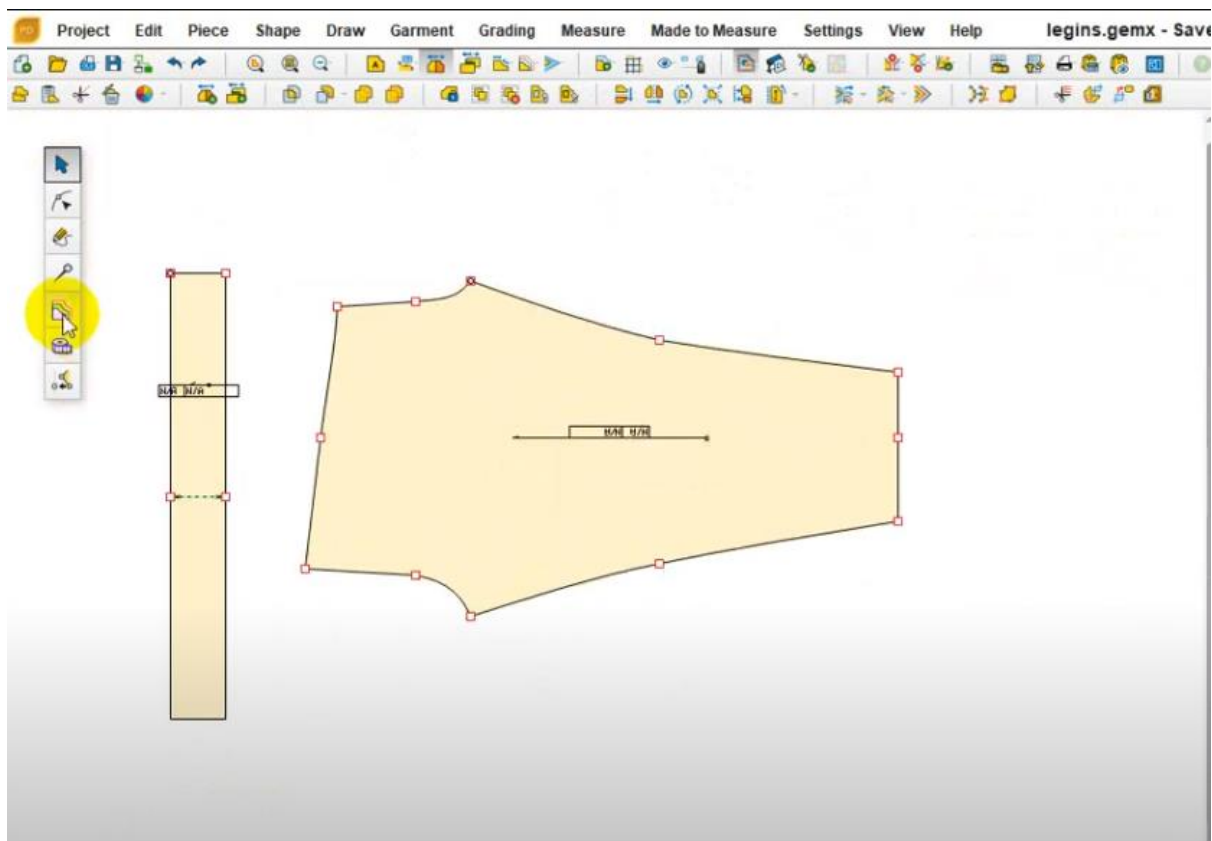


Fig 3.2.3: Picture of The Pattern of The Bottom Sample.

Here in this image, the below measurements are represented in pattern form as per the tech pack. Below is made as per the tech pack so that sample measurements are obtained accurately during sample preparation. Here, the pattern below is made in two parts. The first part is cut from the bottom of the waist to the last part and the second part is cut according to the measurement of a wide cloth tech pack along the waist. Adding two parts will make a complete outfit. And this dress is women's leggings.

3.2.4 Women's Legging (Swing Study):

STYLE NO: 72023R22

STYLE DESCR: Womens Killarney Solid Legging

VENDOR NAME: Interstoff Apparels Ltd.

Serial No.	Swing Code	Swing Position	Stitch Type	Thread & Needle Specification	Machine Used	M/C Picture
01	514	Bottom Side Seam Attaching	Overlock Stitch	2 Needle Threads & 2 Lopper Threads	Overlock M/C	
02	602	Bottom Heam Attaching and Joining the waist and bottom fabric	Cover Stitch	2 Needle Threads & 4 Lopper Threads	Flatlock M/C	
03	401	Attaching the Elastic to The Waist Band	Flatlock Chain Stitch	1 Needle & 1 Bobbin Thread	Flatlock M/C	

Fig 3.2.4: Stitch Details with Sewing Machine for Style 72023R22

The machines for the sample below in this style are nicely specified in the chart. This chart easily shows the number of yarns and needles used in the machine, along with the name, picture, and code of the swing machine. A total of three machines are used for this style. Ex: flat lock machine (602, 401); overlock machine (514). In the sample below, the elastic is attached to the waist band on a flat lock machine, the waist and bottom fabric are joined, and the bottom seam is sewn on a flat lock machine. On the other hand, the side seam of the bottom is stitched in the overlock machine. Both the machine and stitching of this chart are internationally recognized and easily verified.

3.2.5 Submitted Trims & Sample:

In a garment factory, work is done according to the instructions of the buyer. Trim, accessories, fabric, etc. cannot be used for making samples without the approval of the buyer. Approval of all types of items is required for making samples. Therefore, the following items are sent to the buyer for approval:

3.2.5.a Heat Transfer Logo Submission to Buyer for Approval:

MATERIAL SUBMIT FORM

For Canadian Tire Official use only

☒ FGL ☐ Mark's ☐ CTC ☐ USA ☐ Other

LAB-DIPS/KNITDOWN	STRIKE OFF/PATTERN	EMBROIDERY	TRIM	BULK QUALITY
☐ 1st Submission	☐ 1st Submission	☐ 1st Submission	☒ 1st Submission	☐ Hand feel/Quality
☐ 2nd Submission	☐ 2nd Submission	☐ 2nd Submission	☐ 2nd Submission	☐ Bulk lot Colour
☐ 3rd Submission	☐ 3rd Submission	☐ 3rd Submission	☐ 3rd Submission	☐ Shadeband
				☐ Weight

1st Submission ☐ 2nd Submission ☐ 3rd Submission ☐

ATTENTION: Heat Seal BRAND: Ripzone SUBMIT DATE: 27th July -2023
VENDOR/MILL: Interstoff Apparels LTD COO: Bangladesh RECEIPT DATE:
STYLE#: 72023R22 COLOR/COLOR CODES: Black Beauty PRINT/ARTWORK REF:
MATERIAL REF #: RPZAT00060 DESCRIPTIONS: Womens Killarney Solid Legging
FABRIC CONTENT: 95% Cotton 5% Elastane FABRIC TYPE: Jersey WIDTH: 74 WEIGHT: 202
FINISH:
ADDITIONAL COMMENTS: Logo Submission for Approval.

INDICATE WHICH PART OF THE GARMENT THIS COMPONENTS/FABRIC IS FOR:

☐ FILL	☐ SHELL	☐ LINING	☐ SMALL INSERT	☐ SECONDARY FABRICS
☐ FULL BODY	☐ SLEEVE	☐ 1/2 BODY	☒ OTHER	

7. Please submit Strike Off with a full repeat

Fig 3.2.5.a: Heat Transfer Logo Submission to Buyer for Approval

Before making a complete sample, the buyer asks for a strike-off to verify the quality of the heat seal. Observing the strike-off value, the buyer makes a comment, depending on which further action is taken.

3.2.6 Sample Submission to Buyer for Approval:

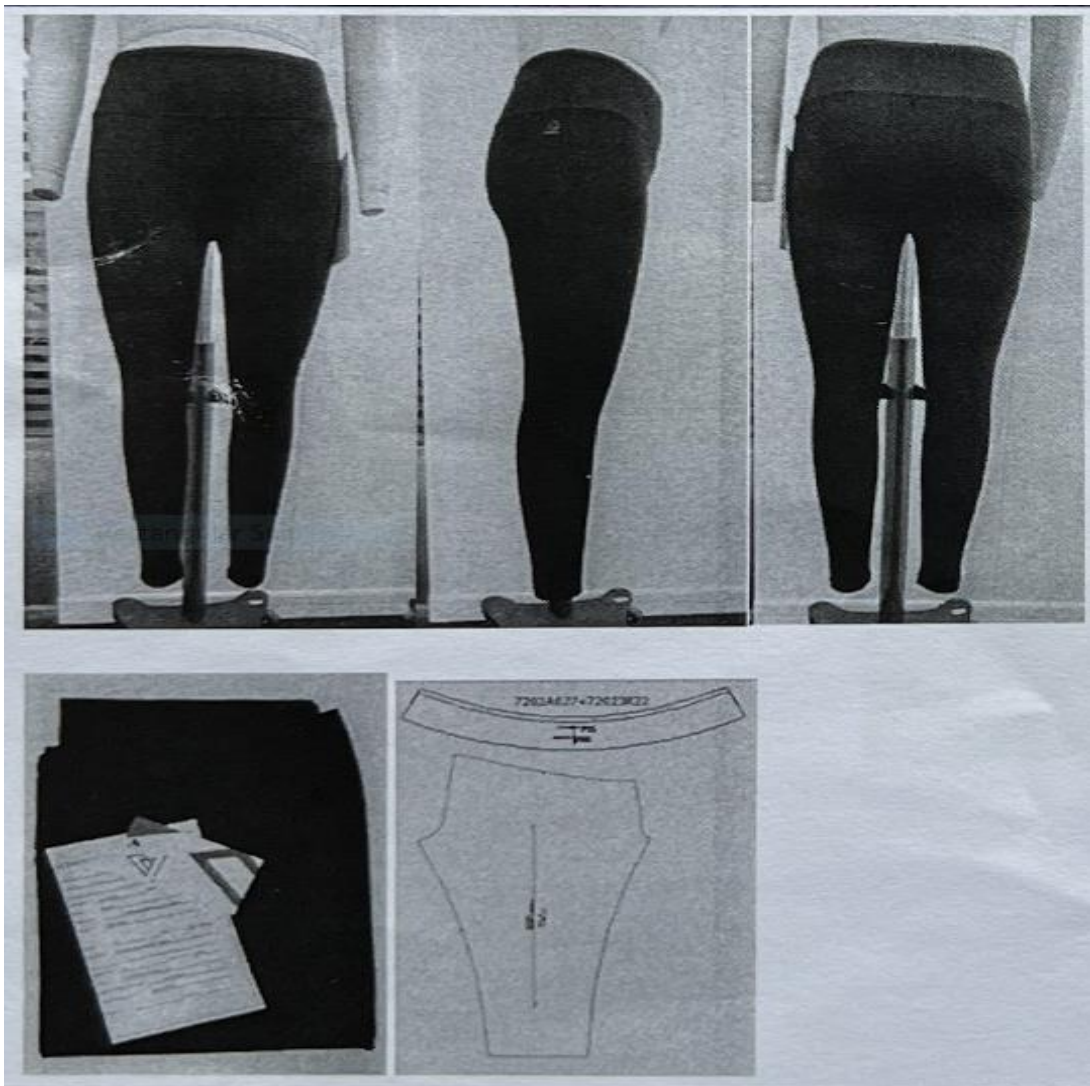


Fig 3.2.6: Sample Submission to Buyer for Approval

After all strike-offs are submitted, a sample with the fabric strike-off and heat transfer logo is sent to the buyer. Subsequent samples are processed after receiving the buyer's approval.

CHAPTER-04

DISCUSSION OF RESULTS

4.1 Tech Pack Analysis:

The primary document a trader receives from a client is the Tech Pack. This tech pack contains all kinds of garment details, such as style, measurement, stitching, trim, color, and many more, which helps a trader create a well-informed quality sample. That is why the trader needs to analyze the tech pack very carefully.

4.1.1 Children's Outerwear and Sleepwear:

Point which includes in tech pack:

- A clean introductory page where every piece of information is available regarding the particular style. This page also mentions quality preview comments.
- The construction page includes a basic construction manual for the style.
- The measurement page includes all sizes ratios with acceptable tolerance.
- Base fabric details are on the elastic details page.

Points can be added for a clear idea:

- If more detailed information about sewing is analyzed with pictures, it becomes easier to work according to the developer's or supplier's tech pack.
- If the fabric details were better presented in the tech pack, it would have been easier for the developer to book the fabric.
- The developer would have benefited if the tech pack specified where the waist band elastic should be placed on the bottom.

4.1.2 Women's Legging:

Point which includes in tech pack:

- Everything needed to create a full-fledged sample is nicely specified in this tech pack.
- Details of fabric, trims, labels, and other accessories are mentioned.
- Where to stitch the sample is very nicely given in this tech pack.
- Fabric colors and sample pictures are provided in this tech pack to facilitate developers in making samples.

Points can be added for a clear idea:

- If the fabric details were better presented in the tech pack, it would have been easier for the developer to book the fabric.
- The developer would have benefited if the tech pack specified where the waist band elastic should be placed on the bottom.

4.2 Artwork Study:

4.2.1 Children's Outerwear and Sleepwear:

Point which includes in artwork:

- The measurement of the repeating unit.
- All of the colors on the design correspond to their pantone.
- Sorted base color and printed color.

Study of artwork:

- The same design has the same measurement & the same repeating unit.
- One style has the same 9/10 color, which has been used repeatedly.

4.3 Sample Requisition Form:

4.3.1 Children's Outerwear and Sleepwear:

		SAMPLE REQUISITION FORM INTERSTOFF APPARELS LTD.				
						DATE: 06/09/23
						PREPARED BY: LAURA GHERBAZ
BUYER	TARGET					PICTURE OF SAMPLE 
STYLE#	3700295263					
STYLE DESC	LITTLE GIRLS RIB PJ SET - PRINCESS					
FACTORY	IAL					
SAMPLE TYPE	COLOR	FABRIC	THREAD	QNTTY	SIZE	
DEVELOPMENT	AOP	95% BCI C. 5% E.	SAMPLE COLOR BASE	2	1-7 YEARS	
SAMPLE YRDS STATUS	GIVEN		SHRINKAGE %	13-14	4	
COMPOSITION	95% BCI COTTON 5% ELASTIC					
STYLING DETAILS / TRIMS DETAILS						
STYLING	AS PER IMAGE					
PATTERN	AS PER TECH PACK					
TECH PACK						
SPEC SHEET	GIVEN TECHPACK					
MAIN LABEL	1-7 YEARS					
CARE LABEL	AS PER TECH PACK					
PU PATCH	NOT REQUIRED					
SIZE LABEL	1-7 YEARS					
ZIPPER	NOT REQUIRED					
EMB	NOT REQUIRED					
LOGO	NOT REQUIRED					
COMMENT	NEED MEASUREMENTS TO BE EXACT					
POCKETING	NOT REQUIRED					
WASHING PLANT						
WASH TYPE						
DRY PROCESS						
TINTING						
REMARKS						
APPROVED & SIGNED BY			FACTORY MERCHANT NAME & SIGN			
_____			_____			

Fig 4.3: Sample Requisition Form of Children's Outerwear and Sleepwear

4.3.2 Women's Leggings:

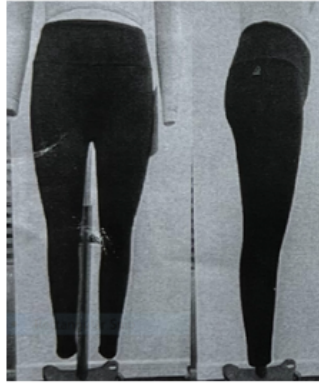
		SAMPLE REQUISITION FORM INTERSTOFF APPARELS LTD.					DATE: 10/06/22	
							PREPARED BY: ASHLEY FLOREY	
BUYER	RIPZONE					PICTURE OF SAMPLE 		
STYLE#	72023R22							
STYLE DESC	WOMEN'S KILLARNEY SOLID LEGGING							
FACTORY	IAL							
SAMPLE TYPE	COLOR	FABRIC	THREAD	QNTTY	SIZE			
DEVELOPMENT	BLACK BEAUTY	95% COTTON, 5% SPANDEX	COATS EPIC TEX 40 P. WAR. P. CORE	2	XS-XL			
SAMPLE YRDS STATUS	GIVEN		SHRINKAGE %	13-14	M/L			
COMPOSITION	95% COTTON 5% SPANDEX							
STYLING DETAILS / TRIMS DETAILS								
STYLING	AS PER IMAGE							
PATTERN	AS PER TECH PACK							
TECH PACK								
SPEC SHEET	GIVEN TECHPACK							
MAIN LABEL	XS-XL							
CARE LABEL	AS PER TECH PACK							
PU PATCH	NOT REQUIRED							
SIZE LABEL	XS-XL							
ZIPPER	NOT REQUIRED							
EMB	NOT REQUIRED							
LOGO	NOT REQUIRED							
COMMENT	NEED MEASUREMENTS TO BE EXACT							
POCKETING	NOT REQUIRED							
WASHING PLANT								
WASH TYPE								
DRY PROCESS								
TINTING								
REMARKS								
APPROVED & SIGNED BY					FACTORY MERCHANT NAME & SIGN			
_____					_____			

Fig 4.3: Sample Requisition Form of Women's Legging

Here are two sample requisition forms created for two tech packs. A sample requisition form is a document that contains all the information and requirements given by the buyer in one form. It is usually after the merchandiser receives the tech pack from the buyer to put all the requirements in one place, and the merchandiser gives the request to the sample department to give instructions for further work. In this way, the sample department can quickly complete the work according to a buyer's requirements.

As we worked on this thesis, we discovered that, unlike the two sample requisition forms we created, the sample requisition form merchandiser did not create his samples using the request form from the sample department.

If the merchandiser uses our sample requisition form to prepare his sample, the sample department can easily prepare the sample. Because the sample requisition form has everything you need to create a complete sample on one page, you can quickly decide what's needed and what's not.

CHAPTER-05

CONCLUSION

Samples can be developed under many names, such as development sample, design sample, proto sample, quality assurance sample, online sample, customer contact sample, size set sample, and fit sample.

- 4.1: By studying several tech packs, we observed that every tech pack is different according to the client, but some of the information can provide a clearer vision if it is included. Communicating with the client accordingly can reduce these issues.
- 4.2: By studying artwork, we find that one style has a similar color on different samples, but for a style, all samples with print include the same color in different places. So, it's mandatory not to make any shade of difference to them.
- 4.3: By studying the sample requisition form, we know that if it is used, the samples department can easily know all the requirements of the sample and can work accordingly. It speeds up work and makes it easy to collect trims and accessories. Unfortunately, merchandisers do not create samples from the sample department using the sample requisition form. They do this by sharing tech packs via email, which we think slows down the sample department.

Through our thesis, we learned about different tech packs, what they include and what they don't include, and we discussed them nicely. Also, this thesis provides detailed information about fabric details, colors, measurements, accessories, sewing machines used for all styles, and where different stitches are mentioned. We are submitting documents with samples, such as fabric and heat transfer logos. We also learned about the sample requisition form and how the samples department would work if it was implemented or not. Sample development is the main part of executing an order. That is why we need to be more concerned about developing samples with maximum accuracy.

REFERENCE

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- Sajidul Islam, Apparel Merchandising, Daffodil International University [2022]
- Interstoff Apparels Ltd.

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