



# STRATEGIC ISSUES IN THE FASHION INDUSTRY

Joanne McGowan

University of Huddersfield | MA International Fashion Design Management

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# Strategic Issues in the Fashion Industry

## Introduction

The purpose of this report is to further understand the micro and macro levels of operations, primarily looking at how social, economic, technological and environmental are drivers in strategic decision making and the sustainability of organisations within the industry.

For this, a series of three small and one medium sized case studies have been conducted. The three small cases were present at Pure London – Feb 2018, these were Thought, The Mermaid Cave and Free Spirit. The medium sized case study is based on Camira where it was possible to visit one of their manufacturing sites, and the use of data sheets were used.

All four companies pride themselves on being ethical and sustainable in the understanding of Corporate Social Responsibility practice (CSR). Unlike other companies, these four have been very helpful regarding this study. For example, a few companies that was at Pure London in February 2018 refused to talk on the subject of: CSR, ethical, sustainable fashion and/or refused to be recorded on the subject.

To fully understand what type of businesses they are. It is best practice to define what an ethical business, sustainable business and those that adhering to CSR practice is.



Figure 1 Five Clusters of characteristics of ethical business cultures

As an ethical business Ardichvili, et al (2009) suggest there are five characteristics that a business should be doing to achieve this, these are: Mission and Vision Driven; Stakeholders; Leadership Effectiveness; Long-term perspective and Process Integrity. As illustrated in figure 1.

and if any of these are focused on for too long or too much then it will become unbalanced and will not achieve its main goal. Ardichvili, et all (2009) also suggests that it should permeate throughout the business from functions of systems to managers and front-line staff.

Sustainability can mean different things in different contexts and can lead to some confusion (Hethorn & Ulasewicz, 2015). In this case in relation to apparel, footwear and textiles according to Sustainable Apparel Coalition, which is a large collaboration of brands and retailers to work towards sustainability, is an:

*“industry that produces no unnecessary environmental harm and has a positive impact on the people and communities associated with its activities.” (N.D)*

This is similar vision to The Sustainability Consortium, where we:

*“can experience the benefits of consumer products without causing harm to people or going beyond the environmental limits of our planet. (2018).*

Corporate Social Responsibility (CSR) as defined by the European Commission (2018) is “the responsibility of enterprises for their impact on society” this is primarily lead by companies by adhering to the law, and “integrating social, environmental, ethical, consumer, and human rights concerns into their business strategy and operations” (European Commission, 2018). There are many voluntary roles a business can do to ensure that they are CSR, but there are a few compulsory

regulations. It is possible (in most cases) to put both ethical and sustainability under the umbrella of CSR. As it applies to SME (small to medium enterprise) and large corporations. Although smaller business might not always understand the full extent of CSR. As highlighted in when interviewing Free Spirit.

For the three smaller case studies a SWOT analysis has been carried out and for the medium sized case study a SWOT analysis and a PESTLE Analysis has been performed. This is to give a full understanding of the strategic influences the external environment to the business has on these brands that are ethically/sustainable and CSR minded.

The Methodology will discuss why these businesses was choose for this case study report, the reasons for the use of case studies as a method and the benefits of its use. Including why SWOT and/or PESTLE analysis was used to evaluate each case.

## Methodology

Before starting this series of case studies, it was important to 'plan my journey' (Malins & Gray, 2016) before starting to research please Figure 2. This was a series of maps was to plan the best way to give as much information in a short space.

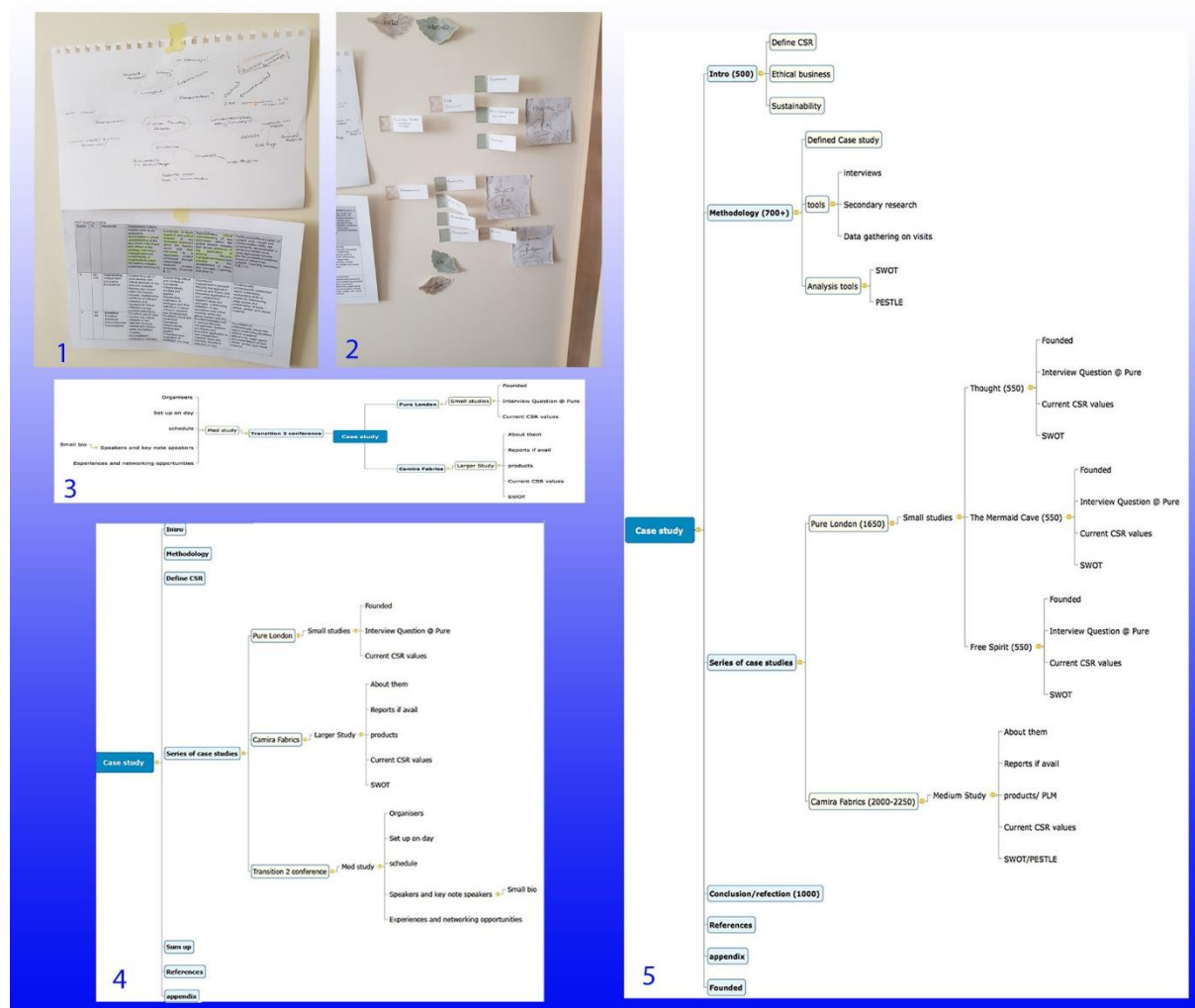


Figure 2 Mapping case study

This included removing a case study about PTC Conference (PTC Forum Europe 2017 in Stuttgart, Germany and Online, 14<sup>th</sup> November 2017) and a Conference called Transition 2: Material Revolution (University of Huddersfield 11<sup>th</sup> and 12<sup>th</sup> April 2018) that had both been attended.

The reason for its removal was based on personal preferences, the idea was to showcase the companies themselves regarding strategic issues in the fashion industry. However, there is reference to PTC Forum Conference in relation to PLM (product lifecycle management) in the Camira Fabrics case study.

As Gray and Malins (2016) point out, there are two types of research, primary and secondary. Secondary data already exists and is predominantly available to everyone however it can be bias or interpreted in different ways. Primary data is new, that has not been subjected to scrutiny. Therefore, both type of data needs to be critically analysed on their authenticity and dependency in context of the source. As both secondary and primary data needs to be subjective it is better to have both and critically analyse them.

The case study approach has been used because it is thought that it will gives an invaluable yet deep understanding into the real-world behaviours of the cases, and whilst also bring an insightful appreciation (Yin, 2012). The definition of ‘case study research’ is

*“A research approach that investigates the phenomenon in question in its context. It is the most suitable research if the number of variables that needs to be considered is very large and if the phenomena and its antecedent cannot yet be clearly distinguished.” (Blumberg, et al, 2014, pp 479)*

As this report is designed to look at ‘social, economic, technological and environmental are drivers in strategic decision making’ there is a lot of variables that will need to be looked at to fully understand what really drives decision making process, so the case study research is able to achieve this.

Yin (2009) suggests that there are six most commonly used methods of collecting data. These are: archival records, interviews, direct observations, participant-observations, documents and physical artefacts. All of which have their strengths and weakness.

Source	Strength	Weakness
<b>Archival Records</b>	Can be seen repeatedly, precise and usually quantitative,	Accessibility maybe an issue due to data protection, can be bias, and maybe incomplete records
<b>Interviews</b>	It focused, can be insightful	Can be bias if questions are not designed well, can be difficult to recall, can be bias answers.
<b>Direct Observations</b>	Covers event in real time,	Can be both cost and time consuming, may miss something unless you have a team of observers
<b>Participant -Observations</b>	Same as above but also interpersonal	Can be bias due to participates recollection of events
<b>Documents</b>	Same as Archival Records	Same as Archival Records
<b>Physical Artefacts</b>	Insightful in relation to culture and technical operations	Availability and Selectivity might not be possible.

Figure 3 Six Sources of Evidence: Strengths and Weaknesses, Yin (2009)

It is advised by Swanborn (2010) advises that a ‘triangulation’ of if sources give an opportunity to compare subjective data with objective data. This would therefore nullify Gray and Malins (2016) view of primary and secondary data.

For the small case studies, the use of primary data was gathered by conducting small interviews lasting approximately three minutes this is due to time constraints on the participants, as they were at Pure to generate business. In one case subsequent follow up questions was possible. The secondary data is from documents (information found on the internet).

To analysis the data quickly the use of a SWOT analysis was used. According to 50minute.com and 50 (2015) SWOT is

*“a multidimensional tool for strategic analysis:*

- *It identifies an organization's internal factors (strengths and weaknesses) and its external factors linked to its environment (weaknesses and threats);*
- *It also allows organizations to prioritize factors in terms of expected impact, whether they are positive (strengths and opportunities) or negative (weaknesses and threats).*

*A SWOT analysis has no intrinsic value unless it is used for strategic purposes.” (p.4)*

They also suggest that the results are easy to communicate to the public.



Figure 4 PESTLE analysis (50minute.com et al, 2015)

For the medium case study, the use of Observations from field visit, documents and artefacts was used primarily and follow up questions via email was made possible. The reason behind these data gathering methods used, is due to the availability at the time of field visit, but also Stake (1995) suggests a use of a data gathering form will not only have

*“space for the information to be recorded but that draws attention to the issues of immediate concern”. (p50)*

Please see appendix 1 for a copy of the data gathering sheet for Camira Fabrics.

This is again a mix of primary and secondary data and analysed via a SWOT analysis and a PESTLE analysis.

The use of PESTLE analysis is due to its ability to look at the ‘macroeconomic factors’ (50minutes.com, et al, 2015) it is a successful tool when used to create different scenarios that managers can then anticipate and plan strategically to navigate.

## Case Studies

### Pure London

Pure London is a trade show that offers people the chance to see:

*“unrivalled inspirations, never-before-seen collections, free educational seminars, WGSN trend briefings and exhilarating live catwalk shows.” (Pure London, 2018)*

At their February 2018 show, they had nine curated show sectors which was Menswear, Pure Premium, Womenswear, Spirit, Pure Origins (which was new this year) Athleisure, footwear, accessories and Retail solutions. All these sections have many brands and to give an idea of how vast this event was please see figure 5 This was above Pure Premium going into Womenswear.



Figure 5 Photo of Pure London by Joanne McGowan

## Thought

Thought was part of the womenswear sections. The bio that was in the show guide is

*“Considered, contemporary style is what Thought do best. We craft timeless clothing from natural, sustainable yarns. We hand-stitch their artisanal prints in house. And we return to nature for inspiration time and again.”* (Pure London, 2018, p115).



Figure 6 Photo of Thought Stall by Joanne McGowan

The business began in 1995 in Australia by two men, John and David. This started off with a men's capsule collection which was designed on keeping cool in a hot climate. In 2002 John brought the brand to the UK and opened pop up stall on markets and vacant spaces. Over the next few years it expanded into womenswear. During this time, it was called Braintree Clothing. This was changed in 2017, as they have grown, and they felt that their name should reflect how 'thought' underlines everything they do. They now have an office in London and have currently 30 members of staff. (Thought, 2018). And over 1000 stores around the world stock their products.

Thought was the first stall that was visited and unfortunately the conversation was not recorded. However, the gentleman that I spoke to was very insightful and was willing to discuss the brand, allowing me to write down his responses and allowed me to take some photo's. The initial start of the

conversation started with introducing myself and my interests in CSR. Before any questions were asked the interviewee talked about Thought. In how “we make visits to China and employ someone specifically for CSR. Because it is such a big area.” He then continued to say about how the brand is contemporary and model ‘Slow Fashion’ and using sustainable fabrics for example bamboo. “although some bamboo has had bad press ours are grown in an ethical way”. Having picked up on the ‘Slow fashion’ I asked, “how do you manage slow fashion and sell them into stores where it is fast fashion based?” His response was “its challenging when you have retailers such as John Lewis requesting more of a specific line and it is almost impossible to get it to them as it maybe on a container at sea and is not due to come in for a few weeks. It's a lot of planning involved.” Something he admitted they get right but sometimes they don't.



Figure 7 Photo of top from Thought collection by Joanne McGowan.



Through further research, it is now known that they create are made from “naturally grown bamboo, cotton, wool and hemp” (Thought, 2018) They also recently started using Tencel and modal. Having got Global Organic Textile Standard2 (GOTS) certified their organic cotton and use OEKO-TEX® to ensure their dyes are not harmful to the planet. They even use the odd recycled polyester and rayon. They even made it onto the ‘12 best sustainable fashion brands for women’ list by the Independent. They stated that we should look out for

*“the Global Organic Textile Standard (GOTS), the Soil Association, the UK’s certification body or Oeko-Tex, which checks processes for harmful chemicals, to assure the fabric has come from approved sources.” (Newall, 2017 para 7)*

They have stated on their website about how they work with the same manufacturers and have grown with them since they started, and how they only ship slow. They have even outlined their code of conduct that they have with their suppliers (see appendix 2) which if this is matched with their visits. Then this is a strong ethical business especially as it has been certified by The Ethical Fashion Forum (see appendix 3).

Strengths

They have sourced fabrics that are certified  
 They have a clear Code of Conduct  
 They are members for the Ethical Fashion Forum

Weakness

Their certificate expires in July 2018  
 They don’t have a lot of information about modal, where as they have a lot of information on the other fabrics they use on their website. They don’t state who they supply to, and maybe missing customers who prefer to touch and feel before purchasing.

Opportunities

Put more information about modal on their website.  
 They could state some of the retailers they supply to for those people that don’t like purchasing online

Threats

By using slow shipping and not planning well this could cause issues with retailers they supply to and may loss business.

Thought are doing well in this area but there’re areas where they can improve.

The Mermaid Cave

The Mermaid Cave was located within the Accessories section. The bio in the show guide describes them as:

*“Festival fashion & beauty experience, offering biodegradable glitter makeovers, handmade crystal jewellery & headdresses, alongside other sustainable products. 10% of profits donated to ocean conservation.” (Pure London, p162)*

Zoe Lower founded this business in July 2015. They do a series of 3-7 festivals per season. One of their first and regular spots is “Farr Festival, a lovely small one held in woodland in Hertfordshire” (Z Lower, personal communication, April 24, 2018). Due to the nature of the business design they have been to many different festivals and countries for example

*“We did Glastonbury one year (the year of the mud!), we've been abroad to Sziget in Budapest and Pure Life Experiences in Morocco. However, one of our new favourites is Wilderness” (Z Lower, personal communication, April 24, 2018).*



Figure 8 The Mermaid Cave sign by Joanne McGowan



Figure 9 Oceans Care logo

They are not only at festivals, but they are also online with their own website which sells a range of eco products to headress and crystal's. If a product is not there, regarding jewellery it is possible to get one custom made by contacting them, by either Facebook or their website. Their Facebook page is regularly updated with new products, photos and shared posts about the damage created by

plastics and rubbish in our oceans.

When I met Zoe at Pure London I was granted permission to record the conversation (please see appendix 4 for transcript). My question was "what made you think there was an issue, and how did you make a change?" Her response was horrific. It was primarily down to a personal experience when snorkelling in Nusa, Bali to see the Manta Ray's. "I got in the water and had to get out of the water after two minutes. It was as if somebody had ripped 10 bin bags and thrown in the water I was swimming and got hit in the face with Pot Noodle" Unfortunately she had to get out after 2 minutes as this was a traumatising experience. From this experience The Mermaid Cave now donates 10% of profits to the Ocean Care. Their current project is to put in place a hydro/solar powered trash collector in the Jangkuk River in Lombok. This was developed and tested in Baltimore, USA (ocean. care, 2016). Which Zoe did mention when interviewed.

Their current products are from sustainable sources. Their biodegradable glitter is most promising as it has been certified marine & waste water compostable. Where as other glitter is made with a base of PET, the bio glitter is made from rayon & glycerin (plant derived) (The Mermaid Cave, 2018).



Figure 10 Photo of The Mermaid Cave stall

#### Strengths

- Small business capable of moving around including over sea's.
- They have an online store
- Their biodegradable glitter has been certified by a body.
- The donate 10% profit to Ocean. Care.
- They offer a unique service

#### Opportunities

- Could start selling clothing online, with information about fabric sources and where it is made (is it ethical?)
- They can reach out and get an article published in festival magazines to let more people know what they do.

They have many opportunities in which they can be more noticed and generate more business with very little effort. There is a lot of information about the impact of plastic on our oceans but if they

#### Weaknesses

- Festivals in the UK have a habit of being due to adverse weather and terror threats.
- Thy currently only have clothing for their traveling den and not much is known about the fabric sources.

#### Threats

- Other festival stalls,
- Political threats at festivals

are selling a bit of clothing it would be highly beneficial to write something about the sustainability of them as well.

## Free Spirit



Figure 11 Photo of Free Spirit stall 1

Free Spirit was located in the Athleisure section of Pure London. The bio in the show guild was:

*“Australian born Ethical Yoga wear, using 100% sustainable fabrics of organic cotton and bamboo, designed to inspire and uplift, for on or off the mat!”* (Pure London, p120).

Free Spirit was founded by Christina Gill, after working for large well know fashion brands for 8/10 years and travelling the world she decided that she wanted to make a difference and her work should have a purpose. Having moved to

Australia she opened Free Spirit, sourcing only sustainable fabrics (free Spirit, 2015).

During the interview I asked her “what are your thoughts about corporate social responsibility?” her response was “I mean for me personally erm its obviously very important” and going on to say that “but for everyone its always about the problem bottom line” It was obvious from her response that her experience in the “big corporate fashion world” not only given her a chance to see what it was like for large brands but it had also made an impression. Please see appendix 5 for full transcript.

Not only does this company support the use of sustainable fabrics like organic cotton and bamboo, but it also visits the whole manufacturing process. “ensuring the quality of our product and also a highly ethical work environment.” (Free Spirit, 2015). As well as donating 5% of sales to the Hope Foundation, in fact in the interview she admitted she should probably donate profit, but as its one of her USP (unique selling point) she wanted her customers to “know that you have helped a child” as this 5% is enough for 6months of educational supplies.

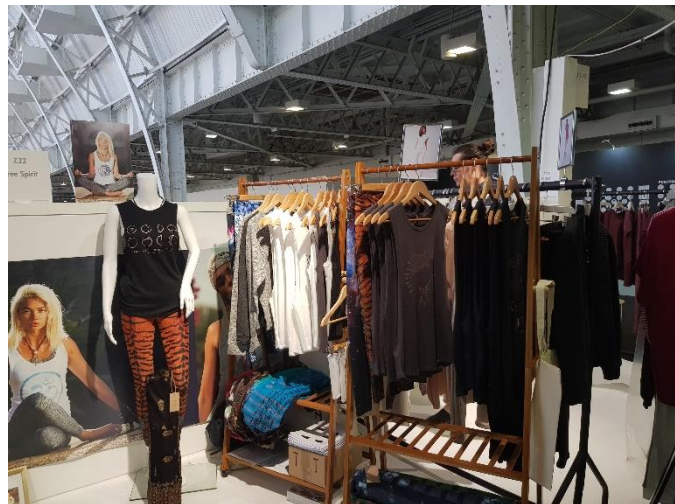


Figure 12 Photo of Free Spirit stall 2

Unfortunately, when looking at the Free Spirit website there was some conflicting information, it states that the 5% from one t-shirt is enough for 3months supply. It also does not state if any of the fabrics have been certified.

### Strengths

It has serval USP’s

She has even got a press section on her website from featuring in Drapers and other magazines.

Actually, goes and visits the manufacturers

### Weaknesses

Information from interview is slightly inconsistent to the information found on their website.

Does not have fabrics certified, or if it did it’s not published on the website.

### Opportunities

Can simply add the certificates or mention them if the fabrics have been certified.  
Needs to update the website to address the inconsistent information

If the business is donating 5% regardless of company performance it does leave her vulnerable to bankruptcy, not careful

### Threats

If the business is not performing very well especially if 5% is being taken before profit. Then this maybe a problem long term

All three small case studies have not been to this trade show before according to Pure London (2018) Only Free Spirit had a code Ethical clothing, The Mermaid Cave had made in the UK symbol but they all had new to Pure.



Figure 13 Symbols from Show Guide, 2018, p115

## Camira Fabrics

### About

“Camira are fabric experts, creating materials for furnishings and textiles” (Ultimate, N.D). They have rich, yet seemingly young heritage. It is built on blocks of Stoke Brothers, John Holdsworth, Teknit it has changed its name from Camborne, to Interface to Camira. Their main purpose is to deliver design with substance. Whilst valuing Customer centric, quality, teamwork, sustainability, innovation and integrity. They make over 8 million metres of fabric within the UK and Lithuania, for a range of industries, from healthcare, education to transport. (Camira, 2018). This is done by starting...

*“with the yarn itself, from wool spinning and polypropylene yarn manufacture, through to yarn dyeing, warping, weaving, technical knitting and textile finishing. So we control our own supply chain to ensure continuity of supply for our customers far and wide”* (Camira Fabrics, Manufacturing, 2018, para 3).

They have approximately 700 members of staff and 180 of those work in the Meltham site where the visit was carried out. At this particular site they have at least 2 shifts which enables them to produce 24/7. They order 800 tons of lamb’s wool every year (Please see appendix 6 for filled in data gathering sheet). Their USP is if you buy in the UK by 3.30pm they will deliver it by 9am the next day. In order to do this, they have 5 vans themselves and they use providers such as UPS. They also work closely with Universities and other external bodies and collaborate where possible. They have recently been a speaker at the Transition 2: Material Revolution conference held at The University of Huddersfield.

### Products/PLM

During the visit to their Meltham site, myself and a few others had the opportunity to see many samples of their products, as well as their production and testing facilities.



Figure 15 fabric samples at Camera Fabrics.

Above are just some of the samples seen on the day of the visit. Please see appendix 7 – 10 of fabrics and their Swatch card (the fabric was given as a free sample, and the Swatch information was downloaded from their site. Some of these products have been certified by the EU Ecolabel. These are the following: Technical Knits, Cara, Xtreme, Urban, Manhattan, Lucia, L2, X2, Hemp, Hebden, Main Line Flax, Rivet, Synergy, Synergy 170, Individuo, Patina, (please see appendix 11). Just as Thought have, they have even got some of their products certified by OEKO-TEX® these include, Xtreme, Urban, x2, L2, Lucia, Gravity, Canopy, Era, Aspect, Fiji, Phoenix, Xtreme CS, Lucia CS and Nexus (please see appendix 12). Many of their fabrics are natural based using wool, nettle, hemp, but they now include recycled Jute and flax.



Figure 14 Camera Fabrics 1



Figure 16 Camira Fabrics 2

Having been to Camira I did follow up with an email question, this was about PLM (Product Life Management) software which AutoDesk (2018) defines as “a process of managing complex product information, engineering and manufacturing workflow and collaboration”. I had asked which one do you use? There was an unexpected reply of “having checked we do not have a PLM. We are beginning to research possible systems and do plan to use one in the future.” (Director, personal communication, April 17, 2018). This would aid them dramatically when collaborating with suppliers and across the world with their agents especially with their other production outlets in Lithuania.

#### CSR Value

CSR and Sustainability is supposed to be Camira’s ‘moral’ fibre. With this in mind, they consider both environmental and social impacts that creating the product makes. Due to this prior to the visit, 3 questions had been prepared. These were even on the gathering sheet, this is so that I stayed focused on the topic. These were:

1. On their Sustainability Snapshot 2015/2016 they stated, "In 2014, 61% of the products manufactured at our main UK site were from natural or recycled raw materials – a figure that is rising every year!" I want to know what the percentages are now?
2. Other than winning awards such as Queens Award in 2015, how do they measure their own success when it comes to sustainability?
3. They mention their UK site having nearly 0% waste in 2013/14, have they tried to replicate this in their other sites? if so how successful was this and was there any obstacles that need to be overcome?

Question 3 and 2 was answered almost immediately. For No2. we were given a handout which showed how the company measures their own success when it comes to sustainability (please see figure 17. In response to No3. they have not yet replicated the results due to Lithuania not being as developed enough, regarding recycling, but everything takes time. Towards the end of the question session my 1<sup>st</sup> question was answered. It is apparently approximately 70% however it is difficult to get the exact figures.

When asked about who deals with CSR the response was that there is not one person, it goes to the board and then divided into projects and subsections. When it comes to auditing, Camira used to audit 100% the farms where their wool etc came from but now its every other visit and get an agent to do the rest. The audit looks at training, H&S, social aspects and quality of the product they are purchasing. They even run an apprenticeship scheme, so people learn the skills of weaving etc. During the visit to their site they mentioned about how they impact their local area too, so a few years ago they opened the site to family/friends of the people that worked there, which was highly successful. During this conversation it was mentioned about the Coffee shop up the road did not

really know that much about them, but they did think it was great to have a large business in the area. To which Camira are now considering opening to the local people for a day to learn about what they do and how they do it.

Camira even support Hector Dolphin's with their Blazer fabric, for every meter sold the contribute to New Zealand Whale and Dolphin Trust charity, they also do the same while supporting Just a Drop when they sell Synergy fabric. (Camira Fabric, Provenance to Process, 2018)

In the UK, since 2013 their main manufacturing facility has been 0% waste to landfill. They send the polyester selvedge waste, back to the supplier to be re-extruded. Certain products lines contain 25% closed loop yarns. They run reclaim off-cut fabrics from their customers to then create new products. (Camira Fabrics, Liner Loop, 2018). Although they do have the X2 and some others that are made with 100% recycled polyester, please see X2 product information sheet, appendix 7 for more details.

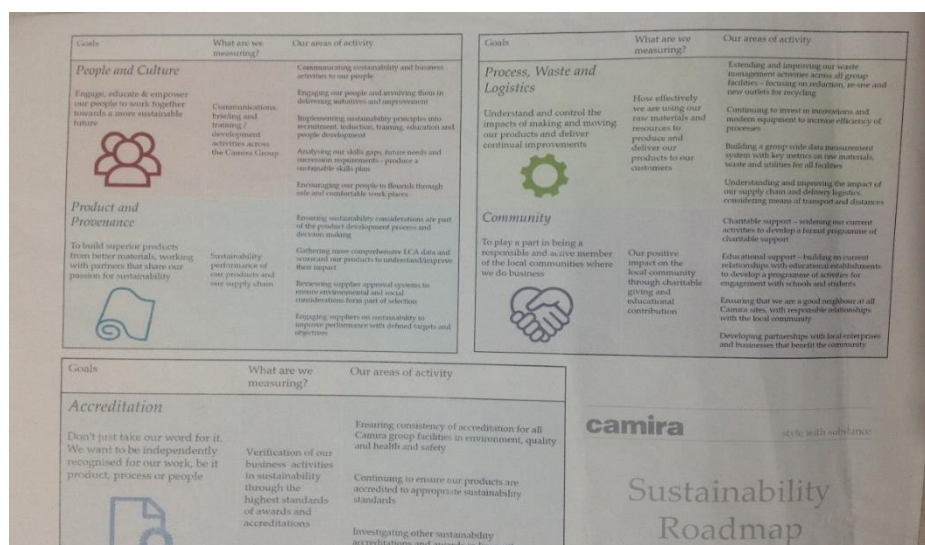


Figure 17 Camira Handout

## SWOT/PESTLE

This section will start off with a quick SWOT analysis followed by a PESTEL analyse that goes deeper into detail.

### SWOT

#### Strengths

- Some of their lines have got certificates proving their environmental impacts, such as EU Ecolabel and OEKO-TEX®.
- They do some charity donations
- They try to close the loop and become more of a circular business were possible.
- They are a global company but also small which means they can be flexible.
- They have all the certificates on fire and abrasions testing.
- They visit and audit their suppliers, every other visit.

#### Weaknesses

- Its not all the lines that have the EU Ecolabel or OEKO-TEX®.
- They don't really mention why those particular charities.
- They said that they are local and take interest in the local areas but there was an example of a local business that did not know much about them
- They do not have a PLM system in place which would help them keep up to date with new technologies and data
- If they are only doing every other audit then it is possible that they might miss something that is not legal or ethically/morally wrong.

### Opportunities

They can look into their collection and see if they can make some change to get them signed off as Eco etc.

They can hold an open day

Get a new PLM system which can communicate about fabrics in stock and information easily accessible from Lithuania etc.

They can return to doing the audits themselves rather than relying on an external company.

### Threats

Changes to legal requirements regarding regulations on fabrics.

New technologies not implemented may give them a disadvantage over their competitors

## PESTEL

### Political

Political uncertainty is a big issue for many businesses currently, as stated by Pratley (2017). With the Brexit negotiations and the fact that Camira do ship to other countries this could be a big challenge for the future.

### Social

As the average disposable income has been proven to be having an effect on the economy it is highly likely this could affect Camira in the long run. Camira is more business to business sales so it relies on the other business (their customers) being in demand.

### Legal

Due to the nature of some of Camira's client it is essential to have paperwork proving that flame retardancy and its abrasions results. Any miss guided, or falsified documents could result in substantial fines and/or law suits.

As you can see there is many things that faces Camira. However, there is plenty of opportunities for them as well. For example, PLM, getting more involved locally and nationally. Especially as they are already using recycled plastic in some of their fabrics. This is a great selling point and should push more in this area.

### Economical

According to Chu (2018) the market almost stalled as the economic growth only raised by 0.1% in the first Quarter of this year. This could be from the bad weather, the income squeeze or the uncertainty of Brexit. Either way it shows people are not spending. This may affect Camira in the B2B (business to Business) if their customers have issues financially.

### Technological

Infrastructure in the public domain has been underinvested as low paid workers have been widely available which has meant companies have not invested in efficiency-enhancing machines. (Elliott, 2018). Such as Camira's case with PLM software this could streamline them saving them money etc.

### Environmental

There has been a lot of press about plastic pollution, pesticides and pressure on companies being more responsible for their supply chain. They want to "discourage industry from using virgin plastic, and to boost their recycling and re-use of the material." (Kirby, 2018) Camira have been proactive in this area by sourcing sustainable yarns and working hard to do zero waste. However, this is still much more to be done.



## Conclusion

From these cases each company does something unique and very good. From Thought that get their fabrics certificate, The Mermaid Cave that donates 10% of profits to Ocean. Care and sells biodegradable glitter. Free Spirit donates 5% of sales to the Hope Foundation and sources organic cotton and bamboo products. Camira, which is more established than the other companies, donates to 2 charities, use natural based fibres or recycled fibres for its fabrics.

However, there is a lot that these companies could improve on. Both individually or all together. One they might all consider is getting all products certified (this may or may not be possible), keep using innovative materials. Individually, Thought would benefit from putting more information about on their site about modal fabric and doing a bit more to market their ethical business for example Free Spirit had a symbol. The mermaid Cave is a pop-up boutique, but it would be good if they had the clothing on their website too and if they are made ethically and using sustainable methods. Free Spirit could do with being clearer on the details for example to me Christina said 5% of profit provides 6months of educational supplies but on the website, it states only 3 months, it also doesn't prove that the fabrics are organic. Camira is the largest company of the four case studies and it too has opportunities to invest as well as improve both locally and globally.

When we relook at the five clusters of characteristics of ethical business cultures we can see that the visions of these four companies are complemented by their leadership teams. They all seem be conscious of their products impact on environment and their social impacts regarding sustainability and CSR.

The series of case studies within this report demonstrates that even by using the basic SWOT analysis can quickly highlight what strategic issues small and medium sized companies face, and what opportunities they may have missed/take advantage of. However, further research is needed especially regarding the interviews, for the smaller cases was very short, it would have been better if more time could have been allocated, but that was the draw back from using the Trade Show time. Interviews with Camira would have brought a greater dynamic to this project and research into possible PLM software could be drawn upon in future.

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# Appendix

## Appendix 1

Observer:		Date:		Time:		To	
No of Staff on site:		Place:		Our contact:			
Observations							
Questions							
<p>1. On their Sustainability Snapshot 2015/2016 they state "In 2014, 61% of the products manufactured at our main UK site were from natural or recycled raw materials – a figure that is rising every year!" I want to know what the percentages are now?</p> <p>2. Other than winning awards such as Queens Award in 2015, how do they measure their own success when it comes to sustainability?</p> <p>3. They mention their UK site having nearly 0% waste in 2013/14, have they tried to replicate this in their other sites? if so how successful was this and was there any obstacles that need to be overcome?</p>							
Response							

# thought

## OUR CODE OF CONDUCT

---

We recognise our responsibility to the people involved in the production of our garments, including those we directly and indirectly employ.

All workers involved in the production of our products will therefore be entitled to fair wages, decent working conditions and the fundamental standards set out by the International Labour Organisation.

As such, contractors, sub-contractors and suppliers of ours are required to demonstrate compliance with the following:

### OUR CODE OF CONDUCT

- **Employment is freely chosen.** There must not be any use of forced, bonded or prison labour (International Labour Organisation [ILO], conventions 29 and 105). Workers must not be required to lodge "deposits" or their identity papers with their employer.
- **There is no discrimination in employment.** Equality of opportunity and treatment regardless of race, colour, sex, religion, political opinion, nationality, social origin or other distinguishing characteristic will be provided (ILO conventions 100 and 111).
- **Child labour is not used.** There must not be any use of child labour. Only workers above the age of 15 years or above the compulsory school-leaving age must be engaged (ILO convention 138). Adequate transitional economic assistance and appropriate educational opportunities must be provided to any replaced child workers.
- **The right to effective consultation between employers and employees is respected.** Employers must adopt best available practice as provided by the All China Federation of Trade Unions (ACFTU), or equivalent, to provide representation and engage in consultation with employees. Consultation includes any request to change labour, wages or working conditions.
- **Living wages are paid.** Wages and benefits paid for a standard working week must meet at least legal or industry minimum standards. They must always be sufficient to meet basic needs of workers and their families and provide some discretionary income.

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tel: 0207 607 1173 | fax: 0203 538 9813 | info@wearethought.com

Deductions from wages for disciplinary measures must not be permitted. Any illegal deduction from wages is not allowed either; i.e. if an unachievable target is set for an employee and their wages are deducted as a result of the deadline not being met.

All workers must be provided with written and understandable information about the conditions in respect of wages before they enter employment. This also covers the particulars of their wages for the pay period concerned each time that they are paid.

- **Hours of work are not excessive.** Hours of work must comply with applicable laws and industry standards. In any event, workers must not, on a regular basis, be required to work in excess of 48 hours per week and must be provided with at least one day off for every 7-day period. Overtime must be voluntary and always compensated at a premium rate.
- **Working conditions are decent.** A safe and hygienic working environment must be provided and best occupational health and safety practice must be promoted, bearing in mind the prevailing knowledge of the industry and of any specific hazards. Physical abuse, threats of physical abuse, unusual punishments or discipline, sexual and other harassment, and intimidation by the employer are strictly prohibited.
- **The employment relationship is established.** Regular employment must not be avoided, or replaced with labour-only contracting arrangements or apprenticeship schemes where there is no real intent to impart skills or provide regular employment. Workers must be given the opportunity to participate in education and training programmes upon request.

Contractors, sub-contractors and suppliers are expected to implement the Code of Conduct by:

- Communicating the contents of the code to all employees so that they are aware of their rights and obligations.
- Keeping and maintaining employment records.
- Providing information concerning their operations.
- Permitting workplace inspections.
- Under no circumstances are employees to suffer disciplinary action, dismissal or discrimination for providing information in compliance with the Code of Conduct.

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tel: 0207 607 1173 | fax: 0203 538 9813 | info@wearethought.com

We will facilitate the implementation of the Code of Conduct by:

- Assigning a responsible person(s) to oversee and support the code's successful execution.
- Integrating the code into our company philosophy.
- Enforcing the code as a condition of all contracts.
- Periodically reviewing the code's operation and success.

Any breach of the code will be met with the following actions:

- Recognisable and unmistakable violations of the code will be ceased immediately.
- Where a corrective action can be reasonably expected, parameters and a time frame for implementation will be set.
- Contractors, sub-contractors and suppliers found to be committing the same violation of the code on more than one occasion will be considered for dismissal.

Thought, Westgate House, 149 Roman Way, London N7 8XH  
tel: 0207 607 1173 | fax: 0203 538 9813 | info@wearethought.com

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### Appendix 3



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#### Appendix 4

Transcript of short questions from Pure London – 11<sup>th</sup> Feb 9:52 AM

Between Joanne McGowan and Zoe founder of The Mermaid Cave.

Permission to be recorded was granted before short interview was conducted.

Joanne; right is mainly because I know you do biodegradable products,

Zoe; yeah

Joanne; I think it's amazing it really is and really useful.

Zoe; thank you,

Joanne; but what made you think there was an issue, and how did you make a change?

Zoe; so I went to Bali for two months this time last year, ermm and we were snorkelling and manta rays in Nusa and much and I was the most critical experiences of my life it was really traumatising, and I got in the water and had to get out of the water after two minutes. It was as if somebody had ripped 10 bin bags and thrown in the water I was swimming and got hit in the face with Pot Noodle and it was... it was... and feet getting caught in plastic bags.

Joanne; sounds horrific.

Zoe; it was devastating, and I had to get out of the water because I was basically crying after that I realised that, back here, it's the distance between nature and it's so easy to become so removed and I just thought I had... Like... A purpose now, to try like alert people was actually going on, and use my brand and lifestyle and... and... lead people towards. And I knew biodegradable glitter I had already made the decision to switch, but but that moment when I was like... I need to help people so we send 10% of all our profits to that ocean charity...Over in Indonesia, and have available solutions like solar powered Joanne; Thank you, that's really helpful. Ermm basically what I am planning on doing is small case studies and putting it into a portfolio

Zoe; ok, yea, amazing.

Joanne; So I have already done quite a bit of research online so I have been looking at your biodegradable glitter.

Zoe; ok, that's nice to know you found us before-hand, Cool.

We then exchanged business cards.

#### Appendix 5

Transcript of short questions from Pure London – 11<sup>th</sup> Feb 10:05 AM

Between Joanne McGowan and Christine founder of Free Spirit.

Permission to be recorded was granted before short interview was conducted.

Joanne: Well I understand that its really ethically made and you have some really high



expectations on how you source your fabrics and the people that work for you. But I just want to know what your thoughts are in regards to CSR? And do you think as a whole that you guys do enough?

Christine: Tell me what CSR is? In Australia things are a bit...

Joanne: Corporate Social Responsibility

Christine: oh ok, and what was the question?

Joanne: Erm, what are your thoughts about corporate social responsibility and do you think Christine: ah well, I mean for me personally erm its obviously very important. I have worked for a lot of big companies in the pasted. I think that it should apply to everyone. I know some it doesn't, and obviously, you know, but for everyone its always about the problem bottom line. It will sound really cheesy when I say its not. But that because I spent 10 years working for big companies and earning a big salary. When actually that's not what is important to me. So now, the fact that I'm doing something like that it has to have a purpose. So, if I don't, if I'm not socially responsible erm if I can't give something back to someone in need, the it's like what's the point in doing it? Erm and that's where I started the brand from, because I wanted to get out of the big erm corporate fashion world as it were, and make a difference, be it tiny, but just make some kind of difference with what I am doing.

Joanne: yeah... Erm... there was another one but I am not sure it is relevant.

Christine: ok..

Joanne: With your brand, what do you think is the best part? What is the best selling feature?

Christine: oh the USP... Erm, that...the fact that its all organic cotton and bamboo fabric. Erm, there is a lot of organic cotton on the market and bamboo is not so popular I guess. Erm the fact I'm using 100% sustainable fabrics throughout the whole range. Erm, so they would be the biggest USP's I mean I do donate 5% of sales and that's sales not profit to the hope foundation. Erm which is something that is really important to me. I get it might not be really important to everyone, but to me it is. I just want whoever buys a T-Shirt of me to know, that, that t-shirt that they bought, pays for a child's educational materials for 6 months. You know, regardless of whether or not my company makes a profit or not. So that's like a cherry on top.

Joanne: There is quite a lot of businesses out there that just donate a small percentage of profit.

Christine: yeah, which is fine. From a business sense it is probably what I should be doing... but I feel that is one of my USP, so if you by a t-shirt from me regardless of how my company performs, you should know that you have helped a child basically and that's what...

Joanne: That's really nice, well thank you very much.

Appendix 6

Observer:	<i>100</i>	Date:		Time:	10.15	To:	
No of Staff on site:	<i>700</i>	Place:	<i>Melkham</i>	Our contact:			

Observations

*wkend overtime. 2x shifts 24/7*  
*Nettle & Wood mtr are flame retardant*  
*Travels in London Crib 7. High wool + treatment*  
*Laminate fabrics can be others or other external fabrics.*

Questions

1. On their Sustainability Snapshot 2015/2016 they state "In 2014, 61% of the products manufactured at our main UK site were from natural or recycled raw materials – a figure that is rising every year!" I want to know what the percentages are now?
2. Other than winning awards such as Queens Award in 2015, how do they measure their own success when it comes to sustainability?
3. They mention their UK site having nearly 0% waste in 2013/14, have they tried to replicate this in their other sites? If so how successful was this and was there any obstacles that need to be overcome?

Response

- ① *Not yet but takes time, close in Lithuania is not as developed in other countries.*
- ② *see handout.*
- ③ *About 70% it is difficult to get exact figure at the moment.*

Design in Innovation - OU

menswear  
bow

and study Manufacture engineering

Parafabrics

owns coin Paper making 2001. 17 yrs.

14 years started camera.

Dying, Pulling

Sustainable - EU Recycled Accredited  
Fibre ECO Label.

They send people out to farmers, Auditing  
suppliers.

800 Tones of Lambs wool every year.

English wool in transport.

38-40 microns.

Marham Dale Fibre best

24/7

2 Sustainable - Polyester recycled bottles  
waste of yarn & recycled again.

inquiries - thinking of doing an open day for the  
water community.

kilometers UK is Volume

million metres per year total.

USP

use different models for different countries 98% of buying by 3.30  
USA is more agents but as this develops and deliver is  
y will change to own sales etc. 9 am next  
in UK.

they have done something wow then  
apply.

Sivan

& using  
drivers & Pro  
ie ups.

10 camera auditors, every other visit.  
to Pakistan.

Training - HAS, Social aspects, Quality.

Raise money for charities.

subsections of people from board then directed.

## Appendix 7

X2 - Product information		AK 0218	
<p>X2 provides stretch, flammability and abrasion performance in an unobtrusive background grey mélange effect. The subtle dark tones create texture and dimension within a playful colour palette of brights through to subtle neutrals. The mottled appearance is also a practical solution to aid appearance retention.</p> <p>X2 was our first 100% recycled fabric to include closed loop content. 25% of the raw material is derived from our own waste streams, specifically polyester selvages and yarn remnants.</p>		<p><b>Contact</b></p> <p>UK Head Office: +44 (0)1924 490491</p> <p>France/Belgium: +32 56 227 266</p> <p>Germany: +49 7031 60 84 30</p> <p>Netherlands: +31 7361 25120</p> <p>Scandinavia: +45 32 55 20 01</p> <p>Turkey: +90 850 396 6150</p> <p>USA: +1 616 288 0655</p> <p>China: +86 (0)21 6133 1812</p> <p><a href="http://www.camirafabrics.com">www.camirafabrics.com</a></p>	
<p><b>Technical information</b></p>		<p><b>OEKO-TEX®</b> CERTIFIED BY TESTEX <b>STANDARD 100</b> 15-43665 Shirley Tensile by Knorr-Tex GmbH www.oeko-tex.com www.certified-by-testex.com</p> <p><b>Ecolabel</b> www.ecolabel.com www.ecolabel.com</p> <p><b>THE SPANISH COUNCIL FOR ENVIRONMENTAL CERTIFICATION</b> www.cer.es www.cer.es</p> <p><b>THE SPANISH COUNCIL FOR ENVIRONMENTAL CERTIFICATION</b> www.cer.es www.cer.es</p>	
<b>UK</b>	<b>D</b>	<b>F</b>	<b>ES</b>
<p><b>Composition</b> 100% Recycled FR Polyester Non metallic dyes/stuffs</p> <p><b>Environment</b> Certified to the EU Ecolabel Certified to OEKO-TEX® Standard 100 Made from 100% recycled polyester</p> <p><b>Width</b> 140 cm minimum</p> <p><b>Weight</b> 310 g/m<sup>2</sup> ±5% (435 g/lin.m ±5%)</p> <p><b>Abrasion Resistance*</b> Heavy duty / 10 year guarantee Independently certified to ≥100,000 Martindale cycles</p> <p><b>Flammability</b> EN 1021 - 1 (cigarette) EN 1021 - 2 (match) BS 7176 Low Hazard BS 5802 Ignition Source 5 BS 7176 Medium Hazard DIN 4102 E1 NF D 60-013 ONORM A 3800-1 UNI 9175 Classe 1 IM <i>Note: Flammability performance is dependent on components used. This range has been tested using 34-38 kg/m<sup>3</sup> CMHR foam unless otherwise stated.</i></p> <p><b>Light Fastness</b> 6 (ISO 105 - B02)</p> <p><b>Fastness to Rubbing</b> Wet: 4, Dry: 4 (ISO 105 - X12)</p> <p><b>Cleaning</b> Washable to 60°C. Vacuum regularly. Wipe clean with a damp cloth or shampoo using proprietary upholstery shampoo.</p> <p><small>*Abrasion testing produces a wide variability of results even from the same test sample. The independent certifiers of ≥100,000 cycles is available on our website or from our customer service team. Internally we also specify this product at ≥100,000 cycles which we believe is realistic for reparability of testing. Please be aware that abrasion testing alone is not a reliable indicator of the actual wear performance of fabrics. We're so confident in the durability of our products that we provide a robust 10-year guarantee (full details available).</small></p> <p><small>Please note that seam performance is dependent on seam construction and needle and thread type. We recommend that appropriate sewing advice be taken.</small></p> <p><small>Batch to batch variations in shade may occur within commercial tolerances. We reserve the right to alter technical specifications without notice. The Unregistered Design Rights and the Copyright in all designs are the exclusive property of Camira Fabrics Limited.</small></p>	<p><b>Zusammensetzung</b> 100% Recyceltes Polyester FR Nicht schwermetallhaltige Farbstoffe</p> <p><b>Umweltfreundlich</b> Nach Zertifikat EU Ecolabel Nach Zertifikat OEKO-TEX® Standard 100 Hergestellt aus 100% recyceltem Polyester</p> <p><b>Breite</b> 140 cm nutzbare Breite</p> <p><b>Gewicht</b> 310 g/m<sup>2</sup> ±5% (435 g/lin.m ±5%)</p> <p><b>Schwerfestigkeit*</b> Schwerer Objektarsatz / 10 Jahre Garantie Extern zertifiziert mit ≥100,000 Scheuertouren Martindale</p> <p><b>Feuersicherung</b> EN 1021 - 1 (Zigarettestest) EN 1021 - 2 (Streichholztest) BS 7176 Low Hazard BS 5802 Ignition Source 5 BS 7176 Medium Hazard DIN 4102 E1 NF D 60-013 ONORM A 3800-1 UNI 9175 Klasse 1 IM <i>Bemerkung: Schwerentflammbarkeit hängt vom verwendeten Schaum ab. Dieser Stoff wurde mit 34-38 kg/m<sup>3</sup> CMHR Schaum getestet.</i></p> <p><b>Lichtechtheit</b> 6 (ISO 105 - B02)</p> <p><b>Reibechtheit</b> Nass: 4, Trocken: 4 (ISO 105 - X12)</p> <p><b>Reinigung</b> Waschbar bis 60°C. Regelmässig staubsaugen. Dazu mit einem feuchten Tuch abwischen, oder mit einem speziellen Polsterschaum behandeln.</p> <p><small>*Die Schwerfestigkeitsprüfung erfolgt selbst bei gleicher Reibkraft nach abweichender Ergänzungen. Das Zertifikat eines unabhängigen Prüfinstitutes über ≥100.000 Scheuertouren erhalten Sie von unserem Vertriebsmitarbeiter oder auf unserer Website, intern spezifizieren wir auch dieses Produkt mit &gt;100.000 Scheuertouren, die in der Schwerentzündungsprüfung allein keine Aussagekraft über die Langzeitigkeit eines Beschäftigten hat. Wir sind von der Langzeitigkeit unserer Produkte überzeugt und bieten daher 10 Jahre Garantie (Details auf Anfrage).</small></p> <p><small>Eine optimale Nahtaussehensfähigkeit hängt von der Nahtführung, der verwendeten Nadel und dem Näh-Garn ab. Wir empfehlen daher Nähversuche durchzuführen.</small></p> <p><small>Handeltübliche Farbabweichungen können auftreten und berechtigen nicht zur Reklamation. Wir behalten uns die Änderung technischer Spezifikationen vor. Die registrierten und nicht registrierten Urheberrechte der Designierungen sind ausschließlich Eigentum der Camira Fabrics Limited.</small></p>	<p><b>Composition</b> 100% Polyester retardateur de flamme recyclé Teintures non métalliques</p> <p><b>Écologique</b> Avec le certificat EU Ecolabel Certifié à OEKO-TEX® Standard 100 Fabriqué d'un polyester 100% recyclé</p> <p><b>Largeur</b> 140 cm minimum</p> <p><b>Poids</b> 310 g/m<sup>2</sup> ±5% (435 g/lin.m ±5%)</p> <p><b>Résistance à l'abrasion*</b> Usage intense / garantie 10 ans. Certificat indépendant ≥100,000 cycles Martindale</p> <p><b>Flammabilité</b> EN 1021 - 1 (cigarette) EN 1021 - 2 (pomme) BS 7176 Low Hazard BS 5802 Ignition Source 5 BS 7176 Medium Hazard DIN 4102 E1 NF D 60-013 ONORM A 3800-1 UNI 9175 Classe 1 IM <i>Note: Le comportement non-feu dépend de la mousse utilisée. Cette gamme a été testé sur une mousse de 34-38 kg/m<sup>3</sup> CMHR mousse, excepté mentionné différemment.</i></p> <p><b>Solidité à la lumière</b> 6 (ISO 105 - B02)</p> <p><b>Solidité au Frottement</b> Mouillé: 4, Sec: 4 (ISO 105 - X12)</p> <p><b>Nettoyage</b> Lavable jusqu'à 60°C. Aspirer régulièrement. Essuyer avec une éponge humide ou nettoyer à l'aide d'un produit approprié pour tissus d'ameublement.</p> <p><small>*Les tests de résistance à l'abrasion proposent une large variété de résultat final, parfois sur le même échantillon de tissu. Les certifiés indépendants de ≥100.000 cycles est disponible sur notre site internet; vous pouvez également contacter notre Service Client. Nous valons également en interne à ≥100.000 cycles; ce qui est, d'après nous, plus réaliste dans le but d'obtenir une continuité égale des résultats de tests. Merci de noter que l'abrasion seule ne constitue pas un indicateur de confiance dans la performance ou tests à long terme. Nous sommes très confiants absolus en nos produits et leur durabilité, c'est pour cela que nous vous offrons une garantie robuste de 10 ans.</small></p> <p><small>Veuillez noter que la performance du joint dépend de sa construction ainsi que de l'aiguille et du type de fil utilisé.</small></p> <p><small>Une variation de couleurs peut provenir (commerciallement tolérable). Nous réservons le droit de changer les spécifications techniques sans préavis. Les droits de conception non enregistrés, et les droits d'auteur de tous les motifs sont la propriété exclusive de Camira Fabrics Limited.</small></p>	<p><b>Composición</b> 100% Poliéster Reciclado FR Tintes no metálicos</p> <p><b>Ambiental</b> Certificado con EU Ecolabel Certificado de OEKO-TEX® Standard 100 Hecho de 100% de poliéster reciclado</p> <p><b>Ancho</b> 140 cm mínimo</p> <p><b>Peso</b> 310 g/m<sup>2</sup> ±5% (435 g/lin.m ±5%)</p> <p><b>Resistencia a la abrasión*</b> Garantía de 10 años con uso intenso independientemente del certificado de ≥100,000 Ciclos Martindale</p> <p><b>Inflamabilidad</b> EN 1021 - 1 (cigarillo) EN 1021 - 2 (punta) BS 7176 Low Hazard BS 5802 Ignition Source 5 BS 7176 Medium Hazard DIN 4102 E1 NF D 60-013 ONORM A 3800-1 UNI 9175 Clase 1 IM <i>Nota: El grado de inflamabilidad depende del tipo de foam utilizado. Esta gama ha sido testada usando foam CMHR de 34-38 kg/m<sup>3</sup>, en caso de otro tipo de foam se informará.</i></p> <p><b>Solidez a la luz</b> 6 (ISO 105 - B02)</p> <p><b>Solidez al rozamiento</b> Húmedo: 4, Seco: 4 (ISO 105 - X12)</p> <p><b>Limpieza</b> Lavable hasta 60°C. Limpiar con aspiradora frecuentemente. Bien lavar con un paño húmedo o con un champú apropiado para tapicería.</p> <p><small>*Los Test de Abrasión producen unos resultados muy variables incluso con la misma muestra. El certificado de ≥100.000 ciclos Martindale está disponible en nuestra web o se puede pedir al Departamento Comercial. Internamente también certificamos este producto &gt;100.000 ciclos, que pensamos que es lo más realista posible en este caso, con una replicación de resultados tan dispares. Tengan en cuenta que el Test de Abrasión solo no es un indicador fiable sobre el desgaste de un tejido. De hecho, estamos tan comprometidos en la durabilidad de nuestros tejidos, que ofrecemos una garantía de 10 años (detalles completos disponibles).</small></p> <p><small>Tenga en cuenta que el rendimiento de la costura depende de la construcción de la costura, además de la aguja y del tipo de hilo. Le recomendamos que se aconsejen para coser la costura.</small></p> <p><small>Las variaciones de tinte a lote en la sombra se puede producir dentro de tolerancias comerciales. Nos reservamos el derecho a efectuar modificaciones técnicas sin previo aviso. Los derechos sobre los diseños no registrados y los derechos de autor en todos los diseños son propiedad exclusiva de Camira Fabrics Limited.</small></p>



Camira Fabrics. (2018). *Fabrics and samples*. Retrieved from <https://www.camirafabrics.com/fabrics-and-samples>.

## Appendix 8

OWA OWN OWT 0118

### The Nettle Collection - Product information

Inspired by the cultural textiles of nomadic tribes, we have taken our expertise in bast fibre fabrics and created The Nettle Collection, a family of three textile patterns made from an intimate blend of virgin wool and harvested nettles.

Traveller has bold stripes with the characteristics of a weathered and timeworn appearance, yet is gentle and smooth to the touch. This is partnered with Aztec, which is a plain version in the same appealing texture. Normad is a cosier, lofty quality which adds a matured shepherd's check to the family.

**Contact**

UK Head Office: +44 (0)1924 490491

France/Belgium: +32 56 227 266

Germany: +49 7031 60 84 30



Scandinavia: +45 32 55 20 01

Netherlands: +31 7361 25120

USA: +1 616 288 0655

China: +86 (0) 21 6133 1812

[www.camirafabrics.com](http://www.camirafabrics.com)

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### Technical information

UK	D	F	ES
<p><b>Composition</b> Nomad: 75% Virgin Wool, 25% Nettle fibre Aztec &amp; Traveller: 83% Virgin Wool, 17% Nettle fibre</p> <p><b>Environment</b> Rapidly renewable and compostable Made from wool and bast fibre</p> <p><b>Width</b> 140 cm minimum</p> <p><b>Weight</b> Nomad: 505 g/m<sup>2</sup> ±5% (710 g/lin.m ±5%) Aztec &amp; Traveller: 495 g/m<sup>2</sup> ±5% (695 g/lin.m ±5%)</p> <p><b>Pattern Repeat</b> Nomad: Width 1.8 cm, Length 2.2 cm Traveller: Length 28 cm</p> <p><b>Abrasion Resistance*</b> 10 year guarantee independently certified to ≥40,000 Martindale cycles</p> <p><b>Flammability</b> EN 1021 - 1 (cigarette) EN 1021 - 2 (match) BS 7176 Low Hazard BS 5852 Ignition Source 5 BS 7176 Medium Hazard <i>Note: Flammability performance is dependent on components used. This range has been tested using 34-38 kg/m<sup>3</sup> CMHR foam unless otherwise stated.</i></p> <p><b>Light Fastness</b> 5 (ISO 105 - B02)</p> <p><b>Fastness to Rubbing</b> Wet: 4, Dry: 4 (ISO 105 - X12)</p> <p><b>Cleaning</b> Vacuum regularly. Professionally dry clean or wipe clean with a damp cloth.</p> <p><small>*Abrasion testing produces a wide variability of results even from the same test sample. The independent certificate of ≥40,000 cycles is available on our website or from our customer service team. Internally we specify this product at ≥35,000 cycles which we believe is realistic for repeatability of testing. Please be aware that abrasion testing alone is not a reliable indicator of the actual wear performance of fabrics. We're so confident in the durability of our products that we provide a robust 10 year guarantee (full details available).</small></p> <p><small>Please note that seam performance is dependent on seam construction and needle and thread type. We recommend that appropriate sewing advice be taken.</small></p> <p><small>Bitte zu blickt Variationen in der Farbe, die innerhalb kommerzieller Toleranzen. Wir respektieren das Recht auf alle technischen Spezifikationen ohne Vorwarnung. Die unregistrierten Designrechte und das Copyright in allen Designs sind das ausschließliche Eigentum von Camira Fabrics Limited.</small></p>	<p><b>Zusammensetzung</b> Nomad: 75% Schurwolle, 25% Brennnesselfaser Aztec &amp; Traveller: 83% Schurwolle, 17% Brennnesselfaser</p> <p><b>Umweltfreundlich</b> Nachwachsender Rohstoff und kompostierbar Mit Wolle und Bastfasern gefertigt</p> <p><b>Breite</b> 140 cm nutzbare Breite</p> <p><b>Gewicht</b> Nomad: 505 g/m<sup>2</sup> ±5% (710 g/lin.M ±5%) Aztec &amp; Traveller: 495 g/m<sup>2</sup> ±5% (695 g/lin.M ±5%)</p> <p><b>Rapport</b> Nomad: Breite 1,8 cm, Länge 2,2 cm Traveller: Länge 28 cm</p> <p><b>Scheuerfestigkeit*</b> 10 Jahre Garantie. Extern zertifiziert mit ≥40.000 Scheuertouren Martindale</p> <p><b>Feuersicherung</b> EN 1021 - 1 (Zigarettertest) EN 1021 - 2 (Streichholztest) BS 7176 Low Hazard BS 5852 Ignition Source 5 BS 7176 Medium Hazard <i>Bemerkung: Scheuerfestigkeit hängt vom verwendeten Schaum ab. Dieser Stoff wurde mit 34-38 kg/m<sup>3</sup> CMHR Schaum getestet.</i></p> <p><b>Lichtechtheit</b> 5 (ISO 105 - B02)</p> <p><b>Reibechtheit</b> Nass: 4, Trocken: 4 (ISO 105 - X12)</p> <p><b>Reinigung</b> Regelmäßig staubsaugen. Professionelle Trockenreinigung. Alternativ dazu mit einem feuchten Tuch abwischen.</p> <p><small>*Die Scheuerfestigkeitprüfung ergibt selbst bei gleichen Testmodulen stark abweichende Ergebnisse. Das Zertifikat eines unabhängigen Prüfinstitutes über ≥40.000 Scheuertouren erhalten Sie von unserem Vertriebsbeauftragten oder auf unserer Website. Intern spezifizieren wir dieses Produkt mit &gt;35.000 Scheuertouren, die in der Serienfertigung als realistisch angenommen werden. Bitte nehmen Sie zur Kenntnis, dass die Scheuerfestigkeitprüfung allein keine Aussagekraft über die Langzeitigkeit eines Bezugsgegenstandes hat. Wir sind von der Langlebigkeit unserer Produkte überzeugt und bieten daher 10 Jahre Garantie (Details auf Anfrage).</small></p> <p><small>Eine optimale Nähnahtausfestigkeit hängt von der Nahtart, der verwendeten Nadel und dem Näh-Garn ab. Wir empfehlen daher Nähversuche durchzuführen.</small></p> <p><small>Handelsübliche Farbabweichungen können auftreten und berechtigen nicht zur Reklamation. Wir behalten uns die Änderung technischer Spezifikationen vor. Die registrierten und nicht registrierten Urheberrechte der Designierungen sind ausschließliches Eigentum der Camira Fabrics Limited.</small></p>	<p><b>Composition</b> Nomad: 75% Laine Vierge, 25% Fibre d'ortie Aztec &amp; Traveller: 83% Laine Vierge, 17% Fibre d'ortie</p> <p><b>Écologique</b> Rapidement renouvelable et compostable Fabriqué avec de la Laine et des fibres originaires de Tignes</p> <p><b>Largeur</b> 140 cm minimum</p> <p><b>Poids</b> Nomad: 505 g/m<sup>2</sup> ±5% (710 g/m.l ±5%) Aztec &amp; Traveller: 495 g/m<sup>2</sup> ±5% (695 g/m.l ±5%)</p> <p><b>Répétition du motif</b> Nomad: Largeur 1,8 cm, Longueur 2,2 cm Traveller: Longueur 28 cm</p> <p><b>Résistance à l'abrasion*</b> Garantie de 10 ans. Certificat indépendant ≥40.000 cycles Martindale</p> <p><b>Flammabilité</b> EN 1021 - 1 (cigarette) EN 1021 - 2 (allumette) BS 7176 Low Hazard BS 5852 Ignition Source 5 BS 7176 Medium Hazard <i>Note: Le comportement non-feu dépend de la mousse utilisée. Cette gamme a été testée sur une mousse de 34-38 kg/m<sup>3</sup> CMHR moussé, excepté mentionné autrement.</i></p> <p><b>Solidité à la lumière</b> 5 (ISO 105 - B02)</p> <p><b>Solidité au Frottement</b> Mouillé: 4, Sec: 4 (ISO 105 - X12)</p> <p><b>Nettoyage</b> Aspirer régulièrement. Nettoyage à sec professionnel. Autrement, essuyer avec un tissu humide.</p> <p><small>*Les tests de résistance à l'abrasion proposent une large variété de résultats finis, parfois sur le même échantillon de tissu. Le certificat indépendant de ≥40.000 cycles est disponible sur notre site internet; vous pouvez également contacter notre Service Clients. Nous validons ce produit - en interne - à &gt;35.000 cycles; ce qui est, d'après nous, plus réaliste dans le but d'obtenir une constance égale des résultats de tests. Merci de noter que l'abrasion seule ne constitue pas un indicateur de confiance dans la performance du tissu à long terme. Nous avons une confiance absolue en nos produits et leur durabilité, c'est pour cela que nous vous offrons une garantie robuste de 10 ans.</small></p> <p><small>Utilisez note que la performance du joint dépend de sa construction ainsi que de l'aiguille et du type de fil utilisés.</small></p> <p><small>une variation de couleurs peut provenir commercialement tolérables. Nous observons le droit de changer les spécifications techniques sans préavis. Les Droits de Conception non-registrés et les droits d'auteur de tous les motifs sont la propriété exclusive de Camira Fabrics Limited.</small></p>	<p><b>Composición</b> Nomad: 75% Lana Virgen, 25% Fibra de ortiga Aztec &amp; Traveller: 83% Lana Virgen, 17% Fibra de ortiga</p> <p><b>Ambiental</b> Rapidamente renovable y compostable Producido con lana y fibras naturales</p> <p><b>Ancho</b> 140 cm mínimo</p> <p><b>Peso</b> Nomad: 505 g/m<sup>2</sup> ±5% (710 g/lin.m ±5%) Aztec &amp; Traveller: 495 g/m<sup>2</sup> ±5% (695 g/lin.m ±5%)</p> <p><b>Repetición en el diseño</b> Nomad: Ancho 1,8 cm, Largo 2,2 cm Traveller: Largo 28 cm</p> <p><b>Resistencia a la abrasión*</b> Garantía de uso 10 años. Independientemente del certificado de ≥40.000 Ciclos Martindale</p> <p><b>Infamabilidad</b> EN 1021 - 1 (cigarillo) EN 1021 - 2 (cerilla) BS 7176 Low Hazard BS 5852 Ignition Source 5 BS 7176 Medium Hazard <i>Nota: El grado de inflamabilidad depende del tipo de foam utilizado. Esta gama ha sido testada usando foam CMHR de 34-38 kg/m<sup>3</sup>, en caso de otro tipo de foam se informará.</i></p> <p><b>Solidez a la luz</b> 5 (ISO 105 - B02)</p> <p><b>Solidez al rozamiento</b> Húmedo: 4, Seco: 4 (ISO 105 - X12)</p> <p><b>Limpieza</b> Limpiar con aspirador con regularidad. Limpiar en seco, o bien lavar con un paño húmedo.</p> <p><small>*Los Test de Abrasión producen unos resultados muy variables incluso con la misma muestra. El certificado de ≥40.000 ciclos Martindale está disponible en nuestra web o se puede pedir al Departamento Comercial. Internamente certificamos este producto &gt;35.000 ciclos, que pensamos que es lo más realista posible en este caso, con una repetición de resultados los mejores. Tengan en cuenta que el Test de Abrasión solo no es un indicador fiable sobre el desgaste de un tejido. De hecho, estamos tan confidentes en la durabilidad de nuestros tejidos, que ofrecemos una garantía de 10 años (detalles completos disponibles).</small></p> <p><small>Tenga en cuenta que el rendimiento de la costura depende de la construcción de la costura, además de la aguja y del tipo de hilo. Le recomendamos que se aconsejen para coser la costura.</small></p> <p><small>las variaciones de tinte a lo largo de la sombra se puede producir dentro de tolerancias comerciales. Nos reservamos el derecho a efectuar modificaciones técnicas sin previo aviso. Los derechos sobre los diseños no registrados y los derechos de autor en todos los derechos son propiedad exclusiva de Camira Fabrics Limited.</small></p>




Camira Fabrics. (2018). *Fabrics and samples*. Retrieved from <https://www.camirafabrics.com/fabrics-and-samples>.

HUH 0318

### Honeycomb - Product information

Honeycomb is a colour woven recycled polyester fabric inspired by architectural structures found in nature and copied by man. The hexagonal shapes of the beehive have long been imitated for their strength and uniformity. Natural engineering at its best, Honeycomb is available in 16 colour mixes. The bolder shades of the pattern outline are softened with a stria of coloured threads. Honeycomb is ideal for high performance upholstery, especially when combined with stain repellent, anti microbial, waterproof and flame retardant coatings. These treatments can be applied on request. Minimum order quantities and charges will apply.

<b>Contact</b>	
UK Head Office:	+44 (0)1924 490491
France/Belgium:	+32 56 227 266
Germany:	+49 7031 60 84 30
Netherlands:	+31 7361 25120
Scandinavia:	+45 32 55 20 01
Turkey:	+90 850 396 6150
USA:	+1 616 288 0655
China:	+86 (0)21 6133 1812
<a href="http://www.camirafabrics.com">www.camirafabrics.com</a>	



### Technical information

UK	D	F	ES
<b>Composition</b> 100% Recycled Polyester	<b>Zusammensetzung</b> 100% Recyceltes Polyester	<b>Composition</b> 100% Polyester Recyclé	<b>Composición</b> 100% Poliéster Reciclado
<b>Environment</b> Made from 100% recycled polyester	<b>Umweltfreundlich</b> Hergestellt aus 100% recyceltem Polyester	<b>Écologique</b> Fabriqué à partir de 100% polyester	<b>Ambiental</b> Hecho de 100 % poliéster reciclado
<b>Width</b> 143 cm minimum	<b>Breite</b> 143 cm nutzbare Breite	<b>Largeur</b> 143 cm minimum	<b>Ancho</b> 143 cm mínimo
<b>Weight</b> 280 g/m <sup>2</sup> ±5% (395 g/lft.m ±5%)	<b>Gewicht</b> Breite 21 cm, Länge 27 cm +/- 5%	<b>Poids</b> 280 g/m <sup>2</sup> ±5% (395 g/lft.m ±5%)	<b>Peso</b> 280 g/m <sup>2</sup> ±5% (395 g/lft.m ±5%)
<b>Pattern Repeat</b> Width: 21 cm, Length: 27 cm +/- 5%	<b>Rapport</b> Breite 21 cm, Länge 27 cm +/- 5%	<b>Répétition du motif</b> Largeur 21 cm, Longueur 27 cm +/- 5%	<b>Répétition en el diseño</b> Ancho 21 cm, Largo 27 cm +/- 5%
<b>Abrasion Resistance*</b> Heavy duty / 10 year guarantee Independently certified to ≥50,000 Martindale cycles	<b>Schuerfestigkeit*</b> Schwerer Gebrauch / 10 Jahre Garantie Extern zertifiziert mit ≥50.000 Schuertouren Martindale	<b>Résistance à l'abrasion*</b> Usage intense / garantie 10 ans. Certificat indépendant ≥50,000 cycles Martindale	<b>Resistencia a la abrasión*</b> Garantía de 10 años con uso intenso Independientemente certificado de ≥50,000 Ciclos Martindale
<b>Flammability</b> EN 1021 - 1 (cigarette) EN 1021 - 2 (match) BS 7176 Low Hazard <i>Note: Flammability performance is dependent on components used. This range has been tested using 34-38 kg/m<sup>2</sup> CMHR foam unless otherwise stated.</i>	<b>Feuersicherung</b> EN 1021 - 1 (Zigarettestest) EN 1021 - 2 (Streichholztest) BS 7176 Low Hazard <i>Bemerkung: Schwereflammbarkeit hängt vom verwendeten Schaum ab. Dieser Stoff wurde mit 34-38 kg/m<sup>2</sup> CMHR Schaum getestet.</i>	<b>Flammabilité</b> EN 1021 - 1 (cigarette) EN 1021 - 2 (allumette) BS 7176 Low Hazard <i>Note: Le comportement non-feu dépend de la mousse utilisée. Cette gamme a été testé sur une mousse de 34-38 kg/m<sup>2</sup> CMHR mousse, excepté mentionné différemment.</i>	<b>Inflamabilidad</b> EN 1021 - 1 (cigarillo) EN 1021 - 2 (velilla) BS 7176 Low Hazard <i>Note: El grado de inflamabilidad depende del tipo de foam utilizado. Esta gama ha sido testada usando foam CMHR de 34-38 kg/m<sup>2</sup>, en caso de otro tipo de foam se informará.</i>
<b>Light Fastness</b> 5 (ISO 105 - B02)	<b>Lichtechtheit</b> Nass, 4, Trocken: 4 (ISO 105 - B02)	<b>Solidité à la lumière</b> 5 (ISO 105 - B02)	<b>Solidez a la luz</b> 5 (ISO 105 - B02)
<b>Fastness to Rubbing</b> Wet: 4, Dry: 4 (ISO 105 - X12)	<b>Reibechtheit</b> Nass, 4, Trocken: 4 (ISO 105 - X12)	<b>Solidité au Frottement</b> Mouillé, 4, Sec: 4 (ISO 105 - X12)	<b>Solidez al rozamiento</b> Húmedo, 4, Seco: 4 (ISO 105 - X12)
<b>Cleaning</b> Washable to 60°C. Vacuum regularly. Wipe clean with a damp cloth or shampoo using proprietary upholstery shampoo.	<b>Reinigung</b> Waschbar bis 60°C. Regelmäßig staubsaugen. Dazu mit einem feuchten Tuch abwischen, oder mit einem speziellen Polsterschaum behandeln.	<b>Nettoyage</b> Lavable jusqu'à 60°C. Aspirer régulièrement. Essuyer avec une éponge humide ou nettoyer à l'aide d'un produit approprié pour tissus d'ameublement.	<b>Limpeza</b> Lavable hasta 60°C. Limpiar con aspiradora frecuentemente. Bien lavar con un paño húmedo o con un champú apropiado para tapicería.
<small>*Abrasion testing produces a wide variability of results over from the same test sample. The independent certifier of ≥50,000 cycles is available on our website or from our customer service team. Internally we specify this product at ≥30,000 cycles which we believe is realistic for repeatability of testing. Please be aware that abrasion testing alone is not a reliable indicator of the actual wear performance of fabrics. We're so confident in the durability of our products that we provide a robust 10 year guarantee (full details available).</small>	<small>*Die Schuerfestigkeitsprüfung ergibt selbst bei gleichen Teststrichen stark abweichende Ergebnisse. Das Zertifikat eines unabhängigen Prüfinstituts über ≥50.000 Schuertouren erhalten Sie von unserem Vertriebsmitarbeiter oder auf unserer Website. Intern spezifizieren wir dieses Produkt mit &gt;=30.000 Schuertouren, die in der Serienanfertigung als realistisch angemerkt werden. Bitte nehmen Sie zur Kenntnis, dass die Schuerfestigkeitsprüfung allein keine Aussagekraft über die Langzeitdauer eines Bezugstoffes hat. Wir sind von der Langzeitdauer unserer Produkte überzeugt und bieten daher 10 Jahre Garantie (Details auf Anfrage).</small>	<small>*Les tests de résistance à l'abrasion produisent une large variété de résultats lors, parfois sur le même échantillon de tissu. Le certificat indépendant de ≥50,000 cycles est disponible sur notre site internet, vous pouvez également contacter notre Service Client. Nous indiquons ce produit – en interne – à ≥30,000 cycles, ce qui est, d'après nous, plus réaliste dans le but d'obtenir une certifiabilité égale des résultats de tests. Merci de noter que l'abrasion seule ne constitue pas un indicateur de confiance dans la performance du tissu à long terme. Nous avons une confiance absolue en nos produits et leur durabilité, c'est pour cela que nous vous offrons une garantie robuste de 10 ans.</small>	<small>*Los tests de Abrasion producen unos resultados muy variables incluso con la misma muestra. El certificado de ≥50,000 ciclos Martindale está disponible en nuestro web, o se puede pedir al Departamento Comercial. Internamente especificamos este producto ≥30,000 ciclos, que pensamos que es lo más realista posible en este caso, con una repetición de resultados tan dispersa. Tenga en cuenta que el test de Abrasion solo no es un indicador fiable sobre el desgaste de un tejido. De hecho, estamos tan convencidos en la durabilidad de nuestros tejidos, que ofrecemos una garantía de 10 años (verificar condiciones completas disponibles).</small>
<small>Please note that seam performance is dependent on seam construction and needle and thread type. We recommend that appropriate sewing advice be taken.</small>	<small>Eine optimale Nahtaussehenshaftigkeit hängt von der Nahtart, der verwendeten Nadel und dem Näh-Garn ab. Wir empfehlen daher Nähverweise durchzuführen.</small>	<small>Vous'lliez noter que la performance de joint dépend de sa construction ainsi que de l'aiguille et du type de fil utilisés.</small>	<small>Tenga en cuenta que el rendimiento de la costura depende de la construcción de la costura, además de la aguja y del tipo de hilo. Le recomendamos que se aconsejen para coseir la costura.</small>
<small>Batch to batch variations in shade may occur within commercial tolerances. We reserve the right to alter technical specifications without notice. The Unregistered Design Rights and the Copyright in all designs are the exclusive property of Camira Fabrics Limited.</small>	<small>Handeltübliche Farbabweichungen können auftreten und berechnen nicht zur Forderung. Wir behalten uns die Änderung technischer Spezifikationen vor. Die registrierten und nicht registrierten Urheberrechte der Gestaltungungen sind ausschließliche Eigentum der Camira Fabrics Limited.</small>	<small>Une variation de couleurs peut provenir (communément tolérée). Nous réservons le droit de changer les spécifications techniques sans préavis. Les Droits de Conception non-éregistrés et les droits d'auteur de tous les motifs sont la propriété exclusive de Camira Fabrics Limited.</small>	<small>Las variaciones de lote a lote en la sombra se puede producir dentro de tolerancias comerciales. Nos reservamos el derecho a efectuar modificaciones técnicas sin previo aviso. Los derechos sobre los diseños no registrados y los derechos de autor en todos los diseños son propiedad exclusiva de Camira Fabrics Limited.</small>



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# Appendix 10

## Landscape Collection - Product information

Inspired by the re-imagined plaids of the catwalks, the Landscape Collection is a tailored approach to meet the demands of the future office. Modular systems are increasingly used to travel through and define open workspace environments. Balance, Contact and Synergy can work in isolation or union.

We have partnered with Just A Drop, the international water aid charity, and for every metre of fabric we sell, we will make a donation to a specific project around the world, helping to provide clean and safe water to those in need.



### Technical information

#### UK

**Composition**  
95% Virgin Wool, 5% Polyamide  
Non metallic dyes/stuffs

**Widths**  
140 cm minimum

**Weight**  
400 g/m<sup>2</sup> ±5% (560 g/lin.m ±5%)

**Pattern Repeat**  
Balance: Width 14.5 cm, Length 14.5 cm  
Contact: Width 14.5 cm, Length 57 cm

**Abrasion Resistance\***  
Heavy duty / 10 year guarantee  
Independently certified to:  
Balance: ≥60,000  
Contact: ≥60,000  
Synergy: ≥100,000

#### Flammability

All:  
EN 1021 - 1 (cigarette)  
EN 1021 - 2 (match)  
BS 7176 Low Hazard  
UNI 9175 Classe 1 IM

Synergy:  
NFD 60-013  
ONORM B 3825 & A 3800-1 (58kg/m<sup>2</sup> CMHR Foam)

EN 13501-1 Adhered D, S1, d0  
EN 13501-1 Un-adhered E, S2, d0

**Optional - please specify when ordering:**

All (when FR treated):  
BS 5852 Ignition Source 5  
BS 7176 Medium Hazard

Synergy (when FR treated):  
EN 13501-1 Adhered B, S1, d0  
EN 13501-1 Un-adhered D, S2, d0

BS 5867-2 Type B Curtains & Drapes

**Note: Flammability performance is dependent on components used. This range has been tested using 34-38 kg/m<sup>2</sup> CMHR foam unless otherwise stated.**

**Light Fastness**  
5 (ISO 105 - B02)

**Fastness to Rubbing**  
Wet 4, Dry: 4 (ISO 105 - X12)

**Cleaning**  
Vacuum regularly. Professionally dry clean or wipe clean with a damp cloth.

\*Abrasion testing produces a wide variability of results even from the same test sample. The independent certificate is available on our website or from our customer service team. Internally we specify this product at: Balance: ≥50,000, Contact: ≥50,000, Synergy: ≥100,000 which we believe is realistic for repeatability of testing. Please be aware that abrasion testing alone is not a reliable indicator of the actual wear performance of fabrics. We do not consider the durability of our products that we provide a robust 10 year guarantee (full details available).

Please note that seam performance is dependent on seam construction and needle and thread type. We recommend that appropriate sewing advice be taken.

Due to batch variations in shade may occur within commercial tolerances. We reserve the right to alter technical specifications without notice. The Unregistered Design Rights and the Copyright in all designs are the exclusive property of Camira Fabrics Limited.

#### D

**Zusammensetzung**  
95% Schurwolle, 5% Polyamid  
Nicht schwermetallhaltige Farbstoffe

**Breite**  
140 cm nutzbare Breite

**Gewicht**  
400 g/m<sup>2</sup> ±5% (560 g/ld.M ±5%)

**Report**  
Balance: Breite 14,5 cm, Länge 14,5 cm  
Contact: Breite 14,5 cm, Länge 57 cm

**Schuerfestigkeit\***  
Schwerer Objekttest / 10 Jahre Garantie  
Extern zertifiziert mit:  
Balance: ≥60,000  
Contact: ≥60,000  
Synergy: ≥100,000

#### Feuersicherung

Alle:  
EN 1021 - 1 (Zigarettenstiel)  
EN 1021 - 2 (Streichholzstiel)  
BS 7176 Low Hazard  
UNI 9175 Classe 1 IM

Synergy:  
NFD 60-013  
ONORM B 3825 & A 3800-1 (58kg/m<sup>2</sup> CMHR Foam)

EN 13501-1 Adhered D, S1, d0  
EN 13501-1 Un-adhered E, S2, d0

**Bitte bei Auftragserteilung angeben:**

Alle (wenn mit FR ausgerüstet):  
BS 5852 Ignition Source 5  
BS 7176 Medium Hazard

Synergy (wenn mit FR ausgerüstet):  
EN 13501-1 Adhered B, S1, d0  
EN 13501-1 Un-adhered D, S2, d0

BS 5867-2 Type B Curtains & Drapes

**Bemerkung: Schwerentflammbarkeit hängt vom verwendeten Schaum ab. Dieser Stoff wurde mit 34-38 kg/m<sup>2</sup> CMHR Schaum getestet.**

**Lichtechtheit**  
5 (ISO 105 - B02)

**Reibechtheit**  
Nass: 4, Trocken: 4 (ISO 105 - X12)

**Reinigung**  
Regelmäßig abstauben. Professionelle Trockenreinigung. Alternativ dazu mit einem feuchten Tuch abwischen.

\*Die Schuerfestigkeitprüfung erfolgt selbst bei gleichen Testmustern stark abweichende Ergebnisse. Das Zertifikat eines unabhängigen Prüfinstitutes erhalten Sie von unserem Vertriebsdienst oder auf unserer Website. Intern spezifizieren wir dieses Produkt mit: Balance: ≥50,000, Contact: ≥50,000, Synergy: ≥100,000 die in der Reihenfolge als realistisch angenommen werden. Bitte nehmen Sie zur Kenntnis, dass die Schuerfestigkeitprüfung allein keine Aussagekraft über die Langlebigkeit eines Bezugsstoffes hat. Wir sind von der Langlebigkeit unserer Produkte überzeugt und bieten daher 10 Jahre Garantie (Details auf Anfrage).

Eine optimale Nahtausfestigkeit hängt von der Nahtform, der verwendeten Nadel und dem Näh-Garn ab. Wir empfehlen daher Nähversuche durchzuführen.

Händelsübliche Farbabweichungen können auftreten und berechnen nicht zur Reklamation. Wir behalten uns die Änderung technischer Spezifikationen vor. Die registrierten und nicht registrierten Urheberrechte der Dessamierungen sind ausschließliches Eigentum der Camira Fabrics Limited.

#### Contact

UK Head Office:	+44 (0)1924 490491
France/Belgium	+32 56 227 266
Germany:	+49 7031 60 84 30
Netherlands:	+31 7361 25120
Scandinavia:	+45 32 55 20 01
Turkey:	+90 850 396 6150
USA:	+1 616 288 0655
China:	+86 (0) 21 6133 1812

[www.camirafabrics.com](http://www.camirafabrics.com)



#### F

**Composition**  
95% Laine Vierge, 5% Polyamide  
Teintures non métalliques

**Largeur**  
140 cm minimum

**Poids**  
400 g/m<sup>2</sup> ±5% (560 g/m.l ±5%)

**Répétition du motif**  
Balance: Largeur 14,5 cm, Longueur 14,5 cm  
Contact: Largeur 14,5 cm, Longueur 57 cm

**Résistance à l'abrasion\***  
Usage intense / garantie 10 ans. Certificat indépendant:  
Balance: ≥60,000  
Contact: ≥60,000  
Synergy: ≥100,000

#### Flammabilité

Alle:  
EN 1021 - 1 (cigarette)  
EN 1021 - 2 (allumette)  
BS 7176 Low Hazard  
UNI 9175 Classe 1 IM

Synergy:  
NFD 60-013  
ONORM B 3825 & A 3800-1 (58kg/m<sup>2</sup> CMHR Foam)

EN 13501-1 Adhered D, S1, d0  
EN 13501-1 Un-adhered E, S2, d0

**Prière de le mentionner lors de la commande:**

Tout (si traitement FR):  
BS 5852 Ignition Source 5  
BS 7176 Medium Hazard

Synergy (si traitement FR):  
EN 13501-1 Adhered B, S1, d0  
EN 13501-1 Un-adhered D, S2, d0

BS 5867-2 Type B Curtains & Drapes

**Note: Le comportement non-tou dépend de la mousse utilisée. Cette gamme a été testée sur une mousse de 34-38 kg/m<sup>2</sup> CMHR mousse, excepté mentionné différemment.**

**Solidité à la lumière**  
5 (ISO 105 - B02)

**Solidité au Frottement**  
Mouillé: 4, Sec: 4 (ISO 105 - X12)

**Nettoyage**  
Aspirer régulièrement. Nettoyage à sec professionnel. Autrement, essayer avec un tissu humide.

\*Les tests de résistance à l'abrasion proposent une Large variété de résultats final, parfois sur le même échantillon de tissu. Le certificat indépendant est disponible sur notre site internet, vous pouvez également contacter notre Service Clients. Nous valons ce produit en interne à: Balance: ≥50,000, Contact: ≥50,000, Synergy: ≥100,000 ce qui est, d'après nous, plus réaliste dans le but d'obtenir une confiance égale des résultats de tests. Merci de noter que l'abrasion seule ne constitue pas un indicateur de confiance dans la performance de tissu à long terme. Nous avons une confiance absolue en nos produits et leur durabilité, c'est pour cela que nous vous offrons une garantie robuste de 10 ans.

Veuillez noter que la performance du joint dépend de sa construction ainsi que de l'agilité et du type de fil utilisé.

Une variation de couleurs peut provenir (commerciallement tolérable). Nous réservons le droit de changer les spécifications techniques sans préavis. Les Droits de Conception non-enregistrés et les droits d'auteur de tous les motifs sont la propriété exclusive de Camira Fabrics Limited.

#### ES

**Composición**  
95% Lana Virgen, 5% Polyamide  
Tintes no metálicos

**Ancho**  
140 cm mínimo

**Peso**  
400 g/m<sup>2</sup> ±5% (560 g/ln.m ±5%)

**Repetición en el diseño**  
Balance: Ancho 14,5 cm, Largo 14,5 cm  
Contact: Ancho 14,5 cm, Largo 57 cm

**Resistencia a la abrasión\***  
Todos (estando con tratamiento FR):  
Balance: ≥60,000  
Contact: ≥60,000  
Synergy: ≥100,000

#### Inflamabilidad

Todos:  
EN 1021 - 1 (cigarrillo)  
EN 1021 - 2 (cerilla)  
BS 7176 Low Hazard  
UNI 9175 Classe 1 IM

Synergy:  
NFD 60-013  
ONORM B 3825 & A 3800-1 (58kg/m<sup>2</sup> CMHR Foam)

EN 13501-1 Adhered D, S1, d0  
EN 13501-1 Un-adhered E, S2, d0

**Por favor especificar cuando se requiere en el pedido:**

Todos (estando con tratamiento FR):  
BS 5852 Ignition Source 5  
BS 7176 Medium Hazard

Synergy (estando con tratamiento FR):  
EN 13501-1 Adhered B, S1, d0  
EN 13501-1 Un-adhered D, S2, d0

BS 5867-2 Type B Curtains & Drapes

**Nota: El grado de inflamabilidad depende del tipo de foam utilizado. Esta gama ha sido testada usando foam CMHR de 34-38 kg/m<sup>2</sup>, en caso de otro tipo de foam se informará.**

**Solidez a la luz**  
5 (ISO 105 - B02)

**Solidez al rozamiento**  
Humedo: 4, Seco: 4 (ISO 105 - X12)

**Limpieza**  
Limpiar con aspirador con regularidad. Limpiar en seco, o bien lavar con un paño húmedo.

\*Lo Test de Abrasión producen unos resultados muy variables incluso con la misma muestra. El certificado está disponible en nuestra web o se puede pedir al Departamento Comercial. Internamente certificamos este producto: Balance: ≥50,000, Contact: ≥50,000, Synergy: ≥100,000 que pensamos que es lo más realista posible en este caso, con una repetición de resultados tan dispersa. Tengan en cuenta que el Test de Abrasión solo no es un indicador fiable sobre el desgaste de un tejido. De hecho, estamos tan convencidos en la durabilidad de nuestros tejidos, que ofrecemos una garantía de 10 años (detalles completos disponibles).

Tenga en cuenta que el rendimiento de la costura depende de la construcción de la costura, además de la aguja y del tipo de hilo. Le recomendamos que se aconsejen para coser la costura.

Las variaciones de lote a lote en la sombra se puede producir dentro de tolerancias comerciales. Nos reservamos el derecho a efectuar modificaciones técnicas sin previo aviso. Los derechos sobre los diseños no registrados y los derechos de autor en todos los diseños son propiedad exclusiva de Camira Fabrics Limited.



Camira Fabrics. (2018). *Fabrics and samples*. Retrieved from <https://www.camirafabrics.com/fabrics-and-samples>.



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[https://www.camirafabrics.com/sites/default/files/document-library/Camira%20EU%20Ecolabel%20Certificate%20-%20June%202017\\_0.pdf](https://www.camirafabrics.com/sites/default/files/document-library/Camira%20EU%20Ecolabel%20Certificate%20-%20June%202017_0.pdf).





OEKO-TEX®. (N.D). *OEKO-TEX® Standard 100 certificate*. Retrieved from <https://www.camirafabrics.com/sites/default/files/document-library/OEKO%20TEX%20CERT.pdf>.