

Guidance on design for longevity – casualwear

Extending the lifespan and use of garments is one of the most significant ways of reducing the environmental impact of clothing

Product overview

- Casualwear includes t-shirts, leggings, sweat tops, skirts, trousers, shorts, blouses and shirts.
- It is one of the largest sectors of the market, with vast quantities bought and disposed of every year.
- Casualwear garments can be produced quickly and at low cost – and hence have become particularly associated with disposable or fast fashion: on-trend items are cheap and ubiquitous, but not manufactured to last.
- The knowledge exists to produce higher quality garments that would have a longer lifespan: the challenge is around proving the commercial case for investing more in production.
- A business model could be developed around producing garments that last longer and marketing this additional longevity as a key benefit to consumers, who would in turn be willing to pay more if longevity was assured.

Top five solutions

- Selecting high-quality fabric and testing rigorously for performance, including colourfastness and pilling.
- Providing clear and simple care and laundry instructions.
- Designing-in adjustable features to accommodate fluctuations in body shape.
- Where appropriate, designing garments with detachable parts which can be replaced when they become soiled or worn.
- Providing styling guidance for the consumer to encourage longer use and potential re-use.

Extending the average life of clothes (2.2 years) by just three months of active use per item would lead to a 5-10% reduction in each of the carbon, water and waste footprints, and cut resource costs by £2bn.

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lifetime?

Fibre and
fabrics

Design and
manufacture

Care and
repair

Re-use and
discard

What limits lifetime?

The focus on low cost and trend-driven fashion over quality and style of products has reduced the longevity of casualwear in recent years.

- Garments are rapidly discarded when no longer in fashion.
- Price pressures mean that raw materials and components are often of a low standard and so susceptible to fading, shrinkage or loss of shape.
- The need to deliver quickly means that speed is prioritised over quality in production processes – so garments can easily tear or develop holes.
- Where garments do last longer – for example, among less fashion-conscious consumers – they are rarely designed to be responsive to changes in body size or shape.

*Around **30%**
of clothing waste
ends up in landfill.*

*The waste footprint for
clothing is estimated at
1.2 million tonnes,
equivalent to **5%** of
UK household waste.*

Recommendations on fibre and fabrics

The first, fundamental step to producing casualwear that lasts longer is to improve the quality of fabrics used.

- Fibres such as wool, nylon and polyester are recognised as being hard-wearing and so can be a good choice.
- Industry-standard tests including fabric weight per unit area, knit/weave density and tear strength rating can be used to ensure selected fabrics meet the desired requirements for durability.
- Including elastomeric yarns in fabrics with knitted structures will help with stretch and recovery properties; this is particularly useful for close-fitting garments.
- Good quality knitted rib trims at neck hems and cuffs can help avoid t-shirts and sweatshirts losing shape.
- Fabrics such as cotton or wool can be pre-shrunk prior to production.
- Colourfastness tests against perspiration, wet and dry rubbing, and washing are all recommended.
- Fabric finishes that address moisture, stains and odours for t-shirts, sweatshirts, blouses and shirts can be marketed as an additional benefit.



Image: smartwentcrazy

Selecting mid-tones and marl textiles can increase longevity

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Recommendations on design and manufacture

Well-considered design and construction can prolong the life of casualwear garments.

- When designing casualwear for longevity, the latest trends are best avoided.
- Classic shapes will result in consumers wearing such garments for longer. Classic or neutral colours have greater longevity compared to fashion or seasonal colours. Marls are also long-lasting as they do not fade.
- Longevity can be increased by allowing garments to be adjusted as body size changes. Features such as an adjustable waist, pleating, adjustable button fastenings and wide seam allowance can all be of use.
- Usage and lifespan can also be increased through versatility. A strapless dress could be converted into a long-sleeve top; longer length t-shirts can be worn tucked in or loose to create different looks.
- It could be possible to produce casualwear with detachable parts such as collars or cuffs which can be replaced when soiled or worn.
- No-waste, interactive and complete garment designs offer the potential for innovative styles and bespoke fits, but also greater longevity, as stress on the fabric is distributed equally throughout the garment.
- A range of best practice exists around casualwear manufacturing to increase lifespan of garments – such as always using 4-thread overlocking for knitted and stretch fabrics to provide added security of seams, and serging fabrics prone to fraying.
- Garment specific action sheets allow designers to set standards and facilitate quality production.

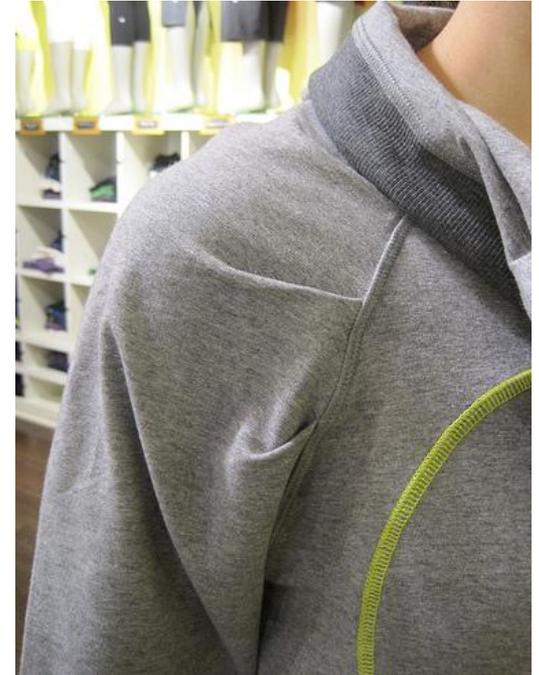


Image: Lululemon athletica

Pleated shoulder detailing promotes movement, comfort and wear

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Recommendations on care and repair

Even with lower-cost garments, changes to care practices can increase the lifespan of casualwear and deliver wider environmental benefits, by reducing resource use. Retailers can help drive this with clear information on care labels, as well as through websites and point-of-purchase information.

- The risk of damage through laundry can be limited by reducing the number of times a garment is washed – freshening items up by airing, as opposed to washing, where possible – and sorting laundry into colours and fibre types before washing.
- Consumers can be encouraged to consider washing by hand, steam-cleaning wool fabrics and removing stains with a liquid detergent rather than washing the whole garment.
- Consumers are often receptive to warnings about the potential impact of not following care instructions – such as the risk of shrinkage if garments are washed at too high a temperature, or the risk of white t-shirts becoming discoloured if washed with dark items.
- Home repair kits – including correct-coloured thread, spare buttons and other components, as well as instructions – could encourage consumers to make small repairs to particularly cherished garments.



A considered approach to laundering will promote garment longevity

Recommendations on re-use and discard

While some casualwear garments are damaged and therefore not suitable for re-use, many are discarded when still wearable. There are therefore plenty of opportunities for garments to be resold, passed on to friends or family, donated to charity or taken to events such as swishing.

- Retailers can help raise awareness of this by providing advice on the labels and their websites about options for re-use.
- Garments that no longer look good can still be used for outdoor activities such as gardening.
- Worn-out clothing can be recycled – but many consumers are relatively unaware of this. Retailers can therefore provide information about this possibility too.
- Using a single fabric facilitates recycling, but where multiple fabrics and components are used, there is scope for designers to make it easy to disassemble these, without compromising the robustness of the product.



Advice on re-use and recycling reduces waste

This is one of a series of Guidance Notes for product development teams offering guidance on design for longevity.

For further information visit:

www.wrap.org.uk/clothing

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