

Kvadrat upholstery textile guide



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Introduction

Textiles play a fundamental role in how we perceive a space. Much more than just practicalities, they create atmosphere and complete the experience when we interact with furniture.

When it comes to selecting a textile, each setting poses a unique set of requirements. To help you make the right choice, this guide explains the characteristics and benefits of popular materials, weaves, finishes and manufacturing processes.



About Kvadrat

At Kvadrat we create high quality products that help architects to shape architectural spaces, designers and furniture manufacturers to produce and craft furniture, and private consumers to add tactility and colour to their homes.

Our textiles have been used in some of the world's most iconic architectural developments, such as the Museum of Modern Art, NYC, Guggenheim Museum, Bilbao and Guangzhou Opera House, China.

Key facts:

- Number one in Europe
- Established in Denmark in 1968
- 24 showrooms
- Representatives in 25 countries
- Quality management certified ISO 9001 since 1992
- Environmentally certified ISO 14001 since 1997

The Kvadrat collection

Designed in collaboration with world-leading designers, our upholstery textiles reflect our commitment to colour, simplicity, innovation and contemporary design.

Produced to the highest environmental standards, our textiles are premium quality, easy to maintain and hardwearing. They come in wide choice of styles and constructions.

Our collection offers:

- Over 100 designs and 2000 colours
- Security of a comprehensive 10-year warranty
- Wide selection of textiles carrying the EU Ecolabel

Designers

Working continuously with a broad selection of leading designers and artists we push the aesthetic, technological and artistic boundaries of textiles.

The diversity of our collection reflects that the designers we collaborate with work across a variety of disciplines. These include architecture, ceramics, graphic design and fashion.

Among our collaborators are: David Adjaye, Tord Boontje, Ronan and Erwan Bouroullec, Thomas Demand, Olafur Eliasson, Alfredo Häberli, Akira Minagawa, Giulio Ridolfo, Peter Saville, Roman Signer, Raf Simons, Finn Sködt, Patricia Urquiola.

We regularly engage in art projects with artists, museums, galleries and designers.

Environment

Respect for the environment is paramount at Kvadrat. Ever since our company was founded in 1968, we have had a strong focus on minimising our environmental impact throughout all processes from design to delivery.

We use the latest technology and the best raw materials to enhance the quality and longevity of our products, and minimise their environmental impact. Reflecting this, many have been awarded the EU Ecolabel.

Furthermore, we also carry out life-cycle assessment (LCA) on all our products. This enables us to provide our customers with information about their environmental impact.

We never use:

- PVC in base production
- Bromide flame-retardants for upholstery textiles
- Dyes that contain heavy metals
- Mothproofing for woollen products
- Chemicals that require chlorine for production
- AZO dyes, which release certain aromatic amines





Zoo by Ionna Vautrin, commissioned for Hallingdal 65 (2012)



N°35 Automatica Carcanape by Bless, commissioned for Hallingdal 65 (2012)



F51 chair upholstered in Harald and Astor, Kvadrat/Raf Simons



Freeform sofa and ottoman upholstered in Vidar, Kvadrat/Raf Simons



Kvadrat showroom Stockholm, Ronan and Erwan Bouroullec



The Wool Parade, Doshi Levien



The Picnic, Raw-Edges Design Studio

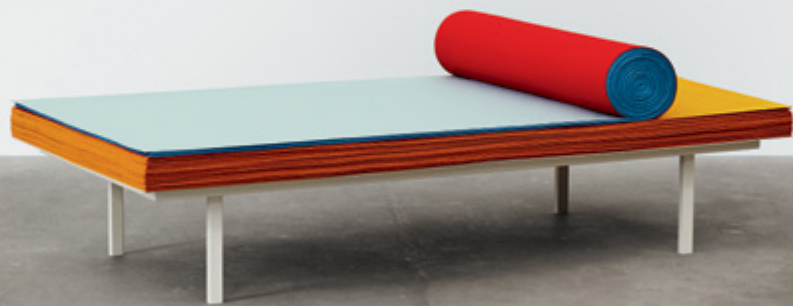








Textile Field, Ronan and Erwan Bouroullec



Day bed by Muller van Severen,
commissioned for *Divina: Every colour is divine* (2014)



Thread Wrapping Architecture by Anton Alvarez,
commissioned for *Divina: Every colour is divine* (2014)





Materials

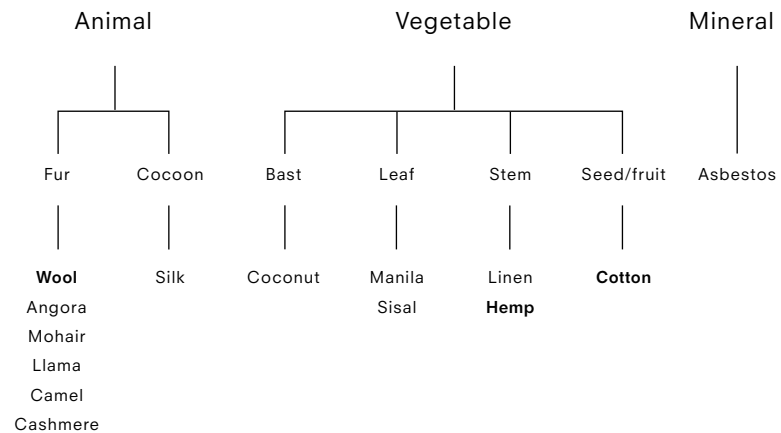
Choosing materials

Various upholstery textiles suit different settings. For example, in general, woven upholstery is most comfortable as it 'breathes' better. Furthermore, some furniture designs are not suited to all types of textiles.

So, before deciding on an upholstery fabric, it is important to consider the following:

- How it will be used
- How often it will be cleaned
- Its expected lifetime
- The shape of the furniture
- Hard or soft upholstered
- How its colour will work in context

Natural fibres



Wool

Wool consists of fibres from sheep fleece.
Very versatile, it offers many natural advantages.

Benefits:

- Renewable and biodegradable
- Naturally flame retardant, *does not require chemical treatment*
- Naturally dirt-resistant – *resists soiling to a greater extent than many other fibres*
- Hard wearing – *capable of withstanding a high degree of abrasion*
- Comfortable – *compact, soft and breathable fibres adjust to room temperature*
- Flexible – *elastic fibres ensures excellent stretchability and no creases*
- Low pilling
- Ages beautifully
- A wide selection of Kvadrat's wool textiles are carrying the EU Ecolabel
- Wool textiles can be GREENGUARD® certified
- Can potentially be used to obtain LEED credits

Recommended applications:

- Contract and private
- Premium quality furniture
- Hard and soft upholstery
- Organically shaped furniture and large surfaces

Cotton

Cotton is a vegetable fibre. Cottonseed lint, consisting of cellulose, is used for cotton yarn.

Benefits:

- Renewable and biodegradable
- Hardwearing
- Very comfortable – *cotton has a soft and natural feel*
- Strong colour and printing properties – *fibres have a high absorption capacity*
- Cotton textiles can be GREENGUARD® certified
- Can potentially be used to obtain LEED credits

Recommended applications:

- Private homes
- Low traffic areas
- Ideal for soft seating
- Well-suited to small upholstery surfaces

Hemp

Hemp is a fibre extracted from the stem of the plant, like flax. Combined with wool, hemp is suitable for upholstery. Kvadrat's textile Willow is made from a blend of wool and hemp.

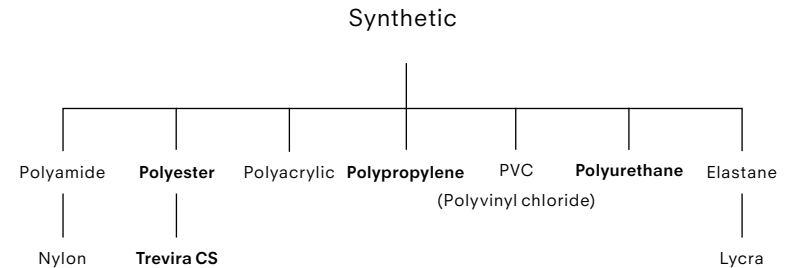
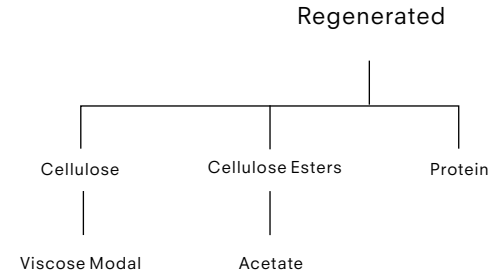
Benefits of a wool/hemp blend:

- Renewable and biodegradable
- Hardwearing
- Comfortable
- Natural look
- Hemp only requires a small amount of agricultural chemicals during the cultivation.

Recommended applications:

- Private and contract
- Ideal for soft seating

Man made materials



Polyester

Polyester is a synthetic fibre made using raw material from the petrochemical industries. Kvadrat mostly works with flame retardant (FR) types of polyester, such as Trevira CS. This is a unique type of flame retardant polyester. It is produced by Trevira GmbH, an ISO 14001 certified company.

As a sustainable option, Kvadrat's Revive 1+2 designs are made of 100% recycled polyester FR, which comes from used plastic bottles. Consequently they are ideal for those looking for textiles with significantly reduced environmental impact.

Benefits of polyester FR:

- Hypoallergenic yarns
- Fast drying – *tumble drying is not necessary*
- Permanently flame retardant – *so does not require chemical treatment*
- Hardwearing – *strong abrasion performance and minimal pilling*
- Washable at 60°C and even higher temperatures
- Can be disinfected
- Unaffected by moisture
- Trevira CS textiles can be GREENGUARD® certified

Recommended applications:

- Contract, including the healthcare sector, and private areas
- High-traffic areas
- Outdoor and/or moist environments
- Detachable upholstery fabrics
- Rooms used by allergy sufferers

Polypropylene

Polypropylene is a versatile and very durable high-tech fibre. Textiles made by polypropylene are particularly suitable for outdoor use.

Benefits:

- High lightfastness
- Moisture resistant and weatherproof
- Although not fully waterproof, polypropylene does not absorb water and therefore dries quickly
- Stain resistant
- Resistant to chlorine, salt, mildew and bacteria
- Washable at 30°C with delicate programme
- Suitable for allergic persons
- Certified according to the OEKO-TEX® Standard 100

Recommended applications:

- Outdoor and/or moist environments
- Contract and private

Polyurethane (PU)

PU articles are all produced by binding a thin layer of polyurethane into a woven, knitted or non-woven base article. The polyurethane layer will typically form a very durable, hardwearing surface.

Benefits:

- Ease of use and simple maintenance
- Exceptional durability
- Wipeable with disinfectants

Recommended applications:

- Healthcare sector
- Soft padding and organic shapes
- Furniture where the fabric on exposed areas is protected by the frame

PU articles are not suitable for:

- Very high traffic areas
- Shell chairs and stackable chairs – *the surface may crack/peel off if the chair is insufficiently padded on edges and corners*
- Gluing – *the surface becomes inflexible and may crack*

Microfibre

Microfibre is an exceptionally thin fibre less than 1 denier, which is $\frac{1}{20}$ th the diameter of strand of silk. The most common types are created using nylon, polyester, polyurethane or a mixture of these fibres.

During production, the fibres are first pressed together using pins. Next, the resulting material is napped in order to achieve a suede-like appearance.

Kvadrat's textile Waterborn is made with super microfibres, which are as fine as 0.001 denier, ensuring extra softness, durability and lightness. Unlike conventional microfibres Waterborn is made without solvent, using a process that uses 70% less water and produces 35% less CO² than traditional production methods.

Benefits:

- Soft
- Supple
- Hardwearing
- Waterborn has a GREENGUARD® certification
- Waterborn is a sustainable alternative to leather and suede

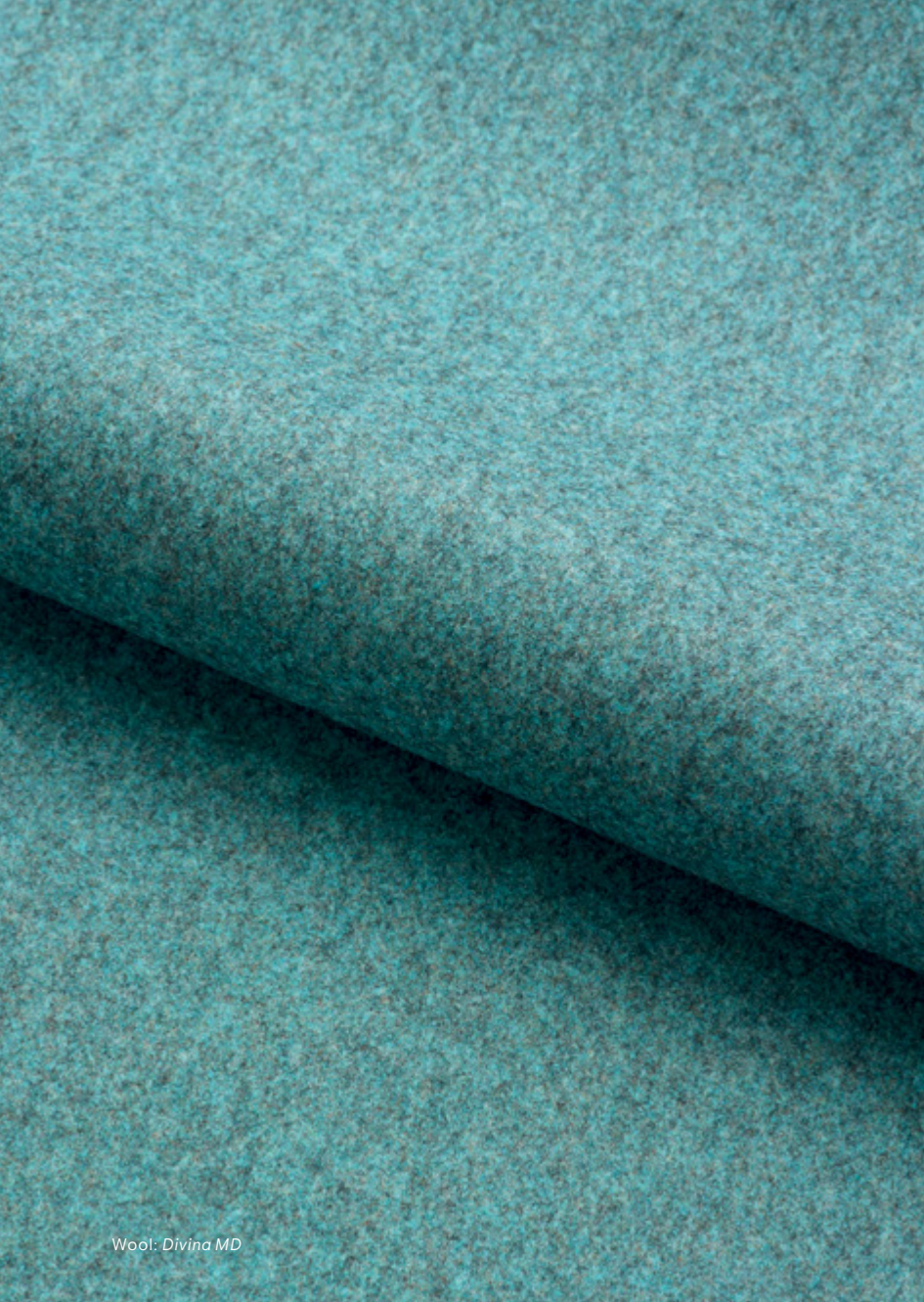
Recommended applications:

- Contract and private
- Hard and soft upholstery

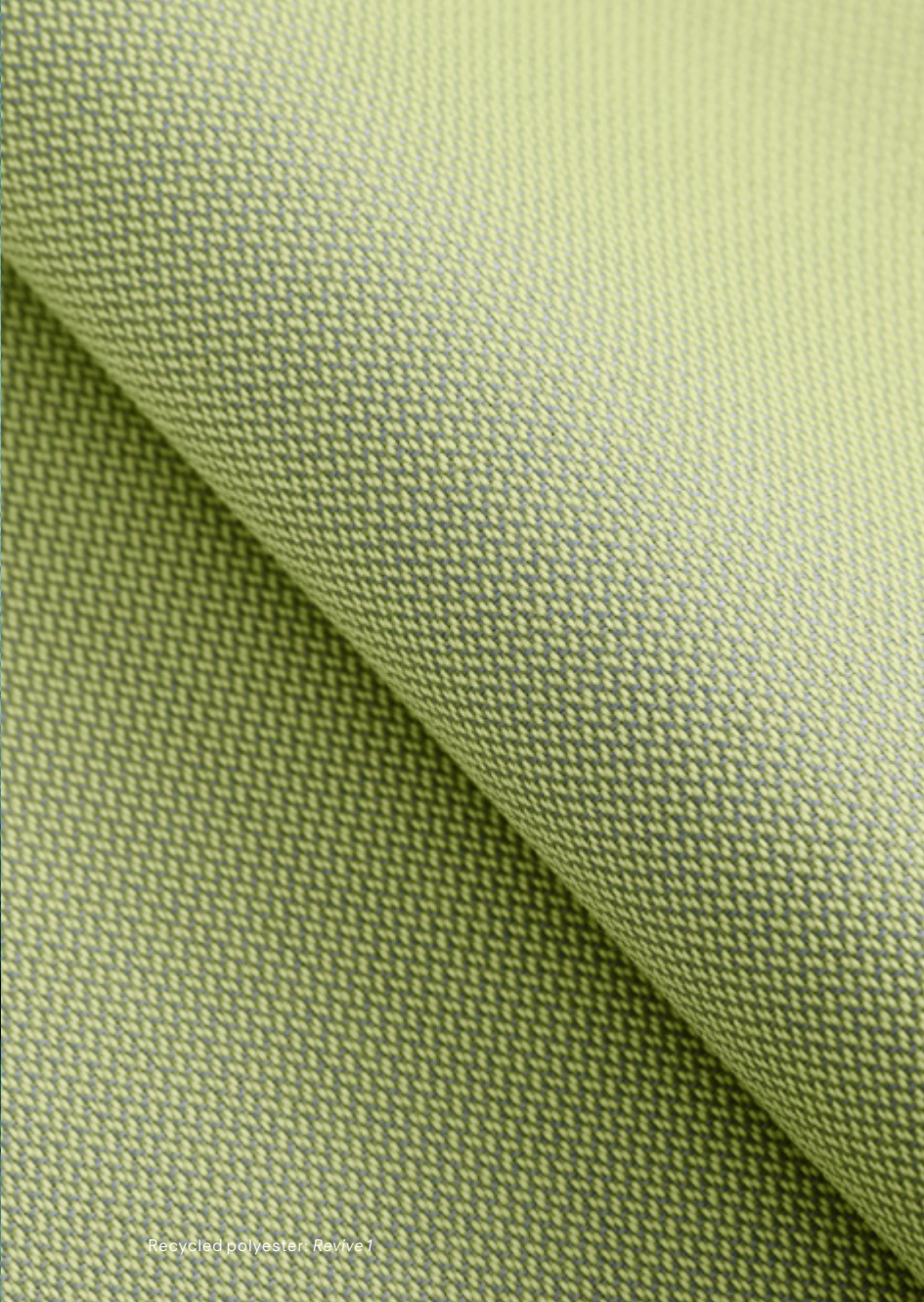


Hemp: *Willow*

Cotton: *Pause*



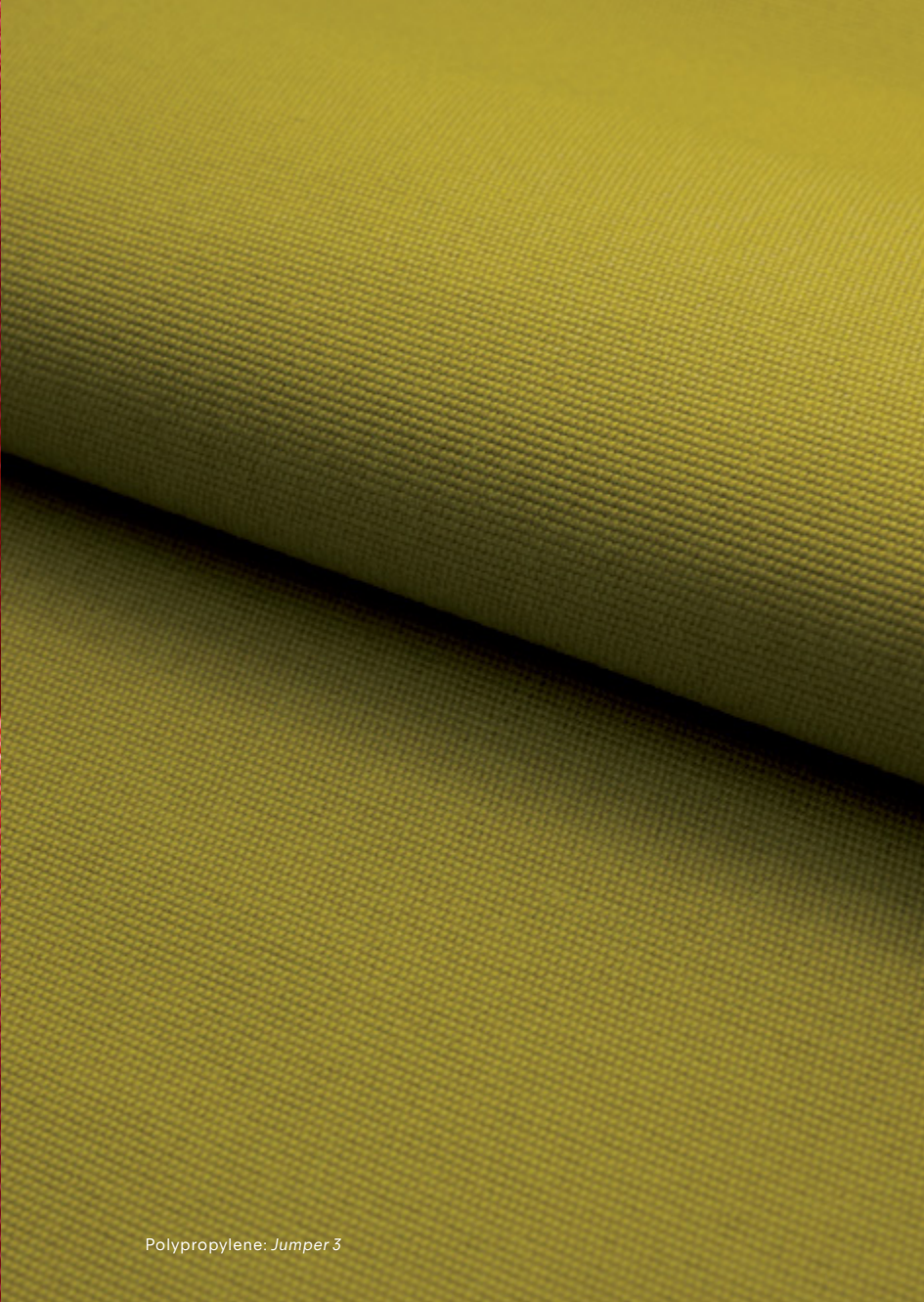
Wool: *Divina MD*



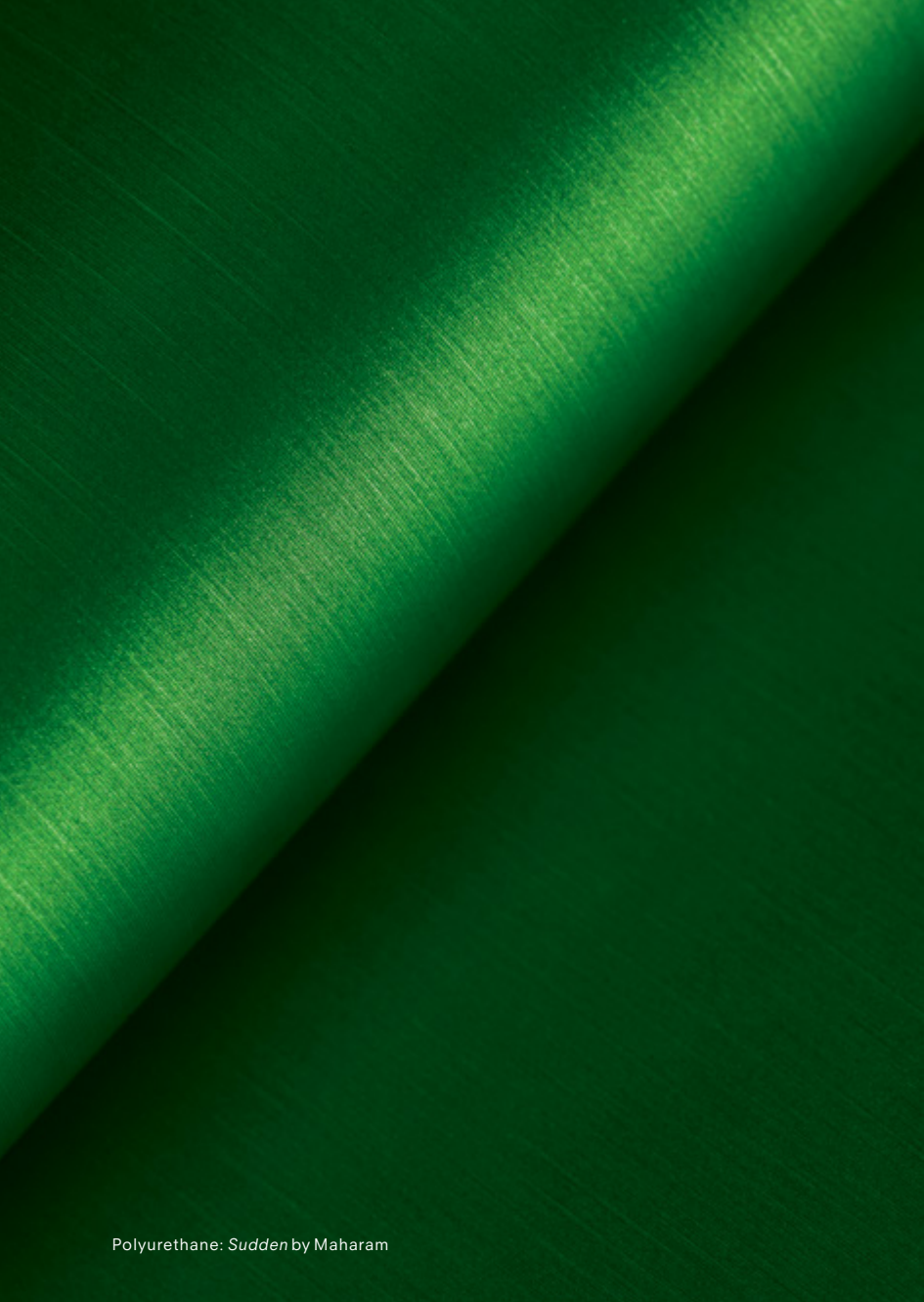
Recycled polyester: *Revive 1*



Trevira CS: *Field*



Polypropylene: *Jumper 3*



Polyurethane: *Sudden* by Maharam

Microfibre: *Waterborn*

From yarn to textile



Yarns

Loose fibre go through a number of processes to be turned into yarn. This involves opening, cleaning and aligning the loose fibres, then gathering them into a band.

Subsequently, these bands are stretched and twisted to give the yarn its final strength and thickness. This is called spinning.

Spun yarns

Are made from fibres of a set length called staple fibres. All natural fibres, except silk, are staple.

Filament yarn

Are made from fibres of infinite lengths (filament fibres). Synthetic textiles are most often made from filament yarns. All Kvadrat upholstery made by synthetic fibres are woven with filament yarns, which is an advantage as they do not pill.

Carded yarns

Undergo few alignment processes and are therefore relatively 'woolly'.

Worsted yarns

Are combed to remove very short fibres. As a result, they are very smooth and lustrous.

Plied yarns

Are two or more yarns that are plied together, ensuring greater tensile strength and evenness. Special machines can ply different types of yarn together. This is how boucle, slub and loop yarns are created.

Chenille yarns

Consist of short fibres attached to an inner thread. This gives the yarn the look of a pipe cleaner.

Dyeing

Material dyeing

Dyeing of loose wool/cotton fibres or spun-dyed synthetic fibres.

Yarn dyeing

The off-white yarn is dyed to the desired shade(s) before weaving.

Piece dyeing

The off-white yarn is woven into cloth which is then dyed.

Please note that with all dyeing methods slight colour differences may occur from one production batch to the other.

Weaves

Woven textiles combine two different thread systems, which respectively consist of warp and weft threads. The warp threads run lengthways and the weft threads run widthways.

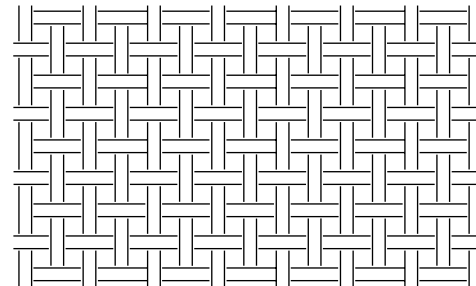
The desired weave is obtained depending on how these two systems are combined. However, all can be traced back to three basic weaves: plain, twill and satin.

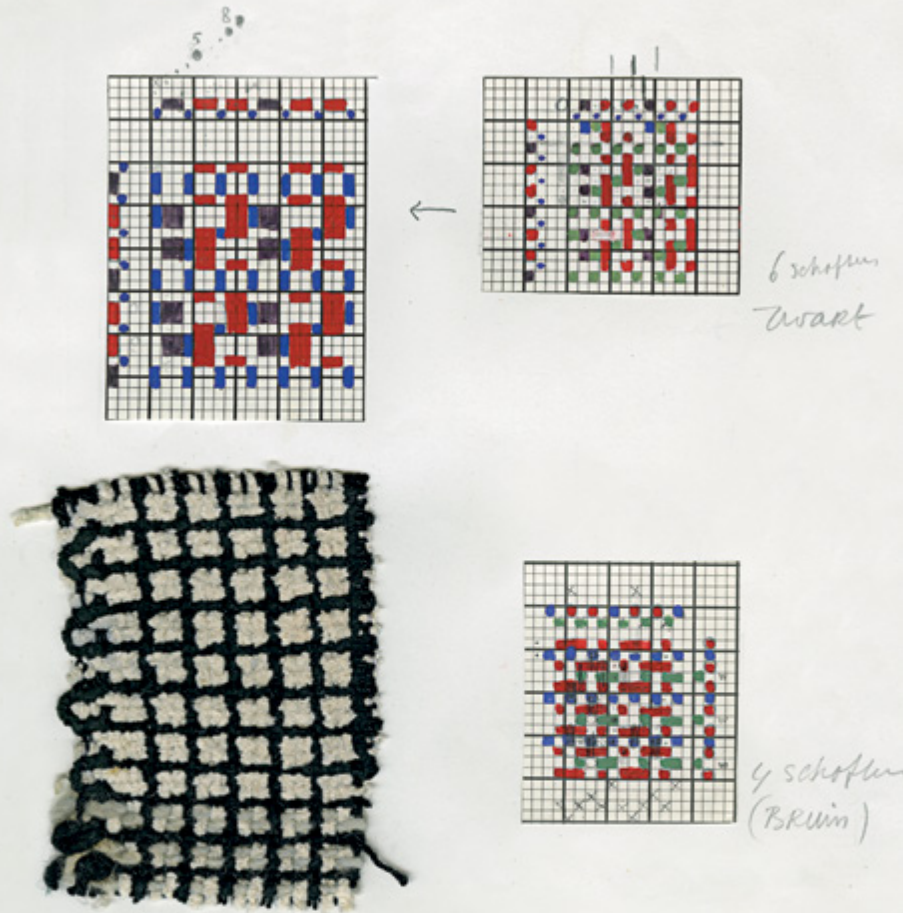
Basic structures

Plain weave

The simplest and most common weave. The weft threads run above and below each warp thread. A plain weave looks the same front and back.

Plain weaves produce a firm, strong fabric as they make use of the maximum number of intersections.

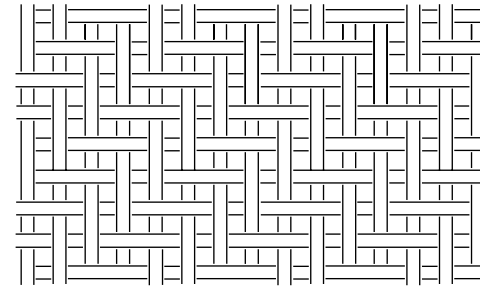




Twill weave

This weave is characterised by the diagonal stripes that are formed during the weaving process. If the diagonal goes from left to right, the twill is called Z twill. If it goes from right to left, it is called S twill.

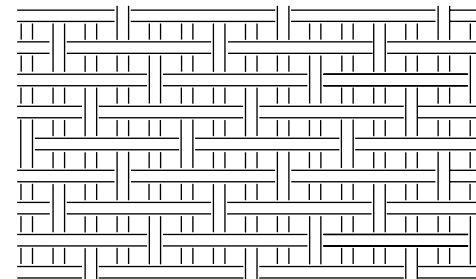
Twill weave fabrics are suppler than plain-weave fabrics as they have fewer intersections.



Satin weave

With satin weaves there is a distinctive difference between the front and reverse sides of the textile, as either the warp or weft threads form the wearing surface.

Satin weave textiles are smooth and often lustrous. They also have a tighter structure than other fabrics.



Complex structures

Jacquard weave

Jacquard weaving is used for organic or complex patterns, such as floral motifs. It uses a technique where each individual warp thread is raised or lowered independently of the others. This is carried out by a jacquard machine, which is typically digitally guided.

Double weave

A double weave combines two items woven together. This means that both sides of the textile can be used as front. Double weaving is often used for bedspreads.

Épinglé weave (uncut pile)

Épinglé textiles are created by tying each loop either once or twice, like a V or a W, in the base weave. This produces a very strong surface, which makes it almost impossible to pull out the loops.

Velvet (cut pile)

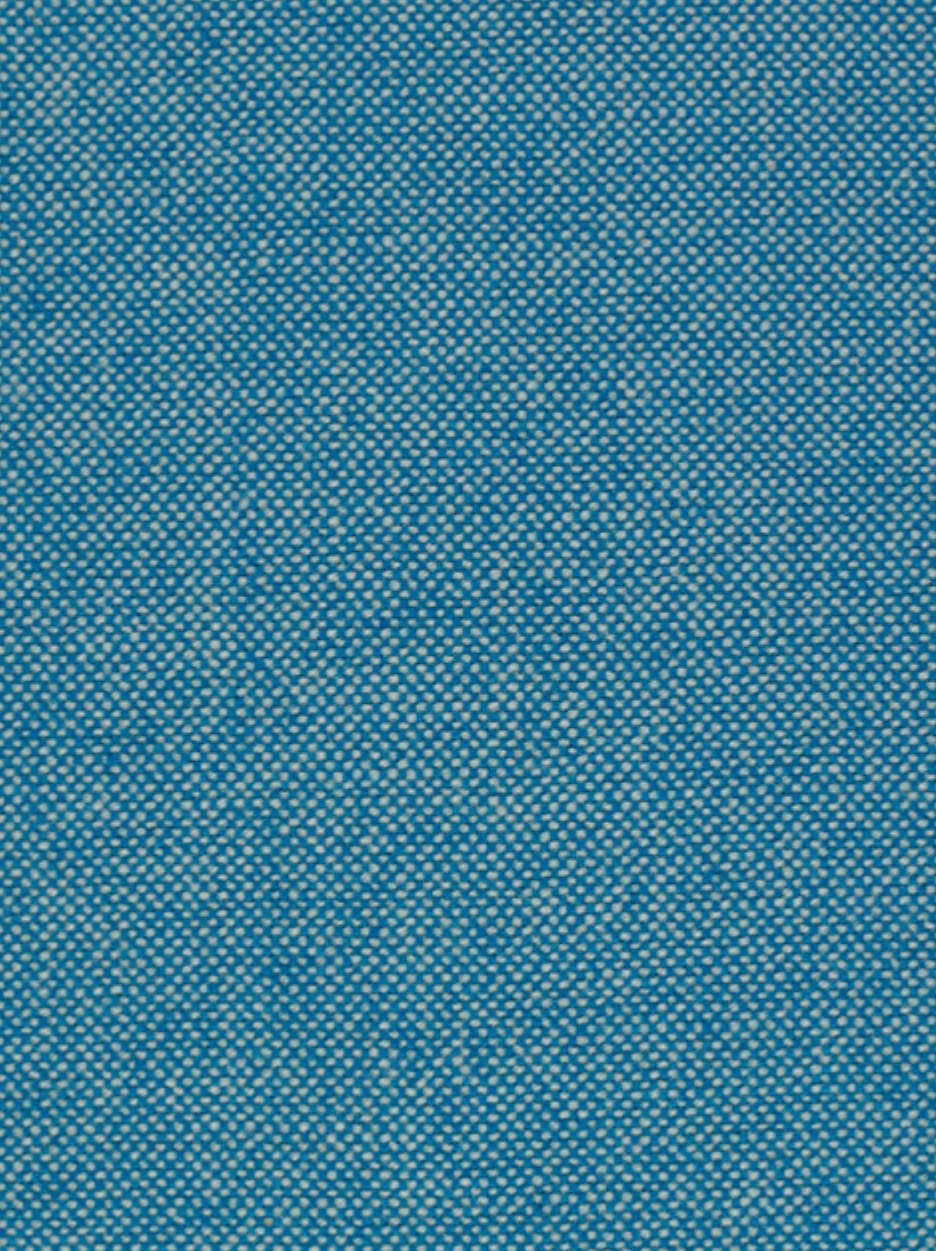
The technique used to produce velvet can be the same as that used for épinglé. However, in the case of velvet, the loops are cut, resulting in a very soft surface.

Another technique is to weave two fabrics face to face with the pile ends interchanging from one fabric to the other. The pile ends are then cut by knife while still in the loom, giving separate pieces of textile.

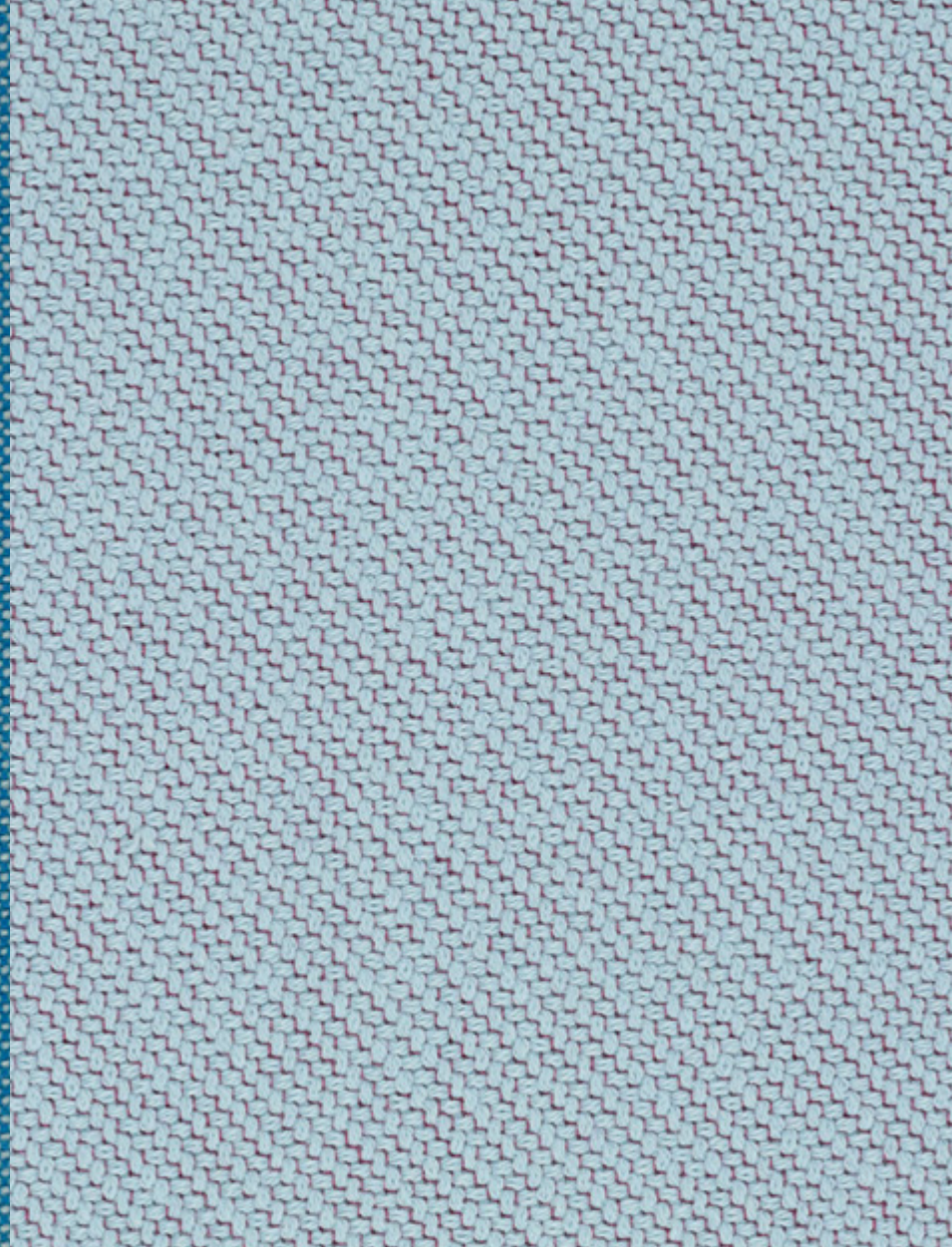
Knitted textiles

Knitted textiles offer multi-directional elasticity. As a result, they are very flexible and particularly ideal for organically shaped furniture. To produce knitted textiles, yarn is fed into needles, which grab it and form it into connected loops.

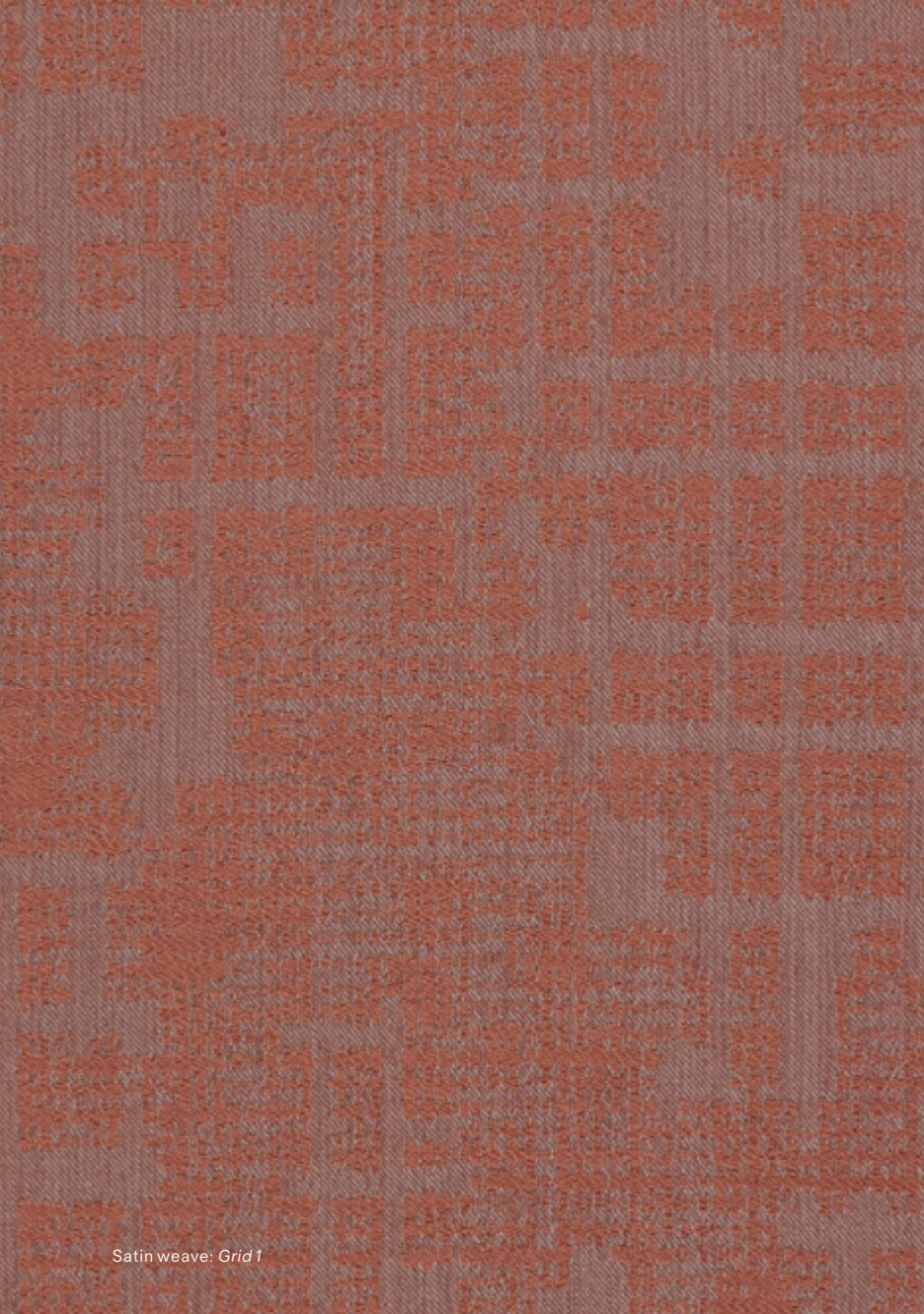
Kvadrat knitted textiles are produced on circular knitting machines. The yarn is moved around by a circular bed of needles, creating a knitted tube. This is then cut open to make a flat fabric.



Plain weave: *Hallingdal 65*



Twill weave: *Coda*



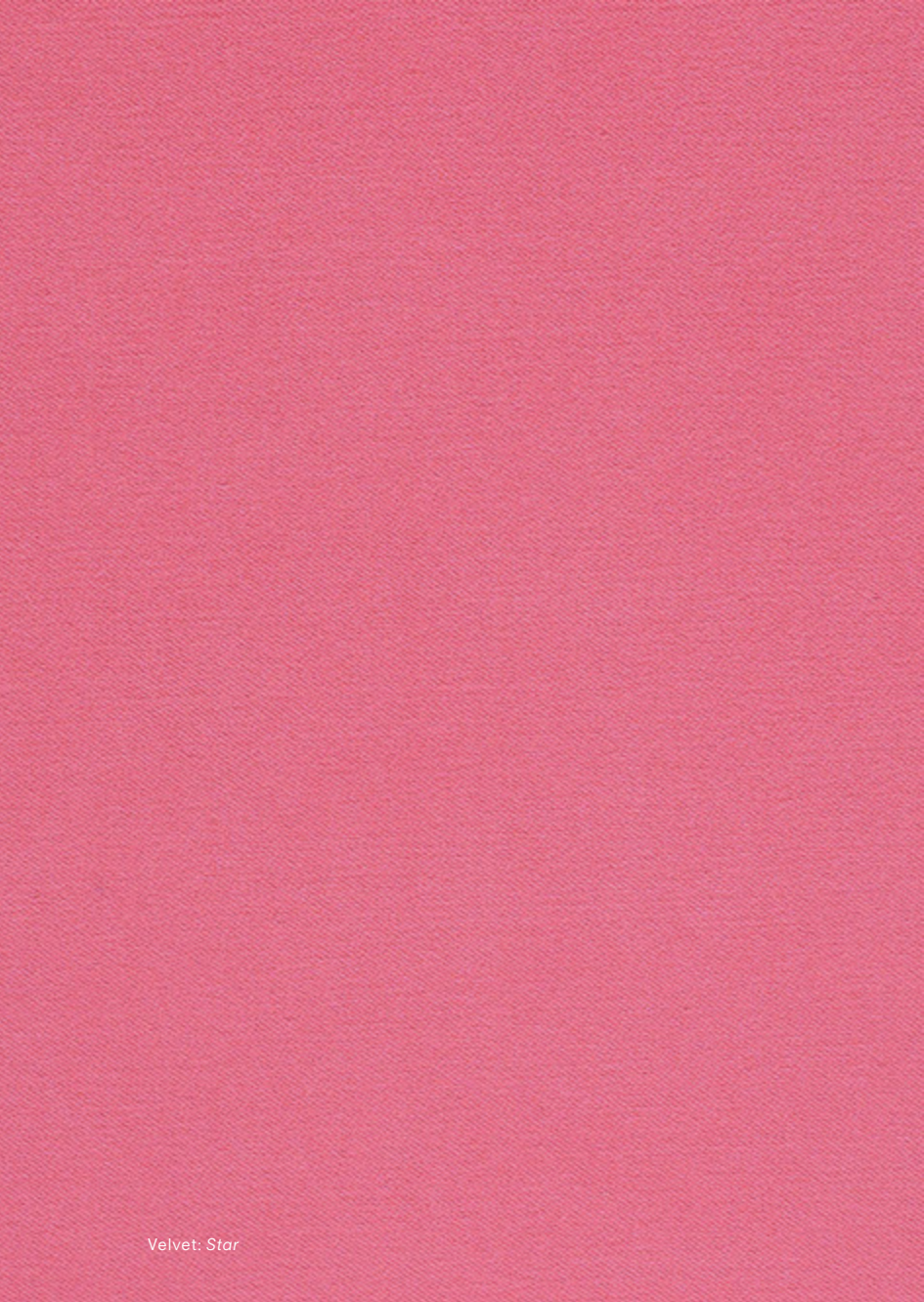
Satin weave: *Grid 1*



Jaquard: *Memory*



Epinglé: Letters



Velvet: Star

Pretreatment and finishing

Pretreatment and finishing methods

Mercerisation

A treatment that strengthens cotton and gives it a lustrous appearance. These effects are permanent. It involves simultaneously stretching the cotton whilst it is being treated in strong soda lye.

Milling

A finishing method for woollen fabric, where the fabric is subjected to mechanical processing with soap and water. This gives the fabric a felt-like appearance.

Milled fabric, however, is not comparable with true felt, which is not woven.

Sanforising

A controlled shrinking process for woven cotton fabrics, which results in fabrics that hold their shape particularly well.

Protective finishes

Flame retardant treatments

Products for public buildings often have to pass fire tests. These differ according to the area of application, country and regional standards.

Several textiles pass these tests without requiring treatment but others do not. We can organise flame retardant treatment of our fabrics from stock.

Key facts:

- Possible to treat most textiles
- Mainly applied by dipping
- Can also be applied as a back coating
- Usually cleaning-proof and some are wash-proof
- Amount required depends on the textile's design

Different types of FR treatment:

- Low Smoke Zirpro has been developed for wool fabrics
- Flovan can be used on different materials
- Private label retardants are also available for diverse materials

Discover more about the requirements relevant to your specific needs at kvadrat.dk/products/care-and-warranty

Stain resistant finishes

Protect textiles from everyday dirt and liquid spills, making them easier to clean. They do not alter the handle and appearance of the fabric.

We can organise stain resistant treatment of our fabrics from stock.

Key facts:

- Relatively resistant to washing and dry-cleaning
- Can be revitalised by the effect of heat, e.g. ironing

Different examples of treatment:

- Teflon®
- Fluorocarbon
- Private label treatments, e.g. Duraseal

Wool	Not really necessary to treat as wool is naturally stain resistant. If treated, treatment does not affect flammability.
Cotton and other natural fibres	These materials are quite sensitive towards stains and dirt. Consequently, cotton fabrics are usually treated.
Trevira CS	Treatment reduces flammability properties and is therefore not recommended.
Polyurethane	Cannot be treated.
Microfibre	Kvadrat microfibre-textile Waterborn has a light water repellent treatment, so further treatment should not be necessary.
Other synthetic fabrics	Treatment does not damage the fabric.

Durability testing



Abrasion resistance

Martindale

EN ISO 12947-2 is the most widely used and most realistic method for testing upholsteries for abrasion resistance.

During Martindale testing the fabric is rubbed against a standard wool textile with a given weight-load applied.

The Martindale machine runs at intervals of 5,000 circular rubbing motions. The test continues until the two threads are worn.

Home	Public areas and offices
<p><i>Rooms used occasionally</i></p> <ul style="list-style-type: none"> • Soft upholstery 10,000 revolutions • Hard upholstery 15,000 revolutions 	<p><i>Hotels, meeting rooms, hospital wards not used intensively</i></p> <ul style="list-style-type: none"> • Soft upholstery 10,000 revolutions • Hard upholstery 15,000 revolutions
<p><i>Rooms used intensively</i></p> <ul style="list-style-type: none"> • Soft upholstery 15,000 revolutions • Hard upholstery 25,000 revolutions 	<p><i>Lounges in hospitals, nursing homes, function rooms and student hostels</i></p> <ul style="list-style-type: none"> • Soft upholstery 15,000 revolutions • Hard upholstery 25,000 revolutions
	<p><i>Offices, staff, meeting and lecture rooms, restaurants, canteens, cinemas, theatres and aircrafts</i></p> <ul style="list-style-type: none"> • Soft upholstery 25,000 revolutions • Hard upholstery 35,000 revolutions
	<p><i>Trains, buses, passenger boats, hotel foyers, departure halls, cafeterias, schools and institutions for children and youths</i></p> <ul style="list-style-type: none"> • Soft upholstery 30,000 revolutions • Hard upholstery 45,000 revolutions

Upholstery classification (5th edition), Danish Technological Institute (2002)

Wyzenbeek

Wyzenbeek, like Martindale, is a test used to measure abrasion. However, the test works differently to Martindale.

The Wyzenbeek machine rubs along the warp and weft, whereas the Martindale machine rubs in a figure of eight shape.

For heavy-duty usage, i.e. conference rooms and hotel dining rooms, the recommended specification is 30,000 double rubs Wyzenbeek method (or 40,000 cycles Martindale method).

However, certain spaces, such as theatres, 24-hour emergency rooms and airport terminals, may require higher than 30,000 double rubs.

Pilling

Pilling is the term used to indicate whether a fabric 'pills' i.e. whether small balls of fibres, known as pills, form on the surface of the fabric due to wear.

The test for pilling is carried out using the Martindale machine. The fabric is rubbed against the same standard fabric that is used in the abrasion test. However, there is no weight applied. Afterwards its appearance is compared with standard photos.

It is evaluated on a scale from 5 (best) to 1 (worst).

Test: EN ISO 12945

Lightfastness

Lightfastness relates to the ability of a textile to retain its colour under light. When testing for lightfastness, samples are exposed to artificial daylight for a specified period.

The evaluation scale ranges from 1 to 8, with 8 being the best score. An increase of one point corresponds to a doubling of the lightfastness, i.e. the same fading takes twice as long.

At Kvadrat our minimum requirement is 5.

Test: ISO 105 B02, method 2

Fastness to weathering

Fastness to weathering indicates the degree to which a textile fades when exposed to outdoor conditions, i.e. non-UV filtered artificial daylight and humidity.

It is evaluated on a scale from 8 (best) to 1 (worst).

Test: ISO 105 B04

Fastness to rubbing

The term for determining the resistance of the textile's colour to rubbing off and staining other materials. A distinction is made between wet and dry rubbing.

It is evaluated on a scale from 5 (best) to 1 (worst)

Test: ISO 105 X12

Maintenance

Maintenance

Just like textiles worn as garments, textiles used for upholstery need regular cleaning.

Regular cleaning is important in order to keep the upholstery textile looking its best and to prolong its life. Dust and dirt wear down the textile and also reduce its fire-retardant properties.

Standard cleaning

Vacuum frequently, ideally every week. Use the vacuum at half power when appropriate.

We recommend that upholstered furniture in commercial environments are cleaned by professionals 2 to 3 times a year.

Upholstered furniture in private homes usually needs less frequent cleaning.

Stain removal

Acting quickly is paramount. Always test stain-removal agents on a small, inconspicuous area before proceeding.

First, scrape off any liquids or hardened residues.
Next, vacuum before further cleaning.

Specific stains

Liquids must be soaked up with an absorbent napkin or cloth.

Non-greasy stains can be removed by gently dabbing with a moist sponge or lint-free cloth. Work in circular motion towards the centre of the stain.

Always ensure the textile is fully dry before using the furniture again. Using a hairdryer can help to avoid edge marks, particularly with microfibre fabrics.

Please note: these tips are purely recommendations and do not guarantee complete stain removal. In all cases, we recommend contacting a professional dry cleaner

Cleaning removable covers

Removable covers made from Trevira CS can be machine-washed at a maximum of 40 to 60°C. It is also possible to wash certain cotton and microfibre covers.

- Wash inside out and spin-dry at low speed
- Dry suspended
- Half wash load
- Reapply when slightly damp

Removable covers made from wool cannot be washed but should be dry cleaned.

Please note: not all covers with zippers are designed to be removable or machine washed, so please check with the manufacturer.

Cleaning polyurethane





Wipe the textile with a dry or moist cloth. May also be vacuum cleaned with a soft brush.

Stains from jeans on polyurethane can often be removed with a rubber.



Find more detailed information on maintenance temperatures and shrinkage at [kvadrat.dk/products/care-and-warranty](https://www.kvadrat.dk/products/care-and-warranty)

Care symbols





Washing

-  A washing bowl is used as the basic symbol for washing.
-  The number gives the highest washing temperature that the textile can tolerate.
-  Where the washing bowl is underlined, a delicates wash should be used. Delicates wash means a more gentle wash combined with higher water level, which means that the textile is subjected to less creasing. The words "half load" and "gentle spin" will be shown in addition.
-  Where washing would damage the item, the basic symbol is crossed out, unless information regarding the risk is given in a supplementary text.




Bleaching

-  A triangle is used as the basic symbol for bleaching in connection with washing. Where bleaching is possible, the chemical designation "Cl" for chlorine is given in the triangle.
-  The basic symbol is crossed out where bleaching is to be avoided, since it would damage the item.






Dry cleaning

-  A circle is used as the basic symbol for dry-cleaning.
-  The letter in the circle indicates the dry cleaning fluid and dry-cleaning method to be used (information for the dry-cleaners).
-  An underlining of the basic symbol means that the textile requires a gentle dry-cleaning process.
-  If dry-cleaning will damage the item, the basic symbol is crossed out unless information regarding damage is given in supplementary text.




Drying

-  A circle surrounded by a square is used as a basic symbol for drying in connection with laundering.
-  Where all drying methods, i.e. tumble-drying, line-drying, drip-drying and drying flat are possible, the symbol shows the maximum basic temperature for tumble-drying in the form of one or two dots.
-  Where tumble-drying would damage the item irreparably, the basic symbol is crossed out.

Ironing

-  An iron is used as the basic symbol for post washing treatment. The temperature is given by using one, two or three dots in the iron.
-  Ironing with or without steam.
Max 110°C (acrylic/acetate).
-  Ironing with or without steam.
Max 150°C (wool/polyester/viscose).
-  Ironing with or without steam.
Max 200°C (cotton/linen).
-  Where ironing would damage the item, the basic symbol is crossed out.

Other symbols from our textile labels

-  Tested and approved to meet the fire requirements for shipping (EU Directive on marine equipment (96/98/EC) as amended by Commission Directive 2010/68/EF).
-  The arrow indicates where the selvedge is located on a full piece of fabric compared to the sample.
-  The textile has been tested for acoustic properties.

Environmental labels and certificates



EU Ecolabel

The EU Ecolabel is only awarded when the product's life-cycle is among the best in the market for the particular category.

Customers can be sure that, if a textile carries an EU Ecolabel, it is in the top third of its particular product category for environmental and functional performance.

The many criteria for the EU Ecolabel are divided into 3 main areas:

1. Environmental requirements for types of fibre used.
2. Environmental requirements for processes and chemicals.
3. Requirements for fitness for use of finished textiles.



DK 16/24

Greenguard

GREENGUARD® certification verifies that chemical and particle emissions emitted by building products and materials fall within acceptable indoor air-quality pollutant thresholds.

Many of our textiles are GREENGUARD® certified. These can help to gain LEED credits, especially if they are made from rapidly renewable content, like wool or cotton, or recycled content.

LEED

LEED (Leadership in Energy and Environmental Design) is an internationally recognised green building certification system.

LEED assesses buildings against a wide range of environmental issues covering a number of categories.

For each issue, one or more 'credits' are available when specific levels of performance or process are achieved.

Discover more about our environmental certificates at kvadrat.dk/about/environment-and-quality





Raw wool shipped from Australia



Ecru and black wool blended to create mélange effect



Wool in various colours blended to create specific shades of textile *Divina MD*



Yarns being prepared for the looms

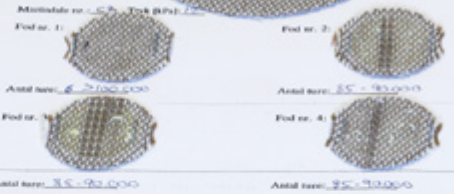


Looms

Slidstyrke EN ISO 12947:1998 / BS 5690:1991

Dato: 28-2007	Signatur: [Signature]	Signatur:	Laborantens nr.: 730812
Prøvemateriale: STEELCUT 215	Betegnelse:		

Kvadratsvervigt (g/m²): 553



Antal ture: 85-90.000

Antal ture: 85-90.000

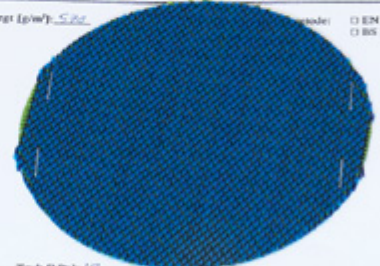
Antal ture: 85-90.000

Antal ture: 85-90.000

Slidstyrke EN ISO 12947:1998 / BS 5690:1991

Dato: 16-2-2007	Signatur: [Signature]	Signatur:	Laborantens nr.: 74824P
Prøvemateriale: STEELCUT 853	Betegnelse:		

Kvadratsvervigt (g/m²): 564



Antal ture: 85-90.000

Antal ture: 85-90.000

Bemærkninger:

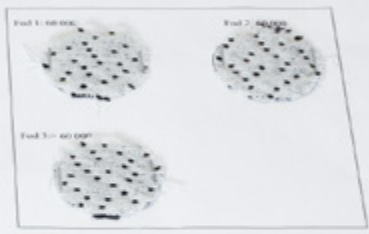
TEKNOLOGISK INSTITUT

Kontrol: A/S v/ Lone Brøndum, Landhøvelvej 26, 8000 Århus C
 Test Rapport nr. 418300-1

Test Methods

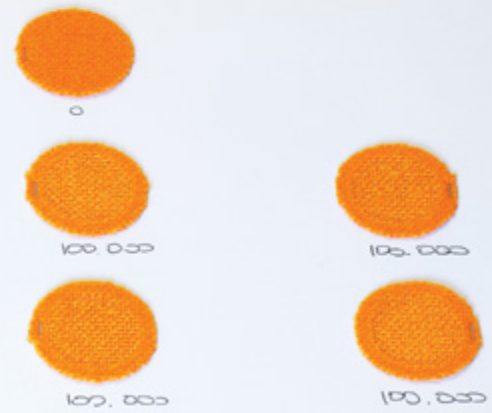
Standard prøvemateriale: Martindale
 EN ISO 12947-1:1998
 Mærke: 707 g
 Normalt tryk: 12 kPa
 Prøvemateriale: Stål
 Drivmekanisme: Tætslukket Skruer

Elektronisk prøvefelt



XUS 201
 II-201/37-1
 8.2009

2009 03 21
 ldt



BEAT: 100 cm²
 207: 5,36 cm² → 536 cm²

Martindale testing



Final quality check



Textiles ready for dispatch at Kvadrat headquarters

Contact

We always like to hear from our customers. If you have a question we can help with, or would like to talk to a local Kvadrat representative, visit kvadrat.dk/contact.

Other useful links:

kvadrat.dk/products
kvadrat.dk/designers
kvadrat.dk/segments

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