



### FABRIC PRODUCTION





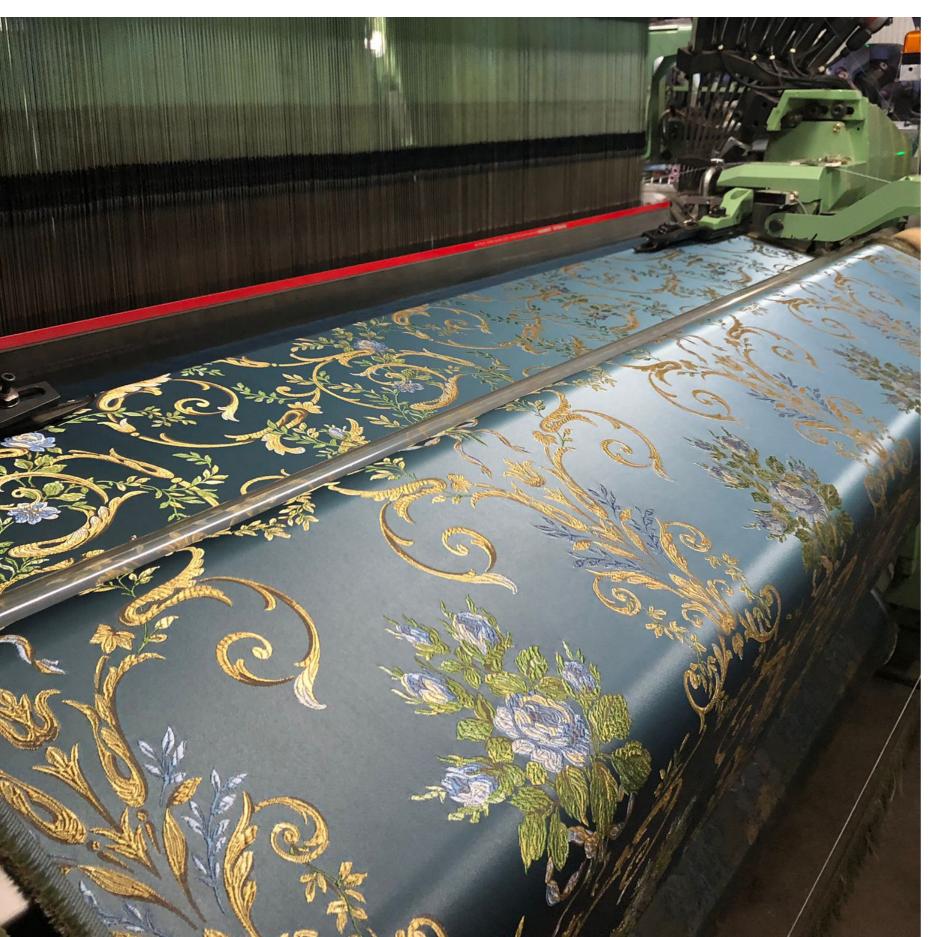
# TYPES OF WEAVING MACHINE

There are four types of looms on the market Manual: operated by hand, used for handcrafted work mainly Mechanical: automatic or semi-automatic looms that reduce human intervention. Air-jet or water-jet: use air or water to move the weft, suitable for light and smooth fabrics. Jacquard: are complex these looms that can create elaborate patterns by independently controlling the warp threads.

The looms that we use in Sarelli Interiors Textiles are mainly complex jacquard-type looms, with machine dimensions of 165 cm.

The looms are used to produce various types of upholstery fabrics of interest to us, such as: for curtains Jacquard and upholstery with complex designs. - Plain fabrics for sheets or linings - Damask and brocade for fine decorative elements. Modern machinery incorporates advanced technologies (such as digital control) to ensure precision, efficiency and the ability customize textile designs.





### JACQUARD LOOM

A Jacquard loom is an advanced type of textile loom that enables the creation of textiles with complex and detailed patterns. This loom is distinguished by the innovation introduced by Joseph Marie Jacquard in 1804, which allows independent control of each warp thread.

#### features

*Independent control of warp threads:* each thread can be raised or lowered individually, thanks to a perforated card system (in historical versions) or electronic controls in modern looms.

#### production capabilities

Complex fabrics: ideal for intricate patterns such as damasks, brocades, elaborate upholstery and decorative fabrics. Pattern size: not limited to repetition of small patterns as in traditional looms; allows creation of large designs. Multicolor: can use multiple warp and weft threads of different colors to achieve multicolored patterns.

### Advantages of the Jacquard loom

Creative flexibility: Allows the production of fabrics with detailed patterns without requiring changes in mechanical configurations. Advanced automation: Modern Jacquard looms use computerized systems to quickly program designs. Precision: Each warp thread can be controlled with extreme precision, ensuring quality and consistency in the result.











## WEAVING MACHINE OPERATION

Looms for the production of upholstery fabrics work by following basic weaving principles, combining warp and weft threads to create fabrics with specific characteristics.

#### components

parallel threads stretched Warp: of Set across the loom, which form the structure of the fabric. Weft: Threads that are woven through warp, fabric. forming the pattern and structure of the Tool that threads Comb: compacts the weft ensuring fabric, the uniform density. in Healds: Devices that raise and lower the warp threads to create the space where the weft will pass through (called a passage). Shuttle or rapier: A system that inserts the weft threads into the warp, either manually or automatically.

#### weaving process

Warp preparation: The threads are arranged parallel on a subbio (winding cylinder) and stretched on the loom. Warp separation: Healds raise and lower the warp threads, creating an opening (passage) through which the weft passes. Weft insertion: The weft is inserted through the warp using a shuttle or other automated mechanism. Beating: comb pushes the The weft thread against the already formed fabric, compacting it. **Repeat:** The cycle continues until the desired fabric is obtained.



# FABRICS' CHARACTERISTICS





### MATERIALS

The choice of yarn is crucial to the functionality and aesthetics of the fabric. Furnishing fabrics can be divided into two main types:

#### • Natural:

*Cotton:* Soft, breathable, but less resistant to wear and tear. *Linen:* Elegant and durable, ideal for curtains and upholstery.

Wool: Used for warm, textured fabrics.

Silk: Lustrous and refined, used for luxurious curtains or

decorative details.

#### • Synthetics:

Polyester: Inexpensive, durable, ideal for practical fabrics.

Nylon: Excellent wear resistance, but less breathable.

Acrylic: Alternative to wool, resistant to pilling.

Blends: Combine natural and synthetic fibers to make fabrics

with better properties (e.g., cotton-polyester for greater

strength).





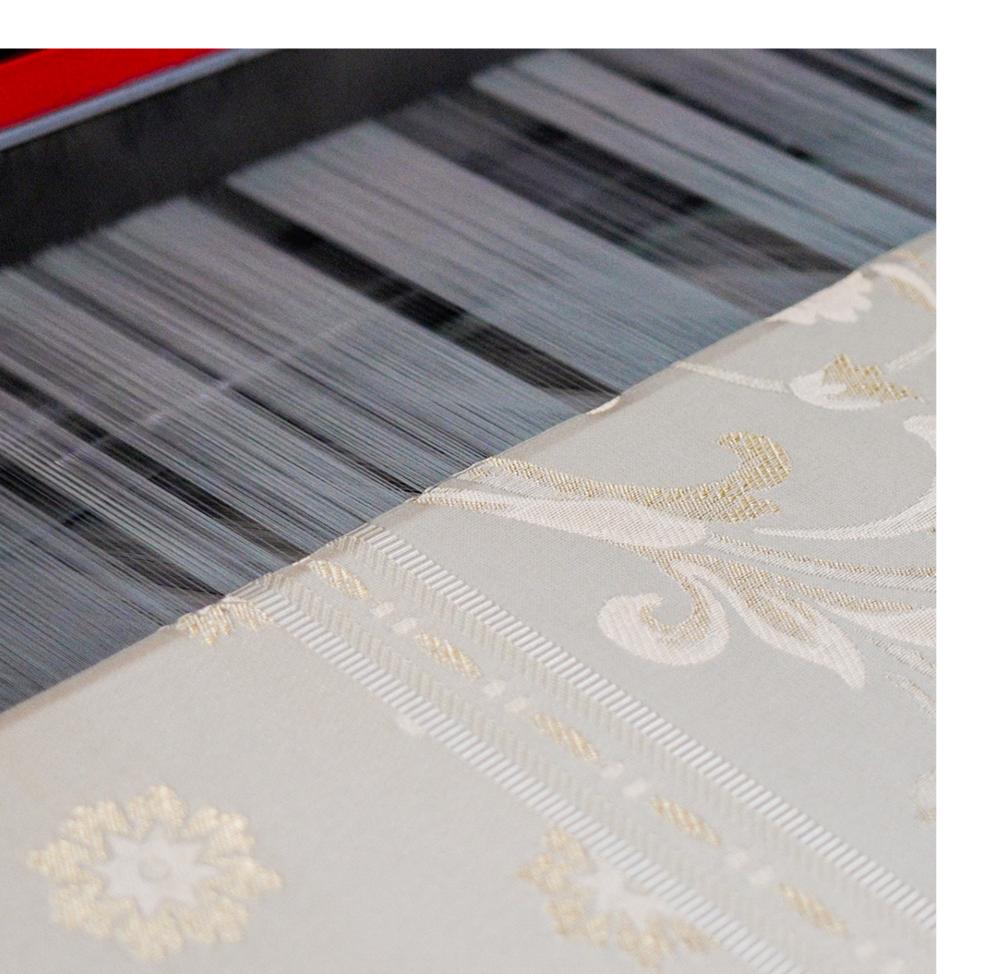
### **COMPOSITIONS**

The fabrics of the *Sarelli Interiors Textiles* collections are created after a careful study of the combination of different types of materials.

The following is a list of the main components:

- *RAYON*: semi-synthetic textile fiber derived from natural cellulose, similar to viscose, often used as a generic term to describe various types of regenerated fibers. In the context of upholstery fabrics, rayon is valued for its versatility, aesthetics and properties similar to those of natural fibers.
- *VISCOSE*: a semisynthetic textile fiber derived from natural cellulose, obtained mainly from wood pulp or other plant sources such as bamboo, which is widely used in upholstery fabrics because of its combination of aesthetic, tactile and functional characteristics.
- **PES:** or polyester, is a synthetic fiber widely used in upholstery fabrics for its strength, versatility and ease of maintenance. It is obtained through a chemical-industrial process using petroleum derivatives or other synthetic raw materials.
- *COTTON:* A natural fiber obtained from the seeds of the cotton plant, widely used in upholstery fabrics because of its versatile, aesthetic and functional characteristics. It is one of the most common and popular fibers for the production of upholstery, curtains, pillows and other decorative items.





# CHARACTERISTICS OF THE FABRICS

density

Density refers to the amount of threads present per unit area (e.g., threads per centimeter or inch) and affects: **Strength:** Denser fabrics are stronger and more suitable for upholstery or upholstered furniture.

Appearance: Density can affect the level of opacity or transparency (e.g., lightweight curtain fabrics).

**Durability:** Fabrics with denser warp and weft tend to last longer and resist wear and tear.

*Measurement:* Warp (vertical threads) and weft (horizontal threads) are distinguished, the combined density of which determines the weight and structure of the fabric.

The fabrics of the *Sarelli Interiors Textiles* collections have the following characteristics:

- 132 stitches(picks) on cm
- Warp (warn) of 50 dn that is, very thin to allow our designs to be very detailed





# CHARACTERISTICS OF THE FABRICS

dyeing

Fabric color and finish are crucial to furnishings and are achieved through various techniques *Yarn dyeing:* The threads are dyed before weaving. It ensures uniform colors and durability, ideal for fine fabrics.

**Piece dyeing:** The finished fabric is dipped in the color bath. Used for plain and solid colors.

**Printing:** Designs and patterns are applied to the already woven fabric (gravure or digital for more detail).

Finishing treatments:

**Stain-resistant:** For upholstery fabrics intended for furniture or surfaces subject to wear and tear.

*Fireproof:* Required for public environments or safety regulations.

Anti-mold and waterproof: For curtains or fabrics in wet environments.

Sarelli Interiors Textiles' fabrics are executed by the Yarn Dyeing method: the threads are dyed before weaving. It guarantees uniform colors and durability, ideal for fine fabrics. This allows us to offer the customer a fabric that is fully customizable in the colors of the yarns that make up the fabric structure.





# CHARACTERISTICS OF THE FABRICS

### other references

Other parameters to consider in characterizing the fabric are

*Weight:* Measured in grams per square meter  $(g/m^2)$ , affects softness and use (light fabrics for curtains, heavy for upholstery).

*Elasticity:* Important for fabrics that must conform to curved surfaces, such as furniture linings.

**Durability:** Martindale or Wyzenbeek tests are used to evaluate the fabric's resistance to abrasion.







### THE COLLECTIONS

The names of the *Sarelli Interiors Textiles* collections have a reference to classicism, with iconoclastic names that are easy to associate with the fabrics. They are all indicated in the header of the individual pulls, for ease of identification.

The *Sarelli Interiors Textiles* collections are in total 38, each consisting of several fabrics usually divided between:

- main fabric (main)
- -various coordinating fabrics (flower coo, stripes coo, geometric coo.)
- plain fabrics (plain)

Each collection was developed in about five or six background colors, usually with yarns in gold and silver coloring. Each collection can be made in different colors, according to the customer's choice.



# LIGHT CURTAINS' PRODUCTION





# LIGHT CURTAINS' CHARACTERISTICS

Lightweight curtains, used to filter light or decorate rooms, are made through a process that combines material selection, weaving, and sometimes additional treatments to improve their properties.

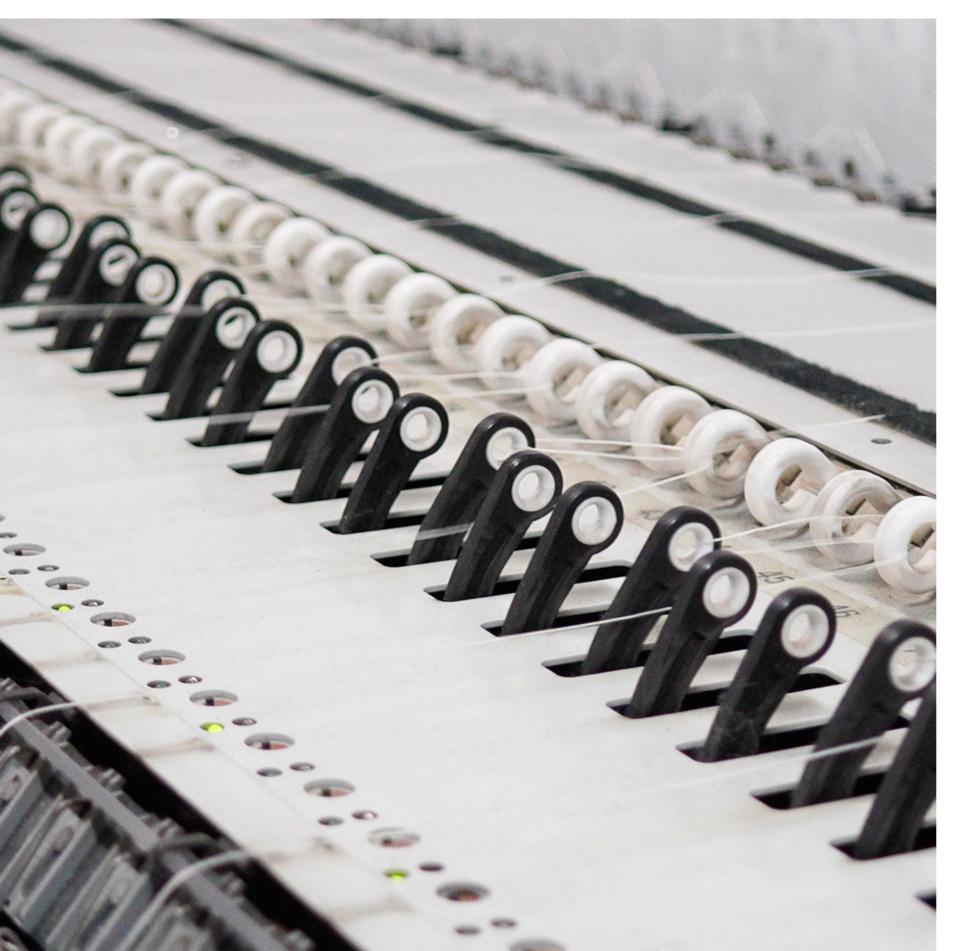
The main characteristics of Lightweight Curtains are *Low weight:* Often less than 150 g/m<sup>2</sup>

*Transparency:* They allow light to pass through while maintaining a degree of privacy

Versatility: Used alone or in combination with heavier curtains

*Ease of maintenance*: Most lightweight curtains, especially polyester, are washable and shrink-resistant.





# TYPE OF WEAVING MACHINE

The making of lightweight curtains involves the use of specific frames and machinery, which may be:

**Shuttle or rapier loom:** used for plain or lightly woven transparent fabrics. The warp threads are stretched and the weft is precisely inserted to create an open and delicate structure.

*Jacquard loom:* suitable for lightweight curtains with intricate patterns, such as arabesques or floral motifs. It allows independent control of each warp thread, creating intricate designs without compromising the lightness of the fabric.

Air or water jet looms: used for the production of very thin, uniform fabrics, such as voile or organza. These looms use air or water to move the weft threads through the warp, reducing physical contact and improving fabric quality.

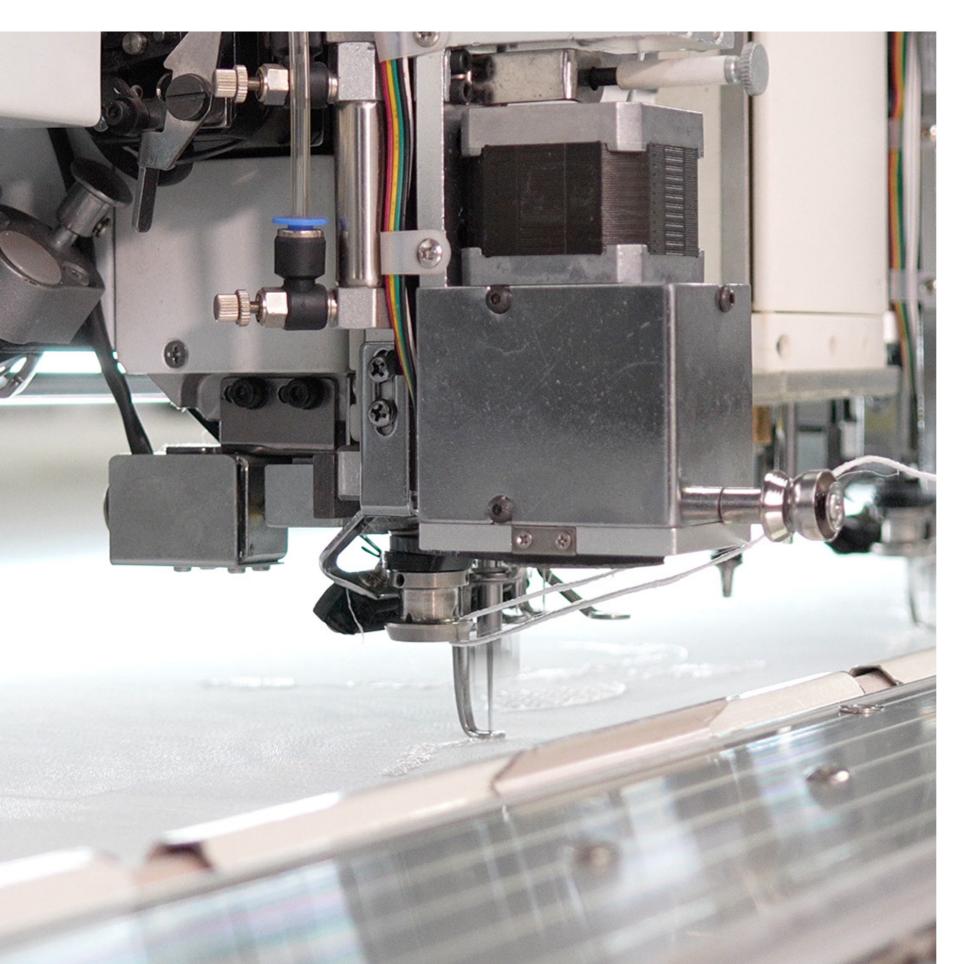
#### Finishing machinery

Calenders: Used to smooth and polish fabric, improving its transparency.

#### Special treatment machines:

Antistatic to prevent curtains from sticking. Yellowing resistant to ensure color durability. Fireproof, especially for public environments.





# PRODUCTION PROCESS

#### Warp preparation

The warp threads are selected according to the desired lightness and transparency, then stretched on the loom.

#### Weaving

The weft is woven with the warp. For lightweight curtains, wide wefts or specific techniques are used to create fabrics such as:

Voile: Transparent, smooth and uniform fabric.

Organza: Stiff, lightweight fabric, often used for decorative curtains.

Tulle: Fine mesh fabric, very light and transparent.

#### Finish

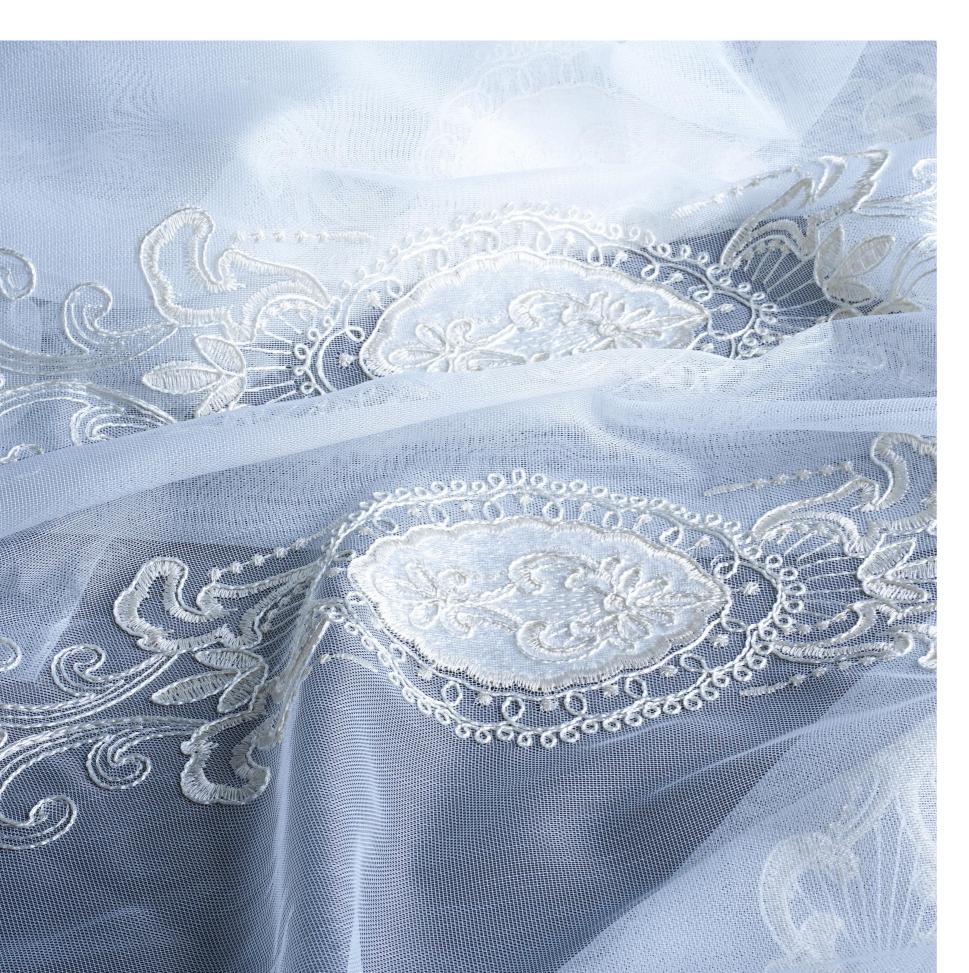
Chemical treatments: Can be applied to impart specific properties, such as softness, resistance to washing or dimensional stability.

Dyeing or printing: Lightweight curtains are often dyed in soft or neutral colors, but may also have printed patterns to add decoration.

#### Cutting and packaging

Fabric is cut and sewn into panels of the required size. Details such as eyelets, loops, or pleats are added to facilitate assembly.





### **MATERIALS**

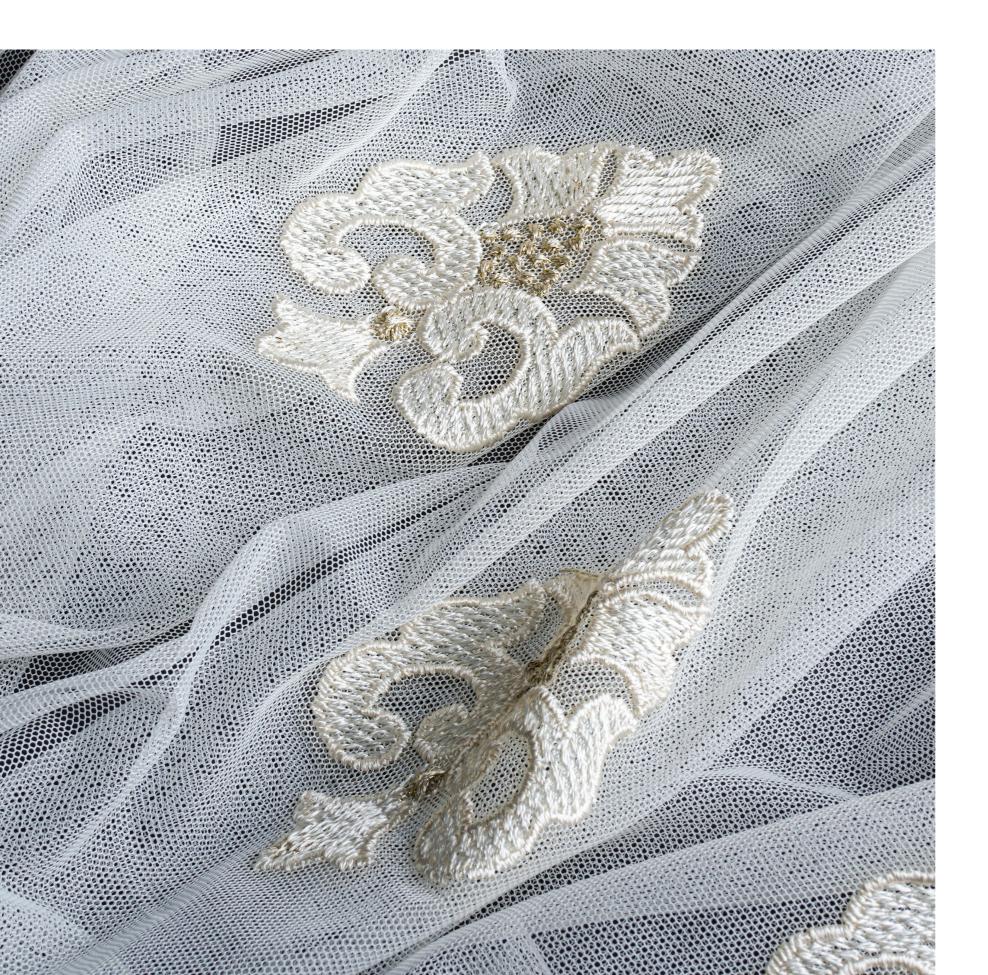
Lightweight curtains are usually made from transparent or semi-transparent fabrics, chosen for their lightness and ability to diffuse light:

Polyester: Common for its strength, lightness and affordability.

Cotton: Used for a natural look and soft texture. Linen: Elegant and light, with a slightly irregular texture. Silk: For luxurious curtains, offering luster and fluidity. Blended fabrics: Combinations of natural and synthetic fibers to balance aesthetics and durability.

Sarelli Interiors Textiles' lightweight curtains are composed of 100 percent polyester.





### THE COLLECTIONS

The Sarelli Interiors Textiles light curtain collections have a nod to simplicity, with names that are easy to remember. They are all indicated in the header of the individual pulls, for ease of identification.

There are a total of 19 *Sarelli Interiors Textiles* lightweight curtain collections, each consisting of a single lightweight curtain.

