



fabric specification | guidelines



introduction

Selecting the right fabric can be critical to creating the most successful project. This booklet is designed to help you make the selection that will best meet the needs for your project.

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specification considerations

Qualify the application

- Commercial or residential
- Multi-purpose or dedicated function rooms
- Daytime, nighttime or all-hours use
- What types of activities will occur in the space
- Will an aesthetic match be important inside or outside the building
- Latitude of project and orientation of windows
- Additional issues

Prioritise needs

Based on the application, determine priorities including:

- Controlling glare inside (reducing reflections on computer monitors, TVs, etc.)
- Providing visual comfort for occupants
- Maintaining view through windows
- Protecting interiors from fading
- Reduce build-up of heat inside
- Optimising energy efficiency
- Achieving a particular aesthetic (inside or outside)
- Reducing environmental impact
- Creating a darkened room
- Ensuring privacy

If space is multi-purpose, or multiple priorities are equally important, consider a dual-mount application (two fabric rolls mounted on the same window).

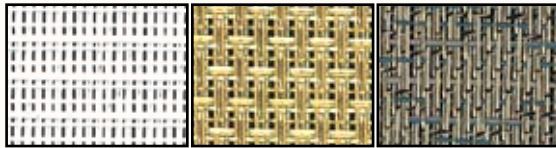


Lutron® fabrics are grouped into four categories: **SheerShade™**, **SheerShade Designer™**, **Privacy**, and **Blackout**. These provide varying degrees of light control and functionality.



SheerShade fabrics feature open weaves so sunlight is filtered while a view is preserved. These fabrics are measured by “openness factor,” which describes the ratio of open space to fabric yarn in a weave.

SheerShade Designer fabrics provide more decorative weave options.



Privacy fabrics permit some light, but are not open weaves, so the view is limited to shapes and shadows.



Blackout fabrics prevent all light from passing through the material. These fabrics are often combined with special side channels, top treatments, and other system components to ensure a complete light seal.



Light colour fabrics

- Reduce interior heat build-up
- Reflect more light



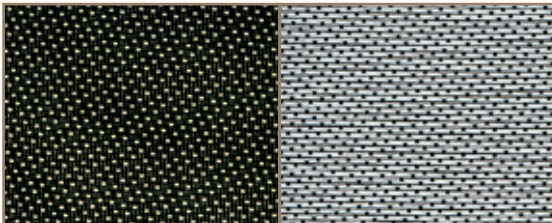
Dark colour fabrics

- Control interior glare more effectively
- Maintain a clearer view outside



Dual-sided fabrics

For many applications, the ideal SheerShade™ fabric combines the strengths of both darker and lighter fabrics to offer a clearer view and increased energy efficiency.



Facing interior

Facing exterior



solar performance metrics defined

Solar performance information is provided to help you select the right fabric for your needs. This information can be found in the fabric swatch book or at www.lutron.com/shadingsolutions.

Solar transmittance (T_s)

percentage of solar radiation that passes through the fabric

Solar absorptance (A_s)

percentage of solar radiation absorbed by the fabric

Solar reflectance (R_s)

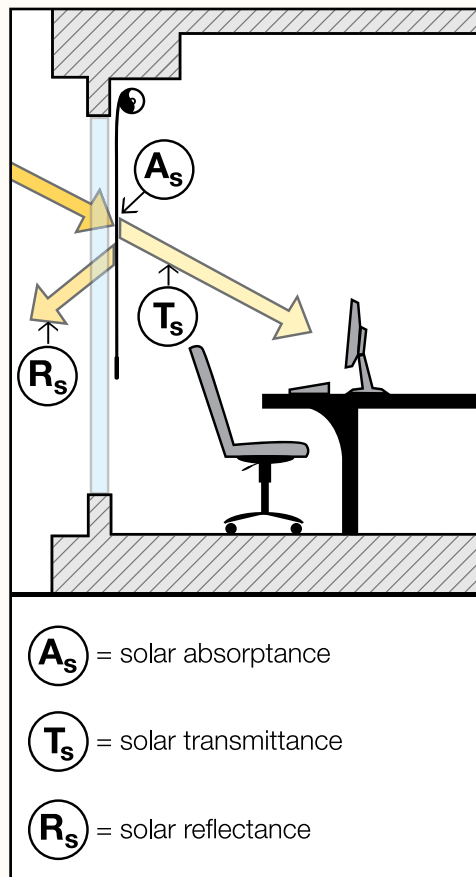
percentage of solar radiation reflected back out by the fabric

For each fabric, $T_s + A_s + R_s = 100\%$

Visual transmittance (T_v)

Percentage of glare-causing visible light that passes through the fabric. Lower values indicate greater glare reduction.

example: a T_v of 14% indicates a glare reduction of 86%



applying solar performance metrics

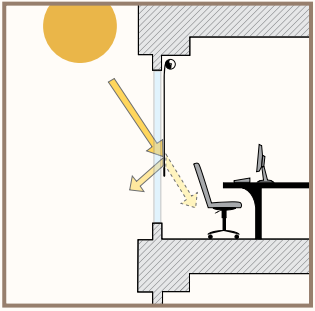
When selecting a fabric, this information may be used as a rough guideline. Each application presents unique requirements.

| If needs are to: | Consider fabric with: | In openness factors of: | Also important: |
|--|---|-------------------------|---|
| Control glare Enhance visual comfort | Low visual transmittance ($T_v < 10\%$) | $\leq 5\%$ | Dark fabric colours facing room |
| Maintain view outside | Low visual transmittance ($T_v < 10\%$) | $\geq 5\%$ | Dark fabric colours facing room |
| Protect interiors from fading | Low solar transmittance ($T_s < 10\%$) | $\leq 1\%$ | Select controllable system to maximise protection |
| Optimise energy efficiency | High solar reflectance ($R_s > 50\%$) | $\leq 5\%$ | Light fabric colours facing window |
| Optimise energy efficiency and control glare | High solar reflectance and low visual transmittance | $\leq 5\%$ | Dual-sided fabrics with dark colour facing room and white facing window |

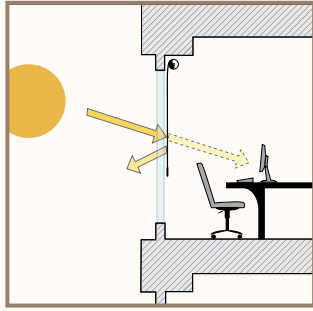


influence of latitude and orientation

The latitude and orientation of a project impact the amount of sunlight as well as the angle of the sun that enters the space.



High sun



Low sun - requires more sun control

In most northern hemisphere applications, these orientation guidelines apply:

North

- Less exposure
- Indirect sun
- Less sun control required

South

- Less exposure
- Moderate sun control required

East

- High sun exposure
- Higher sun control required

West

- High sun exposure
- Higher sun control required



Polyester and fiberglass

Our standard SheerShade™ fabrics are woven using either polyester or fiberglass materials. In addition to aesthetic differences, these two materials have characteristics that make them perform differently in certain applications. Contact your Lutron® representative for more information.

Reduced environmental impact

Lutron offers several families of fabrics comprised of PVC- and halogen-free materials to provide environmental benefits, such as improved air quality. These fabrics are ideal for projects being designed with sustainable criteria.



railroading fabric panels

Why and when railroading is necessary

A fabric's roll width determines the maximum width for a roller blind in standard orientation. To accommodate wider windows, fabric can be "railroaded", or turned 90° from the way it comes off the fabric roll. If the height requires it, this panel may then be attached to another fabric panel with a seam.

For visual consistency, it is recommended that if one roller blind in a space needs to be railroaded, any others in that space should be railroaded also.

Aligning seams with window mullions

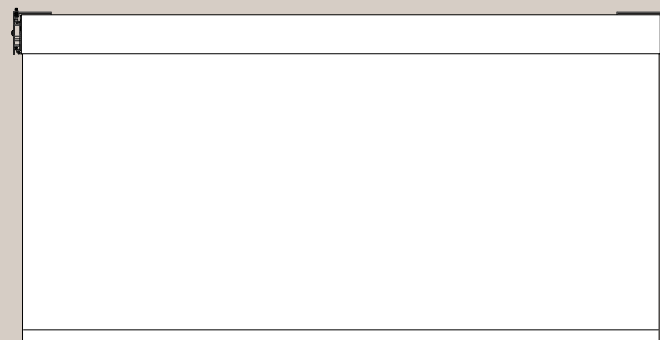
Where possible, railroad seams should be positioned to align with horizontal window mullions to minimise their visibility. This can be specified when roller blinds are ordered from Lutron®.

Standard



less than fabric roll width

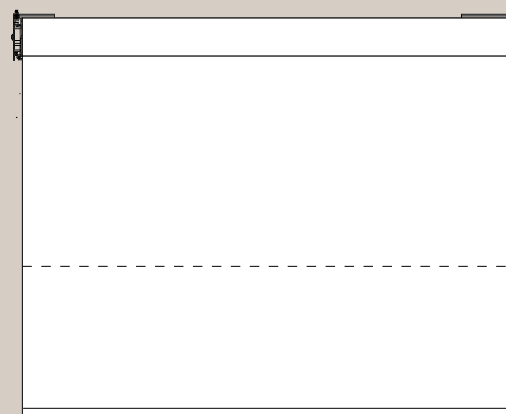
Railroaded without seam



height less than fabric roll width

greater than fabric roll width

Railroaded with seam



greater than fabric roll width

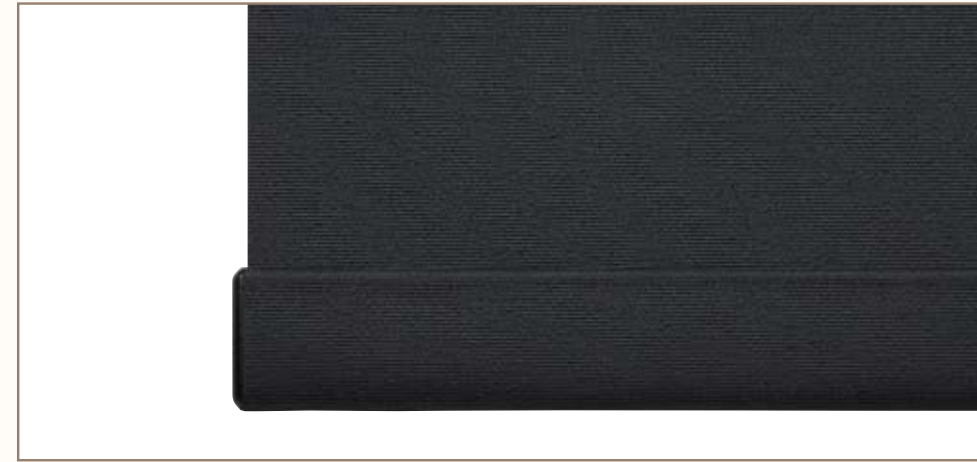
Wrapped and exposed bottom bar

The Architectural Bottom Bar offers a clean aesthetic at the bottom of Lutron® roller blinds with no visible welding seam. It is available in three options; full-wrap, half-wrap, and exposed. The full-wrap option is recommended for fabrics with the same colouring on both sides of the shade. The half-wrap option is ideal for dual-sided fabrics with different colours on each side. The exposed option offers the ability to coordinate the hembar colour with the fabric for a more contrasting look. The bottom bar is available in white, anodized aluminum, or bronze. Light-blocking wool pile is available with all three wrap options for blackout shades used with side channels.

Sealed battens

For roller blinds that are very wide, horizontal battens can be sealed into the fabric to provide stability and help ensure the best performance.

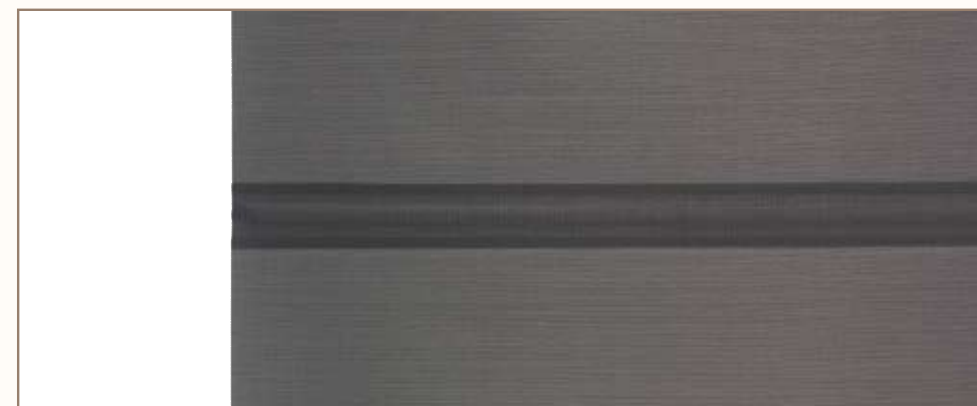
Wrapped bottom bar



Exposed bottom bar with wool pile



Sealed batten



non-standard fabrics and COM materials

In addition to our array of standard offerings, Lutron® is able to provide many other fabrics, as well as custom colours and wider roll widths of certain fabrics.

Lutron can also use customer's own materials (COM) for roller blinds. All COM fabrics must be evaluated to ensure feasibility. Contact customer service for more information.

custom-printed designs

Lutron® designs

Choose from a variety of designs to accent your roller blinds. Lutron provides a selection of designs that can be printed on white SheerShade™, privacy, and blackout fabrics.

Designs include exclusive reproductions of Frank Lloyd Wright® leaded-glass windows, as well as Abstract Expressionist and Toile designs.

Customer's own designs

You can provide your own image via electronic file to be printed on fabric. Corporate logos and other artwork can be accurately reproduced.



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