

Commercial Blinds Technical Information

Ergonomics in the Workplace

Ergonomics in the workplace is centred on designing environments and tasks that match the physical and cognitive capabilities of employees. The goal is to promote comfort, efficiency, and safety. When workstations, tools, and daily routines are properly adjusted—such as through supportive seating, correctly positioned screens, appropriate lighting, and smooth workflow—workers experience less physical strain, fewer injuries, and reduced fatigue. This leads to lower rates of absenteeism and long-term health issues, while improving concentration, job satisfaction, and overall productivity. Thoughtful ergonomic design supports well-being by aligning with natural body movements, enabling people to maintain high energy and minimal discomfort throughout the workday.

Acoustic, Thermal, and Visual Comfort

With people spending up to 90% of their time indoors, high-quality blinds can make a significant difference. They help insulate against noise, regulate light levels, and minimize thermal discomfort, all of which contribute to a more comfortable and productive indoor environment.

Enhanced Indoor Comfort and Productivity

Maintaining stable indoor temperatures is vital for employee performance. Research indicates that productivity decreases when temperatures fall below 19°C or rise above 24°C. Using the right blinds can help keep spaces within these optimal temperature ranges, boosting focus, well-being, and satisfaction at work.

Solar Gain and Overheating Prevention

Effective shading reduces the risk of overheating by limiting solar gain. For instance, with double-glazed windows, total solar energy transmittance (G TOT) can be reduced from 0.85 to 0.24. This keeps indoor climates stable, prevents unnecessary strain on building systems, and improves comfort for everyone inside.



Privacy & Spatial Zoning

Window blinds are essential for providing privacy and delineating spaces within open-plan or glass-intensive office environments. They function both as a visual and functional barrier while permitting natural light to filter through

Glare Control & Visual Clarity

Blinds play a critical role in regulating luminance, preventing glare on screens and work surfaces. They dynamically adjust to changing daylight conditions, thereby ensuring optimal visual comfort and reducing eye strain.

Improved Sleep and Well-being

Access to natural daylight during working hours confers significant health benefits. Studies indicate that office workers exposed to daylight average 46 additional minutes of sleep per night, contributing to enhanced productivity, alertness, and mental well-being.



Insulation & Heat Loss Reduction

By mitigating solar heat gain in summer and reducing heat loss in winter, window blinds substantially decrease HVAC loads. Building performance simulations reveal up to 16% savings in HVAC energy costs for offices equipped with internal shading solutions, supporting passive climate control and long-term operational savings.



Enhanced Colour Rendering (CRI)

Artificial lighting frequently distorts colour perception. By maximizing access to daylight, blinds enhance colour accuracy and alleviate stress—benefits especially pertinent in sectors such as design, fashion, and healthcare where precise colour representation is crucial.

Low CRI / High CRI

A higher Colour Rendering Index (CRI) achieved through increased daylight exposure ensures true-to-life colour perception, facilitating more accurate visual assessments and improved workplace satisfaction.



Sustainable Design & CO₂ Reduction

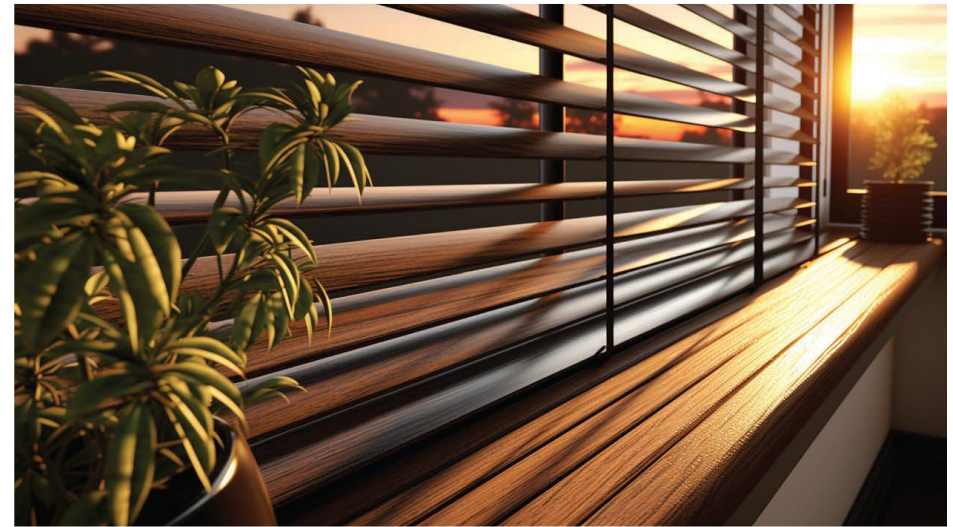
Solar shading is a passive cooling strategy recognised by the International Energy Agency. According to the ESCORP/EU25 study, widespread implementation could reduce CO emissions by up to 80 million tons, making blinds a vital component in sustainable building practices.

Daylight Harvesting & Natural Light Optimisation

Window blinds enable controlled use of natural daylight, reducing the dependence on artificial lighting. This not only saves electricity but also improves indoor ambience, employee mood, and visual comfort.

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Technical Specifications & Data

These textiles are more than just consumables, they are a statement of functionality, aesthetics, quality and sustainability. Luminos exclusive range of commercial fabrics from Junkers & Müllers in Germany carries the SCS Global Services Indoor Advantage Gold certification. This guarantees compliance with rigorous indoor air quality emission requirements. The program is designed for interior building materials, furnishings and systems. Junkers & Müllers are also members of the USGBC and adhere to Leadership in Energy and Environmental Design (LEED).

You may request more information about the following:

- Fabric composition
- Anti-Bacterial Certifications
- Flame Retardant Classifications
- Acoustic Properties
- Harmful effects of PVC
- Solar Optical Properties
- Indoor Air Quality Certifications

