KADECO®

microTex roller blinds

microTex roller blinds – effective and multifunctional glare protection

Daylight in rooms not only improves our mood; it also increases motivation and willingness to perform. However, glare as a result of excessive sunlight can have the opposite effect, while also damaging the eyes.

microTex roller blinds from KADECO counteract unwanted glare in the workplace and combat the heating-up effect of sunlight in rooms. It is also worth taking note of the ergonomic requirements for office work with visual display terminals in ISO 9241-6.

If you're looking for flexibility in the design of your glare protection, privacy shielding, sun protection and measures for preventing rooms from being heated by the sun, then microTex roller blinds provide the very best conditions for doing so. The roller blinds can be adapted to on-site conditions with a variety of laminates or fabrics according to the intensity of the sunlight and where your windows are facing. For example, you have the choice between maintaining a line of sight with the outside world by using transparent laminates, and using thick fabrics to achieve maximum glare protection and privacy shielding.

The features at a glance

Laminates
- PET laminate (a flame-resistant quality according to DIN 4102-B1)
- Available in various colours and transmission grades
- Good glare and anti-heating protection with a highly reflective, silver outer surface
- Highly stable laminates and attractive appearance thanks to diamond stamping
- Produced using a calender manufacturing process, thus ensuring high uniformity
- Maximum height up to 240 cm, depending on quality and width

Textile fabrics
- PES fabric (flame-resistant according to DIN 4102-B1)
- Available in various colours and transmission grades
- Dim-effect fabric also available (not blackout)
- Combination of a textile appearance with effective glare protection
- Pleasant transparency to the outside world
- Natural colour reproduction in rooms
- Maximum height up to 220 cm, depending on quality and width


Transparent


Pleated


Semi-transparent


Smooth


Dim-effect

Compact window glare protection

The one-piece, square cassette has a cross-section of 34 x 33.5 mm and is bolted on its side by plastic end caps.
The cassette is attached using a connector on the side guide rails, which are available in various models. The cassette is operated using a chain pull mechanism with an anti-fall safeguard for infinitely adjustable drape positioning.

The 4.5 mm continuous bead chain is available in white, grey and black to match the other plastic parts. Subject to an additional fee, the operating chain is also available as a metal version. microTex roller blinds are supplied ex-works with a chain holder. The operating length can easily be reduced on site if required. Please note that the operating length of the chain must be at least 2/3 of the system height. Please also observe the requirements of EN 13120 (child-safe operation and exceptions in the commercial sector) for on-site installation.

Colours / models

All profiles are available powder coated in white (RAL 9016) or in anodised silver (E6/EV1) as standard. For an additional fee, these are available in any special RAL colour on request.

All plastic parts are made of UV-resistant and non-wearing materials which are available in white, grey and black.

Profiles

White, RAL 9016

Anodised silver E6/EV1

Plastic parts

White

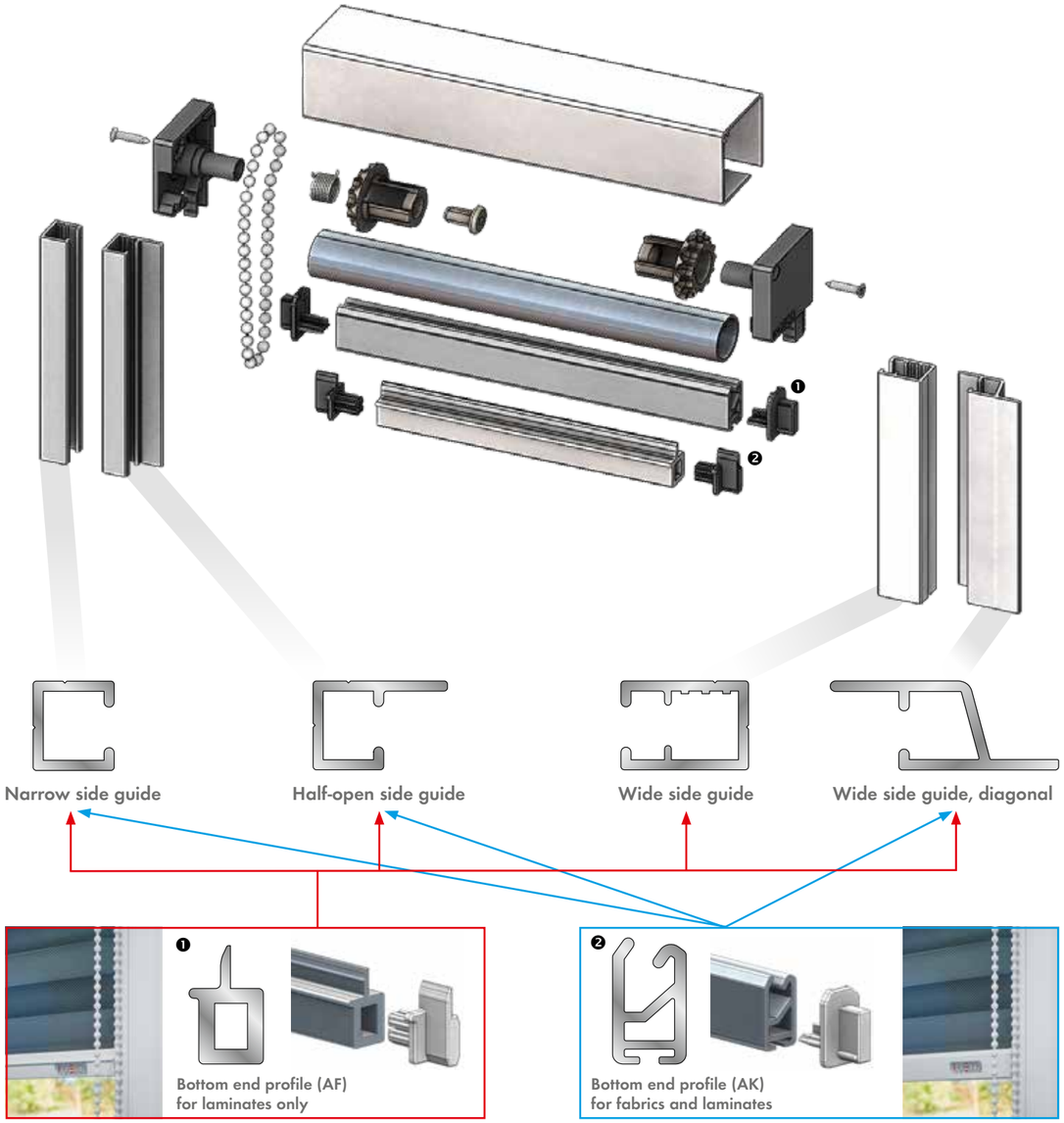
Grey

Black

System design

KADECO offers a variety of side guide rails made from extruded aluminium for different installation types. The special adhesive tape applied at the factory ensures permanent, UV-resistant attachment of the profiles to the window casement and frame. Alternatively, the profiles can also be bolted to the casement on the front or front-facing side. The side guide rails are not fitted with any end caps.

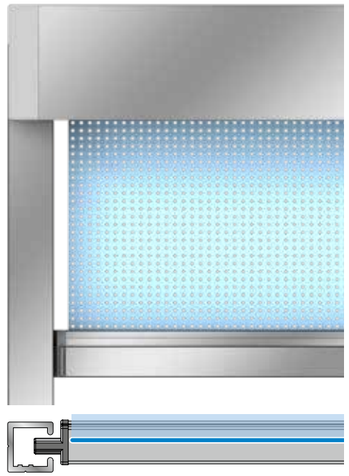
Two different bottom end profiles are available for the microTex roller blind which are guided on the sides with plastic end caps. The smaller model (AF), at 12 x 11 mm, is only suitable for combining with laminate materials. The higher profile (AK), at 20 x 11 mm, accommodates beading and can therefore be combined with textiles as well as laminate materials. In addition, this profile has a retainer for an optional brush seal at the bottom.



Side guide rails

Installing microTex roller blinds

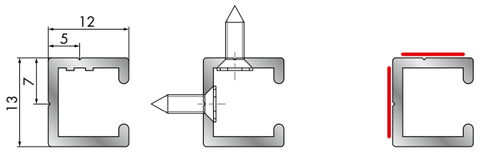
microTex roller blinds are fastened to the installation substructure with the side guide rails. The side guide rails can be fastened to the installation substructure either with special adhesive tape (already applied at the factory) or by bolting them directly to it (profiles can be pre-drilled on request). The cassette can then be easily inserted into the side guide rails from above. A required space of approx. 15 mm must be allowed for at the top. For flush top installation in the glass rabbet, the cassette is already fitted prior to the installation of the side guide rails.



Narrow side guide

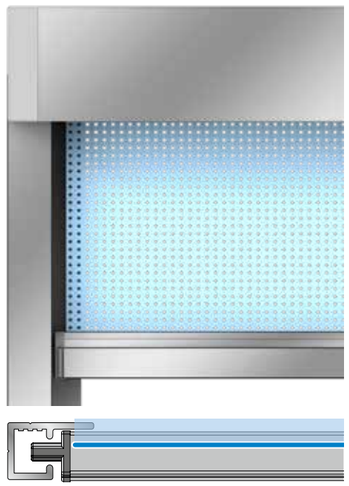
12 x 13 mm profile for straight window bars

- No covering of the drape with 4 mm light-permeable gap
- Unobstrusive side guide rail
- Installation on the window frame
- Installation at 90° in the right-angled glass rabbet



Profile with screws

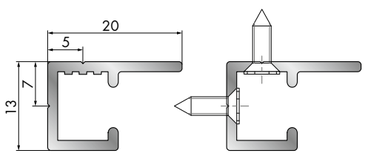
Profile with adhesive tape*



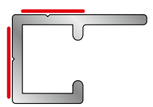
Half-open side guide

11/20 x 13 mm profile for straight window bars

- One-sided covering of the drape to the rear without a direct light-permeable gap (lateral diffuse light possible)
- Unobstrusive front side guide rail
- Fitted with additional profile bridge on the rear for covering the drape
- Glare protection across the entire system width
- Installation on the window frame
- Installation at 90° in the right-angled glass rabbet



Profile with screws

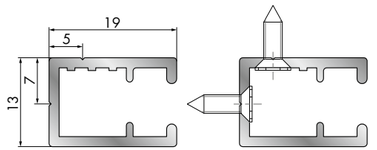


Profile with adhesive tape*

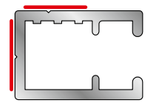
Wide side guide (straight)

19 x 13 mm profile for straight window bars

- Dual-sided covering of the drape without a direct light-permeable gap (lateral diffuse light possible)
- Drape is guided inside the side guide rail
- Perfect glare protection thanks to the wide side guide
- Only suitable for use with laminate materials
- Installation on the window frame (recommended)
- Installation at 90° in the right-angled glass rabbet (recommended under certain circumstances)



Profile with screws

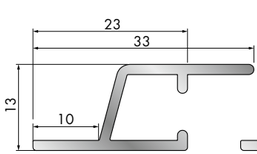


Profile with adhesive tape*

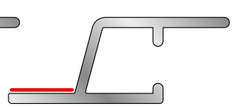
Wide side guide (diagonal)

23 x 13 mm profile for diagonal window bars
(rabbet brackets between 96° and 117°)

- One-sided covering of the drape to the rear without a direct light-permeable gap (lateral diffuse light possible)
- Fitted with an additional profile bridge at the front for covering diagonal window bars
- Recommended for rabbet brackets between 96° and 117°
- Recommended under certain circumstances for rabbet brackets between 90° and 96° (a light-permeable gap arises here between the cassette and the window bar)
- Installation partly in the glass rabbet / on the window frame
- Because it is not possible to install on distinctly rounded window bars (R > 3 mm, max. 5 mm) using adhesives, screws should be used instead in such cases



Profile with screws



Profile with adhesive tape*

* Only one adhesive tape is applied at the factory for wall or alcove mounting – not suitable for installation on wooden windows.

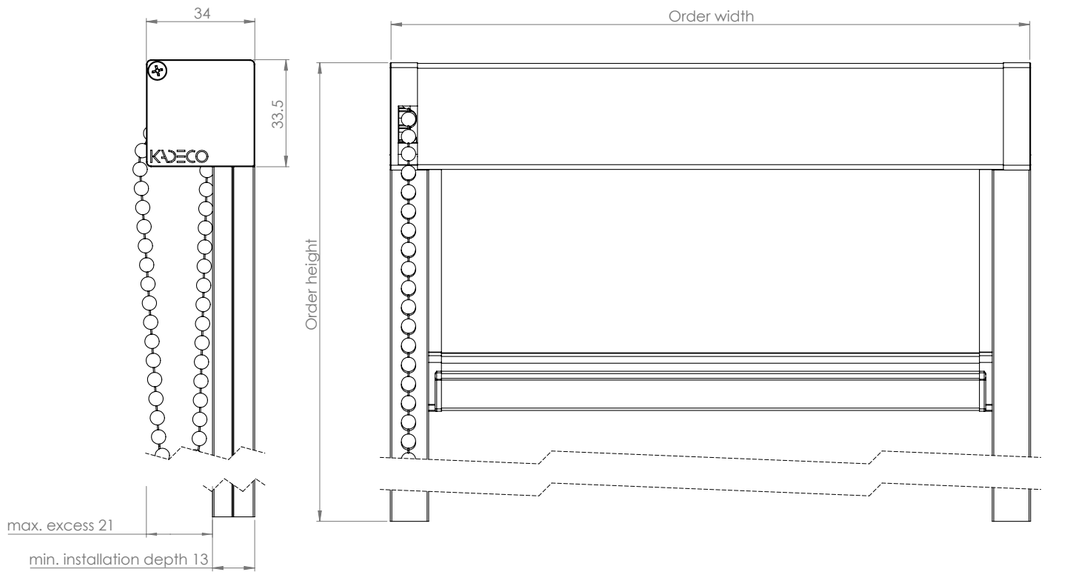
Notes on measuring and installation

microTex roller blinds were designed for installation on vertical casements and are not suitable for operation on sloped windows (e.g. rooflights). For installation using adhesives, the underlying surface must be clean, level and free of grease in order to ensure a firm hold.

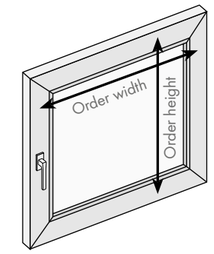
Measure the inside dimensions at several points and bear in mind that the microTex roller blind can only be installed in right-angled casements (check the cross measurement).

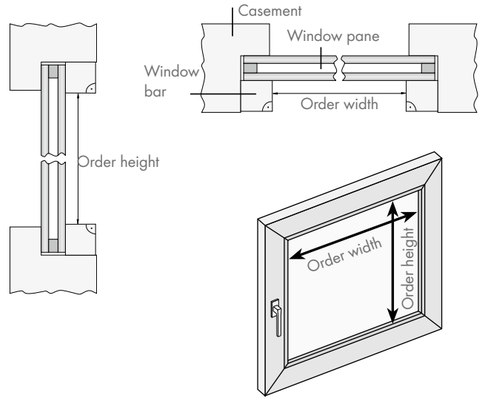
The installation type (adhesive or screws) and the installation position (in or on the casement) must always be specified when ordering.

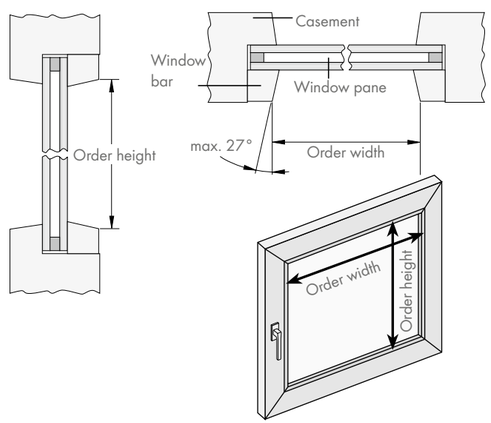
When installing in a diagonal window bar using the diagonal side guide rail, the width and height clearances must be measured on the front edge (to the room). We also need you to specify the window bar angle.



Ordering and calculating the price







Installation on the frame

Order width = Edge of window bar + required excess
= price width

Order height = Edge of window bar + required excess
= price height

Important note:
When measuring, please take account of any protruding objects, such as hinges or window handles, and make sure that the window can continue to open fully.

Installation in a straight window bar

Order width = window bar internal dimension minus 1 mm
= price width

Order height = window bar internal dimension minus 1 mm
= price height

Important note:
The minimum window bar depth is 13 mm

Installation in a diagonal window bar

Order width = window bar front edge minus 1 mm = price width

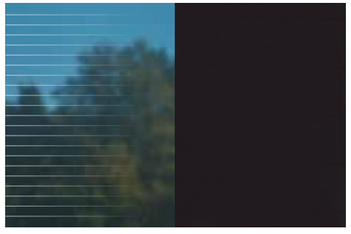
Order height= window bar front edge minus 1 mm = price height

Important note:
The minimum window bar depth is 12 mm.
The maximum window bar angle is 27°.

The window bar angle must always be specified when ordering.

Laminates

PLEATED LAMINATES

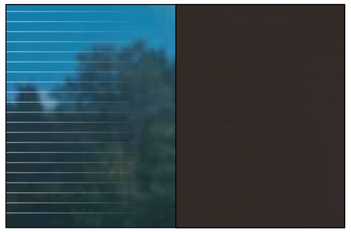


31007 LT 9%

21641 LT 16%

31006 LT 3%

21640 LT 3%



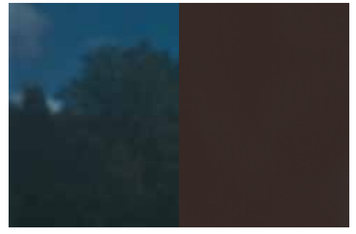
21639 LT 7%

The right-hand side of the illustrations shows the respective laminate sample and the left-hand side shows the corresponding view from inside and transparency of the sample with back-lighting. Please refer to the original sample, since colour variations can occur due to printing.

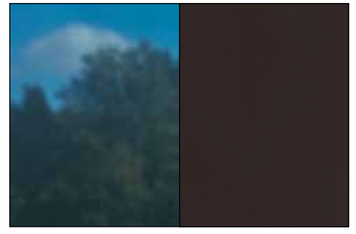
Art. no.		max. cm W≤100 cm	max. cm W>100 cm		g/m²			LR %	LT %	LA %		SR %	ST %	SA %	gtotal *	Fc-Wert *				
21639	PET laminate	180	140	ALU	102	–	7	56	7	37		–	–	–	–	–	–		–	
21640	PET laminate	180	140	ALU	102	–	7	72	3	25		–	–	–	–	–	–		–	
21641	PET laminate	180	140	ALU	103	–	7	66	16	18		–	–	–	–	–	–		–	
31006	PET laminate	180	140	ALU	103	B1	7	78	3	19		–	–	–	–	–	–		–	
31007	PET laminate	180	140	–	138	–	7	16	9	75		–	–	–	–	–	–		–	

* Values measured on double glazing with thermal insulation coating EN_13363-1 gWindow = 0.7; UWindow = 1.6

FLAT LAMINATES



21637 LT 3%



21638 LT 7%

The right-hand side of the illustrations shows the respective laminate sample and the left-hand side shows the corresponding view from inside and transparency of the sample with back-lighting. Please refer to the original sample, since colour variations can occur due to printing.

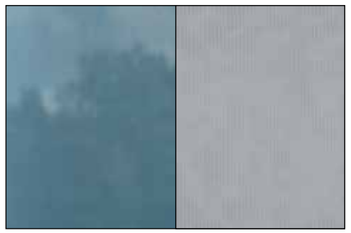
Art. no.		max. cm W≤100 cm	max. cm W>100 cm		g/m²			LR %	LT %	LA %		SR %	ST %	SA %	gtotal *	Fc-Wert *				
21637	PET laminate	240	180	ALU	103	–	7	69	3	28		–	–	–	–	–	–		–	
21638	PET laminate	240	180	ALU	102	–	7	56	7	37		–	–	–	–	–	–		–	

* Values measured on double glazing with thermal insulation coating EN_13363-1 gWindow = 0.7; UWindow = 1

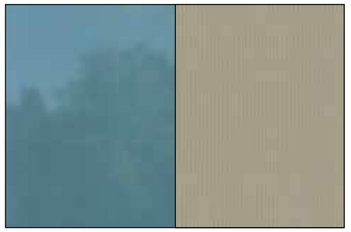
Fabrics

TRANSPARENT FABRICS

11506 LT 8%



11505 LT 15%



11509 LT 17%

11507 LT 11%

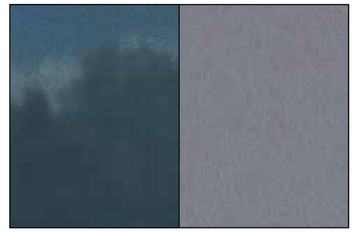
11508 LT 13%

The right-hand side of the illustrations shows the respective fabric sample and the left-hand side shows the corresponding view from inside and transparency of the sample with back-lighting. Please refer to the original sample, since colour variations can occur due to printing.

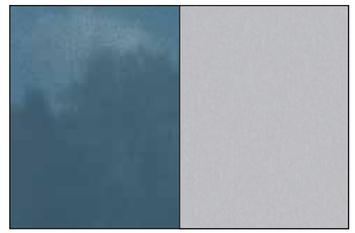
Art. no.		max. cm W≤100 cm	max. cm W>100 cm		g/m²			LR %	LT %	LA %		SR %	ST %	SA %	gtotal *	Fc-Wert *			
11505	PES	220	180	ALU	70	B1	6	51	15	34		53	15	32	0,43	0,61	✓		
11506	PES	220	180	ALU	70	B1	6	49	8	43		52	12	36	0,43	0,62	✓		
11507	PES	220	180	ALU	70	B1	6	50	11	39		53	13	34	0,43	0,61	✓		
11508	PES	220	180	ALU	70	B1	6	50	13	37		53	14	33	0,43	0,61	✓		
11509	PES	220	180	ALU	70	B1	6	50	17	33		52	17	31	0,43	0,62	✓		

* Values measured on double glazing with thermal insulation coating EN_13363-1 gWindow = 0.7; UWindow = 1.6

SEMI-TRANSPARENT FABRICS

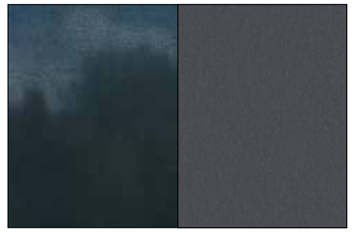


11512 LT 4%



11510 LT 7%

11514 LT 6%



11513 LT 4%

11511 LT 6%

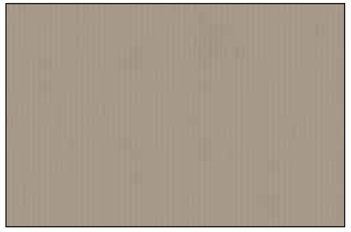
The right-hand side of the illustrations shows the respective fabric sample and the left-hand side shows the corresponding view from inside and transparency of the sample with back-lighting. Please refer to the original sample, since colour variations can occur due to printing.

Art. no.		max. cm W≤100 cm	max. cm W>100 cm		g/m²			LR %	LT %	LA %		SR %	ST %	SA %	gtotal *	Fc-Wert *			
11510	84 % Trevira CS 16 % PES	200	150	ALU	125	B1	6	64	7	29		66	7	27	0,37	0,52	✓		
11511	84 % Trevira CS 16 % PES	200	150	ALU	125	B1	6	60	6	34		62	7	31	0,39	0,55	✓		
11512	84 % Trevira CS 16 % PES	200	150	ALU	125	B1	6	57	4	39		60	6	34	0,39	0,56	✓		
11513	84 % Trevira CS 16 % PES	200	150	ALU	125	B1	6	57	4	39		60	6	34	0,39	0,56	✓		
11514	84 % Trevira CS 16 % PES	200	150	ALU	125	B1	6	57	6	37		55	7	38	0,42	0,60	✓		

* Values measured on double glazing with thermal insulation coating EN_13363-1 gWindow = 0.7; UWindow = 1.6

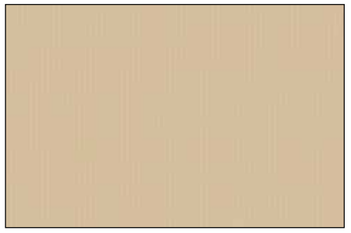
Fabrics

DIM-EFFECT FABRICS



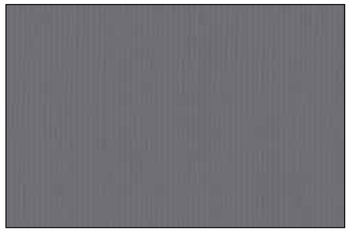
11504 LT 0%

11500 LT 0%



11501 LT 0%

11502 LT 0%



11503 LT 0%

The right-hand side of the illustrations shows the respective fabric sample and the left-hand side shows the corresponding view from inside and transparency of the sample with back-lighting. Please refer to the original sample, since colour variations can occur due to printing.

Art. no.		max. cm W≤100 cm	max. cm W>100 cm		g/m²			LR %	LT %	LA %		SR %	ST %	SA %	gtotal *	Fc-Wert *			
11500	PES	190	180	–	165	B1	5	68	0	32		49	0	51	0,43	0,61	✓		–
11501	PES	190	180	–	165	B1	5	68	0	32		49	0	51	0,43	0,61	✓		–
11502	PES	190	180	–	165	B1	5	68	0	32		49	0	51	0,43	0,61	✓		–
11503	PES	190	180	–	165	B1	5	68	0	32		49	0	51	0,43	0,61	✓		–
11504	PES	190	180	–	165	B1	5	68	0	32		49	0	51	0,43	0,61	✓		–

* Values measured on double glazing with thermal insulation coating EN_13363-1 gWindow = 0.7; UWindow = 1.6

Symbols and finishing

The climate in a room and the optical effect of a roller blind are dictated by the fabric's response to incident sunlight. For the purpose of making technical estimates, we assign percentage light and solar values to each individual fabric.

Blackout

Translucent

Transparent

Photometric values

In physics, the visible range of the spectrum between 380 and 780 nm is defined as light. The reflection, transmission and absorption values indicated below always add up to 100 %.

Reflectance (visual)
The light reflectance according to EN 14501 indicates which proportion of visible sunlight is reflected by the fabric.

Transmittance (visual)
The light transmittance according to EN 14501 indicates which proportion of visible sunlight can penetrate the fabric.

Absorption (visual)
The light absorption according to EN 14501 indicates which proportion of visible sunlight is absorbed by the fabric.

Solar values

Solar radiation in both the visible and the invisible ranges must be considered when calculating the total energy transmission value. These values differ.

Reflectance (solar)
The solar reflectance according to EN 14501 indicates which proportion of incident sunlight (entire spectrum) is reflected by the fabric.

Transmittance (solar)
The solar transmittance according to EN 14501 indicates which proportion of incident sunlight (entire spectrum) can penetrate the fabric.

Absorption (solar)
The solar absorption according to EN 14501 indicates which proportion of incident sunlight (entire spectrum) is absorbed by the fabric.

Energy values

The effect of the sunshade on the system comprising glazing and interior sun protection is defined using two key technical indicators: total energy transmission value (gtotal) and reduction factor (F_C).

Total energy transmission value
The total energy transmission value (gtotal) according to EN 13363-1 (simplified method) indicates how much solar energy can penetrate the overall system of glazing and sun protection into the room. If the aim is to save cooling energy in summer or prevent the room from heating up, then the total energy transmission value must be minimised. The sunshade should therefore reduce total transmission – the total energy transmission value should be as low as possible.

Reduction factor
The reduction factor (F_C value according to EN 14501) indicates how much a sunshade reduces the energy entry through the window. It can be a value between 0 and 1, and depends on the glass used. The F_C value should be as low as possible, as this would indicate particularly effective sun protection.

Suitability for use in work areas

Provide the best light for your employees
Daylight makes you feel happy, energetic and productive. These positive attributes can also be brought into the workplace – without unpleasant side-effects such as glare, heat radiation or reflections on computer screens. The design of modern workplaces actually has such a significant effect on the health and well-being of employees, that information, guidelines and legal regulations have been created to ensure this is taken into consideration.

From 1996 to 2016, the German Screen Work Ordinance (BildscharbV) represented the German implementation of the authoritative EU regulations in this area.
When the **German Workplace Ordinance (ArbStättV)** was amended on 3 December 2016, the BildscharbV was merged with the **ArbStättV**, which is legally binding in Germany. The **ArbStättV** covers every aspect of designing workplaces and working conditions with regard to the health and safety of employees.

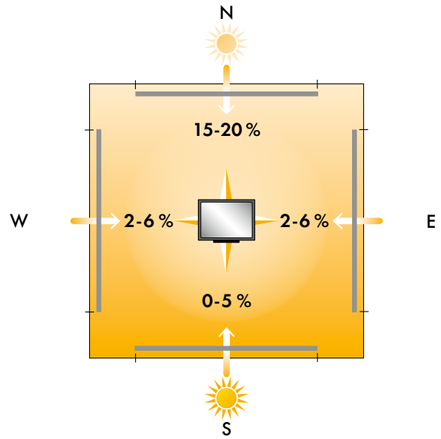
What are considered good conditions in monitor-based workplaces?
- Every window must be fitted with a suitable, individually adjustable privacy shield and glare protection device
- Bothersome reflections and glares on screens must be prevented as much as possible
- Equipment should be adjustable so that users have a line of sight to the outside world, for most of the time at least
- It must be possible to react flexibly to changing daylight conditions
- The workplace must be sufficiently lit
- Screens must be at an approximately 90° angle in relation to the window in order to reduce reflections in general (note examples provided by the German Social Accident Insurance)

Practical information about implementing the EU directive can be found at: German Social Accident Insurance (DGUV) Information 215-444 (sun protection in offices).

Find easy, attractive ways to implement legal requirements with KADECO
Workplace windows must have an effective and flexible glare protection system in place so that employees can benefit from daylight, but won't be disturbed. Since you can individually react to the amount of incident light with KADECO's interior privacy screens and sunscreens, these are suitable as internal glare protection at the workplace.

Current legal requirements, standards and directives:
- German Workplace Ordinance, ArbStättV, Appendix 6 (measures for the design of monitor-based workplaces)
- Technical regulations for workplaces, ASR 3.4 (lighting)
- German Social Accident Insurance DGUV Information 215-444
- Lighting of work places – Indoor work places, EN 12464-1
- Ergonomic requirements for office work with visual display terminals, EN ISO 9241-6

Recommended transmission values



Note:
This information does not claim to be complete, and does not exclude any other equivalent technical solutions that are equally safe. In certain unfavourable situations, additional external glare protection may be necessary.

Suitability for use in work areas
Fabrics marked as follows are suitable for monitor-based workplaces facing the following directions:

South – West – North – East
Light transmission of the fabric 0–5 %

West – North – East
Light transmission of the fabric 6 %

North
Light transmission of the fabric 7-20 %

You can find additional information on this topic in the brochure "Optimale Lichtbedingungen für Bildschirmarbeitsplätze durch innenliegenden Sicht- und Sonnenschutz" (Optimal lighting conditions for monitor-based workplaces via internal privacy screens and sunshades) by the ViS (Association of internal sight and sun protection systems).


Some fabrics in the microtex chart can also be used for roller blinds, panel tracks and vertical blinds to equip larger windows.

Child-safe operation as per EN 13120

The European standard EN 13120 stipulates special requirements in respect of the child safety of sunscreens. The aim is to minimise the risk of a small child being strangled by operating chains or cord loops. If a product is fitted with such operating mechanisms, a minimum floor clearance (generally 150 cm) and the use of special safety components are mandatory.

Because the system is fitted with a chain holder at the factory, it is also possible to install the roller blinds for domestic use according to the requirements of the standard.

As a responsible manufacturer, we naturally make sure that our products comply with this standard and offer child-safe operating mechanisms for all of our models. When selecting your KADECO sunscreen, please bear in mind any local constraints in respect of child-safe and convenient operation.

Further information is available at www.kadeco.de, from your local industry association (e.g. in Germany: ViS – Verband innenliegender Sonnenschutz) or your national standards body.

KADECO®

You can find our current Terms and Conditions on our website at www.kadeco.de.
Our prices valid at the time of conclusion of the contract shall apply and are available on request.

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