

																						m	yds			
		cm	inch	g/m <sup>2</sup>	cm	inch																				
Guard III 1)	7 col.	150	59	117	-	-	-	X	-	-	X	X	X	X	-	-	-	-	-	-	-	-	100% PLF = Trevira CS		2,5%	
Protect III 1)	4 col.	210	83	180	-	-	X	-	-	-	X	X	X	X	X	X	X	-	-	-	-	-	100% PLF = Trevira CS		1%	
Provide 1)	4 col.	210	83	215	-	-	X	-	-	-	X	X	X	X	X	X	X	-	-	-	-	-	100% PLF = Trevira CS		1%	
Shade III 1)	14 col.	220	87	131	-	-	X	-	-	X	-	-	X	X	X	X	X	-	-	-	-	240	260	100% PLF = Trevira CS		1%
Shade III 1)	4 col.	300	118	131	-	-	X	-	-	X	-	-	X	X	X	X	X	X	-	-	-	240	260	100% PLF = Trevira CS		1%
Shadow III 1)	14 col.	150	59	131	-	-	X	-	-	-	X	X	X	X	X	X	X	-	-	-	-	-	100% PLF = Trevira CS		1%	
Shadow III 1)	5 col.	210	83	131	-	-	X	-	-	-	X	X	X	X	X	X	X	-	-	-	-	-	100% PLF = Trevira CS		1%	
Shine II 1)	7 col.	150	59	85	-	-	X	-	-	-	X	X	X	X	-	-	-	-	-	-	-	-	100% PLF = Trevira CS		1%	
Steel Base	4 col.	300	118	67	-	-	-	X	-	X	-	X	X	X	-	-	-	X	-	-	-	-	100% Polyester PLF	1%	2,5%	
Steel Block	9 col.	300	118	101	2,3	1	-	X	-	X	-	X	X	X	-	-	-	-	X	-	-	500	550	100% Polyester PLF	0,5%	1%
Steel Line	1 col.	300	118	23	-	-	X	-	-	-	-	X	X	X	-	-	-	X	-	-	-	-	100% Polyester PLF	0,5%	1%	
Steel Net	10 col.	300	118	116	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	X	500	550	100% Polyester PLF	0,5%	2,5%
Steel Plain	1 col.	300	118	30	-	-	X	-	-	-	-	X	X	X	-	-	-	X	-	-	-	-	100% Polyester PLF	0,5%	1%	
Steel Strie	1 col.	300	118	27	-	-	X	-	-	-	-	X	X	X	-	-	-	X	-	-	-	-	100% Polyester PLF	0,5%	1%	
Steel Stripe	7 col.	300	118	34	10,5	4 1/4	X	-	X	-	-	X	X	X	-	-	-	X	-	-	-	500	550	100% Polyester PLF	0,5%	1%
Steel Tex	9 col.	300	118	120	-	-	-	X	-	X	-	X	X	X	-	-	-	-	-	-	X	500	550	100% Polyester PLF	0,5%	2,5%

Durch die Beschichtung mit Aluminium und Stahl, erreicht man hervorragende Funktionswerte, die mit konventionellen Textilien sonst nicht möglich sind.

Um die gewünschte Funktion zu erreichen, ist die bedampfte Stoffseite gegen das Fenster einzusetzen.

Zu den Warentypischen Eigenschaften von aluminiumbedampften Stoffen gehören sichtbare Knicke, die durch Knittern oder Knautschen der Ware entstehen.

Die ganzen Produkte der «Silver & Steel» Kollektion wurde umfassend geprüft und ausge-

wertet. Von sämtlichen Colorits sind nach genannten Verfahren die Reflektions- und Transmissionswerte sowie der Energieabminderungsfaktor ermittelt.

Diese offiziellen Prüfzertifikate stehen auf der Website von Création Baumann frei zur Verfügung.

[www.creationbaumann.com/Sicht- und Blendschutz](http://www.creationbaumann.com/Sicht- und Blendschutz)  
Kontaktieren Sie uns für weitere detaillierte Produktinformationen.

Rollo - siehe Rollkollektion

The characteristics of the aluminium vapour coated fabrics visible creases derived from creasing and crushing of the merchandise. They do not affect how the fabrics perform technically.

To obtain the desired performance the coated side must face the window.

Outstanding results are achieved in functionality testing thanks to aluminum and steel soating that otherwise cannot be attained with conventional textiles.

The entire products of the «Silver & Steel» collection has been submitted to comprehensive and rigorous evaluations. Reflection and transmission values for each and every colour setting has been established in accordance with prescribed test standards.

These official certificates are readily available on the Création Baumann webpage.





[www.creationbaumann.com/Glareprotection](http://www.creationbaumann.com/Glareprotection)

Please contact us for further and detailed information.

Rollo - see rollsample



1)

		 Lichttransmissionsgrad light transmission degree	 Lichtreflektionsgrad light remsion degree	 UV-Transmissionsgrad UV-transmission degree	 Solartransmissionsgrad solar transmission degree
	col.	$\tau_v, B$	$\rho_v, B$	$\tau_{UV}$	$\tau_e, B$
Guard III	111	53%	44%	39%	54%
Guard III	112, 121-125	30-33%	34-37%	29-31%	32-34%
Protect III	151	35%	62%	12%	35%
Protect III	152, 155, 156	3-6%	50-52%	1-2%	5-6%
Provide	191	34%	62%	12%	34%
Provide	192, 195, 196	3-5%	50-51%	1-2%	4-5%
Shade III	201, 301	43%	54%	24%	44%
Shade III	202, 203, 247, 248 261-269, 302, 303, 363	11-33%	5-41%	10-19%	30-39%
Shadow III	171, 181	43%	54%	24%	44%
Shadow III	172, 175-177, 182 401-412	10-14%	52-55%	10-12%	12-15%
Shine II	102	53%	45%	40%	53%
Shine II	103, 112-116	19-22%	45-48%	19-21%	21-22%
Steel Base	58	61%	36%	46%	61%
Steel Base	56, 59, 60	37-42%	16-18%	37-39%	40-42%
Steel Block	67	51%	46%	37%	52%
Steel Block	61-66, 68, 69	27-35%	17-21%	27-32%	30-35%
Steel Line	21	62%	14%	61%	63%
Steel Net	90	49%	46%	32%	50%
Steel Net	81-89	21-29%	18-21%	21-24%	26-29%
Steel Plain	1	55%	17%	54%	56%
Steel Strie	11	60%	15%	58%	60%
Steel Stripe	31-37	41-49%	16-18%	41-47%	44-50%
Steel Tex	79	51%	44%	35%	52%
Steel Tex	71-78	26-31%	18-21%	25-28%	29-32%

### SILVER&STEEL – FABRICS TO CONTROL LIGHT AND TEMPERATURE

The collection SILVER&STEEL, with its versatile textiles, captivates with aesthetics and polyvalent/multi purpose functionality. At the window, these fabrics provide simultaneously

- privacy • glare protection • thermal protection • UV-protection for contract sector and residential furnishing.

### SILVER

The special feature is a thin aluminium coating, which is applied to the back of the fabric using a highly evolved vacuum process, yet still retains a degree of transparency. Reflection of sunrays reduces incoming light and creates a soft light without glare or dazzle. Simultaneously ingress of thermal energy is minimised whilst heat loss is minimised during cold weather.

To obtain the maximum benefit of the fabrics' specific properties, the aluminium-coated side must face the window.

Metallisation takes place in a sealed high-vacuum environment. Fabric is fed from a roll in a continuous process through the treatment zone. Pre plasma treatment cleanses and primes the textile for the coating. In the metallizing zone pure aluminium is heated to 1650 – 1800° C and vaporised. This aluminium vapour deposits itself onto the exposed side of the textile surface.

### PROTECTIVE COATING

A special coating makes the textile more resistant to water stains, water vapours and other stains/soiling.

### STEEL

The special feature is a thin steel coating, which is applied to the back of the fabric using a highly sophisticated engineering process, and which allows the textile to retain a degree of transparency. Reflection of sunrays reduces incoming light and creates a soft light without glare or dazzle. Simultaneously ingress of thermal energy is minimised whilst heat loss is minimised during cold weather.

To obtain the maximum benefit of the fabrics' specific properties, the steel-coated side must face the window.

Sputtering is a physical process. In a vacuum chamber atoms are ejected from a solid target material of special steel due to bombardment of the target by energetic ions. These metal atoms condense in the gas phase to form a layer on the exposed side of the textile (nano technology). Compared to aluminium coating, reflection is below that of aluminium coating. On the plus side fabrics are wash resistant and less susceptible to creasing and cracking.

### TESTING RESULTS

Outstanding results are achieved in functionality testing thanks to aluminium and steel coating that otherwise cannot be attained with conventional textiles. The entire products of the «Silver&Steel» collection have been submitted to comprehensive and rigorous evaluations. Reflection and transmission values for each and every colour setting have been established in accordance with prescribed test standards. These official certificates are readily available on the Création Baumann webpage; they serve to assist specialist engineers in establishing light and energy values.

[www.creationbaumann.com/Glareprotection](http://www.creationbaumann.com/Glareprotection)

### BENEFITS AND FUNCTIONS AT A GLANCE FILTERING OUT INTRUSIVE STARES

Transparency is crucial. The data of recorded light measurements listed below demonstrate that SILVER&STEEL encompasses a broad band of different transparencies. The degree of protection and privacy can be tailored therefore to any specific requirements at a window.

### GLARE PROTECTION

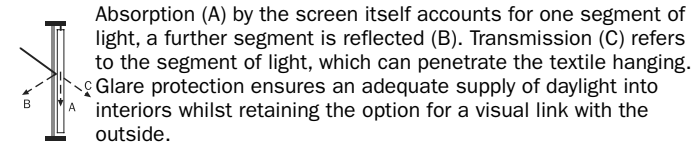
Excessively light areas in conjunction with high levels of luminance are perceived as glare. The greater the luminance, the greater the dazzle effect.


Direct glare                      light rays hit the eye directly  
Reflex glare                      light rays that are reflected by surfaces to hit the eye


For trouble-free working excessive levels of radiant intensity on PC-screens and disproportionate luminance differentials between sunlit areas must be eliminated. The use of a glare protection reduces dazzle from sunlight or eliminates it altogether.


### FUNCTIONS OF INTERIOR GLARE PROTECTION

Three different factors that affect the light flux have to be taken into consideration.




 Light transmission DIN EN 410  
the percentage of light (380 to 780 nm) that penetrates the textile hanging into the interior.


 Light absorption DIN EN 410  
the percentage of light (380 to 780 nm) that is absorbed by the textile hanging.


 Light reflection DIN EN 410  
the percentage of light (380 to 780 nm) that is reflected by the vapour coated side of the textile hanging.

### THERMAL PROTECTION (SOLAR)

The sun's energy travels to earth and – through glass – unhindered into the interior of a room by electromagnetic waves. It can do so because uncoated glass is to a large extent pervious to most radiation. Incoming radiation (energy) converts to thermal energy. Generated heat directly at the window is to a very large degree reflected by the textile hanging in the direction of the glass. Best results over a long period can be achieved by drawing off any resulting heat increase between hanging and window to the outside.

 Solar transmission DIN EN 410  
the percentage of (thermal) energy that penetrates the textile hanging to the interior.

 Solar absorption DIN EN 410  
the percentage of (thermal) energy that is absorbed by the textile hanging.

 Solar reflection DIN EN 410  
the percentage of (thermal) energy that is reflected by the aluminium vapour coated side of the textile hanging.

### UV PROTECTION

Studies indicate that UV radiation (ultraviolet) is on the increase, a fact that is generally attributed to the reduction of ozone in the atmosphere. UV protection is increasingly an important factor in interior furnishing, for instance museums (to safeguard artefacts against deterioration) or buildings with large glass frontage (to protect furnishings from fading).

The sunlight includes visible radiation (wavelengths in nanometers (nm) ranging from 380 to 700) and invisible radiation (in wavelengths from 0 to 380 nm). The invisible radiation spectrum is generally referred to as UV radiation, which subdivides into

UV-A 315 to 380 Nanometer	Causes some decomposition of polymers. Tans without causing sunburn. Is used to test textiles and for interior application testing. Permeates window glass.
UV-B 280 to 315 Nanometer	The shortest wavelength of sunlight, which can be found on the earth's surface. Is responsible for the decomposition of most polymers. Causes sunburn. Is absorbed by window glass.
UV-C Less than 280 Nanometer	Can only be found in sunlight in outer space (cosmos). Is filtered out by the ozone in the atmosphere. Can cause unnatural reactions.

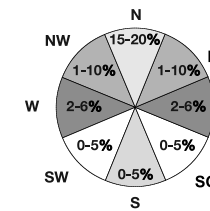
UV-A/UV-B radiation (with wavelengths of 280 to 380 nm) is of particular importance in interior sunscreen technology as it penetrates uncoated window glass. It is known for instance that polyester suffers particularly badly under long-term exposure of UV radiation with a wavelength of 325 nm. It is therefore a matter of lowering entry of UV-A/UV-B radiation as much as possible.

### INTERIOR SHADING FOR PC WORKSTATION (DIN EN ISO 9241)

In the European Union the directive for health and safety at work at PC workstations is in force.

Relevant criteria for sunscreens:

- The direction the window is pointing to
- The sun's intensity from every direction is different
- The interior sunscreen must cut incoming sunlight
- In accordance with EU guidelines, the maximum admissible light transmission factor is specified for every direction as a percentage.



If the course of the sun is transposed onto the floor plan of a building, it becomes even clearer which areas face which level of sun radiation intensity. Maximal light transmission values for textile hangings in accordance with EU PC-screen directives for the different directions.