



RECASENS BCN **n** 1886









Thermal comfort



Glare contro



Partial darkening



Privacy



Acoustic absorption



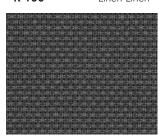
Visibility to the outside



Natural light







R-700 Anthracite-Anthracite

INTERIOR DESIGN AND DECORATION INDOOR SOLAR PROTECTION Roller blinds or curtains for windows Roller blinds or curtains for enclosures Roller blinds for roof windows Folding blinds Vertical blinds Japanese panels Folding awnings Shade sails Tensioned textiles under skylights INDOOR FURNITURE Cushions Armchairs and sofas (*) Seats and hairs (*) Footstools and pouffes Office chairs INDOOR TEXTILE ARCHITECTURE Access to premises Wall coverings Ceiling coverings Ceilings with skylights Separators and screens Wrappings for isolated elements Decorative accessories

FACADES AND ENCLOSURES					
OUTDOOR BLINDS		R	T		
Roller blinds for windows or facade awnings		~	~		
Roller blinds for glazed enclosures		~	~		
Roller blinds for roof windows	OR	~	~		
Roller blinds for skylights		~	~		
AWNINGS		R	T		
Folding awnings		~	~		
Drop-arm awnings		~	~		
Classic awnings		~	~		
Invisible arm awnings (2)	7	~	~		
Roller drop awnings (3)		~	~		
Vertical or downward awnings		~	~		
Hoods or fixed canopies	A	~	~		
Retractable hoods or Dutch awnings		~	~		
COVERINGS AND ENCLOSU	RES	R	T		
Fixed pergolas and walkways	PA	~	~		
Roofs with fabric enclosures		~	~		
Walls with fabric enclosures		~	~		
Verandas (4)		~	~		
Pergolas with folding awning		~	~		
FACADES		R	Ţ		
Fixed or sliding panels	TI	~	~		
Balcony coverings and technical elements		~	~		



OUTDOORS AND TEXTILE ARCHITECTURE

OUTDOOR SOLAR PROTECT	ION	R	ŀ
Umbrellas and sunshades		~	•
Self-supporting double awning (5)	7	~	•
Shade sails		**)	(1
Arbours		>	•
Canopies		~	•
Privacy screens and windbreaks		~	•
OUTDOOR FURNITURE		R	
Cushions		~	•
Sun loungers		~	•
Armchairs and sofas		~	•
Seats and chairs	F	~	•
Footstools and pouffes		~	•
Deckchairs		~	•
Portable sun loungers		~	•
Portable armchairs and sofas		~	•
Portable seats and chairs		~	•
Portable stools	B	~	•

- (1) Up to 12m in line and 9m drop with Llaza ironworks.
- (2) Depending on awning model, up to 6.25m in line and 4.5m extension with 2 arms and Llaza ironworks. Ask for more information about maximum dimensions for multiarm awnings.
- (3) For awnings up to, approximately, 4/5m in line x 3/2.75m extension.
- (4) Depending on model, up to 4.75/5.5m in line x 6.5/5.5 extension with 2 guides and Llaza ironworks, with both line and extension being adjustable whilst maintaining the same surface area of fabric. Ask for more information about maximum dimensions with more than 2 guides.

 (5) Up to 6m in line and 2 x 2.5m extension, with 2 arms and
- Llaza ironworks.
- (*) For upholstery of mobile furniture (not for upholstery for fixed seats that make up part of the project in cinemas, theatres, auditoriums, assembly halls, etc.).
- (**) Small dimensions.

THERMAL FACTORS

	RECSCREEN 4000P							THERMAL	FACTORS	5			UV
	1% openness factor		FABRIC			FABRIC + GLAZING IN PARALLEL POSITION							
			FADRIC		Type	C Glazing	Type I	D Glazing	Type (Glazing	Type I	D Glazing	TUV
REF.	COLOUR	TS (τ _{e,B})	RS (ρ _{e,B})	AS ((\alpha_e,B)	g _{tot int}	THERMAL COMFORT CLASS	g _{tot int}	THERMAL COMFORT CLASS	g _{tot ext}	THERMAL COMFORT CLASS	g _{tot ext}	THERMAL COMFORT CLASS	(τ _{υν})
R-000	White-White	19,8	69,2	11,0	0,35	2	0,25	2	0,14	3	0,09	4	2,6
R-001	White-Linen	16,8	60,3	22,9	0,37	1	0,26	2	0,13	3	0,09	4	2,2
R-002	White-Sable	14,3	52,3	33,4	0,40	1	0,26	2	0,12	3	0,09	4	2,2
R-004	White-Pearl Gray	13,9	51,9	34,2	0,40	1	0,26	2	0,12	3	0,09	4	2,7
R-005	White-Dark Gray	5,1	33,6	61,3	0,46	1	0,28	2	0,09	4	0,07	4	2,1
R-100	Linen-Linen	14,6	54,0	31,4	0,39	1	0,26	2	0,13	3	0,09	4	1,6
R-300	Black-Black	1,5	4,0	94,5	0,55	0	0,30	2	0,10	4	0,08	4	1,5
R-307	Black-Bronze	2,5	6,4	91,1	0,55	0	0,30	2	0,10	4	0,08	4	2,3
R-400	Pearl Gray-Pearl Gray	10,6	39,8	49,6	0,44	1	0,27	2	0,12	3	0,09	4	2,4
R-700	Anthracite-Anthracite	2,6	7,7	89,7	0,54	0	0,30	2	0,10	4	0,08	4	2,3

The g tot values are provided for standard glazing types C and D. Please contact us to request the g tot study relating to any other kind of standard glazing or specific glazing for the project.

THERMAL FACTORS

FABRIC

TS $(\tau_{e,B})$: Solar transmittance factor of the fabric in % RS ($\rho_{e,B}$): Solar reflection factor of the fabric in % AS (O(e,B): Solar absorption factor of the fabric in %

FABRIC + GLAZING

gtot int: Total solar energy transmittance factor.

Glass + fabric in parallel position / Fabric on the inside.

gtot ext: Total solar energy transmittance factor.

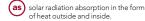
Glass + fabric in parallel position / Fabric on the outside.

100% SOLAR RADIATION = RS + AS + TS

(RS) SOLAR REFLECTION Solar energy reflected by the material towards the outside



SOLAR TRANSMISSION Solar energy that goes though the material.



TYPES OF GLAZING

Type C Glazing: g = 0.59 Total solar energy transmittance factor

U = 1.20 W/(m2.K) Thermal transmittance coefficient Double glazing (4mm float + 16mm chamber + 4mm float), with low emission coating in position 3 (outer surface of the

indoor glass), chamber filled with argon.

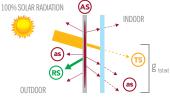
Type D Glazing: g = 0.32 Total solar energy transmittance factor U = 1.10 W/(m2.K) Thermal transmittance coefficient

Double glazing (4mm float + 16mm chamber + 4mm float), with low emission coating in position 2 (inner surface of the

outdoor glass), chamber filled with argon.

100% SOLAR RADIATION INDOOR





FABRIC PARALLEL TO THE GLASS OUTSIDE

ULTRAVIOLET FACTORS

TUV (Tuv): Total ultraviolet spectrum transmission factor in %

BIM RECASENS & LLAZA

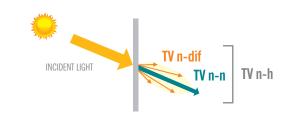
In order to facilitate the work of all those involved in the project, as well as to provide the possibility of performing an energy calculation for our products and adapting it to the specific project data, RECASENS & LLAZA subscribe to the BIM methodology, making their entire range of fabrics coverted into BIM aims available to users. The BIM aims of RECASENS & LLAZA are available in Revit® and Archicad® formats, in Spanish and English. At www.bimobject.com/es you will be able to do the following after registering:

- Download products in Revit®, Archicad®, IFC® formats, etc.
- Download catalogues and manuals
- Request information and advice for your project



VISUAL PROPERTIES

	RECSCREEN 4000P	OPTICAL FACTORS		
	1% openness factor			
REF.	COLOUR	(T v, n·h)		
R-000	White-White	16,9		
R-001	White-Linen	13,3		
R-002	White-Sable	9,0		
R-004	White-Pearl Gray	10,6		
R-005	White-Dark Gray	3,9		
R-100	Linen-Linen	10,6		
R-300	Black-Black	1,5		
R-307	Black-Bronze	2,4		
R-400	Pearl Gray-Pearl Gray	7,6		
R-700	Anthracite-Anthracite	2,3		



OPTICAL FACTORS

TV n-h ($\tau_{v, n-h}$): Normal-hemispheric light transmittance in %





TECHNICAL DATA SHEET

Indoor and Outdoor

TECHNICAL FEATURES				
Weight	475 g/m² / 14 oz/yd²	UNE-EN 12127:1998		
Thickness	0,51 mm	UNE-EN ISO 5084:1997		
Width	300 cm / 118"			
Standard roll length	30 m / 32.8 yards			
Tensile strength (warp/weft)	190/165 daN/5 cm	UNE-EN ISO 13934-1:2013		
Tear strength (warp/weft)	10/10 daN	UNE-EN ISO 13937-2:2001		
Resistance to cold and heat after tropicalisation test	-30°C / +70°C -22°F / 158°F	UNE 53243-22:1978		
Colour fastness to artificial light - Xenotest	4 (Good) Grey scale 7 (Very good) Blue scale	UNE-EN ISO 105 B02:2014		
Colour fastness to artificial weathering - Xenotest	4-5 (Good-Excellent) Grey scale	UNE-EN ISO 105 B04:1998		
Antimicrobial activity	Up to 99% bacteria growth reduction	AATCC Test Method 100-2012		
	No fungi growth, fungistatic fabric - Grade 0	UNE-EN ISO 846:1998		
Fire classification	Class 1	UNE-EN 13773:2003		
i ii e ciassilication	B-s2,d0 (on substrate and with air chamber)	UNE-EN 13501-1:2007+A1:2009		

QUALITY MANAGEMENT SYSTEM

RecScreen®

ISO 9001:2015

SAFETY, HEALTH AND ENVIRONMENT		
Odour test at temperature of (40 ± 2)°C	2 (Perceptible, not unpleasant)	PV-3900:2000-08
Odour test at temperature of (80 ± 2)°C	2 (Perceptible, not unpleasant)	1 4-3500.2000-08
Ultraviolet protection factor - UPF	40 to 50 (Excellent protection)	AS-NZS 4399:1996

























TEST LABORATORIES









ADVANTAGES AND BENEFITS



Textile look and feel



Dimensional stability



Rolling quality



No cone effect



No colour



Printable fabrics



Easy to maintain



Energy saving



Cost saving



Stands the test of time







HEADQUARTERS:

Travessera de Gràcia, 18-20. 08021 Barcelona - Spain Phone +34 93 200 27 00 - Fax +34 93 202 19 32 export@recasens.com / cial@recasens.com

www.recasens.com