

cult

Déco N203 Denim 430

—
COLLECTION 2018-2021
FUSING STYLE AND INNOVATION
GLASSFIBRE
OF = 3-5%



**Make the latest
trends in architecture
and design a feature
of your space.
Meet Cult.**



Déco N203



GLASSFIBRE

OF = 3%

Technical specifications

TECHNICAL SPECIFICATION		UNITY		STANDARD	RESULT
composition				Glassfibre 36% - PVC 64%	
openness factor		%		NBN EN 410	3%
weight		g/m ²		NF EN 12127	435,9
thickness		mm		ISO 2286-3	0,551
density		yarn/cm	warp	ISO 7211/2	22
			weft		20
colour fastness to artificial light				ISO 105 B02	>7
tear strength	original	daN	warp	ISO 4674-1 method 2	3,3
			weft		3,65
elongation up to break	original	%	warp	ISO 1421	8,8
			weft		2,8
breaking strength	original	daN/5 cm	warp	ISO 1421	125
			weft		175
elongation up to break	after colour fastness to artificial light	%	warp	ISO 1421	8,7
			weft		2,7
breaking strength	after colour fastness to artificial light	daN/5 cm	warp	ISO 1421	120
			weft		185
tear strength	after climatic chamber -30°C	daN	warp	ISO 4674-1 method 2	3
			weft		3,8
elongation up to break	after climatic chamber -30°C	%	warp	ISO 1421	8,6
			weft		1,8
breaking strength	after climatic chamber -30°C	daN/5 cm	warp	ISO 1421	120
			weft		140
tear strength	after climatic chamber +70°C	daN	warp	ISO 4674-1 method 2	3,1
			weft		3,6
elongation up to break	after climatic chamber +70°C	%	warp	ISO 1421	8,9
			weft		1,9
breaking strength	after climatic chamber +70°C	daN/5 cm	warp	ISO 1421	130
			weft		125
fire classification	Europe			UNE-EN 13501-1:2007	C-s3,d0
	France			NF P92-503	M2
	Italy			UNI 9177	Class 1
	Germany			DIN 4102	B2
	UK			BS 5867	C
	USA			NFPA 701	FR
	Spain			UNE 13773	Clase 1
roll length	30 m				
cleaning	with soapy water				
confection	by heat, high frequency or ultrasonic welding				

These properties are given as indicative and don't have any contractual value

Déco N203 008034 linen | plum blossom





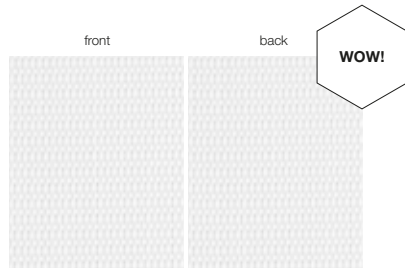
Déco N203



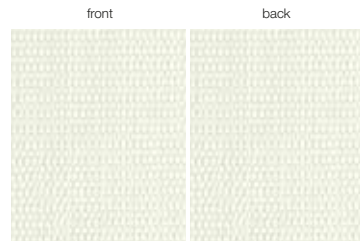
GLASSFIBRE

OF = 3%

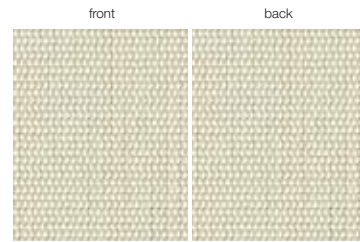
Colours & references



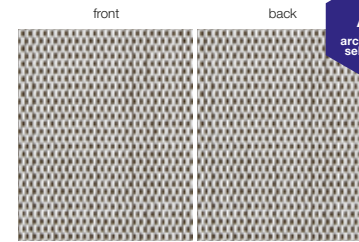
Déco N203 092092 WOW white



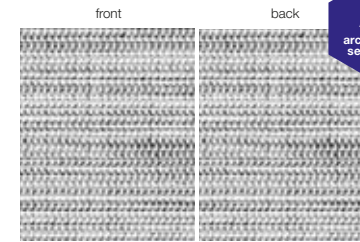
Déco N203 002002 white | white



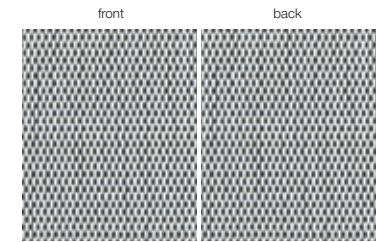
Déco N203 002008 white | linen



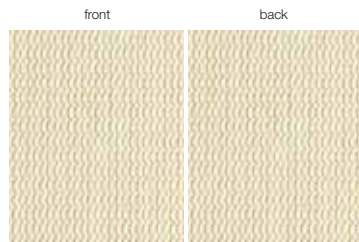
Déco N203 002035 white | melocake



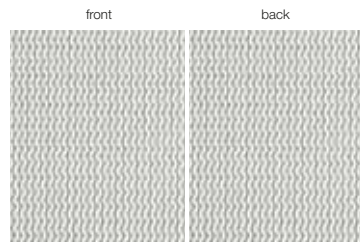
Déco N203 bicolor 002049 white | white-charcoal



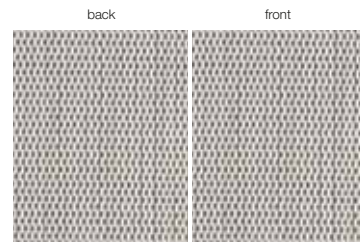
Déco N203 002010 white | charcoal



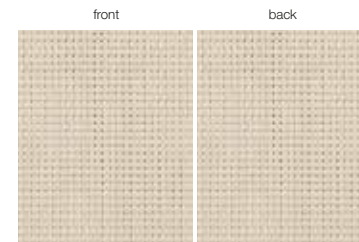
Déco N203 002003 white | sand



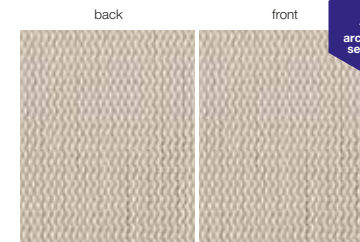
Déco N203 002007 white | pearl grey



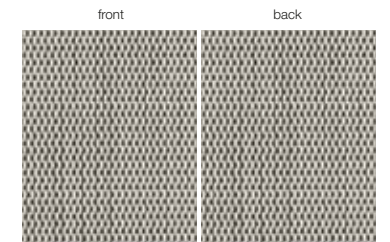
Déco N203 002001 white | grey



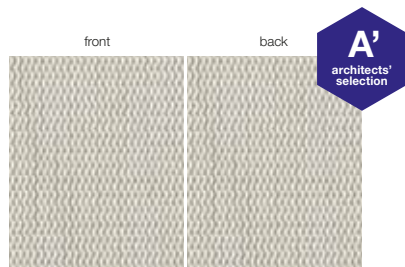
Déco N203 008008 linen | linen



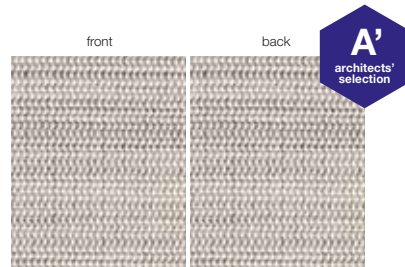
Déco N203 008034 linen | plum blossom



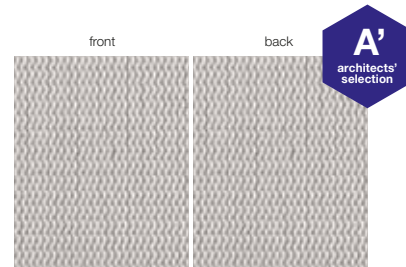
Déco N203 008010 linen | charcoal



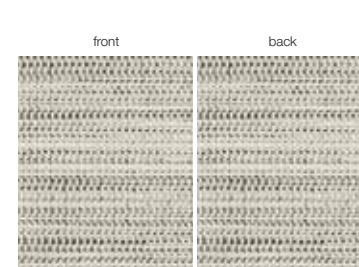
Déco N203 002032 white | wet sand



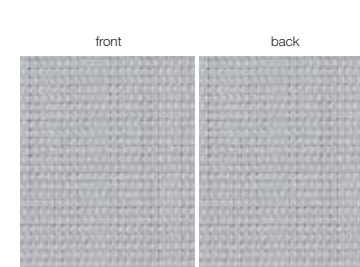
Déco N203 bicolor 002048 white | sand-bronze



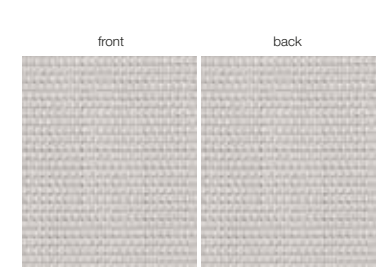
Déco N203 002034 white | plum blossom



Déco N203 bicolor 008049 linen | white-charcoal



Déco N203 007007 pearl grey | pearl grey



Déco N203 007008 pearl grey | linen

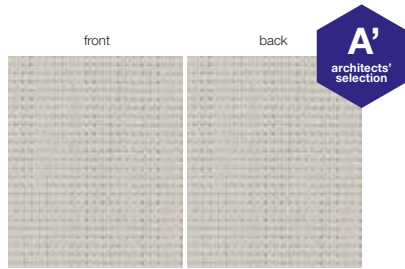
Déco N203



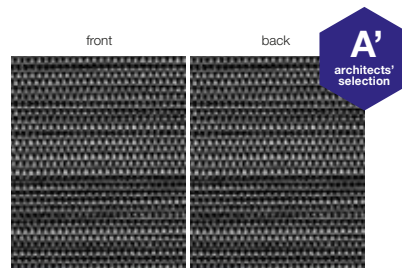
GLASSFIBRE

OF = 3%

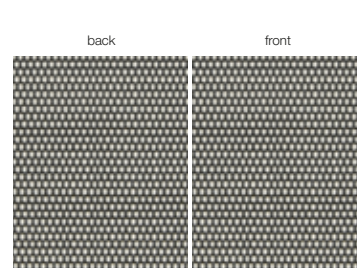
Colours & references



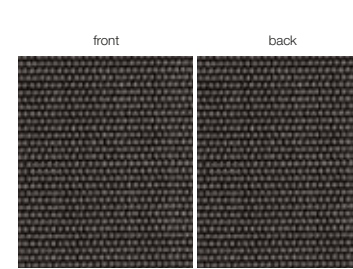
Déco N203 007003 pearl grey | sand



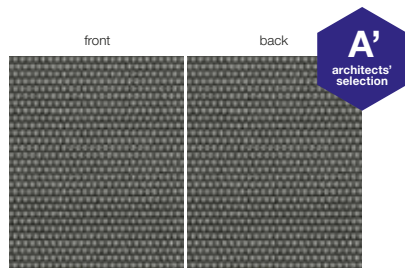
Déco N203 bicolor 010049 charcoal | white-charcoal



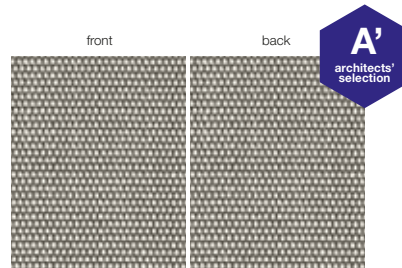
Déco N203 010008 charcoal | linen



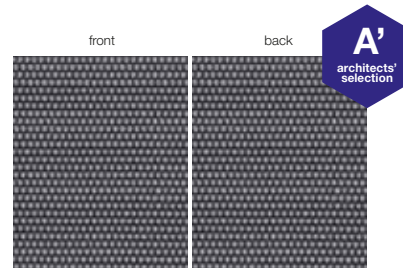
Déco N203 010001 charcoal | grey



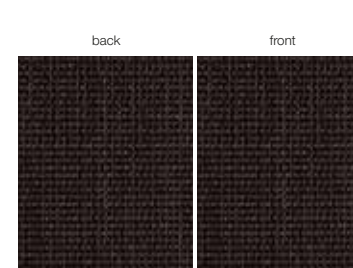
Déco N203 010031 charcoal | jade river



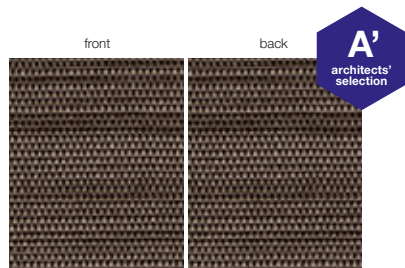
Déco N203 010024 charcoal | apricot



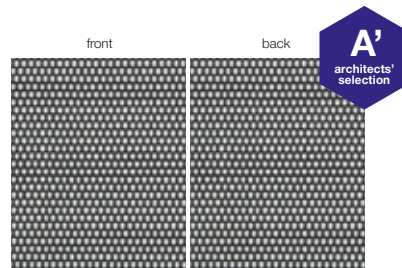
Déco N203 010034 charcoal | plum blossom



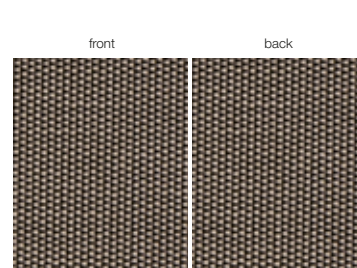
Déco N203 010011 charcoal | bronze



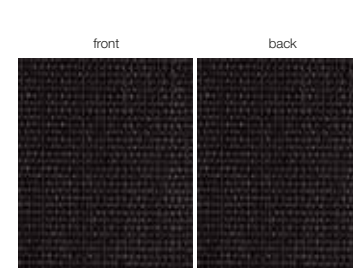
Déco N203 bicolor 010048 charcoal | sand-bronze



Déco N203 010023 charcoal | stone



Déco N203 010003 charcoal | sand



Déco N203 010010 charcoal | charcoal

Déco N203	250 cm	320 cm
092092 WOW white	•	
002002 white white	•	•
002008 white linen	•	•
002003 white sand	•	•
002007 white pearl grey	•	
002001 white grey	•	
002032 white wet sand	•	
002048 white sand-bronze	•	
002034 white plum blossom	•	
002035 white melocake	•	
002049 white white-charcoal	•	
002010 white charcoal	•	
008008 linen linen	•	
008034 linen plum blossom	•	
008010 linen charcoal	•	
008049 linen white-charcoal	•	
007007 pearl grey pearl grey	•	
007008 pearl grey linen	•	
007003 pearl grey sand	•	
010049 charcoal white-charcoal	•	
010008 charcoal linen	•	
010031 charcoal jade river	•	
010024 charcoal apricot	•	
010034 charcoal plum blossom	•	
010048 charcoal sand-bronze	•	
010023 charcoal stone	•	
010003 charcoal sand	•	
010001 charcoal grey	•	
010011 charcoal bronze	•	
010010 charcoal charcoal	•	

Déco N203



GLASSFIBRE

OF = 3%

Solar energetic properties

Déco N203 European Standard EN 14501 Calculation G-value according to EN 13363-1, version 7.0			SOLAR ENERGETIC PROPERTIES										VISUAL PROPERTIES	
			FABRIC		FABRIC + GLAZING									
					INTERIOR									
					G-factor = total solar energy transmittance									
references	colours	As = Solar Absorbance %	Rs = Solar Reflectance %	Ts = Solar Transmittance %	Glazing A - Gv = 0,85 - U = 5,8	Glazing B - Gv = 0,76 - U = 2,9	Glazing C - Gv = 0,59 - U = 1,2	Glazing D - Gv = 0,32 - U = 1,1	Tv = Visible Light Transmittance %	Tuv = UV Transmittance %				
	front	back	front	back	front	back	front	back	front	back				
092092	WOW white	front	8,6	68,2	23,2	0,34	0,36	0,35	0,25	21,1	11,7			
		back	8,6	68,2	23,2	0,34	0,36	0,35	0,25	21,1	11,7			
002002	white white	front	12,7	68,1	19,2	0,34	0,36	0,35	0,25	18,3	5,0			
		back	12,3	68,5	19,2	0,34	0,36	0,35	0,25	18,3	5,0			
002008	white linen	front	21,3	62,5	16,2	0,37	0,38	0,37	0,25	13,8	5,3			
		back	21,2	62,6	16,2	0,37	0,38	0,37	0,25	13,8	5,3			
002003	white sand	front	31,0	56,5	12,5	0,40	0,41	0,39	0,26	10,6	4,6			
		back	30,8	56,6	12,5	0,40	0,41	0,39	0,26	10,6	4,6			
002007	white pearl grey	front	35,9	51,8	12,3	0,43	0,44	0,40	0,26	10,2	5,0			
		back	35,6	52,1	12,3	0,42	0,44	0,40	0,26	10,2	5,0			
002001	white grey	front	48,2	43,5	8,4	0,47	0,48	0,43	0,27	7,8	3,7			
		back	48,0	43,6	8,4	0,47	0,48	0,43	0,27	7,8	3,7			
002032	white wet sand	front	39,7	46,0	14,3	0,44	0,45	0,42	0,27	11,5	5,6			
		back	39,7	46,0	14,3	0,44	0,45	0,42	0,27	11,5	5,6			
002048	white sand-bronze	front	41,3	45,9	12,8	0,46	0,47	0,42	0,27	10,6	5,6			
		back	41,3	45,9	12,8	0,46	0,47	0,42	0,27	10,6	5,6			
002034	white plum blossom	front	40,7	45,8	13,5	0,43	0,45	0,42	0,27	11,0	5,5			
		back	40,7	45,8	13,5	0,43	0,45	0,42	0,27	11,0	5,5			

GLAZING A = clear single glazing 4 mm	Gv = 0,85
GLAZING B = clear double glazing (4/12/4), space filled with air	Gv = 0,76
GLAZING C = double glazing (4/16/4), with a low emissivity coating in position 3, space filled with argon	Gv = 0,59
GLAZING D = reflective double glazing (4/16/4), with a low emissivity coating in position 2, space filled with argon	Gv = 0,32

Solar energetic properties

Déco N203 European Standard EN 14501 Calculation G-value according to EN 13363-1, version 7.0			SOLAR ENERGETIC PROPERTIES										VISUAL PROPERTIES	
			FABRIC		FABRIC + GLAZING									
					INTERIOR									
					G-factor = total solar energy transmittance									
references	colours	As = Solar Absorbance %	Rs = Solar Reflectance %	Ts = Solar Transmittance %	Glazing A - Gv = 0,85 - U = 5,8	Glazing B - Gv = 0,76 - U = 2,9	Glazing C - Gv = 0,59 - U = 1,2	Glazing D - Gv = 0,32 - U = 1,1	Tv = Visible Light Transmittance %	Tuv = UV Transmittance %				
	front	back	front	back	front	back	front	back	front	back				
002035	white melocake	front	56,2	33,4	10,4	0,49	0,51	0,45	0,28	9,3	5,6			
		back	56,2	33,4	10,4	0,49	0,51	0,45	0,28	9,3	5,6			
002049	white white-charcoal	front	36,9	48,7	14,4	0,45	0,45	0,41	0,27	13,2	5,6			
		back	36,9	48,7	14,4	0,45	0,45	0,41	0,27	13,2	5,6			
002010	white charcoal	front	59,2	32,5	8,3	0,49	0,51	0,46	0,28	7,8	4,6			
		back	59,2	32,5	8,3	0,49	0,51	0,46	0,28	7,8	4,6			
008008	linen linen	front	34,5	50,4	15,1	0,41	0,43	0,40	0,26	11,1	5,2			
		back	34,5	50,4	15,1	0,41	0,43	0,40	0,26	11,1	5,2			
008034	linen plum blossom	front	48,1	40,3	11,6	0,46	0,48	0,43	0,27	8,8	5,5			
		back	48,1	40,3	11,6	0,46	0,48	0,43	0,27	8,8	5,5			
008010	linen charcoal	front	64,4	28,3	7,3	0,51	0,53	0,47	0,28	6,5	4,5			
		back	64,4	28,3	7,3	0,51	0,53	0,47	0,28	6,5	4,5			
008049	linen white-charcoal	front	49,9	39,2	10,9	0,46	0,48	0,44	0,27	9,2	5,7			
		back	49,9	39,2	10,9	0,46	0,48	0,44	0,27	9,2	5,7			
007007	pearl grey pearl grey	front	61,3	32,2	6,5	0,49	0,51	0,46	0,28	4,8	3,8			
		back	61,3	32,2	6,5	0,49	0,51	0,46	0,28	4,8	3,8			
007008	pearl grey linen	front	52,2	39,1	8,7	0,46	0,48	0,43	0,27	6,0	3,9			
		back	52,2	39,1	8,7	0,46	0,48	0,43	0,27	6,0	3,9			

Déco N203



GLASSFIBRE

OF = 3%

Solar energetic properties

Déco N203 European Standard EN 14501 Calculation G-value according to EN 13363-1, version 7.0			SOLAR ENERGETIC PROPERTIES										VISUAL PROPERTIES	
			FABRIC		FABRIC + GLAZING									
					INTERIOR									
					G-factor = total solar energy transmittance									
references	colours	front	back	As = Solar Absorptance %	Rs = Solar Reflectance %	Ts = Solar Transmittance %	Glazing A - Gv = 0,85 - U = 5,8	Glazing B - Gv = 0,76 - U = 2,9	Glazing C - Gv = 0,59 - U = 1,2	Glazing D - Gv = 0,32 - U = 1,1	Tv = Visible Light Transmittance %	Tuv = UV Transmittance %		
007003	pearl grey sand	front	back	55,4	36,2	8,4	0,47	0,49	0,44	0,27	5,5	3,8		
		front	back	55,4	36,2	8,4	0,47	0,49	0,44	0,27	5,5	3,8		
010049	charcoal white-charcoal	front	back	81,0	14,7	4,3	0,63	0,62	0,52	0,30	4,2	3,9		
		front	back	81,0	14,7	4,3	0,63	0,62	0,52	0,30	4,2	3,9		
010008	charcoal linen	front	back	75,5	18,6	5,9	0,56	0,57	0,50	0,29	5,5	4,9		
		front	back	75,5	18,6	5,9	0,56	0,57	0,50	0,29	5,5	4,9		
010031	charcoal jade river	front	back	84,4	9,5	6,1	0,61	0,62	0,53	0,29	5,9	5,8		
		front	back	84,4	9,5	6,1	0,61	0,62	0,53	0,29	5,9	5,8		
010024	charcoal apricot	front	back	75,8	17,2	7,0	0,57	0,58	0,50	0,29	6,5	5,7		
		front	back	75,8	17,2	7,0	0,57	0,58	0,50	0,29	6,5	5,7		
010034	charcoal plum blossom	front	back	80,8	12,8	6,4	0,59	0,60	0,52	0,29	6,1	5,9		
		front	back	80,8	12,8	6,4	0,59	0,60	0,52	0,29	6,1	5,9		
010048	charcoal sand-bronze	front	back	83,3	13,2	3,5	0,64	0,63	0,53	0,30	3,3	3,3		
		front	back	83,3	13,2	3,5	0,64	0,63	0,53	0,30	3,3	3,3		
010023	charcoal stone	front	back	74,6	19,2	6,2	0,56	0,57	0,50	0,29	6,0	4,9		
		front	back	74,6	19,2	6,2	0,56	0,57	0,50	0,29	6,0	4,9		

GLAZING A = clear single glazing 4 mm	Gv = 0,85
GLAZING B = clear double glazing (4/12/4), space filled with air	Gv = 0,76
GLAZING C = double glazing (4/16/4), with a low emissivity coating in position 3, space filled with argon	Gv = 0,59
GLAZING D = reflective double glazing (4/16/4), with a low emissivity coating in position 2, space filled with argon	Gv = 0,32

Solar energetic properties

Déco N203 European Standard EN 14501 Calculation G-value according to EN 13363-1, version 7.0			SOLAR ENERGETIC PROPERTIES										VISUAL PROPERTIES	
			FABRIC		FABRIC + GLAZING									
					INTERIOR									
					G-factor = total solar energy transmittance									
references	colours	front	back	As = Solar Absorptance %	Rs = Solar Reflectance %	Ts = Solar Transmittance %	Glazing A - Gv = 0,85 - U = 5,8	Glazing B - Gv = 0,76 - U = 2,9	Glazing C - Gv = 0,59 - U = 1,2	Glazing D - Gv = 0,32 - U = 1,1	Tv = Visible Light Transmittance %	Tuv = UV Transmittance %		
010003	charcoal sand	front	back	77,2	17,0	5,8	0,62	0,61	0,51	0,29	5,4	5,0		
		front	back	77,2	17,0	5,8	0,62	0,61	0,51	0,29	5,4	5,0		
010001	charcoal grey	front	back	85,3	9,4	5,2	0,66	0,65	0,54	0,30	5,2	5,1		
		front	back	85,3	9,4	5,2	0,66	0,65	0,54	0,30	5,2	5,1		
010011	charcoal bronze	front	back	87,1	6,5	6,4	0,68	0,66	0,55	0,30	6,3	6,3		
		front	back	87,1	6,5	6,4	0,68	0,66	0,55	0,30	6,3	6,3		
010010	charcoal charcoal	front	back	88,8	5,7	5,5	0,69	0,67	0,55	0,30	5,5	5,5		
		front	back	88,8	5,7	5,5	0,69	0,67	0,55	0,30	5,5	5,5		

Denim 430



GLASSFIBRE

OF = 5%

Technical specifications

TECHNICAL SPECIFICATION		UNITY		STANDARD	RESULT
composition				Glassfibre 36% - PVC 64%	
openness factor		%		NBN EN 410	5%
weight		g/m ²		NF EN 12127	430
thickness		mm		ISO 2286-3	0,59
density		yarn/cm	warp	ISO 7211/2	22
			weft		20
colour fastness to artificial light				ISO 105 B02	>7
tear strength	original	daN	warp	ISO 4674-1 method 2	3,3
			weft		3,65
elongation up to break	original	%	warp	ISO 1421	8,8
			weft		2,8
breaking strength	original	daN/5 cm	warp	ISO 1421	125
			weft		175
elongation up to break	after colour fastness to artificial light	%	warp	ISO 1421	8,7
			weft		2,7
breaking strength	after colour fastness to artificial light	daN/5 cm	warp	ISO 1421	120
			weft		185
tear strength	after climatic chamber -30°C	daN	warp	ISO 4674-1 method 2	3
			weft		3,8
elongation up to break	after climatic chamber -30°C	%	warp	ISO 1421	8,6
			weft		1,8
breaking strength	after climatic chamber -30°C	daN/5 cm	warp	ISO 1421	120
			weft		140
tear strength	after climatic chamber +70°C	daN	warp	ISO 4674-1 method 2	3,1
			weft		3,6
elongation up to break	after climatic chamber +70°C	%	warp	ISO 1421	8,9
			weft		1,9
breaking strength	after climatic chamber +70°C	daN/5 cm	warp	ISO 1421	130
			weft		125
fire classification	Europe			UNE-EN 13501-1:2007	awaiting results
	France			NF P92-503	M2
roll length	30 m				
cleaning	with soapy water				
confection	by heat, high frequency or ultrasonic welding				

Denim 430 002208 wide wave



These properties are given as indicative and don't have any contractual value



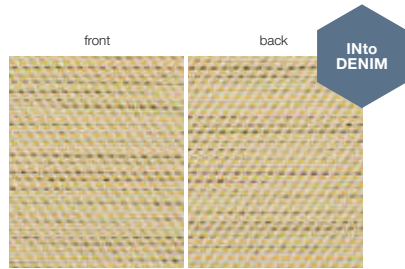
Denim 430



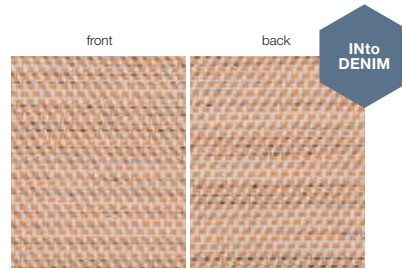
GLASSFIBRE

OF = 5%

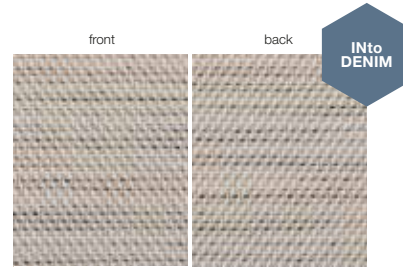
Colours & references



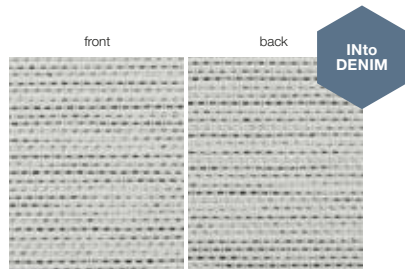
Denim 430 002201 casual corn



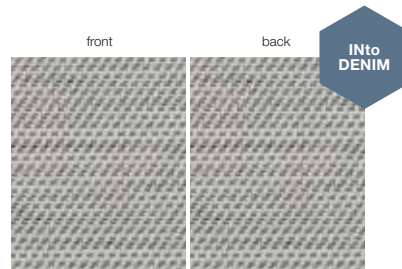
Denim 430 002203 coral rise



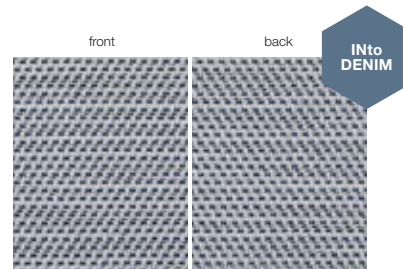
Denim 430 002206 skinny cream



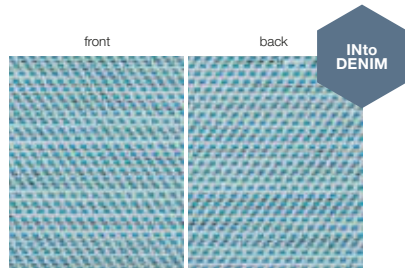
Denim 430 002209 slime slate



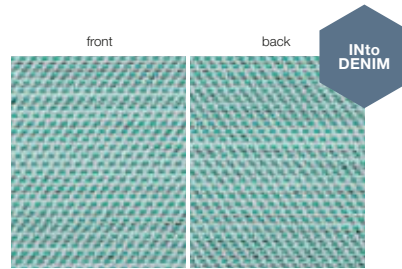
Denim 430 002207 straight grey



Denim 430 002208 wide wave



Denim 430 002204 aqua boot



Denim 430 002205 mineral fit

Denim 430	250 cm
002201 casual corn	•
002203 coral rise	•
002206 skinny cream	•
002209 slime slate	•
002207 straight grey	•
002208 wide wave	•
002204 aqua boot	•
002205 mineral fit	•

Solar energetic properties

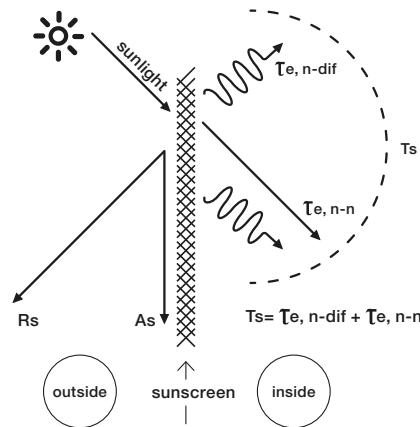
Denim 430 European Standard EN 14501 Calculation G-value according to EN 13363-1, version 7.0		SOLAR ENERGETIC PROPERTIES								VISUAL PROPERTIES		
		FABRIC			FABRIC + GLAZING				Tv = Visible Light Transmittance %			Tuv = UV Transmittance %
					INTERIOR							
references		As = Solar Absorbance %	Rs = Solar Reflectance %	Ts = Solar Transmittance %	G-factor = total solar energy transmittance				Tv = Visible Light Transmittance %	Tuv = UV Transmittance %		
colours	front				back	Glazing A - Gv = 0,85 - U = 5,8	Glazing B - Gv = 0,76 - U = 2,9	Glazing C - Gv = 0,59 - U = 1,2			Glazing D - Gv = 0,32 - U = 1,1	
002201	casual corn	front	28,5	53,0	18,5	0,43	0,43	0,40	0,26	17,0	6,4	
		back	29,6	51,9	18,5	0,43	0,43	0,40	0,26	17,0	6,4	
002203	coral rise	front	28,9	52,1	19,0	0,43	0,44	0,40	0,26	15,3	6,7	
		back	29,9	51,1	19,0	0,43	0,44	0,40	0,26	15,3	6,7	
002206	skinny cream	front	36,3	47,3	16,4	0,46	0,46	0,42	0,27	14,5	6,9	
		back	35,1	48,5	16,4	0,46	0,46	0,42	0,27	14,5	6,9	
002209	slime slate	front	27,6	54,6	17,8	0,42	0,43	0,39	0,26	17,3	6,4	
		back	27,2	55,0	17,8	0,42	0,43	0,39	0,26	17,3	6,4	
002207	straight grey	front	44,2	42,4	13,4	0,48	0,49	0,43	0,27	12,7	6,1	
		back	45,1	41,5	13,4	0,48	0,49	0,43	0,27	12,7	6,1	
002208	wide wave	front	46,5	39,3	14,2	0,50	0,50	0,44	0,27	13,1	7,1	
		back	47,3	38,5	14,2	0,50	0,50	0,44	0,27	13,1	7,1	
002204	aqua boot	front	32,2	50,3	17,5	0,44	0,45	0,41	0,26	13,7	6,5	
		back	33,0	49,5	17,5	0,44	0,45	0,41	0,26	13,7	6,5	
002205	mineral fit	front	35,2	47,4	17,4	0,46	0,46	0,42	0,27	14,5	6,5	
		back	35,2	47,4	17,4	0,46	0,46	0,42	0,27	14,5	6,5	

Working of a sunscreen



Sunscreen = protection against sunrays

Sunscreen means protection against the sunrays, so the function is the protection against light and heat, which is expressed in several properties.



Rs	Solar reflectance
As	Solar absorptance
Ts	Solar transmittance
Te, n-dif	Diffuse solar transmittance
Te, n-n	Normal solar transmittance

Classes indicate effect of a sunscreen

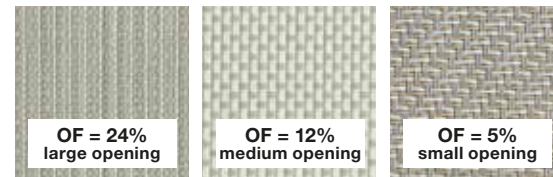
Based on certain properties, the screen can be split up in classes, from 0 to 4. Those classes are used, starting from the norm EN 14501, to indicate the effect of a certain sunscreen.

influence on thermal and visual comfort	
Class 0	very little effect
Class 1	little effect
Class 2	moderate effect
Class 3	good effect
Class 4	very good effect

Visual properties

Openness factor

The openness of a screen is indicated by the openness factor = **OF**. The openness coefficient is the relative area of the openings in the fabric seen under a given incidence. The openness factor is seen under a normal incidence.



The sunrays are subdivided in: **Visible light, UV-light** and **IR-light**.

Visible light (55% of the sun-energy) is that part for which our eyes are most sensitive. How larger the light intensity, how more detrimental for our eyes.

The factor Visible Light Transmittance = **Tv**, is the ratio of visible light that will be transmitted. How lower this factor can be kept, how better for the eyes.

UV-light (3% of the sun-energy) is the part of radiation which is detrimental for our health. This factor is indicated by the UV Transmittance = **Tuv**. This is the quantity UV-light transmitted by the sunscreen.

IR-light is invisible. This is however 42% of the sun-energy. These rays care for the reheating of solid substances and gases.

Influence of colours

The choice of the colour has direct influence on the criteria which justify the use of sunscreen protection:

- Protection against visible light, expressed by the factor **Tv**.
- Protection against sun-energy, expressed by the **G** value.
- Protection against secondary heat, expressed by the factor **Qi**.
- Protection against UV-light, expressed by the factor **Tuv**.

Visual properties: classes

Glare control

The capacity of the solar protection device to control the luminance level of openings and to reduce the luminance contrasts between different zones within the field.

Tv, n-n	Tv, n-dif			
	Tv, n-dif < 0,02	0,02 ≤ Tv, n-dif < 0,04	0,04 ≤ Tv, n-dif < 0,08	Tv, n-dif ≥ 0,08
Tv, n-n > 0,10	0	0	0	0
0,05 < Tv, n-n ≤ 0,10	1	1	0	0
Tv, n-n ≤ 0,05	3	2	1	1
Tv, n-n = 0,00	4	3	2	2

Privacy at night

Night privacy is the capacity of an internal or external blind or a shutter in the fully extended position or fully extended and closed position to protect persons, at night in normal light conditions from external view. External views means the ability of an external observer located 5m from the fully extended and closed product, to distinguish a person or object standing 1m behind the protection device in the room.

Tv, n-n	Tv, n-dif		
	0 < Tv, n-dif ≤ 0,04	0,04 < Tv, n-dif ≤ 0,15	Tv, n-dif > 0,15
Tv, n-n > 0,10	0	0	0
0,05 < Tv, n-n ≤ 0,10	1	1	1
Tv, n-n ≤ 0,05	2	2	2
Tv, n-n = 0,00	4	3	2

Visual contact with the outside

Visual contact with the outside is the capacity of the solar protection device to allow an exterior view when it is fully extended. This function is affected by different light conditions during the day.

Tv, n-n	Tv, n-dif		
	0 < Tv, n-dif ≤ 0,04	0,04 < Tv, n-dif ≤ 0,15	Tv, n-dif > 0,15
Tv, n-n > 0,10	4	3	2
0,05 < Tv, n-n ≤ 0,10	3	2	1
Tv, n-n ≤ 0,05	2	1	0
Tv, n-n = 0,00	0	0	0

Daylight utilisation

Daylight utilisation is characterised by:

- the capacity of the solar protection device to reduce the time period during the artificial light is required.
- the capacity of the solar protection device to optimise the daylight which is available.

CLASS	0	1	2	3	4
Tv, dif-h	Tv, dif-h < 0,02	0,02 ≤ Tv, dif-h < 0,10	0,10 ≤ Tv, dif-h < 0,25	0,25 ≤ Tv, dif-h < 0,40	Tv, dif-h ≥ 0,40




Working of a sunscreen



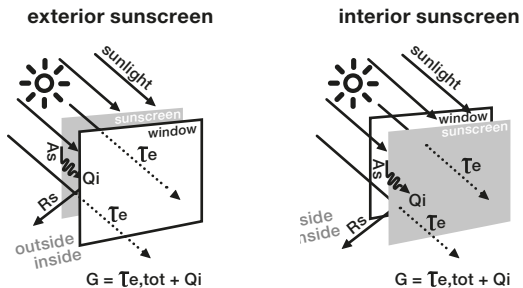
Thermal comfort

Fabric

Energy radiated by the sun, will be split up in 3 factors:

factor 1:	factor 2:	factor 3:
 <p>As = Solar absorptance is the ratio of the absorbed flux to the incident flux.</p>	 <p>Rs = Solar reflectance is the fraction of the incident solar radiation that is directly reflected by the component.</p>	 <p>Ts = Solar transmittance is the sum of the (normal) direct solar transmittance and the diffuse solar transmittance. This is the fraction of the total transmitted energy to the total incident solar radiation.</p>
These 3 factors together are always 100%		

The G-factor



Rs	Solar reflectance
As	Solar absorptance
Te	Direct solar transmittance
Qi	Secondary heat transfer factor
G	G-factor = total solar energy transmittance

Sunscreens are always used in combination with a glazing. These together will prevent a large quantity of energy, sent by the sun to the earth, which is indicated by the: Total Solar Energy Transmittance, or **G-factor**.

The **G** value is the ratio between the total solar energy transmitted into a room through a window and the incident solar energy on the window. The **G_{tot}** is the solar factor of the combination of glazing and solar protection device.

The **G_v** is the solar factor of the glazing alone. The shading coefficient is defined as the ratio of the solar factor of the combined glazing and solar protection device **G_{tot}** to that of the glazing alone **G_v**.

The total solar energy transmitted through a window consists of two parts:

- 1) Radiation: measured by the solar transmittance: **Te,tot**
- 2) Heat: measured by the secondary heat transfer: **Qi**

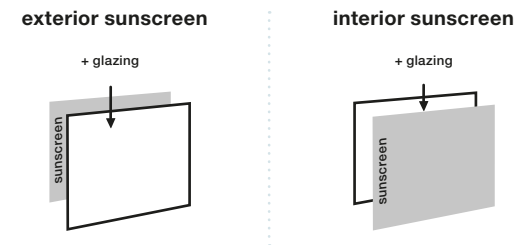
$$G = \overline{T_{e,tot}} + Q_i$$

The factor **Te,tot**, is the quantity of energy, which will pass the combination solar protection device and window.

The factor **Qi** is the quantity of heat which is released by the absorption of energy in the sunscreen protection system = combination sunscreen + glazing.

The **G-factor** is the most important factor to explain the efficiency of a combination sunscreen + glazing, as protection against the energy of the sun. The **G-factor** divided into his components explains the difference in efficiency between exterior and interior sunscreen.

$$G = \overline{T_{e,tot}} + Q_i$$



The direct solar transmittance **Te,tot** is the same for interior and exterior use of sunscreens.

The secondary heat factor **Qi** for interior sunscreen is bigger then for exterior sunscreen. For interior use, the heat, produced by the absorption of energy, will be transmitted to the room inside. By exterior use, the heat will be transmitted to the outside, without any inconvenience at the inside.

Also the colour of the sunscreen has an influence on the **G-factor**. Dark colours will absorb a lot of sun energy and will transmit this to heat. If the screen is used for exterior, heat will have no influence inside the room, contrary to a screen used for interior. This is why a darker screen is ideal for exterior use and a lighter screen for interior use.



Thermal comfort: classes

Total Solar energy Transmittance = G-factor

CLASS	0	1	2	3	4
G _{tot}	G _{tot} ≥ 0,50	0,35 ≤ G _{tot} < 0,50	0,15 ≤ G _{tot} < 0,35	0,10 ≤ G _{tot} < 0,15	G _{tot} < 0,10

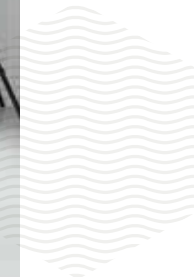
Secondary Heat transfer = Qi

CLASS	0	1	2	3	4
Qi	Qi ≥ 0,30	0,20 ≤ Qi < 0,30	0,10 ≤ Qi < 0,20	0,03 ≤ Qi < 0,10	Qi < 0,03

Normal Solar transmittance = protection against direct transmission

The ability of a solar protection device to protect persons and surroundings from direct irradiation is measured by the direct/direct solar transmittance of the device in combination with the glazing. **Te,n-n** is used as measure for this property.

fusing style and innovation





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