

TEXTILES TO TRANSFORM



DUROTECH[®] MESHTOP

Enduring Strength Through Innovative Fabrics

APPROVED COLOURS FOR TEXTILE ARCHITECTURE



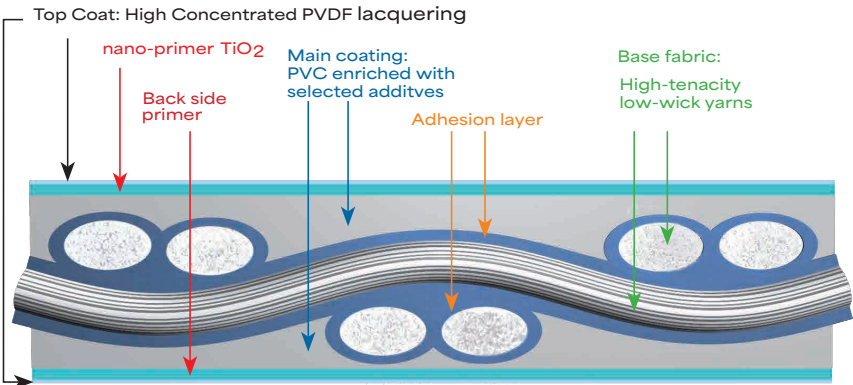
The Products For textile architecture are exposed to wind and weather for many years. To ensure these challenging quality requirements, each colour undergoes extensive Accelerated weathering tests before being released. The Textile Architecture approved colours swatch book includes all colours that passed this test successfully. If your colour is not available, we will gladly arrange colour matching and testing.



SECTION VIEW OF A DUROTECH® MESHTOP

An architectural membrane performs only as good as its components. That is why the Duro Tech Mehatop feature proven and tested components.

The construction has a great influence on the performance. The section view shows how structural fabrics perform at their best:



Top Coat: High Concentrated PVDF lacquering

A top coat lacquering performs at its best, if:

- Top finish consists of two layers to ensure homogeneity and maximum protection
- Top finish is as thick as necessary and as thin as possible to remain flexible
- Higher coating mass on the face side increases protection against weathering and degradation
- Adhesion layer maximises bonding between base fabric and main coating and hence increases the seam strength



DUROTECH®

			GSM 700 Type I	GSM 900 T ype II	GSM 1000 Type III	FR 1400 Type IV	FR 1600 Type V
	Measurement methods/ Classifications	Unit					
Material composition							
Finish	Multi-composed top coating lacquering with Titaniumdioxide (TiO ₂) reinforcement and highly concentrated PVDF mixture on both sides, weldable without grinding.						
Base fabric	ISO 2076		Polyester Plain Weave L1/1	Polyester Panama Weave P 2/2	Polyester Panama Weave P 2/2	Polyester Panama Weave P 3/3	Polyester Panama Weave P 3/4
Yarn count	ISO 2060	dtex	1100	1100	1670	1670	2200
Low-wick yarn treatment	Methylenblue liquid method	mm	< 5	< 5	< 5	< 5	< 5
Total weight	ISO 2286-2	g/m ²	700	900	1050	1350	1550
Fabric thickness		mm	0.6	0.8	0.9	1.1	1.3
CMD ratio (Front:Back)			3:2	3:2	3:2	3:2	3:2
Mechanical properties							
Tensile strength (warp/weft)	ISO 1421/V1	N/50 mm	3000 / 3000	4300 / 4200	6000 / 5500	8000 / 7000	10000 / 9000
Elongation at break (warp/weft)	ISO 1421/V1	%	22 / 30	23 / 29	24 / 32	24 / 33	27 / 29
Tear strength (warp/weft)	53363	N	300 / 300	500 / 500	900 / 800	1200 / 1200	2000 / 2000
Adhesion	PA 09.03	N/cm	20	25	25	26	30
Crack resistance	53359 A	No. of folding	100,000 T - no cracks	100,000 T - no cracks	100,000 T - no cracks	100,000 T - no cracks	100,000 T - no cracks
Physical properties							
Light fastness	ISO 105 B02		> 6	> 6	> 6	> 6	> 6
White index	CIE		≥ 90	≥ 90	≥ 90	≥ 90	≥ 90
Solar transmission	ASHRAE 74 1988 / ISO EN 410	%	9 / 9	7 / 7	6 / 6	5 / 5	3 / 3
Solar reflection	ASHRAE 74 1988 / ISO EN 410	%	83 / 81	85 / 82	84 / 82	86 / 84	86 / 84
Solar absorption	ASHRAE 74 1988 / ISO EN 410	%	8 / 10	8 / 11	10 / 12	9 / 11	11 / 13
UV transmission	410	%	0	0	0	0	0
Shading coefficient Fc, single glazing (external/internal)	13363-1		0.12 / 0.30	0.10 / 0.28	0.10 / 0.27	0.08 / 0.26	0.06 / 0.55
Solar reflectance index (SRI)	ASTM E 1980-01		114	113	112	113	110
Global thermal resistivity, R-value (vertical/horizontal)	ISO 6946	[m ² K/W]	0.175 / 0.206	0.176 / 0.207	0.177 / 0.208	0.178 / 0.209	0.179 / 0.210
Global thermal transmittance, U-value, (vertical/horizontal)	ISO 6946	[W/m ² K]	5.711 / 4.852	5.677 / 4.827	5.658 / 4.813	5.617 / 4.783	5.596 / 4.769
Cold resistance	1876-1	°C	-40	-40	-40	-40	-40
Heat resistance	PA 07.04	°C	+70	+70	+70	+70	+70
Fire resistance	Classification		DIN 4102-1:B1 EN 13501-1:B S2 DC UNI 9177:CL2 NFP 92507:M2 BS 7837 California T19 SIS 650082 NFPA 701 Method 2 GOST	DIN 4102-1:B1 EN 13501-1:B S2 DC UNI 9177:CL2 NFP 92507:M2 BS 7837 California T19 CAN ULC S109 NFPA 701 Method 2 GOST	DIN 4102-1:B1 EN 13501-1:B S2 DO UNI 9177:CL2	DIN 4102-1:B1 EN 13501-1:B S3 DO UNI 9177:CL2	DIN 4102-1:B1 EN 13501-1:B S2 DO BS 7837 California T19 GOST



DUROTECH® Silhouetteon

DUROTECH® Silhouetteon is a highly flexible membrane which shows good cleanability thanks to the performance enhancing PVDF content in the top finish. The DUROTECH® Silhouetteon line has been designed to meet the requirements of small and medium sized projects, especially

for sun shading and car park canopies. As all materials DUROTECH® Silhouetteon is weldable with all common welding technologies. This material is the economical solution for your membrane project.



DUROTECH®			SILHOUETTEON GSM 700 TYPE I	SILHOUETTEON GSM 900 TYPE II	SILHOUETTEON GSM 1000 TYPE III
	Measurement Methods/ Classifications	Unit			
Material composition					
Type of Coating			PVC	PVC	PVC
Type of Finish			PVDF tempered lacquer on top side, protected against microbial and fungal attack, UV-protected	PVDF tempered lacquer on top side, protected against microbial and fungal attack, UV-protected	PVDF tempered lacquer on top side, protected against microbial and fungal attack, UV-protected



DUROTECH[®] carpark plus



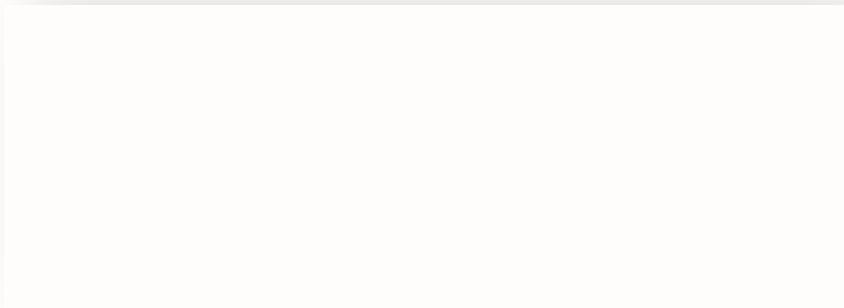
907907 White 300 cm

DUROTECH[®] carpark plus

Coating		PVC
Finish		PVDF-lacquer on both sides, antimicrobial, UV-protected
Flame retardancy		AS 1530 part 2, AS 1530 part 3, BS 7837
Total weight		750 g/m ² EN ISO 2286-2
Tensile strength	warp/weft	2800 / 2700 N/50 mm
Tear strength	warp/weft	300 / 270 N
Temperature resistance		-40 °C / +70 °C
Adhesion		20 N/cm PA 09.03 (intern)
Light fastness		>6
Crack resistance		>100.000 No cracks
Base fabric		100 % PES
For base fabric		low-wick
Standard width		300 cm



DUROTECH® light shade GSM



WeiB

160 cm, 320cm



Silver

160 cm



Brilliantgetb

160 cm



Blau

160 cm



Mango

160 cm



Grün

160 cm



Rot

160 cm



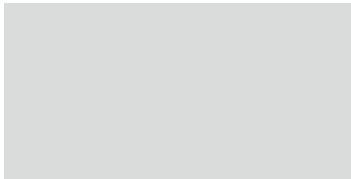
Hollandgrün

160 cm



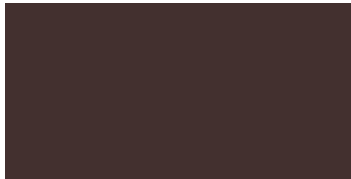
Turkischrot

160 cm



Lichtgrau

160 cm



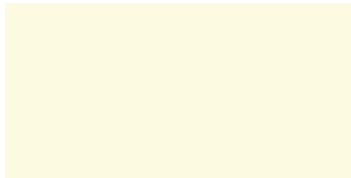
Braun

160 cm



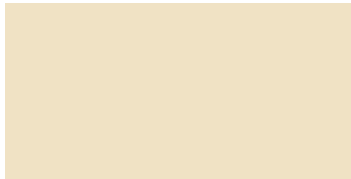
Schwarz

160 cm



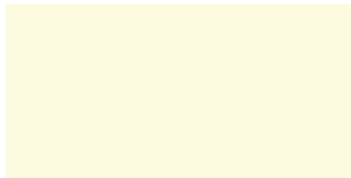
Nature

160 cm



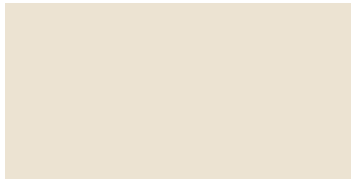
Dune

160 cm



Creme

160 cm



Beige

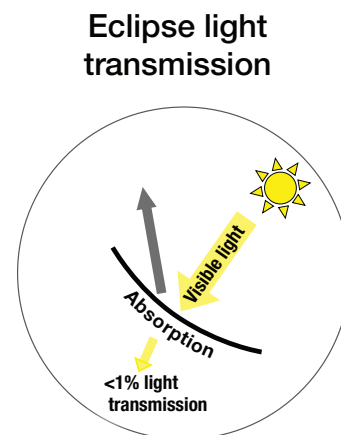
160 cm



DUROTECH® lightshade ECLIPSE GSM

908908 Weiß

320 cm



112112 Natur

320 cm

126126 Beige

320 cm

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