T3117T Type 3 Fluo2Max

Fabric	100% PES/1670dtex 1500 denier	Low wick treated	
Weaving style	P2/2	DIN ISO 9354	
Total Weight	1150g/m² 33.9oz/yd²	DINEN ISO 2286/2 1998 ASTM D751	
Thickness	1 mm 39.1 mil	DIN EN ISO 2286/3 1998 ASTM D751	
Characteristics	ABUV	Anti Mold, UV, double side High quality pvc coating	
Lacquering	Face/Back	Front TiO2 PVDF back PVDF Weldable with out processing	
Embossing	High Gloss		
Tensile strength Strip Warp	6000 N/5cm ; 685 lb/in 6650 N/5 cm ; 759 lb/in 6210 N/5 cm ; 709 lb/in	EN ISO 1421/1 1998 ASTM D751 ASTM D4851	1.6mm/sec 5.0mm/sec 0.85mm/sec
Tensile strength Strip Weft	5500 N/5cm ; 628 lb/in 5705 N/5 cm ; 652 lb/in 5880 N/5 cm ; 671 lb/in	EN ISO 1421/1 1998 ASTM D751 ASTM D4851	1.6mm/sec 5.0mm/sec 0.85mm/sec
Elongation at Break Warp	27.00% 27.40%	ASTM D751 ASTM D4851	5.0mm/sec 0.85mm/sec
Elongation at Break Weft	35.30% 33.40%	ASTM D751 ASTM D4851	5.0mm/sec 0.85mm/sec
Tensile Strength Grab Warp	4200 N / 944 lb (slips out of jaws)	ASTM D751	5.0mm/sec
Tensile Strength Grab Weft	4200 N / 944 lb (slips out of jaws)	ASTM D751	5.0mm/sec
Tear strength Trapezoid warp Tear strength Tongue Warp Tear strength Trapezoid warp	900 N / 202.3 lb 1119 N / 251.6 lb 741 N / 166.5 lb	DIN 53363 2003 ASTM D751 ASTM D751/ASTM D4851	 0.85mm/sec 5.0mm/sec
Tear strength Trapezoid weft Tear Strength Tongue Weft Tear strength Trapezoid weft	800 N / 187.1 lb 1149 N / 258.3 lb 832 N / 187.1 lb	DIN 53363 2003 ASTM D751 ASTM D751/ASTM D4851	1.6mm/sec 0.85mm/sec 5.0mm/sec
Adhesion	120 N/5cm ; 13,7 lb/in 141 N/5 cm ; 16.1 lb/in 158 N/5 cm ; 18.1 lb/in	EN ISO 2411 2000 ASTM D751 ASTM D4851	1.6mm/sec 5.0mm/sec 0.83mm/sec
Temperature resistance	Minus -30C to 70C above Minus -22F to 158F above	DIN EN 1876/2 1998 ASTM D751	
Hydrostatic Resistance	> 10 m water column (1 bar)	ASTM D751	
Bursting strength	9245 N / 2078 lb	ASTM D751	
Solar Transmission Visible light Transmission Solar Reflection UV Transmission Solar Reflectance Index Solar Factor	4.80% 4.20% 83% 0% 106 7%	DIN EN 410 DIN EN 410 DIN EN 410 DIN EN 410 ASTM E 1980 DIN EN 13363-1	
U value Vertical Airflow U value Horizontal Airflow	5.5W/(m².K) 4.6 W/(m².K)	DIN EN ISO 6946 DIN EN ISO 6946	
Flex Resistance (x 100000 cycles)	No Cracks	DIN 53359-A	
Fungal Resistance	Degree 0, Excellent	ISO 846-A	
Application	Tensile Architecture/Architectural Membrane		

*Above figures are indicative values based upon averages of previous production samples

T3119T Type 3 Opaque Fluo2Max

Fabric	100% PES/1670dtex 1500 denier	Low wick treated	
Weaving style	P2/2	DIN ISO 9354	
Total Weight	1300g/m² 38.3oz/yd²	DINEN ISO 2286/2 1998 ASTM D751	
Thickness	1.1 mm 43.3 mil	DIN EN ISO 2286/3 1998 ASTM D751	
Characteristics	ABUV	Anti Mold, UV, double side High quality pvc coating	
Lacquering	Face/Back	Front TiO2 PVDF back PVDF Weldable with out processing	
Embossing	High Gloss		
Tensile strength Strip Warp	6000 N/5cm ; 685 lb/in 6650 N/5 cm ; 759 lb/in 6210 N/5 cm ; 709 lb/in	EN ISO 1421/1 1998 ASTM D751 ASTM D4851	1.6mm/sec 5.0mm/sec 0.85mm/sec
Tensile strength Strip Weft	5500 N/5cm ; 628 lb/in 5705 N/5 cm ; 652 lb/in 5880 N/5 cm ; 671 lb/in	EN ISO 1421/1 1998 ASTM D751 ASTM D4851	1.6mm/sec 5.0mm/sec 0.85mm/sec
Elongation at Break Warp	27.00% 27.40%	ASTM D751 ASTM D4851	5.0mm/sec 0.85mm/sec
Elongation at Break Weft	35.30% 33.40%	ASTM D751 ASTM D4851	5.0mm/sec 0.85mm/sec
Tensile Strength Grab Warp	4200 N / 944 lb (slips out of jaws)	ASTM D751	5.0mm/sec
Tensile Strength Grab Weft	4200 N / 944 lb (slips out of jaws)	ASTM D751	5.0mm/sec
Tear strength Trapezoid warp Tear strength Tongue Warp Tear strength Trapezoid warp	900 N / 202 lb 1119 N / 251.6 lb 741 N / 166.5 lb	DIN 53363 2003 ASTM D751 ASTM D751/ASTM D4851	1.6mm/sec 0.85mm/sec 5.0mm/sec
Tear strength Trapezoid weft Tear Strength Tongue Weft Tear strength Trapezoid weft	800 N / 179 lb 1149 N / 258.3 lb 832 N / 187.1 lb	DIN 53363 2003 ASTM D751 ASTM D751/ASTM D4851	1.6mm/sec 0.85mm/sec 5.0mm/sec
Adhesion	120 N/5cm ; 13,7 lb/in 141 N/5 cm ; 16.1 lb/in 158 N/5 cm ; 18.1 lb/in	EN ISO 2411 2000 ASTM D751 ASTM D4851	1.6mm/sec 5.0mm/sec 0.83mm/sec
Temperature resistance	Minus -30C to 70C above Minus -22F to 158F above	DIN EN 1876/2 1998 ASTM D751	
Hydrostatic Resistance	> 10 m water column (1 bar)	ASTM D751	
Bursting strength	9245 N / 2078 lb	ASTM D751	
Solar Transmission Visible light Transmission Solar Reflection UV Transmission Solar Reflectance Index Solar Factor	0.00% 0.00% n.a. 0% n.a. n.a.	DIN EN 410 DIN EN 410 DIN EN 410 DIN EN 410 ASTM E 1980 DIN EN 13363-1	
U value Vertical Airflow U value Horizontal Airflow	5.5W/(m².K) 4.6 W/(m².K)	DIN EN ISO 6946 DIN EN ISO 6946	
Flex Resistance (x 100000 cycles)	No Cracks	DIN 53359-A	
Fungal Resistance	Degree 0, Excellent	ISO 846-A	
Application	Tensile Architecture/Architectural Membrane		

*Above figures are indicative values based upon averages of previous production samples

B. EFFECTIVENESS OF THE WARRANTY

1. This Limited Warranty may not be enforced against SIOEN if SIOEN has not received any scheduled payment for the product under the purchase order or contract for supply of the product.

2. The customer must possess a duly filled, approved, stamped signed Warranty Certificate edited by SIOEN connected with the project (project being clearly identified). This document regularize the warranty terms for the mentioned project and automatically exclude any other submitted document, correspondence, verbal or written agreement in this regard. Without this valid Certificate, the General Sales Conditions of SIOEN, available on the backside of our Invoices or upon request applies. The customer can apply for a Warranty Certificate using the SIOEN Warranty Application Form available upon request at warranty.arch@sioen.com or directly with the local SIOEN sales contact.

3. In case of a complaint, it should be addressed in a writing to the address hereunder (B.7.) within thirty (30) days after the alleged Defect being discovered.

4. After notification of an alleged Defect, SIOEN shall be entitled to inspect the Defective Membrane and have access to all documents related to conception, the fabrication, the placement, the periodic maintenance and control of the project (project engineering study, inspection and maintenance reports…) in order to take appropriate steps for timely corrective measures. In the event SIOEN representatives are denied the right to inspect alleged Defects, inspection and maintenance reports, this Limited Warranty is null, void and of no legal effect with respect to such Defect.

5. The terms and provisions of this Limited Warranty shall be governed by, construed under and enforced in accordance with the laws of Belgium, without regard to the Uniform Law for International Sales under the United Nations Convention. Competent court for any claim with respect to this Warranty shall be the jurisdiction of Bruges, Belgium.

6. Any questions, inquiries or claims under this Warranty shall be directed to:

   SIOEN INDUSTRIES, FABRIEKSTRAAT 23, B-8850 ARDOOIE, BELGIUM

   warranty.arch@sioen.com

SIOEN INDUSTRIES
FABRIEKSTRAAT 23, B-8850 ARDOOIE, BELGIUM TEL: +32 51 740 900 FAX: +32 51 740 964 info@sioen.com www.sioen.com

PERMANENT ARCHITECTURE MEMBRANES

20 YEAR LIMITED WARRANTY

DISCLOSURE FORM | THIS IS NOT A WARRANTY CERTIFICATE

Subject to all the terms and conditions contained herein and with specific reference to the percentage of SIOEN Liability chart contained herein, SIOEN INDUSTRIES NV (SIOEN) hereby provide a **Twenty (20) Years Warranty** for:

- SIOEN Architectural Membranes **Fluomax™ Opaque**, referenced under the production code **T2119F, T3119F, T4119F and T5119F** with the color code white **9909,**

- and for the SIOEN Architectural Membranes **Fluo2max™** translucent **T2117T, T2118T, T2119T, T3117T, T3119T, T4117T, T4119T, and T5117T, T5119T** with the color code white **9922**.

A. CONDITIONS OF APPLICATION OF THE WARRANTY

1. This Warranty is exclusively applicable if the structural Membrane is installed for its intended use, under constant characterized prestress.

2. The customer notified SIOEN, prior to purchasing the Membrane, with identifying intended use and installation location. Customer shall receive a written confirmation from SIOEN that the Warranty will be in effect. Customers purchasing a custom color or a special architectural fabric should request from SIOEN a written notification as to whether the requested membrane is covered by the terms and conditions of this warranty.

3. For this limited warranty to be applicable, the defined tensile membrane structure shall be designed and constructed in accordance with local applicable building code for membrane structures and following the handling and maintenance manual edited by SIOEN. Proof of maintenance and inspection must be recorded and shall be made available at any time upon request by SIOEN.

4. Moreover, to be applicable, it is the customer's responsibility to ensure that the Membrane has been designed and installed with an initial safety coefficient of at least four (4) with regards to initial design strength.

C. EXTENT OF THIS WARRANTY

1. Initial properties: SIOEN warrants that the delivered Membrane, manufactured in its production facilities, meet the technical specifications stated in its product data sheet at the time of shipment from SIOEN warehouse.

2. Tensile strength: SIOEN warrants the retention of at least 75% of the Membrane's initial design strength (ASTM D-751 Cut Strip Method or D4851 Breaking Force Method) for a period of twenty (20) years as of its delivery from SIOEN warehouse.

   Residual tensile strength measurements can only be performed in plain fabric panels, which exclude areas where the Membranes could have been cut or damaged during the installation phase or areas where the coated fabrics have not been under constant tension (as for example wind fluttering material…).

3. Flame retardancy and Waterproofing**:** SIOEN warrants that the Membrane shall retain their flame retardancy and waterproofing for a period of twenty (20) years as of its delivery from the SIOEN production plant.

Each of the above warranties are herein described collectively as the 'Limited Warranty'.

D. SIOEN's OBLIGATIONS UNDER THIS LIMITED WARRANTY

Subject to the limitations mentioned in the chart (*Percentage of SIOEN's liability),*

1. SIOEN shall provide a percentage of the cost of repair or replacement of the Membrane at SIOEN's sole option for the parts which may prove defective ("Defect" or a "Defective Membrane") or otherwise fail to perform as stated above under normal use, maintenance and service, as determined by SIOEN, during the warranty period. However, not to exceed the original Membrane sales price of SIOEN to the original purchaser of the Membrane.

   The customer must pay the remaining portion of any such costs of repair or replacements of Defective Membrane.

2. Should the Products prove so defective, however, as to preclude the remedying of warranted Defects by repair or replacement, the customer's sole and exclusive remedy shall be the refund of the purchase price of the fabric, in accordance with the chart below *(E. Percentage of SIOEN's liability)*.