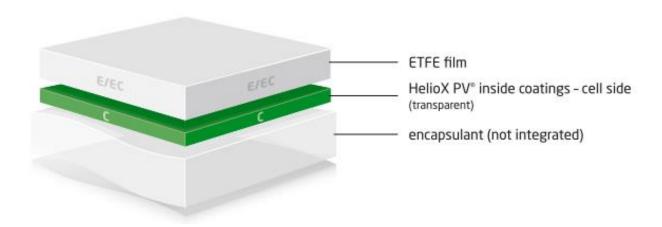


Product Information HelioX PV[®] frontsheet transluX ECC 100

		UNIT	VALUE	STANDARD
Construction				
	ECTFE	μm	100	
	PV inside Coating	g/m²	< 0.5	Cell Side
Colour			transparent	
Dimension				
Total thickness		μm	100	ISO 4593:1993
Weight		g/m²	168	ISO 536
Ageing resistance				
Weathering	No visible changes concerning colour, yellowness, gloss and adhesion after 12,000 h xenon test.			DIN EN ISO 4892-2
Damp-heat test	No visible or relevant functional changes (included encapsulant adhesion) after 2,000 h. Test was realized in laminated modules (encapsulant/glass/frontsheet transluX ECC).			IEC 61215 (85°C, 85% r.h.)
Humidity-freeze test	No visible or relevant functional changes (included encapsulant adhesion) after 150 cycles. Test was realized in laminated modules (glass/encapsulant//frontsheet transluX ECC).			IEC 61215 (- 40° C \rightarrow 85 $^{\circ}$ C, 85% r.h.)
Technical properties				
Tensile strength	initial 1,000 h damp-heat	N/mm²	60 (MD) - 50 (TD) 50 (MD) - 50 (TD)	ISO 527-1
Elongation at break	initial 1,000 h damp-heat	%	355 (MD) - 365 (TD) 155 (MD) - 175 (TD)	ISO 527-1
Tear resistance		N/mm	23 (MD) - 25 (TD)	DIN 53363
Encapsulant adhesion		N/mm	> film expansion	internal
Heat shrinkage		%	-3,3 (MD) - (-0,6) (TD)	ASTM D-1204 (150°C, 30min)
Water vapour permeability		g/m²·d	1,6	ASTM F-1249 (38°C, 90% r.h.)
Radiant panel test		-		ASTM E-162
Breakdown voltage		kV		IEC 60243-1
Maximum system voltage		VDC		IEC 60664-1
Production figures				
Width		mm	upon customer request	
Roll diameter		mm	upon customer request	
Inner reel diameter		mm	76 (3"), 152 (6")	other diameters upon request





Values

- All values stated above are to be considered as average values. We reserve the right to make technical changes.
- It shall be for the respective user to check and to ensure the compatibility of HelioX PV® sheets with other products/films/laminates or modules.
- Furthermore the user has to check and to ensure the suitability of HelioX PV® sheets for the corresponding finished product.
- This product information is a technical information, however no product specification.
- In this regard Aluminium Féron GmbH & Co. KG assumes no liability and no warranty.

Shelf life

12 months in original packaging under storage conditions from + 5 to + 40°C and 50 ± 20 % r.h.

Notes

- Other thicknesses available on request.
- transluX ECC: EC: ECTFE film; C: HelioX PV® coating technology

Notes on processing

- PV coating technology reaches full functionality after laminating process.
- Please use gloves.
- Please follow the processing notes of your encapsulant and junction box adhesive supplier.

PV inside coating - Cell side

- Before lamination be aware of the side which is proper for encapsulant adhesion.
- Inner side of roles is prepared for lamination = Cell side
- Do not clean the surface with solvents or any other material before laminating.
- Do not wipe or touch the inner side.
- The surface of this side has to be clean (no fingerprints or other contaminations).

Certification

Aluminium Féron GmbH & Co. KG is DIN EN ISO 9001-2008 certified.

03.03.2015