

# Product Information

## HelioX PV<sup>®</sup> backsheet neoX PPE 50/125/50 trans

		UNIT	VALUE	STANDARD
<b>Construction</b>				
	<b>PET (bp)</b>	µm	50	<u>basic performance</u> DHT 3,000 h
	<b>PV adhesive</b>	g/m <sup>2</sup>	10	
	<b>PET (bp)</b>	µm	125	<u>basic performance</u> DHT 3,000 h
	<b>PV adhesive</b>	g/m <sup>2</sup>	10	
	<b>Encapsulant promoter</b>	µm	50	
Colour			transparent	
<b>Dimension</b>				
Total thickness		µm	245	ISO 4593:1993
Weight		g/m <sup>2</sup>	387	internal
<b>Ageing resistance</b>				
Weathering	No visible changes concerning colour, yellowness, gloss and adhesion after <b>3,000 h</b> xenon test.			DIN EN ISO 4892-2
Damp-heat test	No visible or relevant functional changes (included encapsulant adhesion) after <b>3,000 h</b> . Test was realized in laminated modules (glass/encapsulant/backsheet neoX PPE).			IEC 61215 (85°C, 85% r.h.)
Humidity-freeze test	No visible or relevant functional changes (included encapsulant adhesion) after <b>30 cycles</b> . Test was realized in laminated modules (glass/encapsulant/backsheet neoX PPE).			IEC 61215 (- 40°C → 85°C, 85% r.h.)
<b>Technical properties</b>				
Tensile strength	initial	N/mm <sup>2</sup>	<b>80 (MD) - 90 (TD)</b>	ISO 527-3
Elongation at break	initial	%	<b>120 (MD) - 120 (TD)</b>	ISO 527-3
Interlayer adhesion (PET <-> Encapsulant prom. PET <-> PET)	initial 1,000 h damp-heat 2,000 h damp-heat	N/mm	<b>1.0</b> <b>0.5</b> <b>no visible change</b>	T-Peel (IEC 62788-2)
Encapsulant adhesion	initial 1,000 h damp-heat 2,000 h damp-heat	N/mm	<b>6.0</b> <b>3.0</b> <b>no visible change</b>	T-Peel (IEC 62788-2)
Junction box adhesion	initial 1,000 h damp-heat 2,000 h damp-heat	N/mm	<b>max.</b> <b>max.</b> <b>no visible change</b>	T-Peel (IEC 62788-2)
Heat shrinkage		%	<b>1.5 (MD) - 0.5 (TD)</b>	ASTM D-1204 (150°C, 30min)
Breakdown voltage		kV	<b>15</b>	IEC 60243-1
Maximum system voltage		V <sub>DC</sub>	<b>&gt; 1,000</b>	IEC 60664-1
<b>Production figures</b>				
Width		mm	<b>upon customer request</b>	
Roll diameter		mm	<b>upon customer request</b>	
Inner reel diameter		mm	<b>76 (3"), 152 (6")</b>	<b>other diameters</b> <b>upon request</b>

#### 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<sup>®</sup> sheets with other products/films/laminates or modules.
- Furthermore the user has to check and to ensure the suitability of HelioX PV<sup>®</sup> 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.
- **PET bp:** basic PET hydrolysis performance; **C:** HelioX PV<sup>®</sup> coating technology; **E:** Encapsulant Promoter

#### 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.

#### Encapsulant Promoter – 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).

#### Transparent UV stabilized PET - Air side

- Outer side of roles = Air side of the modules

#### Certification

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

09.12.2015