




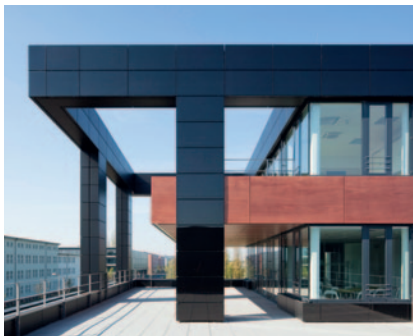
CORIUM FACADE SOLUTION

NEW DIMENSION OF SOLAR ARCHITECTURE

Top-quality, multifunctional, unrivaled



-  SOLAR CONSTRUCTION
-  SUSTAINABILITY
-  TECHNOLOGY



CORIUM – NEW DIMENSION OF SOLAR ARCHITECTURE

Solar architecture at its finest

With its sleek black design, the facade solution offers a unique combination of the latest solar power technology with a distinctive design. An architectural highlight, which opens new dimensions in solar construction.

Highest standard for photovoltaic on facades

The solar facade system forms the building envelope, enabling the system to discharge water in a controlled manner, protecting the structural elements from invasive moisture. The rear ventilation system prevents interstitial condensation from forming and cools the PV modules as well.

Intelligent system – easy installation

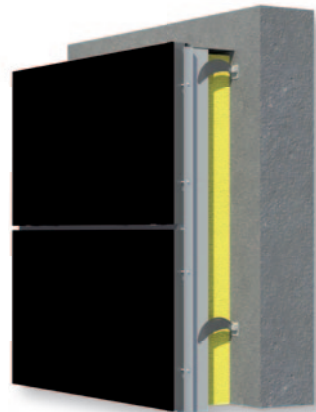
Soltecture's frameless facade solution consists of a black Linion module and the proven facade cassette. The two are combined to form a single element, enabling quick and easy installation. The manufacturing of the system involves innovative adhesive technology, which eliminates intrusive clamping brackets and cleats. The frameless module has a perfectly uniform surface even at the corners. This effect is guaranteed by a special, internal, long-term stable, ceramic pressure.

All-round great support

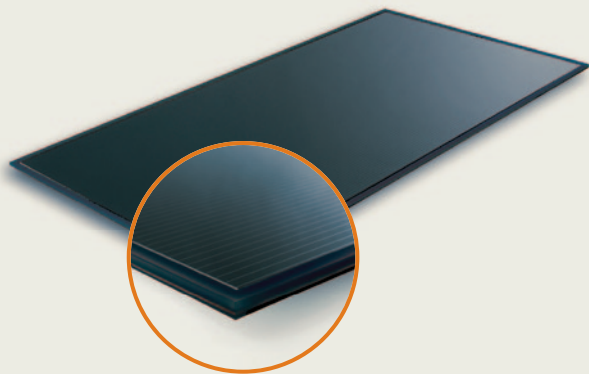
With its facade solution Corium, Soltecture offers the all-round carefree package. If desired, Soltecture assumes the project management beginning with planning and design of the building, through personal support service, up to the maintenance of the solar power system.

The unrivaled system solution

Soltecture's facade solution meets the highest architectural and construction demands and offers far more than just solar electricity. The Corium system acts as a ventilated facade cassette and transforms balustrades and walls into prestigious and unique glass facades.



System components: Soltecture Corium facade solution



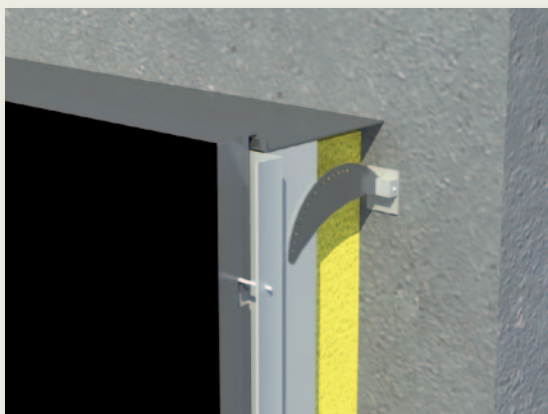
Black laminate module



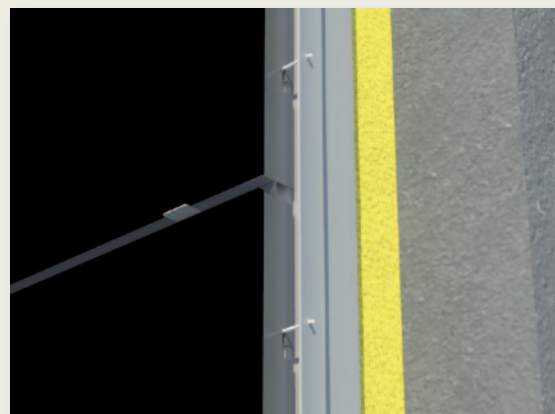
Facade cassette, front



Facade cassette, rear



Upper rim



Simple insertion system



Scope of delivery: Soltecture Corium facade solution

- Cassette (including black Linion I module) for the surface area and upper rim
- Facade brackets
- Facade substructure (aluminum supporting profile)

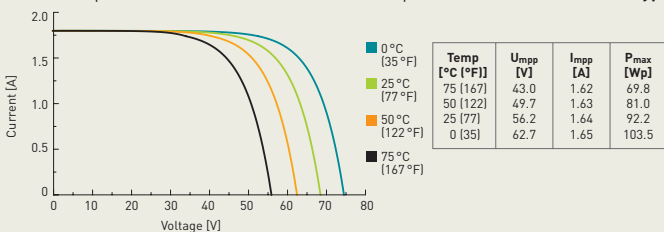
Facade solution	CORIUM 90	CORIUM 95	CORIUM 100
Electrical characteristics at 1000 W/m²; 25 °C; AM1.5			
Rated power P _{max}	90.0 W	95.0 W	100 W
Tolerance (P _{max})	+5/-0 W	+5/-0 W	+5/-0 W
Module efficiency	11.1%	11.7%	12.3%
Rated voltage ¹⁾ U _{mpp}	56.2 V	57.2 V	58.2 V
Rated current ¹⁾ I _{mpp}	1.64 A	1.67 A	1.70 A
Open circuit voltage ¹⁾ U _{oc}	72.2 V	73.1 V	74.0 V
Short circuit current ¹⁾ I _{sc}	1.80 A	1.82 A	1.83 A
Maximum system voltage	IEC 61730	1000 V	1000 V
	UL 1703	600 V	600 V
Reverse current rating	3 A	3 A	3 A
Max. no. of modules connected in series per string +10% toL., 1000 V, -10 °C [IEC] [600 V, 14 °F [UL]]	11 (UL: 6)	11 (UL: 6)	11 (UL: 6)
Maximum no. of modules in parallel ²⁾	Individual strings connected to a blocking diode in (+) and 3 A fuse in (-).		
Electrical characteristics at 800 W/m²; NOCT; AM1.5			
Power ¹⁾ P _{max}	65.2 W	67.8 W	70.5 W
Voltage ¹⁾ U _{mpp}	49.6 V	50.8 V	51.9 V
Current ¹⁾ I _{mpp}	1.31 A	1.34 A	1.36 A
Open circuit voltage ¹⁾ U _{oc}	64.7 V	65.9 V	67.1 V
Short circuit current ¹⁾ I _{sc}	1.44 A	1.45 A	1.47 A
Electrical characteristics at 200 W/m²; 25 °C; AM1.5			
Maximum absolute reduction of efficiency	0.8%	0.8%	0.8%
Thermal behavior			
Working temperature (NOCT)	49 °C (120 °F)	49 °C (120 °F)	49 °C (120 °F)
Power temperature coefficient T _c (P _{max})	-0.45%/K	-0.43%/K	-0.41%/K
Voltage temperature coefficient T _c (U _{oc})	-0.35%/K	-0.33%/K	-0.31%/K
Current temperature coefficient T _c (I _{sc})	+0.01%/K	+0.01%/K	+0.01%/K
Operating conditions			
Temperature range	-40 °C to +85 °C (-40 °F to 185 °F)		
Maximum mechanical load ³⁾	IEC 61730	2400 Pa; 245 kg/m ²	
	UL 1703	1600 Pa; 33 lbs/ft ²	
Maximum torsion	1.2°		
IP code (to IEC 60529)	IP65		
Protection class (to IEC 61140)	II		
Application class (to IEC 61730)	A		
Fire rating (to IEC 61730)	C		

Notes ¹⁾ Tolerance of the electrical parameters ± 10%
²⁾ Limited: See explanation in the Electrical Configuration section in the installation instructions for Soltecture PV modules.
³⁾ See Soltecture GmbH's independent manufacturer warranty for Linion PV modules (last revised October 2011).
⁴⁾ Crucial is the spacing between the facade brackets and the load-bearing capacity of the anchors in the existing structure.
 The modules are not suitable for mobile or maritime applications. Please note that if the Linion PV modules are stored in dark spaces for long periods, they must then be exposed to sufficient solar radiation to attain their rated output. **Please refer to our user information at www.soltecture.com/download-centre. As we continually optimize our solar modules, related data pertinent to these changes will be cited in the technical data sheet.** All information applies exclusively to modules produced during the most recent product revision. The modules are certified for use in the following countries: EU countries, Switzerland, Norway, Turkey, Liechtenstein, Israel, Lebanon, Croatia, Bosnia and Herzegovina, Serbia. [09/2010]
For technical questions, please contact us at: service@soltecture.de

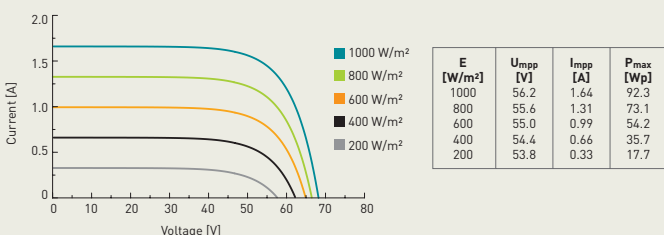
Corium element dimensions	
Standard cassette dimensions	1250 mm x 650 mm (49.2 in / 25.6 in)
Grid dimensions for entire structure	1270 mm x 670 mm (50 in / 26.4 in)
Structural depth of the cassette	Approx. 60 mm (2.4 in)
Weight	15 kg (33.1 lbs)
Load-bearing capacity of the Corium element	
Cassette	Rd = 1.5 kN/m ² (31.3 lbs/ft ²)
Substructure ⁴⁾	Variable up to Rd= 1.5 kN/m ² (31.3 lbs/ft ²)
Additional data	
Maximum string fuse	3 A (e.g. Socomec 60PV0003)
Included bypass diode	1 x Diotec BY550-1000
Connection cable	2 x 1000 mm (39.4 in) / 4 mm ² (AWG 11)
Plug connector	Y-SOL 4
Cell type	CIGSe thin-film
Front glass	3 mm (0.12 in) tempered safety glass
Rear glass	3 mm (0.12 in) float glass
Encapsulation	EVA

Certificates and warranties (Linion L module)	
TÜV certificates: IEC 61646, IEC 61730 Manufactured in the EU CE-marking	 <ul style="list-style-type: none"> • Qualified, IEC EN 61646 • Safety tested, IEC 61730 • Periodic Inspection 
	Further information at www.tuv.com ID: 000033202 and www.soltecture.com/download-centre
Independent product warranty	10 years (for Linion L modules) ³⁾
Independent output warranty	25 years (for Linion L modules) ³⁾

Example characteristic curves at various temperatures – Linion 90 module type



Example characteristic curves at various irradiances – Linion 90 module type



Sketch of the Corium element

