



1



Het verhaal van Solar Visuals

- o Solar Visuals ontwikkelde een **unieke kleurmethode** met **TNO, UNStudio** en **TS Visuals** tussen 2016 en 2018.
- o **Productie** door **AGC Glass Europe** in België. **Garanties en Certificering** van AGC.
- o Solar Visuals is exclusief **vertegenwoordiger voor AGC's Active Glass portfolio in NL**



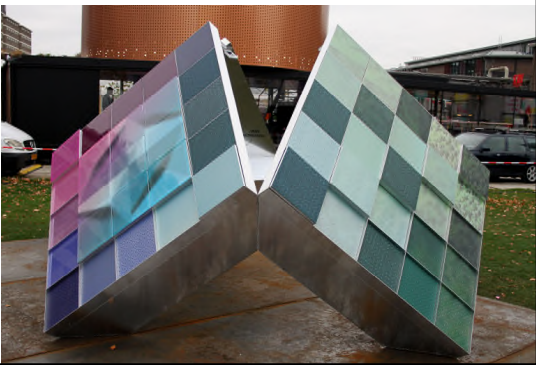
Active Glass



ISSOL

with a touch of

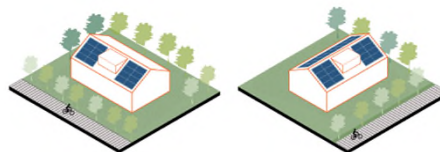


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Hellende daken



BAPV



zwart



kleur

BIPV



Indak panelen



dakpanvervanger



voldak



kleur

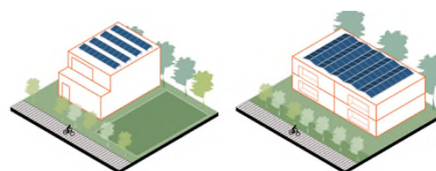


overkapping

3



Platte daken



BAPV



zuid



Oost-west



lichtgewicht

solarge

ENERGYRA®

BIPV



op membraan



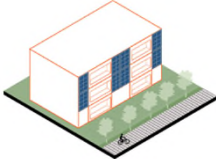
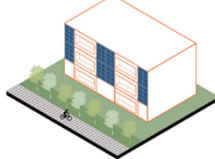
Op metaal

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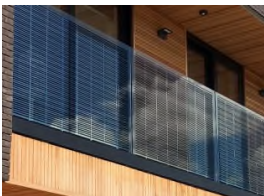
solar
visuals

Gevels

Beschikbaar:
NL minimaal 500 km²

BAPV



BIPV






Standaard panelen

Balustrade

lamellen

Tweede huid

zwart

kleur

afbeelding

Transparant geïsoleerd

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solar
visuals

SunEwat Origin

Bold Overhoeks
Amsterdam – The Netherlands
 Promotor : Vorm
 Architect : Oever Zaaier
 Construction : Van Rossum

Product : SmartSkin IGU Physee
 Lacobel T Active Black
 with Imagine Screen
 Production Plant : MIRODAN (BE)
 ISSOL (BE)

Standaard zwarte module in glossy of mat

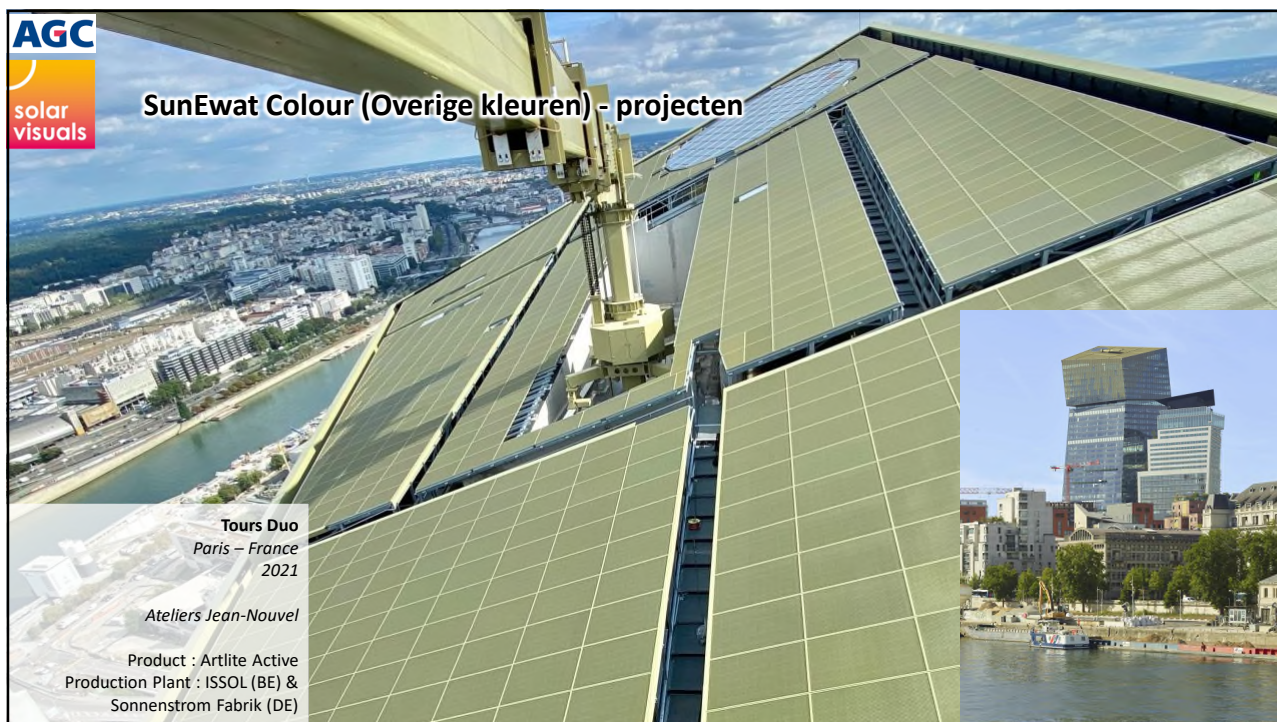
- Homogeen zwart
- Potdeksel montage
- 200 Wp/m²
- Performance: 100%



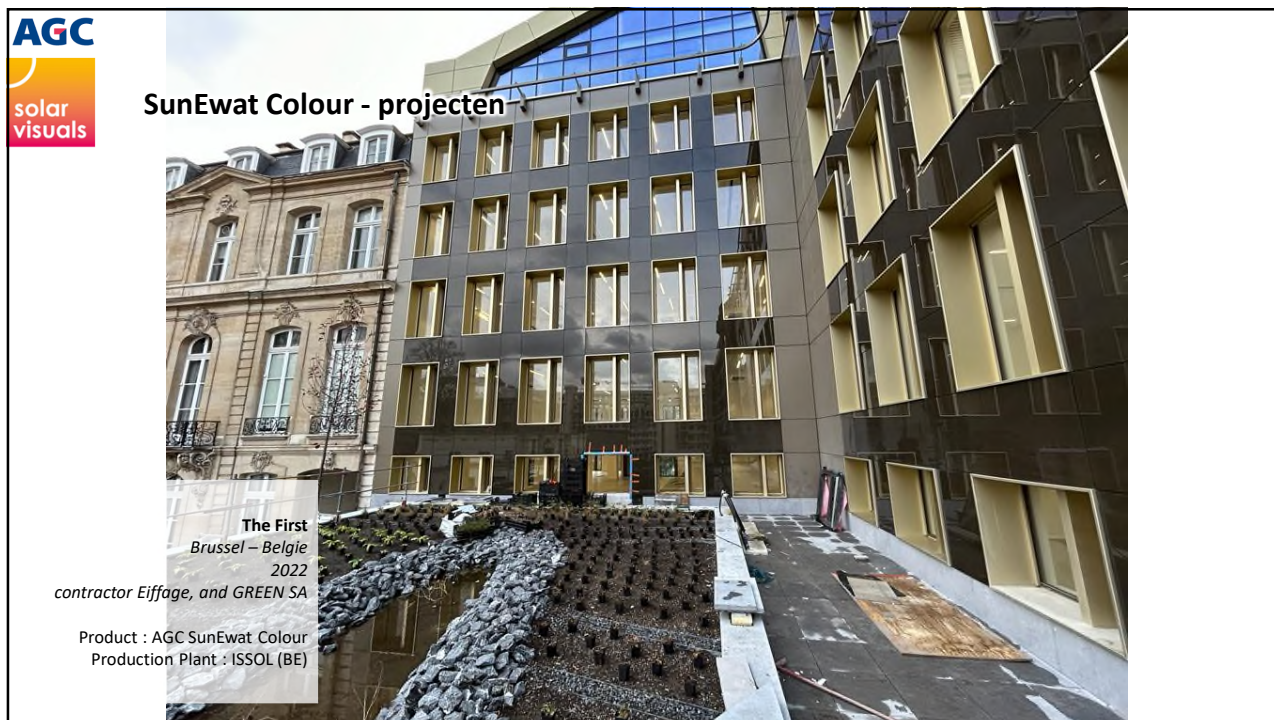

6



7



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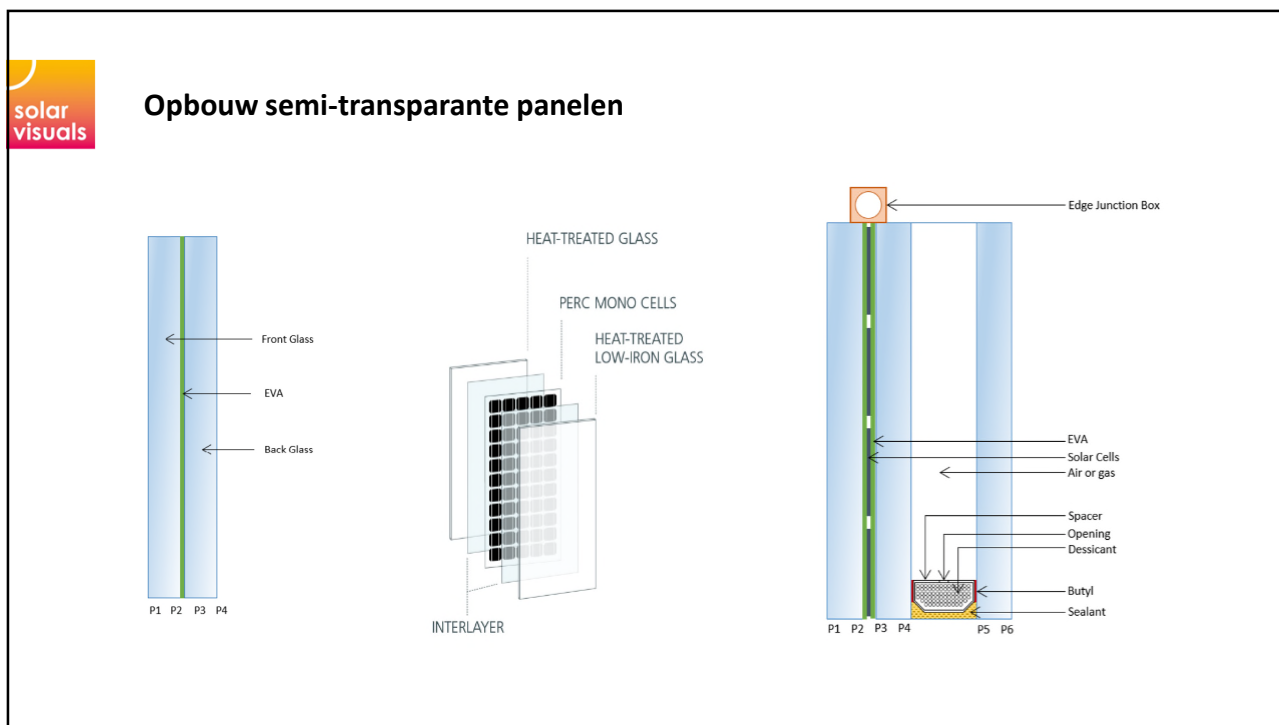
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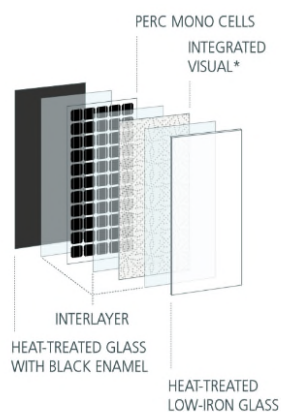
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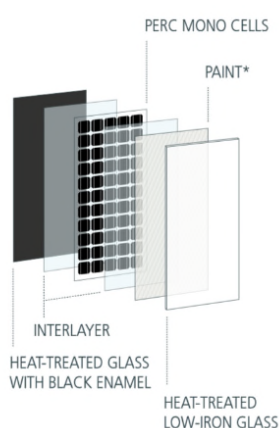
12



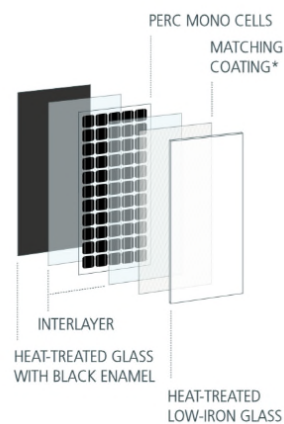
Kleurmethoden opake oplossingen



Film



Verf



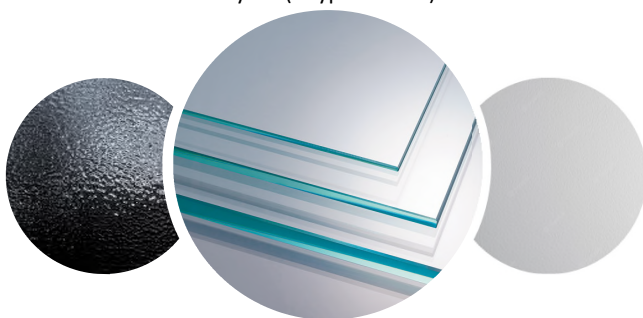
Coating

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Samenstelling/opties

- Maatvoering: tot maximaal 2m x 4m
- Ronde/schuine zijdes
- Mat of glad oppervlak
- Dikte 4-12mm glasplaten
- Gelaagd, dubbel, triple glas
- Maatwerk cellayout (2 typen cellen)

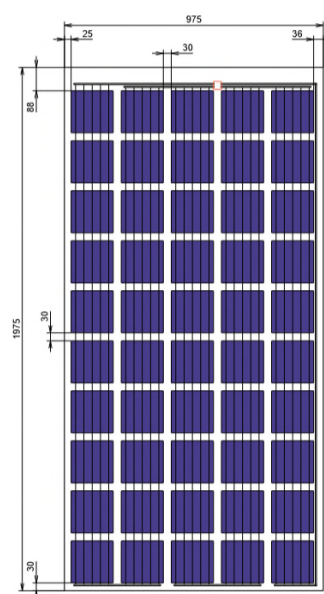


SunEwat project

Vision Square

Height=1975 Width=975 Cells=50

SunEwat



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Brandklasse testen

- Glas – glas
 - Gevel: EN13501-1 B-s1,d0 haalbaar
 - [brandklasse A](#) (op dak) volgens de IEC 61730-2
- Glas – backsheet
 - EN13501-1 klasse B **niet** haalbaar



Photo No. 13
Ignition of Window Burner



Photo No. 14
Burners Extinguished (Post-Test)

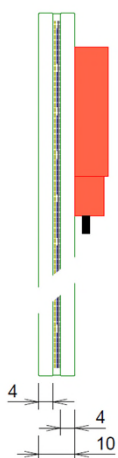
Mitrex

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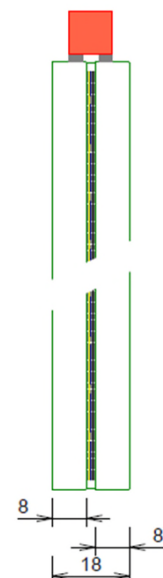


Samenstelling en brandklasse

Aluminium frame



- glasdikte
- glastype
- Dikker glas = meer encapsulanten
- Aanwezigheid frame
- Locatie junction box



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Voorkom schaduw

~0% schaduw



Design by ANA architecten

~50% schaduw



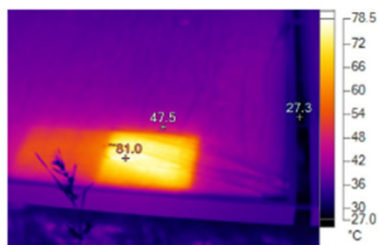
Design by UNStudio



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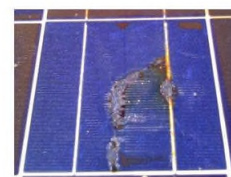
Hot spots



Infrarood beeld



Vermijden door:
Panelen niet in serie maar parallel aansluiten



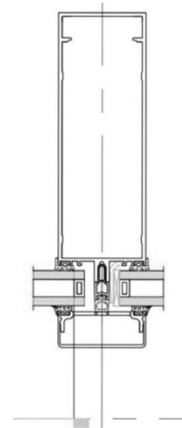
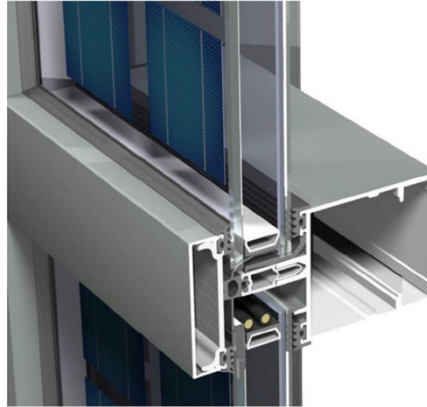
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Montage in kozijn

BIPV IGU CURTAIN WALLING SYSTEMS

Edge junction boxes & internal DC wiring into CW system. Here Reynaers CW60 system.
!! The model has to forecast enough space for DC wiring!

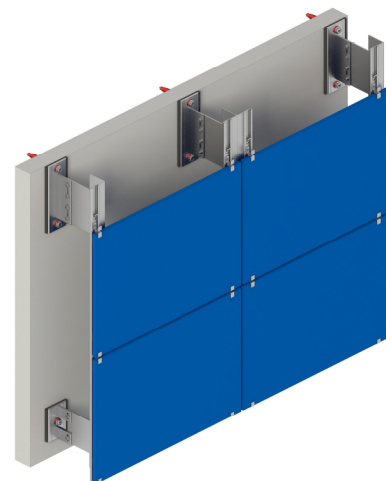
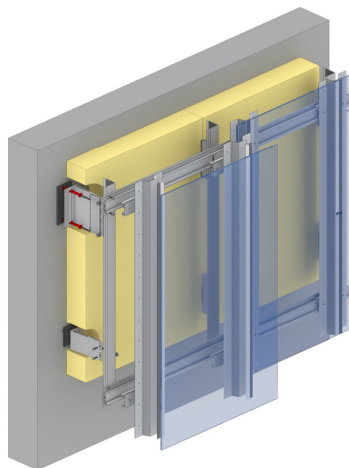


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Montage

- Bevestigingsopties:
 - Verlijmd
 - Mbv glasklemmen
 - In kozijn
- Zorg voor ventilatie



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Ventilatie en temperatuur

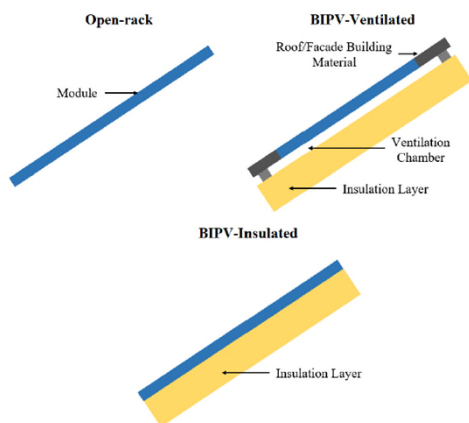


Fig. 1. Summary of installation configurations on the BIPV test stands.

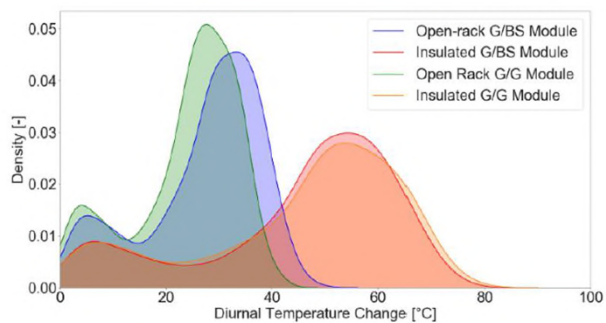


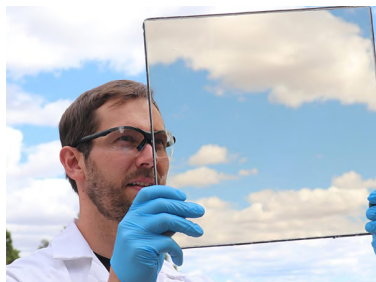
Fig. 3. Diurnal temperature change distribution of the modules from Test Stand-1. Temperature measurements in Test Stand-1 are between 4:00 AM and 9:00 PM. All times are Coordinated Universal Time (UTC).

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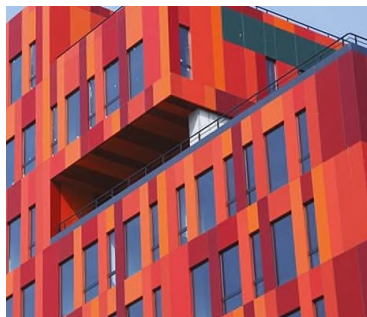


Aankomende innovaties in de BiPV markt

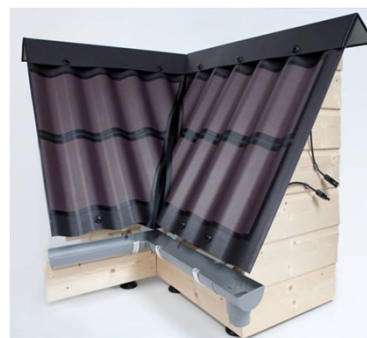
Transparante panelen als ruiten



Integratie op andere bouwmaterialen



Flexibele PV op gebogen bouwmaterialen



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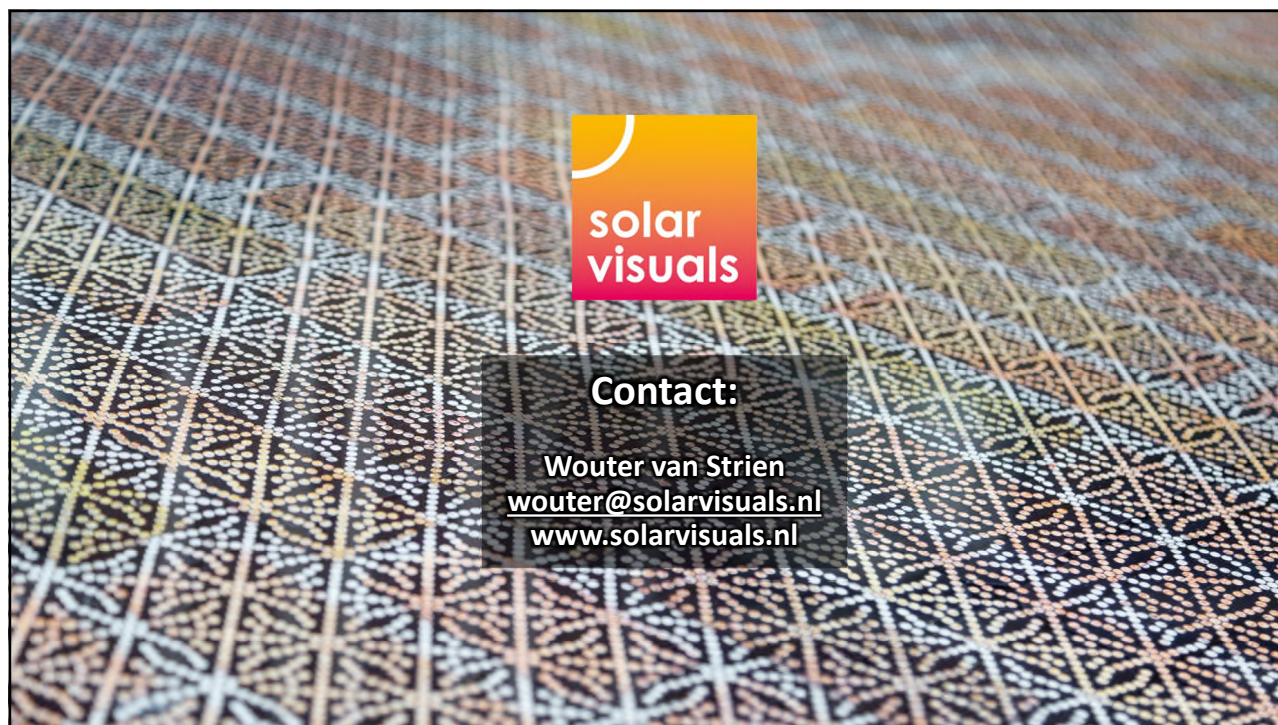


Aankomende innovaties in de BiPV markt

Integratie zonnepaneel met A1 klasse aluminium composiet gevelcassette



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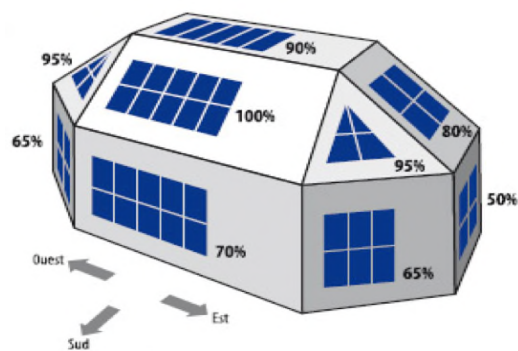
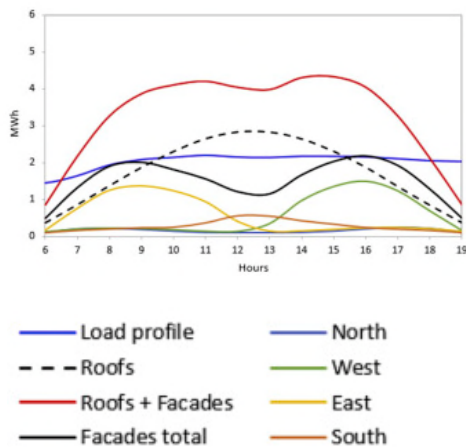


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Instralingsgrafiek gevels

Summer
Day

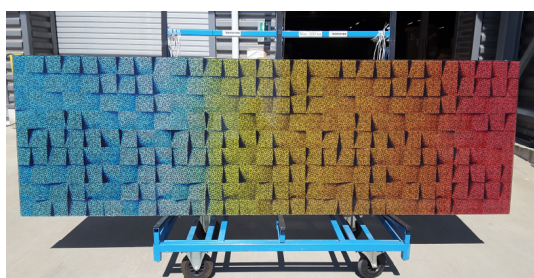
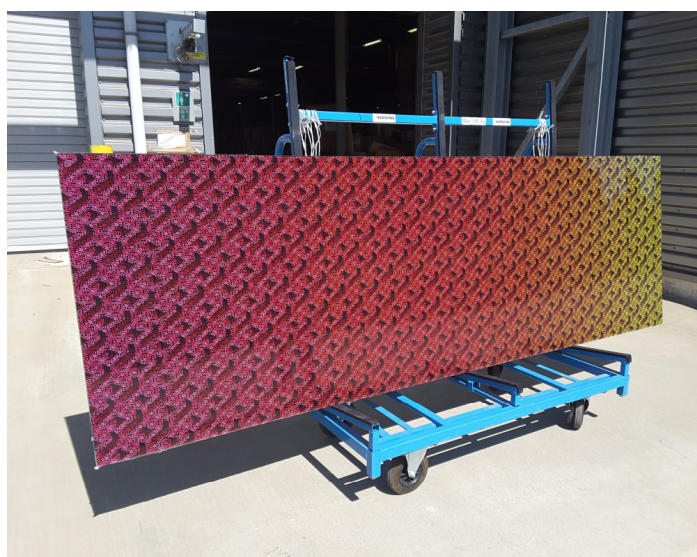


Hourly electricity demand (dark blue line) and photovoltaic potential of roofs (black dashed line), all facades (black solid line), south facades (orange), east facades (yellow), west facades (green), north facades (light blue) and roofs and facades (red), for Area 1 (left) and Area 2 (right) for a winter day (top) and a summer day (bottom). The importance of facades for the solar PV potential of a building depends on the orientation, the climate and the building type. (Source: VITO, 2019)

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SunEwat Design – groot formaat voorbeelden



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