

Imper Italia

Established in 1936, Imper Italia is a pioneer in the development and production of TPO membranes. As the undisputed world leader with over 25 years of experience, the group to which Imper Italia belongs has a production capacity of 32 million m². Since 2005, CGMA and IMPER ITALIA have been investing in the development of photovoltaic processes on TPO waterproofness.



SINTOFOIL TPO membrane

- Available in 1.8 or 2.0 mm
- Grey or white to improve the thermal emissivity of the building (cool roof effect)
- White with high reflectivity for better performance
- 20 year warranty
- Durable product (40 years), ecological and recyclable, inert nature, no added plasticizer
- Developed and tested on ribbed steel sheet (classic and long span) and concrete
- Brooft1 (Belgium) and Brooft3 (France) classification for new construction or complete renovation projects (without dismantling the existing membrane)
- Hot air welding without fire risk
- New and renovation projects
- Compatible with all insulation materials and bitumen

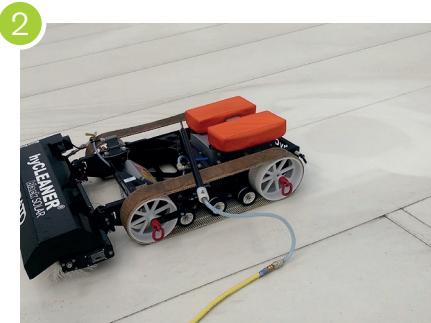


CGMA TPO photovoltaic integration process



1 Laying the membrane

- No manual, time-consuming, tedious and risky welding
- Use of standard width strips (1.50 m, 1.05 m and 0.75 m)
- Suitable for renovation without dismantling of the existing membrane



2 Preparation of the water-proofing (retrofit application)

- Cleaning of the membrane with automated robot
- Reactivation of the membrane



3 Renting a robot

- Developed in partnership with a leading manufacturer
- Very high speed of execution (welding at 5 lm/minute)
- Risk-free



4 Thermo welding of the TPO CGMA profile

- Thermo welding with hot air (not flame)
- Extremely light profile 1 kg/lm
- No penetration of the waterproofness
- Automated procedure



5 PV ready roof

- Optimisation of the investment
- The waterproofing is carried out according to the best practice
- The roof is ready to receive the photovoltaic modules



6 novotegra system and PV modules installations

- Without ballast, without penetration of the waterproofing membrane
- In accordance with Eurocode EN 1991-1-4
- Dynamically wind tested according to ETAG 006, EN 16002 and EN 12179
- Statically tested according to EN 12316- 2 and EN 12317-2
- Compression and traction tested according to a protocol defined by a certified institution.

Sales office



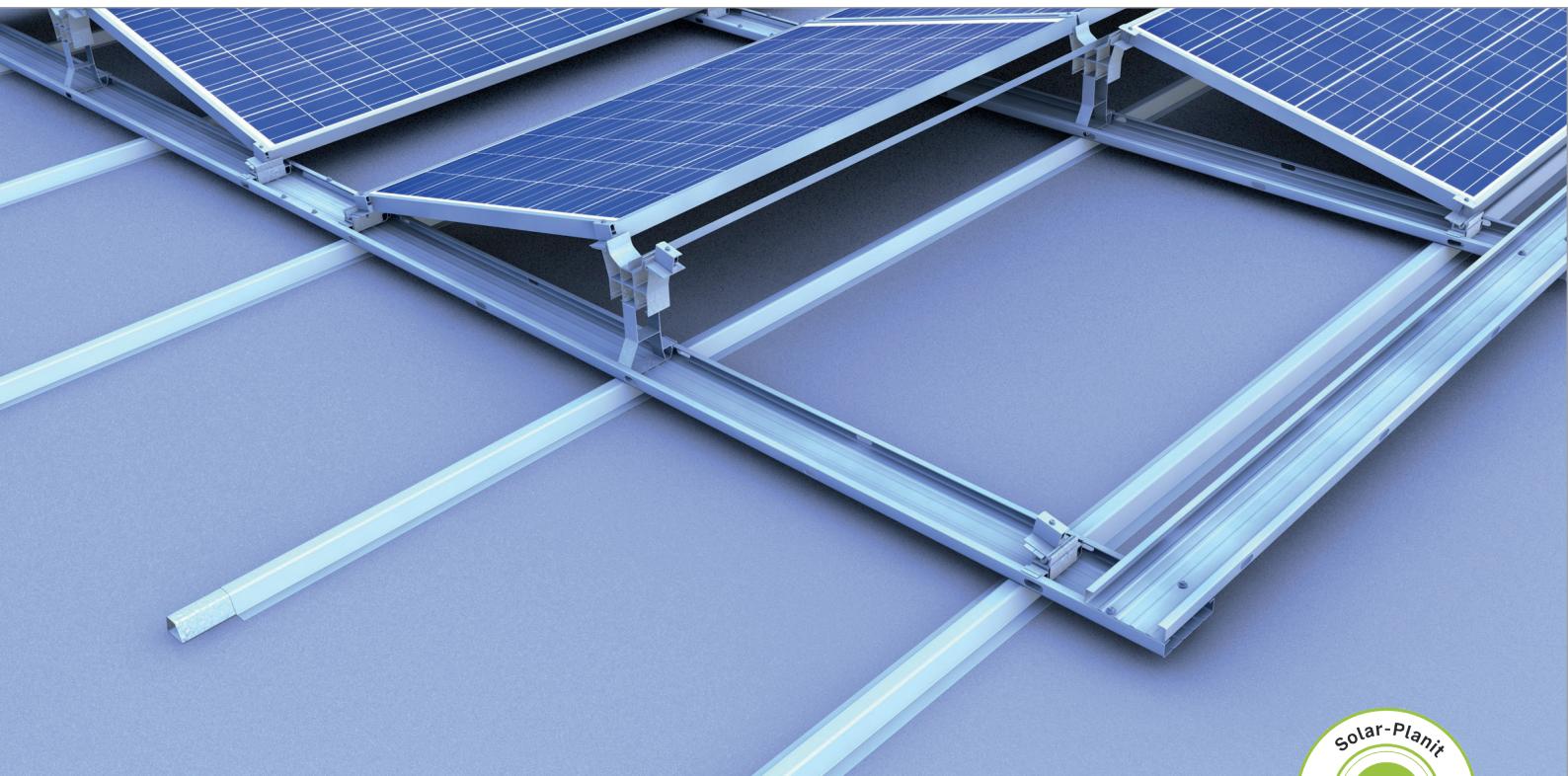
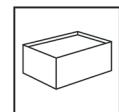
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Approved and certified with novotegra systems

Flat Roof System | East-West System II | TPO

Flat roof system east-west II



Our EAST-WEST facing solution on TPO roofs

- Without ballast
- Quick and easy to install
- Suitable for use on new membranes or roofs renovation without dismantling the existing membrane
- Better distribution of the production over the day in order to optimise self-consumption
- Optimisation of production with bifacial modules on reflective membrane

Advantages

- Wind tunnel tested aerodynamics
- No waterproofness penetration
- Overall roof load less than 10 kg/m^2
- 13° tilt angle
- Easy calculation in accordance with Eurocodes
- ETN certified mounting system



Fixation of the base rail to the TPO rail



Base foot in base through



Double module support for high loads

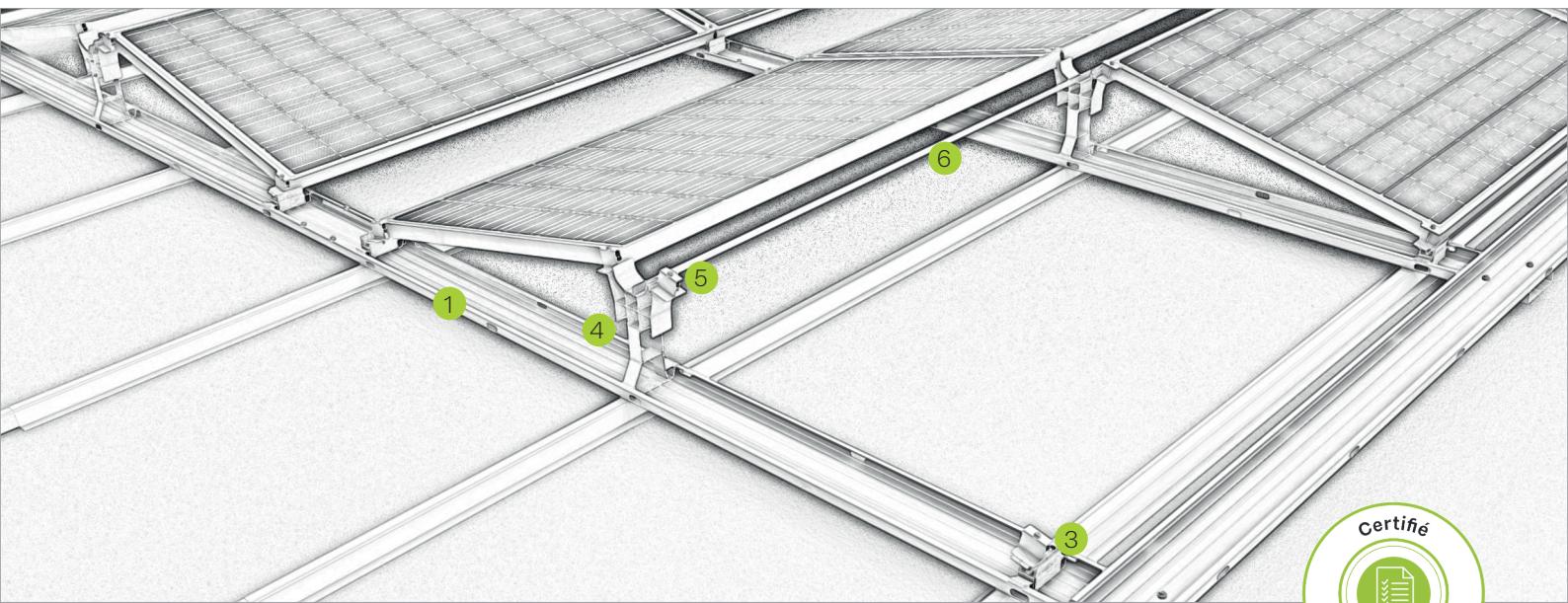
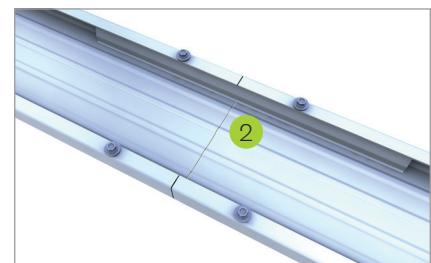


Fig Description

- ① Base rail
 - can be used as a cable duct with the optional cover
- ② Rail connections and free-standing fasteners
 - connection for panel fields up to 17 m
 - free-standing connection for the connection of two panel fields of more than 17 m
- ③ Base foot
 - quick-clip without additional screwing
 - pre-drilled for easy mounting of the panel clamp
- ④ Module support
 - quick-clip without additional screwing
 - pre-drilled for easy mounting of the module clamp
- ⑤ Module clamp
 - completely pre-mounted
 - with self-drilling head for easy screwing in
- ⑥ Support brace
 - limitation of the wind load
 - interconnection of the modules supports
- ⑦ Self-drilling screw
 - For fixing the base rail to the TPO rail



Rail connector kit



Self-drilling screw

Sales office

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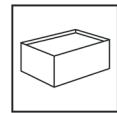
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Flat roof | System South II | TPO

Flat roof system closed II



Our south-facing solution on TPO roofs

- Without ballast
- Quick and easy to install
- Suitable for use on new membranes or roofs renovation without dismantling the existing membrane
- Optimisation of production with bifacial modules on reflective membrane

Advantages

- Wind tunnel tested aerodynamics
- No waterproofness penetration
- Overall roof load less than 10 kg/m^2
- 13° tilt angle
- Easy calculation in accordance with Eurocodes
- ETN certified mounting system



Fixation of the base rail to the TPO rail



Wind deflector and module support



Base foot

Flat roof | System South II | TPO

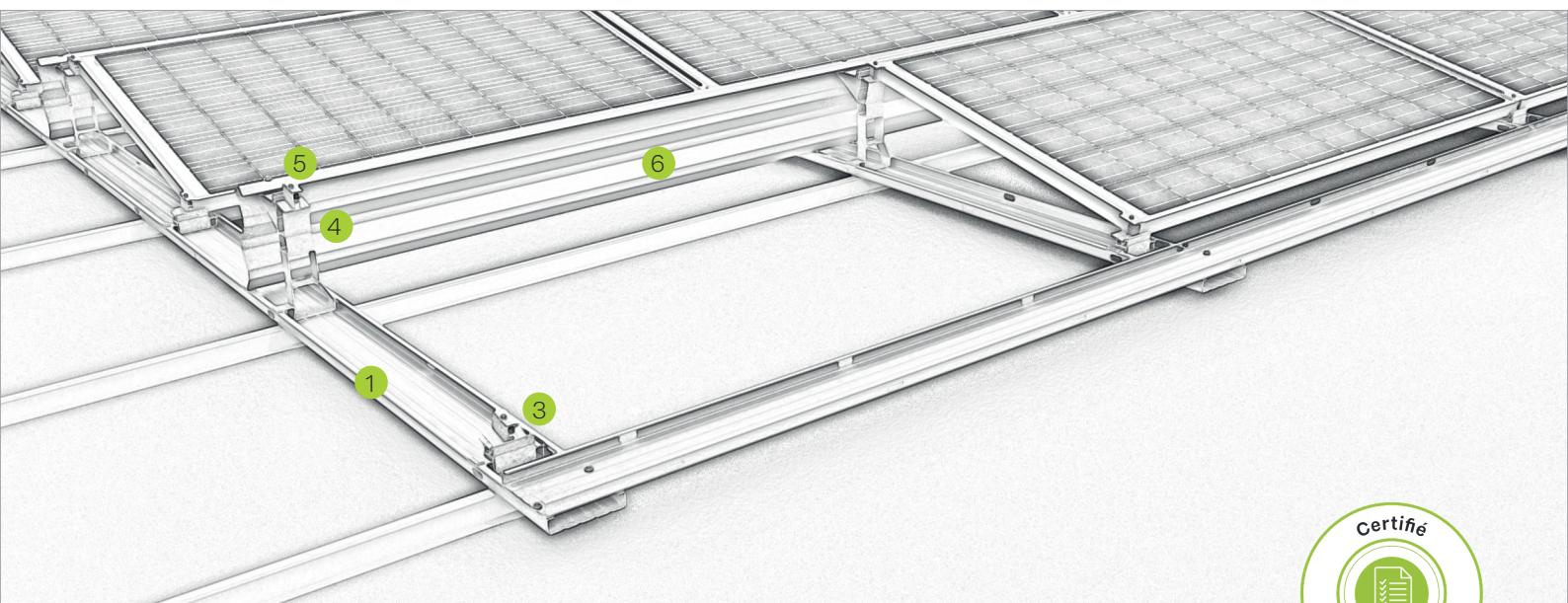


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- ⑦ Self-drilling screw
 - For fixing the base rail to the TPO rail



Rail connection kit



Self-drilling screw

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