



FLOOR[®] IS...

Floor® is a walkable photovoltaic tile which thanks to a new technology patented by Invent, enables the installation of photovoltaic technology in flooring.

Thanks to this innovative product, the surface area dedicated to the generation of green energy expands and embraces previously unconsidered places.

Floor[®] by Invent transforms inert flooring into live and active systems which capture the sun's rays to generate clean energy.

Fitting photovoltaic tiles on the floor not only enables the more fruitful and fertile exploitation of a surface area which extends beyond that of the roof, it also means greater accessibility, which translates into convenient installation and maintenance and therefore, potentially, into lower installation, cleaning and maintenance costs.

The photovoltaic flooring system Floor® is a floating floor as it is installed above ground level with the use of an adjustable mechanical support.



It has been created to harmoniously blend with gardeans, green areas and nature.



It's perfect for installations at office and retail facilities modern and minimal.



It's the ideal choice in situations in which preserving natural features is a must.









It's reflected in sky blue and mirrored in crystal clear stretches of the water.



It's the glamorous touch which illuminates the entire range.



It's exudes all the colour's timeless elegance to exalt everything.









ADVANTAGES AND DESIGN

Beauty meets technology

Instead of classic flooring, made of asphalt, cement, tiles or slabs of various materials, it is now possible to install the photovoltaic tile system Invent Floor® , bringing flooring to life and transforming the ground beneath our feet into an additional energy source: energy from the sun, which now also comes from the floor.

Floor[®] by Invent enormously multiplies possibilities for the generation of clean energy: anyone with insufficient roof surface area for photovoltaic plant installation can now embrace a green approach and turn their own home or company into an ecosustainable place, in harmony with nature.

This is also the mission of Invent, which with this latest invention aims to create an additional opportunity for coming into contact with nature and for respectfully harvesting the energy which the sun so generously bestows upon the Earth. With the aim of creating a new world, at last inspired by harmony with and respect for the environment: the Invent vision.

Fitting photovoltaic tiles on the floor not only enables the more fruitful and fertile exploitation of a surface area which extends beyond that of the roof, it also means greater accessibility, which translates into convenient installation and maintenance and therefore, potentially, into lower installation, cleaning and maintenance costs.

A photovoltaic system which is more ductile, more accessible, more adaptable and more inviting: doing good for the environment, for a better quality of life.

Floor[®] has arrived to enrich the already wellestablished range of Invent design photovoltaic modules for fitting onto the roofs and walls of buildings, capable of transforming sunlight into clean energy for humans, providing high aesthetic value and, for businesses, expressing identifying brand characteristics.

Floor® does not compromise on design and aesthetic impact: it is available in six finishes which can be selected to ensure harmony with the surrounding environment or own brand identity; they can also be mixed and matched to create moods, graphic effects and patterns.





Green has been created to harmoniously blend with gardens, green areas and natural environments: paths around the home, city parks, as well as for rural tourism, the countryside and mountain areas.



Invent Floor® compositions never stay in the shadows!

A led lighting system ingeniously fitted in installation profiles will further enhance the system's aesthetic value by night too, guaranteeing maximum functionality for photovoltaic surfaces.

Paths, walkways and entrances will be perfectly accessible and usable thanks to leds which light the way, softly accompanying users.







Grey is perfect for installations at office and retail facilities: a modern and minimal touch which enhances the elegance of work and leisure buildings.









Brown is the ideal choice in situations in which preserving natural features is a must, such as mountain villages, where it seamlessly integrates with natural wood buildings which characterise the environment.



The delicate aquamarine of Teal is reflected in sky blue and mirrored in crystal clear stretches of sea and lake water, in harmony with buildings characterised by special styles.

Gold is the glamorous touch which illuminates the entire Floor ® range: a resplendent match for the iridescent whiteness of buildings and monuments, naturally matching with sand or burnt earth, sparkling in retail or office premises.

Black exudes all the colour's timeless elegance to exalt everything surrounding tiles in this colour and to unleash the greatest possible amount of energy.

FLOOR[®] TECHNOLOGY Nothing is left to chance

Technically, the photovoltaic flooring system Floor[®] is a floating floor as it is installed above ground level with the use of an adjustable mechanical support, raising it 3.5 to 5 cm above the ground.

This creates a space for the installation of electrical connections, guaranteeing easy access for inspection, maintenance and intervention in the future, compared to a normal system installed on the roof.

The Floor® flooring system consists of glass surface 70 x 103 cm photovoltaic tiles which can be composed and laid as desired. This means you are free to focus on the tiles when designing and planning, as once they have been laid, each one will come to life, generating energy. The Floor® flooring system is also fully walkable: tiles are made of a special tempered glass with antislip treatment, are built to withstand 200 kg/m2 and will soon be available in a version with an even greater load-bearing capacity.

Each photovoltaic tile contains 24 cells and provides a power of 100/120 W, depending on colour, with a 20 mm thick glass, without aluminium frames. Flush-fitting glass enables greater freedom of modulation and creation for the assembly of panels, with superior aesthetic results.

DATA SHEET

module data

Module Name		Q.olor	Black
Power class	Wp	100	120
Annual module production*	kWh	100	120
Efficiency	%	13,87	16,64
Cell type		polycrystalline	monocrystalline

tecnical data

Nominal tension	Vmp	12,19	14,45
Nominal power	А	8,2	8,3
No load volatge	Voc	15,15	17,99
Short-circuit current	A(Isc)	8,8	8,9
Full load voltage	V	1.000	1.000
Short-circuit current's temperature coefficient (a)	Pm	4,60 mA/°C	4,60 mA/°C
No load voltage's temperature coefficient (β)	Vo	-0,132 V/°C	-0,132 V/°C
Power's temperature coefficient (γ)	Voc	-1,021 W/°C	-1,021 W/°C
Power tolerance		±5%	±5%
NMOT		45,10°C	45,10°C

Values obtained under standard conditions: 1.000 W / m2 - 25 $^{\circ}$ C - AM 1.5

* Calculated based on the production of photovoltaic modules in Northern Italy with optimal orientation / inclination, estimating a value of 1,200 kWh / kWp

optimiser system

During assembly, contacts are connected to an optimisation system which improves module performances in case of shading. The optimiser, based on the shifting of shade across areas, modulates single-panel productivity, according to exposure to the sun.

module performance in shading

This technological feature enables lit panels to maintain 100% output, even while those in the shade generate less energy. As soon as panels in the shade are illuminated, energy production is remodulated, until 100% achieved, once more.

INVENT SRL

Via Alessandro Volta, 54 30020 Noventa di Piave - VE - Italy info@inventsrl.it

www.inventsrl.it

www.ecocasalucegas.it

