

# INVISIBLE SOLAR TILES

## PROVIDING HISTORICAL CENTERS WITH GREEN ENERGY

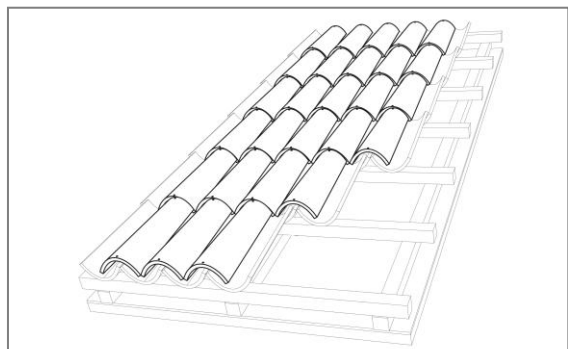
The Italian [Dyaqua Art Studio company](#) designed the *Invisible Solar Tile*, an impacting innovative solution allowing energy rehabilitation of buildings protected by architectural-landscape restrictions in historical centres.



The *Invisible solar* is an innovative production process allowing to make photovoltaic modules in the form of traditional architectural or construction object elements hiding silicon cells under a special surface, opaque in appearance and transparent to sunlight. The surface is capable to take the appearance of any building object, thus transforming the silicon cells in real architectural elements. The [transparency of the surface-invisible allows sunlight to filter within the module](#).



Made with non-toxic and all recyclable materials, the photovoltaic roof tile is coated with a photocatalytic surface that allows light to degrade the smog particles, while maintaining at the same time clean the tile: dirt and air pollution are reduced into harmless salts which are dispersed in the environment at the touch of wind and rain.



Main characteristics of the *Invisible Solar Tile* are as follows:

- It produces clean and renewable energy;
- It adapts to the roof covering and retains the aesthetics of the building;
- It can be installed as a normal brick tile, hence ideal to create installations on existing roofs;
- It has high resistance and provides a more efficient coverage than normal baked, and
- It is made of non-toxic, natural or reused materials being totally recyclable.

Many historical centers in Italy need to be renovated in a sustainable way, but the constraints of cultural heritage make these works difficult to implement. The Invisible Solar technology integrates aesthetics values of historic buildings, allowing the complete redevelopment. In 2015 the Ministry of Cultural Heritage (MiBACT) included the Invisible Solar methodologies in the *Guidelines for improving energy efficiency in cultural heritage*.



Taking into account these prospects for national impact of the new technologies designed, Dyaqua Art Studio has recently opened applications for the establishment of a Cooperative for the exclusive sale of Invisible Solar technologies in Italy, inviting photovoltaic installers to apply as prospective members.



**To know more**

[Dyaqua Art Studio website](#)

[Technical sheet](#)

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[Article in energoclub.org](#)

[Article in rinnovabili.it](#)

