PV ROOF TILES

NEW CONSTRUCTION

Sustainability and energy self-sufficiency have become fundamental pillars in modern home design and construction. Onyx Solar has taken a leading role in this movement by developing and manufacturing high-efficiency photovoltaic solar roof tiles, which have been successfully installed in this private residence in Germany.

These innovative roof tiles incorporate photovoltaic cells directly into laminated glass, allowing for efficient and direct solar energy capture from the roof itself. This integration not only maximizes the production of renewable energy but also preserves the aesthetic and functional aspects of the architectural design.

Two different exterior sizes were used in the fabrication of these tiles—725 x 400 mm and 406 x 400 mm—demonstrating the flexibility of the design to meet various architectural needs. Aesthetically and functionally, the front glass underwent a precise acid-etch treatment, giving it an elegant matte finish and adds a touch of sophistication to the home's exterior. Meanwhile, the rear glass was treated with black frit, a process that enhances both the durability and the distinctive, refined appearance, perfectly complementing the architectural vision of the residence.



