

PHOTOVOLTAIC FAÇADE RENOVATION

The Black Box is the hub where our diverse team converge daily to innovate in the realm of Building Integrated PhotoVoltaics (BIPV).

It's the epicenter of our endeavors to develop the building materials of the 21st century. Initially, The Black Box was an office building featuring solid concrete exterior walls and windows.

We transformed it by installing a **PV rainscreen cladding system** crafted from amorphous silicon photovoltaic glass panels.

This system incorporates both **fully opaque PV glass for the solid façade areas and 20% VLT PV glass to cover the original windows.**

A rainscreen cladding made with solar safety laminated glass panels is **one of the best constructive solutions** to integrate photovoltaics into a building.

It has several advantages:

- It **generates clean and renewable energy from the sun**, reducing the building's carbon footprint and dependence on fossil fuels.
- It **improves the thermal and acoustic insulation** of the building, lowering the heating and cooling costs and enhancing the indoor comfort.
- It **protects the building** from weather damage and reduces the maintenance costs.
- It offers **design flexibility** and aesthetic appeal, as the solar panels can be **customized in size, shape, color and transparency.**



THE BLACK BOX ÁVILA, SPAIN

FAÇADE

AMORPHOUS SILICON TECHNOLOGY



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