

Case Study

BARACLIT

Facade Installation Bibbiena



Bibbiena, Italy



The black Solar Frontier CIS thin-film modules are a real eye-catcher on this facade in Bibbiena. (Image: Baraclit)

Site Overview

Location	Bibbiena, Italy
Coordinates	43.72° N, 11.81° E
Average global irradiance	1,400 kWh/m ² /yr
Average temperature	13.6 °C, 56.48 °F
Average precipitation	910 mm/yr, 35.83 in/yr

Technical Overview

Date onstream	June 2012
System capacity	63 kWp
Panel type	SF150-L (150 W)
Number of installed panels	420
Tilt angle, orientation	90°, 14° S, -76° E
Expected output	52,245 kWh/yr
CO ₂ reduction	29,414 kg/yr, 64,847 lbs/yr
Inverter	Power One Trio

Financing Bank

Private Investment

"Solar Frontier's CIS thin-film modules, with this high aesthetic value and high efficiency, are a convincing solution for this facade. Through the black CIS modules on the south façade the building is an architectural landmark in the city of our headquarters."

*Ing Natanaele Bacci, Business Development
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Baraclit is a leading Italian company in the field of prefabricated concrete and since 1946 has been active in industrial and commercial sectors. The company's headquarters and 350 employees are located in Bibbiena, Italy. In 2009, Baraclit introduced the "b.POWER" business division, focusing on building-integrated photovoltaic systems (BIPV).

This facade installation, comprised of 420 Solar Frontier CIS thin-film modules, was installed in June 2012 in the Italian city Bibbiena. The southern vertical wall was fitted with 57.75 kWp and the east wall with 5.25 kWp. The black modules make a strong architectural statement in Bibbiena.

This system is the first documented vertical facade installation of Solar Frontier's CIS thin-film modules in Europe. Despite a very unfavorable tilt angle of 90°, the modules are exceptionally competitive compared to other technologies because of the broader spectrum of light absorption and low light strength, the same characteristics that allow Solar Frontier panels to work earlier and later in the day. This combination of performance and aesthetic value make Solar Frontier modules ideal for facade installations.

About Solar Frontier

Solar Frontier is committed to creating the world's most ecological, economical solar energy solutions. Our proprietary CIS technology (denoting key ingredients copper, indium, and selenium) has the best overall potential to set the world's most enduring standard for solar energy. For more information visit www.solar-frontier.com and www.solar-frontier.eu