



SINT-MICHIELS COLLEGE B-2900 SCHOTEN - BELGIUM

Project name : Sint-Michiels College
Architect(s) : Gie Bresseleers
Project owner : v.z.w. Sint-Michielscollege
General contractor : Gillion Bouw
Façade contractor/System supplier : E-Activ

Application

A glazed roof canopy in front of a new building construction for the Sint-Michiels college in Schoten Belgium, consisting of laminated safety glass with integrated solar cells generating electricity and providing shading and cooling for the building and occupants

E-Activ's scope of the work

- Engineering, manufacturing, and construction
- Electrical installation (DC & AC), testing and commissioning

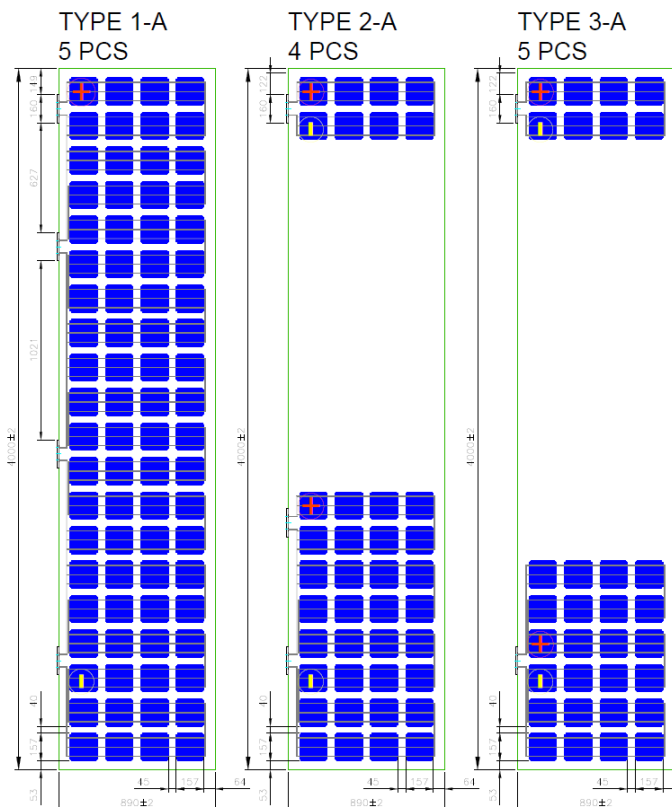
Completion year : December 2020

Quantities : 110 m²

Power output : 7,6 kWc

Estimated annual energy production: 6,5 MWh

Design:



Technical challenges:

- Laminated safety glass: enhanced fall-trough and injury safety by using strengthened glass on the backside.
- Fire Class BS1d0: no combustibility and special module assembling & components
- Arrangement of the cells and different designs

Features:

- Laminated safety photovoltaic glass
- Glass thickness calculations according to European standards
- High efficiency ($\geq 22\%$) mono PERC solar cells - 158,75x158,75 mm – 5,5 Wp

What makes the project possible?

- Current building regulations: “Nearly Zero Energy Building Directive” 2010/31/EU
- Project owner commitment towards sustainable construction
- E-Activ's experience and expertise in projects for public buildings.