SUSTAINABILITY | BEHIND THE CONSTRUCTION FENCE | CONSTRUCTION DETAILS | VIDEO

Vive le sport

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PORR has built a multifunctional sports centre in Poland. And it is also sustainable.

Polana Jakuszycka is covered in snow for almost half the year. In other words, ideal conditions for biathlons and cross-country skiing. But also in summer, the sports areas of the multifunctional area offer many possibilities on 27,000m2. In addition, there is a four-storey sports, conference and hotel complex with a total area of 22,000m2. And: an indoor swimming pool, cycle paths, roller skating tracks, cross-country skiing and biathlon tracks with a shooting range, and a football pitch with an athletics track. The sports centre building complex, which PORR has been building since 2019, also houses a museum, a wellness centre, a sports equipment rental shop, and a restaurant. The facility is designed to accommodate European and international sporting events and competitions.

Promoting the microclimate

Polana Jakuszycka in Lower Silesia benefits from a very specific microclimate. There are 150 days of snow per year on average. That is why it is Poland's most well-known cross-country skiing centre. It is also very popular for hiking and cycling tours in the Jizera Mountains. The new sports centre will make Polana Jakuszycka even more popular. Sustainability naturally plays a key role when building such a large sports facility in such a unique environment. PORR has therefore created a natural habitat for plants on the roofs of the sports centre. This has a positive effect on the unique climate.

Ready, set, go

Creating living roofs

PORR installed the roof on Building A using a thin film system. It is light and low maintenance. It is primarily suited to planting sedums, which store water well, mosses, and grasses. PORR installed the roof on Building B using several layers – grass, vegetation, filtration, drainage, stabilisation, and root protection. This system allows for a wider choice of plants such as perennials, shrubs, and grass. For PORR, responsible building always means finding sustainable solutions. In this project, living roofs are one of them. They enable us to collect and retain around 50% of the rainwater. The plants absorb up to 20% of pollutants from the air and increase the oxygen content and humidity.

Insulating heat

The construction of the roofs is inverted. This means that the thermal insulation layer is applied on top of the waterproofing layer. The benefit of this is that the water-proofing layer maintains a constant temperature similar to that inside the building. The thermal insulation layer provides additional protection against mechanical damage and the effects of the weather. We improved the thermal and sound insulation qualities by planting vegetation. Thanks to PORR's team spirit and full commitment, the work was completed ahead of schedule. Now the spirit of sport is alive in Polana Jakuszycka. And attracts athletes from all over the world to Poland.