INTERVIEW

CONSTRUCTION DETAILS

BEHIND THE CONSTRUCTION FENCE

SUSTAINABILITY

Sustainable Construction Sites: An Outline

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Sustainable construction sites are all about conserving resources and planning with foresight. Our expert Katrin Maja Künzler explains what this means and how PORR does it.

What makes a construction site sustainable?

The <u>German Sustainable Building Council (DGNB)</u> certifies building sites in accordance with predefined criteria and awards the Sustainable Building Site Certificate. In terms of environmental sustainability, this applies to the use of materials, conservation of resources, transport, avoidance of

pollutants, and preserving biodiversity. Social responsibility on the construction site is also relevant. In addition to the safety of everyone involved in the construction process, it also covers preventive measures for health protection.

How are sustainable building projects planned?

The process of establishing a sustainable building site begins with the planning stage. Action must be taken early to avoid negative impacts on and around the construction site. The most important aspects concern biodiversity preservation, soil and water protection, and measures against noise, visual

disturbances, and dust. In order to assess the sustainability of a construction site over the entire construction period, checks must be carried out at regular intervals, for example in the form of site inspection reports.

The PORR branch in Salzburg is a certified project. How were the criteria implemented?

A sustainability officer appointed for the construction site was responsible for monitoring the implementation of the DGNB certification process. She regularly documented electricity and water consumption throughout the construction process. The <u>pde</u> sustainability department created the concepts necessary to reduce noise and dust,

protect the soil and groundwater, reduce shocks and vibrations, and avoid and organise waste. Of course, the involvement of the entire team at our Salzburg branch is particularly important, as is a regular exchange of information. All the PORRians involved in the construction were briefed on the DGNB criteria.



The sustainable PORR branch in Salzburg (c) PORR

What will the sustainable building site of the future look like?

The DGNB certificate is an important milestone on the path to enabling quantifiable sustainable construction. Sustainability concerns us all. That's why further measures for the construction site of the future are already being discussed. These include, for example, using green electricity, PV panels on construction cabins, increasing the use of rainwater, actively shaping recycling and disposal routes, and using low-emission vehicles.

Did you know ...

- ... that the interior of the PORR branch in Salzburg s made exclusively from zero-emission and pollutant-free materials with all the timber sourced from sustainable forestry? It also features hybrid collectors, combined with a ground brine storage tank and heat pumps for sustainable heating and cooling of the building.
- ... that even more PORR branches are particularly sustainable? In Sulz in Vorarlberg, for example, the cooling and heating is provided by brine-water heat pumps. There is a photovoltaic system on the green roof. And the branch in Klagenfurt has been awarded platinum certificate. According to the <u>ÖGNI</u>, what makes this energy-plus building so sustainable can be summed up as follows: a highly efficient, cost-optimised building envelope with

passive house components including external shading, groundwater heating and cooling, photovoltaic systems on the facade, on the flat roof, and as a shading element above the roof terrace in a semi-transparent design, electric charging stations to promote alternative modes of transportation, highly efficient LED lighting including daylight-guided control and presence sensors, maximum building ecology requirements, and choice of materials for efficient environmental protection, and an optimum indoor climate, and a positive annual energy balance. And since the revitalisation in 2018, PORR in Linz has also been supplied with renewable energy through a geothermal probe system.