Construction Sector Group Publication
Updated: September 2022

GFRP - Combar for a Healthy Working Atmosphere

Location	Swiss Plateau
Overview	In the Swiss Plateau, on the language border between German and French Switzerland, a typical small to medium-sized company has treated itself to a corner extension of almost 600 square meters. In this way, the company solves its lack of space and creates meeting zones, office workplaces and a conference room. Steel reinforcement of the concrete core was taboo for health reasons. For this reason, the glass fibre composite Combar from the construction product manufacturer Schöck was used for the reinforcement – even though the client trades in stainless steel and metal.
The challenge	It was only during the planning of the wooden structure that the choice fell on high-quality Jurassic limestone concrete for the staircase core; this in turn led to the decision not to use steel for its reinforcement. Especially in the efforts of the client to create a healthy working atmosphere, magnetic fields should be avoided at all costs.
The solution	Increasingly, the causes of chronic headaches, sleep disorders and rheumatic complaints, for example, are associated with changes in the natural radiation environment and discussed. Therefore, numerous building biologists advise to avoid magnetic field. Since reinforcing steel is electrically conductive and also magnetizable, it can cause distortion of the Earth's natural magnetic field near the reinforcement. The client wanted to avoid exactly that: "When we expressed our desire for a harmless reinforcement, the engineer quickly had an alternative at hand with Combar."
Materials used	GFRP- Schoeck Combar
Client	L. Klein AG, Biel
Architect	Gautschi Lenzin Schenker Architekten AG, Aarau
Engineer	WMM Ingenieure AG, Münchenstein
Contractor	Sterki Bau AG, Bellach
Supplier	Schoeck Ltd
Further details	Website: www.schoeck.com Press Release: The Steel Trader Who Didn't Want Steel (German)