

Seismic retrofitting of masonry with S&P CFK-Laminates and G-Sheets

Project: Block of flats on Pilgers Street *MFH Pilgerstrasse* in Baden, Switzerland (AG / CH)

Year: 2013

Solution: In the course of a total renovation, the roughly 50-year-old multi-family block of flats *MFH Pilgerstrasse* is to be reinforced to improve earthquake safety according to norms and requirements. The static calculations show that various masonry walls must be reinforced across several storeys. S&P CFK-Laminates will be used to transfer the dynamic loads into the foundations. The G-Sheets AR 50/50, applied beforehand, strengthen the horizontal joints in the masonry and hold these together. To meet vapour diffusion requirements, S&P Resicem was chosen for application.

Material consumption: approx. 700 metres of S&P CFK-Laminates and 500 m² of S&P G-Sheet AR 50/50

Timeframe: around 4 months in several stages

Images: *a) Preparing the application surface with grinding and re-profiling (S&P Repcem)
b) Reinforcing the masonry with S&P G-Sheet and S&P Resicem (vapour permeable)
c) Application and anchoring of the laminates as specified by the statics calculations
d) Completed reinforced masonry walls before finishing tasks*

