

## Axial reinforcement of columns using S&P C-Sheet 240

Project: Renovation of sports hall in Villnachern, Switzerland (AG / CH)

Year: 2014

Description: While renovating the sports hall, the concrete parapet on the facade between the columns was removed. Structural calculations showed that a total of 7 of the 14 outer columns had to be reinforced with S&P C-Sheets 240 (400 g/m<sup>2</sup>) along the bottom 1.2 metres of the columns. The load-transferring wrapping of the column was carried out using the carbon fibre mesh C-sheets and the vapour-permeable epoxy resin S&P Resicem on a prepared bearing substrate.

Materials: 12 m<sup>2</sup> S&P C-Sheet 240 400 g/m<sup>2</sup>, width of roll: 300 mm

Construction time: The application of the S&P C-Sheets 240 was carried out in two stages on two working days.

Images: *a) Preparing the concrete surface / Chamfering the edges to a radius of min. 25 mm*  
*b) Laminating the S&P C-Sheet 240 (400 g/m<sup>2</sup>) with S&P Resicem (vapour permeable)*  
*c) Covering the columns in quartz sand as bonding course*  
*d) Completed reinforced column*

