



## **Flood prevention – Concrete with structure and colour**

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# Flood prevention – Concrete with structure and colour

Due to raising flood catastrophes during the last years, flood prevention has become a central topic. Concrete as building material gains an outstanding importance in the construction of protective walls because of economical and formability reasons.

The building activity of the bureau of water management Kronach for flood prevention in Bad Staffelstein represents a current example how exposed concrete surfaces can be shaped attractively using RECKLI-formliners.

In the future, 45 h settlement area of the city Bad Staffelstein will be protected against floods by the planned measures of flood prevention along the stream Lauterbach starting from the bridge Goethebrück in Bad Staffelstein and ending at the motorway bridge A73. About 400 houses as well as 35 factories and social facilities are protected by the construction of walls and dikes for flood prevention.

The area Oberfranken is responsible for this building project and the bureau of water management Kronach is in charge of the concept and the execution of construction work. The total costs of this project amount to approx. 7,8 m €.

For economic reasons, it was decided to use RECKLI-brick and masonry pattern 2/147 Allgäu. A plain concrete wall combined with a bricked natural stone placed on it would have been far more expensive.

RECKLI has delivered several 1,40 m x 1,50 m elastic formliners to the construction firms AS-Bau GmbH Hoch- und Tiefbau in Hof, as well as to Dietz Baugesellschaft mbH & Co. KG in Weismain. These formliners can be placed almost smoothly one to another to grant a continuous run of structure.

The use of the formliners was realized in cast-in-situ-concrete. In this case, the elastic formliners are adhered entirely to the formwork by the help of RECKLI Formliner adhesive. The use of RECKLI Stripping wax TL-SO, specially adjusted to the elastic formliners and being an essential component of the RECKLI-system, guarantees a high reusability (up to 100 applications) of the formliners and permits an absolutely homogeneous concrete surface.

After that, the walls were colourized with Nawtöne-Staining. Nawtöne is an innovative colour system for vertical and inclined concrete surfaces. For this reason, it is especially qualified for the most attractive design of facing and structural concrete. NAWTÖNE Stain is not a conventional coating system. You are missing a filling character whereby it does not mask the surface texture of the painted wall. Different colour shades and tinges are wanted and lead to a vitalisation of the surface. In this way, the natural stone character of the pattern is intensified and the walls fit in harmonically in the landscape.

Due to the high amount of casting of RECKLI-formliners (up to 100 applications), the expected high economic efficiency of this project is achieved. Apart from this, it underlines the almost unlimited creative possibilities offered to architects, constructors, planners and designers by RECKLI-formliners.

In fact, RECKLI offers an overall solution, covering a competent personal consultation on site, model making on special demand, formliners and all necessary additional material.















