

# SIKA AT WORK GENERAL RENOVATION OF LA TRINITÉ-PORHOËT WATER TOWER

STRUCTURAL STRENGTHENING: Sika CarboDur<sup>®</sup> Grid CONCRETE REPAIR: 731 Lankorep Structure WATERPROOFING: Lankocoat DW Epoxy system



**BUILDING TRUST** 

## LA TRINITÉ-PORHOËT WATER TOWER

General refurbishment including repair and reinforcement of the cornice using the FRCM Sika CarboDur<sup>®</sup> Grid system

#### **PROJECT DESCRIPTION**

La Trinité-Porhoët water tower is located at La Trinité-Porhoët, Brittany in France. Its structure needed generally to be refurbished which would include repair, reinforcement and waterproofing. This project is the first structural reinforcement case in France with an FRCM system under technical agreement in 2016 (ATex).

#### **PROJECT REQUIREMENTS**

The project owner's wish was to find a couple of partners (contractor + manufacturer) able to provide a global solution for the renovation of this reservoir.

The key issue for the refurbishment was the limited project downtime which would minimize the interruption of the current reservoir operation, which served the drinking water storage and distribution for the entire municipality of La Trinité-Porhoët. Less time needed to refurbish this structure would lead to cost savings, limited downtime and less nuisance for the inhabitants of the village. That was why the Sika CarboDur<sup>®</sup> Grid system was selected by the project owner. The use of Sika CarboDur<sup>®</sup> Grid allowed the refurbishment work on the structure to be completed in a short time, which contributed to the rapid return to service of the structure.

#### SIKA SOLUTIONS

Sika CarboDur<sup>®</sup> Grid system was supplied to the refurbishment project. This system is composed of the following Parex products:

- 731 LANKOREP STRUCTURE
- 32 LANKOSTRUCTURE CARBOGRID TRM
- 52 LANKOSTRUCTURE CARBOGRID COLLE
- 400 LANKOCOAT DW EPOXY PRIMER
- 401 LANKOCOAT EPOXY DW
- 402 LANKOCOAT ARMATURE DW 450

#### \* Parex – a Sika company

Products and systems under the Parex name also exist in the Sika offer under the Sika name.



Cutting of reinforcements before installation.



Pre-wettingthe substrate



The CarboGrid is placed.



Repair of cracks.



Mortar preparation.



The mortar is applied with a notched trowel

The implementation of the reinforcement system is so simple that only one person is needed to carry out this work. The preparation of system components is very simple because the mortar is a single-component mortar (mixed with clean water), and the grid can be easily cut with a pair of scissors and its geometric stability makes it easy for a single person to put it in place without the risk of deforming it during installation. Everything is designed for simple, fast work, without any risk to the applicator or the environment (no solvents, no waste to be reprocessed, and no nuisance or pollution).

Moreover, simple and inexpensive tools are all that is needed to implement this system, which extends the life of the works without having a negative impact on their original appearance, which is a real plus.





Enrobing of the grid.





No overlapping difficulties.



Smoothing the finish.



Wetting the surface.

### GENERAL RENOVATION OF LA TRINITÉ-PORHOËT, WATER TOWER



#### PROJECT PARTICIPANTS

Owner:

Contractor: ROE 50530 C Sika organization: Parex France

Supply of Brocéliande (SIAEP), City of La Trinité-Porhoët (Brittany, France) ROE 50530 CHAMPCEY (France) Parex France



Our most current General Sales Conditions shall apply. Please consult the most current local Product Data Sheet prior to any use.





**SIKA SERVICES AG** Tueffenwies 16 CH-8048 Zurich

Switzerland

Contact Phone +41 58 436 40 40 www.sika.com



**BUILDING TRUST**