

## Artificial Lake (Sofia, Bulgaria)

Classification	New construction
Type of structure	Artificial lake
Place	West Park, Sofia Bulgaria
Time	2020



Project	The reconstruction of this artificial lake is part of an investment program by the Sofia Municipality, with the aim of completely renovating West Park, the second largest park of Sofia. The park includes many features which are considered emblematic for the city, such as rock gardens, wooded trails and the artificial lake which measures 2000 m <sup>2</sup> in total.
Application methods	With the active assistance and consultancy of <b>VAL TECHNOLOGY Ltd.</b> and <b>CONIX TRADE Ltd.</b> , an innovative technical solution was proposed and adopted for the execution of the structure using high-tech hybrid fiber-reinforced “wet” mix shotcrete.  In order to ensure a monolithic waterproof structure, a specialized fiber-reinforced concrete mix design was employed, making use of the waterproofing properties of <b>Krystaline Add1</b> and its ability to self-heal future cracks. In addition, <b>Keptonite</b> (a special shrinkage controlling admixture) was used to ensure a completely joint-free structure.
Products Applied	<b>Krystaline Add1</b> dosed at 1 kg/m <sup>3</sup> . The design allowed for <b>Krystaline Add1</b> to be used as the only waterproofing system.
Results	This pilot implementation creates objective preconditions for expanding the range of innovative structural systems with KRYSTALINE products, which, in addition to specific structural functions, are also applicable as opportunities for aestheticizing urban and park environments.

Application in progress:





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Finished project:

