

# [Al areen water park, bahrain essay sample](https://assignbuster.com/al-areen-water-park-bahrain-essay-sample/)

Al Areen is a new large scale, luxurious mixed use, desert spa and family tourism development spread over 2 million square metres. It is located on an elevated desert plateau in the south of Bahrain. The current project is divided into two distinct areas:

„ The lost paradise of Dilmun Water Park“ with an area of approximately 80‘ 000 m2 and a total cost of approx. $150 million. This magniﬁcent world-class water park brings to life the spirit of the Arabian past, recreating the ancient world of Dilmun, with artifacts and replicas from real historical sites.

„ The Banyan Tree Desert Spa and Resort“ is located on the highest point of the site and will be unparalleled in the region. With its use of sophisticated techniques and advanced technology, the Banyan Spa will be the deﬁnitive destination to relax and escape the trials and tribulations of a hectic modern lifestyle.

The Problem   
The construction of these replica historic buildings in the Dilmun Water Park was predominantly in block walls covered with rendering of approximately 10 cm overall thickness. The surface features which included cracks, rock formations, animals and many other details and designs were carved. This artistic work was undertaken by a specialist Malaysian company. They started 10 minutes after the application of the sprayed mortar was ﬁnished and all of their works had to be ﬁnished within 8 months. In addition to these buildings, many other structures including water channels, lakes, wave pools etc. had to be constructed during the same period using the same construction technique.

The Sika Solution   
To fulﬁll all of the desired application and performance requirements of the sprayed mortar Sika Bahrain provided a „ full package“ to the contractor which involved the following:   
Aliva mortar spray equipment, modiﬁed to suit the speciﬁc applications Free technical training on site supported by technicians from Switzerland Optimized Mix Designs to support the contractors

Accessories, modiﬁcations and spare parts for the Aliva spray equipment Sika Admixtures Sigunite® and SikaCrete®-PP1 TU to improve the workability of the sprayed mortars With this full Sika package all of the project requirements were fulﬁlled to the complete satisfaction of everybody involved. In addition to this successful “ package” a lot of additional Sika products were also provided to the contractors on site. In the table below is a summary of the most important products supplied: Product

Quantities

Sika Separol -FP15

25 drums

Sika Antisol -E15

40 drums

Igasol® Emulsion BA

35 drums

SikaGrout -114

SikaRep

7000 bags   
3000 bags

Sika Aliva-263 (shotcrete)

1 machine

Sika® Aliva-263 (plastering)

2 machines

Spare Parts

value = 22‘ 000 $

Sigunite Powder BA

Sikacrete -PP1 TU

2000 bags   
8000 bags

SikaLatex Emulsion

30 drums

SikaTop® Seal-107

2000 sets

Sika® Waterbar V-20L

1300 l. m

Sika Rugasol -2 Liquid

20 drums

The total value of Sika products used was approximately $210‘ 000

Work in Progress to Recreate Replicas of Historical Sites at the “ Dilmun Water Park”

Grouting Sikadur®-42 under the base plate of tower columns

Villas at the „ the Banyan Tree Desert Spa and Resort“

Al Areen Water Park, Bahrain

Aliva Spray Equipment Application Instruction and Training on Site

Mr. Roger Zutter, Sika Switzerland Sika General Manager, Middle East, Ashraf Wahib, and the Sika Gulf Sales Manager, Amin Halaseh, visiting the Site during the works Application Instructor

Application of Sikadur®-42 grout under the base plate of the tower columns

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Waterchannel at “ Dilmun Water Park”

Corporate Construction 06. 06 / 01 / 01 / ar

Mr. Islam Besar, Sika Gulf   
Project Technical Sales Advisor