



# SIKA AT WORK

## LINING OF WATERTOWER FOR STORING OF POTABLE WATER, CITY OF LEON, MEXICO

WATERPROOFING: Sikaplan® WT 4220-15 C SHEET WATERPROOFING MEMBRANE

BUILDING TRUST



# LINING OF WATERTOWER FOR STORING OF POTABLE WATER, LEON, MEXICO



## PROJECT DESCRIPTION

Grupo Sadasi is a consortium that specialises in the development of sustainable residential complexes with projects across Mexico, from its headquarters in the Federal District also known as Mexico City and the country's capital. The company is primarily concerned with developing the affordable social housing and mid-range residential housing that is so much in demand today.

In this development, located in the Central City of Leon Guanajuato, an elevated drinking water tower was built to ensure sufficient water and pressure was available for the continuous supply of fresh drinking quality water to the Los Heroes District of the City. This project was intended to have a lasting impact and improve the lives of the many thousands of people living and working in the area.

## PROJECT REQUIREMENTS

A durable structure with a secure and reliable, waterproofing system with a long service-life was required to ensure the new tower could fulfil its function and supply fresh drinking quality water for the people and without fail for the foreseeable future.

It was also a pre-condition that all of the products used in the waterproofing system must be certified for use in contact with potable drinking water i.e. water that is fit for human consumption. Geometrica de Mexico, the internationally acclaimed Architects and Engineers designing the geometric water tower, also required a guarantee of watertightness with minimal maintenance for at least 10 years. Whilst the water towers service-life is obviously intended to be far longer than this, the engineers experience is that if the internal waterproofing is guaranteed for 10 years then it will last far longer and up to the service life of the structure.

## SIKA SOLUTIONS

After reviewing all of the various waterproofing system alternatives proposed for this landmark structure, the client and their professional advisors opted for the solution offered by Sika Mexico, using a Sikaplan® WT flexible, polyolefin based, glass fibre fabric reinforced, sheet membrane system (FPO), as this met all of the stated requirements, had extensive international references with proven success and long-term durability on key structures.

This Sika system was used to line throughout the interior of the tank, including on the lateral walls where it was securely installed on the sloping of 50°, and at a height of up to 15 m. The same Sikaplan® WT waterproofing membrane was also installed on the fill, overflow and outflow pipes for the tank, by using metal hose clamps to seal the membranes around the pipes.

Date of waterproofing works: April 2014

## Used products:

Sikaplan® WT 4220-15 C

Sikaplan® WT Fixation Plate PE

Sikaflex®-1 A

## PROJECT PARTICIPANTS

Owner: Grupo Sadasi

Main contractor: Geometrica de Mexico SA de CV

Sub contractor: Servicio Retana

Sika organization: Sika Mexicana S.A.

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



## SIKA SERVICES AG

Tüffenwies 16  
CH-8048 Zürich  
Switzerland

## Contact

Phone +41 58 436 40 40  
Fax +41 58 436 41 50  
www.sika.com

**BUILDING TRUST**

