



# SIKA AT WORK

## DUBAI INTERNATIONAL AIRPORT, UAE

FIRE PROTECTION: Sika® Unitherm®

COATING: Sikagard®

WATERPROOFING: Sika® Permacor®

BUILDING TRUST



# STEEL STRUCTURE PROTECTION FOR SEVEN EMIRATES HANGARS



## PROJECT DESCRIPTION

Beside all the attractions Dubai provides, “Emirates” Dubai’s own airline is equipped with the most modern aircraft, Airbus and Boeing, with excellent service and global connections. The number of passengers at Dubai International Airport has increased dramatically. To be prepared for the future growth, there have been extension plans in different phases. In extension phase II, seven “Emirates” hangars for aircraft maintenance, coating and accommodation – even for the giant bird Airbus A 380, were constructed.

## PROJECT REQUIREMENTS

The steel structure of the hangars shall be able to be protected against fire for 60 minutes so that in case of fire the people would have enough time to escape and the aircraft could be protected against big damage. In total about 240,000 m<sup>2</sup> steel structure of the roof system was coated open air. Normally such open air application is not a problem because of the dry climate of Dubai. But during the construction time, there was unexpected strong rain. So only a very fast protection method made the work to go on again possible. Additionally, there was special actions taken against the strong wind during the day, to avoid that the soft lacquer got “sand paper” effect.

## SIKA SOLUTION

All these problems were solved well by our experienced technician on-site. The coating system is composed of anti-corrosion primer coat, Sika® Unitherm®-38091 interior, R 60 and Sika® Unitherm®-7854 top coat, RAL 9002. Towards the end of the project, total 600 tons of Sika® Unitherm® including top coat were used.

At the same time, the steel structure of the terminal extension was also fire-protected by Sika® Unitherm®. In this case, the escape time of the human being during the fire is set to be the priority, so the fire resistance time is set to be 2 hours. The pedestrian bridges from the terminal to the airplanes were coated against fire as well.

Besides the classical fire protection coating, in this terminal there were further Sika products used. The technical rooms need to have wall surfaces with minimal VOC / AMC or particle emissions, therefore Sikagard®-183 W CR was applied for the walls to meet the standard and the approval. Sika® Permacor®-136 TW was used for the interior coating of the drinking water facility to fulfil the local potable water standard.

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



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