LEGOLAND® Water Park

Johor Bahur, Malaysia

Project Name

LEGOLAND® Water Park - Johor Bahur, Malaysia

Installer

STARK'S - Kuala Lumpur, Malaysia

General Contractor

Sunway Construction, Malaysia

Architect

Alma Architect and Planning, Malaysia

Featured Products

ARDEX WPM 265 Water Based Primer

ARDEX WPM 108 Quick Drying Undertile Waterproofing Membrane for Wet Areas

ARDEX Abacrete Bonding Agent for Use with Sand/ Cement Screeds and Renders

ARDEX WPM 256 (Hydrepoxy) Bonding Bridge

ARDEX Abalastic Liquid Polymer Additive for ARDEX Cement-Based Adhesives and Compounds

ARDEX FG 8 Flexible Coloured Grout

ARDEX Grout Booster Water-Based Polymer Grout Improver

ABA 500T Tile Adhesive

Challenge

- 5,850 square meter installation area
- · One-month installation time frame
- Construction taking place during rainy season (rain showers every afternoon)
- · Excessive humidity throughout installation substrate

Situation

LEGOLAND® Water Park has more than 20 slides and water based attractions and boasts 70 LEGO models. The LEGOLAND Build-a-Raft allows guests to design and build a unique LEGO raft and set afloat on a voyage around the lazy river. The ivory cement-based skim coat on the walls of the lazy river had to withstand water immersion and pressure. From the time of proposal submission to the job completion, installers had one month to finish the installation.

Solution

STAR'K worked with ARDEX Singapore Technical Services Department who recommended various ARDEX products for the LEGOLAND Water Park. ARDEX WPM 265 was used to prime new concrete surfaces. Next they applied ARDEX WPM 108 waterproofing membrane, a tough, ready to use product specifically designed for use under tiles. ARDEX WPM 108 is totally resistant to re-emulsification once cured and not affected by extreme temperatures. Adding ARDEX Abacrete into the sand/cement screed improved water resistance and accommodates thermal movement. An ivory decorative cementitious skim coat of ABA 282 mixed with ARDEX WPM 256 was applied as a final step. This provided excellent water resistance and superior adhesion to the substrates. ARDEX FG 8 and ARDEX Grout Booster were used to fill the mosaic tile joints to prevent mold growth on tiles in the Lazy River. ARDEX WPM 256 water-based epoxy enabled the high-humidity installation to continue with minimal down time. ARDEX Singapore Technical Services Department provided installation demonstrations and site inspections regularly during the installation to ensure correct application processes were being followed.







ARD 1776 (01/2014)