



# SIKA AT WORK

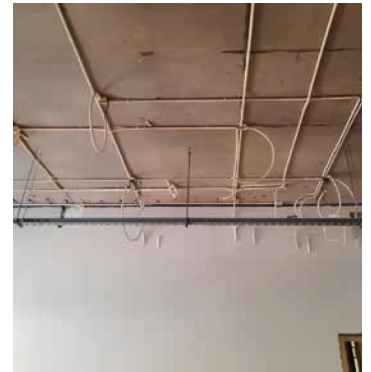
## PASSIVE FIRE PROTECTION AT NAM THEUN I HYDRO POWER PLANT, NAM KADING RIVER, LAOS

SEALING & BONDING: Sikasil®-670 Fire  
SikaSeal®-627 Fire Collar+

BUILDING TRUST



# PASSIVE FIRE PROTECTION NAM THEUN I HYDRO POWER PLANT



## PROJECT DESCRIPTION

Project name: Nam Theun I Hydro Power Plant  
Location: Pakkading, Bolikamxay, Laos  
Construction: 2015-2021

## PROJECT REQUIREMENTS

The Nam Theun 1 Hydro Power Plant, a 600MW facility situated along the Nam Kading River, features a 177-meter-high curved gravity roller-compacted concrete (RCC) dam. In order to meet the project requirements, it was essential to install passive fire protection capable of effectively sealing gaps in the finishing materials of the concrete structure.

## SIKA SOLUTIONS

Sika proposed the implementation of Sikasil®-670 Fire and SikaSeal®-627 Fire Collar+ as the ideal solutions for the project as both products meet the necessary fire safety standards, ensuring effective sealing in areas prone to fire hazards. Sikasil®-670 Fire is a fire rated, 1 component, moisture curing, low modulus elastic fire resistant joint sealant, suitable for sealing gaps in both interior and exterior applications. SikaSeal®-627 Fire Collar+ is a fire-resistant prefabricated pipe collar consisting of a metal casing and an intumescent insert. This product is suitable for plastic pipes and closes off gaps which form during a fire when combustible pipes melt away.

Any product name or reference reflects the Sika product name at the time of creation of this document and may differ from the product name or reference during past events.

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

Sika supplied 200 linear meters worth of Sikasil®-670 Fire as well as 72 pieces of SikaSeal®-627 Fire Collar+ with a diameter of 110mm/50mm and 66 pieces with a diameter of 200mm/60mm.

Other Sika products used in the project:

- Sikaflex® PRO-3 (floor joint sealant)
- Sika® Plastiment® TM-28 (water reducer/set retarder)
- Sika® Sigunit® L-53 TH (alkali-free shotcrete accelerator)
- Sikament®-520 (water reducer/set retarder)
- SikaPlast®-204 TH (superplasticizer)
- Sika® Antisol® E & S (curing agent)
- Sika® Separol® W-398 C (release agent)
- SikaFiber® Force PP 48 (synthetic macro fibers)
- Sika Waterbar® - Elastomer FM 500 (permanently flexible waterbar)
- Sika® Greenstreak 714, 719, 905 & 958 (PVC waterstops)
- Sikafloor®-3 QuartzTop (mineral dry shake hardener)
- Sikafloor® ColourSeal (concrete sealer)
- Sikagard®-62 (resin-based protection coating)

## PROJECT PARTICIPANTS

Project owner: Nam Theun 1 Power Co.,Ltd  
Architect, Engineering & Consultant: AFRY  
Contractor: CMC/ITD/SONG DA Joint Venture  
Sino Hydro Corporation  
Supplier: KPM (Export), BU Concrete  
Sika Organization: Sika (Thailand) Limited



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