



SIKA AT WORK

PAHANG - SELANGOR RAW
WATER TRANSFER TUNNEL
PROJECT, MALAYSIA

BUILDING TRUST



PSRWTP – MALAYSIA, LOT 1-1 WATER TRANSFER TUNNEL

Conveying Raw Water from Pahang State to Selangor State to Meet the Anticipated Future Water Demands of the Kuala Lumpur

PROJECT DESCRIPTION

To transfer raw water from the Sementan river in Pahang state to a proposed water treatment works in Selangor on the outskirts of Kuala Lumpur, a 44.6 km long transfer tunnel had to be constructed through the Titiwangsa hill range.

Three tunnelling methods were used simultaneously to meet the project program requirements and to suit the differing geological conditions and topography over the length of the tunnel:

TBM	34.4 km
NATM	9.1 km
Cut & Cover	1.1 km

It is anticipated the transfer tunnel will supply the Selangor, Kuala Lumpur & Putrajaya areas with a total of 1,890 million litres of water per day.

PROJECT REQUIREMENT

Sprayed Concrete

Early strength	> 5 MPa at 8 hrs
28 day strength	> 30 MPa
Energy absorption	> 1,000 Joules
	> Sect'10.4 of EFNARC
Open time	> 2 hrs

Intsu Lining Concrete

Early strength	> 8 MPa at 12 hrs
28 day strength	> 35 MPa
Open time	> 2 hrs

Invert Segment Precast Concrete

Early strength	> 8 MPa at 8 hrs
28 day strength	> 35 MPa
Open time	> 1 hrs



SIKA SOLUTIONS

Sika is working closely together with the customer from the tendering phase through to completion of the project. The strong relationship with the customer enables Sika to provide the particular on-site and off-site support as requested by the customer to meet their particular technical, commercial and logistical requirements.

SIKA PRODUCTS

Sigunit® L53 MY	Shotcrete accelerator
Sika® ViscoCrete® SC-315	Shotcrete superplasticizer, lining concrete, TBM invert segment - precast
Sika® ViscoCrete®-2055	HRWR (lining concrete)
Sikament® 163 EX	MRWR (insitu concrete)
	conduit-cut and cover section
Plastocrete®-R6	Retarder
SikaGrout®-216	Contact grout - invert segement
Sika® Rock Anchor SN MY	Rock anchor grout



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PROJECT PARTICIPANTS

Owner: Ministry of Energy, Green Technology and Water - Malaysia (KeTTHA)

Engineer: TEPSCO (JPN) - SMEC (AUS) - SMHB

Contractor: Shimizu- Nishimatsu - UEMB- IJM Joint- Venture

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

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