

SIKA AT WORK MAYES CANAL CYCLE BRIDGE MOOLOOLABA

Products: SikaFiber® PPM 48/19



BUILDING TRUST

PROJECT BACKGROUND

- Sunshine Coast Council, in conjunction with the Queensland Government's Cycle Network Local Government Grants Program, has spent \$5 million to construct a new pedestrian and bicycle bridge across Mayes Canal. The bridge separates pedestrians and cyclists from vehicles travelling along Brisbane Road and spans across the Mooloolaba River.
- The bridge features decorative panel elements and the bridge is 5.38 metres wide and 66 metres long and the deck of coloured concrete slab, which is divided to 3 x 20m pours to appear as old style infill slabs

PROJECT REQUIREMENTS

- No joints in 3 x 20m infill slab and the slab thickness varies from 160mm to 313mm to achieve a curved shape over the top of the straight precast planks
- The coloured concrete infill slab required having a broom finish but some sections were sand blasted to create architectural patterns
- No visible cracks in infill slabs and no saw cuts in 3 x 20m infill slab.
- Coloured concrete mix should be workable enough to pump without any blockages and it was required to broom finish the slab same day afternoon



SIKA SOLUTION

- Considering the crack control requirement and broom finish and slip rating requirements, Sika proposed SIka Fibre PPM 48/19 at a dosage rate of 6.9kg/m3.
- Shrinkage control admixture is used to achieve control shrinkage of 250 x 10-6 at 28days
- Concrete slump was maintained around 100mm to quick and easy finishing of the slab
- Concrete was supplied by Holcim and the fibre was added to the truck at the batching plant



3

SIKA PRODUCT USED: SIKAFIBER® PPM 48/19

PROJECT OUTCOME	 During the initial site trials, it was found that the fibre dosage is at the upper limit and needed to reduce to 4.6kg/m3 to avoid any finishing issues. SikaFiber PPM 48/19 was mixed, placed and finished for the project without a single complaint from engineers, contractor or concrete placement team.
CONSULTANT ENGINEER	Tod Consulting
SPECIFICATION ENGINEER	Chaminda Jayathilake
CLIENT	Sunshine Coast Regional Council
DATE	07/03/2019
LOCATION	Bindaree Cresent Mooloolaba QLD

WE ARE SIKA

Sika is a specialty chemicals company with a leading position in the development and production of systems and products for bonding, sealing, damping, reinforcing and protecting in the building sector and the motor vehicle industry. Sika's product lines feature concrete admixtures, mortars, sealants and adhesives, structural strengthening systems, flooring as well as roofing and waterproofing systems.

SIKA AUSTRALIA PTY LTD ABN 12 001 342 329

1300 22 33 48 aus.sika.com

HEAD OFFICE

55 Elizabeth Street Wetherill Park, NSW 2164 P: (02) 9725 1145 F: (02) 9725 2605

NEW SOUTH WALES

122 Newton Road Wetherill Park, NSW 2164 P: (02) 9725 1700 F: (02) 9756 5001

QUEENSLAND

30 Parker Court Pinkenba, QLD 4008 P: (07) 3633 9222 F: (07) 3633 9200

QUEENSLAND

70 Platinum Street Crestmead, QLD 4132 P: (07) 3489 3000 F: (07) 3489 3099 VICTORIA

33 Fiveways Boulevard Keysborough, VIC 3173 P: (03) 9797 0600 F: (03) 9797 0666

SOUTH AUSTRALIA

28 Kenworth Road Gepps Cross, SA 5094 P: (08) 8162 9055 F: (08) 8162 9099

SOUTH AUSTRALIA

1-2/28 Maxwell Road Para Hills, West SA 5096 P: (08) 8349 4955 F: (08) 8349 7061

WESTERN AUSTRALIA

61 Bushland Ridge Bibra Lake, WA 6163 P: (08) 9395 5300 F: (08) 9395 5399



BUILDING TRUST