



# SIKA AT WORK

## SIKA PRECAST TECHNOLOGY FOR THE WAIWERA VIADUCT

CONCRETE: Sika ViscoCrete®-2100 · Sika ViscoCrete®-20 HE  
REFURBISHMENT: SikaGrout®-212 HP

BUILDING TRUST





# SIKA PRECAST TECHNOLOGY FOR THE WAIWERA VIADUCT



Sika Grout 212HP, a shrinkage compensated high strength cementitious grout, was then chosen to grout the bearing pads onto the piers.



Sika ViscoCrete-20 HE and Sika ViscoCrete-2100 were used to achieve the necessary high early strength whilst allowing the concrete to flow through the congested steel to form the pre-cast panels.

## PROJECT DESCRIPTION / REQUIREMENTS

The Waiwera Viaduct is the largest bridge in the Northern Gateway Toll Road (ALPURT B2) project. At 537 metres long, with span lengths of 76 metres its pre-cast segmental design of reinforced and pre-stressed concrete materials meant this bridge needed high early strength and exceptional flow characteristics through congested steel as well as high strength grout for the bearing pad supports on top of the piers.

## CHALLENGES · SIKA SOLUTION

Sika ViscoCrete-20 HE and Sika ViscoCrete-2100 were used to achieve the necessary high early strength whilst allowing the concrete to flow through the congested steel to form the pre-cast panels.

Sika Grout 212HP, a shrinkage compensated high strength cementitious grout, was then chosen to grout the bearing pads

onto the piers. It has positive shrinkage compensation, high early age strength development and very high final strengths. It's high flow characteristics and adjustable consistency make Sika Grout-212 HP ideal for many types of structural grouting applications where high early age and/or long term compressive strengths are required.

## SIKA PRODUCTS

Sika ViscoCrete-2100  
Sika ViscoCrete-20 HE  
SikaGrout-212 HP

## PROJECT PARTICIPANTS

Main Contractor: Northern Gateway Alliance

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