



SIKA AT WORK

55 UPPER QUEEN STREET
STRENGTHENING, AUCKLAND, NZ.

REFURBISHMENT: Sika Carbodur® · SikaWrap®

BUILDING TRUST



55 UPPER QUEEN STREET, AUCKLAND, NZ



PROJECT DESCRIPTION

An additional storey was added to the reinforced concrete building at 55 Upper Queen Street as part of a redevelopment project.

PROJECT REQUIREMENT

The extra weight of the new upper level required some of the existing ground level columns to be strengthened.

SIKA SOLUTION

Project Engineers, Structure Design Ltd specified that 13 columns and beam column junctions should be strengthened with carbon fibre reinforced FRP.

BBR Contech (Construction Techniques Ltd) were contracted to install Sika CarboDur FRP strengthening. This involved the application of vertical strips of carbon fibre on the sides of the columns to provide additional flexural strength and multiple layers of circumferential wraps to enhance confinement.

The ends of the concrete beams connecting to the columns were strengthened in shear by application of carbon fibre strips perpendicular to the axis of the beam.

SIKA PRODUCTS

- Sika CarboDur
- SikaWrap

PROJECT PARTICIPANTS

Client: Cordite Construction.

Consultant: Structure Design Limited.

Specialist Contractor: BBR Contech (Construction Techniques Ltd).

Sika Organisation: Sika (NZ) Ltd

SIKA (NZ) LTD

PO BOX 19192
Avondale · Auckland
1746 · New Zealand

Contact

Phone 0800 745 269
Fax 0800 745 232
www.sika.co.nz

BUILDING TRUST

