

Scharbergbrug Bridge

Track record 2016

Applied system

Interzone® 3507 @ 130µm
Interzone 3507 @ 140µm
Interthane® 990SG @ 50µm

Location of application

The Netherlands

Project owner

RWS

Applicator

van der Ende

Surface preparation

Full Blast Sa2,5

Project size

60,000m²



Brug Bridge

Track record 2016

Applied system

Interzone® 3507 @ 130µm
Interzone 3507 @ 140µm
Interthane® 990SG/Interfine® 878 @ 50µm

Location of application

The Netherlands

Project owner

RWS

Applicator

van der Ende

Surface preparation

Full Blast Sa2,5

Project size

60,000m²



Shaldon Bridge

Track record 2016

Location of project

UK

Project owner

Devon County Council

Applicator

Maintenance Plus

Products/system used

Columns -

Interzone® 954 @ 2 x 350µm

Beams -

Interzone 954 @ 2 x 250µm

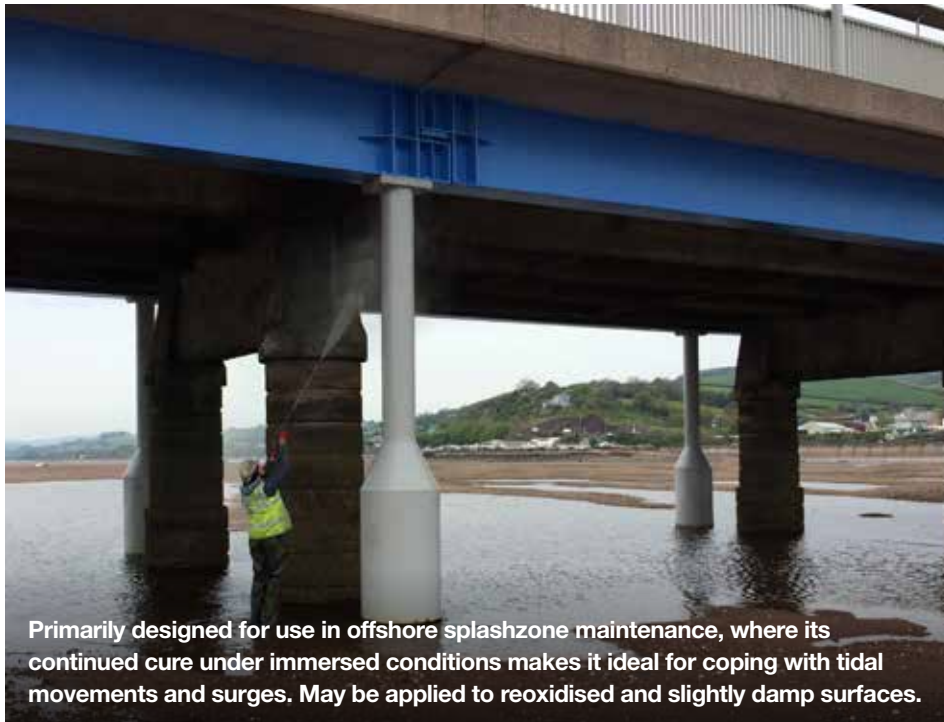
Interfine® 629HS @ 1 x 50µm

ISO12944 environment

C5M / Immersed

Project size

2,200m²



Westlakes Foot Bridges

Case history 2010

Focus products: 2 coats of Interfine® 878
@ 60µm (2 mils) dft per coat,
Interplus® 358 @ 125µm (5 mils)

Year of project: 2006

Location: Adelaide, South Australia

Project owner: City of Charles Sturt

Project size: Approx 400 litres (106 gals)

Area inspected 1:

Coating system remains
in good condition.

Area inspected 2:

Colour retention and gloss
still in good condition.



The customer wanted a product that could
be applied by brush and roller and also
have good Graffiti proof properties.

Mosinee Bridge repaint

Track record 2010

Location of project

Wisconsin, USA

Products/system used

Structural steel
Interzinc® 52 @ 2.5-3µm
Intergard® 475HS @ 6-8µm
Interthane® 990HS @ 2-3µm

Project owner

Wisconsin Department
of Transportation

Engineer

WDOT

Applicator

C&L Contracting

ISO12944 environment

C4

Surface preparation

SP10 with 2.5 mill profile

Total volume

5,574 litres (1,500 gals)

Total area

9,800m² (60,000ft²)



Oshkosh Bridge repaint

Track record 2011

Location of project

Wisconsin, USA

Products/system used

Structural steel
Interzinc® 52 @ 2-3mils
Intergard® 475HS @ 6-8mils
Interthane® 870 @ 3-5mils

Project owner

Wisconsin Department
of Transportation

Engineer

WDOT

Applicator

C&L Contracting

ISO12944 environment

C3

Surface preparation

SP 10

Total volume

1,893 litres (500 gals)

Total area

3,252m² (35,000ft²)



Sydney Harbour Bridge Refurbishment

Track record 2003

Location of project

Sydney, Australia

Products/system used

Interzinc® 72, Intergard® 475HS,
Interthane® 80HS

Project owner

NSW Department of Public Works

Applicator/Contractor

Sydney Harbour Bridge Maintenance

ISO12944 environment

C4

Total area

10,000m² (107,639ft²)



Oresundsbron Bridge

Track record 1999

Location of project

Sweden - Denmark

Products/system used

Interzinc® 72, Intercure® 420,
Interthane® 799

Project owner

Øresundsbro Konsortiet

Applicator

Skanska International Civil Engineering AB
& Alucrom AB (Midroc)

Architect

Georg Rotne

Contractor

Dragados SA

ISO12944 environment

C5-M

Total area

60,000 m² (High bridge)
500,000 m² (Crossing)



Webb Bridge

Track record 2003

Location of project

Melbourne, Australia

Products/system used

Interzinc®, Intercure® 420,
Interthane® 990 Metallic

Architect

Breitburn Energy

Structural engineers

Ove Arup & Partners

Fabricator

Geelong Fabrications



Whittle Arch and Glass Bridge

Track record 2000

Location of project

Coventry, United Kingdom

Products/system used

Interzinc[®] 52HS, Interfine[®] 979

Project owner

Local Government

Applicator/Fabricator

Rowecord Engineering Ltd

Architect

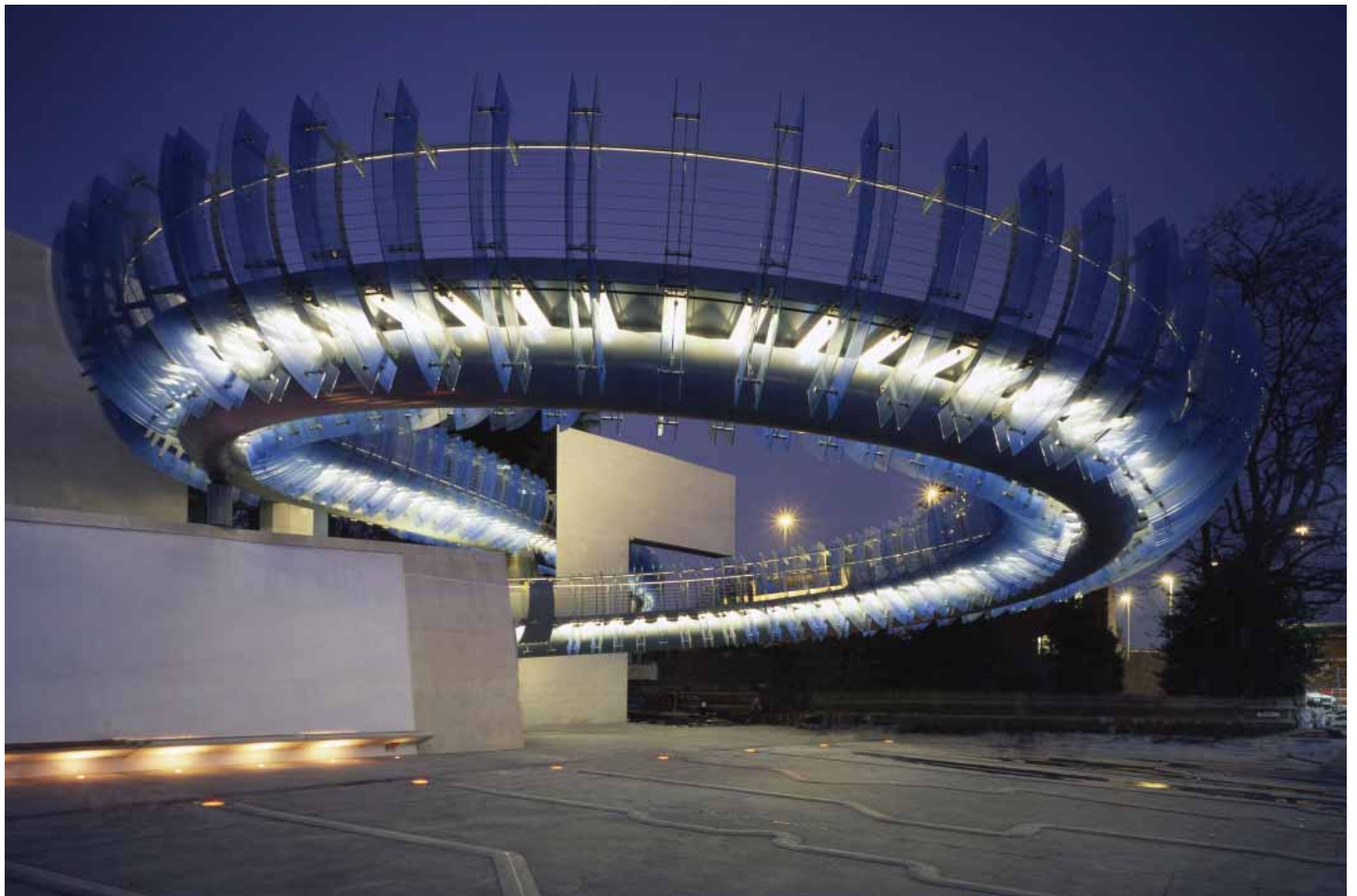
Whitbybird

ISO12944 environment

C4

Total area

2,000m² (21,528ft²)



Kurilpa Bridge

Track record 2009

Location of project

Australia

Products/system used

Interzinc® 52, Intergard® 475HS,
Interfine® 878

Project owner

Queensland Government

Applicator

Tranzblast

Fabricator

Beenleigh Steel

ISO12944 environment

C3

Total area

12,500m² (134,548ft²)



Miri Bridge

Track record 2011

Location of project

Malaysia

Products/system used

Intergard® 269, Interseal® 670HS,
Interthane® 990

Project owner

Jabatan Kerja Raya, Miri

Applicator

Perwira Spektra Sdn. Bhd. Miri

Fabricator

Pekerjaan Piasau Konkerit Sdn. Bhd. Miri

ISO12944 environment

C3



Samuel Beckett Bridge

Track record 2009

Location of project

Dublin, Ireland

Products/system used

Intercure® 200, Intergard® 475HS,
Interthane® 870

Project owner

Dublin City Council

Applicator

Hollandia/Gelders-Staalstraal
en Schilderbedrijf (GSB)

ISO12944 environment

C5-M

Total volume

5,000 litres (1,099 gals)

Total area

External and internal -
both 7,000m² (75,347ft²)



Neptune Way Foot and Cycle Bridge

Track record 2007

Location of project

Cambridge, UK

Products/system used

Structural steel
Interzinc® 52HS, Interfine® 979
Handrails
Interseal® 670HS, Interfine 979

Project owner

Cambridgeshire County Council

Fabricator

Watson Steel

ISO12944 environment

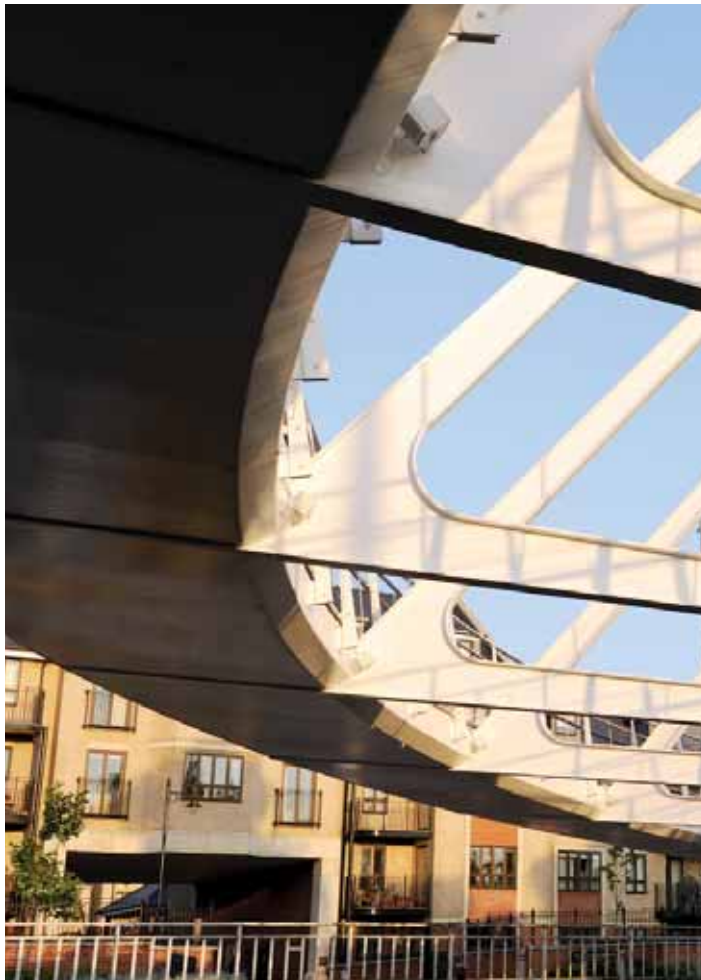
C3

Total volume

1,360 litres (359 gals)

Project size

160 tonnes



Throgs Neck Bridge

Track record 2008

Location of project

New York, USA

Products/system used

Towers
Interzinc® 52, Intergard® 475HS,
Interfine® 979

Suspended span

Interzinc 52, Intergard 475HS,
Interthane® 990HS

Project owner

Metropolitan Transportation Authority
(MTA)

Applicator

Corcon Inc.

ISO12944 environment

C4

Total area

159,700m² (1,718,996ft²)



Chartiers Creek Bridge

Track record 2006

Location of project

USA

Products/system used

Interzinc[®] 52, Intergard[®] 475HS, Interfine[®] 979

Project owner

Allegheny County

Applicator

John B. Conomos Painting

ISO12944 environment

C3

Total area

1,950m² (21,000ft²)



Wynyard Cycle Bridge

Track record 2001

Location of project

Sedgefield, UK

Products/system used

Interzinc[®] 52HS, Interfine[®] 979

Project owner

Highways Agency (UK)

Fabricator

Nusteel Structures

ISO12944 environment

C3

Total area

1,000m² (10,700ft²)



The Millennium Bridge

Track record 2000

Location of project

Gateshead, UK

Products/system used

Interzone® 505,
Interfine® 629HS,
Interthane® 990

Project owner

Local government

Fabricator

Watson Steel

ISO12944 environment

C3

Total area

12,000m² (129,100ft²)



Queen Elizabeth II Bridge

Track record 2007

Location of project

Newcastle-upon-Tyne, UK

Products/system used

Interplus® 256, Interplus 770, Interthane® 990

Project owner

Nexus

Applicator

Pyeroy

Contractor

Fairhurst and Partners

ISO12944 environment

C4

Total area

32,500m² (349,827ft²)



Christchurch International Airport - 6 fixed link air bridges

Track record 2012

Location of project

New Zealand

Products/system used

Intergard[®] 251

Chartek[®] 1709

Interchar[®] 212

Interthane[®] 990

Architect

Warren & Mahoney
Hassell

Fire engineer

Brady Cosgrove

Project manager

Coffey Projects

Main contractor

Hawkins Construction Ltd

Steel fabricator

John Jones Steel

Applicator

H W Hendriks Ltd

ISO12944 environment

C2

Application method

Plural spray

Passive fire protection

Chartek[®] 1709 - 7,200kg

Interchar[®] 212 - 300kg



Batu Kawa Bridge

Track record 2011

Location of project

Malaysia

Products/system used

Intergard® 251, Intergard® 475HS,
Interthane® 990

Project owner

Sarawak Government

Applicator/Fabricator

KKB Engineering Berhad

ISO12944 environment

C3

Project size

5,000m² (53,820ft²)



Stock Bridge - Concrete Bridge Deck

Case study 2013

Background

The Stock Bridge was built in 1941 for the purpose of transporting purchased stock across from the Newmarket saleyards to Newell's Paddock, rather than along the public road. The materials for the bridge, a steel structure with a concrete deck, came from a footbridge that had spanned the Yarra River at Punt Road from 1899 to 1938. The bridge now connects the suburbs of Footscray with Kensington and spans 120m in length over the Maribyrnong river. Today, the historic bridge is a bustling 2-way pedestrian bridge frequented by local residents and cyclists.

Over the number of years, the original 500m² concrete deck of this historic bridge began to wear, revealing exposed aggregate and a wave of deep valleys along edges where concrete had been screed.



“The Intercrete 4852 system was chosen for its excellent abrasion resistance and fast return to service capabilities. The client required an aesthetically pleasing flooring system that could be applied and returned to service with minimal downtime so the public wasn’t inconvenienced. Intercrete 4852 has achieved this brief along with providing a repair system with outstanding long term durability, which has exceeded the client expectations”

David Johnstone - Concrete Specialist (AkzoNobel)

The solution

The deck needed a pedestrian trafficable and waterproof coating system. Approved applicators, Mattioli Bros, decided to grind the concrete substrate flat to provide a sound, laitance free surface. The substrate was then primed with **Intercrete 4850** single component, acrylic bonding agent, with the deep voids filled with **Intercrete 4801** high strength, shrinkage compensated, structural repair mortar. **Intercrete 4852** self smoothing, epoxy/polymer flooring system was applied at a nominal thickness of 3mm, then kiln dried sand was broadcast to refusal for slip resistance. Once cured, the **Intercrete 4852** has a compressive strength of 45MPa.

Construction joints were re-cut and caulked with a flexible polyurethane sealant. The remediation works covered half the lane section at any time, and the bridge remained in service. The bridge was back in full service in 2 weeks.

Bridgewater Canal

Track record 2013

Location of project

Manchester, UK

Products/system used

Network Rail M34 - Interzone® 954
@ 450µm (18 mils) followed by
Interfine® 691 @ 50µm (2 mils)

Project owner

Network Rail

Applicator

Industrial Coating Services

Main contractor

Balfour Beatty

ISO12944 environment

C4

Project size

2,000m²



White Horse Bridge, Wembley

Case study 2013

Summary: Reinstatement of concrete cover on recently cast abutments

Focus product: Intercrete™ 4840

Contractor: Edmund Nuttall Limited

Designer: Halcrow Group Limited



Background

The White Horse Bridge is a state-of-the-art £20 million footbridge that crosses Wembley Stadium Railway Station leading up to the new Wembley Stadium.

Constructed in 2006 and designed by London Eye architects Marks Barfield, the name of the bridge was decided via an online poll hosted by BBC Five Live in conjunction with the London Development Agency. The chosen name commemorates the first FA Cup final to be held at the old stadium in 1923 with the famous image of Billy, a white horse, clearing a pitch invasion after an estimated 250,000 people flooded the ground.

The bridge's four arches mirror the now-famous arch of the new Wembley Stadium itself. On event days, as many as 8,000 people an hour cross the footbridge. During construction it was found that the abutments supporting the main arch had insufficient concrete cover to the reinforcement and a rapid method of reinstatement was required without resorting to costly recasting.

The solution

Intercrete 4840, a two component, waterborne, epoxy and cementitious modified polymer coating, was chosen for this project due to its ability to effectively reinstate cover. A 2mm coating of **Intercrete 4840** affords in excess of an additional 100mm of effective cover, as well as providing a complete barrier to water under 10 bar pressure. Being cement based, it chemically reacts with the substrate to form an integral part and will have a design life equivalent to that of the concrete to which it is applied.

Intercrete 4840 can be applied to green concrete by brush or spray techniques, exhibits minimal hazard and is non-toxic when cured.

Intercrete 4840 does not require specialist skills or equipment during application and rapidly cures to enable early backfilling - an important consideration to minimise disruption to construction schedules. It cures to produce an exceptionally hard, durable coating with excellent resistance to water, chloride ions, oxygen and aggressive chemicals.

Westgate Bridge Strengthening Project

Track record 2010

Location of project

Australia

Project owner

Vic Roads

Products/system used

Area 1 - Public safety barriers,
props - external, gantries
Interzinc[®] 52, Interfine[®] 979

Area 2 - Enabling works
Interzinc[®] 215, Interzinc[®] 315

Applicators

JT Corrosion, Belkblast,
Action Alliance, Allblast,
A-AA Blastmasters,
McElligotts

Fabricators

Alfasi, KVE Engineering,
Haywards

ISO12944 environment

C3

Project size

4,000 tonnes



M80 Ring Road Expressway Upgrade

Track record 2013

Location of project

Australia

Project owner

Thiess JV

Products/system used

Area 1 - Concrete noise walls
Interplus® 356, Interfine® 878

Area 2 - Sign gantries & bridges
Interzinc® 52, Interfine® 979

Applicator

Smart Distributions/
Haywards/Action Alliance/
Belkblast

Fabricator

Theiss JV

ISO12944 environment

C3

Project size

20,000m² (215,278ft²)



Kaituna Bridge

Track record 2013

Location of project

Bay of Plenty, New Zealand

Products/system used

Interzinc® 125

Applicator

Napier Sandblasting

Main contractor

Eastbridge Engineering, Fulton Hogan

Project size

1000 tonnes of structural steel



Ngaruawahia New Bypass Bridge

Track record 2013

Location of project

Waikato, New Zealand

Applicator

Napier Sandblasting

Fabricator

Eastbridge Engineering

Products/system used

Structural Steelwork:

Interzinc® 125

Abutment Steelwork:

Interzinc® 52, Interplus® 356,

Interthane® 990

Project size

8,000m² (86,111ft²)



All images courtesy of NZ Transport Agency

Jim Stynes Bridge

Track record 2012

Location of project

Australia

Products/system used

Visible steelwork
atmospheric areas
Interzinc® 52, Interfine® 979

Visible steelwork
splashzone areas
Interzone® 954, Interfine® 878

Project owner
City of Melbourne

Architects
Cox Architects

Main contractor
Fitzgeralds Constructions

Applicator
Focus Engineering

ISO12944 environment
C3

Project size
1,200m² (12,917ft²)



Pennant Hill footbridge

Track record 2014

Location of project

Australia

Products/system used

Fire Rated Steework:
Interzinc® 52, Interchar® 2060,
Interthane® 870

Project owner

Transport NSW - Railcorp

Applicator

L&S Coatings

Fabricator

JK Butko

ISO12944 environment

C3

Project size

500m² (5,382ft²)

Total volume

100 litres (26 gals)



Tampico Bridge

Track record 1988

Location of project

Mexico

Products/system used

Polibrid® 705E @ 30mils (760µm)

Project owner

Secretaria de Comunicaciones
y Transportes (SCT)

Applicator

Obras y Proyectos S.A. de C.V.

Total area coated

4,000m² (43,000ft²)



Bridges in New Zealand

Highlights from our track record

State Highway 4 Okura Realignment Bridge | Wanganui



Interzinc® 86

Dilworth Footbridge | Auckland



Zinc Metal Spray, Intergard® 251, Interthane® 870 Metallic



Jacobs Ladder Pedestrian Bridge | Auckland



Zinc Metallic Spray, Intercure® 200, Interthane 870 Metallic



Point Resolution Bridge | Auckland



Intergard 251, Interthane 870

Cobham Drive Bridge

Track record 2015

Location of project

Hamilton, New Zealand

Products/system used

Interzinc® 52, Intercure® 420, Interplus® 1180,
Devthane® 4379, Interthane® 990

Project owner

Hamilton City Council

Applicator

Napier Sandblasting

Engineer

Bloxham, Burnett
and Olliver Ltd

ISO12944 environment

C3

Project size

3,000m² (32,292ft²)



Canada Street Bridge

Track record 2015

Location of project

Auckland, New Zealand

Products/system used

Zinc Metal Spray, Intergard® 251, Interfine® 878

Project owner

New Zealand Transport Agency

Applicator

Counties Industrial Coatings

Fabricator

PFS Engineering

ISO12944 environment

C3

Project size

6,500m² (69,965ft²)



Images courtesy of NZ Transport Agency

