



CHANGING ARCHITECTURAL LANDSCAPES

The success, beauty and longevity of future buildings belongs to those shaping the industry today.

To realise a true architectural vision, it's vital to look beyond the formulaic and functional shapes built around us, and to the shapes of nature that have formed around us.

KingZip freeform standing seam systems are a celebration of nature's architecture and have been designed to maximise flexibility and versatility to help you reach unstoppable heights and bring your architectural vision to life.

Take a closer look at some of the projects where KingZip Standing Seam systems have enabled design fulfilment with uncompromising flexibility.

04-05 Bunjil Place - Australia

06-07 Abu Dhabi International Airport - UAE

08-09 Queen Alia International Airport – Jordan

10-11 Dee Why PCYC – Australia

12-13 DEWA Moro Hub – UAE

14-15 Manukau Bus Interchange – New Zealand

16-17 Deira Night Souk – UAE

18-19 Adelaide Convention Centre - Australia

20-21 Perth Stadium Train Station – Australia

22-23 Canberra MRT Station – Singapore

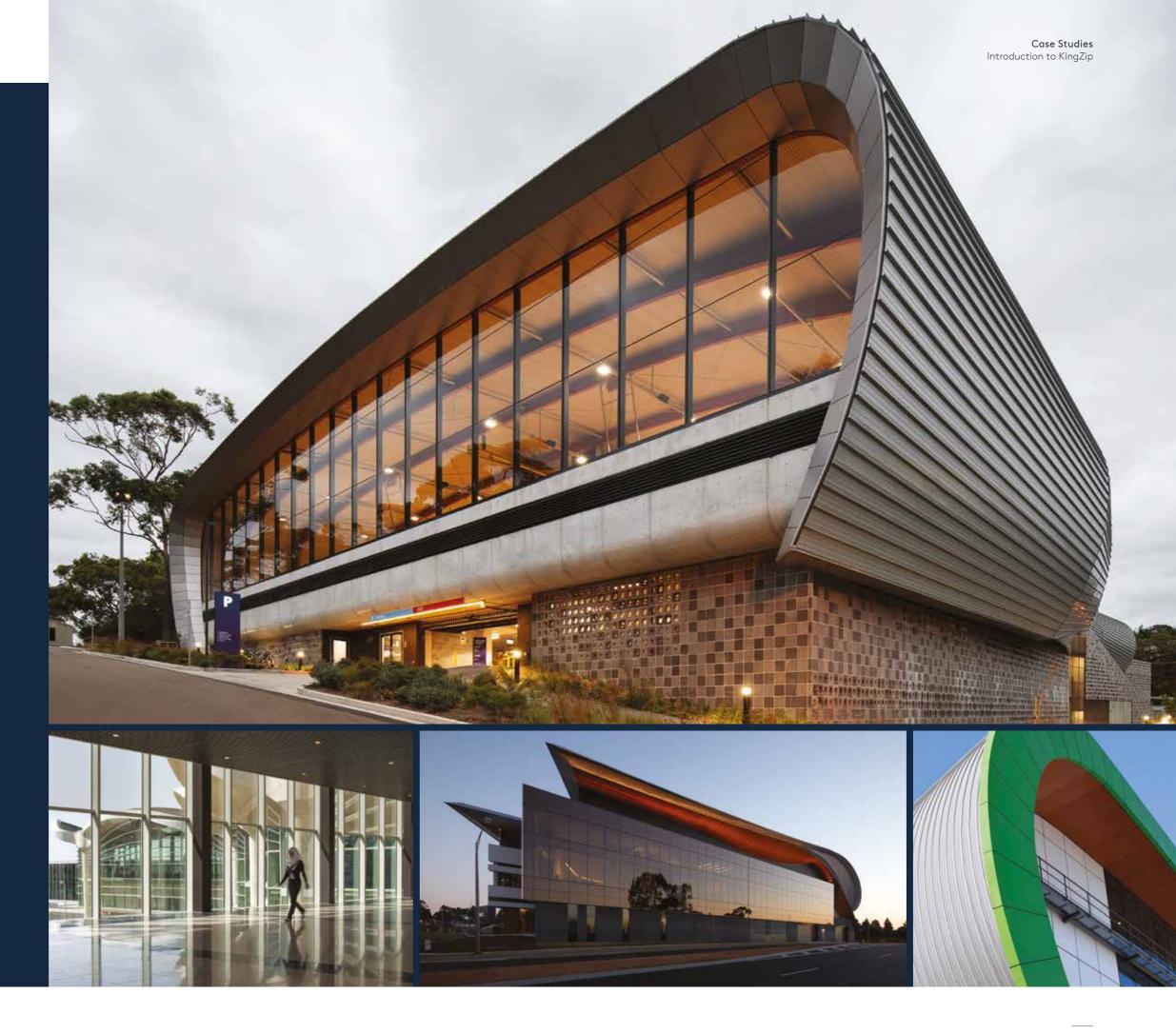
24-25 Our Tampines Hub - Singapore

26-27 Daisey's Hotel - Australia

28 Dubai International Airport Terminal 3 – UAE

29 Emirates Engineering Centre – UAE

30-31 Istanbul Airport Service Buildings – Turkey





Bunjil Place, Narre Warren, Victoria, Australia KingZip Linea System from Kingspan Insulated Panels has been used to create an intricate roof façade for a cultural precinct project in the city of Casey, Victoria. The name and design of the \$125 million AUD multipurpose arts, civic and community facility were inspired by stories of Bunjil the 'creator', from the First Nation's People. The iconic roof structure is designed to resemble the soaring eagles' wings with the world-renowned timber gridshell in the foyer acting as the legs.

"Superficially it's a very complex piece of geometry...
for something that is as complex as it appears,
KingZip achieves it so effortlessly."

John Perry, Associate Partner, FJMT.



Abu Dhabi International Airport, Midfield Complex, Abu Dhabi, UAE Scheduled to open in 2020, this \$3 billion terminal project spans a massive 742,000sqm floor area and is expected to become the benchmark for all airports over the next 20 years. It will have the capacity to handle 45 million passengers annually.

The roof design of the terminal is inspired by the natural beauty and symmetry of the sand dunes of the Abu Dhabi desert.

KingZip Infiniti System's free-form 3D roll-forming capability has been used to create the unusual and complex curves that form the centre piece of the roof design.



Queen Alia International Airport, Amman The airport terminal at Queen Alia International Airport in Jordan proudly displays the smooth curved KingZip Linea Standing Seam roofing system.

With its striking and distinctive design, the \$750 million terminal has become the focal point of the Levant region. The building was expertly designed by architects Foster + Partners to cope with the region's demanding climatic conditions, whilst at the same time majestically displaying local traditional architectural style.

"We know that Kingspan Insulated Panels deliver when we need unique, high performance building envelope solutions for our clients."

Project Contractor, J&P.

Case Studies
Police Citizens Youth Club



Police Citizens Youth Club, Dee Why, Sydney, Australia KingZip Linea System from Kingspan Insulated Panels has been used to create a single curved, tapered surface encompassing both roof and walls, that envelops a striking new community building on the Northern Beaches of Sydney.

KingZip roof system was used to realise the architect's vision of an organic cloud-like form, spanning over and around the key functions of the new Police Citizens Youth Club in Dee Why. The centre houses two basketball courts, meeting rooms, café and administrative offices, and car parking. The roof height, which varies by up to five metres, reflects the different internal uses.

"One of the wonderful things about using KingZip is you can taper it, twist and bend it or curve it without losing the strength as a consequence. You can make irrational shapes very easily."

John Perry, Associate Principal, FJMT.

Moro Hub, Dubai, UAE Moro is a Dubai Energy and Water Authority company (DEWA) that offers Digital Services, Data Centre Services, Cloud and Business Centre Services to Enterprise across the Public and Private sectors in UAE and the region. The datacentre building is called the Moro Hub and has been design in the shape of the letter "D" to signify the link between the two businesses. The building also has the special achievement of being the first LEED Platinum data centre in the Middle East.

The integration of KingZip Linea and Infiniti systems were used to create the roof of the structure which cascades down and also forms the facade of the building.

KingZip Infiniti was key for this project to create a highly attractive 3D building geometry.





Manukau Bus Interchange, Auckland, New Zealand

A giant multi-faceted saw-tooth roof completes the new Manukau Bus Interchange with the complex roof geometry easily achieved from a range of Kingspan products.

Designed by Beca and Cox Architects, the saw-tooth roof over the Manukau Bus Interchange offers a sculptural addition to the skyline. Steve Gray, Beca Project Architect on the modern transport hub, commented that several elements helped shaped the roof which included the kite flying narrative reflecting the heritage of the area along with the need to maximize the natural light and fresh air in the main concourse.



"Discussions with
the local Manu
Whenua of
Nga Matukurua
identified a desire
for the building
form to reflect a
tukutuku manu
- or kite flying
narrative - arising
from the heritage
of the area."

Steve Gray, Beca Project Architect.

Deira Night Souk, Dubai, UAE Deira Night Souk will be a bustling new shopping and dining destination on the Deira Islands development. It is the first major commercial development to be realised on the ambitious Deira Islands Project being developed by Nahkeel.

The development, stretching 1.9km on the Deira Island Waterfront is a modern representation of the traditional Arabic Souk and will be home to 5,300 shops and 96 quayside cafes. Smooth curved Kingzip Linea Standing Seam System has been used to form the curved roofs of the 70 buildings forming the Souk Complex retail shops.

"Having UAE Civil Defence Certification for our systems makes KingZip the preferred standing seam solution for architects and specifiers in the region to eliminate any kind of risks regarding regulatory compliance."

Shrini Menon, Senior BDM - Kingspan Insulated Panels Middle East.



Adelaide Convention Centre, Adelaide, South Australia, Australia

Adelaide's Convention Centre required an entire envelope package for their new Plenary Building. The new Plenary Building is a multi-purpose facility with the capacity to seat up to 3,500 guests.

Kingspan's Kingzip Linea Standing Seam Roof Solution was chosen for its unparalleled benefits as a flexible roof system. Kingzip Linea sheets were roll formed on site in lengths of 55m, significantly increasing the speed of construction. Kingspan Roof and Wall Liner Panels were used to complete the remainder of the envelope, providing excellent thermal performance as well as a substrate for the zinc standing seam and flat lock tiles.

"The Kingzip
Linea sheets
were roll formed
on-site in
lengths of 55m,
significantly
increasing the
speed of
construction."

Cladding and Roofing Contractors, Adelaide.



Perth Stadium Train Station, Perth, Western Australia, Australia The Perth Stadium Train Station was designed by Hassell Studio Architects who acknowledged the integral role of the space in enhancing the atmosphere of excitement in the lead up to an event. Operational functionality was also important as the station needed to facilitate the movement of up to 28,000 patrons entering or exiting the stadium for events. With the station being in a corrosive environment near the Swan River, the KingZip system was manufactured in 1.2mm aluminium

and a high build 3 coat Kingspan PVDF paint system to meet the life expectancy requirements of Perth Transport Authority.

Utilising Kingspan's mobile roll-forming capabilities, KingZip Linea system was manufactured and curved on-site down to a minimum radius of 2 meters. In addition, the project utilised perforated KingZip sheets on either side of the concourse sections to assist with natural ventilation and air flow for passengers travelling through.

"Kingspan was engaged by Hassell during early concept design phase, as the KingZip system was the only product on the market capable of achieving the design geometry, aesthetic vision and life expectancy set out for the project."

Niall Horgan, Commercial Director, Kingspan Insulated Panels, Australia.



Canberra MRT Station, Sembawang, Singapore

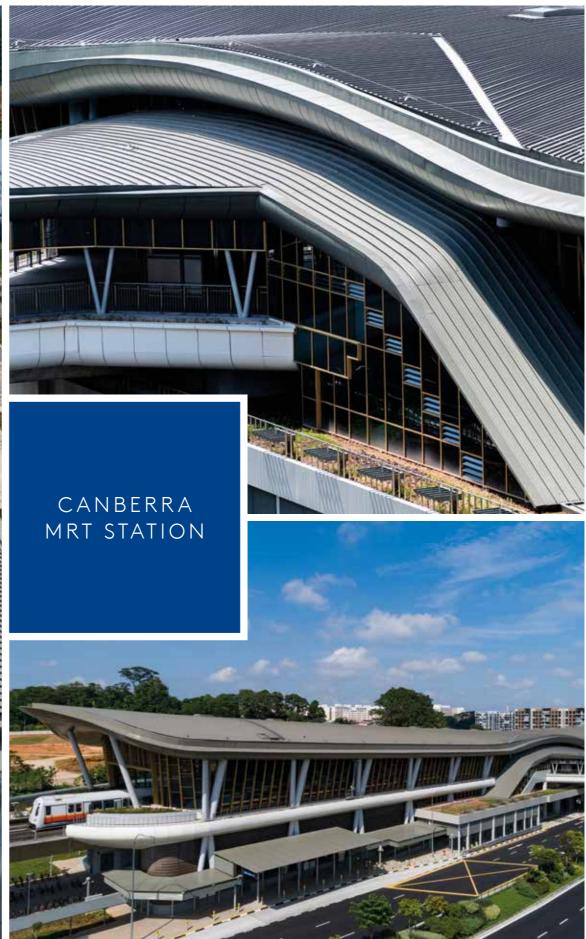
Canberra MRT Station is an elevated track built on the North South Line located along Canberra Link in Sembawang, Singapore. The station's barrel vault roof span was approximately 50m and the architectural design brief required the roof covering to be in a single length sheet, without end laps. KingZip Linea Standing Seam System with 65mm high ribs can be used for roof pitches up to 1.5 degrees and was site rolled and curved for the project.

Being a train station roof, the lining material had to meet Class O of the Building Standards, and had to pass BS476 Part 6 and 7. KingZip roof layer and the steel decking layer meets both of these requirements.

"One of the main performance requirements of the project was for the complete roof system assembly to comply with FM4471, which was achieved by KingZip Linea Standing Seam roof system"

DP Architects.







Our Tampines Hub, Tampines, Singapore. Designed by DP Architects, Our Tampines Hub (OTH) is a people-centric and inclusive multifunctional hub integrating a comprehensive range of activities focused on shared spaces and on collaborative use. The complex includes a public library, a swimming complex, food and shopping mall and features a public services centre as well as a 5,000 seater FIFA-endorsed football stadium.

OTH is also conceived as a large and integrated sustainable space incorporating extensive green walls, accessible sky terraces, rooftop gardens and eco-community farming facilities. The stadium roof required steel decking for the unsupported span requirement of 9 meters between trusses, which was achieved by utilising Kingspan RD200/750 structural decks with 1.5mm gauge as part of the KingZip Linea System.

In order to withstand high levels of humidity within the indoor swimming pool environment, Kingspan WA200 aluminium liners with PVDF paint finish were specified [in preference to steel decks] and installed in these areas.

Daisey's Hotel, Ringwood East, Victoria, Australia Completely transforming the look of Castello's Daisey's Hotel in Ringwood East, Victoria, Kingspan's Standing Seam Kingzip cladding system was installed by Signal and Hobbs Roofing contractors. In order to align with the shape of the hotel's domed bistro, the Kingzip Linea sheets were tapered and curved on site to achieve the dome geometry.

Kingzip Linea tapered sheets provided the flexibility to design more complex geometries, which allowed the realisation of the dome features of the hotel complex.







Dubai International Airport, Dubai, UAE Dedicated for use by Emirates Airlines, Terminal 3 increased Dubai International Airport's total capacity by 43 million passengers per year to 60 million when it opened. The Terminal 3 complex also includes Concourse A, a purpose-built facility for Airbus A380, which opened in January 2013, increasing the airport's capacity to 75 million passengers per annum.

KingZip Linea Standing Seam System has been used as a weatherproof base layer for the decorative ACP cladding used as the final finish on the project. Steel KingZip Linea Standing Seam Top Sheets have been used for the project along with RD75/300 structural decks which were 'pre curved' on-site, matching the curve radius of the unique shape and design of the terminal building.



Emirates Engineering Centre, Dubai, UAE Emirates Engineering is one of the world's most technologically advanced aircraft maintenance facilities and supports' the world's largest fleet of Airbus and Boeing aircrafts, operated by Emirates. KingZip Linea Standing Seam was site rolled for seven hangars of the complex, which was built over three years.

In addition to the standing seam roof system, HC35/800-MR single skin profile was specifically designed and developed as wall cladding for the project as part of the complete building envelope offering from Kingspan.

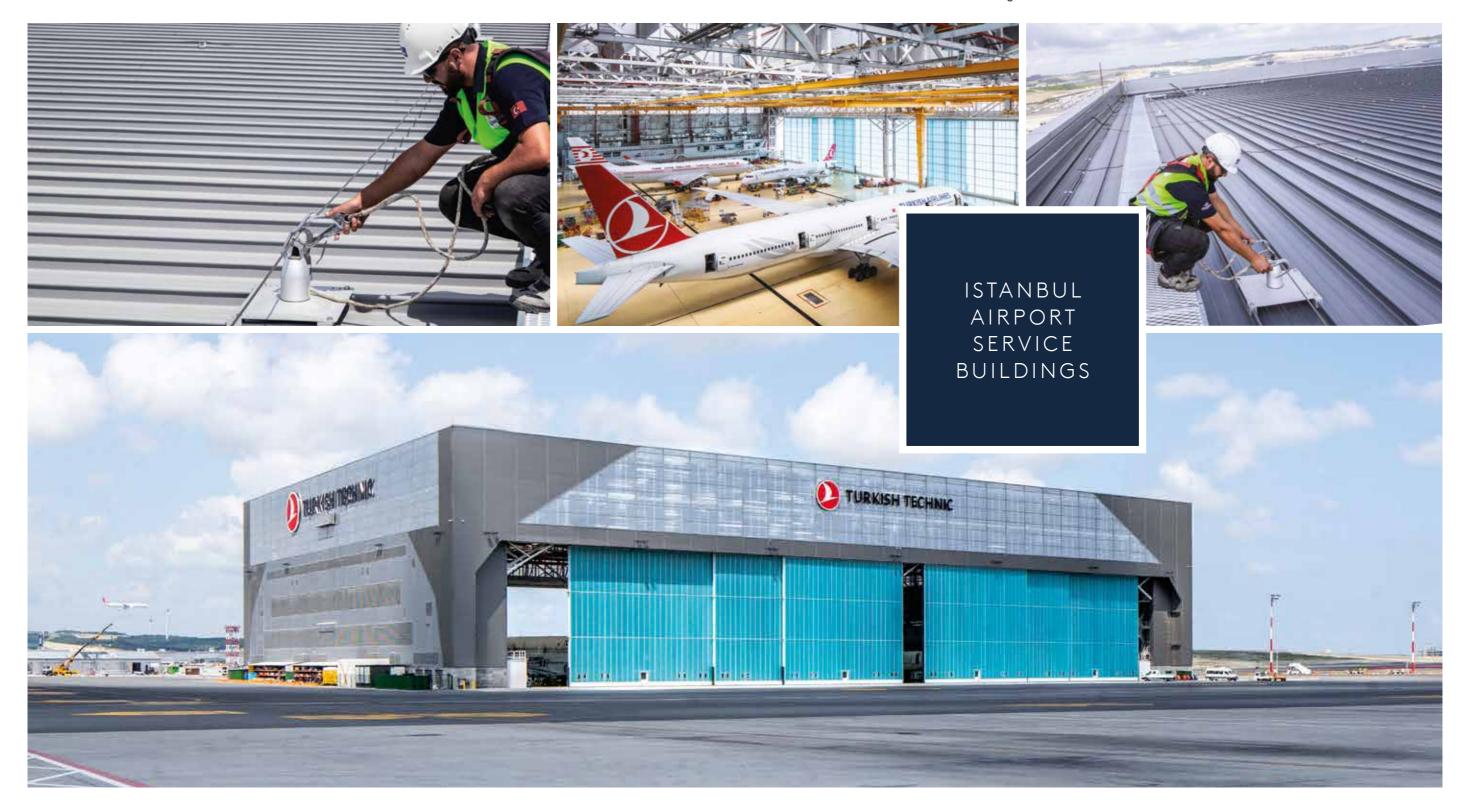
Istanbul Airport Service Buildings

Istanbul Airport, THY D Zone Service Buildings, Istanbul, Turkey With the development of Istanbul's new airport in Turkey, Turkish Airlines (THY) is building a state-of-the-art campus comprising of 50+ next-generation support facilities that will total over 650,000sqm. THY engaged Ghafari architects to provide master planning, architecture and engineering services.

KingZip Linea Standing Seam System utilising 150mm thick mineral wool insulation has been installed as the roof construction to achieve the specified U-Value for the service buildings. Kingspan SafePro2 Fall Arrest System, was installed on top of the roof as part of the KingZip Integrated Solution offering to complement the standing seam roof system.

"Portable KingZip roll formers were lifted to the roof of the building via cranes and all KingZip Linea Standing Seam sheets were produced/rolled on-site for maximum installation and logistical efficiency."

Lambda Construction and Roofing Contractors.



Contact details

Middle East, Africa, Turkey & Central Asia

Kingspan Insulated Panels Manufacturing LLC PO Box 60493 Dubai Investment Park Gate 1

T: +971 4 8854232 E: info@kingspanpanels.ae www.kingspanpanels.ae

UK & Europe

Dubai I UAE

Kingspan Limited Greenfield Business Park 2 Bagillt Road | Holywell CH8 7GJ

T: +44 (0) 1352 716 100 E: kingzip@kingspan.com www.kingspanpanels.co.uk

Americas

Morin Corporation 685 Middle Street | Bristol CT 06010 | U.S.A.

T: +1 (860) 584-0900 E: kingzip@kingspan.com www.kingspanpanels.com

South East Asia

Kingspan Insulated Panels Pty Limited 1 Commonwealth Lane #07-26 Singapore 149544

T: +65 6264 5942 E: infosea@kingspan.com www.kingspanpanels.sg

India

Kingspan Jindal Pvt. Ltd. Old Manesar Road | Narsinghpur Gurgaon - 122001 | Haryana | India

T: +91 124 4393 200 E: sales@kingspanjindal.com www.kingspanjindal.com

Australia

Kingspan Insulated Panels Australia 38-52 Dunheved Circuit St Marys | NSW 2760

T: +61 (02) 8889 3000 E: info@kingspanpanels.com.au www.kingspanpanels.com.au

New Zealand

Kingspan Limited 97 Montreal Street | Sydenham Christchurch

T: +64 (0) 800 121280 E: info@kingspanpanels.co.nz www.kingspanpanels.co.nz

For the product offering in other markets please contact your local sales representative or visit www.kingspanpanels.com

Care has been taken to ensure that the contents of this publication are accurate, but Kingspan Limited and its subsidiary companies do not accept responsibility for errors or for information that is found to be misleading. Suggestions for, or description of, the end use or application of products or methods of working are for information only and Kingspan Limited and its subsidiaries accept no liability in respect thereof.

