

ASP Floors NZ Limited

OTAGO REGIONAL COUNCIL

Dunedin Central, New Zealand

Case Study | 2025

Project Exclusive

The new Otago Regional Council headquarters at 35 MacLaggan Street in Dunedin is a purpose-built commercial facility designed to deliver long-term functionality and environmental efficiency for regional operations.

Spanning 3,700 m², the development integrates ASP's advanced underfloor air distribution technology through the Icon Air and Urban Interlock systems. The installation also incorporates ASP's engineered seismic bracing pedestals — fabricated to meet ASNZ 1170.5 compliance standards — ensuring superior structural resilience in one of New Zealand's most active seismic regions.



THE WHO'S WHO

CLIENT

Ports of Otago

ARCHITECT

GHD Architects

BUILDER

Calder Stewart Construction

STRUCTURAL ENGINEER

Chapman Sanders
(Seismic Design Consultant)

ACCESS FLOOR INSTALLATION

ASP Floors NZ Limited
www.aspfloors.co.nz

THE ACCESS FLOOR SCOOP

ASP Floors NZ managed the full supply, project management, and installation of access flooring across the facility. The scope included 9.0 kN and 4.5 kN Icon Air systems @ 470 mm FFH, combined with 9.0 kN and 6.0 kN Urban Interlock systems.

Twelve independent Air Highway zones were created to support efficient air distribution throughout the building, enhancing occupant comfort and energy performance. Standard pedestals were installed using low-VOC adhesives, while seismic pedestals were anchored with engineer-specified Hilti seismic fixings to maintain full compliance with local standards.

The raised floor system successfully concealed structural seismic plates within the 470 mm plenum, delivering a clean architectural finish without compromising access or safety.



SUSTAINABILITY TRENDS



ENVIRONMENTAL PRODUCT DECLARATION



THE INTERNATIONAL EPD® SYSTEM

PS1 - Design | PS3 - Installation
PS4 - Installation Compliance Review



DID YOU KNOW

The project achieved full compliance under New Zealand's Producer Statement system (PS1, PS3, PS4) and supports healthier indoor environments through underfloor air distribution and low-VOC materials.

3,700 m²

The project sits next door to Dunedin's iconic Speight's Ale House and Brewery — a local landmark with heritage dating back to 1876.

Featured Products

ICON AIR

9.0kN & 4.5kN Icon Air Systems. High-capacity underfloor air distribution system providing superior air quality and climate control flexibility.

URBAN INTERLOCK

9.0kN & 6.0kN Urban Interlock systems. Durable, high-strength interlocking panel system engineered for acoustic performance and stability under load.

ASP Floors NZ Ltd

AUT A1 TUKUTUKU BUILDING

Auckland, NZ

Case Study | 2024

Project Exclusive

Located at 72 Akoranga Drive, Northcote, the new AUT A1 Building – known as Tukutuku – is a benchmark in sustainable tertiary design. The building forms part of Auckland University of Technology's drive to achieve net-zero carbon by 2030.

ASP Floors NZ Ltd supplied and installed a combination of ICON X 4.5 kN and CONCEPT+ HPL 9.0 kN raised access floor systems at 500 mm FFL. The installation also incorporated seismic pedestals designed for use on cross-laminated timber (CLT) floors, providing strength, flexibility, and compliance with local structural standards.



THE WHO'S WHO

CLIENT

AUT

ARCHITECT

Jasmax

BUILDER

Naylor Love Construction Ltd

ENGINEER

BECA

ACCESS FLOOR INSTALLATION

ASP Floors NZ Ltd

www.aspfloors.co.nz

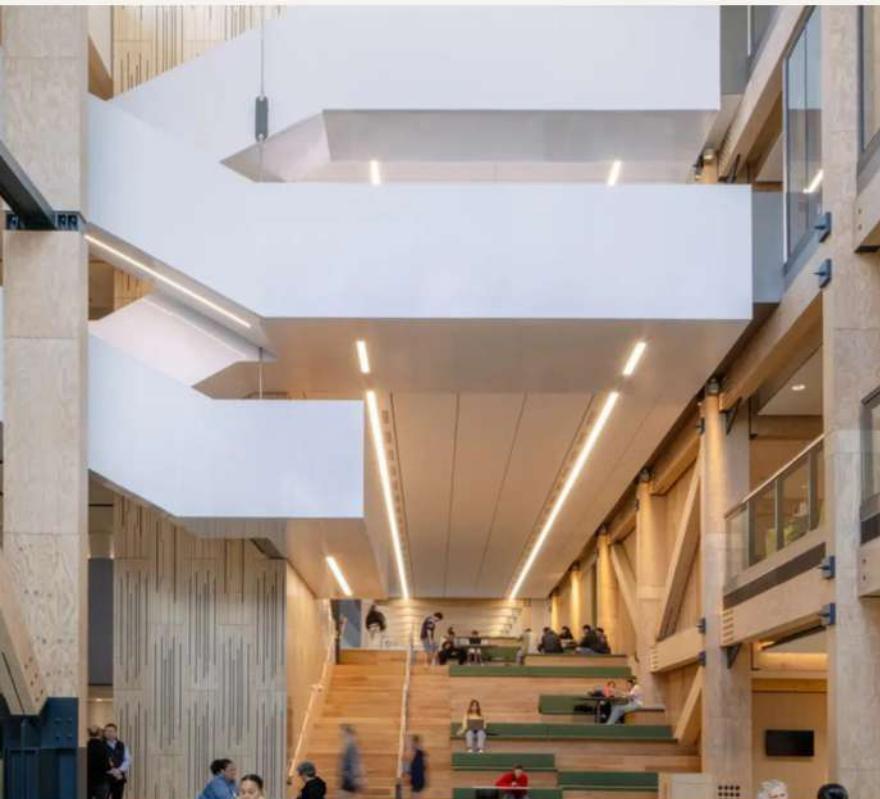
THE ACCESS FLOOR SCOOP

ASP Floors NZ managed the full project procurement and installation, delivering over 2,500 m² of raised flooring across three CLT floors.

The systems were installed at 500 mm FFL, integrating seamlessly with the Air Highway System to create zoned underfloor air distribution for improved air quality and energy performance.

A key technical achievement was the fixing of seismic bracing directly to CLT floor joints while maintaining acoustic isolation for both standard and seismic pedestals.

This innovation provided a secure and quiet flooring platform suitable for AUT's high-specification teaching and research environments.



Featured Products

ICON X 4.5kN

Steel-cementitious access floor system providing durability and stability for general office and teaching spaces.

CONCEPT+ HPL 9.0kN

Pre-finished, high-strength flooring system combining design flexibility with exceptional load performance.

SEISMIC PEDESTAL SYSTEM

Custom-engineered pedestals designed for CLT substrates to ensure structural compliance and acoustic integrity.



SUSTAINABILITY TRENDS

AUSTRALASIA **EPD®**
ENVIRONMENTAL PRODUCT DECLARATION

THE INTERNATIONAL EPD® SYSTEM

greenstar

DID YOU KNOW

Tukutuku features the largest post-tensioned engineered timber structure in Australasia. ASP's raised flooring supported the project's low-carbon goals through modular design, low-VOC materials, and energy-efficient air distribution.

2,500 m²

Tukutuku is recognised as one of New Zealand's most sustainable tertiary buildings, achieving the country's lowest carbon emissions per square metre of built space.

ASP Floors NZ Ltd

AUT M1

Auckland, NZ

Case Study | 2016

Project Exclusive

Located at 640 Great South Road, Manukau, the AUT M1 development forms part of the University of Auckland's modern learning precinct. This 3,500 m² tertiary facility combines high-performance construction with sustainable design principles to create a flexible, future-ready environment for staff and students.

ASP Floors NZ supplied and installed ICON X raised flooring systems with both 3.0 kN and 4.5 kN load ratings at a 450 mm finished floor height. The installation included underfloor air baffles for zoned air distribution and a full seismic bracing system for compliance and stability.



THE WHO'S WHO

CLIENT

University of Auckland

ARCHITECT

Jasmax

BUILDER

Fletchers Construction Company

ACCESS FLOOR INSTALLATION

ASP Floors NZ Ltd

www.aspfloors.co.nz

THE ACCESS FLOOR SCOOP

ASP Floors NZ delivered a complete access flooring solution designed to support the performance and adaptability of this advanced tertiary facility. The scope included the supply and installation of the ICON X system, engineered for both durability and acoustic comfort across multiple teaching and administrative zones.

A major feature of the installation was the integration of ASP's Air Highway System, providing underfloor air distribution across zoned areas to enhance ventilation efficiency and occupant comfort. This approach allows the building's HVAC system to operate more effectively, supporting reduced energy consumption and improved indoor air quality.

In addition to the air highway system, ASP Floors NZ designed and installed seismic bracing pedestals and perimeter detailing to meet New Zealand's stringent seismic standards. These solutions ensure structural stability and long-term resilience, while maintaining accessibility for future service and layout modifications.

Featured Products



SUSTAINABILITY TRENDS



ENVIRONMENTAL PRODUCT DECLARATION



THE INTERNATIONAL EPD® SYSTEM



DID YOU KNOW

The design integrates an underfloor air highway system that supports improved air quality, comfort, and energy efficiency within the building's learning spaces.

3,500 m²

AUT M1 features a fully braced, seismically compliant access flooring system—one of the first of its kind installed in a tertiary facility in New Zealand.

ICON X 3.0kN

Steel-cementitious system offering reliability and strength for general office and teaching environments.

ICON X 4.5kN

Enhanced load-capacity system providing stability and long-term durability for high-traffic areas.

AIR HIGHWAY SYSTEM

Underfloor air distribution system supporting efficient HVAC performance and occupant comfort.

ASP Floors NZ Ltd

KIWIRAIL HEAD OFFICE

Auckland, NZ

Case Study | 2023

Project Exclusive

Located at 12/660 Great South Road in Greenlane, the new KiwiRail Head Office and Main Control Centre serves as the operational hub for New Zealand's national rail system. The facility was designed to deliver advanced technical capability, seismic resilience, and modern workspace flexibility.

ASP Floors NZ supplied and installed the ICON X 6.0 kN stringered system at a 300 mm finished floor level, providing a stable, high-load solution ideal for the building's central control room environment.



THE WHO'S WHO

CLIENT

KiwiRail NZ

ARCHITECT

JJCY Architects

BUILDER

Macrennie Commercial Construction

STRUCTURAL ENGINEER

Chapman Sanders

ACCESS FLOOR INSTALLATION

ASP Floors NZ Ltd

www.aspfloorsnz.com

THE ACCESS FLOOR SCOOP

ASP Floors NZ managed the full design, supply, and installation of the raised access flooring system across approximately 1,100 m².

The installation featured heavy-duty ICON X 6.0 kN panels installed on a stringered understructure to meet the rigorous demands of a high-technology operations centre.

A major focus of the project was seismic performance. The raised floor system was engineered and installed in compliance with NZS 1170.5 Section 8, incorporating approximately 280 Hilti seismic anchors specified by ASP's structural engineer. This ensured robust anchoring and long-term resilience in line with national building-code standards.

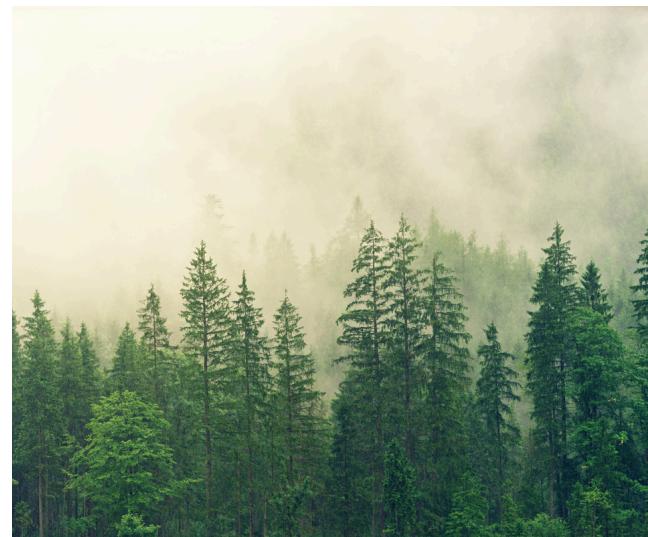
The finished installation delivered a quiet, stable, and easily serviceable flooring platform capable of supporting complex control-room infrastructure while maintaining a clean and professional aesthetic.



Featured Products

ICON X 6.0kN

High-capacity steel-cementitious raised floor system engineered for strength, stability, and compliance in critical control-room environments.



SUSTAINABILITY TRENDS



DID YOU KNOW

The project incorporated ASP's EPD-certified access flooring, supporting environmental transparency and sustainable material use.

1,100 m² (11,840 sqft)

This facility houses KiwiRail's national control centre – the heart of New Zealand's rail network operations.

ASP Floors NZ Ltd

OHĀKEA – TE WHARE TOROA RNZAF BASE OHAKEA

New Zealand

Case Study | 2023

Project Exclusive

Located at RNZAF Base Ohakea, Te Whare Toroa is a purpose-built Defence facility requiring high structural performance, seismic compliance, and long-term functionality. ASP Floors NZ delivered the full raised access floor installation, including seismic design (PS1) and installation compliance (PS4), ensuring the system met New Zealand's rigorous seismic requirements.

The project utilised a combination of ICON X, ICON DATA HPL & Vinyl, and CONCEPT+ Timber systems across 1,910 m², all installed at a 460 mm finished floor level to support operational efficiency and service integration.

THE WHO'S WHO

CLIENT

New Zealand Defence Force

ARCHITECT

Warren & Mahoney Architects New Zealand Limited

BUILDER

Hawkins Construction

SEISMIC ENGINEER

Chapman Sanders Consultants

ACCESS FLOOR INSTALLATION

ASP Floors NZ Ltd

www.aspfloorsnz.com



THE ACCESS FLOOR SCOOP

ASP Floors NZ delivered a complete design-build access flooring solution for Te Whare Toroa, managing specification, fabrication, and installation throughout the facility. All systems were installed at a 460 mm finished floor level to meet operational requirements and support underfloor services.

The installation included ICON X 4.5 kN panels for general areas, supported by ICON DATA HPL 9.0 kN panels where greater load capacity was required, ICON DATA Vinyl (Pewter 0013) and CONCEPT+ Timber (Oak) panels were incorporated to suit specific interior zones and functional needs.

A major component of the project was the integration of 560 engineered seismic pedestals, designed for AS1170.5 Section 8 compliance. These were installed seamlessly alongside A2000 cast aluminium air grilles to provide structural stability and effective air distribution.

ASP's coordinated approach ensured a durable, compliant, and high-performing flooring system tailored to the operational needs of the New Zealand Defence Force.



Featured Products

ICON X 4.5kN Commercial-grade steel-cementitious system engineered for stability and heavy-load environments.	ICON DATA HPL High-strength data-grade flooring with durable, pre-finished HPL.	ICON DATA VINYL Pre-finished vinyl access floor panels for clean, resilient service areas.
SEISMIC PEDESTALS	A2000 AIR GRILLES Cast aluminium 600 x 600 mm units	CONCEPT+ TIMBER Oak-finished access flooring for premium interior spaces.



SUSTAINABILITY TRENDS

AUSTRALASIA **EPD®**
ENVIRONMENTAL PRODUCT DECLARATION

THE INTERNATIONAL EPD® SYSTEM

DID YOU KNOW

ASP's EPD-certified access flooring systems support transparent environmental performance and responsible material selection.

1,910 m² (20,559 sqft)

Te Whare Toroa is one of the few Defence facilities in New Zealand to incorporate a fully engineered seismic pedestal system beneath every raised floor zone.