



TEST REPORT No. T541

CLIENT: **ZX Panel Ltd.** LBP No. 115959
94 Marine Parade
Mt Maunganui, New Zealand

Weathertightness testing on '**ZX Panel**'. Pertaining to AS/NZS 4284:2008.

NZ Building Code **Modified E2/VM1**; 'Limited building elements-reduced scope'

Those elements include;
Vertical and horizontal panel joints, internal and external wall junctions. Pipe penetration, aluminium flanged frame window, footer and header termination systems. Exclusions being; electrical meter box, balcony drainage and parapet flashings.

Prototype mock-up size; 2.45m high x 3.6m wide.

PROJECT: Initial system compliance test

SPECIFIER: ZX Panel Ltd.

FAÇADE
CONSULTANT: Inhabit; www.inhabitgroup.com

TESTING FACILITY: IANZ Accredited to AS/NZS 4284
Altus NZ Ltd
30-32 Bowden Road, Mt Wellington
Auckland 1060, New Zealand

FABRICATOR: ZX Panel Ltd.

INSTALLER: NZ Commercial Construction; Brad and Jason

TEST DATES: 16/17, 23 and 30 Jan. Final; 01 Feb 2018

TESTED BY: Jonathan Holder; Tech Development Team Leader - Altus
Daniel Wist; Test Booth Controller - Altus

WITNESSED: Personnel present for key testing:
Claire Radford - Inhabit
Jason Helms assisted by Brad
Kevin Brunton - The Building Business Ltd.



Tested By.....
Jonathan A Holder

Checked By.....
[Signature]

SUMMARY:

Series 1 Static Pressure Water Penetration Test:

No water penetration observed across the cavity at a test pressure of 455 Pa.

Series 1 Cyclic Pressure Water Penetration Test:

No water penetration across the cavity at cyclic test pressures of 455 - 910 Pa.

Series 2 Static Pressure Water Management Test:

Following the drilling of 5x 6mm holes as 'introduced defects' simulating breakdown in weather sealing, regular water drips off the inside face of the wrap hit the sill noggin below, splattering onto Port D acrylic during a static test pressure of 455 Pa.

Series 2 Cyclic Pressure Water Management Test:

Following removal of internal linings and cutting of wrap, the ZX Panel prototype mock-up revealed water penetration in a total of five locations. In three incidents, a run clung to the inside face of the aluminium panels with 'managed water' draining away at the sill. However in two other sightings, water spatter did bridge the cavity; H1 (above 40 dia pipe) can be classed as 'local spatter directly opposite an introduced defect' and may also be disregarded.

This leaves Port D sightings. Drips forming on the building wrap directly below H5 also fall under the category of 'local spatter directly opposite an introduced defect' and may also be disregarded.

Series 3 Wet Wall Test:

The 'ZX Panel' system demonstrated "no water penetration" across the cavity at the wet wall test pressure of 50 Pa.

Tests on the 'ZX Panel' drained & ventilated cavity system demonstrated that the following elements incorporated into the test sample complied with the E2/VM1 requirements:

Vertical panel joint	Horizontal panel joint
Internal & External corners	Pipe penetration
Aluminium flanged frame window	Footer drainage/ventilation