

## **Test Report**

**for**

### **Curtain Wall System**

**for**

**62-77 Lorne Street, Auckland City**

(SLS pressure = +1.84 kPa / -2.33 kPa)

(ULS pressure = +2.55 kPa / -3.24 kPa)

RESEARCH ENGINEERING DEVELOPMENT  
FACADE CONSULTANTS LIMITED

1 FEBRUARY 2024

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## Report GR23M08-1A

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## 1. Introduction

This report describes the test conducted for the **Curtain Wall System** designed by **Guangdong Kete Facadetech Co., Ltd.** for the project of **62-77 Lorne Street, Auckland City**. The test has been conducted by using the actual samples and simulated conditions in a test chamber against the following specifications in order to ensure the safety and serviceability of the system.

- 1-1.1 Preliminary Test- Open and close Operable Sash Test (AS/NZS 4420.1-2016 Clause 2)
- 1-1.2 Preliminary Test- Static Pressure Test (AS/NZS 4284:2008 Clause 8.2.2)
- 1-1.3 Preliminary Test- Air Infiltration Test (AS/NZS 4284:2008 Clause 8.4)
- 1-1.4 Preliminary Test- Water Penetration Test - Static (AS/NZS 4284:2008 Clause 8.2.3)
- 1-1.5 Preliminary Test- Water Penetration Test - Cyclic (AS/NZS 4284:2008 Clause 8.2.3)
- 1-2 Structural Test at Serviceability Limit State (AS/NZS 4284:2008 Clause 8.3)
- 1-3 Open and close Operable Sash Test (AS/NZS 4420.1-2016 Clause 2)
- 1-4 Air Infiltration Test (AS/NZS 4284:2008 Clause 8.4)
- 1-5 Water Penetration Test - Static (AS/NZS 4284:2008 Clause 8.5)
- 1-6 Water Penetration Test - Cyclic (AS/NZS 4284:2008 Clause 8.6)
- 1-7 Seismic Test at SLS displacement (AS/NZS 4284:2008 Clause 8.9)
- 1-8 Repeated Water Penetration Test - Cyclic (AS/NZS 4284:2008 Clause 8.6)
- 1-9 Seal Degradation Test (AS/NZS 4284:2008 Clause 8.10)
- 1-10 Proof Test at Ultimate Limit State (AS/NZS 4284:2008 Clause 8.8)
- 1-11 Seismic Test at ULS displacement (AS/NZS 4284:2008 Clause 8.9)

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## 2. Witness on the Test

Mr. John Hawkins of

**Mott Macdonald**

Mr. Andrew Hall,  
Mr. Mick Maine and  
Mr. Richard Wu of

**Icon**

Mr. Christian Veloria of

**Inhabit New Zealand**

Mr. Lena Huang and  
Mr. Kim Dong of

**Guangdong Kete Facadetech Co., Ltd**

## 3. Test Information

### 3.1 Project Name and Location

62-77 Lorne Street, Auckland City

### 3.2 Client

Cedar Pacific & Unilodge

### 3.3 Architect

Ashtonmitchell

### 3.4 Facade Consultant

Inhabit New Zealand

### 3.5 Main Contractor

Icon

### 3.6 Facade Contractor/ Designer

Guangdong Kete Facadetech Co., Ltd.

### 3.7 Sample Manufacturer/ Installer

Guangdong Kete Facadetech Co., Ltd.

### 3.8 Test Laboratory

Research Engineering Development Façade Consultants Ltd. (HOKLAS No. 91)  
Location: No.111, Jiaoxin Road, Lanhe Town, Nansha District, Guangzhou, China

### 3.9 Test Engineer

Ms. Ivy Zou

### 3.10 Date of Test

13<sup>th</sup> December 2023

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## **4. Details of the Test Specimen**

### **4.1 General Description**

The specimen is constructed in accordance with the actual size section using the identical material to the material approved by the Architect and to be used in the project. The construction method and fixing of the specimen is also the same as the method used in actual installation of the system on site.

### **4.2 Testing Sample**

The specimen is a curtain wall system of ten glazing modules width and two-and-a-half modules height which is consisted of five awning windows and fixed vision/spandrel areas.

Dimension of the specimen: 13376 (4655+1690+7031) mm (w) x 7848 mm (h).

### **4.3 Testing Drawing (Enclosed)**

AK-17023-FC-0201[2], AK-17023-FC-0202[2], AK-17023-FC-0203[3], AK-17023-FC-0204[4], AK-17023-FC-3201[6], AK-17023-FC-3202[2], AK-17023-FC-4201[5], AK-17023-FC-4202[4], AK-17023-FC-4203[4], AK-17023-FC-4204[5], AK-17023-FC-4205[5], AK-17023-FC-4206[5], AK-17023-FC-4207[5], AK-17023-FC-4208[4], AK-17023-FC-4209[4], AK-17023-FC-4210[3], AK-17023-FC-4211[7], AK-17023-FC-4212[5], AK-17023-FC-4213[4], AK-17023-FC-4214[4], AK-17023-FC-5201[4], AK-17023-FC-5202[4], AK-17023-FC-5203[4], AK-17023-FC-5204[3], AK-17023-FC-5205[3], AK-17023-FC-5206[4], AK-17023-FC-5207[5], AK-17023-FC-5208[4], AK-17023-FC-5209[3], AK-17023-FC-5210[5]

### **4.4 Glass**

GT1: 6 C HS + 16Ar(black)+ 8 C FT

GT1A: 5 C HS+1.52PVB+5 C HS + 16Ar(black)+ 6 C FT

GT2: 6 C HS + 16Ar(black) + 5 C HS+1.52PVB+5 C HS

GT2A: 6C HS + 16A(Black) + 6C HS

GT3: 6 C HS + 16Ar(black)+ 5 C HS+1.52PVB+5 C HS

### **4.5 Sealant**

DOWSIL™ 791 for weather sealant

DOWSIL™ 993N for structural sealant

### **4.6 Equipment**

The externally mounted chamber is equipped with a manometer, air/water flowmeter, water spray system, air-blowers and directional hydraulic jack. The deformation of specimen shall be detected by electronic transducers.

### **4.7 Specimen Preparation**

Remove any sealing material or construction that is not normally a part of the assembly as installed in or on a building. Fit the specimen to the externally mounted chamber and seal the perimeter of the specimen against air and water penetration.

All framing members and other interconnected joints in the facade shall be sealed at the sample boundaries. All pressure equalization and drainage openings in the specimen shall be left open for the duration of the test. All operable test specimens shall be tested for operation with five cycles of opening, closing, and locking prior to the testing.

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## **5. Test Specification and Sequence**

### **5.1.1 Preliminary Test-Open and close Operable Sash Test (AS/NZS 4420.1-2016 Clause 2)**

#### **Procedure**

Unlock, open, close and lock all the operable sash for 5 cycles. Inspect the operating mechanism for any defects.

#### **Requirement**

No damage should be observed after the test.

### **5.1.2 Preliminary Test-Static Pressure Test (AS/NZS 4284:2008 Clause 8.2.2)**

#### **Procedure**

Preload the specimen to +1.84 kPa/-2.33 kPa (positive and negative SLS design wind pressure) for 10 seconds respectively.

#### **Requirement**

No separation, plastic deformations or deleterious should be observed during and after the test.

### **5.1.3 Preliminary Test-Water Penetration Test - Static (AS/NZS 4284:2008 Clause 8.2.3)**

#### **Procedure**

- (a) Without disturbing the seal between the specimen and the test chamber, adjust all ventilators, included in the test specimen so that their operation conforms to the specification requirements, and adjust all hardware for maximum tightness without interfering with their operations.
- (b) Adjust the water spray to the specified rate of 0.05L/ m<sup>2</sup>. sec
- (c) At the start of the test, the water spray operates for 5 minutes with zero pressure.
- (d) Apply the air pressure difference of **552 Pa** promptly and maintain a pressure along with the specified rate of water spray for 15 minutes.
- (e) Remove the air pressure difference and stop the water spray.
- (f) Observation of the internal surface of the specimen shall be carried out during the water spray operation and for 5 minutes after the water spray has stopped and there is zero pressure differential on the specimen.

#### **Requirement**

No water leakage should be observed. A leak is considered to occur when one or more of the following occur: a) Water appears on any inside surface of the façade and is visible from an occupied space. b) Uncontrolled water appears on any inside surface of the façade. c) Water appears that is likely to wet insulation, fixtures and finishes. d) Water appears in other locations specified as unacceptable by the Specifier.

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#### 5.1.4 Preliminary Test-Water Penetration Test - Cyclic (AS/NZS 4284:2008 Clause 8.2.3) Procedure

- (a) The test shall be performed upon completion of the static water test. Should the cyclic water test not commence within 30 min of the static water test then before the start of the test, the water spray operates for 5 minutes with zero pressure.
- (b) Adjust the water spray to the specified rate of 0.05L/ m<sup>2</sup>. sec.
- (c) Apply a cyclic positive air pressure for a duration of 5.0 minutes. The applied pressure shall be varied between the specified limits with a cycle time of 3 s to 5 s.
- (d) Record the cyclic pressure by the pressure gauge data logger.

<u>Pressure</u>	<u>Duration</u>
<b>276 - 552 - 276 Pa</b>	5 min.
0.00 Pa	2 min.
<b>368 - 736 - 368 Pa</b>	5 min.
0.00 Pa	2 min.
<b>552 - 1104 - 552 Pa</b>	5 min.
- (e) Remove the air pressure difference and stop the water spray.
- (f) Observation of the internal surface of the specimen shall be carried out during the water spray operation and for 5 minutes after the water spray has stopped and there is zero pressure differential on the specimen.

#### Requirement

No water leakage should be observed. A leak is considered to occur when one or more of the following occur: a) Water appears on any inside surface of the façade and is visible from an occupied space. b) Uncontrolled water appears on any inside surface of the façade. c) Water appears that is likely to wet insulation, fixtures and finishes. d) Water appears in other locations specified as unacceptable by the Specifier.

**5.2 Structural Test at Serviceability Limit State (AS/NZS 4284:2008 Clause 8.3) Procedure**

Positive / negative pressure up to 100% of the SLS Wind Pressure is applied as follows:

**Take-up**

<u>Pressure (kPa)</u>	<u>Duration</u>	<u>Observation</u>
1.84 (100%)	2 min.	take readings (Initial take-up period)
0.0	2 min.	take readings then set zero (Zero stage Z1)

**Mode 1**

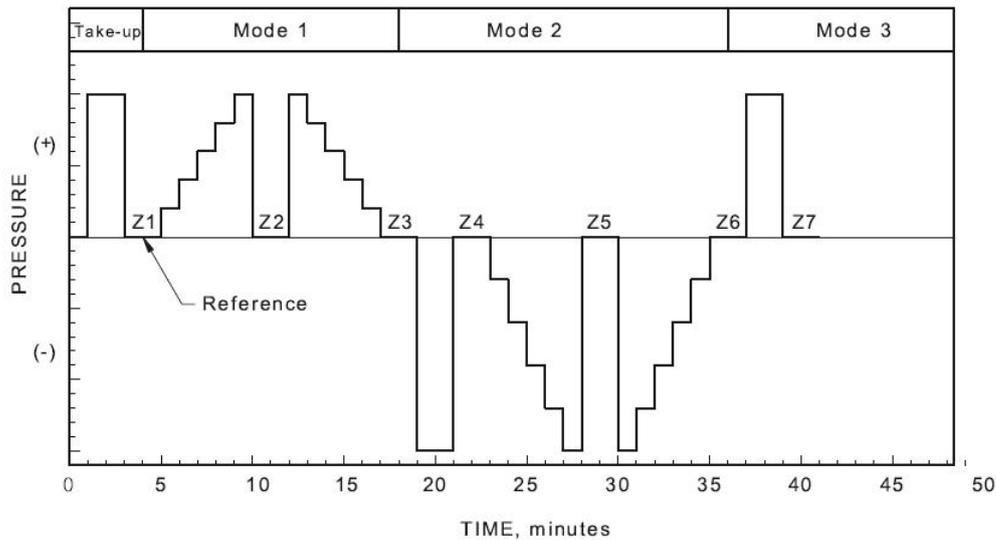
<u>Pressure (kPa)</u>	<u>Duration</u>	<u>Observation</u>
0.37 (20%)	1 min.	take readings
0.74 (40%)	1 min.	take readings
1.10 (60%)	1 min.	take readings
1.47 (80%)	1 min.	take readings
1.84 (100%)	1 min.	take readings
0.0	2 min.	take readings (Zero stage Z2)
1.84 (100%)	1 min.	take readings
1.47 (80%)	1 min.	take readings
1.10 (60%)	1 min.	take readings
0.74 (40%)	1 min.	take readings
0.37 (20%)	1 min.	take readings
0.0	2 min.	take readings (Zero stage Z3)

**Mode 2**

<u>Pressure (kPa)</u>	<u>Duration</u>	<u>Observation</u>
-2.33 (100%)	2 min.	take readings (take-up period)
0.0	2 min.	take readings then set zero (Zero Stage Z4)
-0.47 (20%)	1 min.	take readings
-0.93 (40%)	1 min.	take readings
-1.40 (60%)	1 min.	take readings
-1.86 (80%)	1 min.	take readings
-2.33 (100%)	1 min.	take readings
0.0	2 min.	take readings (Zero stage Z5)
-2.33 (100%)	1 min.	take readings
-1.86 (80%)	1 min.	take readings
-1.40 (60%)	1 min.	take readings
-0.93 (40%)	1 min.	take readings
-0.47 (20%)	1 min.	take readings
0.0	2 min.	take readings (Zero stage Z6)

**Mode 3**

<u>Pressure (kPa)</u>	<u>Duration</u>	<u>Observation</u>
1.84 (100%)	2 min.	take readings
0.0	2 min.	take readings (Zero stage Z7)



NOTE: The displacements used for deflection/span ratios are based on zero deflections at the reference stages Z1 and Z4. The reducing pressure steps from Z2 to Z3 and from Z5 to Z6 are optional.

### Requirement

The performance of the specimen is evaluated against the following criteria.

- (i) The glass and cladding should not break.
- (ii) During the positive and negative pressure tests, the deflection of the framing members of the specimen should not exceed span/250 or 20mm, whichever is less.
- (iii) The glass panel deflection should not exceed span/60 or 20mm, whichever is less.
- (iv) The cladding deflection should not exceed span/110 (for the short direction) or 20mm, whichever is less.
- (v) Maximum successive member displacement should not exceed 3mm.
- (vi) Maximum slippage should not exceed 3mm.

### 5.3 Open and close Operable Sash Test (AS/NZS 4420.1-2016 Clause 2)

#### Procedure

Unlock, open, close and lock all the operable sash for 5 cycles. Inspect the operating mechanism for any defects.

#### Requirement

No damage should be observed after the test.

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#### 5.4 Air Infiltration Test (AS/NZS 4284:2008 Clause 8.4)

##### Procedure

- (a) Without disturbing the seal between the specimen and the test chamber, adjust all ventilators, included in the test specimen so that their operation conforms to the specification requirements, and adjust all hardware for maximum tightness without interfering with their operations.
- (b) Adjust the air flow through the test chamber to provide the specified test pressure difference across the test specimen. When the test conditions are stabilized, record the air flow through the flowmeter and the test pressure difference.
- (c) Eliminate extraneous chamber leakage, or, if this is impractical, measure the amount of such leakage with the specimen sealed, at the air pressure differences to be exerted during the air leakage tests. The metering equipment for the measurement of air leakage may be used for measuring the extraneous leakage, or it may be necessary to provide additional air metering equipment for this purpose.

Air infiltration is to be checked under pressure of +/-150 Pa.

##### Requirement

Air infiltration rate should not exceed: 1.6 l/ m<sup>2</sup>s.

#### 5.5 Water Penetration Test - Static (AS/NZS 4284:2008 Clause 8.5)

##### Procedure

- (a) Without disturbing the seal between the specimen and the test chamber, adjust all ventilators, included in the test specimen so that their operation conforms to the specification requirements, and adjust all hardware for maximum tightness without interfering with their operations.
- (b) Adjust the water spray to the specified rate of 0.05L/ m<sup>2</sup>. sec
- (c) At the start of the test, the water spray operates for 5 minutes with zero pressure.
- (d) Apply the air pressure difference of **552 Pa** promptly and maintain a pressure along with the specified rate of water spray for 15 minutes.
- (e) Remove the air pressure difference and stop the water spray.
- (f) Observation of the internal surface of the specimen shall be carried out during the water spray operation and for 5 minutes after the water spray has stopped and there is zero pressure differential on the specimen.

##### Requirement

No water leakage should be observed. A leak is considered to occur when one or more of the following occur: a) Water appears on any inside surface of the façade and is visible from an occupied space. b) Uncontrolled water appears on any inside surface of the façade. c) Water appears that is likely to wet insulation, fixtures and finishes. d) Water appears in other locations specified as unacceptable by the Specifier.

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## 5.6 Water Penetration Test - Cyclic (AS/NZS 4284:2008 Clause 8.6)

### Procedure

- (a) The test shall be performed upon completion of the static water test. Should the cyclic water test not commence within 30 min of the static water test then before the start of the test, the water spray operates for 5 minutes with zero pressure.
- (b) Adjust the water spray to the specified rate of 0.05L/ m<sup>2</sup>. sec.
- (c) Apply a cyclic positive air pressure for a duration of 5.0 minutes. The applied pressure shall be varied between the specified limits with a cycle time of 3 s to 5 s.
- (d) Record the cyclic pressure by the pressure gauge data logger.

<u>Pressure</u>	<u>Duration</u>
<b>276 - 552 - 276 Pa</b>	5 min.
0.00 Pa	2 min.
<b>368 - 736 - 368 Pa</b>	5 min.
0.00 Pa	2 min.
<b>552 - 1104 - 552 Pa</b>	5 min..

Remove the air pressure difference and stop the water spray.

- (e) Observation of the internal surface of the specimen shall be carried out during the water spray operation and for 5 minutes after the water spray has stopped and there is zero pressure differential on the specimen.

### Requirement

No water leakage should be observed.

A leak is considered to occur when one or more of the following occur: a) Water appears on any inside surface of the façade and is visible from an occupied space. b) Uncontrolled water appears on any inside surface of the façade. c) Water appears that is likely to wet insulation, fixtures and finishes. d) Water appears in other locations specified as unacceptable by the Specifier.

## 5.7 Seismic Test at SLS Displacement (AS/NZS 4284:2008 Clause 8.9)

### Procedure

In this test, the specimen shall be displaced in the plane of the façade sample for 10 cycles from the original setting position. A directional hydraulic jack is used to simulate the cyclic movement by jacking the specified moveable supporting beam. Lateral displacements shall be measured as the relative displacement between the lateral fixed support and the moveable supporting beam.

Perform lateral displacement test by jacking the middle supporting beam for 10 complete cycles.

Maximum movement: ± 10 mm (peak velocity not less than 10mm/s)

Inspect and record the condition of the specimen after the completion of all the cycles.

### Requirement

There shall be no collapse during or after the test.

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## 5.8 Water Penetration Test - Cyclic (AS/NZS 4284:2008 Clause 8.6)

### Procedure

- (a) The test shall be performed upon completion of the static water test. Should the cyclic water test not commence within 30 min of the static water test then before the start of the test, the water spray operates for 5 minutes with zero pressure.
- (b) Adjust the water spray to the specified rate of 0.05L/ m<sup>2</sup>. sec.
- (c) Apply a cyclic positive air pressure for a duration of 5.0 minutes. The applied pressure shall be varied between the specified limits with a cycle time of 3 s to 5 s.
- (d) Record the cyclic pressure by the pressure gauge data logger.

<u>Pressure</u>	<u>Duration</u>
<b>276 - 552 - 276 Pa</b>	5 min.
0.00 Pa	2 min.
<b>368 - 736 - 368 Pa</b>	5 min.
0.00 Pa	2 min.
<b>552 - 1104 - 552 Pa</b>	5 min..

Remove the air pressure difference and stop the water spray.

- (e) Observation of the internal surface of the specimen shall be carried out during the water spray operation and for 5 minutes after the water spray has stopped and there is zero pressure differential on the specimen.

### Requirement

No water leakage should be observed.

A leak is considered to occur when one or more of the following occur: a) Water appears on any inside surface of the façade and is visible from an occupied space. b) Uncontrolled water appears on any inside surface of the façade. c) Water appears that is likely to wet insulation, fixtures and finishes. d) Water appears in other locations specified as unacceptable by the Specifier.

## 5.9 Seal Degradation Test (AS/NZS 4284:2008 Clause 8.10)

### Procedure

A cyclic water penetration test given in procedure 5.6 shall be undertaken with nominated seals removed on the test specimen. Should the cyclic water test not commence within 30 min of procedure 5.8 then before the start of the test, the water spray operates for 5 minutes with zero pressure. All changes to the specimen shall be reported.

Please refer to Figure 2 for the seal degradation location.

### Requirement

The sample shall be observed for water penetration after the nominated seals have been altered. (For information only)

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**5.10 Structural Test at Ultimate Limit State (AS/NZS 4284:2008 Clause 8.8)****Procedure**

Positive / negative pressure up to Ultimate Limit State is applied and held for 10 seconds.

**Positive****Pressure**

0 to 2.55 kPa

2.55 kPa

**Duration**

50s-60s

10s

**Negative****Pressure**

0 to -3.24 kPa

-3.24 kPa

**Duration**

50s-60s

10s

The sample shall be inspected at the end of each of the positive and negative pressure stages. Record all incidences of non-linear deflection and/or collapse.

**Requirement**

There shall be no collapse of the test sample. Collapse shall mean any one or any combination of the following:

- (a) Dislodgment of any framing member, façade panels or any part thereof.
- (b) Failure of any fixings that connect the façade to the building structure, such that the test sample is unstable.
- (c) Failure of any stop, locking device, fastener or support which would allow an opening light to come open.
- (d) Repeated breakage of glass or panels resulting in loss of chamber pressure. Glass or panels may only be replaced once before the sample is deemed to have collapsed.
- (e) Repeated cracking of glass which does not result in loss of chamber pressure. Glass may only be replaced twice before the sample is deemed to have collapsed.
- (f) Any permanent distortion of a panel shall be noted and documented in the test report.

**5.11 Seismic Test at ULS Displacement (AS/NZS 4284:2008 Clause 8.9)****Procedure**

In this test, the specimen shall be displaced in the plane of the façade sample for 10 cycles from the original setting position. A directional hydraulic jack is used to simulate the cyclic movement by jacking the specified moveable supporting beam. Lateral displacements shall be measured as the relative displacement between the lateral fixed support and the moveable supporting beam.

Perform lateral displacement test by jacking the middle supporting beam for 10 complete cycles.

Maximum movement:  $\pm 30$ mm (peak velocity not less than 10mm/s)

Inspect and record the condition of the specimen after the completion of all the cycles.

**Requirement**

There shall be no collapse during or after the test.

## **6. Test Procedure and Observations**

### **6.1.1 Preliminary Test-Open and close Operable Sash Test (AS/NZS 4420.1-2016 Clause 2)**

#### **Procedure**

The testing procedures described in section 5.1.1 were followed.

#### **Observation**

No damage should be observed after the test.

### **6.1.2 Preliminary Test-Static Pressure Test (AS/NZS 4284:2008 Clause 8.2.2)**

#### **Procedure**

The testing procedures described in section 5.1.2 were followed.

#### **Observation**

No separation, plastic deformations or deleterious was observed.

### **6.1.3 Preliminary Test - Water Penetration Test - Static(AS/NZS 4284:2008 Clause 8.2.3)**

#### **Procedure**

The testing procedures described in section 5.1.3 were followed.

#### **Observation**

No water leakage was observed.

### **6.1.4 Preliminary Test - Water Penetration Test- Cyclic (AS/NZS 4284:2008 Clause 8.2.3)**

#### **Procedure**

The testing procedures described in section 5.1.4 were followed.

#### **Observation**

No water leakage was observed.

## 6.2 Structural Test at Serviceability Limit State (AS/NZS 4284 Clause 8.3) Procedure

The testing procedures described in section 5.2 were followed.

### Readings of positive pressure up to 1.84 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm								
	Locations of Transducers								
	Mullion 1			Mullion 2			Mullion 3		
	Span = 2955 mm			Span = 2805 mm			Span = 2955 mm		
	1	2	3	4	5	6	7	8	9
<b>Take-up</b>									
At Pressure = <b>1.84</b>	0.89	1.58	0.88	2.74	3.36	1.18	1.42	2.86	1.68
At Pressure = <b>0.00</b>	0.03	0.05	0.05	0.20	0.23	0.09	0.27	0.18	-0.04
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Mode 1</b>									
At Pressure = <b>0.37</b>	0.22	0.22	0.05	0.59	0.57	0.10	0.20	0.38	0.22
At Pressure = <b>0.74</b>	0.53	0.55	0.21	1.33	1.30	0.36	0.64	1.08	0.71
At Pressure = <b>1.11</b>	0.70	0.95	0.42	1.79	1.95	0.61	0.83	1.72	1.12
At Pressure = <b>1.48</b>	0.79	1.27	0.67	2.18	2.53	0.84	0.99	2.23	1.42
At Pressure = <b>1.84</b>	0.86	1.48	0.81	2.53	3.07	1.05	1.12	2.58	1.68
Relative Disp. (mm)	--	0.645	--	--	1.280	--	--	1.180	--
Permitted Relative Displ. #	--	11.820	--	--	11.220	--	--	11.820	--
At Pressure = <b>0.00</b>	0.00	0.03	0.01	0.02	0.02	0.01	0.01	0.04	0.01
At Pressure = <b>1.84</b>	0.87	1.56	0.82	2.56	3.14	1.09	1.13	2.66	1.68
Relative Disp. (mm)	--	0.715	--	--	1.315	--	--	1.255	--
Permitted Relative Displ. #	--	11.820	--	--	11.220	--	--	11.820	--
At Pressure = <b>1.48</b>	0.83	1.44	0.72	2.32	2.73	0.94	1.10	2.43	1.53
At Pressure = <b>1.11</b>	0.77	1.25	0.56	2.02	2.27	0.75	1.04	2.11	1.30
At Pressure = <b>0.74</b>	0.66	0.86	0.31	1.64	1.68	0.51	0.91	1.57	0.95
At Pressure = <b>0.37</b>	0.47	0.56	0.15	1.03	0.94	0.20	0.55	0.86	0.36
At Pressure = <b>0.00</b>	0.01	0.03	0.01	0.06	0.06	0.02	0.02	0.05	-0.03

# note -The Deflection of Framing Member should not exceed span/250

#### Calculation for Deflection/Span Ratio at SLS Design Wind Load (1.84 kPa)

Relative Deflection of Mullion 1 at Locations 1, 2 and 3

$$= 1.56 - (0.87 + 0.82)/2$$

$$= 0.715 \text{ mm}$$

$$< \text{Span} / 250 = 2955.0 / 250 = 11.820 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 4133$$

Relative Deflection of Mullion 2 at Locations 4, 5 and 6

$$= 3.14 - (2.56 + 1.09)/2$$

$$= 1.315 \text{ mm}$$

$$< \text{Span} / 250 = 2805.0 / 250 = 11.220 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 2133$$

Relative Deflection of Mullion 3 at Locations 7, 8 and 9

$$= 2.66 - (1.13 + 1.68)/2$$

$$= 1.255 \text{ mm}$$

$$< \text{Span} / 250 = 2955.0 / 250 = 11.820 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 2355$$

## Readings of negative pressure up to -2.33 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm									
	Locations of Transducers									
	Mullion 1 Span = 2955 mm			Mullion 2 Span = 2805 mm			Mullion 3 Span = 2955 mm			
	1	2	3	4	5	6	7	8	9	
<b>Mode 2</b>										
At Pressure = <b>-2.33</b>	-0.89	-2.00	-0.42	-4.09	-4.68	-1.14	-1.97	-3.50	-1.13	
At Pressure = <b>0.00</b>	-0.19	-0.36	-0.03	-0.79	-0.84	-0.31	-0.92	-0.78	-0.19	
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
At Pressure = <b>-0.47</b>	-0.14	-0.21	-0.11	-0.58	-0.66	-0.13	-0.10	-0.39	-0.23	
At Pressure = <b>-0.94</b>	-0.54	-0.66	-0.19	-1.40	-1.47	-0.27	-0.37	-1.01	-0.42	
At Pressure = <b>-1.40</b>	-0.69	-1.09	-0.26	-2.12	-2.26	-0.43	-0.61	-1.60	-0.60	
At Pressure = <b>-1.87</b>	-0.70	-1.34	-0.33	-2.76	-3.07	-0.66	-0.84	-2.20	-0.79	
At Pressure = <b>-2.33</b>	-0.70	-1.65	-0.41	-3.35	-3.88	-0.87	-1.08	-2.76	-0.98	
Relative Disp. (mm)	--	-1.095	--	--	-1.770	--	--	-1.730	--	
Permitted Relative Displ. #	--	11.820	--	--	11.220	--	--	11.820	--	
At Pressure = <b>0.00</b>	-0.02	-0.03	-0.01	-0.05	-0.05	-0.02	-0.04	-0.05	-0.02	
At Pressure = <b>-2.33</b>	-0.71	-1.67	-0.44	-3.37	-3.90	-0.88	-1.10	-2.76	-0.99	
Relative Disp. (mm)	--	-1.095	--	--	-1.775	--	--	-1.715	--	
Permitted Relative Displ. #	--	11.820	--	--	11.220	--	--	11.820	--	
At Pressure = <b>-1.87</b>	-0.70	-1.51	-0.36	-2.96	-3.32	-0.74	-0.98	-2.42	-0.80	
At Pressure = <b>-1.40</b>	-0.72	-1.30	-0.26	-2.44	-2.65	-0.58	-0.86	-2.01	-0.64	
At Pressure = <b>-0.94</b>	-0.74	-1.06	-0.18	-1.81	-1.90	-0.39	-0.72	-1.47	-0.46	
At Pressure = <b>-0.47</b>	-0.51	-0.61	-0.11	-1.11	-1.09	-0.21	-0.51	-0.85	-0.29	
At Pressure = <b>0.00</b>	-0.04	-0.07	-0.03	-0.10	-0.09	-0.04	-0.06	-0.09	-0.03	
<b>Mode 3</b>										
At Pressure = <b>1.84</b>	1.01	1.82	0.85	3.31	3.94	1.39	2.00	3.33	1.74	
Relative Disp. (mm)	--	0.890	--	--	1.590	--	--	1.460	--	
At Pressure = <b>0.00</b>	0.16	0.31	0.01	0.79	0.82	0.28	0.85	0.72	0.05	

# note -The Deflection of Framing Member should not exceed span/250

### Calculation for Deflection/Span Ratio at SLS Design Wind Load (-2.33 kPa)

Relative Deflection of Mullion 1 at Locations 1, 2 and 3

$$= |-1.65 - (-0.70 + -0.41)/2|$$

$$= 1.095 \text{ mm} < \text{Span} / 250 = 2955.0 / 250 = 11.820 \text{ mm}$$

Defl./Span Ratio= span / 2699

Relative Deflection of Mullion 2 at Locations 4, 5 and 6

$$= |-3.90 - (-3.37 + -0.88)/2|$$

$$= 1.775 \text{ mm} < \text{Span} / 250 = 2805.0 / 250 = 11.220 \text{ mm}$$

Defl./Span Ratio= span / 1580

Relative Deflection of Mullion 3 at Locations 7, 8 and 9

$$= |-2.76 - (-1.08 + -0.98)/2|$$

$$= 1.730 \text{ mm} < \text{Span} / 250 = 2955.0 / 250 = 11.820 \text{ mm}$$

Defl./Span Ratio= span / 1708

## Readings of positive pressure up to 1.84 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm								
	Locations of Transducers								
	Mullion 4 Span = 2650 mm			Mullion 5 Span = 2945 mm			Mullion 6 Span = 1620 mm		
	10	11	12	13	14	15	16	17	18
<b>Take-up</b>									
At Pressure = <b>1.84</b>	1.24	1.80	1.08	2.42	2.93	1.05	3.25	3.03	2.33
At Pressure = <b>0.00</b>	0.02	0.11	0.12	0.29	0.20	0.03	0.17	0.14	0.07
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Mode 1</b>									
At Pressure = <b>0.37</b>	0.26	0.29	0.21	0.29	0.56	0.35	0.56	0.53	0.37
At Pressure = <b>0.74</b>	0.57	0.79	0.63	0.93	1.31	0.61	1.43	1.31	0.97
At Pressure = <b>1.11</b>	0.81	1.10	0.77	1.36	1.86	0.76	2.13	1.97	1.52
At Pressure = <b>1.48</b>	1.02	1.40	0.88	1.78	2.31	0.89	2.65	2.48	1.94
At Pressure = <b>1.84</b>	1.22	1.69	0.97	2.10	2.68	1.01	3.05	2.87	2.23
Relative Disp. (mm)	--	0.595	--	--	1.125	--	--	0.230	--
Permitted Relative Displ. #	--	10.600	--	--	11.780	--	--	6.480	--
At Pressure = <b>0.00</b>	0.01	0.02	0.01	0.03	0.03	0.01	0.02	0.03	0.01
At Pressure = <b>1.84</b>	1.23	1.73	0.99	2.15	2.73	1.02	3.10	2.92	2.28
Relative Disp. (mm)	--	0.620	--	--	1.145	--	--	0.230	--
Permitted Relative Displ. #	--	10.600	--	--	11.780	--	--	6.480	--
At Pressure = <b>1.48</b>	1.09	1.55	0.91	1.91	2.52	0.90	2.82	2.62	2.07
At Pressure = <b>1.11</b>	0.92	1.32	0.86	1.59	2.20	0.80	2.42	2.21	1.75
At Pressure = <b>0.74</b>	0.64	0.98	0.76	1.19	1.72	0.70	1.85	1.67	1.27
At Pressure = <b>0.37</b>	0.33	0.58	0.47	0.72	1.01	0.44	1.01	0.86	0.59
At Pressure = <b>0.00</b>	0.02	0.04	0.03	0.05	0.05	0.03	0.05	0.05	0.03

# note -The Deflection of Framing Member should not exceed span/250

### Calculation for Deflection/Span Ratio at SLS Design Wind Load (1.84 kPa)

Relative Deflection of Mullion 4 at Locations 10, 11 and 12

$$= 1.73 - (1.23 + 0.99)/2$$

$$= 0.620 \text{ mm}$$

$$< \text{Span} / 250 = 2650.0 / 250 = 10.600 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 4274$$

Relative Deflection of Mullion 5 at Locations 13, 14 and 15

$$= 2.73 - (2.15 + 1.02)/2$$

$$= 1.145 \text{ mm}$$

$$< \text{Span} / 250 = 2945.0 / 250 = 11.780 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 2572$$

Relative Deflection of Mullion 6 at Locations 16, 17 and 18

$$= 2.87 - (3.05 + 2.23)/2$$

$$= 0.230 \text{ mm}$$

$$< \text{Span} / 250 = 1620.0 / 250 = 6.480 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 7043$$

## Readings of negative pressure up to -2.33 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm									
	Locations of Transducers									
	Mullion 4 Span = 2650 mm			Mullion 5 Span = 2945 mm			Mullion 6 Span = 1620 mm			
	10	11	12	13	14	15	16	17	18	
<b>Mode 2</b>										
At Pressure = <b>-2.33</b>	-1.56	-2.71	-1.39	-2.80	-4.52	-1.76	-5.10	-4.29	-2.96	
At Pressure = <b>0.00</b>	-0.09	-0.44	-0.49	-1.26	-1.06	-0.47	-1.04	-0.82	-0.58	
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
At Pressure = <b>-0.47</b>	-0.34	-0.35	-0.12	-0.36	-0.65	-0.37	-0.75	-0.62	-0.44	
At Pressure = <b>-0.94</b>	-0.75	-0.88	-0.31	-0.80	-1.47	-0.68	-1.68	-1.41	-0.97	
At Pressure = <b>-1.40</b>	-1.03	-1.37	-0.55	-1.13	-2.23	-0.91	-2.62	-2.21	-1.52	
At Pressure = <b>-1.87</b>	-1.27	-1.86	-0.76	-1.29	-2.88	-1.15	-3.41	-2.90	-2.01	
At Pressure = <b>-2.33</b>	-1.49	-2.30	-0.91	-1.63	-3.54	-1.35	-4.12	-3.53	-2.44	
Relative Disp. (mm)	--	-1.100	--	--	-2.050	--	--	-0.250	--	
Permitted Relative Displ. #	--	10.600	--	--	11.780	--	--	6.480	--	
At Pressure = <b>0.00</b>	-0.02	-0.03	-0.01	-0.08	-0.09	-0.07	-0.07	-0.03	-0.05	
At Pressure = <b>-2.33</b>	-1.50	-2.32	-0.93	-1.49	-3.48	-1.30	-4.12	-3.53	-2.43	
Relative Disp. (mm)	--	-1.105	--	--	-2.085	--	--	-0.255	--	
Permitted Relative Displ. #	--	10.600	--	--	11.780	--	--	6.480	--	
At Pressure = <b>-1.87</b>	-1.31	-1.98	-0.80	-1.39	-3.09	-1.17	-3.62	-3.07	-2.12	
At Pressure = <b>-1.40</b>	-1.11	-1.59	-0.68	-1.28	-2.63	-1.05	-3.04	-2.55	-1.78	
At Pressure = <b>-0.94</b>	-0.85	-1.13	-0.57	-1.15	-2.05	-0.85	-2.32	-1.93	-1.32	
At Pressure = <b>-0.47</b>	-0.44	-0.57	-0.28	-0.79	-1.21	-0.51	-1.38	-1.11	-0.74	
At Pressure = <b>0.00</b>	-0.02	-0.05	-0.03	-0.09	-0.12	-0.07	-0.09	-0.08	-0.07	
<b>Mode 3</b>										
At Pressure = <b>1.84</b>	1.30	2.09	1.41	3.37	3.65	1.28	4.09	3.66	2.76	
Relative Disp. (mm)	--	0.735	--	--	1.325	--	--	0.235	--	
At Pressure = <b>0.00</b>	0.09	0.41	0.45	1.26	0.97	0.32	0.92	0.72	0.49	

# note -The Deflection of Framing Member should not exceed span/250

### Calculation for Deflection/Span Ratio at SLS Design Wind Load (-2.33 kPa)

Relative Deflection of Mullion 4 at Locations 10, 11 and 12

$$= |-2.32 - (-1.50 + -0.93)/2|$$

$$= 1.105 \text{ mm} < \text{Span} / 250 = 2650.0 / 250 = 10.600 \text{ mm}$$

Defl./Span Ratio= span / 2398

Relative Deflection of Mullion 5 at Locations 13, 14 and 15

$$= |-3.48 - (-1.49 + -1.30)/2|$$

$$= 2.085 \text{ mm} < \text{Span} / 250 = 2945.0 / 250 = 11.780 \text{ mm}$$

Defl./Span Ratio= span / 1412

Relative Deflection of Mullion 6 at Locations 16, 17 and 18

$$= |-3.53 - (-4.12 + -2.43)/2|$$

$$= 0.255 \text{ mm} < \text{Span} / 250 = 1620.0 / 250 = 6.480 \text{ mm}$$

Defl./Span Ratio= span / 6353

## Readings of positive pressure up to 1.84 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm									
	Locations of Transducers									
	Mullion 7 Span = 2945 mm			Mullion 8 Span = 4015 mm			Mullion 9 Span = 4015 mm			
	19	20	21	22	23	24	25	26	27	
<b>Take-up</b>										
At Pressure = <b>1.84</b>	2.03	2.78	1.16	3.07	9.44	2.21	2.83	6.18	1.25	
At Pressure = <b>0.00</b>	0.07	0.13	0.06	0.20	0.31	0.08	0.10	0.16	0.13	
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Mode 1</b>										
At Pressure = <b>0.37</b>	0.40	0.47	0.10	0.63	1.72	0.51	0.57	1.03	0.12	
At Pressure = <b>0.74</b>	1.01	1.17	0.40	1.27	3.73	1.15	1.29	2.35	0.40	
At Pressure = <b>1.11</b>	1.43	1.82	0.79	1.86	5.63	1.60	1.93	3.73	0.65	
At Pressure = <b>1.48</b>	1.74	2.31	1.02	2.38	7.40	1.90	2.35	4.91	0.87	
At Pressure = <b>1.84</b>	1.98	2.66	1.10	2.85	9.06	2.15	2.72	5.96	1.06	
Relative Disp. (mm)	--	1.120	--	--	6.560	--	--	4.070	--	
Permitted Relative Displ. #	--	11.780	--	--	16.060	--	--	16.060	--	
At Pressure = <b>0.00</b>	0.03	0.03	0.01	0.03	0.03	0.02	0.02	0.02	0.01	
At Pressure = <b>1.84</b>	2.00	2.69	1.11	2.88	9.14	2.15	2.74	6.03	1.10	
Relative Disp. (mm)	--	1.135	--	--	6.625	--	--	4.110	--	
Permitted Relative Displ. #	--	11.780	--	--	16.060	--	--	16.060	--	
At Pressure = <b>1.48</b>	1.83	2.43	1.05	2.53	7.79	1.96	2.43	5.26	1.01	
At Pressure = <b>1.11</b>	1.58	2.08	0.92	2.13	6.24	1.70	2.06	4.36	0.86	
At Pressure = <b>0.74</b>	1.21	1.53	0.65	1.62	4.38	1.34	1.49	3.07	0.64	
At Pressure = <b>0.37</b>	0.70	0.73	0.14	0.97	2.36	0.82	0.73	1.55	0.35	
At Pressure = <b>0.00</b>	0.04	0.05	0.02	0.05	0.07	0.05	0.03	0.06	0.02	

# note -The Deflection of Framing Member should not exceed span/250

### Calculation for Deflection/Span Ratio at SLS Design Wind Load (1.84 kPa)

Relative Deflection of Mullion 7 at Locations 19, 20 and 21

$$= 2.69 - (2.00 + 1.11)/2$$

$$= 1.135 \text{ mm}$$

$$< \text{Span} / 250 = 2945.0 / 250 = 11.780 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 2595$$

Relative Deflection of Mullion 8 at Locations 22, 23 and 24

$$= 9.14 - (2.88 + 2.15)/2$$

$$= 6.625 \text{ mm}$$

$$< \text{Span} / 250 = 4015.0 / 250 = 16.060 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 606$$

Relative Deflection of Mullion 9 at Locations 25, 26 and 27

$$= 6.03 - (2.74 + 1.10)/2$$

$$= 4.110 \text{ mm}$$

$$< \text{Span} / 250 = 4015.0 / 250 = 16.060 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 977$$

## Readings of negative pressure up to -2.33 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm									
	Locations of Transducers									
	Mullion 7 Span = 2945 mm			Mullion 8 Span = 4015 mm			Mullion 9 Span = 4015 mm			
	19	20	21	22	23	24	25	26	27	
<b>Mode 2</b>										
At Pressure = <b>-2.33</b>	-3.18	-4.19	-1.02	-4.49	-12.97	-3.17	-3.19	-8.49	-1.00	
At Pressure = <b>0.00</b>	-0.68	-0.69	-0.29	-0.81	-1.42	-0.56	-0.27	-1.02	-0.45	
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
At Pressure = <b>-0.47</b>	-0.48	-0.63	-0.11	-0.88	-2.19	-0.62	-0.60	-1.25	-0.11	
At Pressure = <b>-0.94</b>	-1.04	-1.41	-0.24	-1.61	-4.53	-1.20	-1.20	-2.82	-0.36	
At Pressure = <b>-1.40</b>	-1.68	-2.24	-0.40	-2.35	-6.95	-1.78	-1.81	-4.46	-0.52	
At Pressure = <b>-1.87</b>	-2.14	-2.95	-0.59	-3.05	-9.34	-2.25	-2.41	-6.07	-0.57	
At Pressure = <b>-2.33</b>	-2.54	-3.56	-0.75	-3.71	-11.59	-2.65	-2.94	-7.53	-0.60	
Relative Disp. (mm)	--	-1.915	--	--	-8.410	--	--	-5.760	--	
Permitted Relative Displ. #	--	11.780	--	--	16.060	--	--	16.060	--	
At Pressure = <b>0.00</b>	-0.02	-0.05	-0.01	-0.05	-0.07	-0.02	-0.03	-0.06	-0.04	
At Pressure = <b>-2.33</b>	-2.55	-3.58	-0.76	-3.73	-11.61	-2.67	-2.95	-7.56	-0.64	
Relative Disp. (mm)	--	-1.925	--	--	-8.410	--	--	-5.765	--	
Permitted Relative Displ. #	--	11.780	--	--	16.060	--	--	16.060	--	
At Pressure = <b>-1.87</b>	-2.25	-3.13	-0.65	-3.24	-9.77	-2.35	-2.51	-6.51	-0.66	
At Pressure = <b>-1.40</b>	-1.92	-2.60	-0.53	-2.62	-7.64	-1.96	-1.98	-5.22	-0.68	
At Pressure = <b>-0.94</b>	-1.53	-1.95	-0.40	-1.95	-5.34	-1.55	-1.42	-3.67	-0.70	
At Pressure = <b>-0.47</b>	-0.93	-1.12	-0.19	-1.25	-2.93	-1.01	-0.80	-1.96	-0.55	
At Pressure = <b>0.00</b>	-0.05	-0.07	-0.02	-0.08	-0.11	-0.03	-0.06	-0.15	-0.09	
<b>Mode 3</b>										
At Pressure = <b>1.84</b>	2.62	3.31	1.38	3.69	10.57	2.67	3.02	7.04	1.55	
Relative Disp. (mm)	--	1.310	--	--	7.390	--	--	4.755	--	
At Pressure = <b>0.00</b>	0.57	0.61	0.26	0.79	1.33	0.47	0.26	0.99	0.37	

# note -The Deflection of Framing Member should not exceed span/250

### Calculation for Deflection/Span Ratio at SLS Design Wind Load (-2.33 kPa)

Relative Deflection of Mullion 7 at Locations 19, 20 and 21

$$= |-3.58 - (-2.55 + -0.76)/2|$$

$$= 1.925 \text{ mm} < \text{Span} / 250 = 2945.0 / 250 = 11.780 \text{ mm}$$

Defl./Span Ratio= span / 1530

Relative Deflection of Mullion 8 at Locations 22, 23 and 24

$$= |-11.59 - (-3.71 + -2.65)/2|$$

$$= 8.410 \text{ mm} < \text{Span} / 250 = 4015.0 / 250 = 16.060 \text{ mm}$$

Defl./Span Ratio= span / 477

Relative Deflection of Mullion 9 at Locations 25, 26 and 27

$$= |-7.56 - (-2.95 + -0.64)/2|$$

$$= 5.765 \text{ mm} < \text{Span} / 250 = 4015.0 / 250 = 16.060 \text{ mm}$$

Defl./Span Ratio= span / 696

## Readings of positive pressure up to 1.84 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm								
	Locations of Transducers								
	Transom 1 Span = 1620 mm			Transom 2 Span = 1495 mm			Transom 3 Span = 1620 mm		
	28	29	30	31	32	33	34	35	36
<b>Take-up</b>									
At Pressure = <b>1.84</b>	2.19	2.72	3.01	1.08	1.71	2.63	3.38	2.53	2.62
At Pressure = <b>0.00</b>	0.15	0.23	0.36	0.01	0.10	0.19	0.30	0.22	0.12
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Mode 1</b>									
At Pressure = <b>0.37</b>	0.54	0.56	0.44	0.24	0.26	0.38	0.55	0.48	0.54
At Pressure = <b>0.74</b>	1.15	1.29	1.20	0.50	0.62	0.92	1.40	1.28	1.27
At Pressure = <b>1.11</b>	1.49	1.75	1.73	0.71	0.96	1.45	2.01	1.76	1.83
At Pressure = <b>1.48</b>	1.76	2.14	2.19	0.90	1.29	1.95	2.58	2.09	2.23
At Pressure = <b>1.84</b>	2.03	2.49	2.58	1.07	1.59	2.42	3.02	2.31	2.52
Relative Disp. (mm)	--	0.185	--	--	-0.155	--	--	-0.460	--
Permitted Relative Displ. #	--	6.480	--	--	5.980	--	--	6.480	--
At Pressure = <b>0.00</b>	0.02	0.03	0.02	0.01	0.01	0.02	0.03	0.04	0.04
At Pressure = <b>1.84</b>	2.07	2.52	2.66	1.08	1.61	2.44	3.10	2.36	2.56
Relative Disp. (mm)	--	0.155	--	--	-0.150	--	--	-0.470	--
Permitted Relative Displ. #	--	6.480	--	--	5.980	--	--	6.480	--
At Pressure = <b>1.48</b>	1.88	2.30	2.48	0.97	1.40	2.10	2.82	2.24	2.37
At Pressure = <b>1.11</b>	1.67	2.01	2.18	0.83	1.12	1.67	2.39	2.04	2.08
At Pressure = <b>0.74</b>	1.39	1.63	1.75	0.57	0.76	1.15	1.84	1.66	1.60
At Pressure = <b>0.37</b>	0.93	1.01	1.04	0.31	0.39	0.59	1.13	0.99	0.92
At Pressure = <b>0.00</b>	0.05	0.05	0.04	0.02	0.02	0.03	0.06	0.06	0.07

# note -The Deflection of Framing Member should not exceed span/250

### Calculation for Deflection/Span Ratio at SLS Design Wind Load (1.84 kPa)

Relative Deflection of Transom 1 at Locations 28, 29 and 30

$$= 2.49 - (2.03 + 2.58)/2$$

$$= 0.185 \text{ mm}$$

$$< \text{Span} / 250 = 1620.0 / 250 = 6.480 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 8757$$

Relative Deflection of Transom 2 at Locations 31, 32 and 33

$$= 1.61 - (1.08 + 2.44)/2$$

$$= -0.150 \text{ mm}$$

$$< \text{Span} / 250 = 1495.0 / 250 = 5.980 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 9967$$

Relative Deflection of Transom 3 at Locations 34, 35 and 36

$$= 2.31 - (3.02 + 2.52)/2$$

$$= -0.460 \text{ mm}$$

$$< \text{Span} / 250 = 1620.0 / 250 = 6.480 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 3522$$

## Readings of negative pressure up to -2.33 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm									
	Locations of Transducers									
	Transom 1 Span = 1620 mm			Transom 2 Span = 1495 mm			Transom 3 Span = 1620 mm			
	28	29	30	31	32	33	34	35	36	
<b>Mode 2</b>										
At Pressure = <b>-2.33</b>	-3.32	-4.12	-4.15	-1.64	-2.43	-4.06	-4.88	-4.43	-4.75	
At Pressure = <b>0.00</b>	-0.67	-0.85	-1.22	-0.08	-0.28	-0.48	-1.35	-1.13	-0.91	
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
At Pressure = <b>-0.47</b>	-0.50	-0.56	-0.44	-0.33	-0.35	-0.53	-0.71	-0.64	-0.75	
At Pressure = <b>-0.94</b>	-1.19	-1.35	-1.17	-0.74	-0.81	-1.25	-1.65	-1.46	-1.63	
At Pressure = <b>-1.40</b>	-1.71	-2.08	-1.82	-1.05	-1.27	-2.03	-2.45	-2.24	-2.56	
At Pressure = <b>-1.87</b>	-2.20	-2.73	-2.43	-1.33	-1.73	-2.85	-2.99	-2.82	-3.29	
At Pressure = <b>-2.33</b>	-2.67	-3.32	-2.99	-1.57	-2.18	-3.64	-3.61	-3.37	-3.90	
Relative Disp. (mm)	--	-0.490	--	--	0.425	--	--	0.385	--	
Permitted Relative Displ. #	--	6.480	--	--	5.980	--	--	6.480	--	
At Pressure = <b>0.00</b>	-0.04	-0.06	-0.08	-0.02	-0.03	-0.03	-0.11	-0.09	-0.06	
At Pressure = <b>-2.33</b>	-2.70	-3.34	-3.01	-1.57	-2.18	-3.65	-3.53	-3.34	-3.92	
Relative Disp. (mm)	--	-0.485	--	--	0.430	--	--	0.385	--	
Permitted Relative Displ. #	--	6.480	--	--	5.980	--	--	6.480	--	
At Pressure = <b>-1.87</b>	-2.38	-2.94	-2.74	-1.39	-1.84	-3.04	-3.22	-3.00	-3.51	
At Pressure = <b>-1.40</b>	-2.00	-2.44	-2.34	-1.16	-1.43	-2.32	-2.83	-2.57	-2.99	
At Pressure = <b>-0.94</b>	-1.55	-1.82	-1.80	-0.88	-0.98	-1.51	-2.31	-2.02	-2.32	
At Pressure = <b>-0.47</b>	-1.01	-1.12	-1.14	-0.44	-0.50	-0.76	-1.42	-1.25	-1.42	
At Pressure = <b>0.00</b>	-0.08	-0.11	-0.14	-0.02	-0.04	-0.05	-0.15	-0.12	-0.09	
<b>Mode 3</b>										
At Pressure = <b>1.84</b>	2.71	3.32	3.79	1.14	1.88	2.94	4.39	3.44	3.37	
Relative Disp. (mm)	--	0.070	--	--	-0.160	--	--	-0.440	--	
At Pressure = <b>0.00</b>	0.67	0.82	1.12	0.08	0.27	0.48	1.30	1.03	0.78	

# note -The Deflection of Framing Member should not exceed span/250

### Calculation for Deflection/Span Ratio at SLS Design Wind Load (-2.33 kPa)

Relative Deflection of Transom 1 at Locations 28, 29 and 30

$$= |-3.32 - (-2.67 + -2.99)/2|$$

$$= 0.490 \text{ mm} < \text{Span} / 250 = 1620.0 / 250 = 6.480 \text{ mm}$$

Defl./Span Ratio= span / 3306

Relative Deflection of Transom 2 at Locations 31, 32 and 33

$$= |-2.18 - (-1.57 + -3.65)/2|$$

$$= 0.430 \text{ mm} < \text{Span} / 250 = 1495.0 / 250 = 5.980 \text{ mm}$$

Defl./Span Ratio= span / 3477

Relative Deflection of Transom 3 at Locations 34, 35 and 36

$$= |-3.37 - (-3.61 + -3.90)/2|$$

$$= 0.385 \text{ mm} < \text{Span} / 250 = 1620.0 / 250 = 6.480 \text{ mm}$$

Defl./Span Ratio= span / 4208

## Readings of positive pressure up to 1.84 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm					
	Locations of Transducers					
	Transom 4 Span = 1620 mm			Transom 5 Span = 1056 mm		
	37	38	39	40	41	42
<b>Take-up</b>						
At Pressure = <b>1.84</b>	9.92	8.34	6.31	2.48	2.90	3.50
At Pressure = <b>0.00</b>	0.34	0.27	0.20	0.07	0.14	0.22
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00
<b>Mode 1</b>						
At Pressure = <b>0.37</b>	1.78	1.43	1.06	0.54	0.57	0.62
At Pressure = <b>0.74</b>	3.87	3.18	2.36	1.24	1.31	1.42
At Pressure = <b>1.11</b>	5.87	4.91	3.73	1.78	1.90	2.10
At Pressure = <b>1.48</b>	7.73	6.51	4.93	2.16	2.37	2.70
At Pressure = <b>1.84</b>	9.47	7.97	6.03	2.43	2.75	3.24
Relative Disp. (mm)	--	0.220	--	--	-0.085	--
Permitted Relative Displ. #	--	6.480	--	--	4.224	--
At Pressure = <b>0.00</b>	0.04	0.03	0.04	0.03	0.03	0.04
At Pressure = <b>1.84</b>	9.59	8.08	6.12	2.45	2.80	3.29
Relative Disp. (mm)	--	0.225	--	--	-0.070	--
Permitted Relative Displ. #	--	6.480	--	--	4.224	--
At Pressure = <b>1.48</b>	8.22	6.95	5.32	2.25	2.53	2.94
At Pressure = <b>1.11</b>	6.57	5.63	4.37	1.95	2.18	2.51
At Pressure = <b>0.74</b>	4.63	3.96	3.08	1.50	1.68	1.91
At Pressure = <b>0.37</b>	2.49	2.08	1.58	0.84	0.96	1.08
At Pressure = <b>0.00</b>	0.07	0.07	0.08	0.05	0.07	0.08

# note -The Deflection of Framing Member should not exceed span/250

### Calculation for Deflection/Span Ratio at SLS Design Wind Load (1.84 kPa)

Relative Deflection of Transom 4 at Locations 37, 38 and 39

$$= 8.08 - (9.59 + 6.12)/2$$

$$= 0.225 \text{ mm}$$

$$< \text{Span} / 250 = 1620.0 / 250 = 6.480 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 7200$$

Relative Deflection of Transom 5 at Locations 40, 41 and 42

$$= 2.80 - (2.45 + 3.29)/2$$

$$= -0.070 \text{ mm}$$

$$< \text{Span} / 250 = 1056.0 / 250 = 4.224 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 15086$$

## Readings of negative pressure up to -2.33 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm						
	Locations of Transducers						
	Transom 4 Span = 1620 mm			Transom 5 Span = 1056 mm			
	37	38	39	40	41	42	
<b>Mode 2</b>							
At Pressure = <b>-2.33</b>	-12.73	-11.05	-9.00	-4.29	-4.61	-4.90	
At Pressure = <b>0.00</b>	-1.46	-1.30	-1.10	-0.69	-0.88	-1.05	
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	
At Pressure = <b>-0.47</b>	-2.23	-1.79	-1.33	-0.72	-0.71	-0.70	
At Pressure = <b>-0.94</b>	-4.53	-3.79	-2.99	-1.53	-1.56	-1.56	
At Pressure = <b>-1.40</b>	-6.88	-5.87	-4.71	-2.36	-2.42	-2.44	
At Pressure = <b>-1.87</b>	-9.16	-7.90	-6.41	-3.07	-3.18	-3.25	
At Pressure = <b>-2.33</b>	-11.31	-9.75	-7.94	-3.65	-3.81	-3.91	
Relative Disp. (mm)	--	-0.125	--	--	-0.030	--	
Permitted Relative Displ. #	--	6.480	--	--	4.224	--	
At Pressure = <b>0.00</b>	-0.08	-0.07	-0.07	-0.05	-0.06	-0.06	
At Pressure = <b>-2.33</b>	-11.34	-9.79	-7.98	-3.68	-3.85	-3.97	
Relative Disp. (mm)	--	-0.130	--	--	-0.025	--	
Permitted Relative Displ. #	--	6.480	--	--	4.224	--	
At Pressure = <b>-1.87</b>	-9.60	-8.36	-6.86	-3.26	-3.40	-3.53	
At Pressure = <b>-1.40</b>	-7.58	-6.64	-5.47	-2.74	-2.86	-3.02	
At Pressure = <b>-0.94</b>	-5.39	-4.70	-3.85	-2.12	-2.22	-2.38	
At Pressure = <b>-0.47</b>	-3.01	-2.55	-2.07	-1.30	-1.35	-1.44	
At Pressure = <b>0.00</b>	-0.14	-0.16	-0.17	-0.07	-0.12	-0.14	
<b>Mode 3</b>							
At Pressure = <b>1.84</b>	11.02	9.34	7.18	3.06	3.62	4.33	
Relative Disp. (mm)	--	0.240	--	--	-0.075	--	
At Pressure = <b>0.00</b>	1.35	1.21	1.05	0.56	0.75	0.94	

# note -The Deflection of Framing Member should not exceed span/250

### Calculation for Deflection/Span Ratio at SLS Design Wind Load (-2.33 kPa)

Relative Deflection of Transom 4 at Locations 37, 38 and 39

$$= |-9.79 - (-11.34 + -7.98)/2|$$

$$= 0.130 \text{ mm}$$

$$< \text{Span} / 250 = 1620.0 / 250 = 6.480 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 12462$$

Relative Deflection of Transom 5 at Locations 40, 41 and 42

$$= |-3.81 - (-3.65 + -3.91)/2|$$

$$= 0.030 \text{ mm}$$

$$< \text{Span} / 250 = 1056.0 / 250 = 4.224 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 35200$$

## Readings of positive pressure up to 1.84 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm								
	Locations of Transducers								
	Glass Panel 1 Span = 995 mm			Glass Panel 2 Span = 1507 mm			Glass Panel 3 Span = 980 mm		
	43	44	45	46	47	48	49	50	51
<b>Take-up</b>									
At Pressure = <b>1.84</b>	3.77	6.52	3.44	2.24	12.66	5.49	7.01	11.08	9.02
At Pressure = <b>0.00</b>	0.23	0.25	0.23	0.10	0.54	0.32	0.33	0.39	0.31
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>Mode 1</b>									
At Pressure = <b>0.37</b>	0.66	1.20	0.54	0.39	2.57	0.92	1.19	2.01	1.63
At Pressure = <b>0.74</b>	1.52	2.64	1.40	0.99	5.35	2.14	2.62	4.26	3.49
At Pressure = <b>1.11</b>	2.24	3.95	2.10	1.39	7.88	3.22	4.02	6.49	5.32
At Pressure = <b>1.48</b>	2.90	5.13	2.67	1.78	10.20	4.25	5.37	8.63	7.03
At Pressure = <b>1.84</b>	3.51	6.24	3.18	2.16	12.24	5.19	6.61	10.64	8.62
Relative Disp. (mm)	--	2.895	--	--	8.565	--	--	3.025	--
Permitted Relative Displ. #	--	16.583	--	--	25.117	--	--	16.333	--
At Pressure = <b>0.00</b>	0.04	0.03	0.04	0.05	0.19	0.06	0.03	0.05	0.04
At Pressure = <b>1.84</b>	3.56	6.28	3.23	2.20	12.22	5.23	6.69	10.70	8.71
Relative Disp. (mm)	--	2.885	--	--	8.505	--	--	3.000	--
Permitted Relative Displ. #	--	16.583	--	--	25.117	--	--	16.333	--
At Pressure = <b>1.48</b>	3.06	5.32	2.83	1.92	10.61	4.54	5.68	9.01	7.46
At Pressure = <b>1.11</b>	2.51	4.26	2.37	1.61	8.57	3.61	4.49	7.13	5.95
At Pressure = <b>0.74</b>	1.84	3.08	1.81	1.17	6.12	2.47	3.16	4.97	4.19
At Pressure = <b>0.37</b>	1.03	1.62	0.95	0.68	3.37	1.35	1.68	2.65	2.27
At Pressure = <b>0.00</b>	0.08	0.07	0.08	0.06	0.15	0.08	0.06	0.07	0.07

# note -The Deflection of glass panel should not exceed span/60

### Calculation for Deflection/Span Ratio at SLS Design Wind Load (1.84 kPa)

Relative Deflection of Glass Panel 1 at Locations 43, 44 and 45

$$= 6.24 - (3.51 + 3.18)/2$$

$$= 2.895 \text{ mm}$$

$$< \text{Span} / 60 = 995.0 / 60 = 16.583 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 344$$

Relative Deflection of Glass Panel 2 at Locations 46, 47 and 48

$$= 12.24 - (2.16 + 5.19)/2$$

$$= 8.565 \text{ mm}$$

$$< \text{Span} / 60 = 1507.0 / 60 = 25.117 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 176$$

Relative Deflection of Glass Panel 3 at Locations 49, 50 and 51

$$= 10.64 - (6.61 + 8.62)/2$$

$$= 3.025 \text{ mm}$$

$$< \text{Span} / 60 = 980.0 / 60 = 16.333 \text{ mm}$$

$$\text{Defl./Span Ratio} = \text{span} / 324$$

## Readings of negative pressure up to -2.33 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm									
	Locations of Transducers									
	Glass Panel 1 Span = 995 mm			Glass Panel 2 Span = 1507 mm			Glass Panel 3 Span = 980 mm			
	43	44	45	46	47	48	49	50	51	
<b>Mode 2</b>										
At Pressure = <b>-2.33</b>	-5.12	-8.57	-4.34	-3.54	-16.71	-6.85	-9.32	-14.74	-12.03	
At Pressure = <b>0.00</b>	-0.84	-0.83	-0.76	-0.35	-1.28	-0.92	-1.12	-1.36	-1.41	
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
At Pressure = <b>-0.47</b>	-0.72	-1.45	-0.60	-0.54	-3.43	-1.12	-1.59	-2.60	-2.11	
At Pressure = <b>-0.94</b>	-1.63	-3.10	-1.38	-1.27	-7.03	-2.41	-3.24	-5.35	-4.28	
At Pressure = <b>-1.40</b>	-2.52	-4.69	-2.16	-1.97	-10.31	-3.65	-4.93	-8.13	-6.45	
At Pressure = <b>-1.87</b>	-3.44	-6.29	-2.93	-2.64	-13.22	-4.86	-6.62	-10.88	-8.60	
At Pressure = <b>-2.33</b>	-4.34	-7.81	-3.65	-3.24	-15.78	-6.04	-8.26	-13.51	-10.65	
Relative Disp. (mm)	--	-3.815	--	--	-11.140	--	--	-4.055	--	
Permitted Relative Displ. #	--	16.583	--	--	25.117	--	--	16.333	--	
At Pressure = <b>0.00</b>	-0.07	-0.07	-0.06	-0.06	-0.47	-0.10	-0.08	-0.15	-0.08	
At Pressure = <b>-2.33</b>	-4.36	-7.83	-3.66	-3.24	-15.65	-5.98	-8.26	-13.48	-10.67	
Relative Disp. (mm)	--	-3.820	--	--	-11.040	--	--	-4.015	--	
Permitted Relative Displ. #	--	16.583	--	--	25.117	--	--	16.333	--	
At Pressure = <b>-1.87</b>	-3.68	-6.53	-3.13	-2.78	-13.61	-5.13	-6.98	-11.35	-9.04	
At Pressure = <b>-1.40</b>	-2.93	-5.09	-2.51	-2.21	-11.02	-4.10	-5.46	-8.86	-7.15	
At Pressure = <b>-0.94</b>	-2.06	-3.54	-1.79	-1.56	-8.03	-2.93	-3.83	-6.22	-5.05	
At Pressure = <b>-0.47</b>	-1.19	-1.91	-1.02	-0.80	-4.54	-1.71	-2.12	-3.38	-2.84	
At Pressure = <b>0.00</b>	-0.10	-0.12	-0.12	-0.07	-0.47	-0.15	-0.11	-0.20	-0.14	
<b>Mode 3</b>										
At Pressure = <b>1.84</b>	4.33	7.04	3.91	2.45	13.20	6.05	7.82	11.97	10.11	
Relative Disp. (mm)	--	2.920	--	--	8.950	--	--	3.005	--	
At Pressure = <b>0.00</b>	0.82	0.79	0.73	0.33	1.01	0.88	1.08	1.22	1.33	

# note -The Deflection of glass panel should not exceed span/60

### Calculation for Deflection/Span Ratio at SLS Design Wind Load (-2.33 kPa)

Relative Deflection of Glass Panel 1 at Locations 43, 44 and 45

$$= |-7.83 - (-4.36 + -3.66)/2|$$

$$= 3.820 \text{ mm} < \text{Span} / 60 = 995.0 / 60 = 16.583 \text{ mm}$$

Defl./Span Ratio= span / 260

Relative Deflection of Glass Panel 2 at Locations 46, 47 and 48

$$= |-15.78 - (-3.24 + -6.04)/2|$$

$$= 11.140 \text{ mm} < \text{Span} / 60 = 1507.0 / 60 = 25.117 \text{ mm}$$

Defl./Span Ratio= span / 135

Relative Deflection of Glass Panel 3 at Locations 49, 50 and 51

$$= |-13.51 - (-8.26 + -10.65)/2|$$

$$= 4.055 \text{ mm} < \text{Span} / 60 = 980.0 / 60 = 16.333 \text{ mm}$$

Defl./Span Ratio= span / 242

## Readings of positive pressure up to 1.84 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm										
	Locations of Transducers										
	Backpan							Bracket			
	52	53	54	55	56	57	58	60	61	62	
<b>Take-up</b>											
At Pressure = <b>1.84</b>	2.77	4.75	2.33	1.38	1.82	1.70	16.69	0.73	0.18	-0.37	
At Pressure = <b>0.00</b>	0.06	0.07	0.04	0.19	0.13	0.10	-0.22	0.10	0.09	0.03	
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
<b>Mode 1</b>											
At Pressure = <b>0.37</b>	0.53	0.72	0.37	0.12	0.26	0.25	5.04	0.05	-0.09	-0.05	
At Pressure = <b>0.74</b>	1.12	1.73	0.92	0.36	0.64	0.64	8.61	0.19	-0.15	-0.13	
At Pressure = <b>1.11</b>	1.73	2.83	1.46	0.62	0.98	0.99	11.63	0.34	-0.14	-0.20	
At Pressure = <b>1.48</b>	2.23	3.79	1.90	0.89	1.33	1.30	14.21	0.51	-0.05	-0.29	
At Pressure = <b>1.84</b>	2.68	4.64	2.27	1.12	1.64	1.58	16.42	0.63	0.05	-0.35	
Relative Disp. (mm)	--	--	--	--	--	--	--	--	--	--	
Permitted Relative Displ. #	--	--	--	--	--	--	--	--	--	--	
At Pressure = <b>0.00</b>	0.00	-0.01	0.01	0.03	0.05	0.02	-0.11	0.01	0.00	0.00	
At Pressure = <b>1.84</b>	2.71	4.69	2.30	1.19	1.68	1.60	16.50	0.65	0.07	-0.37	
Relative Disp. (mm)	--	--	--	--	--	--	--	--	--	--	
Permitted Relative Displ. #	--	--	--	--	--	--	--	--	--	--	
At Pressure = <b>1.48</b>	2.38	4.05	2.01	1.08	1.47	1.41	14.59	0.57	0.03	-0.36	
At Pressure = <b>1.11</b>	2.01	3.32	1.67	0.95	1.22	1.17	12.31	0.46	-0.03	-0.28	
At Pressure = <b>0.74</b>	1.42	2.29	1.17	0.74	0.92	0.86	9.33	0.29	-0.06	-0.18	
At Pressure = <b>0.37</b>	0.76	1.08	0.57	0.45	0.54	0.46	5.58	0.16	-0.04	-0.09	
At Pressure = <b>0.00</b>	0.03	0.02	0.02	0.06	0.08	0.05	-0.03	0.01	0.01	0.01	

## Readings of negative pressure up to -2.33 kPa

(For Locations of transducers, please refer to Figure 1)

Pressure in kPa	Displacement in mm										
	Locations of Transducers										
	Backpan							Bracket			
	52	53	54	55	56	57	58	60	61	62	
<b>Mode 2</b>											
At Pressure = <b>-2.33</b>	-3.74	-5.45	-2.65	-1.75	-1.98	-1.32	-26.29	-0.91	0.21	0.29	
At Pressure = <b>0.00</b>	-0.24	-0.70	-0.34	-0.72	-0.52	-0.35	-2.15	-0.20	-0.17	0.01	
<i>Zero reference</i>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
At Pressure = <b>-0.47</b>	-0.69	-0.78	-0.36	-0.11	-0.27	-0.21	-9.74	-0.06	0.09	0.05	
At Pressure = <b>-0.94</b>	-1.37	-1.72	-0.89	-0.33	-0.59	-0.40	-14.37	-0.19	0.18	0.12	
At Pressure = <b>-1.40</b>	-2.09	-2.78	-1.47	-0.65	-0.92	-0.59	-17.71	-0.38	0.26	0.18	
At Pressure = <b>-1.87</b>	-2.79	-3.80	-1.97	-0.86	-1.24	-0.78	-20.46	-0.57	0.36	0.24	
At Pressure = <b>-2.33</b>	-3.45	-4.73	-2.32	-0.99	-1.51	-0.97	-22.75	-0.71	0.38	0.27	
Relative Disp. (mm)	--	--	--	--	--	--	--	--	--	--	
Permitted Relative Displ. #	--	--	--	--	--	--	--	--	--	--	
At Pressure = <b>0.00</b>	-0.02	-0.03	-0.03	-0.02	-0.06	-0.02	1.47	-0.01	-0.01	0.00	
At Pressure = <b>-2.33</b>	-3.61	-5.16	-2.37	-1.07	-1.53	-0.98	-22.34	-0.71	0.38	0.27	
Relative Disp. (mm)	--	--	--	--	--	--	--	--	--	--	
Permitted Relative Displ. #	--	--	--	--	--	--	--	--	--	--	
At Pressure = <b>-1.87</b>	-2.97	-4.12	-2.15	-1.04	-1.36	-0.87	-19.90	-0.69	0.35	0.25	
At Pressure = <b>-1.40</b>	-2.38	-3.33	-1.85	-1.00	-1.17	-0.75	-16.95	-0.61	0.23	0.20	
At Pressure = <b>-0.94</b>	-1.70	-2.37	-1.43	-0.91	-0.92	-0.57	-13.46	-0.44	0.10	0.14	
At Pressure = <b>-0.47</b>	-0.91	-1.26	-0.84	-0.60	-0.58	-0.36	-8.64	-0.24	0.02	0.08	
At Pressure = <b>0.00</b>	-0.09	-0.10	-0.06	-0.08	-0.10	-0.06	2.32	-0.01	-0.02	0.00	
<b>Mode 3</b>											
At Pressure = <b>1.84</b>	2.96	5.40	2.62	1.89	2.16	1.92	19.92	0.81	0.25	-0.38	
Relative Disp. (mm)	--	--	--	--	--	--	--	--	--	--	
At Pressure = <b>0.00</b>	0.25	0.71	0.33	0.61	0.40	0.27	3.77	0.21	0.11	0.00	

## Zero Table and Successive Member Displacement

(For Locations of transducers, please refer to Figure 1)

Zero Stage	Displacement in mm								
	Locations of Transducers								
	Mullion 1			Mullion 2			Mullion 3		
	1	2	3	4	5	6	7	8	9
Z1	0.03	0.05	0.05	0.20	0.23	0.09	0.27	0.18	-0.04
Z2	0.00	0.03	0.01	0.02	0.02	0.01	0.01	0.04	0.01
Z3	0.01	0.03	0.01	0.06	0.06	0.02	0.02	0.05	-0.03
Z4	-0.19	-0.36	-0.03	-0.79	-0.84	-0.31	-0.92	-0.78	-0.19
Z5	-0.21	-0.39	-0.04	-0.84	-0.89	-0.33	-0.96	-0.83	-0.21
Z6	-0.23	-0.43	-0.06	-0.89	-0.93	-0.35	-0.98	-0.87	-0.22
Z7	-0.03	-0.05	-0.02	0.00	-0.02	-0.03	-0.07	-0.06	-0.14

Zero Stage	Displacement in mm								
	Locations of Transducers								
	Mullion 4			Mullion 5			Mullion 6		
	10	11	12	13	14	15	16	17	18
Z1	0.02	0.11	0.12	0.29	0.20	0.03	0.17	0.14	0.07
Z2	0.01	0.02	0.01	0.03	0.03	0.01	0.02	0.03	0.01
Z3	0.02	0.04	0.03	0.05	0.05	0.03	0.05	0.05	0.03
Z4	-0.09	-0.44	-0.49	-1.26	-1.06	-0.47	-1.04	-0.82	-0.58
Z5	-0.11	-0.47	-0.50	-1.34	-1.15	-0.54	-1.11	-0.85	-0.63
Z6	-0.11	-0.49	-0.52	-1.35	-1.18	-0.54	-1.13	-0.90	-0.65
Z7	0.00	-0.03	-0.04	0.00	-0.09	-0.15	-0.12	-0.10	-0.09

Zero Stage	Displacement in mm								
	Locations of Transducers								
	Mullion 7			Mullion 8			Mullion 9		
	19	20	21	22	23	24	25	26	27
Z1	0.07	0.13	0.06	0.20	0.31	0.08	0.10	0.16	0.13
Z2	0.03	0.03	0.01	0.03	0.03	0.02	0.02	0.02	0.01
Z3	0.04	0.05	0.02	0.05	0.07	0.05	0.03	0.06	0.02
Z4	-0.68	-0.69	-0.29	-0.81	-1.42	-0.56	-0.27	-1.02	-0.45
Z5	-0.70	-0.74	-0.30	-0.86	-1.49	-0.58	-0.30	-1.08	-0.49
Z6	-0.73	-0.76	-0.31	-0.89	-1.53	-0.59	-0.33	-1.17	-0.54
Z7	-0.11	-0.08	-0.03	-0.02	-0.09	-0.09	-0.01	-0.03	-0.08

Zero Stage	Displacement in mm								
	Locations of Transducers								
	Transom 1			Transom 2			Transom 3		
	28	29	30	31	32	33	34	35	36
Z1	0.15	0.23	0.36	0.01	0.10	0.19	0.30	0.22	0.12
Z2	0.02	0.03	0.02	0.01	0.01	0.02	0.03	0.04	0.04
Z3	0.05	0.05	0.04	0.02	0.02	0.03	0.06	0.06	0.07
Z4	-0.67	-0.85	-1.22	-0.08	-0.28	-0.48	-1.35	-1.13	-0.91
Z5	-0.71	-0.91	-1.30	-0.10	-0.31	-0.51	-1.46	-1.22	-0.97
Z6	-0.75	-0.96	-1.36	-0.10	-0.32	-0.53	-1.50	-1.25	-1.00
Z7	0.00	-0.03	-0.10	0.00	-0.01	0.00	-0.05	-0.10	-0.13

## Zero Table and Successive Member Displacement

(For Locations of transducers, please refer to Figure 1)

Zero Stage	Displacement in mm					
	Locations of Transducers					
	Transom 4			Transom 5		
	37	38	39	40	41	42
Z1	0.34	0.27	0.20	0.07	0.14	0.22
Z2	0.04	0.03	0.04	0.03	0.03	0.04
Z3	0.07	0.07	0.08	0.05	0.07	0.08
Z4	-1.46	-1.30	-1.10	-0.69	-0.88	-1.05
Z5	-1.54	-1.37	-1.17	-0.74	-0.94	-1.11
Z6	-1.60	-1.46	-1.27	-0.76	-1.00	-1.19
Z7	-0.11	-0.09	-0.05	-0.13	-0.13	-0.11

Zero Stage	Displacement in mm								
	Locations of Transducers								
	Glass Panel 1			Glass Panel 2			Glass Panel 3		
	43	44	45	46	47	48	49	50	51
Z1	0.23	0.25	0.23	0.10	0.54	0.32	0.33	0.39	0.31
Z2	0.04	0.03	0.04	0.05	0.19	0.06	0.03	0.05	0.04
Z3	0.08	0.07	0.08	0.06	0.15	0.08	0.06	0.07	0.07
Z4	-0.84	-0.83	-0.76	-0.35	-1.28	-0.92	-1.12	-1.36	-1.41
Z5	-0.91	-0.90	-0.82	-0.41	-1.75	-1.02	-1.20	-1.51	-1.49
Z6	-0.94	-0.95	-0.88	-0.42	-1.75	-1.07	-1.23	-1.56	-1.55
Z7	-0.02	-0.04	-0.03	-0.02	-0.27	-0.04	-0.04	-0.14	-0.08

Zero Stage	Displacement in mm									
	Locations of Transducers									
	Backpan						Bracket			
	52	53	54	55	56	57	58	60	61	62
Z1	0.06	0.07	0.04	0.19	0.13	0.10	-0.22	0.10	0.09	0.03
Z2	0.00	-0.01	0.01	0.03	0.05	0.02	-0.11	0.01	0.00	0.00
Z3	0.03	0.02	0.02	0.06	0.08	0.05	-0.03	0.01	0.01	0.01
Z4	-0.24	-0.70	-0.34	-0.72	-0.52	-0.35	-2.15	-0.20	-0.17	0.01
Z5	-0.26	-0.73	-0.37	-0.74	-0.58	-0.37	-0.68	-0.21	-0.18	0.01
Z6	-0.33	-0.80	-0.40	-0.80	-0.62	-0.41	0.17	-0.21	-0.19	0.01
Z7	0.01	0.01	-0.01	-0.11	-0.12	-0.08	1.62	0.01	-0.06	0.01

Note: Maximum successive member displacement did not exceed 3 mm.

## Maximum Displacement

(For Locations of transducers, please refer to Figure 1)

Locations of Transducers	Displacement in mm									
	Mullion 1			Mullion 2			Mullion 3			
Transducer No.	1	2	3	4	5	6	7	8	9	
Max. Displacement in Mode 1	0.87	1.56	0.82	2.56	3.14	1.09	1.13	2.66	1.68	
Max. Displacement in Mode 2	-0.74	-1.67	-0.44	-3.37	-3.90	-0.88	-1.10	-2.76	-0.99	
Permitted Max. Displacement	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	
Locations of Transducers	Displacement in mm									
	Mullion 4			Mullion 5			Mullion 6			
Transducer No.	10	11	12	13	14	15	16	17	18	
Max. Displacement in Mode 1	1.23	1.73	0.99	2.15	2.73	1.02	3.10	2.92	2.28	
Max. Displacement in Mode 2	-1.50	-2.32	-0.93	-1.63	-3.54	-1.35	-4.12	-3.53	-2.44	
Permitted Max. Displacement	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	
Locations of Transducers	Displacement in mm									
	Mullion 7			Mullion 8			Mullion 9			
Transducer No.	19	20	21	22	23	24	25	26	27	
Max. Displacement in Mode 1	2.00	2.69	1.11	2.88	9.14	2.15	2.74	6.03	1.10	
Max. Displacement in Mode 2	-2.55	-3.58	-0.76	-3.73	-11.61	-2.67	-2.95	-7.56	-0.70	
Permitted Max. Displacement	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	
Locations of Transducers	Displacement in mm									
	Transom 1			Transom 2			Transom 3			
Transducer No.	28	29	30	31	32	33	34	35	36	
Max. Displacement in Mode 1	2.07	2.52	2.66	1.08	1.61	2.44	3.10	2.36	2.56	
Max. Displacement in Mode 2	-2.70	-3.34	-3.01	-1.57	-2.18	-3.65	-3.61	-3.37	-3.92	
Permitted Max. Displacement	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	20.00	
Locations of Transducers	Displacement in mm									
	Transom 4			Transom 5						
Transducer No.	37	38	39	40	41	42				
Max. Displacement in Mode 1	9.59	8.08	6.12	2.45	2.80	3.29				
Max. Displacement in Mode 2	-11.34	-9.79	-7.98	-3.68	-3.85	-3.97				
Permitted Max. Displacement	20.00	20.00	20.00	20.00	20.00	20.00				
Locations of Transducers	Displacement in mm									
	Glass Panel 1			Glass Panel 2			Glass Panel 3			
Transducer No.	43	44	45	46	47	48	49	50	51	
Max. Displacement in Mode 1	3.56	6.28	3.23	2.20	12.24	5.23	6.69	10.70	8.71	
Max. Displacement in Mode 2	-4.36	-7.83	-3.66	-3.24	-15.78	-6.04	-8.26	-13.51	-10.67	
Locations of Transducers	Displacement in mm									
	Backpan						Bracket			
Transducer No.	52	53	54	55	56	57	58	60	61	62
Max. Displacement in Mode 1	2.71	4.69	2.30	1.19	1.68	1.60	16.50	0.65	0.07	0.00
Max. Displacement in Mode 2	-3.61	-5.16	-2.37	-1.07	-1.53	-0.98	-22.75	-0.71	0.38	0.27
Permitted Max. Displacement	-	-	-	-	-	-	-	3.00	3.00	3.00

Note: Maximum displacement of frame members did not exceed 20 mm. Maximum slippage did not exceed 3 mm.

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### 6.3 Open and close Operable Sash Test (AS/NZS 4420.1-2016 Clause 2)

#### Procedure

The testing procedures described in section 5.3 were followed.

#### Observation

No damage was observed after the test.

### 6.4 Air Infiltration Test (AS/NZS 4284:2008 Clause 8.4)

The testing procedures described in section 5.4 were followed.

#### Observation

Area of the test specimen =  $(4.655+1.690+2.500) \times 6.498 + 4.531 \times 7.848 = 93.03 \text{ m}^2$

Air infiltration limit =  $1.6 \text{ l/m}^2\text{s}$

The air infiltration rates measured at +/-150Pa was as follows:

Pressure (Pa)	+150	-150
Total air infiltration rate through the test specimen and test enclosure ( $\text{m}^3/\text{hr}$ )	107.25	128.92

Air infiltration rate at **+150Pa**

=  $107.25 \text{ (m}^3/\text{hr)} / 93.03 \text{ (m}^2)$

=  $1.153 \text{ m}^3/\text{hr/m}^2$

=  $0.32 \text{ l/m}^2\text{s} < 1.6 \text{ l/m}^2\text{s}$

Air infiltration rate at **-150Pa**

=  $128.92 \text{ (m}^3/\text{hr)} / 93.03 \text{ (m}^2)$

=  $1.386 \text{ m}^3/\text{hr/m}^2$

=  $0.39 \text{ l/m}^2\text{s} < 1.6 \text{ l/m}^2\text{s}$

*Remark: The air infiltration rates determined on the combined test specimen and test enclosure were less than the specified air infiltration rate, it was not deemed necessary to measure the leakage through the test specimen alone. (As per AS/NZS 4284:2008 Clause 8.4.2)*

### 6.5 Water Penetration Test - Static (AS/NZS 4284:2008 Clause 8.5)

#### Procedure

The testing procedures described in section 5.5 were followed.

#### Observation

No water leakage was observed.

### 6.6 Water Penetration Test - Cyclic (AS/NZS 4284:2008 Clause 8.6)

#### Procedure

The testing procedures described in section 5.6 were followed.

#### Observation

No water leakage was observed.

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**6.7 Seismic Test at SLS Displacement (AS/NZS 4284:2008 Clause 8.9)**  
**Procedure**

The testing procedures described in section 5.7 were followed.

**Observation**

No damage or collapse was observed during or after the test.

**6.8 Water Penetration Test - Cyclic (AS/NZS 4284:2008 Clause 8.6)**  
**Procedure**

The testing procedures described in section 5.8 were followed.

**Observation**

No water leakage was observed.

**6.9 Seal Degradation Test (AS/NZS 4284:2008 Clause 8.10)**  
**Procedure**

The testing procedures described in section 5.9 were followed.

Portions of weather sealant and gaskets were cut and removed before the test.

For locations of weather sealant/gaskets removed, please refer to Mark “1” to “18” in Figure 2 and Photo 2 to Photo 19 in Appendix.

**Observation (For Information Only)**

**Stage 1(276 - 552 - 276 Pa):**

No water leakage was observed.

**Stage 2(368 - 736 - 368 Pa):**

No water leakage was observed.

**Stage 3(552 - 1104 - 552 Pa):**

Water leakage was observed at the bottom of an operable sash, please refer to Location “A” in Figure 2 and Photo 20 for details.

**6.10 Structural Test at Ultimate Limit State (AS/NZS 4284:2008 Clause 8.8)**  
**Procedure**

The testing procedures described in section 5.10 were followed.

**Observation**

No collapse was observed under the specified pressure.

The maximum pressures attained were +2.55 kPa/-3.24 kPa.

**6.11 Seismic Test at ULS Displacement (AS/NZS 4284:2008 Clause 8.9)**  
**Procedure**

The testing procedures described in section 5.11 were followed.

**Observation**

No damage or collapse was observed during or after the test.

## 7. Summary of Test Results

Test	Results
1-1.1) Preliminary Test- Open and close Operable Sash Test (AS/NZS 4420.1-2016 Clause 2)	No damage was observed after the test.
1-1.1) Preliminary Test -Static Pressure Test (AS/NZS 4284:2008 Clause 8.2.2)	No separation, plastic deformations or deleterious was observed.
1-1.3) Preliminary Test -Water Penetration Test - Static (AS/NZS 4284:2008 Clause 8.2.3)	No water leakage was observed.
1-1.4) Preliminary Test -Water Penetration Test - Cyclic (AS/NZS 4284:2008 Clause 8.2.3)	No water leakage was observed.
2) Structural Test at Serviceability Limit State (AS/NZS 4284:2008 Clause 8.3)	The deflection/span ratios of framing members were less than 1/250, the deflection/span ratios of glass were less than 1/60. Maximum successive member displacement as well as slippage did not exceed 3.0mm. Maximum displacement of framing members did not exceed 20mm. The SLS test pressures attained were +1.84kPa/-2.33kPa.
3) Open and close Operable Sash Test (AS/NZS 4420.1-2016 Clause 2)	No damage was observed after the test.
4) Air Infiltration Test (AS/NZS 4284:2008 Clause 8.4)	The air infiltration rates measured at +/-150Pa did not exceed 1.6 l/ m <sup>2</sup> s.
5) Water Penetration Test- Static (AS/NZS 4284:2008 Clause 8.5)	No water leakage was observed.
6) Water Penetration Test- Cyclic (AS/NZS 4284:2008 Clause 8.6)	No water leakage was observed.
7) Seismic Test at SLS Displacement (AS/NZS 4284:2008 Clause 8.9)	No damage or collapse was observed during or after the test. Maximum movement=±10mm.
8) Water Penetration Test- Cyclic (AS/NZS 4284:2008 Clause 8.6)	No water leakage was observed.
9) Seal Degradation Test (AS/NZS 4284:2008 Clause 8.10)	Portions of weather sealant and gaskets were cut and removed before the test. For locations of weather sealant/gaskets removed, please refer to Mark “1” to “18” in Figure 2 and Photo 2 to Photo 19 in Appendix. Stage 1(276 - 552 - 276 Pa): No water leakage was observed. Stage 2(368 - 736 - 368 Pa): No water leakage was observed. Stage 3(552 - 1104 - 552 Pa): Water leakage was observed at the bottom of an operable sash, please refer to Location “A” in Figure 2 and Photo 20 for details.

(Cont'd)

Test	Results
10) Structural Test at Ultimate Limit State (AS/NZS 4284:2008 Clause 8.8)	No collapse was observed under the specified pressure. The ULS test pressures attained were +2.55 kPa/ -3.24kPa.
11) Seismic Test at ULS Displacement (AS/NZS 4284:2008 Clause 8.9)	No damage or collapse was observed during or after the test. Maximum movement: ±30mm

I certify the above test results are the true record for the performance test of the **Curtain Wall System** designed by **Guangdong Kete Facadetech Co., Ltd.** for the project of **62-77 Lorne Street, Auckland City**. The test has been conducted against test procedure as detailed in AS/NZS 4284:2008. The test results comply with the performance requirements of AS/NZS 4284:2008.



Dr. ZHANG Zhuoran  
Authorized Signature

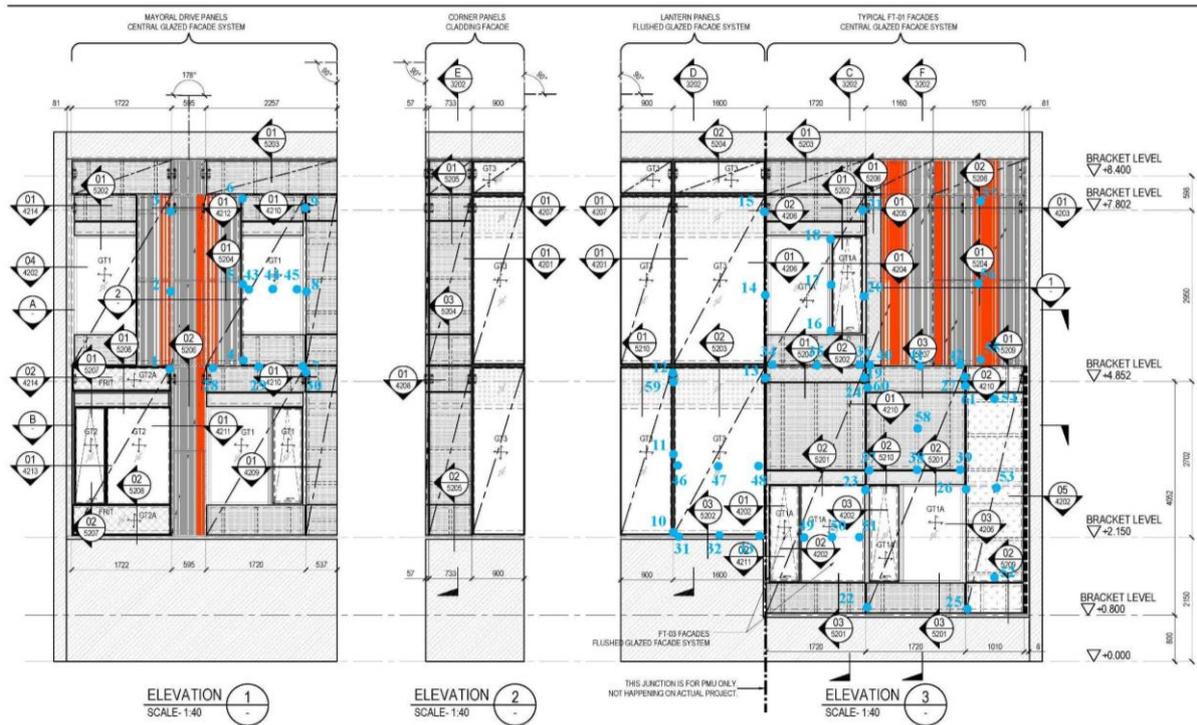
## Appendix

Figure 1: Locations of Displacement Transducers for Deflection Test

Figure 2: Locations of Gasket/Sealant Removed for Seal Degradation Test

Photographs of the mock-up and observation

Shop drawings from client for the test specimen



Mullion: 1-2-3, 4-5-6, 7-8-9, 10-11-12, 13-14-15, 16-17-18, 19-20-21, 22-23-24, 25-26-27  
 Transom: 28-29-30, 31-32-33, 34-35-36, 37-38-39, 40-41-42  
 Glass Panel: 43-44-45, 46-47-48, 49-50-51  
 Backpan: 52, 53, 54, 55, 56, 57, 58    Bracket: 59, 60, 61

Figure 1: Locations of Displacement Transducers for Deflection Test  
(View from outside)

**APPENDIX B**  
Seal Degradation Scope



Figure 2: Gasket/Sealant Removed for Seal Degradation Test  
(View from outside)



Photo 1: Mock-up of the Curtain Wall System





Photo 2: Gasket removed for Seal Degradation Test (Location 1)



Photo 3: Gasket removed for Seal Degradation Test (Location 2)



Photo 4: Gasket removed for Seal Degradation Test (Location 3)



Photo 5: Sealant removed for Seal Degradation Test (Location 4)



Photo 6: Sealant removed for Seal Degradation Test (Location 5)



Photo 7: Gasket removed for Seal Degradation Test (Location 6)



Photo 8: Sealant removed for Seal Degradation Test (Location 7)



Photo 9: Sealant removed for Seal Degradation Test (Location 8)



Photo 10: Gasket removed for Seal Degradation Test (Location 9)



Photo 11: Gasket removed for Seal Degradation Test (Location 10)



Photo 12: Sealant removed for Seal Degradation Test (Location 11)



Photo 13: Sealant removed for Seal Degradation Test (Location 12)



Photo 14: Gasket removed for Seal Degradation Test (Location 13)



Photo 15: Sealant removed for Seal Degradation Test (Location 14)



Photo 16: Gasket removed for Seal Degradation Test (Location 15)



Photo 17: Sealant removed for Seal Degradation Test (Location 16)



Photo 18: Gasket removed for Seal Degradation Test (Location 17)



Photo 19: Sealant removed for Seal Degradation Test (Location 18)



Photo 20: Water observed during Seal Degradation Test (Stage 3)

**- End of Report -**

## **Shop drawings from client for the test specimen**

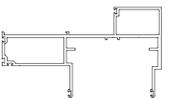
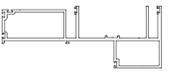
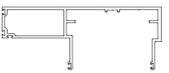
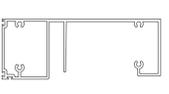
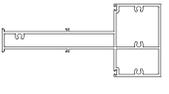
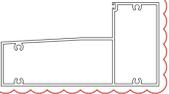
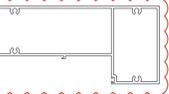
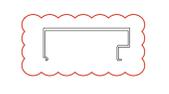
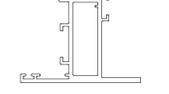
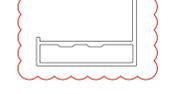
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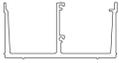
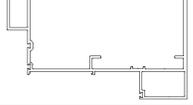
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PMU DRAWINGS

DATE OF ISSUE : January 30th, 2024



EXTRUDED SECTIONS	DIE NUMBER	ALUMINUM GRADE	FINISH	PROFILE
ES01 MALE MULLION 1 (CURTAIN WALL) REFER:	LS-ES01	6063-T6	interpon D2015 Ultriva black ink	
ES02 FEMALE MULLION 1 (CURTAIN WALL) REFER:	LS-ES02	6063-T6	interpon D2015 Ultriva black ink	
ES03 MALE MULLION 2 (CURTAIN WALL) REFER:	LS-ES03	6063-T6	interpon D2015 Ultriva black ink	
ES04 FEMALE MULLION 2 (CURTAIN WALL) REFER:	LS-ES04	6063-T6	interpon D2015 Ultriva black ink	
ES05 STACK HEAD (CURTAIN WALL) REFER:	LS-ES05	6063-T6	interpon D2015 Ultriva black ink	
ES06 STACK SILL (CURTAIN WALL) REFER:	LS-ES06	6063-T6	interpon D2015 Ultriva black ink	
ES07 TRANSOM (CURTAIN WALL) REFER:	LS-ES07	6063-T5	interpon D2015 Ultriva black ink	
ES08 MIDDLE MULLION (CURTAIN WALL) REFER:	LS-ES08	6063-T5	interpon D2015 Ultriva black ink	
ES09 MIDDLE TRANSOM(CURTAIN WALL) REFER:	LS-ES09	6063-T5	interpon D2015 Ultriva black ink	
ES10 CEILING TRANSOM(CURTAIN WALL) REFER:	LS-ES10	6063-T5	interpon D2015 Ultriva black ink	
ES11 TRIM(CURTAIN WALL) REFER:	LS-ES11	6063-T5	interpon D2015 Ultriva black ink	
ES12 SASH(CURTAIN WALL) REFER:	LS-ES12	6063-T5	interpon D2015 Ultriva black ink	
ES13 FRAME SASH(CURTAIN WALL) REFER:	LS-ES13	6063-T5	interpon D2015 Ultriva black ink	
ES14 SERRATED WASHER/LOCKING PLATE REFER:	LS-ES14	6061-T6	-TBC	
ES15 FLOOR BRACKET(CURTAIN WALL) REFER:	LS-ES15	6061-T6	-TBC	

EXTRUDED SECTIONS	DIE NUMBER	ALUMINUM GRADE	FINISH	PROFILE
ES16 STIFFENER CLADDING(CURTAIN WALL) REFER:	LS-ES16	6063-T5	-TBC	
ES17 SUB JAMB (CURTAIN WALL) REFER:	LS-ES17	6063-T6	interpon D2015 Ultriva black ink	
ES18 ADAPTOR (CURTAIN WALL) REFER:	LS-ES18	6063-T6	interpon D2015 Ultriva black ink	
ES19 GUTTER SLEEVE(CURTAIN WALL) REFER:	LS-ES19	6063-T6	-TBC	
ES20 HOOK BRACKET 1 (CURTAIN WALL) REFER:	LS-ES20	6061-T6	-TBC	
ES21 HOOK BRACKET 2 (CURTAIN WALL) REFER:	LS-ES21	6061-T6	-TBC	
ES22 BOLT BLOCK(CURTAIN WALL) REFER:	LS-ES22	6063-T6	-TBC	
ES23 CEILING TRANSOM 1 (CURTAIN WALL) REFER:	LS-ES23	6063-T5	interpon D2015 Ultriva black ink	
ES24 GLAZING BEAD(CURTAIN WALL) REFER:	LS-ES24	6063-T5	interpon D2015 Ultriva black ink	
ES25 GLAZING BEAD(CURTAIN WALL) REFER:	LS-ES24	6063-T5	-TBC	
ES26 STIFFENER CLADDING(CURTAIN WALL) REFER:	LS-ES26	6063-T5	-TBC	
ES27 STARTER SILL (CURTAIN WALL) REFER:	LS-ES27	6063-T6	interpon D2015 Ultriva black ink	
ES28 ADAPTOR (CURTAIN WALL) REFER:	LS-ES28	6063-T5	interpon D2015 Ultriva black ink	
ES29 END MULLION (CURTAIN WALL) REFER:	LS-ES29	6063-T6	interpon D2015 Ultriva black ink	
ES30 GLAZING BEAD(CURTAIN WALL) REFER:	LS-ES30	6063-T5	interpon D2015 Ultriva black ink	

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66-72 Lorne Street, Auckland City  
Project No. AK-17023

Architect  
**ashtonmitchell**  
<https://www.ashtonmitchell.com>

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**ICON**  
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TS	LT	CV	05-12-2023	AS SHOWN

Drawing No. AK-17023-FC-0201 Rev. 2

EXTRUDED SECTIONS	DIE NUMBER	ALUMINUM GRADE	FINISH	PROFILE
ES31 MIDDLE MULLION (CURTAIN WALL) REFER:	LS-ES31	6063-T5	interpon D2015 Ultriva black ink	
ES32 SASH(CURTAIN WALL) REFER:	LS-ES32	6063-T5	interpon D2015 Ultriva black ink	
ES33 FRAME SASH(CURTAIN WALL) REFER:	LS-ES33	6063-T5	interpon D2015 Ultriva black ink	
ES34 ADAPTOR (CURTAIN WALL) REFER:	LS-ES34	6063-T5	interpon D2015 Ultriva black ink	
ES35 ADAPTOR (CURTAIN WALL) REFER:	LS-ES35	6063-T5	interpon D2015 Ultriva black ink	
ES36 SETTING BLOCK (CURTAIN WALL) REFER: FT01	LS-ES38	6061-T6	-TBC	
ES37 ADAPTOR (CURTAIN WALL) REFER:	LS-ES37	6063-T5	interpon D2015 Ultriva black ink	
ES38 ALUM BOX 60x60x5mm.THK(CORNER) REFER:	LS-ES38	6063-T5	interpon D2015 Ultriva black ink	
ES39 SETTING BLOCK (CURTAIN WALL) REFER: FT03	LS-ES39	6061-T6	-TBC	
ES40 MIDDLE BRACKET(TERRA COTTA) REFER:	LS-ES40	6061-T6	-TBC	
ES41 BOTTOM BRACKET(TERRA COTTA) REFER:	LS-ES41	6061-T6	-TBC	
ES42 TOP BRACKET(TERRA COTTA) REFER:	LS-ES42	6061-T6	-TBC	
ES43 VERTICAL FRAME(TERRA COTTA) REFER:	LS-ES43	6063-T6	-TBC	

GLASS	LOCATION REFERENCE	SPECCIFICATION	PROFILE
GT1	FT-01 Central Glazed (Mayor & Rear Elev)	30mm THK. DGU VISION 6mm.THK.HS + 16mm AIR SPACER + 8mm.THK. FT	
GT1A	L5, L6-18 Central Glazed	33.52mm THK. DGU LAMINATED VISION 5mm.THK.HS+1.52 PVB + 5mm.THK.HS+16mm AIR SPACER + 6mm.THK. FT	
GT2	FT-03 Flushed Glazed Dark Grey	33.52mm THK. DGU LAMINATED VISION 6mm.THK.HS+16mm AIR SPACER +5mm.THK.HS+1.52 PVB + 5mm.THK.HS	
GT2A	FT-03 Flushed Glazed Dark Grey spandrel	28mm THK. DGU VISION 6mm.THK.HS + 16mm AIR SPACER + 6mm.THK.HS	
GT3	FT-02 Lantern FT-02 Lantern Full backpan FT-02 Lantern Floor level spandrel	33.52mm THK. DGU LAMINATED VISION 6mm.THK.HS+16mm AIR SPACER+5mm.THK.HS+1.52 PVB + 5mm.THK.HS	

STANDARD EXTRUDED SECTIONS	MANUFACTURER'S PART NUMBER	ALUMINUM GRADE	FINISH	PROFILE
ES100 REFER:	45x20x3mm THICK ALUMINIUM ANGLE TBC	6063-T5	interpon D2015 Ultriva black ink	
ES101 REFER:	25x25x3mm THICK ALUMINIUM ANGLE TBC	6063-T5	interpon D2015 Ultriva black ink	

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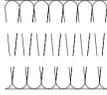
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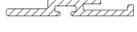
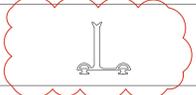
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SILICONE SEALANT		PRODUCT CODE	MATERIAL	FINISH	PROFILE
WS01	STRUCTURAL SEALANT -			COLOR - BLACK	
WS02	WEATHER SEALANT -			COLOR - BLACK	

SILICONE SEALANT		PRODUCT CODE	MATERIAL	FINISH	PROFILE
IN01	INSULATION 100mm THK. DENSITY 100mm kg/M³				

EXTRUDED SECTIONS		PRODUCT CODE	MATERIAL	FINISH	PROFILE
GK01	SETTING BLOCK -		SILICONE	-TBC	
GK02	COMPRESSED CLOSED CELL BACKING ROD -		-	-TBC	
GK03	6mm.THK DOUBLE SIDED GLAZING TAPE AS PER APPROVED PRODUCT DATA		-	-TBC	
GK03A	8mm.THK DOUBLE SIDED GLAZING TAPE AS PER APPROVED PRODUCT DATA		-	-TBC	
GK03B	14mm.THK DOUBLE SIDED GLAZING TAPE AS PER APPROVED PRODUCT DATA		-	-TBC	
GK04	30x31mm x 150mm LONG - AT MULLION JUNCTIONS. HELD IN POSITION BY PANEL WEIGHT		-	-TBC	
GK05	WIPER SEAL - TO MULLION		EPDM	-TBC	
GK06	WIPER/BULB SEAL - TO MULLION		EPDM	-TBC	
GK07	WIPER SEAL - TO STACK SILL		EPDM	-TBC	
GK08	WIPER/BULB SEAL -TO SASH		EPDM	-TBC	
GK09	WIPER/BULB SEAL -TO SASH		EPDM	-TBC	
GK10	WIPER/BULB SEAL -TO FIX GLASS		SILICONE	-TBC	
GK11	WIPER/BULB SEAL -TO FIX GLASS		SILICONE	-TBC	
GK12	WIPER/BULB SEAL -TO FIX GLASS		SILICONE	-TBC	
GK13	GLAZING BEAD(CURTAIN WALL) REFER:		-	-TBC	
GK14	WIPER/BULB SEAL -TO SASH		EPDM	-TBC	
GK15	WIPER/BULB SEAL -TERRA COTTA		EPDM	-TBC	
GK16	PLASTIC PLUG TO MATCH THE MULLION COATING				

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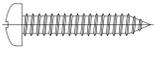
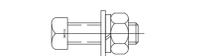
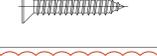
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EXTRUDED SECTIONS	HEAD TYPE	MATERIAL	FINISH	PROFILE
FS01 #12x35mm SELF TAPPING SCREW -	PAN HEAD	S.S. A2/70	N/A	
FS02 #10x25mm SELF TAPPING SCREW -	PAN HEAD	S.S. A2/70	N/A	
FS03 #8x15mm SELF TAPPING SCREW -	PAN HEAD	S.S. A2/70	N/A	
FS04 #8x12mm SELF TAPPING SCREW -	COUNTERSUNK	S.S. A2/70	N/A	
FS05 #12x19mm SELF TAPPING SCREW -	COUNTERSUNK	S.S. A2/70	N/A	
FS06 M16 HEIGHT ADJUSTMENT/LOCKING SCREW FOR HOOK BRACKET TO CURTAIN WALL	ALLEN KEY HEAD	S.S. A2/70	N/A	
FS07 M6 WELD STUD -	HEX HEAD	-	N/A	
FS08 M10x40mm. LONG NUT AND BOLT -	HEX HEAD	S.S. A2/70	N/A	
FS09 HILTI HAC-50 CAST IN ANCHOR - 350mm LONG, 106mm STD EMBEDMENT, 250mm ANCHOR DISTANCE	T-BOLT	CARBON STEEL	HOT-DIPPED GALVANIZED	
FS10 M12x40mm. LONG NUT AND BOLT	HEX HEAD	S.S. A2/70	N/A	
FS11 M16x60mm. LONG NUT AND BOLT	HEX HEAD	S.S. A2/70	N/A	
FS12 #12x38mm SELF TAPPING SCREW	PAN HEAD	S.S. A2/70	N/A	
FS13 #10x25mm SELF DRILLING SCREW	COUNTERSUNK	S.S. A2/70	N/A	
FS14 M8X40mm LG. FLAT HEAD MACHINE SCREW	COUNTERSUNK	S.S. A2/70	N/A	

SHEET METAL ALU/ STEEL	PRODUCT CODE	MATERIAL	FINISH	PROFILE
CD01 3mm THICK ALUMINIUM - PRESSED PANEL BOX FEATURE PANEL		ALUMINIUM	D2015 POWDER COAT	
CD02 2mm THICK 3003 GRADE SOLID ALUMINIUM SHEET		ALUMINIUM	D2015 POWDER COAT	
CD03 1.2mm THICK STEEL SHEET		GALV. SHEET	-	
CD04 4mm THICK SOLID ALUMINIUM SHEET		ALUMINIUM	-TBC	
CD05 6mm THICK ALUMINIUM SHEET		ALUMINIUM	-TBC	
CD06 16mm THICK STEEL SHEET FOR STIFFENERS		STEEL	MILL	

Notes:

Rev	Date	By	Description
4	05-12-2023	KT	FOR PMU AS BUILT
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2	27-10-2023	LT	FOR CONSTRUCTION
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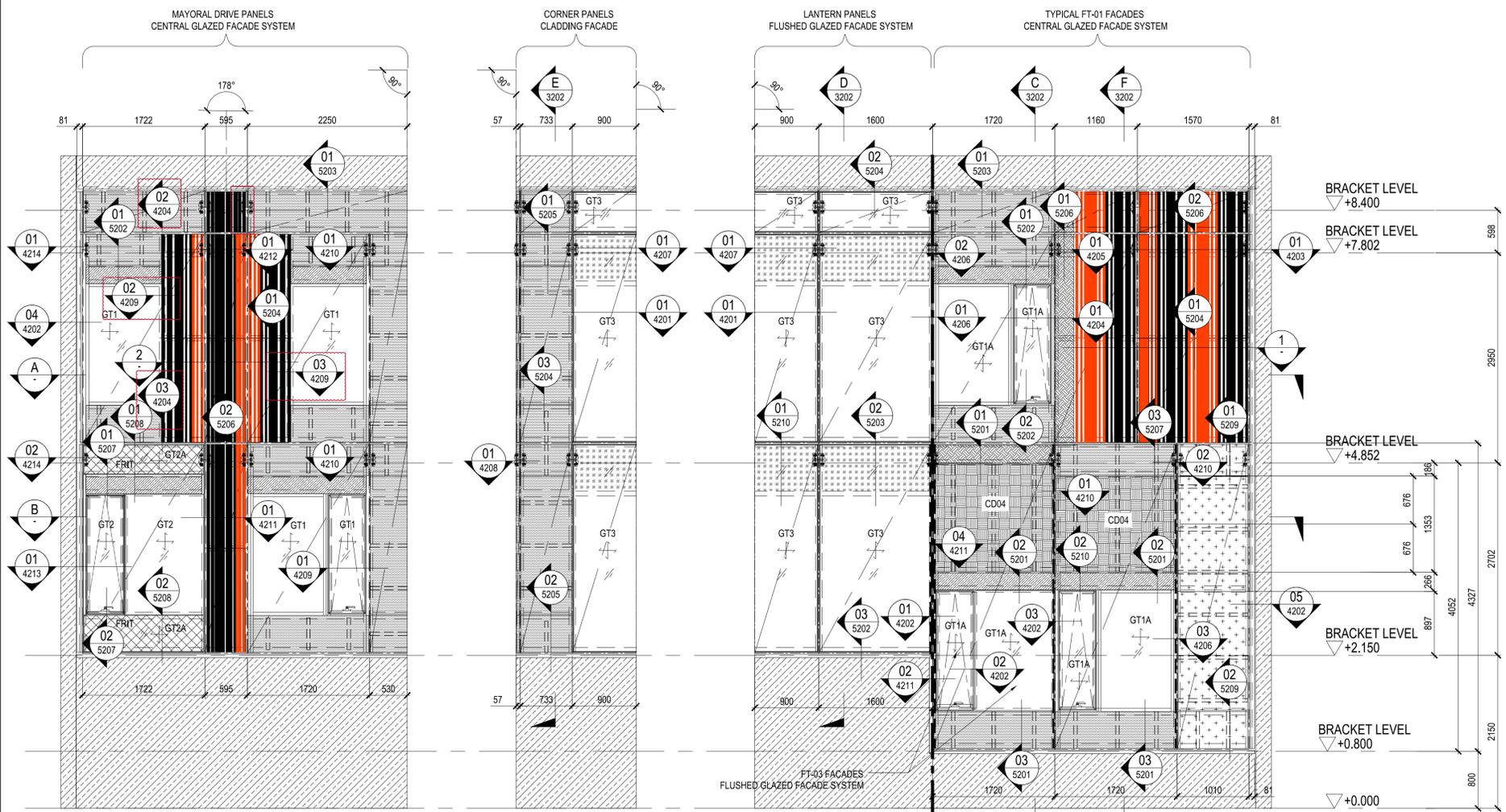
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**LEGEND:**

- CD01 3mm THK. ALUM CLADDING (FLAT PANEL)
- CD04 3mm THK. ALUM CLADDING (VERT. / HOR. EYE BROW)
- CD04A 3mm THK. ALUM CLADDING (FLAT PANEL)
- CD02 2mm THK. ALUM CLADDING (COWL PANEL)
- TR01 TERRACOTTA TYPE TR-1
- TR02 TERRACOTTA TYPE TR-2

**Notes:**

Rev	Date	By	Description
6	30-01-2023	KT	FOR PMU AS BUILT
5	19-12-2023	KT	FOR PMU AS BUILT
4	05-12-2023	KT	FOR PMU AS BUILT
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2	27-10-2023	LT	FOR CONSTRUCTION
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<https://icon.co>

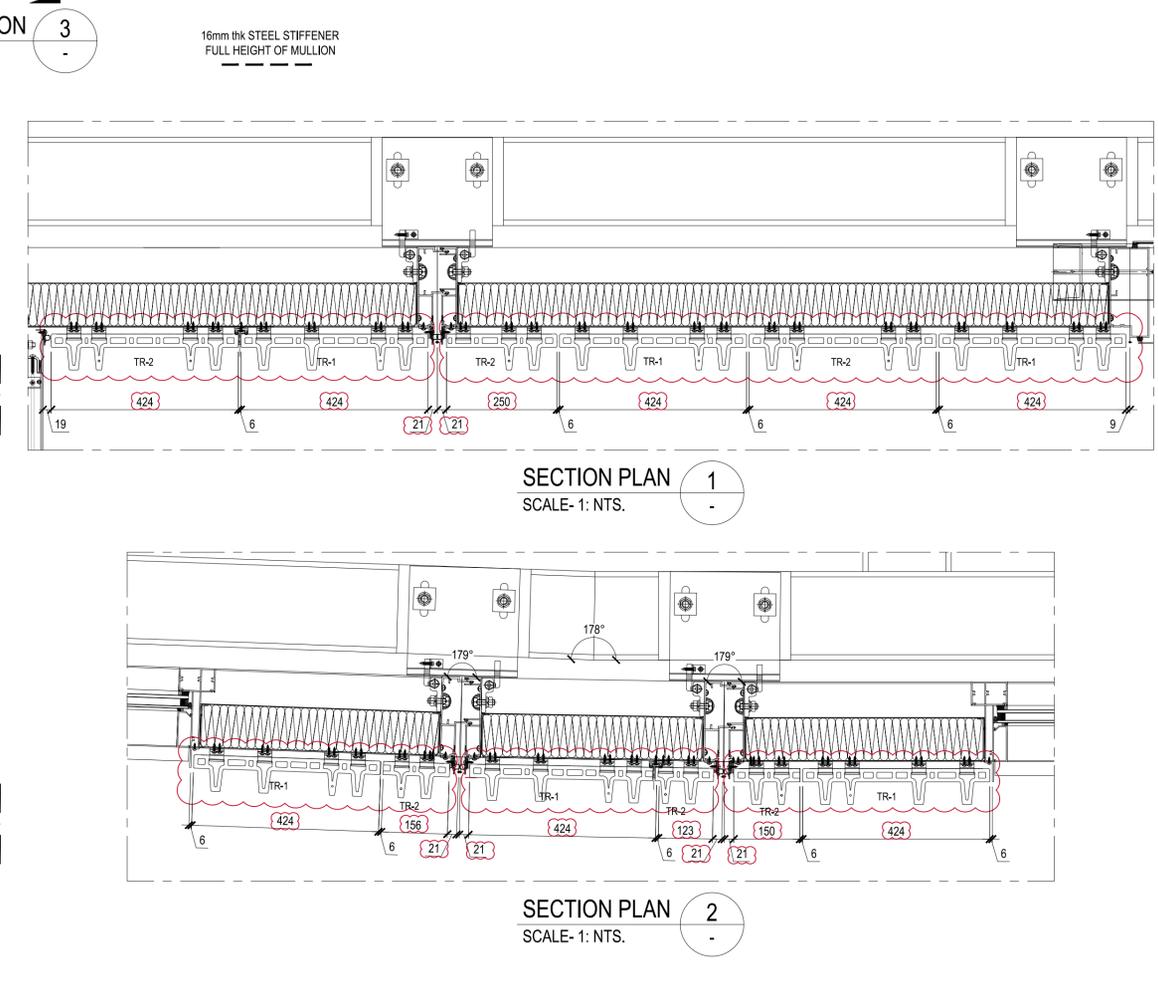
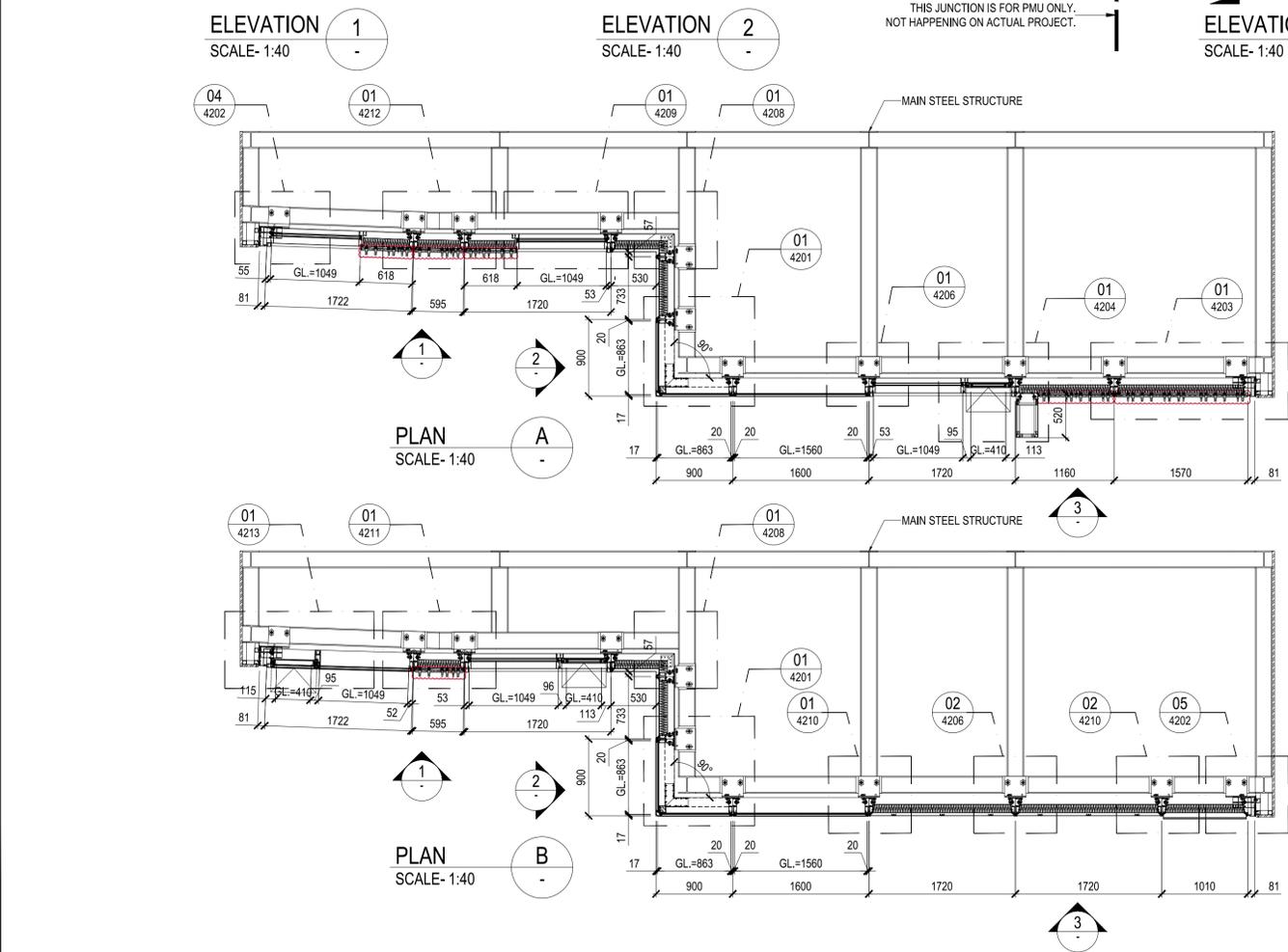
**Client**  
UniLodge | Cedar Pacific  
<https://www.cedpac.com>

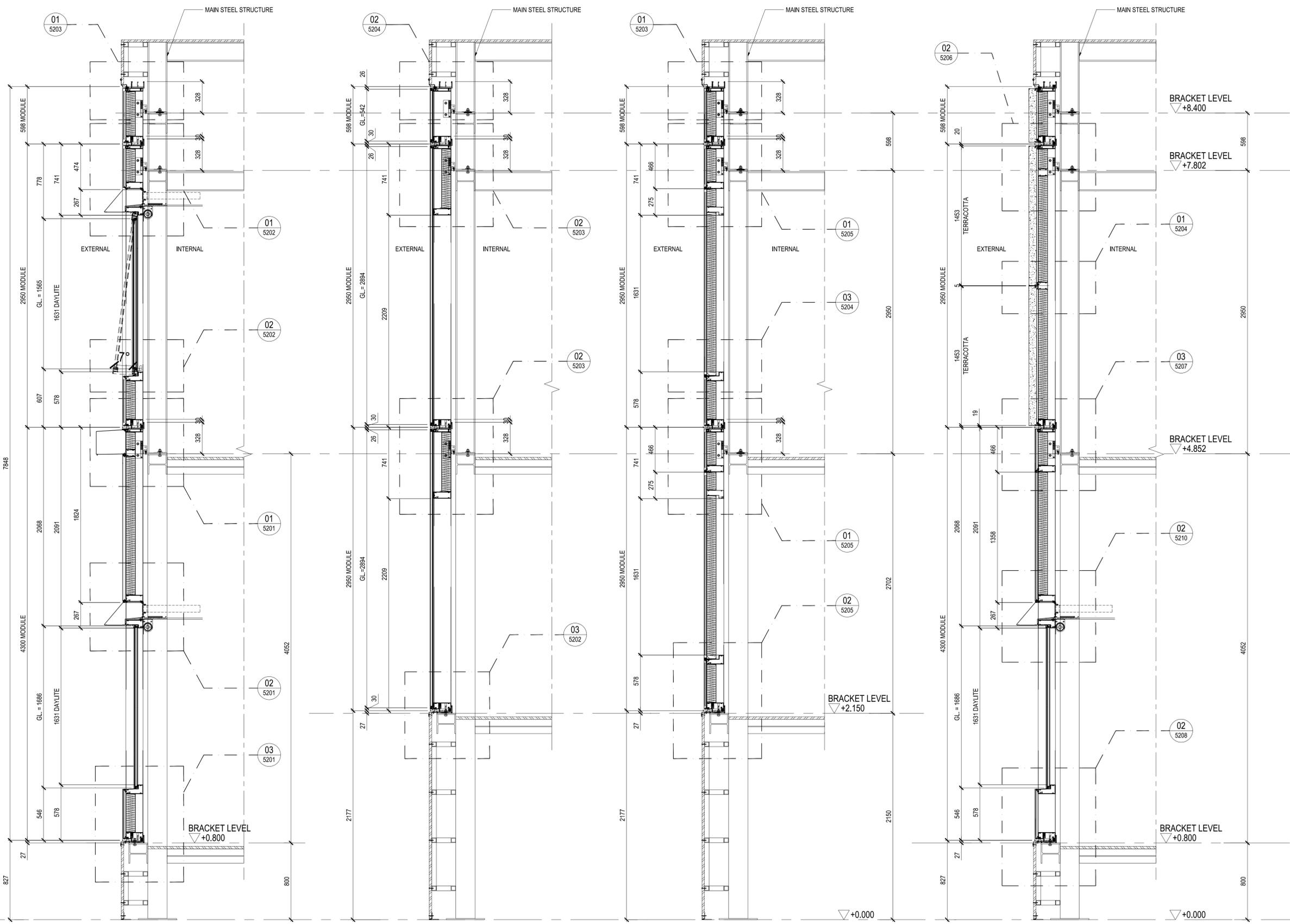
**Drawing Title**  
PERFORMANCE MOCKUP  
PARTIAL ELEVATION  
PLAN

**Inhabit** Inhabit New Zealand  
<https://inhabitgroup.com/project/new-zealand>

Drawn	Reviewed	Approved	Date	Scale at A1
TS	LT	CV	19-12-2023	AS SHOWN

Drawing No. AK-17023-FC-3201 Rev. 6





SECTION C  
SCALE: 1:20

SECTION D  
SCALE: 1:20

SECTION E  
SCALE: 1:20

SECTION F  
SCALE: 1:20

Notes:

Rev	Date	By	Description
2	05-12-2023	KT	FOR PMU AS BUILT
1	18-10-2023	TH	FOR CONSTRUCTION

Issue Status  
FOR CONSTRUCTION

Project  
**LORNE STREET**  
66-72 Lorne Street, Auckland City  
Project No. AK-17023

Architect  
**ashtonmitchell**  
<https://www.ashtonmitchell.com>

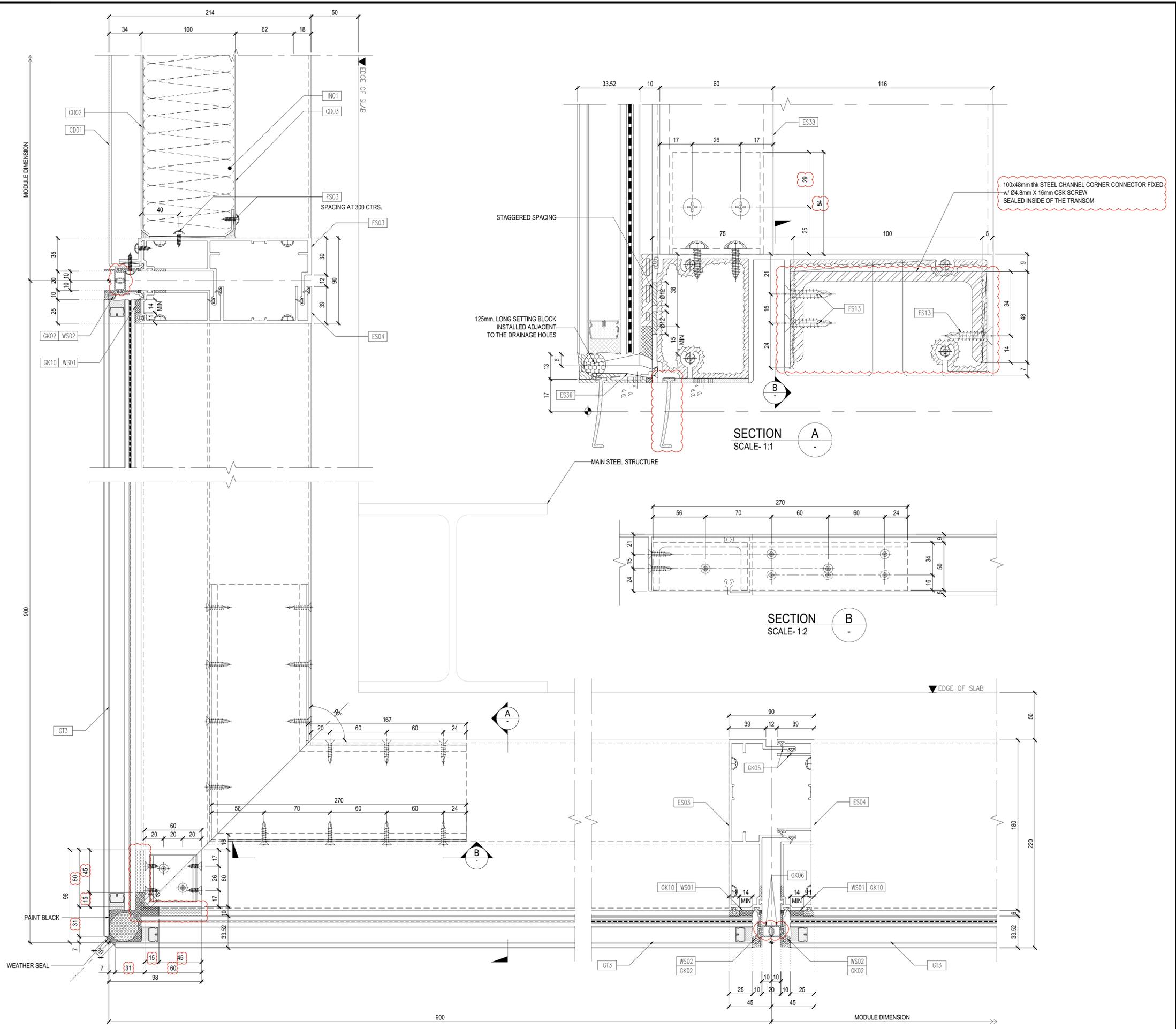
Main Contractor  
**ICON**  
A KAJIMA COMPANY  
<https://icon.co>

Client  
**UniLodge | Cedar Pacific**  
**Cedar Pacific**  
<https://www.cedpac.com>

Drawing Title  
PERFORMANCE MOCKUP  
PARTIAL ELEVATION  
SECTION

**Inhabit** Inhabit New Zealand  
<https://inhabitgroup.com/project-region/new-zealand>

Drawn	Reviewed	Approved	Date	Scale at A1
TS	LT	CV	05-12-2023	AS SHOWN
Drawing No. AK-17023-FC-3202				Rev. 2



Notes:

Rev	Date	By	Description
5	19-12-2023	KT	FOR PMU AS BUILT
4	05-12-2023	KT	FOR PMU AS BUILT
3	27-10-2023	LT	FOR CONSTRUCTION
2	19-10-2023	TH	FOR CONSTRUCTION
1	18-10-2023	TH	FOR CONSTRUCTION

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Issue Status	
FOR CONSTRUCTION	

Project  
**LORNE STREET**  
 66-72 Lorne Street, Auckland City  
 Project No. AK-17023

Architect  
  
<https://www.ashtonmitchell.com>

Main Contractor  
  
 A KAJIMA COMPANY  
<https://icon.co>

Client  
 UniLodge | Cedar Pacific  
  
<https://www.cedpac.com>

Drawing Title  
**TOWER CURTAIN WALL  
 HORIZONTAL DETAIL**

 Inhabit  
 New Zealand  
<https://inhabitgroup.com/project-region/new-zealand>

Drawn	Reviewed	Approved	Date	Scale at A1
TH	LT	CV	19-12-2023	AS SHOWN

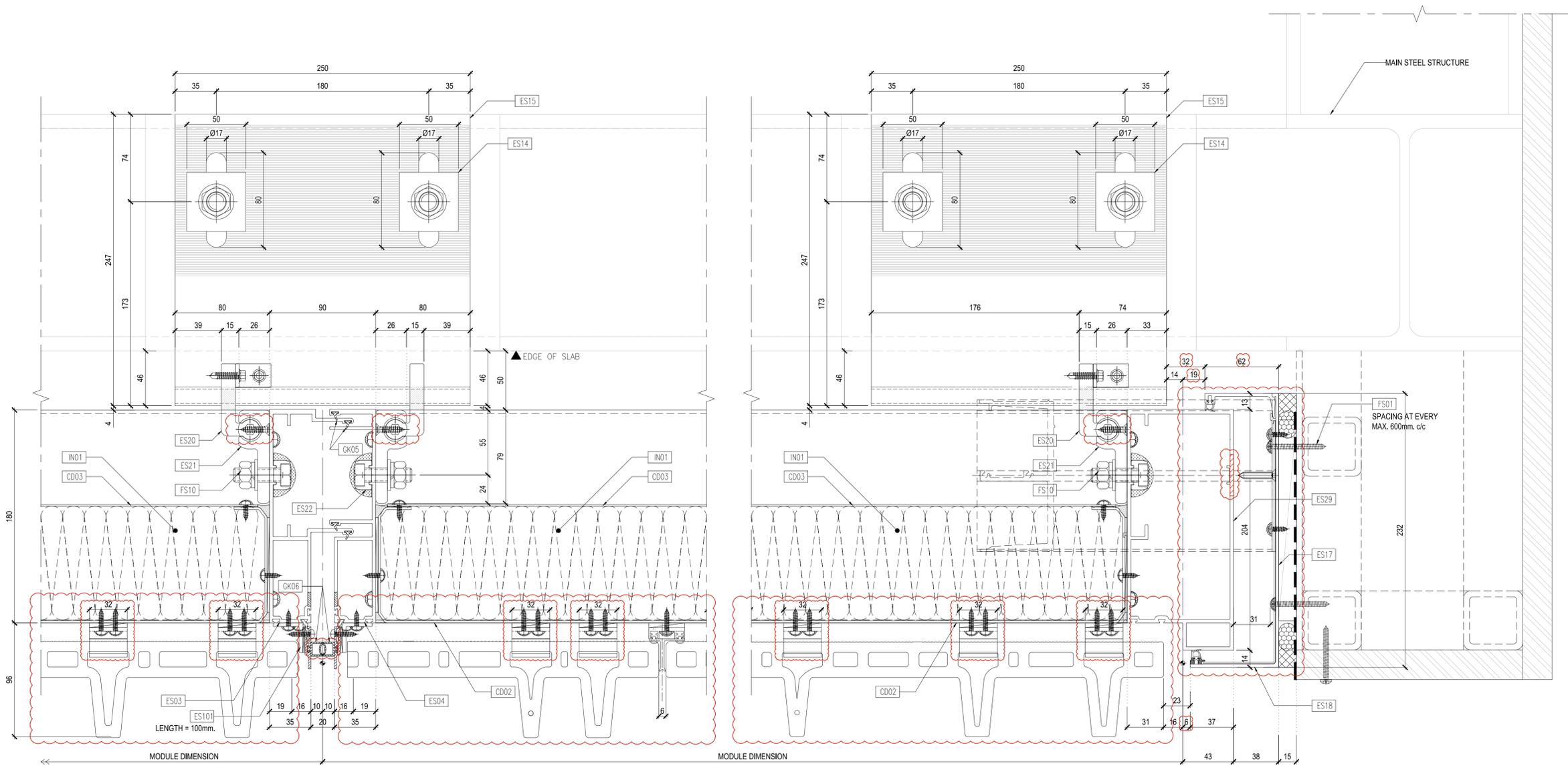
Drawing No.	Rev.
AK-17023-FC-4201	5

EXTERNAL

EXTERNAL

DETAIL  
 SCALE-1:2  
 01





EXTERNAL

DETAIL SCALE-1:2

01

Notes:

Rev	Date	By	Description
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3	19-12-2023	KT	FOR PMU AS BUILT
2	05-12-2023	KT	FOR PMU AS BUILT
1	18-10-2023	TH	FOR CONSTRUCTION

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Issue Status  
FOR CONSTRUCTION

Project  
**LORNE STREET**  
66-72 Lorne Street, Auckland City  
Project No. AK-17023

Architect  
**ashtonmitchell**  
<https://www.ashtonmitchell.com>

Main Contractor  
**ICON**  
A KAJIMA COMPANY  
<https://icon.co>

Client  
**UniLodge | Cedar Pacific**  
**Cedar Pacific**  
<https://www.cedpac.com>

Drawing Title  
TOWER CURTAIN WALL  
HORIZONTAL DETAIL

**Inhabit** Inhabit New Zealand  
<https://inhabitgroup.com/project-region/new-zealand>

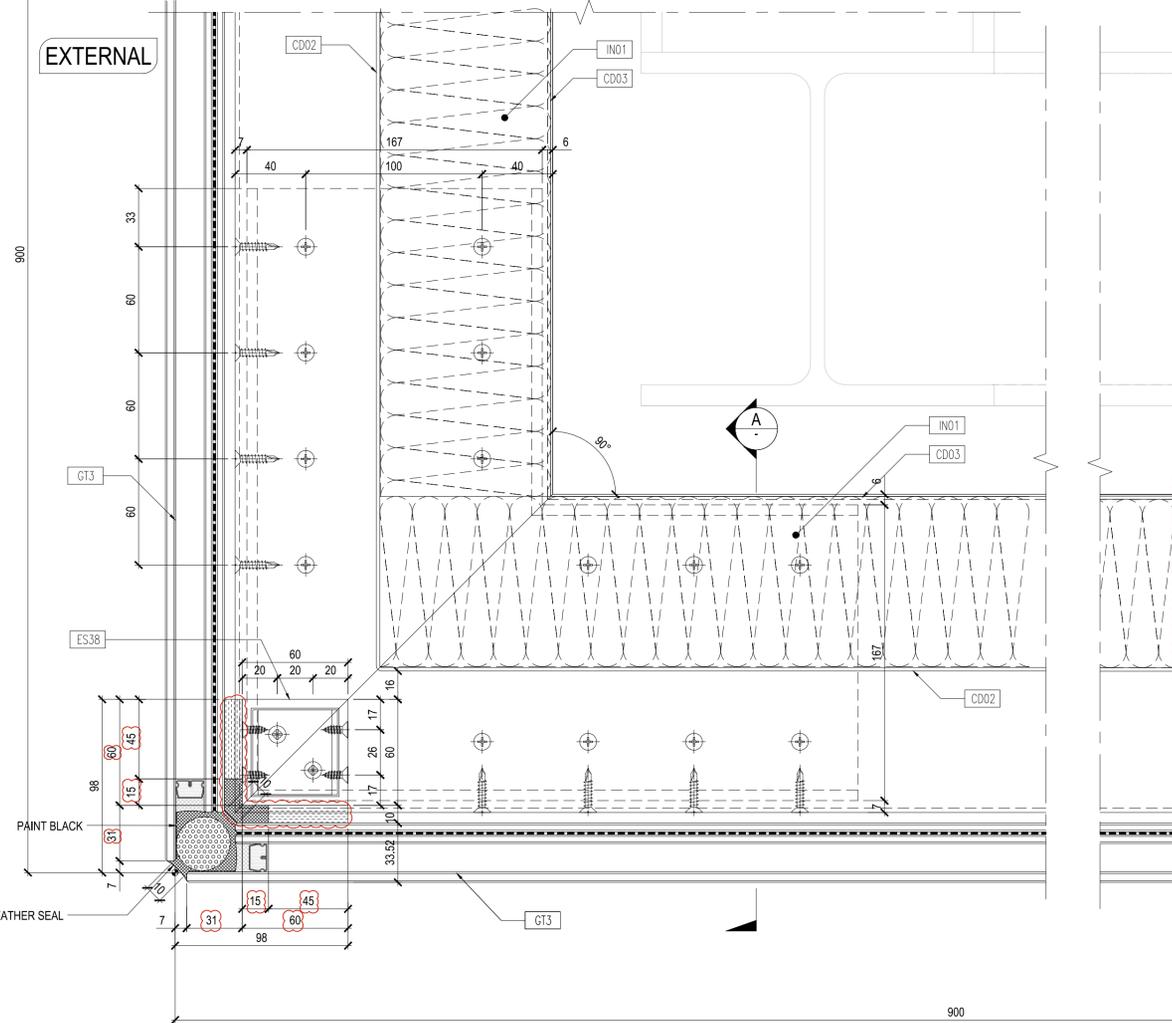
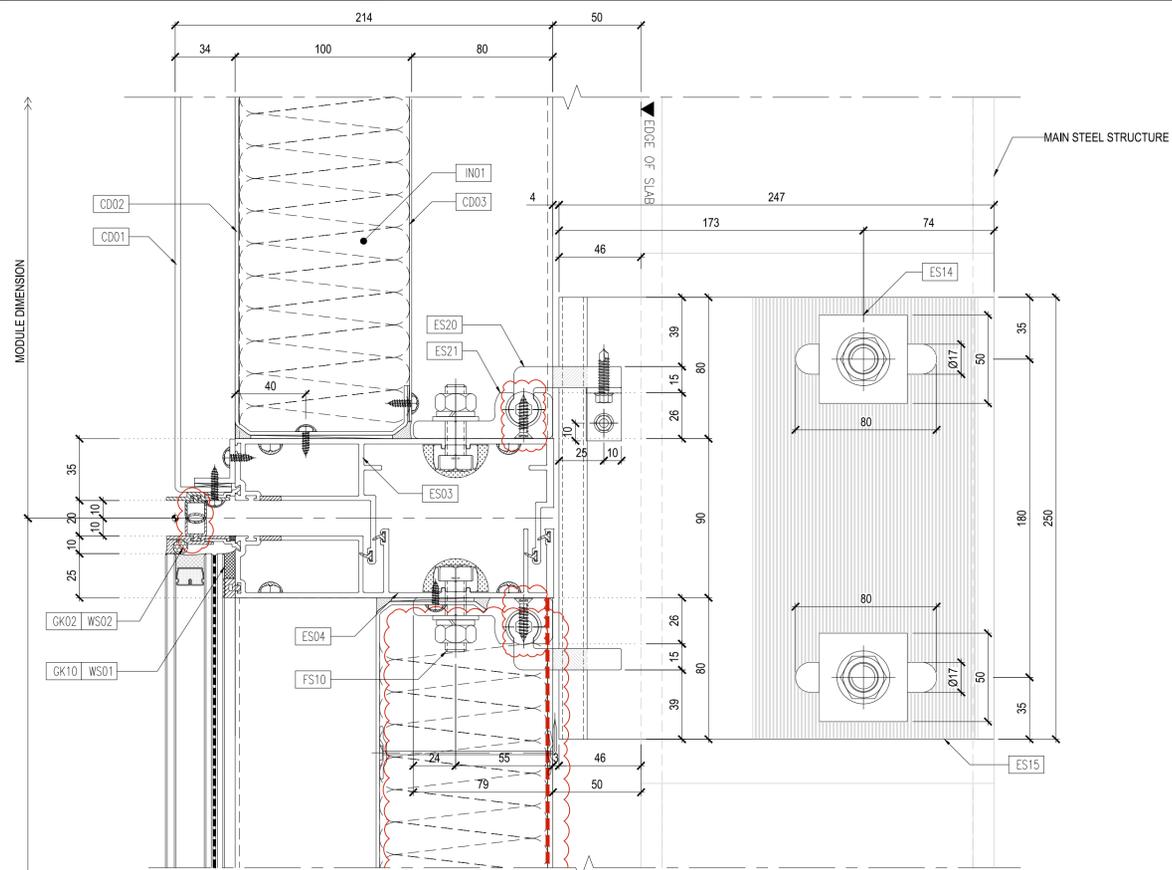
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TH	LT	CV	19-12-2023	AS SHOWN

Drawing No. AK-17023-FC-4203 Rev. 4





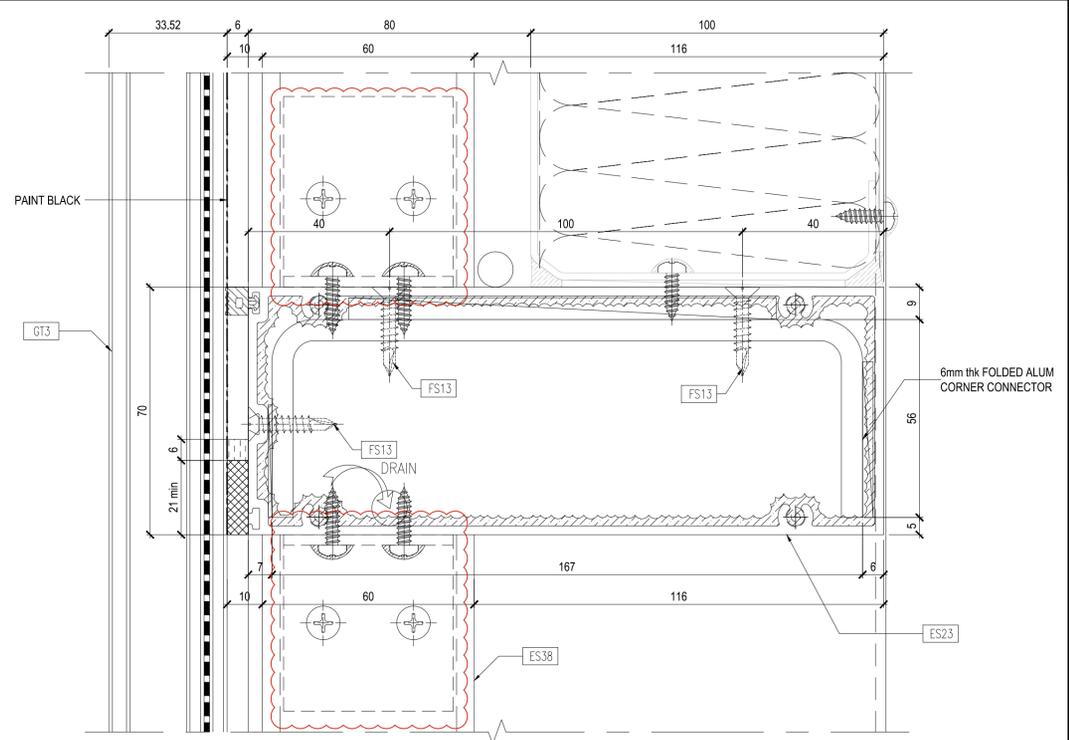




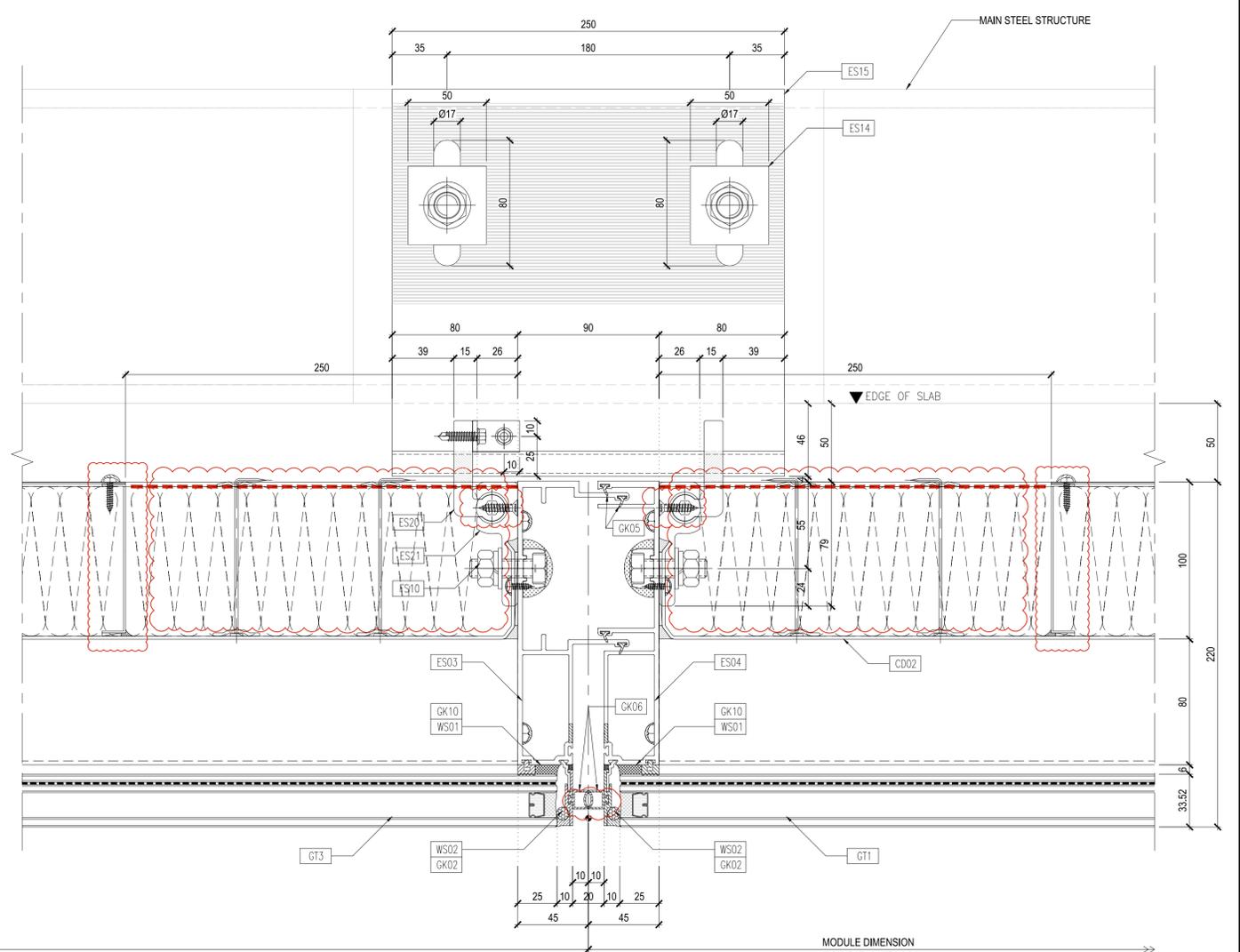
DETAIL  
SCALE: 1:2

01

EXTERNAL



SECTION A  
SCALE: 1:1



MODULE DIMENSION

Notes:

Rev	Date	By	Description
5	19-12-2023	KT	FOR PMU AS BUILT
4	05-12-2023	KT	FOR PMU AS BUILT
3	27-10-2023	LT	FOR CONSTRUCTION
2	19-10-2023	TH	FOR CONSTRUCTION
1	18-10-2023	TH	FOR CONSTRUCTION

Issue Status  
FOR CONSTRUCTION

Project  
**LORNE STREET**  
66-72 Lorne Street, Auckland City  
Project No. AK-17023

Architect  
**ashtonmitchell**  
<https://www.ashtonmitchell.com>

Main Contractor  
**ICON**  
A KAJIMA COMPANY  
<https://icon.co>

Client  
**UniLodge | Cedar Pacific**  
**Cedar Pacific**  
<https://www.cedpac.com>

Drawing Title  
**TOWER CURTAIN WALL  
HORIZONTAL DETAIL**

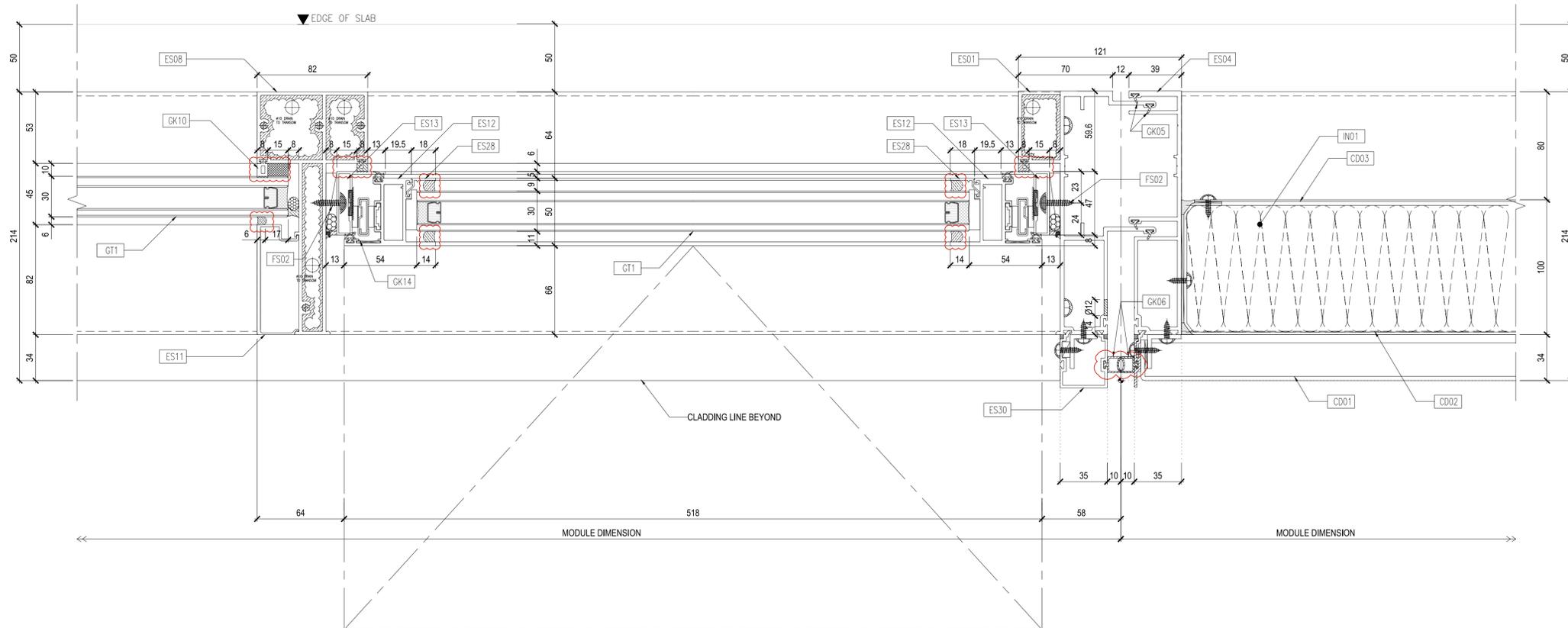
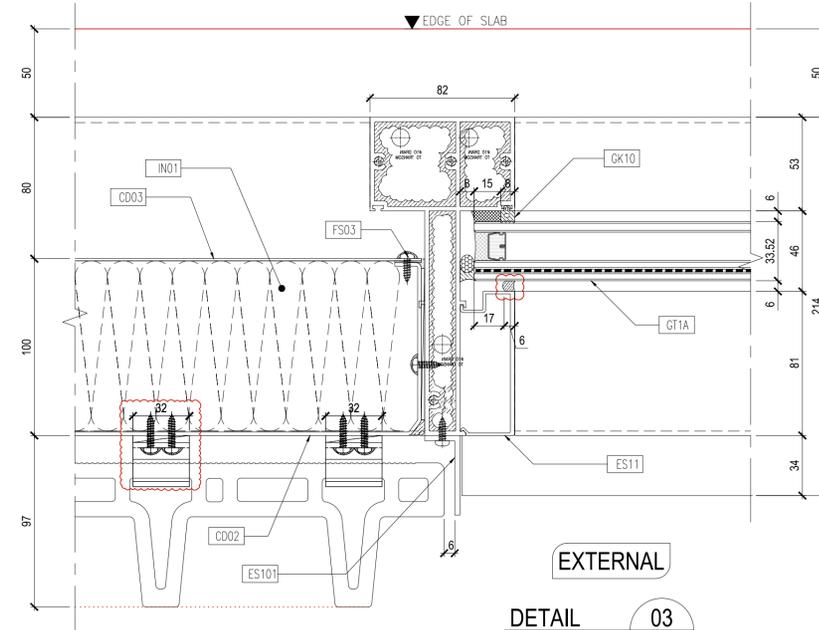
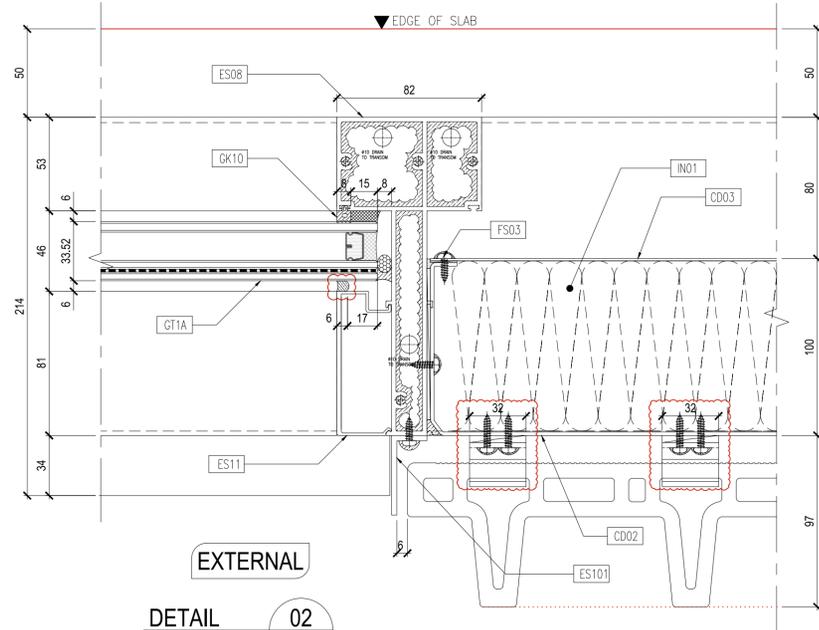
**Inhabit** Inhabit New Zealand  
<https://inhabitgroup.com/project-region/new-zealand>

Drawn	Reviewed	Approved	Date	Scale at A1
TH	LT	CV	19-12-2023	AS SHOWN

Drawing No. AK-17023-FC-4207 Rev. 5



Notes:



Rev	Date	By	Description
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3	19-12-2023	KT	FOR PMU AS BUILT
2	05-12-2023	KT	FOR PMU AS BUILT
1	18-10-2023	TH	FOR CONSTRUCTION

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Issue Status  
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Project  
**LORNE STREET**  
66-72 Lorne Street, Auckland City  
Project No. AK-17023

Architect  
**ashtonmitchell**  
<https://www.ashtonmitchell.com>

Main Contractor  
**ICON**  
A KAJIMA COMPANY  
<https://icon.co>

Client  
**UniLodge | Cedar Pacific**  
**Cedar Pacific**  
<https://www.cedpac.com>

Drawing Title  
TOWER CURTAIN WALL  
HORIZONTAL DETAIL

**Inhabit** Inhabit New Zealand  
<https://inhabitgroup.com/project-region/new-zealand/>

Drawn	Reviewed	Approved	Date	Scale at A1
TH	LT	CV	19-12-2023	AS SHOWN

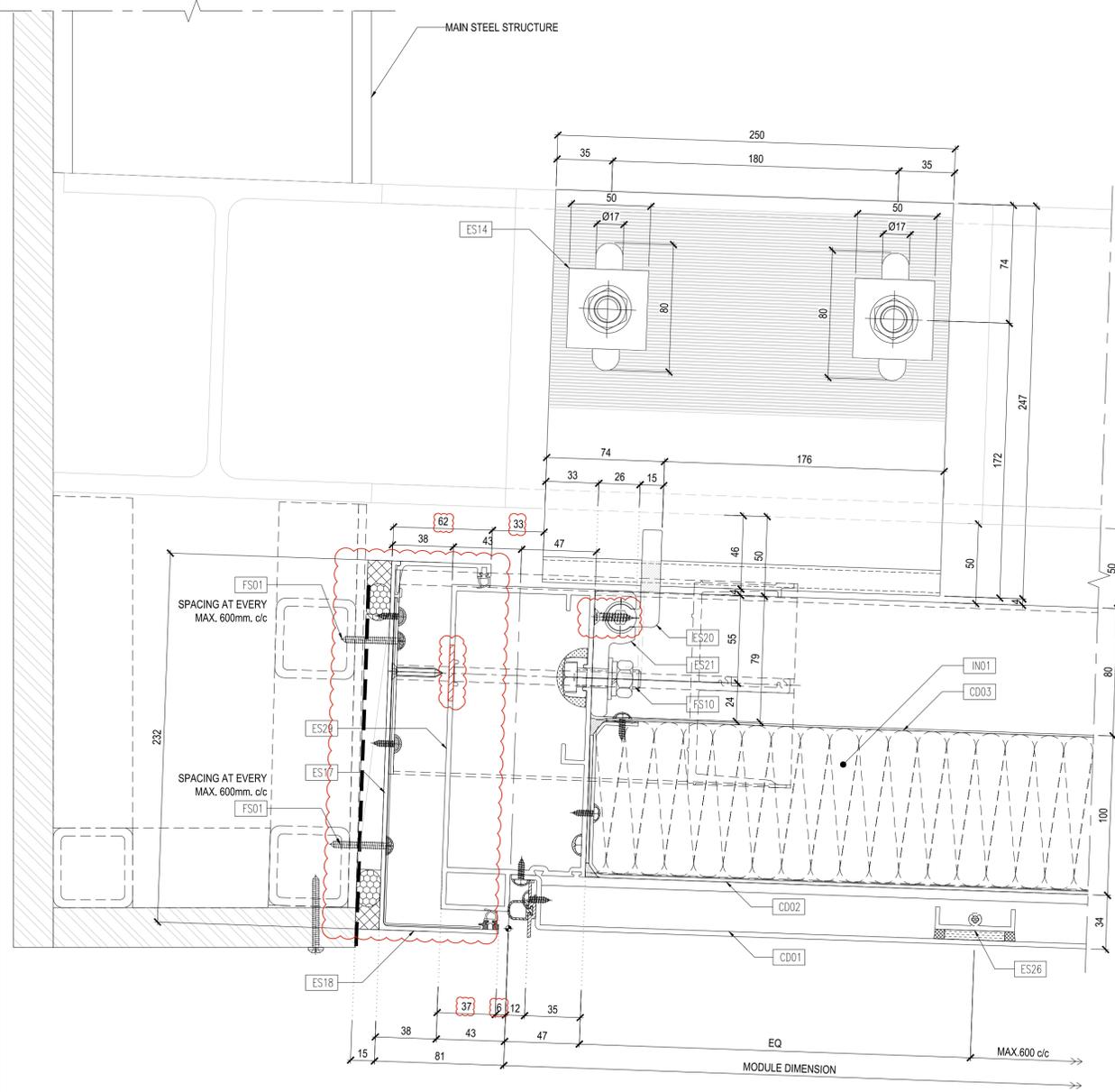
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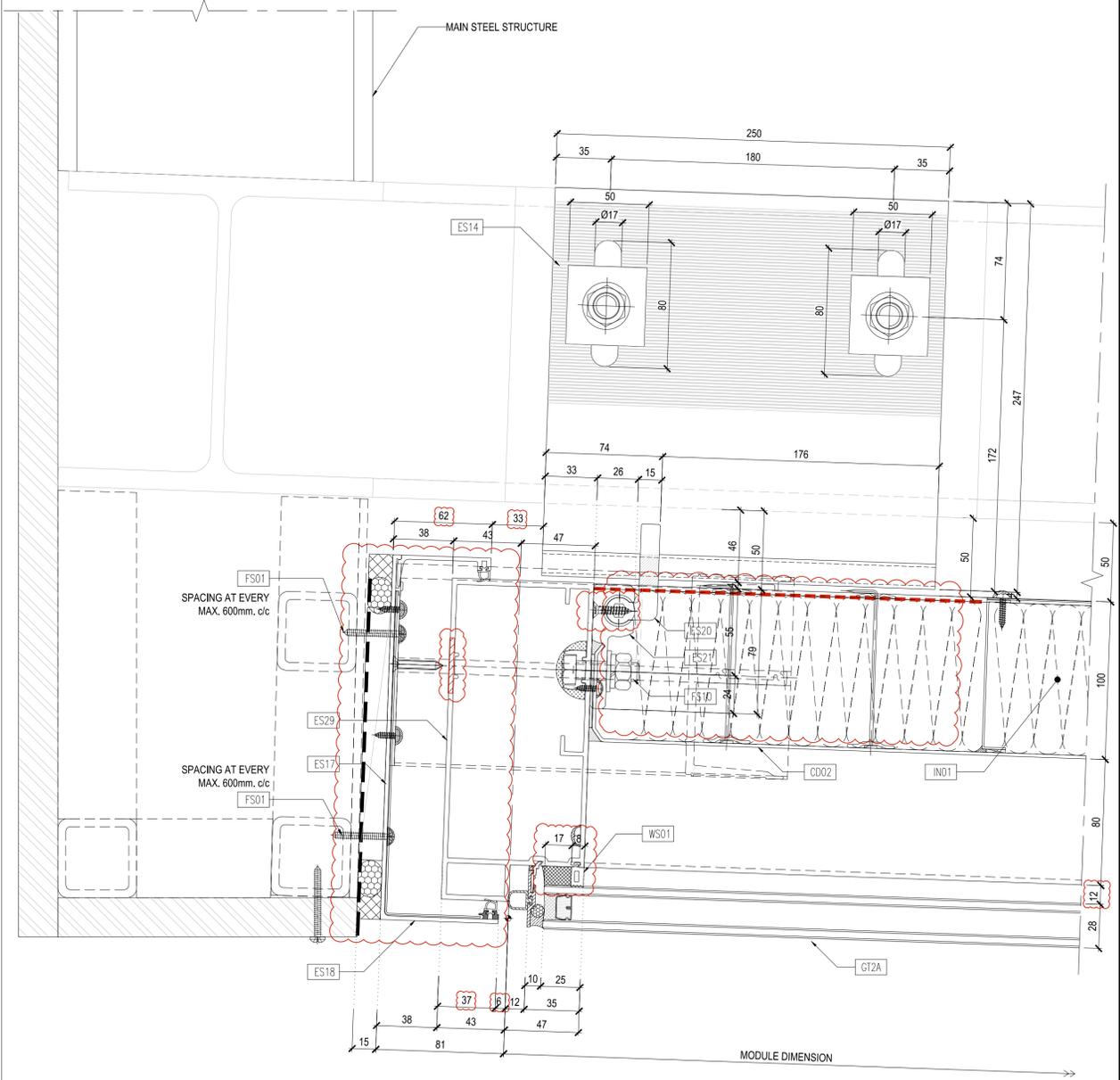








EXTERNAL  
DETAIL SCALE- 1:2 **01**



EXTERNAL  
DETAIL SCALE- 1:2 **02**

Notes:

Rev	Date	By	Description
4	19-12-2023	KT	FOR PMU AS BUILT
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2	19-10-2023	TH	FOR CONSTRUCTION
1	18-10-2023	TH	FOR CONSTRUCTION

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FOR CONSTRUCTION

Project

**LORNE STREET**  
66-72 Lorne Street, Auckland City

Project No. AK-17023

Architect



Main Contractor



Client

UniLodge | Cedar Pacific



Drawing Title

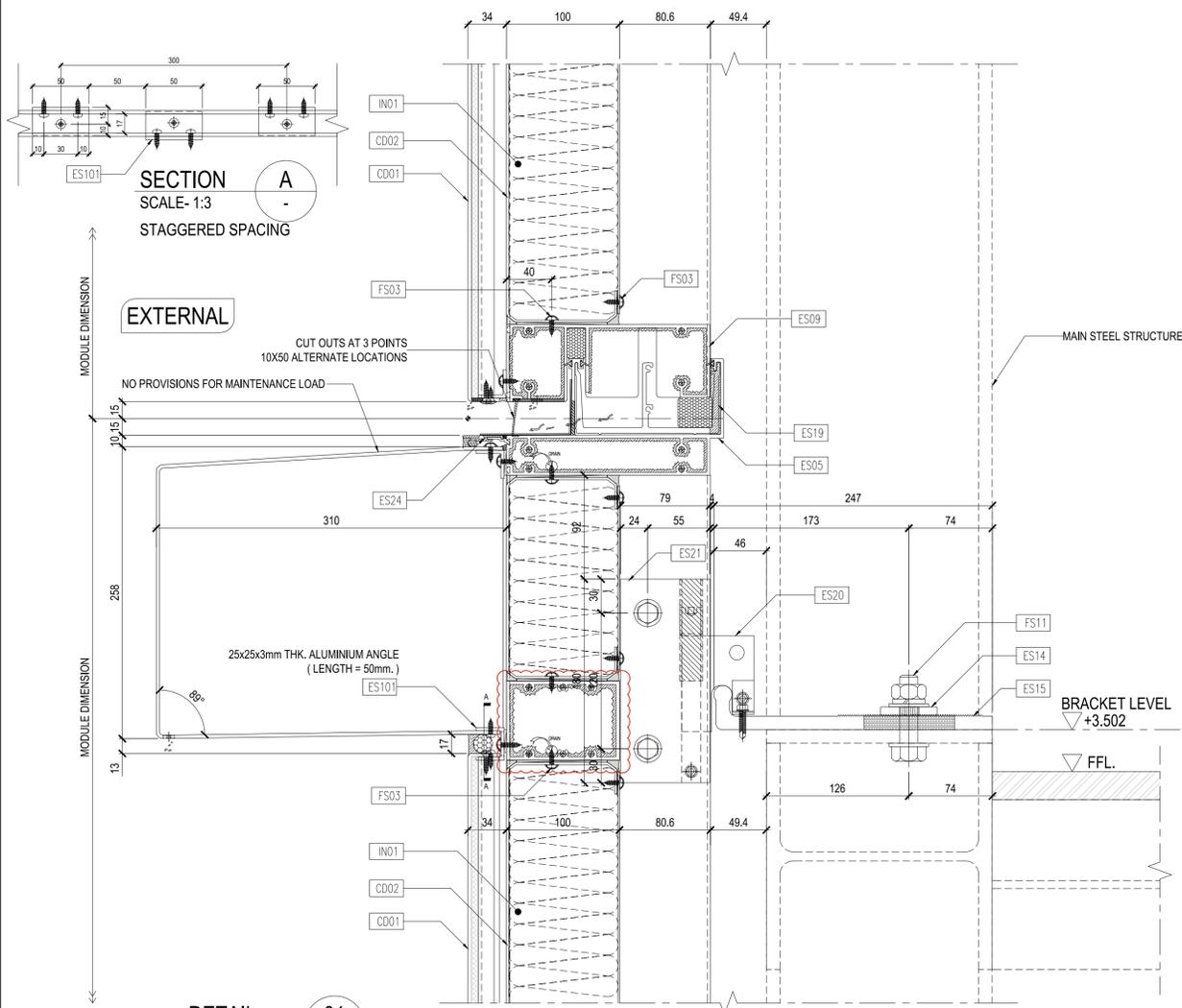
TOWER CURTAIN WALL  
HORIZONTAL DETAIL



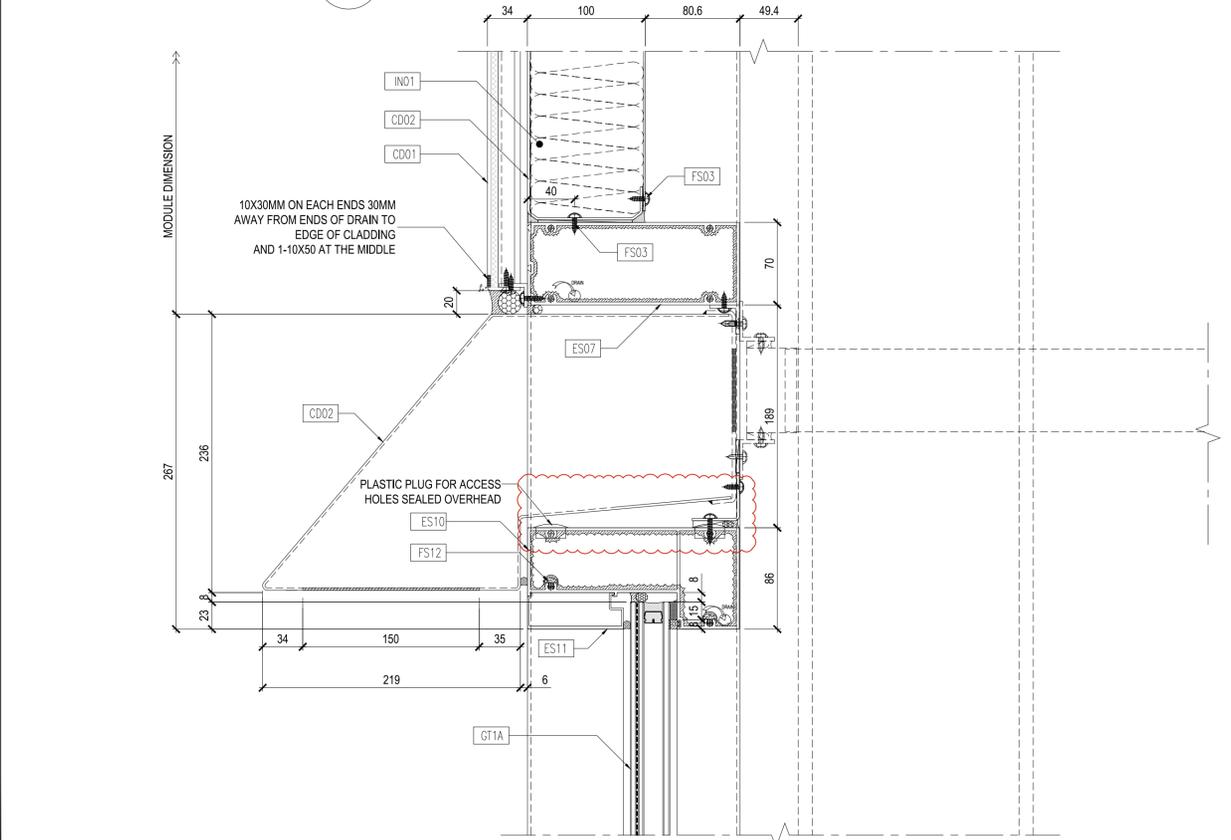
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TH	LT	CV	19-12-2023	AS SHOWN

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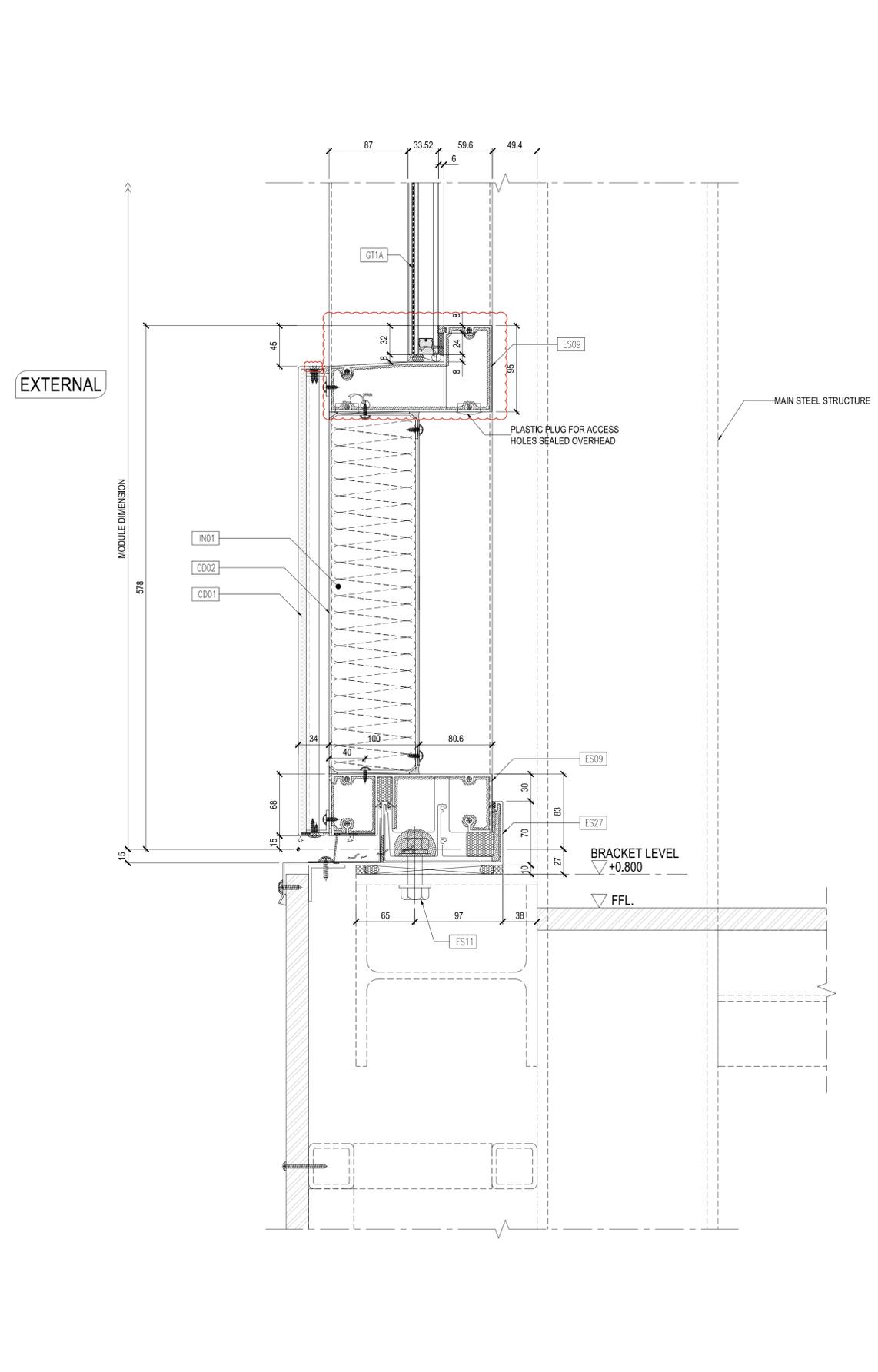
Rev.  
4



DETAIL 01 SCALE- 1:3



DETAIL 02 SCALE- 1:3



DETAIL 03 SCALE- 1:3

Notes:

Rev	Date	By	Description
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3	05-12-2023	KT	FOR PMU AS BUILT
2	19-10-2023	TH	FOR CONSTRUCTION
1	18-10-2023	TH	FOR CONSTRUCTION

Issue Status  
FOR CONSTRUCTION

Project  
**LORNE STREET**  
66-72 Lorne Street, Auckland City  
Project No. AK-17023

Architect  
**ashtonmitchell**  
<https://www.ashtonmitchell.com>

Main Contractor  
**ICON**  
A KAJIMA COMPANY  
<https://icon.co>

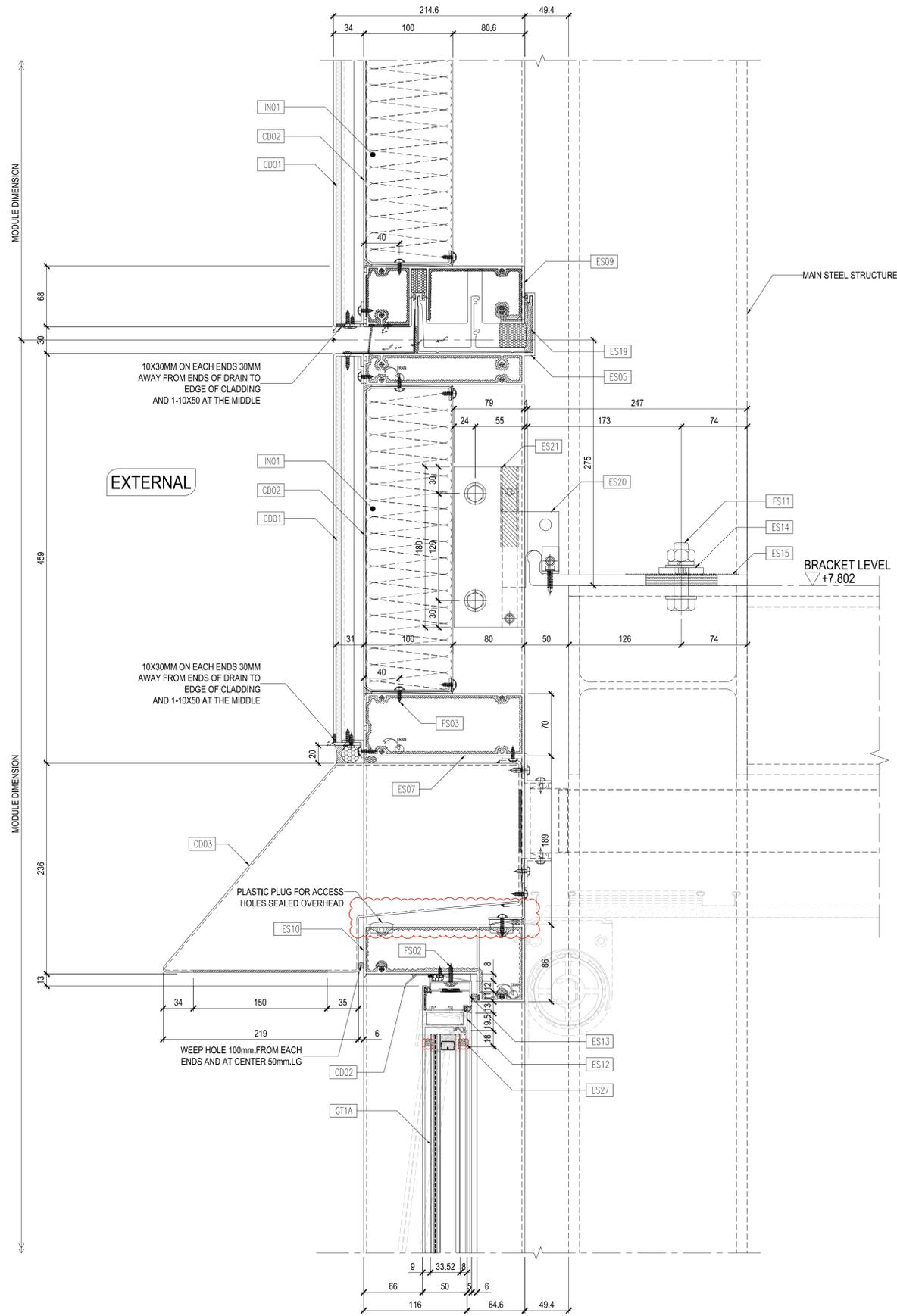
Client  
**UniLodge | Cedar Pacific**  
**Cedar Pacific**  
<https://www.cedpac.com>

Drawing Title  
TOWER CURTAIN WALL  
VERTICAL DETAIL

**Inhabit** Inhabit New Zealand  
<https://inhabitgroup.com/project-region/new-zealand/>

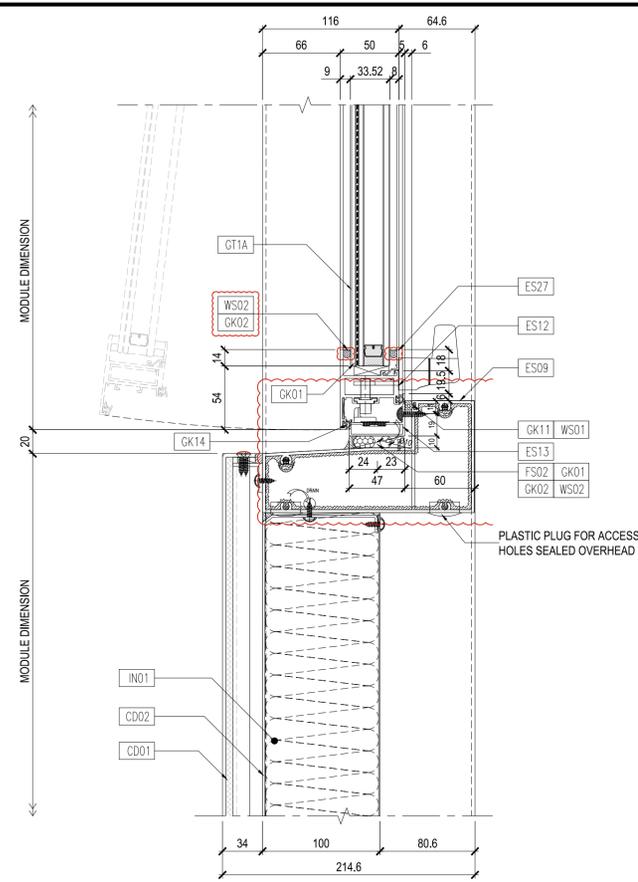
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TH	LT	CV	19-12-2023	AS SHOWN

Drawing No. AK-17023-FC-5201 Rev. 4

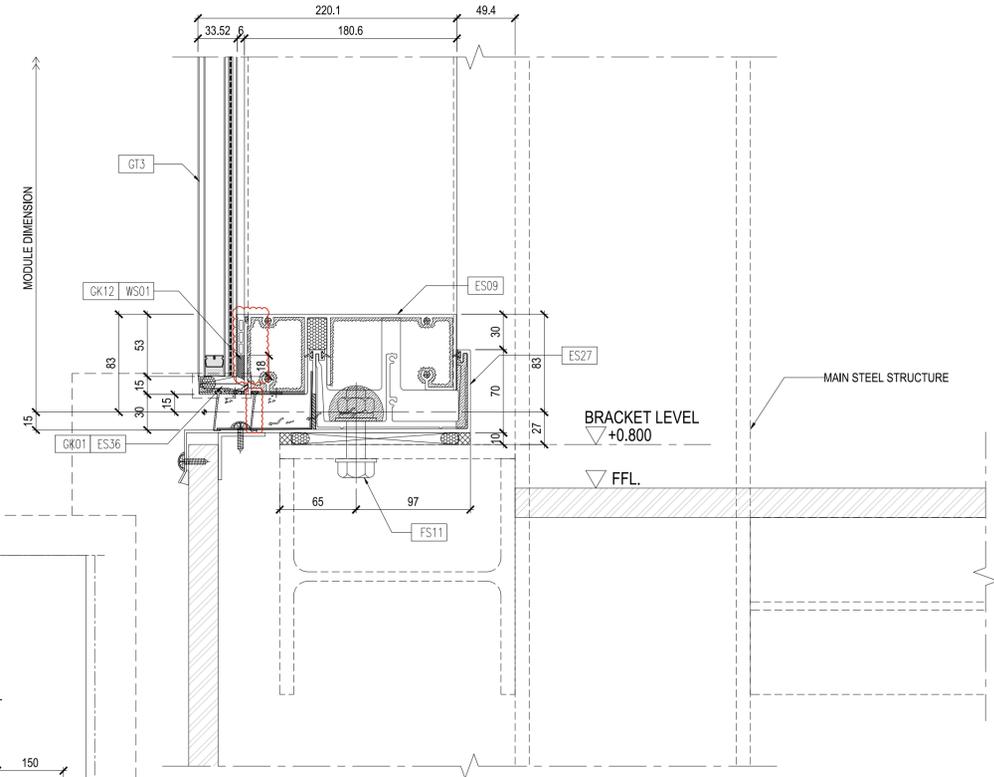


DETAIL 01  
SCALE: 1:3

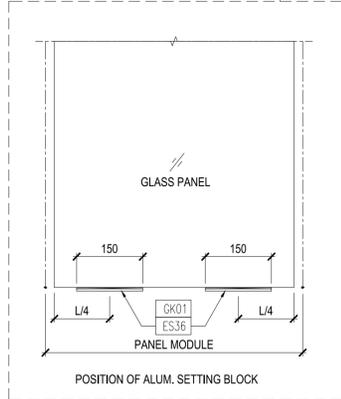
EXTERNAL



DETAIL 02  
SCALE: 1:3



DETAIL 03  
SCALE: 1:3



Notes:

Rev	Date	By	Description
4	19-12-2023	KT	FOR PMU AS BUILT
3	05-12-2023	KT	FOR PMU AS BUILT
2	19-10-2023	TH	FOR CONSTRUCTION
1	18-10-2023	TH	FOR CONSTRUCTION

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Issue Status  
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Project  
**LORNE STREET**  
66-72 Lorne Street, Auckland City  
Project No. AK-17023

Architect  
**ashtonmitchell**  
<https://www.ashtonmitchell.com>

Main Contractor  
**ICON**  
A KAJIMA COMPANY  
<https://icon.co>

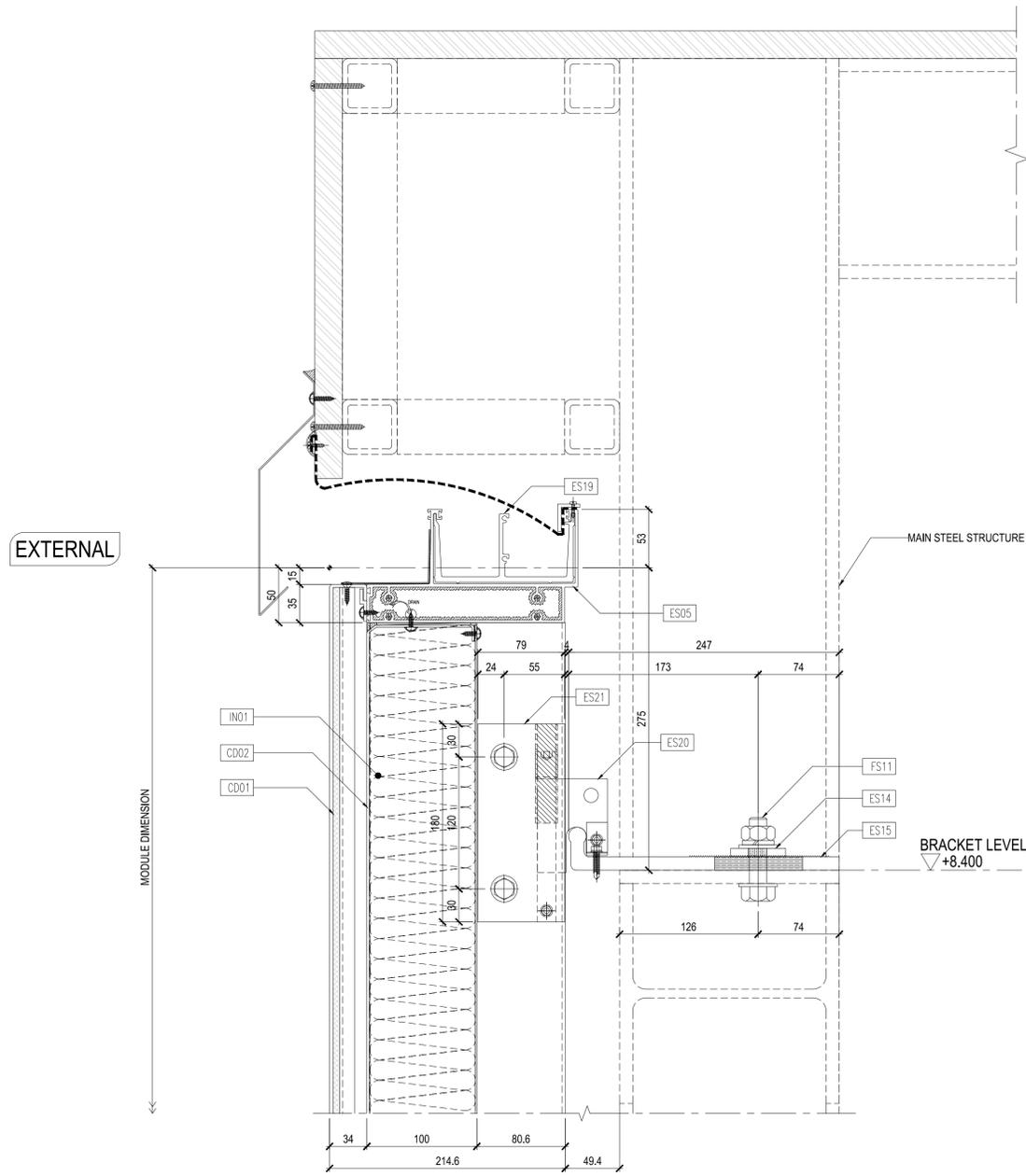
Client  
**UniLodge | Cedar Pacific**  
**Cedar Pacific**  
<https://www.cedpac.com>

Drawing Title  
**TOWER CURTAIN WALL  
VERTICAL DETAIL**

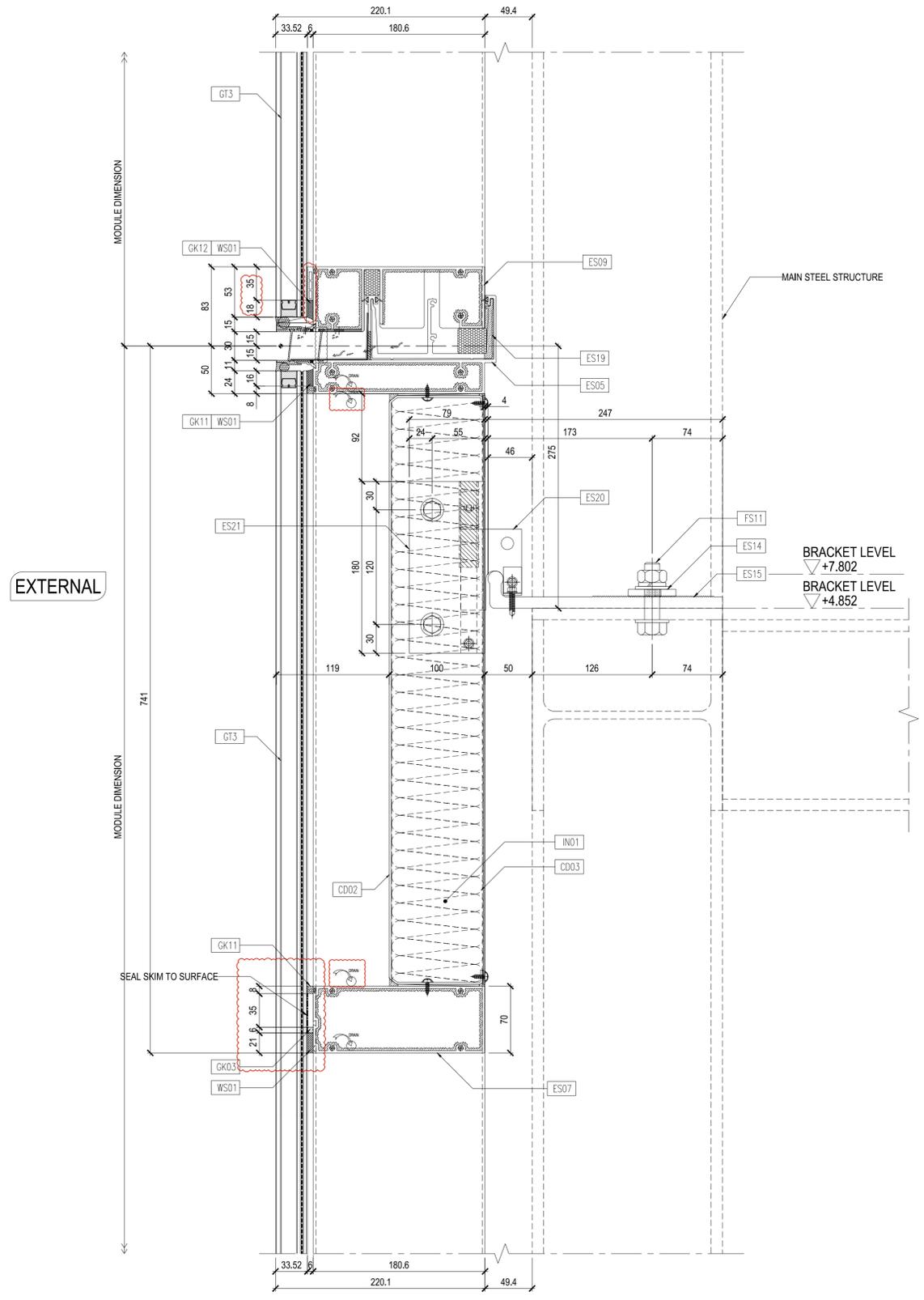
**Inhabit** Inhabit New Zealand  
<https://inhabitgroup.com/project-region/new-zealand>

Drawn	Reviewed	Approved	Date	Scale at A1
TH	LT	CV	19-12-2023	AS SHOWN

Drawing No. AK-17023-FC-5202  
Rev. 4



DETAIL 01  
SCALE- 1:3



DETAIL 02  
SCALE- 1:3

Notes:

Rev	Date	By	Description
4	19-12-2023	KT	FOR PMU AS BUILT
3	05-12-2023	KT	FOR PMU AS BUILT
2	19-10-2023	TH	FOR CONSTRUCTION
1	18-10-2023	TH	FOR CONSTRUCTION

Issue Status  
FOR CONSTRUCTION

Project  
**LORNE STREET**  
66-72 Lorne Street, Auckland City  
Project No. AK-17023

Architect  
**ashtonmitchell**  
<https://www.ashtonmitchell.com>

Main Contractor  
**ICON**  
A KAJIMA COMPANY  
<https://icon.co>

Client  
UniLodge | Cedar Pacific  
**Cedar Pacific**  
<https://www.cedpac.com>

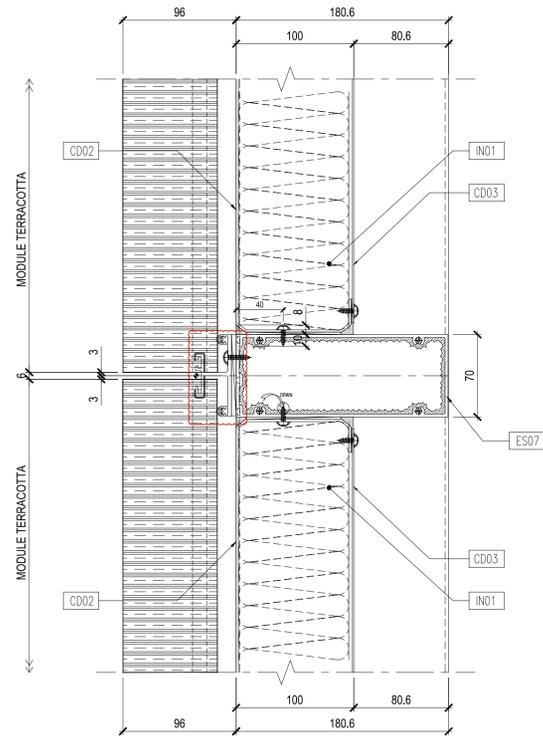
Drawing Title  
TOWER CURTAIN WALL  
VERTICAL DETAIL

**Inhabit** Inhabit New Zealand  
<https://inhabitgroup.com/project-region/new-zealand>

Drawn	Reviewed	Approved	Date	Scale at A1
TH	LT	CV	19-12-2023	AS SHOWN

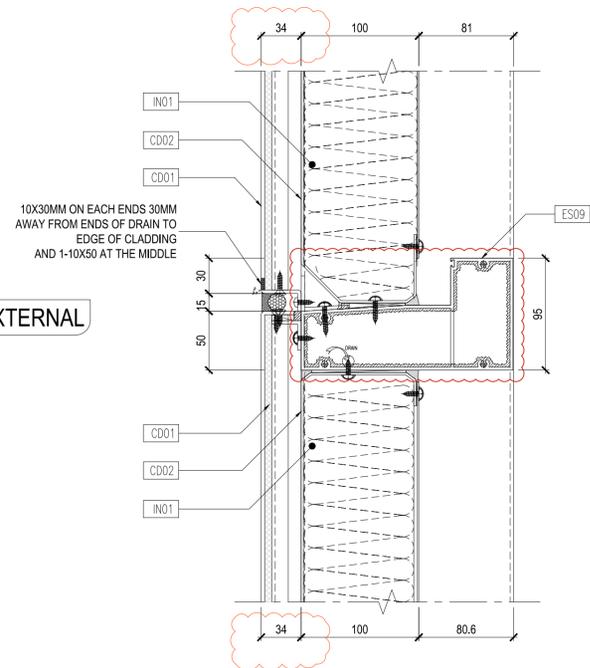
Drawing No. AK-17023-FC-5203 Rev. 4

EXTERNAL



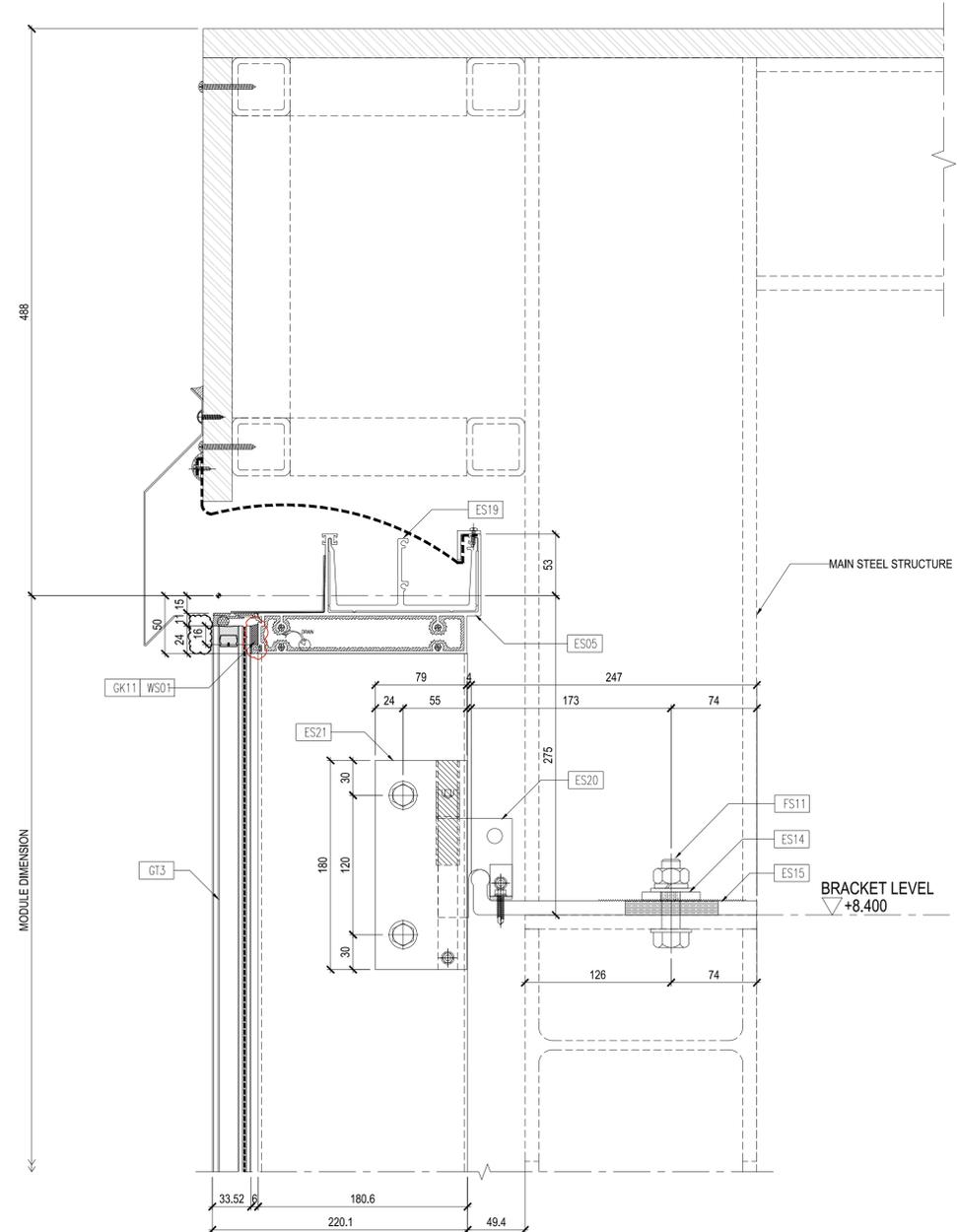
DETAIL 01 SCALE- 1:3

EXTERNAL



DETAIL 03 SCALE- 1:3

EXTERNAL



DETAIL 02 SCALE- 1:3

Notes:

Rev	Date	By	Description
3	05-12-2023	KT	FOR PMU AS BUILT
2	19-10-2023	TH	FOR CONSTRUCTION
1	18-10-2023	TH	FOR CONSTRUCTION

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Issue Status

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Project

**LORNE STREET**  
66-72 Lorne Street, Auckland City

Project No. AK-17023

Architect

**ashtonmitchell**  
<https://www.ashtonmitchell.com>

Main Contractor

**ICON**  
A KAJIMA COMPANY  
<https://icon.co>

Client

UniLodge | Cedar Pacific

**Cedar Pacific**  
<https://www.cedpac.com>

Drawing Title

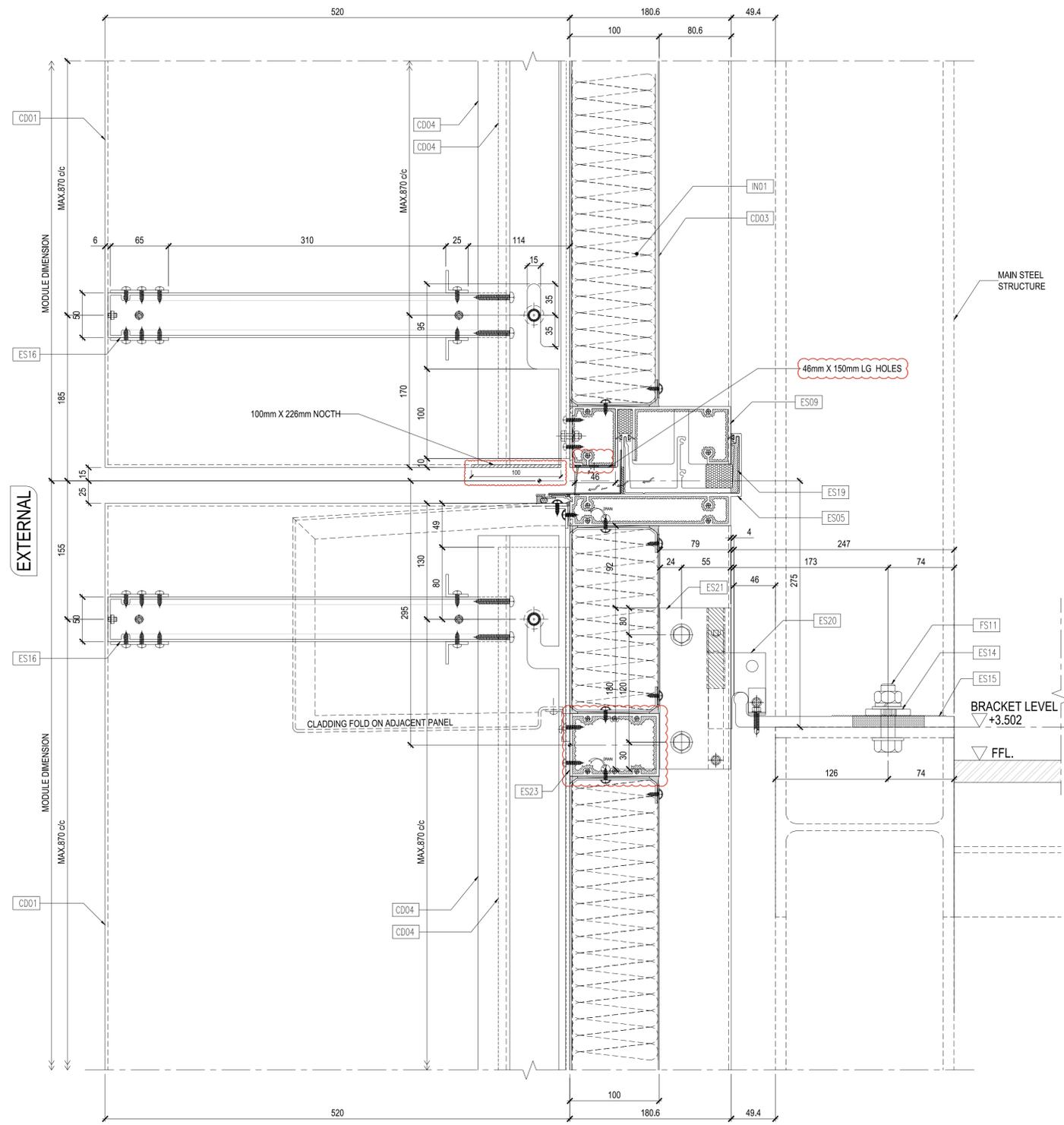
TOWER CURTAIN WALL  
VERTICAL DETAIL

**Inhabit** Inhabit New Zealand  
<https://inhabitgroup.com/project-region/new-zealand/>

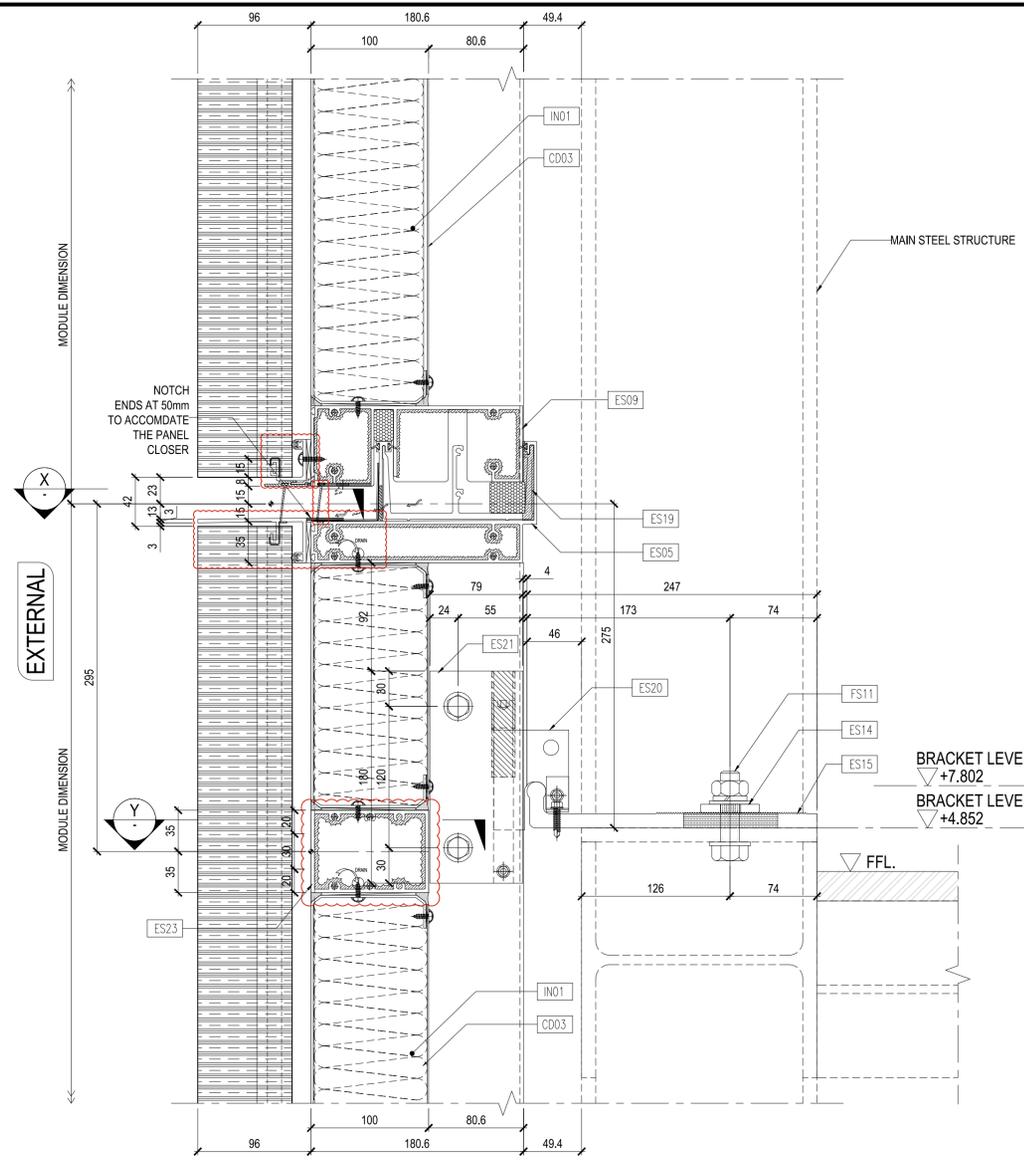
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TH	LT	CV	05-12-2023	AS SHOWN

Drawing No.	Rev.
AK-17023-FC-5204	3

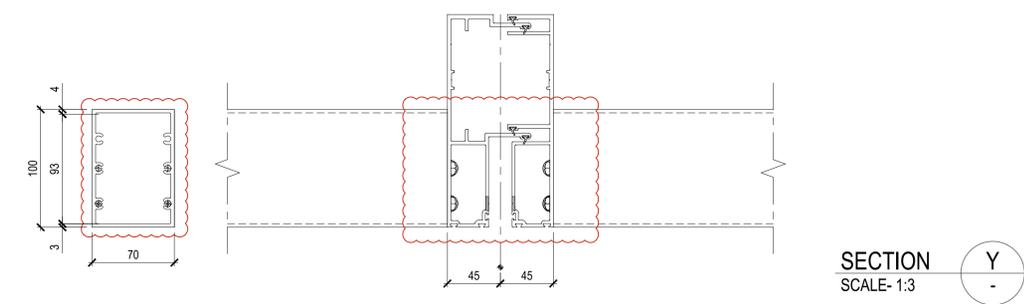




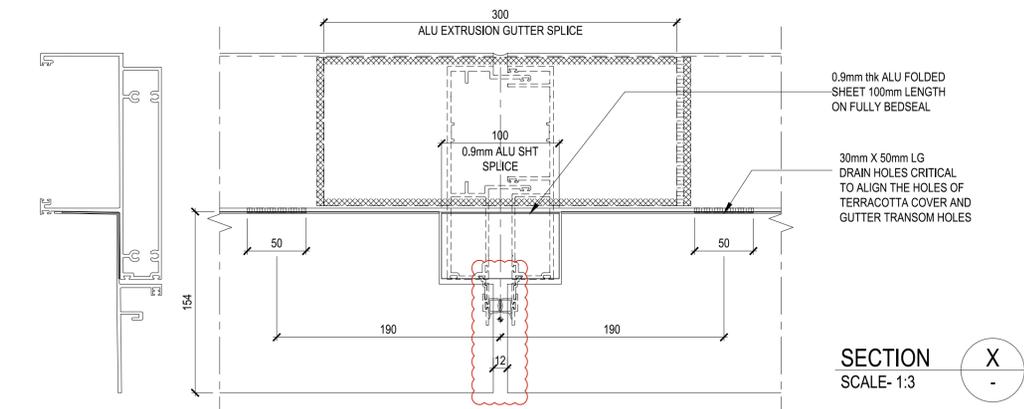
DETAIL 01  
SCALE- 1:3



DETAIL 02  
SCALE- 1:3



SECTION Y-Y  
SCALE- 1:3



SECTION X-X  
SCALE- 1:3

Notes:

Rev	Date	By	Description
4	19-12-2023	KT	FOR PMU AS BUILT
3	05-12-2023	KT	FOR PMU AS BUILT
2	19-10-2023	TH	FOR CONSTRUCTION
1	18-10-2023	TH	FOR CONSTRUCTION

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Issue Status  
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Project  
**LORNE STREET**  
66-72 Lorne Street, Auckland City  
Project No. AK-17023

Architect  
**ashtonmitchell**  
<https://www.ashtonmitchell.com>

Main Contractor  
**ICON**  
A KAJIMA COMPANY  
<https://icon.co>

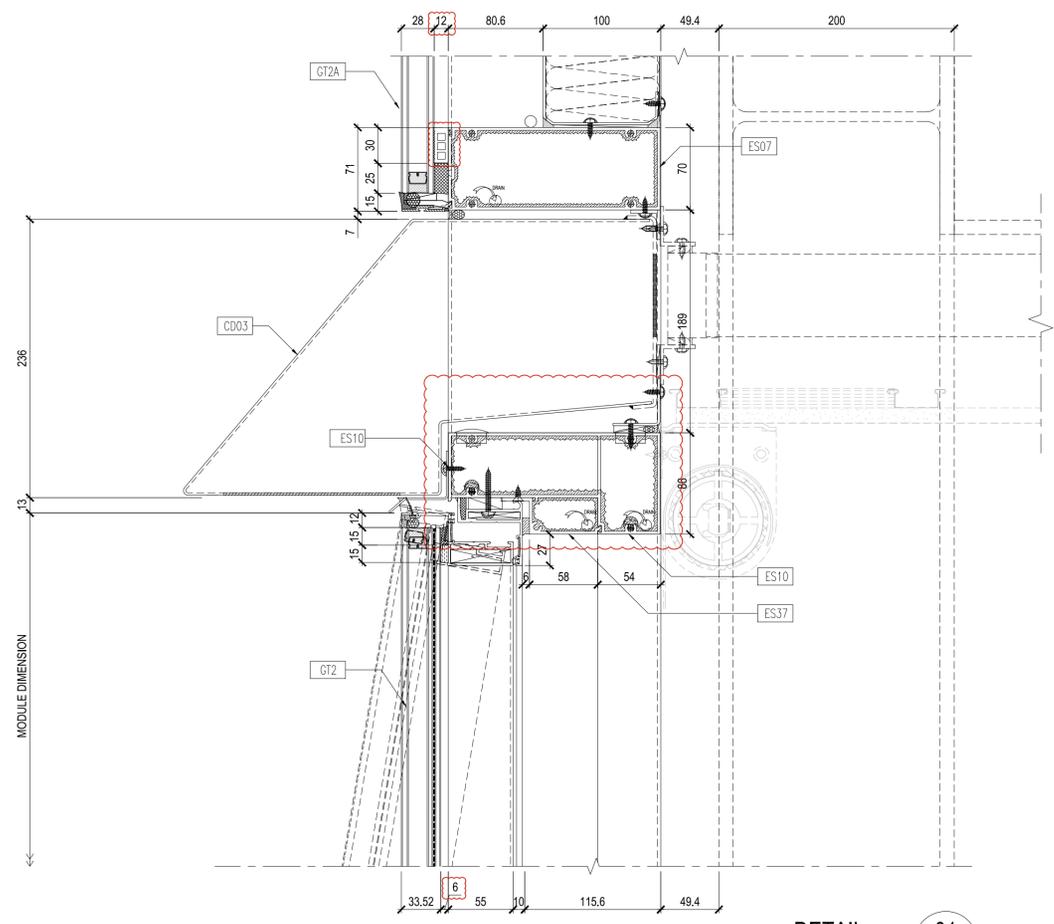
Client  
**UniLodge | Cedar Pacific**  
**Cedar Pacific**  
<https://www.cedpac.com>

Drawing Title  
**TOWER CURTAIN WALL  
VERTICAL DETAIL**

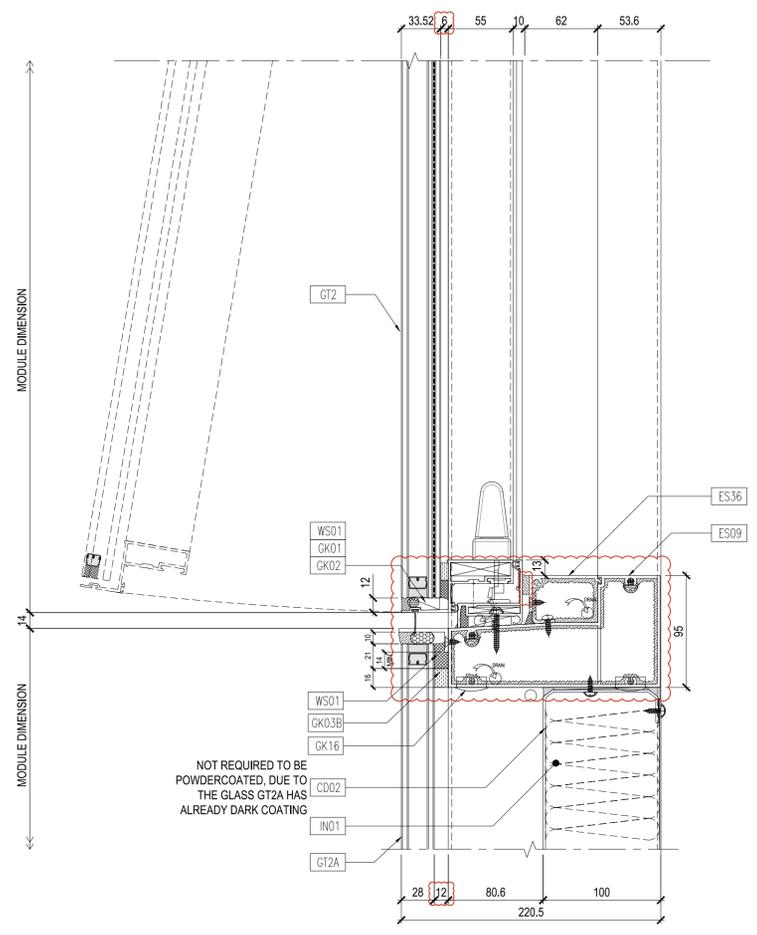
**Inhabit** Inhabit New Zealand  
<https://inhabitgroup.com/project-region/new-zealand>

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TH	LT	CV	19-12-2023	AS SHOWN

Drawing No. AK-17023-FC-5206 Rev. 4

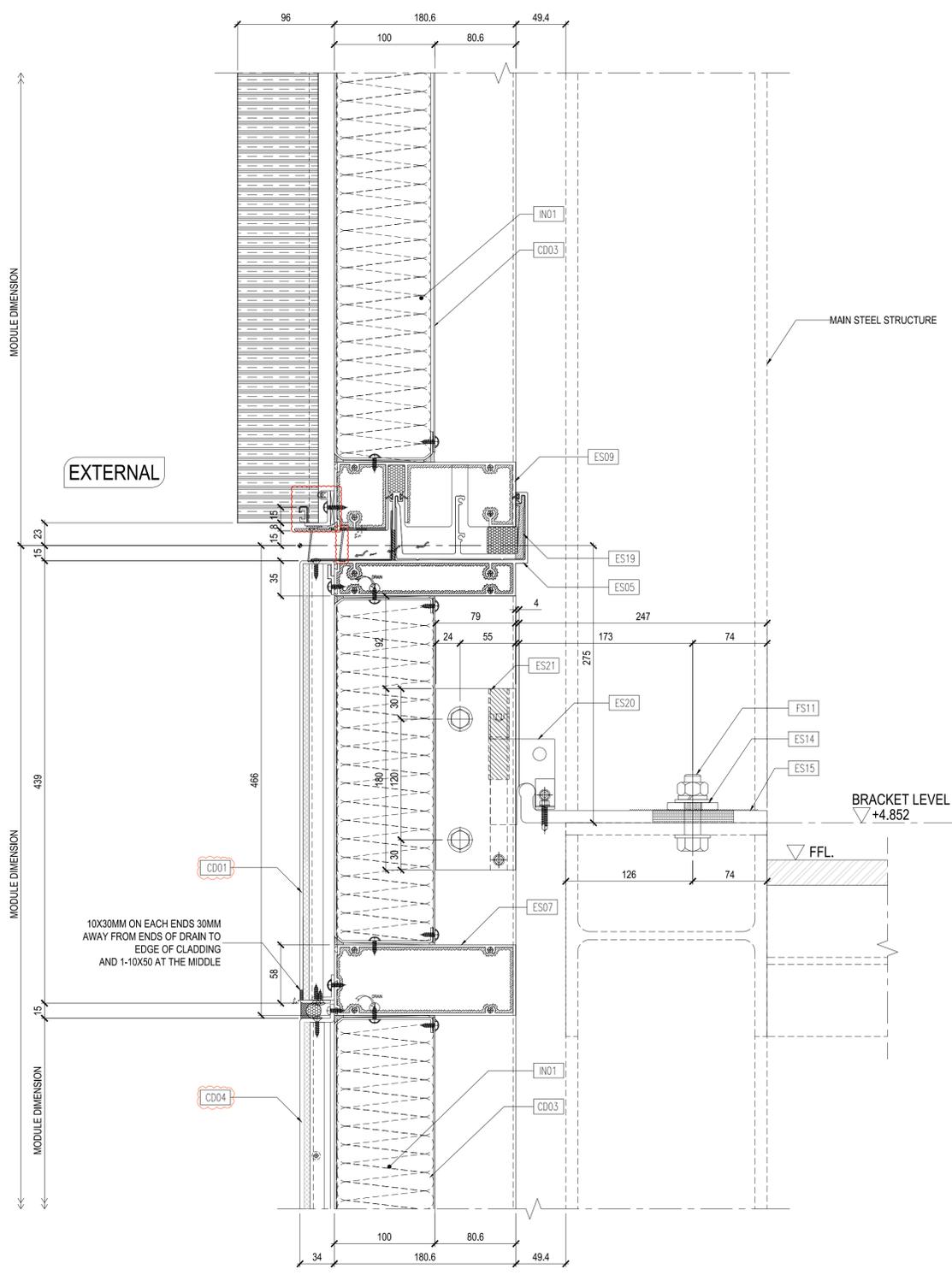


DETAIL 01  
SCALE- 1:3



DETAIL 02  
SCALE- 1:3

NOT REQUIRED TO BE POWDERCOATED, DUE TO THE GLASS GT2A HAS ALREADY DARK COATING



DETAIL 03  
SCALE- 1:3

Notes:

Rev	Date	By	Description
5	19-12-2023	KT	FOR PMU AS BUILT
4	05-12-2023	KT	FOR PMU AS BUILT
3	23-10-2023	TH	FOR CONSTRUCTION
2	19-10-2023	TH	FOR CONSTRUCTION
1	18-10-2023	TH	FOR CONSTRUCTION

Issue Status

FOR CONSTRUCTION

Project  
**LORNE STREET**  
66-72 Lorne Street, Auckland City  
Project No. AK-17023

Architect  
**ashtonmitchell**  
<https://www.ashtonmitchell.com>

Main Contractor  
**ICON**  
A KAJIMA COMPANY  
<https://icon.co>

Client  
**UniLodge | Cedar Pacific**  
**Cedar Pacific**  
<https://www.cedpac.com>

Drawing Title  
TOWER CURTAIN WALL  
VERTICAL DETAIL

**Inhabit** Inhabit New Zealand  
<https://inhabitgroup.com/project-region/new-zealand/>

Drawn	Reviewed	Approved	Date	Scale at A1
TH	LT	CV	19-12-2023	AS SHOWN

Drawing No. AK-17023-FC-5207 Rev. 5





