

## Balustrade load test certificate for: Alideck Ltd. Horizontal Line Load Test

Job ref:	BT/ 2755/R3
Barrier ref:	AliRail Plate Fix
Location:	n/a

### SERVICE LOAD TEST

Pressure (psi)	U.D.L. (kN/m)	Load/ram (kN)	Deflections (mm)			
Pot 2						
0	0	0	0.00			
70	0.15	0.14	0.98			
116	0.30	0.28	3.69			
161	0.44	0.43	6.44			
206	0.59	0.57	9.70			
252	0.74	0.71	12.67			
0	0	0	0.81			
Maximum deflection (mm)			12.67			
Permanent deflection (mm)			0.81			
Recovery (%)			93.6			

### BARRIER AND TEST DETAILS

Test on entire length?	Yes	Design service load	0.74	kN/m
Barrier length loaded	4.57 m	Proof factor	1	
Height of barrier	1.05 m	No. of rams	5	
Initials of tester(s)	TK	Proof test load	0.74	kN/m
Date tested	18/04/2023			
Gauge location	Pot 2 Opposite direction to load application. Midspan			Gauge position

### PROOF LOAD TEST

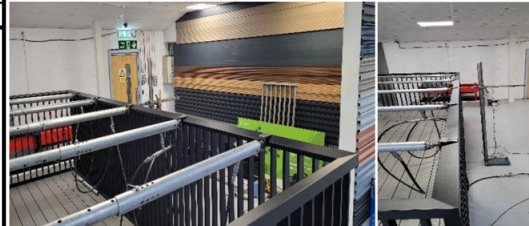
Pressure (psi)	U.D.L. (kN/m)	Load (kN)	Pot 2			
0	0	0	0.00			
70	0.15	0.14	1.02			
116	0.30	0.28	3.80			
161	0.44	0.43	6.05			
206	0.59	0.57	8.85			
252	0.74	0.71	11.51			
Load maintained for five minutes						
252	0.74	0.71	13.30			
0	0	0	0.15			
Maximum deflection (mm)			13.30			
Permanent deflection (mm)			0.15			
Recovery (%)			98.9			

### OBSERVATIONS PRIOR TO TESTS

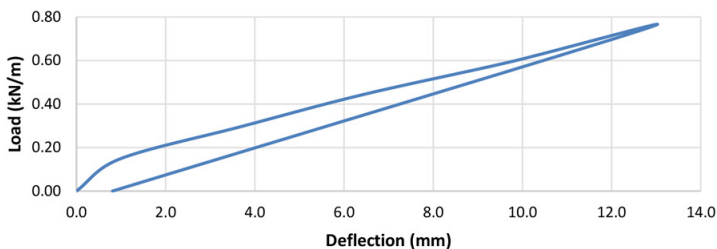
No defects observed.

### OBSERVATIONS DURING & AFTER TESTS

No further defects found.



Service Load Test - Load Deflection Plot



Allowable deflection: 25.00 mm

Maximum deflection: 12.67 mm

TEST CONCLUSION: Pass

Tested in accordance with the load - deflection requirements of BS 6180:2011 'Barriers in and about buildings - Code of practice.'

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Barrier ref:	AliRail Plate Fix
Location:	n/a

### SERVICE LOAD TEST

Pressure (psi)	U.D.L. (kN/m)	Load/ram (kN)	Deflections (mm)				
			Pot 1	Pot 2			
0	0	0	0.00	0.00			
62	0.15	0.12	0.11	0.12			
99	0.30	0.23	0.50	0.53			
136	0.44	0.35	2.35	2.41			
173	0.59	0.46	4.74	4.90			
210	0.74	0.58	7.48	7.57			
0	0	0	0.36	0.39			
Maximum deflection (mm)			7.48	7.57			
Permanent deflection (mm)			0.36	0.39			
Recovery (%)			95.2	94.8			

### BARRIER AND TEST DETAILS

Test on entire length?	Yes	Design service load	0.74	kN/m
Barrier length loaded	1.49 m	Proof factor	1	
Height of barrier	1.05 m	No. of rams	2	
Initials of tester(s)	TK	Proof test load	0.74	kN/m
Date tested	18/04/2023			
Gauge position				
Gauge location	Pot 1	Opposite direction to load application. LHS barrier endspan		
Gauge location	Pot 2	Opposite direction to load application. RHS barrier endspan		

### OBSERVATIONS PRIOR TO TESTS

No defects observed.

### OBSERVATIONS DURING & AFTER TESTS

No further defects found.

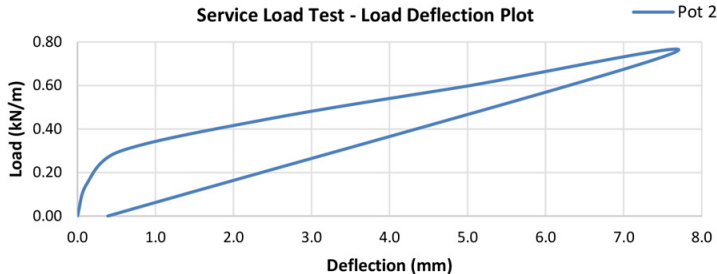


Allowable deflection: 25.00 mm      Maximum deflection: 7.57 mm  
**TEST CONCLUSION: Pass**  
 Tested in accordance with the load - deflection requirements of BS 6180:2011 'Barriers in and about buildings - Code of practice.'

### PROOF LOAD TEST

(psi)	(kN/m)	(kN)	Deflections (mm)	
			Pot 1	Pot 2
0	0	0	0.00	0.00
62	0.15	0.12	0.14	0.11
99	0.30	0.23	1.80	1.88
136	0.44	0.35	3.49	3.59
173	0.59	0.46	5.53	5.67
210	0.74	0.58	7.95	8.08
Load maintained for five minutes				
210	0.74	0.58	8.26	8.41
0	0	0	0.18	0.18
Maximum deflection (mm)			8.26	8.41
Permanent deflection (mm)			0.18	0.18
Recovery (%)			97.8	97.9

Service Load Test - Load Deflection Plot



## Balustrade load test certificate for: Alideck Ltd. Infill Point Load Test

Job ref:	BT/ 2755/R3
Barrier ref:	AliRail Plate Fix
Location:	n/a

### SERVICE LOAD TEST

Pressure (psi)	Point load (kN)	Load/ram (kN)	Deflections (mm)			
0	0	0	Pot 2			
57	0.10	0.10	0.22			
89	0.20	0.20	0.60			
121	0.30	0.30	1.06			
153	0.40	0.40	1.48			
185	0.50	0.50	1.89			
0	0	0	0.21			
Maximum deflection (mm)			1.89			
Permanent deflection (mm)			0.21			
Recovery (%)			89.1			

### BARRIER AND TEST DETAILS

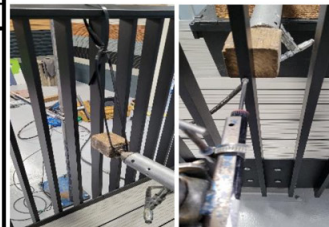
Test on entire length?	Yes	Design service load	0.50	kN
Infill length loaded	1.05 m	Proof factor	1	
Infill width loaded	0.015 m	No. of rams	1	
Initials of tester(s)	TK	Proof test load	0.50	kN
Date tested	18/04/2023			
Gauge location	Pot 2 Opposite direction to load application. Midspan			
		Gauge position		

### OBSERVATIONS PRIOR TO TESTS

Tested spindle was located at the midspan of 4.57m length barrier.  
No defects observed.

### OBSERVATIONS DURING & AFTER TESTS

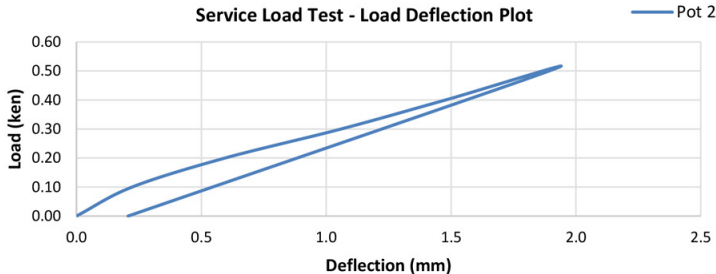
No further defects found.



### PROOF LOAD TEST

Pressure (psi)	Point load (kN)	Load/ram (kN)	Deflections (mm)			
0	0	0	Pot 2			
57	0.10	0.10	0.30			
89	0.20	0.20	0.85			
121	0.30	0.30	0.94			
153	0.40	0.40	1.22			
185	0.50	0.50	1.67			
Load maintained for five minutes						
185	0.50	0.50	1.80			
0	0	0	0.11			
Maximum deflection (mm)			1.80			
Permanent deflection (mm)			0.11			
Recovery (%)			93.7			

Service Load Test - Load Deflection Plot



Allowable deflection (smaller of L/65 or 25mm): 16.15 mm Maximum deflection: 1.89 mm

TEST CONCLUSION: Pass

Tested in accordance with the load - deflection requirements of BS 6180:2011 'Barriers in and about buildings - Code of practice.'