

Balustrade load test certificate for: Alideck Ltd. Uniformly Distributed Line Load Test

Job ref: BT/ 2755 R5
Barrier ref: AliRail Insight Glass System - 6m x 1.2m
Location: n/a

SERVICE LOAD TEST

Pressure (psi)	U.D.L. (kN/m)	Load/ram (kN)	Deflections (mm)			
			Pot 2	Pot 3	Pot 2	Pot 3
0	0	0	0.00	0.00	0.00	0.00
79	0.15	0.17	2.74	2.58	2.62	2.39
134	0.30	0.34	6.76	6.27	6.12	5.65
188	0.44	0.51	11.85	11.12	10.56	9.84
242	0.59	0.68	16.83	16.01	15.19	14.37
297	0.74	0.85	22.33	21.40	20.26	19.32
0	0	0	1.36	1.33	0.43	0.38
Maximum deflection (mm)			22.33	21.40	20.26	19.32
Permanent deflection (mm)			1.36	1.33	0.43	0.38
Recovery (%)			93.9	93.8	97.9	98.0

PROOF LOAD TEST

(psi)	(kN/m)	(kN)	Pot 2	Pot 3		
			0	0	0	0.00
79	0.15	0.17	3.19	2.98		
134	0.30	0.34	6.73	6.25		
188	0.44	0.51	11.18	10.51		
242	0.59	0.68	15.34	14.58		
297	0.74	0.85	19.87	19.01		
Load maintained for five minutes						
297	0.74	0.85	20.83	19.95		
0	0	0	0.54	0.54		
Maximum deflection (mm)			20.83	19.95		
Permanent deflection (mm)			0.54	0.54		
Recovery (%)			97.4	97.3		

BARRIER AND TEST DETAILS

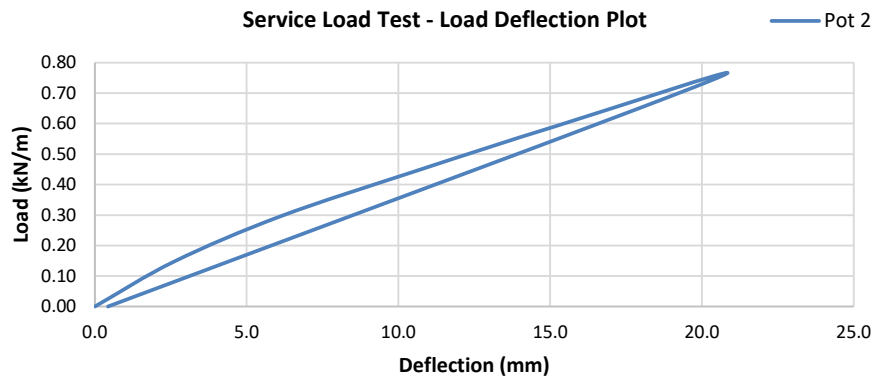
Test on entire length?	Yes	Initials of tester(s)	TK	Date tested	24/05/2024
Type of occupancy	<i>Domestic and residential activities</i>				
Specific use	<i>(ii) Other residential, i.e. houses of multiple occupancy and balconies, including Juliette balconies and edges of roofs in single family dwellings</i>				
Barrier length loaded	5.74 m	Design service load	0.74 kN/m		
Barrier height loaded	1.10 m	Proof factor	1		
		No. of rams	5		
		Proof test load	0.74 kN/m		
		Load Direction	Gauge Position		
Gauge location	Pot 2	In direction of load application.	Midspan		
Gauge location	Pot 3	In direction of load application.	Midspan Post		

OBSERVATIONS PRIOR TO TESTS

The barrier was installed on a concrete floor. An excessive amount of resin was between the nuts and baseplate of the posts (photo below).

OBSERVATIONS DURING & AFTER TESTS

The service load test cycle was conducted twice. After the first cycle, all the fixings were tightened. The resin between the nuts and baseplates was compressed and braking, possibly affecting the deflection readings. No further defects were found.



Allowable deflection: 25 mm Maximum deflection: 20.26 mm
TEST CONCLUSION: Pass
 Tested in accordance with the load - deflection requirements of BS 6180:2011 'Barriers in and about buildings - Code of practice.'

Balustrade load test certificate for: Alideck Ltd. Uniformly Distributed Line Load Test

Job ref: BT/ 2755 R5
Barrier ref: AlIRail Insight Glass System - 6m x 1.2m
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				
76	0.15	0.16	1.02				
126	0.30	0.32	2.07				
177	0.44	0.48	2.98				
228	0.59	0.63	4.29				
278	0.74	0.79	5.65				
0	0	0	0.31				
Maximum deflection (mm)			5.65				
Permanent deflection (mm)			0.31				
Recovery (%)			94.4				

PROOF LOAD TEST

(psi)	(kN/m)	(kN)	Deflections (mm)				
			Pot 2				
0	0	0	0.00				
76	0.15	0.16	1.29				
126	0.30	0.32	1.69				
177	0.44	0.48	2.75				
228	0.59	0.63	4.18				
278	0.74	0.79	5.17				
Load maintained for five minutes							
278	0.74	0.79	5.79				
0	0	0	0.22				
Maximum deflection (mm)			5.79				
Permanent deflection (mm)			0.22				
Recovery (%)			96.2				

BARRIER AND TEST DETAILS

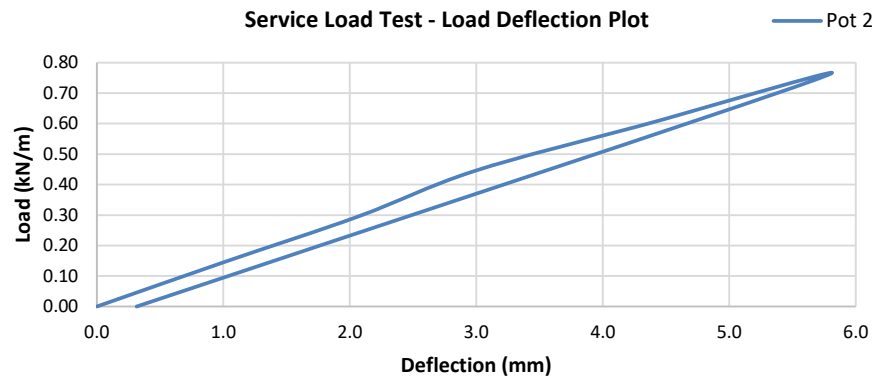
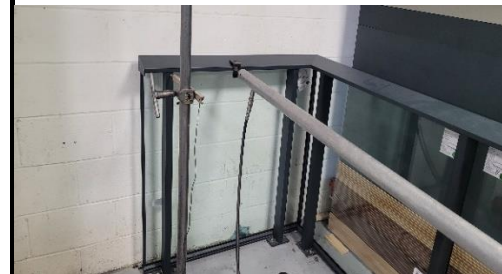
Test on entire length?	Yes	Initials of tester(s)	TK	Date tested	24/05/2024
Type of occupancy	<i>Domestic and residential activities</i>				
Specific use	<i>(ii) Other residential, i.e. houses of multiple occupancy and balconies, including Juliette balconies and edges of roofs in single family dwellings</i>				
Barrier length loaded	1.07 m	Design service load	0.74 kN/m		
Barrier height loaded	1.10 m	Proof factor	1		
		No. of rams	1		
		Proof test load	0.74 kN/m		
		Load Direction			Gauge Position
Gauge location	Pot 2	In direction of load application.			Endspan

OBSERVATIONS PRIOR TO TESTS

The barrier was installed on a concrete floor. An excessive amount of resin was between the nuts and baseplate of the posts (photo below).

OBSERVATIONS DURING & AFTER TESTS

No further defects were found.



Allowable deflection: 25 mm Maximum deflection: 5.65 mm
TEST CONCLUSION: Pass
 Tested in accordance with the load - deflection requirements of BS 6180:2011 'Barriers in and about buildings - Code of practice.'

Balustrade load test certificate for: Alideck Ltd. Uniformly Distributed Line Load Test

Job ref: BT/ 2755 R5
Barrier ref: AlIRail Insight Glass System - 6m x 1.2m
Location: n/a

SERVICE LOAD TEST

Pressure (psi)	U.D.L. (kN/m)	Load/ram (kN)	Deflections (mm)			
0	0	0	Pot 3			
76	0.15	0.16	0.00			
126	0.30	0.32	0.92			
177	0.44	0.48	1.82			
228	0.59	0.63	3.95			
278	0.74	0.79	5.18			
0	0	0	0.35			
Maximum deflection (mm)			5.18			
Permanent deflection (mm)			0.35			
Recovery (%)			93.3			

PROOF LOAD TEST

Pressure (psi)	U.D.L. (kN/m)	Load (kN)	Deflections (mm)			
0	0	0	Pot 3			
76	0.15	0.16	1.10			
126	0.30	0.32	1.42			
177	0.44	0.48	2.43			
228	0.59	0.63	3.78			
278	0.74	0.79	4.63			
Load maintained for five minutes						
278	0.74	0.79	5.12			
0	0	0	0.11			
Maximum deflection (mm)			5.12			
Permanent deflection (mm)			0.11			
Recovery (%)			97.9			

BARRIER AND TEST DETAILS

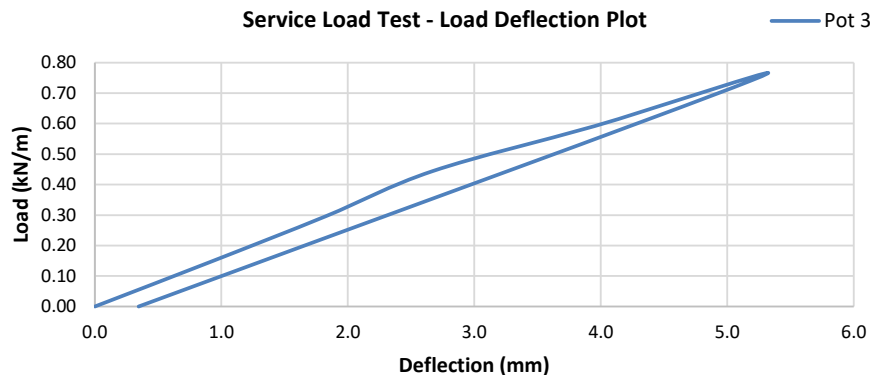
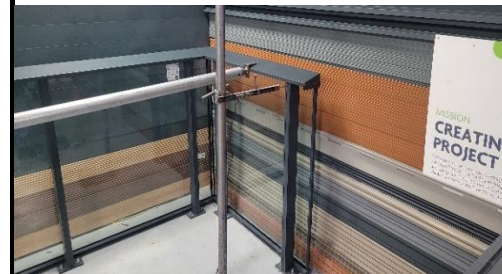
Test on entire length?	Yes	Initials of tester(s)	TK	Date tested	24/05/2024
Type of occupancy	<i>Domestic and residential activities</i>				
Specific use	<i>(ii) Other residential, i.e. houses of multiple occupancy and balconies, including Juliette balconies and edges of roofs in single family dwellings</i>				
Barrier length loaded	1.07 m	Design service load	0.74 kN/m		
Barrier height loaded	1.10 m	Proof factor	1		
		No. of rams	1		
		Proof test load	0.74 kN/m		
		Load Direction	Gauge Position		
Gauge location	Pot 3	In direction of load application.	Endspan		

OBSERVATIONS PRIOR TO TESTS

The barrier was installed on a concrete floor. An excessive amount of resin was between the nuts and baseplate of the posts (photo below).

OBSERVATIONS DURING & AFTER TESTS

No further defects were found.



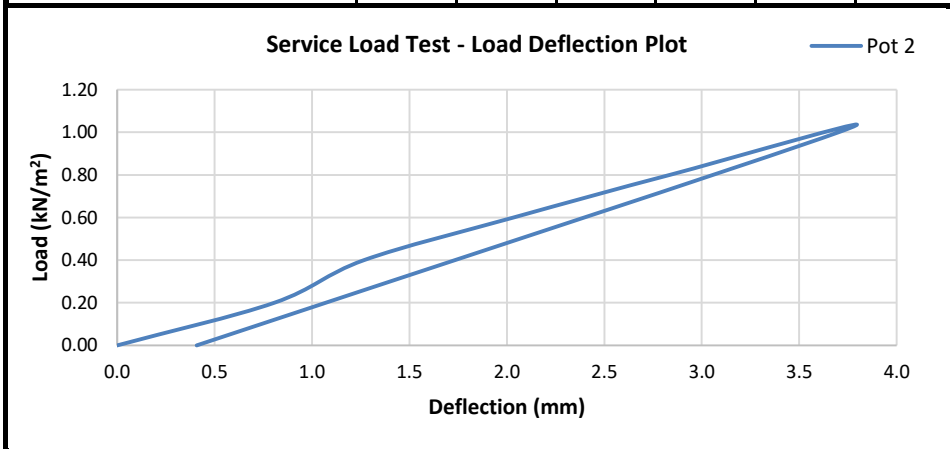
Allowable deflection: 25 mm Maximum deflection: 5.18 mm
TEST CONCLUSION: Pass
 Tested in accordance with the load - deflection requirements of BS 6180:2011 'Barriers in and about buildings - Code of practice.'

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

Job ref: BT/ 2755 R5
Barrier ref: AliRail Insight Glass System - 6m x 1.2m
Location: n/a

SERVICE LOAD TEST							
Pressure	U.D.L.	Load/ram	Deflections (mm)				
(psi)	(kN/m ²)	(kN)	Pot 2	Pot 3			
0	0	0	0.00	0.00			
101	0.20	0.24	0.81	0.62			
177	0.40	0.47	1.27	1.04			
253	0.60	0.71	2.03	1.66			
329	0.80	0.95	2.84	2.37			
404	1.00	1.19	3.70	2.92			
0	0	0	0.41	0.31			
Maximum deflection (mm)			3.70	2.92			
Permanent deflection (mm)			0.41	0.31			
Recovery (%)			89.0	89.3			

PROOF LOAD TEST							
(psi)	(kN/m ²)	(kN)	Pot 2	Pot 3			
0	0	0	0.00	0.00			
101	0.20	0.24	0.31	0.26			
177	0.40	0.47	0.78	0.69			
253	0.60	0.71	1.54	1.32			
329	0.80	0.95	2.34	1.95			
404	1.00	1.19	3.19	2.63			
Load maintained for five minutes							
404	1.00	1.19	3.81	2.80			
0	0	0	0.24	0.10			
Maximum deflection (mm)			3.81	2.80			
Permanent deflection (mm)			0.24	0.10			
Recovery (%)			93.7	96.3			



BARRIER AND TEST DETAILS			
Test on entire length?	Yes	Initials of tester(s)	TK
Date tested	24/05/2024		
Type of occupancy	Domestic and residential activities		
Specific use	<i>(i) All areas within or serving exclusively one single family dwelling including stairs, landings, etc. but excluding external balconies and edges of roofs</i>		
Type of Infill	Barrier with a glass infill panel.		
Infill length loaded	1.14 m	Design service load	1.00 kN/m ²
Infill height loaded	1.04 m	Proof factor	1
Infill area loaded	1.19 m ²	No. of rams	1
L Measurement	1.04 m	Proof test load	1.00 kN/m ²
Gauge location	Pot 2	Load Direction	In direction of load application.
Gauge location	Pot 3	Gauge Position	Midspan
			Midspan Post

OBSERVATIONS PRIOR TO TESTS

The barrier was installed on a concrete floor.

OBSERVATIONS DURING & AFTER TESTS

No further defects were found.

Allowable deflection (smaller of $L/65$ or 25mm): 16.00 mm Maximum deflection: 3.70 mm

TEST CONCLUSION: Pass

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

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

Job ref: BT/ 2755 R5
Barrier ref: AliRail Insight Glass System - 6m x 1.2m
Location: n/a

SERVICE LOAD TEST							
Pressure	Point Load	Load/ram	Deflections (mm)				
(psi)	(kN)	(kN)	Pot 2	Pot 3			
0	0	0	0.00	0.00			
57	0.10	0.10	0.24	0.12			
89	0.20	0.20	0.50	0.32			
121	0.30	0.30	0.89	0.61			
153	0.40	0.40	1.37	0.96			
185	0.50	0.50	2.01	1.38			
0	0.00	0	0.24	0.06			
Maximum deflection (mm)			2.01	1.38			
Permanent deflection (mm)			0.24	0.06			
Recovery (%)			87.9	95.4			

BARRIER AND TEST DETAILS			
Test on entire length?	Yes	Initials of tester(s)	TK Date tested 24/05/2024
Type of occupancy	Domestic and residential activities		
Specific use	(i) All areas within or serving exclusively one single family dwelling including stairs, landings, etc. but excluding external balconies and edges of roofs		
Type of Infill	Barrier with a glass infill panel.		
Infill length loaded	1.14 m	Design service load	0.50 kN
Infill height loaded	1.04 m	Proof factor	1
Infill area loaded	1.19 m ²	No. of rams	1
L Measurement	1.04 m	Proof test load	0.50 kN
Gauge location	Pot 2	Load Direction	In direction of load application. Gauge Position
Gauge location	Pot 3	Load Direction	In direction of load application. Midspan Post

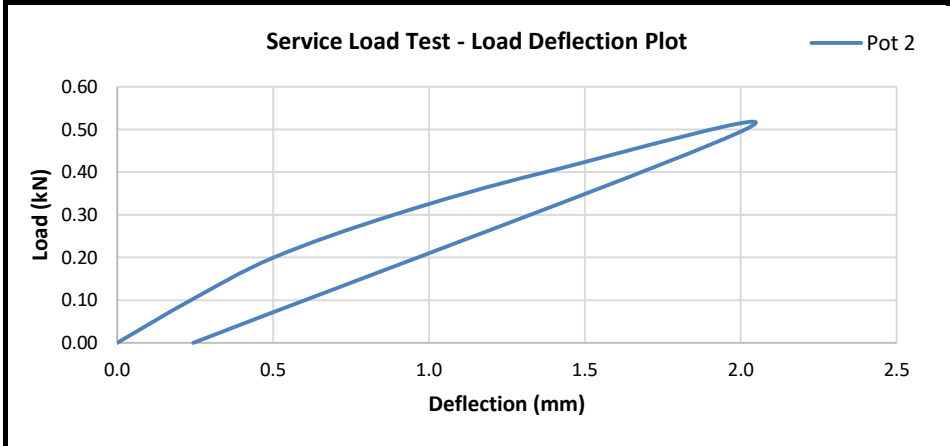
PROOF LOAD TEST							
Pressure	Point Load	Load/ram	Deflections (mm)				
(psi)	(kN)	(kN)	Pot 2	Pot 3			
0	0	0	0.00	0.00			
57	0.10	0.10	0.30	0.15			
89	0.20	0.20	0.60	0.64			
121	0.30	0.30	1.07	0.85			
153	0.40	0.40	1.29	0.91			
185	0.50	0.50	1.78	1.24			
Load maintained for five minutes							
185	0.50	0.50	2.44	1.48			
0	0	0	0.15	0.04			
Maximum deflection (mm)			2.44	1.48			
Permanent deflection (mm)			0.15	0.04			
Recovery (%)			94.0	97.2			

OBSERVATIONS PRIOR TO TESTS

The barrier was installed on a concrete floor.

OBSERVATIONS DURING & AFTER TESTS

No further defects were found.



Allowable deflection (smaller of $L/65$ or 25mm): 16.00 mm Maximum deflection: 2.01 mm

TEST CONCLUSION: Pass

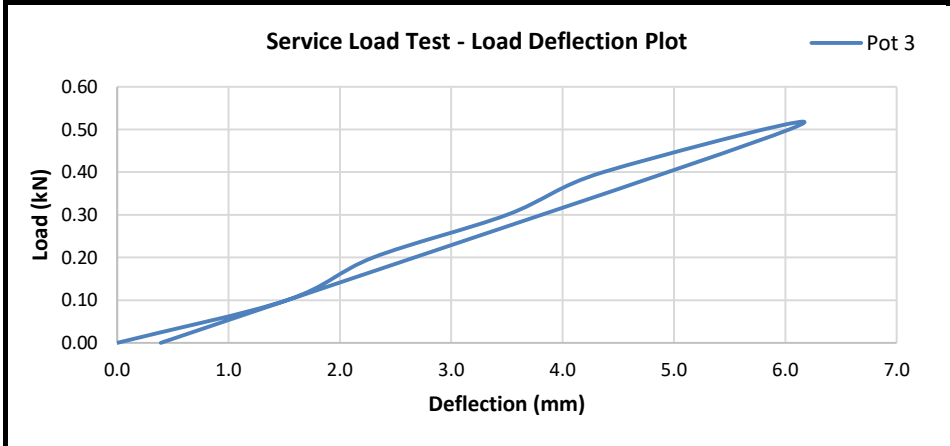
Tested in accordance with the load - deflection requirements of BS 6180:2011 'Barriers in and about buildings - Code of practice.'

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

Job ref: BT/ 2755 R5
Barrier ref: AliRail Insight Glass System - 6m x 1.2m
Location: n/a

SERVICE LOAD TEST			
Pressure	Point Load	Load/ram	Deflections (mm)
(psi)	(kN)	(kN)	Pot 3
0	0	0	0.00
57	0.10	0.10	1.52
89	0.20	0.20	2.30
121	0.30	0.30	3.50
153	0.40	0.40	4.36
185	0.50	0.50	6.03
0	0.00	0	0.39
Maximum deflection (mm)			6.03
Permanent deflection (mm)			0.39
Recovery (%)			93.5

PROOF LOAD TEST			
Pressure	Point Load	Load/ram	Deflections (mm)
(psi)	(kN)	(kN)	Pot 3
0	0	0	0.00
57	0.10	0.10	0.52
89	0.20	0.20	1.97
121	0.30	0.30	3.21
153	0.40	0.40	4.15
185	0.50	0.50	5.61
Load maintained for five minutes			
185	0.50	0.50	6.21
0	0	0	0.19
Maximum deflection (mm)			6.21
Permanent deflection (mm)			0.19
Recovery (%)			96.9



BARRIER AND TEST DETAILS			
Test on entire length?	Yes	Initials of tester(s)	TK
Date tested	24/05/2024		
Type of occupancy	Domestic and residential activities		
Specific use	(i) All areas within or serving exclusively one single family dwelling including stairs, landings, etc. but excluding external balconies and edges of roofs		
Type of Infill	Barrier with a glass infill panel.		
Infill length loaded	1.14 m	Design service load	0.50 kN
Infill height loaded	1.04 m	Proof factor	1
Infill area loaded	1.19 m ²	No. of rams	1
L Measurement	1.04 m	Proof test load	0.50 kN
Gauge location	Pot 3	Load Direction	Gauge Position
		In direction of load application.	Below point load

OBSERVATIONS PRIOR TO TESTS

The barrier was installed on a concrete floor.

OBSERVATIONS DURING & AFTER TESTS

No further defects were found.



Allowable deflection (smaller of $L/65$ or 25mm): 16.00 mm Maximum deflection: 6.03 mm

TEST CONCLUSION: Pass

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