i		D L A D E R E M E N T					Alid	test certificate for: eck Ltd. outed Line Load Test			Job ref: BT/ 2755 R5 Barrier ref: AliRail Insight Glass System - 6m x 1.2m Location: n/a			
SER	RVICE LOAD	TEST								BARRIE	R AND TEST DETAILS			
Pressure	U.D.L.	Load/ram			Deflectio	ons (mm)		Test on entire length?	Yes	Initia	als of tester(s) TK Date tested	24/05/2024		
(psi)	(kN/m)	(kN)	Pot 2	Pot 3	Pot 2	Pot 3								
0	0	0	0.00	0.00	0.00	0.00		Type of occupancy	Dom	estic and resider	ntial activities			
79	0.15	0.17	2.74	2.58	2.62	2.39		Specific use	(ii) O	ther residential,	i.e. houses of multiple occupancy and b	palconies, including		
134	0.30	0.34	6.76	6.27	6.12	5.65			Juliet	tte balconies and	d edges of roofs in single family dwelling	gs		
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		Barrier length loaded	5.74	m	Design service load	0.74 kN/m		
297	0.74	0.85	22.33	21.40	20.26	19.32		Barrier height loaded	1.10	m	Proof factor	1		
0	0	0	1.36	1.33	0.43	0.38					No. of rams	5		
Maxim	um deflectio	on (mm)	22.33	21.40	20.26	19.32					Proof test load	0.74 kN/m		
Permar	nent deflecti	on (mm)	1.36	1.33	0.43	0.38				Load	Direction	Gauge Position		
	Recovery (%	6)	93.9	93.8	97.9	98.0		Gauge location Pot 2		In direction o	f load application.	Midspan		
PR	OOF LOAD 1	rest				•		Gauge location Pot 3		In direction o	f load application.	Midspan Post		
(psi)	(kN/m)	(kN)	Pot 2	Pot 3										
0	0	0	0.00	0.00										
79	0.15	0.17	3.19	2.98						OBSERVAT	IONS PRIOR TO TESTS			
134	0.30	0.34	6.73	6.25				The barrier was installed on a	concre	te floor. An exce	essive amount of resin was between the	e nuts and baseplate of		
188	0.44	0.51	11.18	10.51				the posts (photo below).						
242	0.59	0.68	15.34	14.58										
297	0.74	0.85	19.87	19.01										
_	-			ned for five	e minutes	I								
297	0.74	0.85	20.83	19.95						OBSERVATION	S DURING & AFTER TESTS			
0	0	0	0.54	0.54				The service load test cycle wa	ıs condu	ucted twice. Afte	er the first cycle, all the fixings were tig	htened. The resin		
Maxim	um deflectio	on (mm)	20.83	19.95				between the nuts and basepl	ates wa	s compressed ar	nd braking, possibly affecting the deflect	ction readings. No further		
	nent deflecti	\ <i>\</i>	0.54	0.54	-			defects were found.						
	Recovery (%	. ,	97.4	97.3										
Service Load Test - Load Deflection Plot Pot 2 0.80 0.70 0.60 0.50 0.50 0.30 0.20 0.10 0.10									He HARRY					
0.00 0.	.0	5.0	10.0 De	eflection (n	15.0 າ m)	20.0	25.0	TEST CONCLUSION:	25 mm Pass e load -	deflection requ	Maximum deflection: irements of BS 6180:2011 'Barriers in	20.26 mm and about		

i		DLADE EMENT				Alid	test certificate for: eck Ltd. outed Line Load Test			Job ref: BT/ 2755 R5 Barrier ref: AliRail Insight Glass System - 6m x 1.2m Location: n/a			
SER	VICE LOAD	TEST							BARRIE	ER AND TEST DETAILS			
Pressure	U.D.L.	Load/ram		De	flections (mm)		Test on entire length?	Yes	Init	ials of tester(s) TK Date tester	d 24/05/2024		
(psi)	(kN/m)	(kN)	Pot 2										
0	0	0	0.00				Type of occupancy			ential activities			
76	0.15	0.16	1.02				Specific use			l, i.e. houses of multiple occupancy and	-		
126	0.30	0.32	2.07					Juliet	te balconies ar	nd edges of roofs in single family dwellin	ngs		
177	0.44	0.48	2.98										
228	0.59	0.63	4.29				Barrier length loaded	1.07	m	Design service load	0.74 kN/m		
278	0.74	0.79	5.65				Barrier height loaded	1.10	m	Proof factor	1		
0	0	0	0.31							No. of rams	1		
Maxim	um deflectio	on (mm)	5.65]			Proof test load	0.74 kN/m		
Permar	nent deflecti	on (mm)	0.31]		Loa	d Direction	Gauge Position		
	Recovery (%	5)	94.4				Gauge location Pot 2		In direction	of load application.	Endspan		
PR	OOF LOAD 1	EST											
(psi)	(kN/m)	(kN)	Pot 2										
0	0	0	0.00										
76	0.15	0.16	1.29						OBSERVA	TIONS PRIOR TO TESTS			
126	0.30	0.32	1.69				The barrier was installed on a	concret	e floor. An exc	cessive amount of resin was between th	e nuts and baseplate of		
177	0.44	0.48	2.75				the posts (photo below).						
228	0.59	0.63	4.18										
278	0.74	0.79	5.17										
		Lo	ad maintair	ned for five min	utes	•							
278	0.74	0.79	5.79						OBSERVATIO	NS DURING & AFTER TESTS			
0	0	0	0.22				No further defects were found	d.					
Maxim	um deflectio	on (mm)	5.79										
Permar	nent deflecti	on (mm)	0.22										
	Recovery (%		96.2				1						
0.80 0.70 0.60 0.50 0.40 0.30 0.20 0.10 0.00		Service	Load Test	- Load Deflect	ion Plot	Pot 2	Allowable deflection: 2	S mm		Maximum deflection:	5.65 mm		
0.00	.0	1.0	2.0	3.0	4.0 5.0	6.0	TEST CONCLUSION: Pass						
			De	flection (mm)				e load -	deflection req	uirements of BS 6180:2011 'Barriers in	and about		
							buildings - Code of practice.'						

i		DLADE EEMENT					Alid	test certificate for: eck Ltd. outed Line Load Test			Job ref: BT/ 2755 R5 Barrier ref: AliRail Insight Glass System - 6m x 1.2m Location: n/a		
SER	VICE LOAD	TEST								BARRIE	ER AND TEST DETAILS		
Pressure	U.D.L.	Load/ram			Deflectio	ons (mm)		Test on entire length?	Yes	Initi	ials of tester(s) TK Date tester	d 24/05/2024	
(psi)	(kN/m)	(kN)	Pot 3										
0	0	0	0.00					Type of occupancy	Dome	estic and reside	ential activities		
76	0.15	0.16	0.92					Specific use			l, i.e. houses of multiple occupancy and	· -	
126	0.30	0.32	1.82						Juliet	te balconies an	nd edges of roofs in single family dwellin	ngs	
177	0.44	0.48	2.67										
228	0.59	0.63	3.95					Barrier length loaded	1.07	m	Design service load	0.74 kN/m	
278	0.74	0.79	5.18					Barrier height loaded	1.10	m	Proof factor	1	
0	0	0	0.35								No. of rams	1	
Maxim	um deflectio	on (mm)	5.18]			Proof test load	0.74 kN/m	
Permar	nent deflecti	on (mm)	0.35					1		Loa	d Direction	Gauge Position	
	Recovery (%	5)	93.3					Gauge location Pot 3		In direction of	of load application.	Endspan	
PR	OOF LOAD 1	EST					-						
(psi)	(kN/m)	(kN)	Pot 3										
0	0	0	0.00										
76	0.15	0.16	1.10							OBSERVA	TIONS PRIOR TO TESTS		
126	0.30	0.32	1.42					The barrier was installed on a	concret	e floor. An exc	cessive amount of resin was between th	e nuts and baseplate of	
177	0.44	0.48	2.43					the posts (photo below).					
228	0.59	0.63	3.78										
278	0.74	0.79	4.63										
		Lo	ad maintair	ned for five	minutes	• •	•						
278	0.74	0.79	5.12							OBSERVATIO	NS DURING & AFTER TESTS		
0	0	0	0.11					No further defects were foun	d.				
Maxim	um deflectio	on (mm)	5.12										
Permar	nent deflecti	on (mm)	0.11										
	Recovery (%		97.9										
0.80 0.70 0.60 (0.50) 0.50) 0.40) 0.30 0.20 0.10 0.00		Service	Load Test	- Load De	flection F	Plot	Pot 3	Allowable deflection:	25 mm		NG SI Maximum deflection:	5.18 mm	
0.00	0	3.0 flection (m	4.0 I m)	5.0	6.0	TEST CONCLUSION: Pass Tested in accordance with the load - deflection requirements of BS 6180:2011 'Barriers in and about buildings - Code of practice.'							

N		DLADE EMENT				Alid	l test certificate for: leck Ltd. ea Load Test		I	Job ref: BT/ 2755 R5 Barrier ref: AliRail Insight Glass System - 6m x 1.2m Location: n/a			
SER	VICE LOAD	TEST						BA	ARRIER AND	D TEST DETAILS			
Pressure	U.D.L.	Load/ram			Deflections (mm)		Test on entire length?	Yes	Initials o	f tester(s) TK Date teste	ed 24/05/2024		
(psi)	(kN/m²)	(kN)	Pot 2	Pot 3									
0	0	0	0.00	0.00			Type of occupancy	Domestic and	residentia	l activities			
101	0.20	0.24	0.81	0.62			Specific use			g exclusively one single family dwelling	g including stairs, landings,		
177	0.40	0.47	1.27	1.04				etc. but excludi	ng external b	balconies and edges of roofs			
253	0.60	0.71	2.03	1.66			Type of Infill	Barrier with a	glass infill	panel.			
329	0.80	0.95	2.84	2.37			Infill length loaded	1.14	m	Design service load	1.00 kN/m ²		
404	1.00	1.19	3.70	2.92			Infill height loaded	1.04	m	Proof factor	1		
0	0	0	0.41	0.31			Infill area loaded	1.19	m²	No. of rams	1		
Maxim	um deflectio	on (mm)	3.70	2.92		1	L Measurement	1.04	m	Proof test load	1.00 kN/m ²		
	nent deflecti		0.41	0.31					Load Dir	ection	Gauge Position		
	Recovery (%	5)	89.0	89.3			Gauge location Pot 2	In dire	ction of loa	d application.	Midspan		
PR	OOF LOAD T	EST					Gauge location Pot 3	In dire	ction of loa	d application.	Midspan Post		
(psi)	(kN/m²)	(kN)	Pot 2	Pot 3									
0	0	0	0.00	0.00									
101	0.20	0.24	0.31	0.26				OBSE	RVATIONS	PRIOR TO TESTS			
177	0.40	0.47	0.78	0.69			The barrier was installed on a d	concrete floor.					
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									
			d maintain	ed for five	minutes	<u> </u>							
404	1.00	1.19	3.81	2.80				OBSERV	ATIONS DU	RING & AFTER TESTS			
0	0	0	0.24	0.10			No further defects were found						
-	um deflectio	on (mm)	3.81	2.80									
	nent deflecti		0.24	0.10									
	Recovery (%		93.7	96.3			-						
1.20 1.00 (m/N) 0.80 0.60 0.40		Service L	oad Test	- Load De	flection Plot	Pot 2							
0.40 0.20 0.00 0.00	0 0.5	1.0	1.5 De	2.0 flection (m	2.5 3.0 1m)	3.5 4.0	Tested in accordance with the	Pass	-	16.00 mm Maximum deflect ments of BS 6180:2011 'Barriers i			
							buildings - Code of practice.'						

;		D L A D E R E M E N T				Alid	test certificate for: eck Ltd. nt Load Test		I	Job ref: BT/ 2755 R5 Barrier ref: AliRail Insight Glass System - 6m x 1.2m Location: n/a		
SER	RVICE LOAD	TEST						B	ARRIER ANI	D TEST DETAILS		
Pressure	Point Load	Load/ram			Deflections (mm)		Test on entire length?	Yes	Initials o	f tester(s) TK Date teste	ed 24/05/2024	
(psi)	(kN)	(kN)	Pot 2	Pot 3								
0	0	0	0.00	0.00			Type of occupancy	Domestic and	l residentia	l activities		
57	0.10	0.10	0.24	0.12			Specific use	17		g exclusively one single family dwelling	g including stairs, landings,	
89	0.20	0.20	0.50	0.32				etc. but exclud	ng external t	balconies and edges of roofs		
121	0.30	0.30	0.89	0.61			Type of Infill	Barrier with a	a glass infill	panel.		
153	0.40	0.40	1.37	0.96			Infill length loaded	1.14	m	Design service load	0.50 kN	
185	0.50	0.50	2.01	1.38			Infill height loaded	1.04	m	Proof factor	1	
0	0.00	0	0.24	0.06			Infill area loaded	1.19	m²	No. of rams	1	
Maxim	num deflectio	on (mm)	2.01	1.38			L Measurement	1.04	m	Proof test load	0.50 kN	
Permar	nent deflecti	on (mm)	0.24	0.06					Load Dir	ection	Gauge Position	
	Recovery (%	6)	87.9	95.4			Gauge location Pot 2	In dire	ction of loa	d application.	Midspan	
PR	OOF LOAD 1	TEST					Gauge location Pot 3	In dire	ction of loa	d application.	Midspan Post	
(psi)	(kN)	(kN)	Pot 2	Pot 3								
0	0	0	0.00	0.00								
57	0.10	0.10	0.30	0.15				OBS	ERVATIONS	PRIOR TO TESTS		
89	0.20	0.20	0.60	0.64			The barrier was installed on a	concrete floor.				
121	0.30	0.30	1.07	0.85								
153	0.40	0.40	1.29	0.91			1					
185	0.50	0.50	1.78	1.24			1					
		Loa	d maintain	ed for five	minutes		1					
185	0.50	0.50	2.44	1.48				OBSERV	ATIONS DU	RING & AFTER TESTS		
0	0	0	0.15	0.04			No further defects were found	1.				
Maxim	um deflectio	on (mm)	2.44	1.48			1					
Permar	nent deflecti	on (mm)	0.15	0.04			1					
	Recovery (%	б)	94.0	97.2								
0.60 0.50 (N) 0.40 0.30 0.20 0.10 0.00 0.00	.0	0.5	1.0			Pot 2		Pass		16.00 mm Maximum deflect ments of BS 6180:2011 'Barriers in		
			De	flection (m	ım)		buildings - Code of practice.	e ioau - defiecti	on requirer	ments of DS 0100:2011 Barriers I	ιι απά ανούξ	

											Job ref:		BT/ 2			
	Acco	LADE					Balustrade		test certificate for:		Barrier ref: AliRail Insight Glass System - 6m		System - 6m x 1.2m			
1	MEASUR								deck Ltd.					1:	n/a	
							Inf	ill Poir	nt Load Test			RRIER AN				
SEF	RVICE LOAD															
Pressure		Load/ram			Deflection	ons (mm)			Test on entire length?		Yes	Initials	of tester	(s) TK	Date tested	24/05/2024
(psi)	(kN)	(kN)	Pot 3													
0	0	0	0.00						Type of occupancy		Domestic and					
57	0.10	0.10	1.52						Specific use							ncluding stairs, landings,
89	0.20	0.20	2.30								etc. but excludir			ana eages of	roojs	
121	0.30	0.30	3.50						Type of Infill	1	Barrier with a	glass infi	ll panel.			
153	0.40	0.40	4.36						Infill length loaded		1.14	m		Design servi	ice load	0.50 kN
185	0.50	0.50	6.03						Infill height loaded		1.04	m		Proof factor		1
0	0.00	0	0.39						Infill area loaded		1.19	m²		No. of rams		1
Maxim	num deflectio	on (mm)	6.03						L Measurement		1.04	m		Proof test lo	bad	0.50 kN
Permai	nent deflection	on (mm)	0.39									Load Di	irection			Gauge Position
	Recovery (%	5)	93.5						Gauge location Pot	t 3	In direc	ction of lo	ad applic	ation.		Below point load
PR	OOF LOAD T	EST														
(psi)	(kN)	(kN)	Pot 3													
0	0	0	0.00													
57	0.10	0.10	0.52								OBSE	RVATION	S PRIOR	TO TESTS		
89	0.20	0.20	1.97						The barrier was installed on	n a co	oncrete floor.					
121	0.30	0.30	3.21													
153	0.40	0.40	4.15													
185	0.50	0.50	5.61													
		Loa	d maintain	ed for five	minutes											
185	0.50	0.50	6.21								OBSERVA	TIONS D	URING &	AFTER TEST	rs	
0	0	0	0.19						No further defects were fou	und.						
Maxim	num deflectio	on (mm)	6.21													
Perma	nent deflection	on (mm)	0.19													
	Recovery (%	5)	96.9													
								-								
		Service L	oad Test	- Load De	flection F	Plot	— P	ot 3		Tim	Walkington					
0.60										F		MISSION				
0.50												CREAT	I PAR			
												PROJEC				
Ĵ ^{0.40}									- FINA			And the second s				
D 0.30				\checkmark												
(N) 0.40 0.30 0.20													12			
0.10													1			
									Allowable deflection (small	llor of	EL /65 or 25m	m).	16.00	mm Ma	ximum deflectio	n: 6.03 mm
0.00	.0 1.0	0 2.0	3.	0 /	l.0	5.0	6.0	7.0	TEST CONCLUSION:	Pa:	-		10.00		kinium denectio	0.05 mm
0.	1.0	2.0		flection (m		5.0	0.0	-	Tested in accordance with t			on require	ements o	f BS 6180:20	011 'Barriers in a	and about
			De		,				buildings - Code of practice.'							