

Test Report

Direct instruction testing

Client: Fall Safety Tech

Product: LSE-8

Date(s) of testing: 05/08/2025 to 05/08/2025

Scope of testing: PAS 59:2014 (incorporating corrigendum 1)

Clause 4.2 Dynamic performance for all system types

(incorporating Annex A).

Test result: Sample assessed met requirements.

Authorised by:

John Darby General Manager

T&R reference: S1174 Test report No: T1356-01

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Targeting Standards

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Test Report ID: T1356-01 Service Order: S1174 Client Details		Test Repor	rt - Section 1		
Client Reference: Client Reference: C1053 Test specification PAS 59:2014 (incorporating corrigendum 1) Clause 4.2 Dynamic performance for all system types (incorporating Annex A). Test method: TRC-W28 Test location: Comments: Testing undertaken indoors Product Details Product Description: Product Coescription: Component code(s): Date of receipt: 05/08/2025 Test Details Start: 05/08/2025 Full until the product only by Supplies (D5/08/2025) Revaluation by Authorised by Dsition: Position: Signature: Test Engineer General Manager General Manager	Test Report ID:	T1356-01	Service Order:	S1174	
Client Reference: C1053 Test specification: PAS 59:2014 (incorporating corrigendum 1) Clause 4.2 Dynamic performance for all system types (incorporating Annex A). Test method: TRC-W28 Test location: Test & Research Centre, 34 Regal Drive, Soham, Cambridgeshire, CB7 5BE Testing undertaken indoors Product Name: Product Description: Inflatable safety cushion New Component code(s): Date of receipt: 05/08/2025 Sample no: 1 Test Details Start: 05/08/2025 Finish: 05/08/2025 Name: J. Darby Authorised by General Manager Signature: General Manager		Client	Details		
Test specification: PAS 59:2014 (incorporating corrigendum 1) Clause 4.2 Dynamic performance for all system types (incorporating Annex A). Test method: TRC-W28 Test location: Test & Research Centre, 34 Regal Drive, Soham, Cambridgeshire, CB7 5BE Testing undertaken indoors	Client:	Fall Safety Tech			
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Comments: Testing undertaken indoors Product Name: LSE-8 Product Description: Inflatable safety cushion Product condition: Component code(s): Date of receipt: 05/08/2025 Sample no: 1 Test Details Start: 05/08/2025 Finish: 05/08/2025 Evaluation by Authorised by Date: 05/08/2025 Sample no: 1. Darby Date: 05/08/2025 J. Darby J. Darby Position: Test Engineer Signature: General Manager	Test method:	TRC-W28			
Product Name: Product Description: Product condition: Component code(s): Date of receipt: Dostrice Dostron Do	Test location:	Test & Research Centre, 34 Regal Dri	ve, Soham, Cambridgeshire, CB7 5B	E	
Product Name: Product Description: Product condition: Component code(s): Date of receipt: Date of receipt: D5/08/2025 Sample no: 1	Comments:	Testing undertaken indoors			
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Product Description: Inflatable safety cushion Product condition: New Component code(s): Date of receipt: 05/08/2025 Sample no: 1 Test Details Start: 05/08/2025 Finish: 05/08/2025 Evaluation by Authorised by Date: 05/08/2025 O5/08/2025 Name: J. Darby Position: Test Engineer Signature: General Manager		Produc	ct Details		
Product condition: Component code(s): Date of receipt: Date of receipt: D5/08/2025 Sample no: 1	Product Name:	LSE-8			
Component code(s): Date of receipt: 05/08/2025 Sample no: 1 Test Details Start: 05/08/2025 Finish: 05/08/2025 Authorised by Date: 05/08/2025 05/08/2025 Name: J. Darby J. Darby Position: Test Engineer General Manager Signature: General Manager	Product Description:	Inflatable safety cushion			
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Test Details	Component code(s):				
Start: 05/08/2025 Finish: 05/08/2025 Date: 05/08/2025 05/08/2025 Name: J. Darby J. Darby Position: Test Engineer General Manager Signature: General Manager	Date of receipt:	05/08/2025 Sample no: 1			
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Date: 05/08/2025 05/08/2025 Name: J. Darby J. Darby Position: Test Engineer General Manager Signature:	Start:				
Name: Discription: Test Engineer Signature: J. Darby J. Darby General Manager					
Position: Test Engineer General Manager Signature:					
Signature:				•	
		Test Engineer	Ge	neral Manager	
	Signature:				
Report revision: 1 Date of issue: 05/08/2025	Report revision:	_		05/08/2025	
Comments Sample assessed met requirements.			ments		

	Le	gend
P(ass) = passed test specification	N/A = not applicable	# = Opinion or interpretation made based on competence of
F(ail) = failed test specification	N/T = not tested	T&R staff
All dimensions in mm unless stated ot	herwise	* = Information provided by the client

Decision Rule

Decision rule (based on ILAC G8-09/2019) - Binary statement for simple acceptance:

Pass – the measured value is below the acceptance limit, AL = TL Fail – the measured value is above the acceptance limit, AL=TL

DISCLAIMER

The results contained in this test report relate only to the product tested as supplied. Without permission of the Test & Research Centre, this test report is not permitted to be duplicated in extracts. This test report on its own does not entitle the product to carry any test mark.



Test Report - Section 1			
Test Report No: T1356-01			
	List of equipment used		
Equipment Name	Equipment Number	Used (Y/N)	
150mm steel rule	TE180067		
300mm steel rule	TE180068		
3m steel tape	TE180046		
8m steel tape	TE180047		
150mm digital vernier calliper	TE180071		
1000mm digital vernier calliper	TE180072		
Digital Protractor	TE180066		
Digital Laser Measure	TE190015	Υ	
Stopwatch	TE180070		
25mm Digital plunger indicator	TE200009		
1000mm steel rule	TE200015		
50mm Digital plunger indicator	TE200016		
100mm Digital plunger indicator	TE200017		
600mm digital vernier calliper	TE220001		
Triaxial Accelerometer	TE250003	Υ	

	Information supplied by the client			
Item	Description	Document ID	Date/Rev	
1				
2				
3				
4				
5				

	Components evaluated			
Item	Code	Description		
1	LSE-8	Inflatable safety cushion		
2				
3				
4				
5				

Product & testing description

Fall Safety Tech is a manufacturer of inflatable safety cushions. They have a new design, LSE-8, which is approximately $3m \times 1.75m$ high.

The Test & Research Centre has been contracted to perform the "Dynamic performance for all system types" within PAS 59, to assess the cushions performance against these drop testing requirements.

Testing was conducted at the test laboratory in Soham, using the tall tower space to elevate the drop test weight to the required 2m above the cushion.

Deceleration (g) was measured using a calibrated triaxial accelerometer and data logging equipment.

Testing showed that the cushion met the requirements of PAS 59 clause 4.2.



Test Report - Section 2 Test Report No: T1356-01

Clause	Requirement	Remark		Result
4.2	D			
4.2	Dynamic performance for all system types	Daniel 1		
4.2.1	When tested in accordance with Annex A, the measured deceleration shall not exceed 14g.	<u>Drop 1</u>	2.02	
	inleasured deceleration shall not exceed 14g.	Height (m):	2.02	
		Air temperature (°C):	20.1	
		Location:	Centre	
		Air exit hole:	50% open	
		Max Deceleration (g): X:	3.51	
		Y:	3.19	
		Z:	0.65	
			PASS	
		Drop 2 Height (m):	2.03	
		Air temperature (°C):		
			20.1	
		Location:	Off-Centre	
		Air exit hole:	50% open	
		X:	6.57	
		Max Deceleration (g): Y:	2.74	
		Z:	3.34	
			PASS	
		Drop 3		Р
		Height (m):	2.03	
		Air temperature (°C):	20.2	
		Location:	Corner	
		Air exit hole:	50% open	
		, 6	30,0 3 po	
		X:	3.14	
		Max Deceleration (g): Y:	1.26	
		Z:	2.62	
			PASS	
4.2.2	Should the recorded results from a series of three drops identify deceleration in excess of that specified in 4.2.1 on two or more of the required	N/A		
	drops, the sample shall be judged to have failed.			
4.2.3	Should the recorded results from a series of three drops identify deceleration in excess of that specified at 4.2.1 on any one of the required drops, the sample may be subjected to another series of three drops. Should deceleration in excess of that specified in 4.2.1 occur during any of this second series of drops, the sample shall be judged to have failed	N/A		



Test Report - Section 3			
Test Report No:	T1356-01		





Test weight and accelerometer arrangement



	•	est Report - Section 3
Test Report No:	T1356-01	



Prior to release

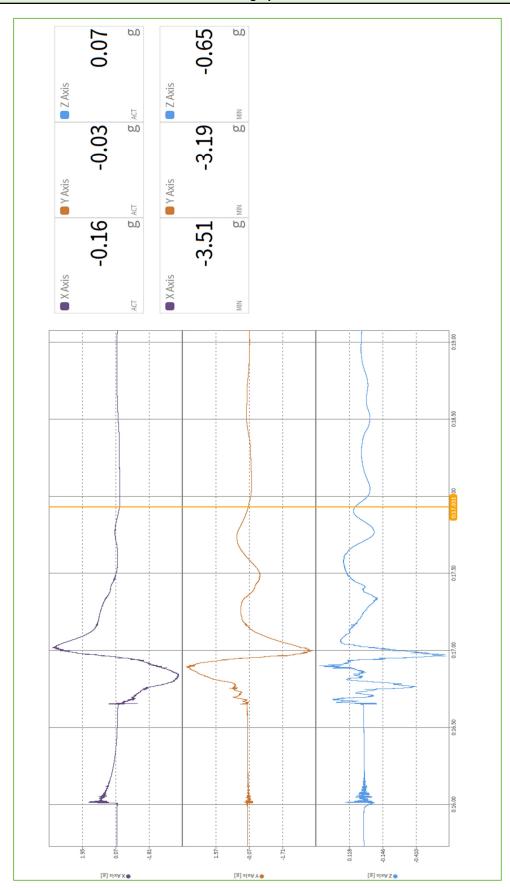


At impact

Drop test 1



	Test R	eport - Section 3
Test Report No:	T1356-01	



Drop test 1



	Test Report - Section 3		
Test Report No:	T1356-01		



At release

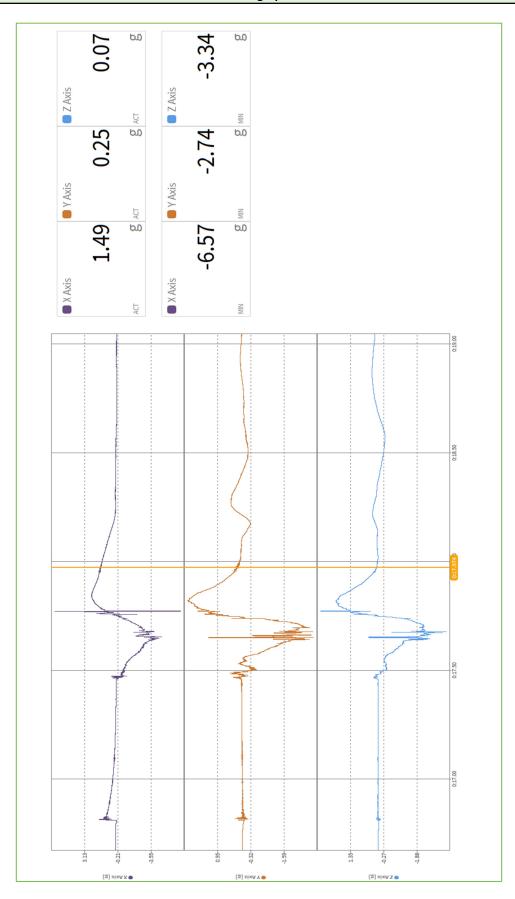


At impact

Drop test 2



Test Report - Section 3			eport - Section 3
Test Report No:	T1356-01		



Drop test 2



	Test R	eport - Section 3
Test Report No:	T1356-01	



Prior to release

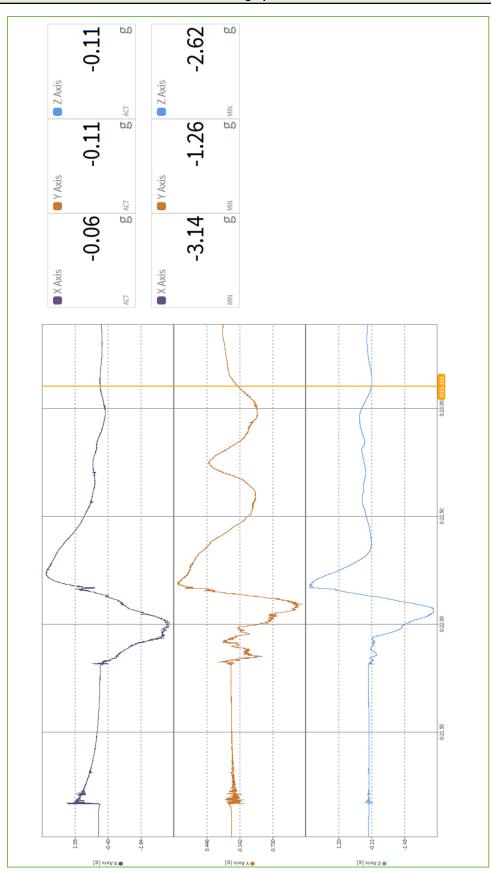


At impact

Drop test 2



Test Report - Section 3			
Test Report No:	T1356-01		



Drop test 2

END OF TEST REPORT