

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:


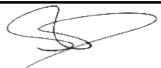


John Darby
General Manager

T&R reference: S1174

Test report No: T1356-01

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Test Report - Section 1			
Test Report ID:	T1356-01	Service Order:	S1174
Client Details			
Client:	Fall Safety Tech		
Client Reference:	C1053		
Test specification			
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		
Comments:	Testing undertaken indoors		
Product Details			
Product Name:	LSE-8		
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		05/08/2025
Name:	J. Darby		J. Darby
Position:	Test Engineer		General Manager
Signature:			
Report revision:	1	Date of issue:	05/08/2025
Comments			
Sample assessed met requirements.			

Legend		
P(ass) = passed test specification	N/A = not applicable	# = Opinion or interpretation made based on competence of T&R staff
F(ail) = failed test specification	N/T = not tested	
All dimensions in mm unless stated otherwise		* = 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	Y
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	
Stopwatch	TE180070	
25mm Digital plunger indicator	TE200009	
1000mm steel rule	TE200015	Y
50mm Digital plunger indicator	TE200016	
100mm Digital plunger indicator	TE200017	
600mm digital vernier calliper	TE220001	
Triaxial Accelerometer	TE250003	

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
<p>Fall Safety Tech is a manufacturer of inflatable safety cushions. They have a new design, LSE-8, which is approximately 3m x 4m x 1.75m high.</p> <p>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.</p> <p>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.</p> <p>Deceleration (g) was measured using a calibrated triaxial accelerometer and data logging equipment.</p> <p>Testing showed that the cushion met the requirements of PAS 59 clause 4.2.</p>

Test Report - Section 2			
Test Report No:		T1356-01	
Clause	Requirement	Remark	Result
4.2	Dynamic performance for all system types		
4.2.1	When tested in accordance with Annex A, the measured deceleration shall not exceed 14g.	<p><u>Drop 1</u></p> <p style="text-align: right;">Height (m): 2.02</p> <p style="text-align: right;">Air temperature (°C): 20.1</p> <p style="text-align: right;">Location: Centre</p> <p style="text-align: right;">Air exit hole: 50% open</p> <p style="text-align: right;">Max Deceleration (g): X: 3.51</p> <p style="text-align: right;">Y: 3.19</p> <p style="text-align: right;">Z: 0.65</p> <p style="text-align: right;">PASS</p> <p><u>Drop 2</u></p> <p style="text-align: right;">Height (m): 2.03</p> <p style="text-align: right;">Air temperature (°C): 20.1</p> <p style="text-align: right;">Location: Off-Centre</p> <p style="text-align: right;">Air exit hole: 50% open</p> <p style="text-align: right;">X: 6.57</p> <p style="text-align: right;">Max Deceleration (g): Y: 2.74</p> <p style="text-align: right;">Z: 3.34</p> <p style="text-align: right;">PASS</p> <p><u>Drop 3</u></p> <p style="text-align: right;">Height (m): 2.03</p> <p style="text-align: right;">Air temperature (°C): 20.2</p> <p style="text-align: right;">Location: Corner</p> <p style="text-align: right;">Air exit hole: 50% open</p> <p style="text-align: right;">X: 3.14</p> <p style="text-align: right;">Max Deceleration (g): Y: 1.26</p> <p style="text-align: right;">Z: 2.62</p> <p style="text-align: right;">PASS</p>	P
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 drops, the sample shall be judged to have failed.	N/A	
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

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Photographs



Test weight and accelerometer arrangement

Test Report - Section 3

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Photographs



Prior to release



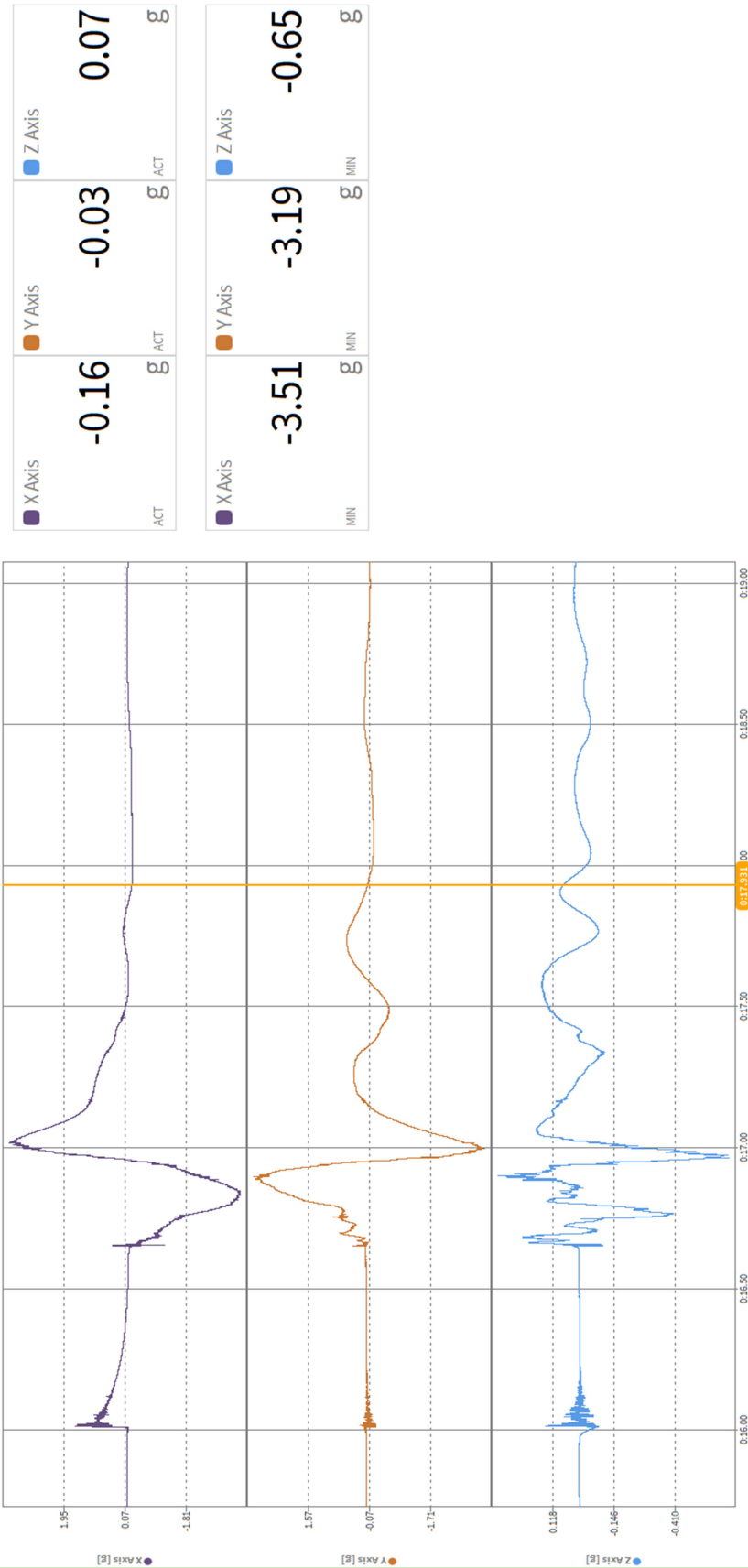
At impact

Drop test 1

Test Report - Section 3

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Photographs



Drop test 1

Test Report - Section 3

Test Report No: T1356-01

Photographs



At release



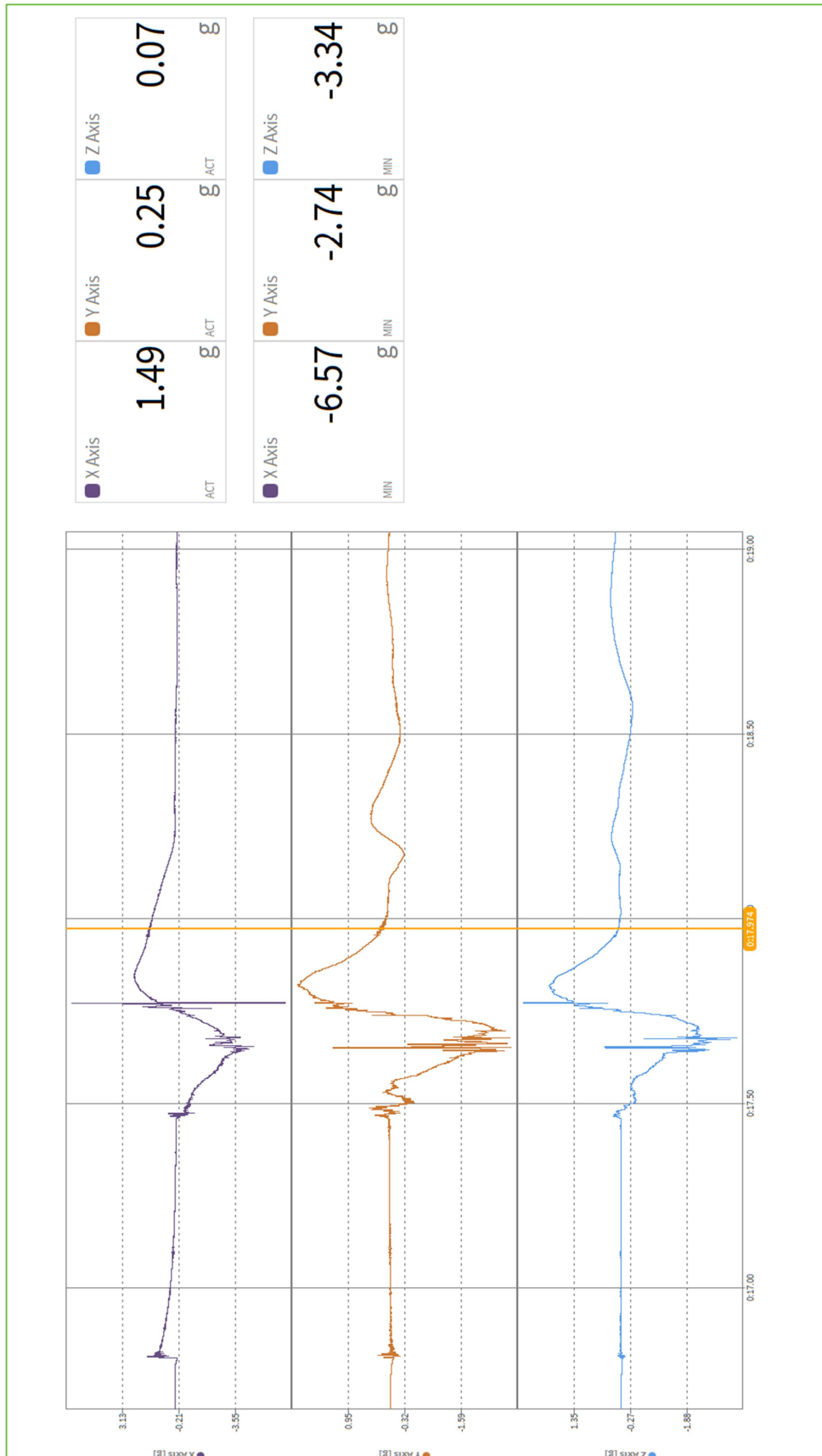
At impact

Drop test 2

Test Report - Section 3

Test Report No: T1356-01

Photographs



Drop test 2

Test Report - Section 3

Test Report No: T1356-01

Photographs



Prior to release



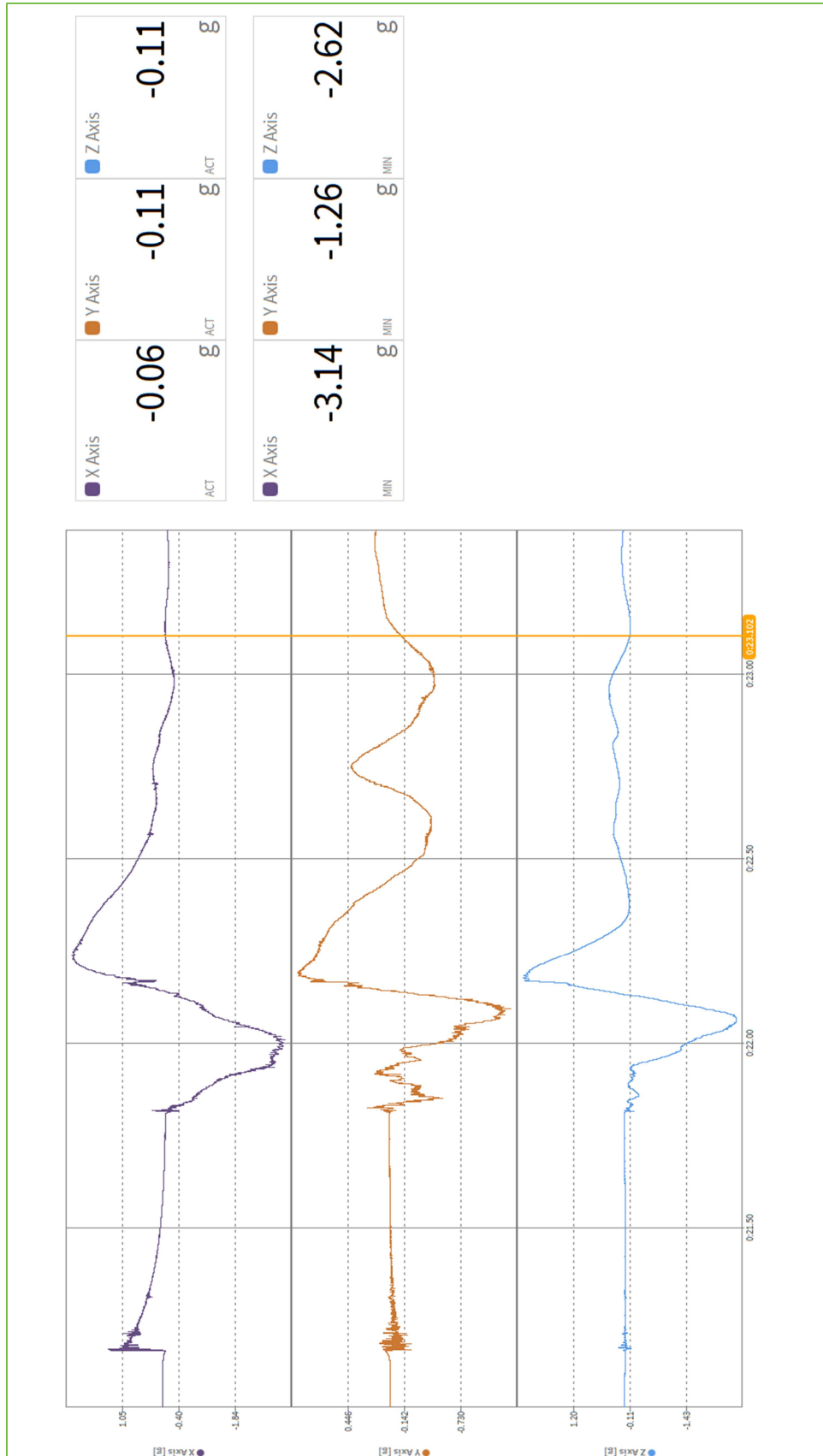
At impact

Drop test 2

Test Report - Section 3

Test Report No: T1356-01

Photographs



Drop test 2

END OF TEST REPORT

TRC-D11-14

Rev: 0.1

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