



Report No	253/8899420	This Report consists of 3 pages
Client	Dellemma Limited 4 Carisbrooke Drive Southampton SO19 7BE United Kingdom	
Authority & date	BSI Service Management Order No 8899420 dated 6 February 2018	
Items tested	Climbing Hat with 'E-Fab' fitted Model: Evo Skyworker Three (3) samples submitted	
Specification	Limited testing to BS EN 12492:2012 Mountaineering Equipment – Helmets for mountaineers – Safety and Test Methods and ANSI/ISEA Z89.1-2014 American National Standard for Industrial Head Protection – Type 1C and Type 1E See Introduction and Assessment Summary for further details	
Results	See Assessment Summary	
Prepared by	S C Hamon 	Senior Engineer
Authorized by	M Mayo 	Testing Team Manager
Issue Date	27 February 2018	
Conditions of issue	This Test Report is issued subject to the conditions stated in current issue of EMCP 100 'Conditions of Contract for Testing'. The results contained herein apply only to the particular sample/s tested and to the specific tests carried out, as detailed in this Test Report. The issuing of this Test Report does not indicate any measure of Approval, Certification, Supervision, Control or Surveillance by BSI of any product. No extract, abridgement or abstraction from a Test Report may be published or used to advertise a product without the written consent of the Managing Director, BSI Testing Services, who reserves the absolute right to agree or reject all or any of the details of any items or publicity for which consent may be sought.	

**BRITISH STANDARDS INSTITUTION  
BS EN 12492:2012 AND ANSI/ISEA Z89.1-2014**

**SPECIFICATIONS:-** Limited testing to BS EN 12492:2012 Mountaineering Equipment – Helmets for mountaineers – Safety requirements and test methods and Limited testing to ANSI/ISEA Z89.1-2014 American National Standard for Industrial Head Protection (see Assessment Summary for details)

CLIENT: Dellemma Limited

MODEL: Evo Skyworker

MANUFACTURE DATE: January 2018

NUMBER OF SAMPLES: Three (3)

ER NO: 10176658

DATE RECEIVED: 6 February 2018

DATE STARTED: 8 February 2018

**INTRODUCTION**

The samples above were submitted by the Client to assess the shock performance when fitted with 'E-Fab' hard hat emergency kit fitted to inner surrounding shell crown area of helmet.

The samples were initially subjected to Section 7.1.2 Force Transmission of ANSI/ISEA Z89.1 – 2014, then subsequently tested to Clause 4.2.1 Shock absorption of BS EN 12492:2012.

This Report should be read in conjunction with the Specifications referenced above.

**ASSESSMENT SUMMARY**

<b>SECTION/CLAUSE NO AND TITLE</b>	<b>ASSESSMENT</b>	<b>DETAIL LOCATION</b>
<b>ANSI/ISEA Z89.1-2014</b>		
<b>7 PERFORMANCE REQUIREMENTS</b>		
<b>7.1 Requirements for Type I and Type II Helmets</b>		
7.1.2 Force Transmission	Pass	Page 3
<b>BS EN 12492:2012</b>		
<b>4 PERFORMANCE</b>		
<b>4.2 Performance requirements</b>		
4.2.1 Shock absorption	Pass	Page 3

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BS EN 12492:2012 AND ANSI/ISEA Z89.1-2014**

**ANSI/ISEA Z89.1-2014**

**SECTION 7 PERFORMANCE REQUIREMENTS**

**Section 7.1.2 Force Transmission (1)**

Sample No./ Shell Colour	Model (Variant)	Claimed size / range (2)	Pre- conditioning	Transmitted Force (max. 4450N)
1 / White	Evo Skyworker (with 'E-Fab' fitted)	53-64cm	+49°C	1730
2 / White		53-64cm	-18°C	1900
3 / White		53-64cm	Ambient	1840

(1) Tested in accordance with Section 10.2 methods.

(2) Size range taken from size embossed on shell.

**BS EN 12492:2012**

**CLAUSE 4.2 PERFORMANCE REQUIREMENTS**

**CLAUSE 4.2.1 SHOCK ABSORPTION**

**Clause 4.2.1.1 Vertical energy absorption capacity**

(Using a Hemispherical striker dropped from a nominal height of 2,000 ±10 mm)

Sample Number	Claimed Size	Size of Test Headform (mm)	Conditioning	Transmitted Force kN (10kN max.)
1	53-64cm	605	+35°C	7.89
2	53-64cm	605	-20°C	6.01
3	53-64cm	605	Ambient	7.03

**END OF REPORT**