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For the attention of: Mr M Cox

## Technical Report

Subject: LIMITED TESTING OF "B SAFE FASTGUARD COLLECTIVE FALL PREVENTION SYSTEM" IN ACCORDANCE WITH EN 12811-1: 2003

Your ref:

Our ref: SPC0187085/1031/2

Date: 2 September 2010

### Conditions of Issue:

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Results given in this report refer only to the samples submitted for analysis and tested by SATRA. Comments are for guidance only.

**A satisfactory test report in no way implies that the product tested is approved by SATRA and no warranty is given as to the performance of the product tested. SATRA shall not be liable for any subsequent loss or damage incurred by the client as a result of information supplied in the report.**

Report signed by: Nathan Wright  
Position: PPE Technologist  
Department: Safety Product Centre



## WORK REQUESTED

A sample of temporary edge protection system, reference “B Safe Fastguard Collective Fall Prevention System”, was installed for testing on 27 August 2010, for testing in accordance with EN 12811-1: 2003 Scaffolds – Performance requirements and general design.

## CONCLUSIONS

SAMPLE REFERENCE	STANDARD	CLAUSE / PROPERTY	PASS / FAIL
B Safe Fastguard CFPS	EN 12811-1: 2003	6.2.5.1 Loads on the side protection – Downward loading	PASS
		6.2.5.2 Loads on the side protection – Horizontal loading	PASS
		6.2.5.3 Loads on the side protection – Upward loading	PASS
		6.3.2 Elastic deflection of the side protection	PASS

## TESTING

Testing was carried out in accordance with EN 13374: 2004 on 27 August 2010

For the purposes of testing, the system was installed on a section of scaffold (with platform) at the premises of B Safe Limited, Bicester. Testing was witnessed by Nathan Wright, of SATRA Technology Centre, with all measurements taken or verified using SATRA calibrated equipment

The system is comprised of at least two coupling devices, which connect a standard scaffold pole to the scaffold uprights to form a horizontal guard rail. A 21’ (6.4 m) pole was attached to the uprights at two points over a span of 3.6 m, connected via a join to a shorter pole, attached to uprights at two points over a span of 2.0 m (span between the two poles 2.0 m)

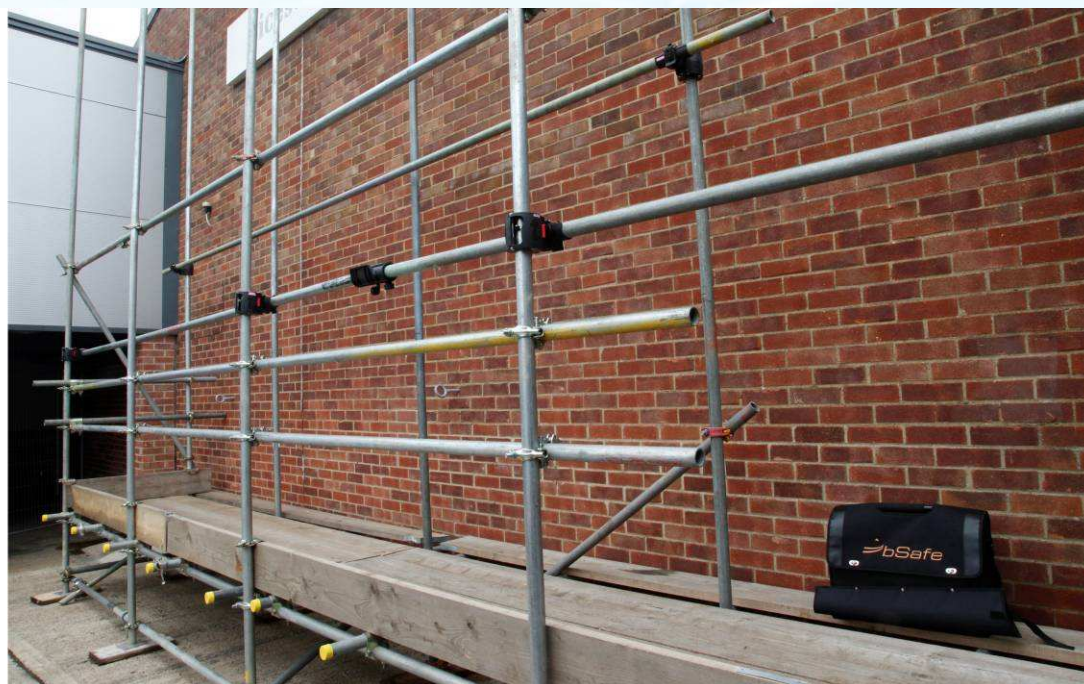


Figure 1 – Temporary edge protection system reference “B Safe Fastguard CFPS” installed for testing (showing coupler and join)

## TEST RESULTS

Table 1 – Testing of edge protection system reference “B Safe Fastguard CFPS” in accordance with EN 12811-1: 2003

EN 12811-1: 2003 CLAUSE / TEST	EN 12811-1: 2003 REQUIREMENT	RESULT / COMMENT	UoM (See note 1)	PASS / FAIL
6.2.5.1 Loads on the side protection – Downward loading	Any principle guardrail and intermediate guardrail, regardless of its method of support, shall be capable of resisting a point load of 1.25 kN	Position: Upright 1.33 kN sustained for 1 minute without failure  Position: Mid-span 1.33 kN sustained for 1 minute without failure  Position: Join 1.33 kN sustained for 1 minute without failure  Position: Join (other side) 1.33 kN sustained for 1 minute without failure	± 50 N	PASS

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EN 12811-1: 2003 CLAUSE / TEST	EN 12811-1: 2003 REQUIREMENT	RESULT / COMMENT	UoM (See note 1)	PASS / FAIL
6.2.5.2 Loads on the side protection – Horizontal loading	All components of the side protection, except toeboards, shall be designed to resist a horizontal point load of 0.3 kN in each case in the most unfavourable position	Position: Upright, outward 0.3 kN sustained for 1 minute without failure  Position: Mid-span, outward 0.3 kN sustained for 1 minute without failure  Position: Join, outward 0.3 kN sustained for 1 minute without failure  Position: Join (other side), outward 0.3 kN sustained for 1 minute without failure  Position: Upright, inward 0.3 kN sustained for 1 minute without failure  Position: Mid-span, inward 0.3 kN sustained for 1 minute without failure  Position: Join, inward 0.3 kN sustained for 1 minute without failure  Position: Join (other side), inward 0.3 kN sustained for 1 minute without failure	± 50 N	PASS

EN 12811-1: 2003 CLAUSE / TEST	EN 12811-1: 2003 REQUIREMENT	RESULT / COMMENT	UoM (See note 1)	PASS / FAIL														
6.2.5.3 Loads on the side protection – Upward loading	To check the fixing of all side protection components, except the toeboard, a point load of 0.3 kN shall be applied vertically upwards in the worst position	Position: Upright 0.3 kN sustained for 1 minute without failure  Position: Mid-span 0.3 kN sustained for 1 minute without failure  Position: Join 0.3 kN sustained for 1 minute without failure  Position: Join (other side) 0.3 kN sustained for 1 minute without failure	± 50 N	PASS														
6.3.2 Elastic deflection of the side protection	Each principle or intermediate guardrail and toeboard, regardless of its span, shall not have an elastic deflection greater than 35 mm, when subjected to the horizontal load specified in 6.2.5.2	<table border="0"> <tr> <td>Position</td> <td>Elastic deflection / mm</td> </tr> <tr> <td>Upright, outward</td> <td>0</td> </tr> <tr> <td>Mid-span, outward</td> <td>8</td> </tr> <tr> <td>Join, outward</td> <td>4</td> </tr> <tr> <td>Upright, inward</td> <td>0</td> </tr> <tr> <td>Mid-span, inward</td> <td>15</td> </tr> <tr> <td>Join, inward</td> <td>14</td> </tr> </table>	Position	Elastic deflection / mm	Upright, outward	0	Mid-span, outward	8	Join, outward	4	Upright, inward	0	Mid-span, inward	15	Join, inward	14	± 0.3 mm	PASS
Position	Elastic deflection / mm																	
Upright, outward	0																	
Mid-span, outward	8																	
Join, outward	4																	
Upright, inward	0																	
Mid-span, inward	15																	
Join, inward	14																	

## ADDITIONAL INFORMATION / NOTES

Note 1 – ‘UoM’ denotes estimated Uncertainty of Measurement for stated test results. This uncertainty value is based on a standard uncertainty multiplied by a coverage factor  $k = 2$ , which provides for a confidence level of approximately 95%

\*\*\*\*\* END OF REPORT \*\*\*\*\*

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