SANDBERG

60222/M/REV01

LABORATORY TESTING OF BUTTON FIX SYSTEM

BUTTONFIX LIMITED

Sandberg LLP
40 Grosvenor Gardens
London SW1W 0EB

Tel: 020 7565 7000
Fax: 020 7565 7100
email: ho@sandberg.co.uk
web: www.sandberg.co.uk

SANDBERG
CONSULTING ENGINEERS
INVESTIGATION INSPECTION
MATERIALS TESTING

Sandberg LLP
40 Grosvenor Gardens
London SW1W 0EB

Tel: 020 7565 7000
Fax: 020 7565 7100
email: ho@sandberg.co.uk
web: www.sandberg.co.uk

60222/M/REV01

LABORATORY TESTING OF BUTTON FIX SYSTEM

BUTTONFIX LIMITED

Buttonfix Limited
Unit A, 1 Britton Street
London
EC1M 5NW

This report comprises:
Contents Page
1 Test Certificate

For the attention of: Mr Tony Wills

31 July 2017

CONTENTS

Instruction: Order ref: BF 050717 Corian /Type1 Bonded shear and tension tests dated 4th July 2017.

SANDBERG
CONSULTING ENGINEERS
INVESTIGATION INSPECTION
MATERIALS TESTING

Sandberg LLP
40 Grosvenor Gardens
London SW1W 0EB
Tel: 020 7565 7000
Fax: 020 7565 7100
email: ho@sandberg.co.uk
web: www.sandberg.co.uk

TEST CERTIFICATE

Certificate:	60222/M/1/REV01	**Order Ref:**	BF050717 Corian/Type1 Bonded
Samples Received:	June 2017	**Tested By:**	NAF
Test Date:	26-27 July 2017	**Test Procedure:**	In House
Client Details:	Buttonfix Limited, Unit A, 1 Britton Street,London ,EC1M 5NW		

STRENGTH TESTING OF BUTTON-FIX SYSTEM

Test Details	:	Type 1 bonded
Adhesive	:	Corian glue
Backing material	:	Corian plaques 12 mm thick
Test equipment	:	Hounsfield tensometer ref.: C/002

TEST RESULTS

Sample Reference	Load Direction	Maximum Failure Load (kN)	Comments
MX 614-1	Vertical Load (Shear) Surface Mount	2.660 (271 kg)	Button pulled from mount
MX 614-2	Vertical Load (Shear) Surface Mount	2.835 (289 kg)	Button pulled from mount
MX 614-3	Vertical Load (Shear) Surface Mount	2.155 (220 kg)	Button pulled from mount
MX 614-4	85 degrees to vertical Surface Mount	2.660 (271 kg)	Button pulled from mount
MX 614-5	85 degrees to vertical Surface Mount	2.835 (289 kg)	Button pulled from mount
MX 614-6	85 degrees to vertical Surface Mount	2.155 (220 kg)	Button pulled from mount
MX 615-1	Vertical Load (Shear) Rebated	6.140 (626 kg)	Countersunk screw failed in shear
MX 615-2	Vertical Load (Shear) Rebated	6.140 (626 kg)	Countersunk screw failed in shear
MX 615-3	Vertical Load (Shear) Rebated	5.880 (600 kg)	Countersunk screw failed in shear

For Sandberg LLP

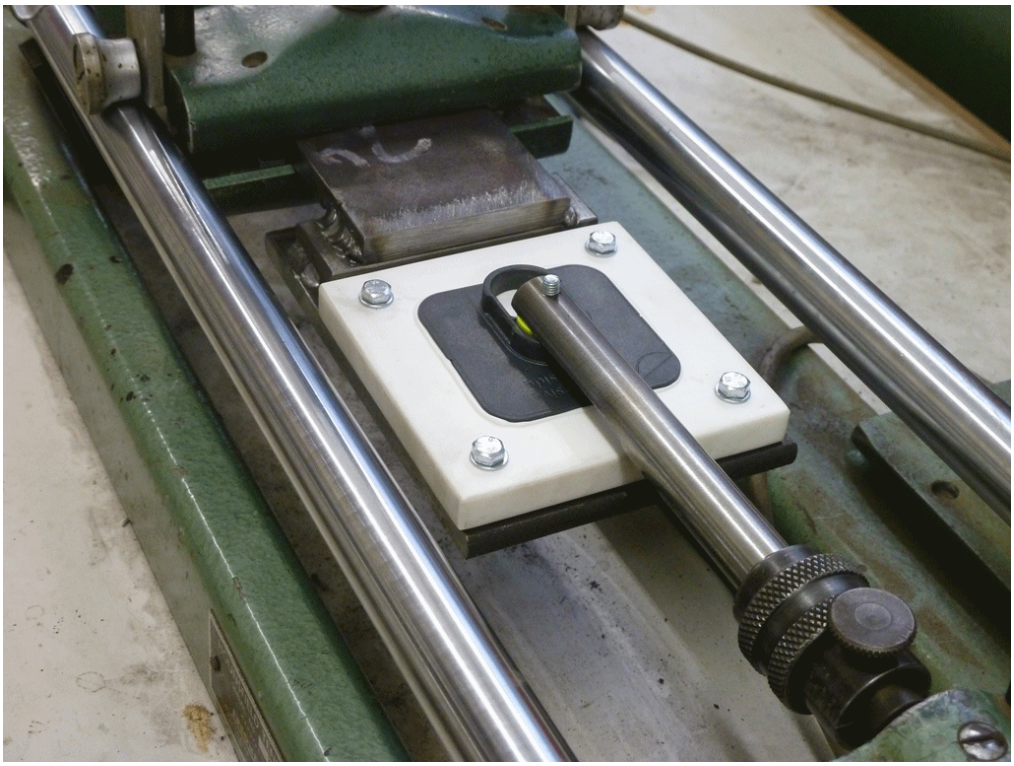
Date: 31 July 2017

Neale Fetter - Assistant Manager Metallurgy Department

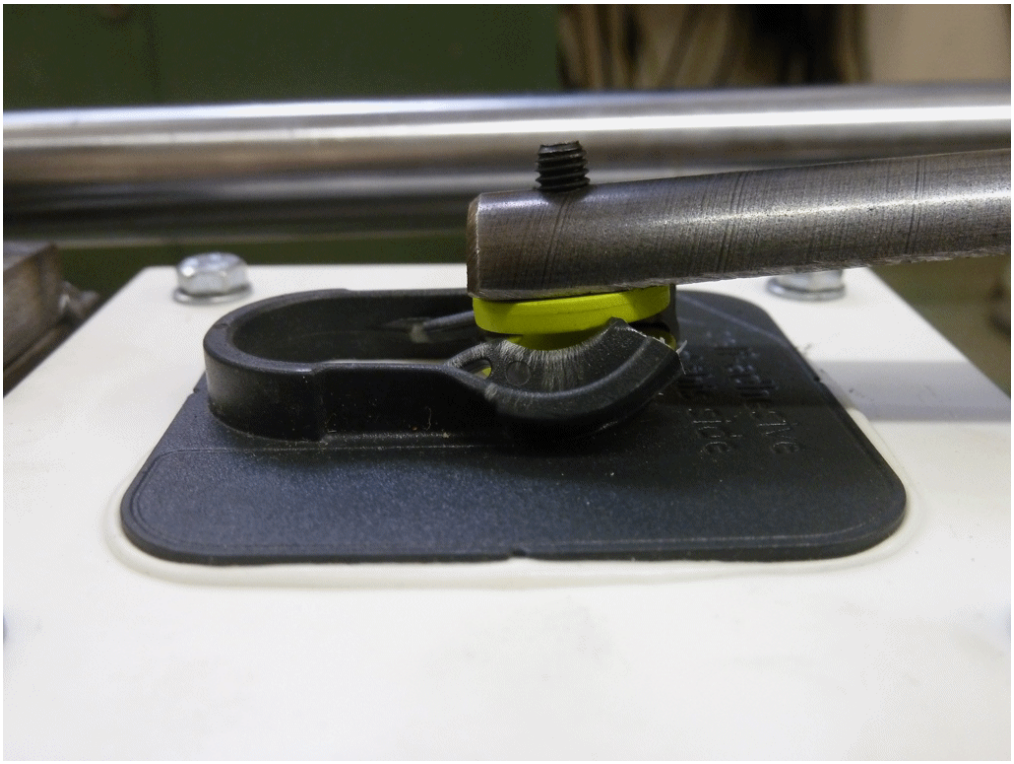
Materials, samples and test specimens are retained for a period of 2 months from the issue of the final report.
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation.

APPENDIX A

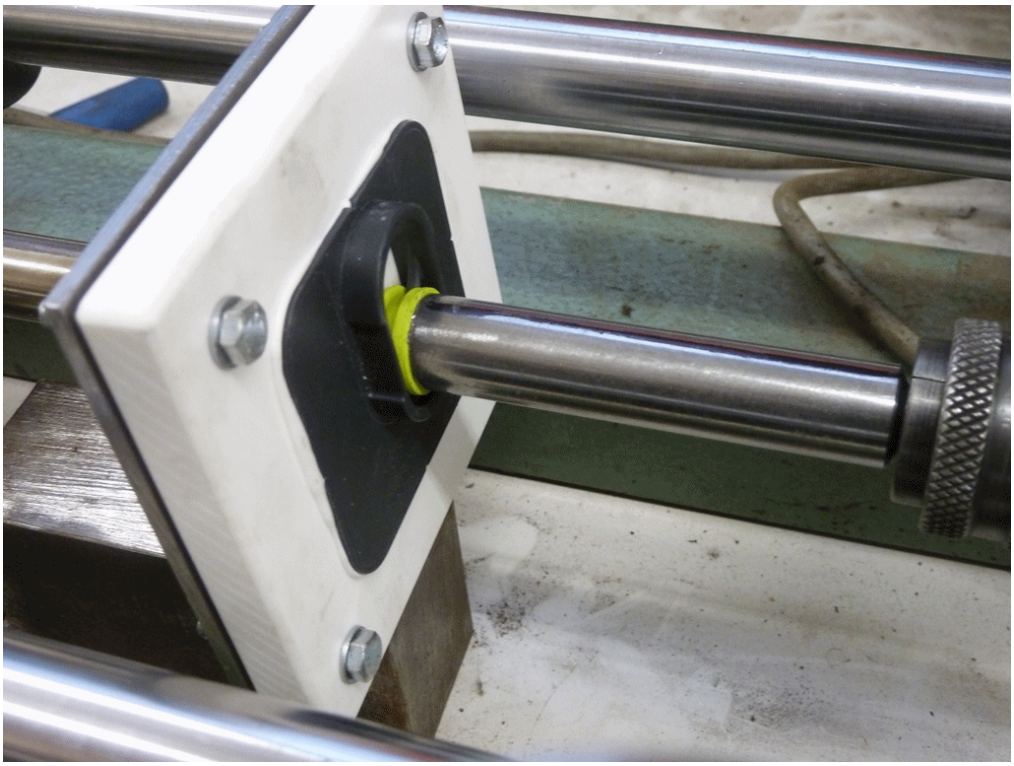
Photographs 1 to 6



Photograph 1 A view showing the test set-up for surface mounted vertical (shear) test.

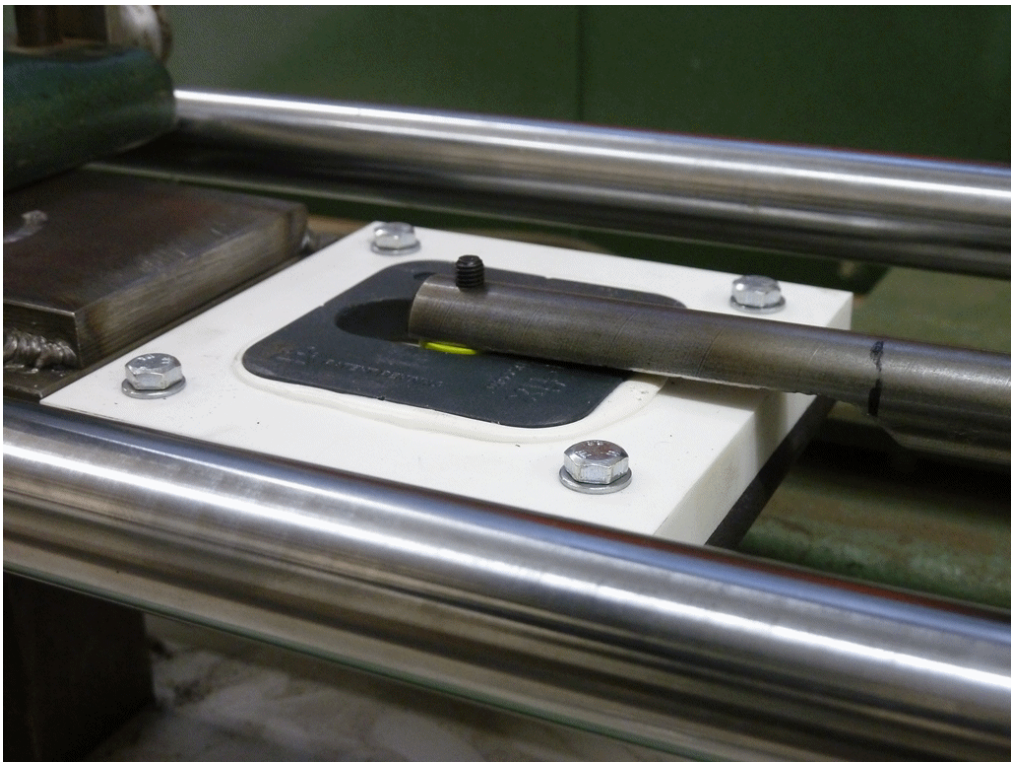


Photograph 2 A view showing vertical (shear) failure mode. The mount material surrounding the button distorted and the button pulled from mount.

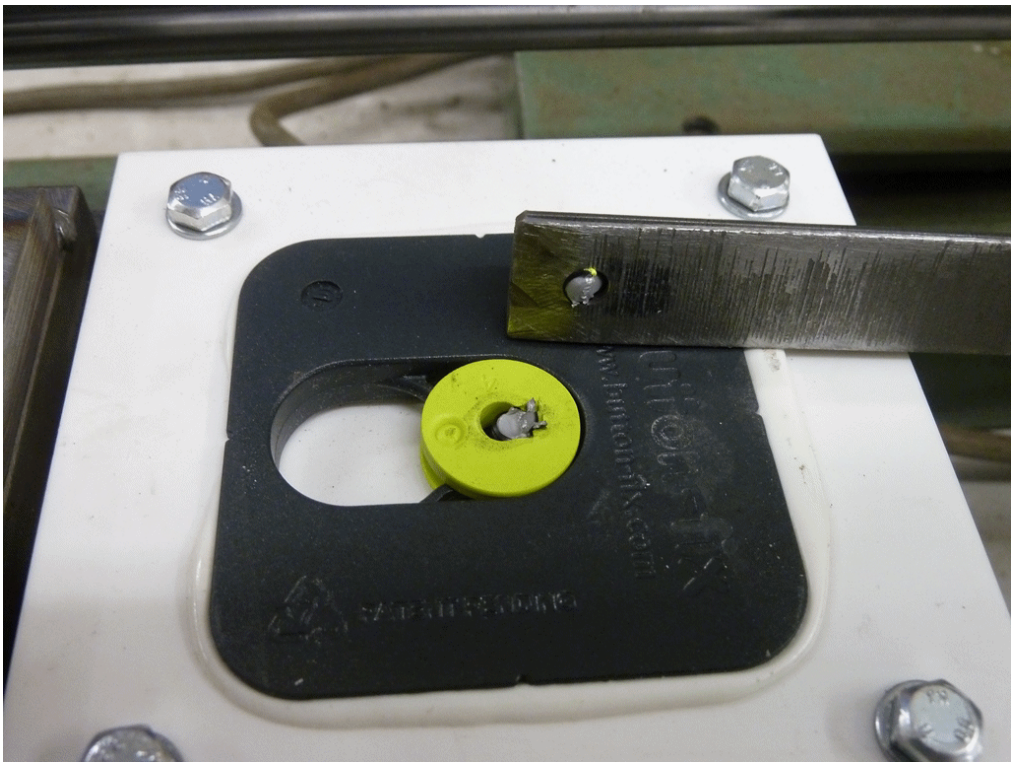


Photograph 3 A view showing the test set up for surface mounted 85 degrees from vertical (tension) test.

Photograph 4 A view showing the 85 degrees from vertical test failure mode. The mount material surrounding and the button distorted, allowing the button to be pulled from the mount.



Photograph 5 A view showing the test set-up for rebate mounted vertical (shear) test.



Photograph 6 A view showing the vertical (shear) test where the countersunk M5 screw failed in shear.