

Customer Details: Pineapple Contracts
Murray Road
ORPINGTON
Kent
BR5 3QY

For the attention of: Mr N Smith

Technical Report

Subject: STRENGTH AND STABILITY TESTING (SEATING)
Your Ref: Boxer Tub Chair
Our Ref: FUR0180425/0948
Date: 15th March 2010

Conditions of Issue:

This report may be forwarded to other parties provided that it is not changed in any way. It must not be published, for example by including it in advertisements, without the prior, written permission of SATRA.

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

Tests marked †fall outside the UKAS Accreditation Schedule for SATRA. All interpretations of results of such tests and the comments based upon them are outside the scope of UKAS accreditation and are based on current SATRA knowledge.

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: J M Shipman
Position: Business Area Manager
Department: Furniture Technology Centre

WORK REQUESTED

The testing to make sure that the product is fit for purpose, in terms of its strength and stability requirements.

Sample Submitted to SATRA: 23rd November 2010

TESTING

BS EN 15373: 2007 (Test Level 3 – Severe Use) – Strength, durability and safety requirements for non-domestic seating

Testing carried out from November 2009 to February 2010

RESULTS

‘Boxer Tub Chair’ BS EN 15373: 2007

Clause	Test	Result
5	Safety Requirements	
5.1	General	
5.2	Shear and squeeze points	
5.2.1	Shear and squeeze points when setting up and folding	PASS
5.2.2	Shear and squeeze points under influence of powered mechanisms	N/A
5.2.3	Shear and squeeze points during use (see strength and durability table)	PASS
5.3	Stability	
5.3.1	General	
5.3.2	Swivelling chairs	N/A
5.3.3	Non swivelling chairs	PASS
5.4	Rolling resistance of the unloaded chair	N/A

STRENGTH AND DURABILITY TABLE – Test Level 3 (Severe Use)

Reference	Test and Sequence	Results
EN 1728: 2000, 6.2.1	Seat and back static load test	PASS
EN 1728: 2000, 6.2.2	Seat front edge static load test	PASS
EN 1728: 2000, 6.3	Additional static load test for tilting chairs and intermediate reclining chairs	N/A
Annex A2	Vertical static load on back	PASS
EN 1728: 2000, 6.4	Foot rail/foot rest and leg static load test	N/A
EN 1728: 2000, 6.5	Arm sideways static load test	NT (see Note 1)
	Wing sideways static load test	N/A
EN 1728: 2000, 6.6	Arm downwards static load test	PASS
Annex A1	Vertical upwards static load on arm rests	N/A
EN 1728: 2000, 6.7	Seat and back fatigue test	PASS
	Seat and back fatigue test for chairs with tilting or reclining mechanism (upright position)	N/A
EN 1728: 2000, 6.8	Seat front edge fatigue test	PASS
EN 1728: 2000, 6.10	Arm fatigue test	PASS
EN 1728: 2000, 6.11	Leg rest fatigue	N/A
Annex A5	Foot rail fatigue	N/A
EN 1728: 2000, 6.12	Leg forward static load test	PASS
EN 1728: 2000, 6.13	Leg sideways static load test	PASS
EN 1728: 2000, 6.14	Diagonal base test	N/A
EN 1728: 2000, 6.15	Seat impact test	PASS
EN 1728: 2000, 6.16	Back impact test	PASS
EN 1728: 2000, 6.17	Arm impact test	PASS
EN 1728: 2000, 6.18	Drop test (multiply seating)	N/A
Annex A3	Auxiliary writing surface static load test	N/A
Annex A4	Auxiliary writing surface static load test	N/A

DISCUSSION

Note 1: This clause was not tested to on the advice of the client.

The 'Boxer Tub Chair' submitted for testing by Pineapple Contracts (see Pictures 1-3), has satisfied the relevant requirements of BS EN 15373: 2007 (Test Level 3 – Severe Use) – Strength, durability and safety requirements for non-domestic seating, except for Clause 6.5, which was not tested to on the advice of the client.

APPENDICES:



Picture 1: Front view of the 'Boxer Tub Chair'



Picture 2: Side view of the 'Boxer Tub Chair'



Picture 3: Rear view of the 'Boxer Tub Chair'

TERMS AND CONDITIONS:

1. **GENERAL**
Work done or services undertaken are subject to the terms and conditions detailed below and all other conditions, warranties and representations, expressed or implied are hereby excluded.
2. **PRICES**
Prices are based on current material and production costs, exchange rates, duty and freight and are subject to change without notice.
3. **DELIVERY ESTIMATES**
Delivery estimates are made in good faith and date from receipt of a written order and full information to enable us to proceed. While we make every effort to fulfil them, such estimates are subject to unforeseen events and if not maintained, cannot give rise to any claim. Offers "ex stock" are subject to prior sale.
4. **CANCELLATION AND RETURNS**
Cancellation of orders for goods, services, training or consultancy are only acceptable by prior agreement of SATRA or its subsidiaries (hereafter called The Centre) and a charge will normally be made.
5. **CLAIMS**
Claims for errors, shortages etc should be notified within 10 days of date of receipt. In the event of goods damaged in transit, packing materials should be retained for examination, otherwise no liability can be accepted.
6. **PAYMENT TERMS**
Payment terms are net 21 days from date of invoice. Failure to comply with the terms of payment may result in delayed delivery of goods and services and a review of your credit account. Should the customer become subject to an administration order, or becomes bankrupt or goes into liquidation, The Centre has a right to cancel any contract and discontinue any work.
7. **RETENTION OF TITLE**
All goods remain the property of The Centre until paid in full. Under no circumstances will a customer's purchase order override our Retention of Title clause. In the case of software, the ownership of the software remains with The Centre. Payment of invoices in full will entitle the customer to use the software under licence until (a) they cease to be a member of The Centre or (b) they cease trading. In both instances, the licence shall then revert to The Centre.
8. **GUARANTEE**
All goods manufactured by us are guaranteed both as regards material and workmanship. Any part returned carriage paid, within twelve months from date of supply and found defective, will be repaired or replaced at our option free of charge. We admit no liability for loss, damage or delay consequent on any defect in any goods supplied by us. Any goods supplied but not made by The Centre carry only the maker's guarantee.
9. **RESPONSIBILITY**
Every effort is made to ensure accuracy in description, drawings and other information in correspondence, catalogues, etc but no warranty is given in this respect and we shall not be liable for any error therein. The Centre carries out all tests and/or advises only on the basis that the same are carried out, made or given without any responsibility whether for negligence or otherwise. The Centre and its servants or agents will not be liable for any damage or loss direct or indirect of whatsoever kind, whether or not the same results directly or indirectly from negligence on the part of The Centre or its servants or agents.
10. **CONFIDENTIALITY**
Unless specifically excluded in the terms of an individual contract between The Centre and its client, the following shall apply to all reports, advice, drawings, photographs, specifications or data:
 - i. The above shall not be disclosed to third parties or used in litigation without the consent of The Centre.
 - ii. Where The Centre has given consent to disclosure, the client shall draw the attention of the third party to these terms of business and the basis on which The Centre undertakes test, reporting and advising. The client shall indemnify The Centre for any failure to do so.
 - iii. The above items are submitted to the client as confidential documents. Confidentiality shall continue to apply after completion of the business, but shall cease to apply to information or knowledge which may come into the public domain.
11. **CONSTRUCTION AND ARBITRATION**
The laws of England shall govern all contracts and the parties submit to exclusive jurisdiction of the courts of England, unless otherwise agreed.

GENERAL CONDITIONS AND INFORMATION CONCERNING FURNITURE TESTING

1. SATRA's General Terms and Conditions apply to both test reports and certificates.
2. Tested products/materials will be kept at SATRA for a limited time and then either returned to clients (at their cost) or will be destroyed.
3. Test Certificates can be provided to supplement test reports. Please request these and quote the test report number and the product/material reference.
4. Test Certificates relate to test reports and evaluations carrying the same SATRA CQ number and no others.
5. Further information on the test methods, specifications used, test results and evaluations are given in SATRA test reports, or are available upon request.
6. Any wording used to promote products as a result of SATRA test reports and/or certificates must be submitted to SATRA for approval, giving sufficient time to allow for clearance in writing. Ask for Policy Document C5130/12.
7. Tests carried out to demonstrate the ability of the product or material to perform satisfactorily in its intended environment do not ensure that failure will not eventually occur as a result of habitual misuse or after a long period of service.
8. Flammability test results relate only to ignitability of the combination of materials under the particular conditions of tests; they are not intended as a means of assessing the full potential fire hazard of the materials in use.
9. Flammability test results can only be applied to the batch of materials submitted for test. It is recommended by many Fire Officers and Trading Standards Officers that test results and certificates are renewed every six months through re-tests. More frequent testing of batches (such as once per month or each batch) may be needed to show due diligence.
10. SATRA Furniture – Fitness for Purpose Guidelines and SATRA Test Methods may be used where appropriate. Such occasions may include instances where there is no European or International standard that is appropriate. SATRA Guidelines and Test Methods reflect the current state of knowledge and are constantly being reviewed.
11. Safety critical items such as bunk beds, mirrors, glass furniture, motion furniture, nursery furniture, beds, electrical items and upholstery may need to comply with specific regulations. Clients are advised to check for conformance before supplying products.
12. Where due diligence is required, clients should be able to demonstrate, statistically, that the required performance level is consistently present throughout each batch. Thus test data is needed and this should be based upon sampling each batch in accordance with statistical sampling such as ISO 2859-1.
13. Reports must not be altered. Reports may be re-issued by SATRA (certain conditions apply) with different references.
14. The uncertainty of the results in this report is based on a standard uncertainty multiplied by a coverage factor $k=2$, which provides for a confidence level of approximately 95%. In accordance with the SATRA Quality Manual, information on uncertainty will be included in test reports when it is deemed relevant to the validity or application of the test results, or when a customer requests such information, or when the uncertainty affects compliance of the item tested to a particular specification.

Furn
June 2007

Report by: Nathan Day
Pineapple Contracts
FUR0180425/0948
15th April 2010

Signed: J M Shipman
Business Area Manager
Furniture Technology Centre
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