



WOOD AND FURNITURE TESTING CENTRE (WFTC)
CSIR-FORESTRY RESEARCH INSTITUTE OF GHANA

FURNITURE TEST REPORT

TEST MATERIAL AND TYPE: Wooden chair and tables

CUSTOMER /COMPANY NAME ADDRESS OF CUSTOMER:

Hopwood Construction Limited
Woodland View,
The Spinney Brighthouse,
HD62JW, UK

WFTC, P.O. Box up 63 Knust, Fumesua, Kumasi. Tel: +233-(0)3220 60123 / 60373.

SUMMARY REPORT

Introduction

This report presents in detail the tests carried out on wooden furniture products (chair and tables) submitted by Mrs. Nangula Hopwood of Hopwood Construction Limited to the Wood and Furniture Testing Centre (WFTC). The tests were carried out under standard conditions and methods prescribed in; GS EN 581-1, GS EN581-2 and GS EN581-3. All tests were conducted at the Wood and Furniture Testing Centre (WFTC) of CSIR - Forestry Research Institute of Ghana under job order JO/2024/04/C063 and JO/2024/04/T004 – T005.

The tests were carried out by suitably trained technical officer of the CSIR-FORIG WFTC accredited under ISO/IEC 17025:2017. Test results were analyzed and authorized by Technical Manager of CSIR-FORIG WFTC.

Objectives

The purpose of carrying out the tests on the chairs was to determine the:

- i. General safety requirements: Sharpness of edges, shear and squeeze points etc.
- ii. Durability: How long the design will withstand usage over time.
- iii. Stability: How the designed chairs can resist toppling during usage.
- iv. Strength: The chairs' ability to withstand their designed loads.

Deviation from Standards, Special Cases and Justification

There were no deviations from the test methods as specified in GS EN 581-1, 581-2 and 581-3

Table 1: Tests results summary of Wooden Coffee Brown chairs Code: C063

No.	Test type	Specified force	No. of Cycles	Remarks
1	Seat static load and back static load test (EN 1728, 6.4)	1600 N, 410 N	10	Passed
2	Seat front edge static load test (EN 1728, 6.5)	1300 N	10	Passed
3	Combined seat and back durability test (EN 1728, 6.17)	1000 N, 330 N	25,000	Passed
4	Leg forward static load test (EN 1728, 6.15)	1000 N, 300 N	10	Passed
5	Leg sideways static test 1728, 6.16	1000 N, 300 N	10	Passed
6	Seat impact test EN 1728, 6.24	250 N	10	Passed
7	Forward stability EN 1022, 6.2	600 N, 20 N,		Passed
8	Rearward stability EN 1022, 6.6	600N, 168.6 N		Passed
9	Sideways stability EN 1022, 6.4	600 N, 20 N		Passed

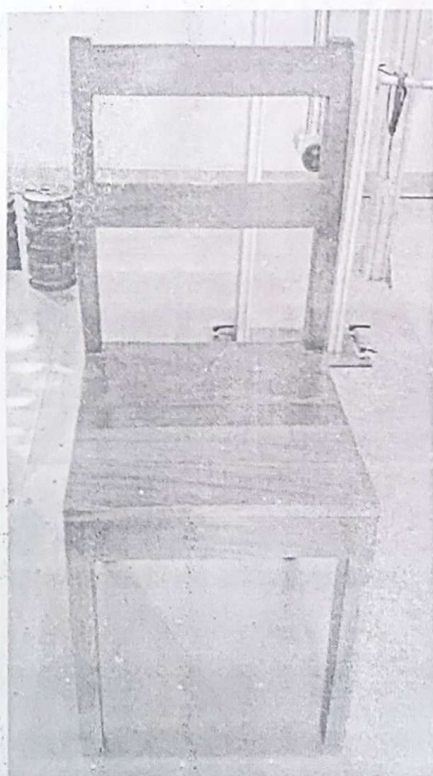


Figure 1: Sample of the wooden chair tested and reported in Table 1.

Table 2: Tests results summary of sample Wooden Coffee Brown Table Code: T004

No.	Test type	Specified force	No. of Cycles	Remarks
1	Vertical static load test on top surface more than 0.25m ² (EN 1730, 6.3.1)	750N	10	Passed
2	Vertical static load test on top surface less than 0.25m ² (EN 1730, 6.3.1)	NA		NA
3	Additional vertical static test on main surface with length greater than 1600mm (EN 1730, 6.3.2)	NA		NA
4	Vertical static load with ancillary surface test (EN 1730, 6.3.3)	NA		NA
5	Horizontal durability test (EN 1730, 6.4.2)	150N	10,000	Passed
6	Stability under vertical (EN 1730, 7.2)	200N		Passed
7	Stability for tables with extension element (EN 1730, 7.3)	NA		NA
8	Stability of tables designed to support a person (EN 1730, 7.4)	NA		NA

NA= Not Applicable



Figure 2: Sample of the wooden dinning table tested and reported in Table 2.

Table 3: Tests results summary of sample Wooden Red Table Code: T005

No.	Test type	Specified force	No. of Cycles	Remarks
1	Vertical static load test on top surface more than 0.25m ² (EN 1730, 6.3.1)	750N	10	Passed
2	Vertical static load test on top surface less than 0.25m ² (EN 1730, 6.3.1)	NA		NA
3	Additional vertical static test on main surface with length greater than 1600mm (EN 1730,6.3.2)	NA		NA
4	Vertical static load with ancillary surface test (EN 1730, 6.3.3)	NA		NA
5	Horizontal durability test (EN 1730, 6.4.2)	150N	10,000	Passed
6	Stability under vertical (EN 1730, 7.2)	200N		Passed
7	Stability for tables with extension element (EN 1730, 7.3)	NA		NA
8	Stability of tables designed to support a person(EN 1730, 7.4)	NA		NA

NA= Not Applicable

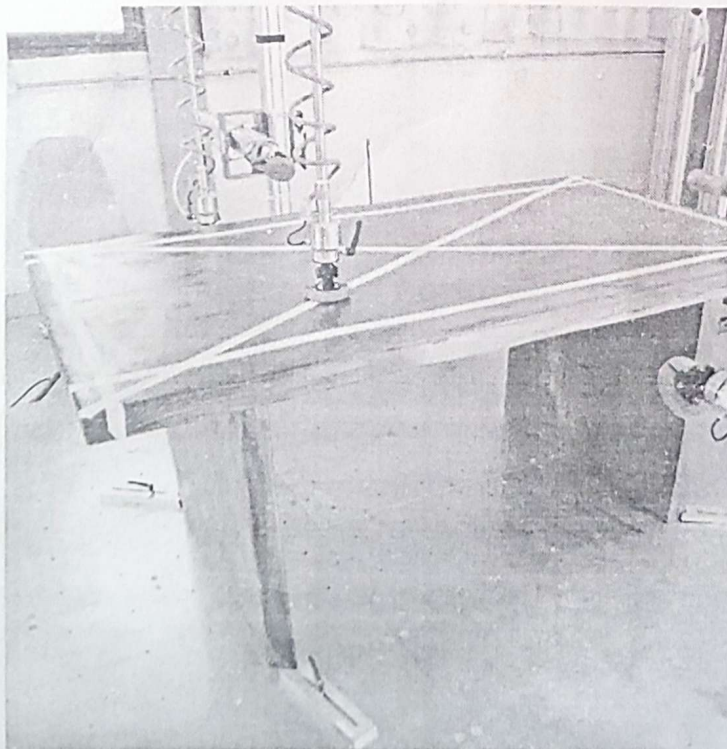


Figure 3: Sample of the wooden table tested and reported in Table 3.

Table 4: Results summary in ISO/IEC 17025 certification for wooden chair

No	Test Details	Conformity Rate (%)	Non-conformity Rate (%)
1	Seat static load and back static load test	100	0
2	Seat front edge static load test	100	0
3	Combined seat and back durability test	100	0
4	Leg forward static load test	100	0
5	Leg sideways static test	100	0
6	Seat impact test	100	0
7	Forward stability test	100	0
8	Rearward stability test	100	0
9	Sideways stability test	100	0

Table 5: Results summary in ISO/IEC 17025 certification for wooden tables

No.	Test Details	Conformity Rate (%)	Non-conformity Rate (%)
1	Vertical static load test on top surface more than 0.25m ²	100	0
2	Horizontal durability test	100	0
3	Stability under vertical	100	0

Terms of this Report

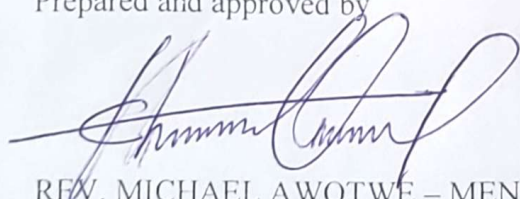
The test results in this report relate exclusively to the products tested. WFTC of CSIR-FORIG shall not be liable for the production of chair and tables that do not conform to the specifications.

Excerpts from this report shall not be reproduced without the permission of Wood and Furniture Testing Centre of CSIR-FORIG.

Original copy of this report will be kept for five years. This report is only valid if signed and stamped by the Technical Manager of the WFTC, CSIR-FORIG.

Prepared and approved by

Issued on 29th August, 2024



REV. MICHAEL AWOTWE – MENSAH (PhD)

TECHNICAL MANAGER

WFTC, CSIR-FORIG

WOOD & FURNITURE TESTING
CENTRE (WFTC)
CSIR - FORIG