

BIOTANEX NEW ZEALAND LIMITED TEST REPORT

SCOPE OF WORK

REPORT OF SICARO DECKING TESTED IN ACCORDANCE WITH ASTM D1037-12 (REAPPROVED 2020), *STANDARD TEST METHODS FOR EVALUATING PROPERTIES OF WOOD-BASE FIBER AND PARTICLE PANEL MATERIALS*, SECTION 17 – *HARDNESS*

REPORT NUMBER

105876374COQ-001

TEST DATE(S)

07/29/24

ISSUE DATE

08/07/24

REVISED DATE

[08/13/24]

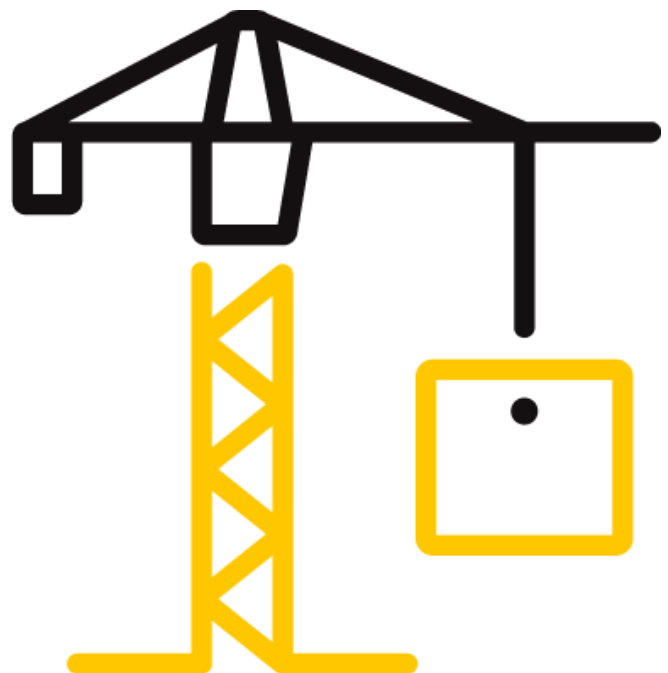
PAGES

10

DOCUMENT CONTROL NUMBER

GFT-OP-10c (09/29/20)

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TEST REPORT FOR BIOTANEX NEW ZEALAND LIMITED

Report No.: 105876374COQ-001

Date: 08/13/24

REPORT ISSUED TO

BIOTANEX NEW ZEALAND LIMITED

2670 Omaha Road

Hastings, 4175

New Zealand

SECTION 1

SCOPE

Intertek Building & Construction (B&C) was contracted by Biotanex New Zealand Limited, 2670 Omaha Road, Hastings, 4175, New Zealand, to perform testing in accordance with ASTM D1037-12 (Reapproved 2020), *Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials*, Section 17 – *Hardness*, on their Sicaro Decking product. Results obtained are tested values and were secured by using the designated test method. Testing was conducted at the Intertek test facility in Coquitlam, BC, Canada.

Unless differently required, Intertek reports apply the “Simple Acceptance” rule also called “Shared Risk approach,” of ILAC-G8:09/2019, Guidelines on Decision Rules and Statements of Conformity.

For INTERTEK B&C:

COMPLETED BY:	Chris Chang, P.Eng. Sr. Tech.
TITLE:	– Building & Construction
SIGNATURE:	 EGBC Permit No.: 1000953
DATE:	08/13/24

REVIEWED BY:	Baldeep Sandhu Manager
TITLE:	– Building & Construction
SIGNATURE:	
DATE:	08/13/24

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SECTION 2

SUMMARY OF TEST RESULTS

TABLE 1. TEST RESULTS		
PROPERTY	DESCRIPTION	RESULT
Hardness	Wildwood	1194 lbf
	Safariwood	1536 lbf

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SECTION 3

TEST METHOD

The specimens were evaluated in accordance with the following:

ASTM D1037-12 (Reapproved 2020), *Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials*, Section 17 – Hardness

SECTION 4

MATERIAL SOURCE/INSTALLATION

The client submitted the decking product to the Evaluation Center on July 9, 2024 (Coquitlam ID# VAN2407191358-001). The samples were received in good condition and were suitable for testing unless noted otherwise. The samples were not independently selected for testing.

SECTION 5

EQUIPMENT

Calibration of test equipment was performed by Intertek B&C in accordance with ISO 17025 requirements.

ASSET #	DESCRIPTION	MODEL	CAL DUE DATE
22079	Lunaire Environmental Chamber	CE0958-4	N/A
D7830	Extech Temperature and Humidity Recorder	RH550	11/07/24
P60553	Instron Universal Testing Machine with 100kN Capacity Load Cell	3382	09/18/24
P60610	T&D Temperature and Humidity Logger	TR-72Ui	08/30/24
D7847	Ohaus Digital Scale	PX4202	01/09/25

SECTION 6

LIST OF OFFICIAL OBSERVERS

NAME	COMPANY
Chris Chang	Intertek B&C

The above observer(s) witnessed part of the test program.

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SECTION 7
CONDITIONING

Test specimen materials were conditioned at a temperature of $20 \pm 3^{\circ}\text{C}$ ($68 \pm 6^{\circ}\text{F}$) and relative humidity of $65 \pm 5\%$ until constant weight per Section 6.3.2 *Dry "Conditioned"* of ASTM D1037-12 (2020).

HARDNESS

Hardness was conducted in accordance with Section 17 of ASTM D1037-12 (2020). Five (5) test specimens, each measuring 10.5 in. (267 mm) long x width of deck product, were used for testing. Extra dummy specimens were prepared to form a thickness of at least 1 in. (25 mm). A steel ball, measuring 0.444 in. (11.3 mm) diameter, was loaded at a rate of 0.25 in./min (6 mm/min) until the ball penetrated to one-half its diameter. Two (2) penetrations were made on each test specimen. Per the client's request, only the smooth surface was tested. The maximum load for each specimen was measured and average reported.

SECTION 8
TEST SPECIMEN DESCRIPTION

The product was identified as Sicaro Decking. The product was submitted in two (2) different configurations as follows:

- Wildwood, 5.5 in. wide x 13/16 in. thick
- Safariwood, 3.5 in. wide x 13/16 in. thick

SECTION 9
TEST RESULTS

A summary of the test results is presented in Section 2 of this test report. See Appendices for a full set of test data.

SECTION 10
CONCLUSION

The Biotanex New Zealand Limited Sicaro Decking product identified and evaluated in this report has been tested per ASTM D1037-12 (Reapproved 2020), *Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panel Materials*, Section 17 – *Hardness*. Results are as reported in Section 2 of this report.



Total Quality. Assured.

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SECTION 11

APPENDIX A – TEST DATA (3 PAGES)



Total Quality. Assured.

Test Data Package Page 1 of 3

Company	Biotanex New Zealand Limited	Technician(s)	Chris Chang,
Project No.	G105876374	Reviewer	Baldeep Sandhu
Models	Sicaro Decking	Start/End Date	July 29, 2024
Product Name	Same as above	Sample ID	VAN2407191358-001
Standard	ASTM D1037-12 (Reapproved 2020), <i>Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panels</i> , Section 17. Hardness		

Test Data Package

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Hardness #1	2
Hardness #2	3

Test:	Hardness	Project No:	G105876374
Date:	29-Jul-24	Eng/Tech:	Chris Chang
Client:	Biotanex New Zealand Limited	Reviewer:	Baldeep Sandhu
Product:	Sicaro Decking - Wildwood	Location:	Coquitlam, BC, Canada
Test Method:	ASTM D1037-12 (Reapproved 2020), <i>Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panels</i> , Section 17. <i>Hardness</i>		
Conditioning	Samples conditioned at 20 ± 3°C and 65 ± 5% until equilibrium		
Equipment:	Lunaire Environmental Chamber (Intertek ID# 22079)		
	Extech RH550 Temperature Humidity Recorder (Intertek ID# D7830, cal due November 7, 2024)		
	Instron 3382 Universal Test Apparatus with 100 kN Load Cell (Intertek ID# P60553, cal due September 18, 2024)		
	BlueHill Version: 4.34.30245		
	T&D TR-72Ui Temperature and Humidity Logger (Intertek ID# P60610, cal due August 30, 2024)		
Specimen Size:	5.5 in. x 10.5 in. (140 mm x 267 mm)		
Load Rate:	0.25 in./min. (6 mm/min.)		
Time/Temp/RH:	10:00AM / 22.2°C / 49.0%		

Panel	Thickness	Location 1	Location 2	Average	
	(in.)	(lbf)	(lbf)	(lbf)	(N)
1	0.8450	1246.7	1375.7	1311	5832
2	0.8415	1273.3	1228.8	1251	5565
3	0.8435	1118.8	1052.2	1085	4828
4	0.8410	1105.7	1088.4	1097	4880
5	0.8485	1038.9	1414.3	1227	5456
Mean:				1194	5312
StdDev:				99	441
COV:				8%	8%

Test:	Hardness	Project No:	G105876374
Date:	29-Jul-24	Eng/Tech:	Chris Chang
Client:	Biotanex New Zealand Limited	Reviewer:	Baldeep Sandhu
Product:	Sicaro Decking - Safariwood	Location:	Coquitlam, BC, Canada
Test Method:	ASTM D1037-12 (Reapproved 2020), <i>Standard Test Methods for Evaluating Properties of Wood-Base Fiber and Particle Panels</i> , Section 17. <i>Hardness</i>		
Conditioning	Samples conditioned at 20 ± 3°C and 65 ± 5% until equilibrium		
Equipment:	Lunaire Environmental Chamber (Intertek ID# 22079)		
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	BlueHill Version: 4.34.30245		
	T&D TR-72Ui Temperature and Humidity Logger (Intertek ID# P60610, cal due August 30, 2024)		
Specimen Size:	3.5 in. x 10.5 in. (89 mm x 267 mm)		
Load Rate:	0.25 in./min. (6 mm/min.)		
Time/Temp/RH:	10:55AM / 22.2°C / 49.0%		

Panel	Thickness	Location 1	Location 2	Average	
	(in.)	(lbf)	(lbf)	(lbf)	(N)
1	0.8315	1247.3	1324.4	1286	5719
2	0.8345	1675.7	1642.2	1659	7379
3	0.8305	1420.1	1596.9	1508	6710
4	0.8305	1515.8	1461.2	1488	6621
5	0.8305	1825.3	1649.9	1738	7729
Mean:				1536	6832
StdDev:				174	775
COV:				11%	11%

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SECTION 12

REVISION LOG

REVISION #	DATE	PAGES	REVISION
0	08/07/24	N/A	Original Report Issue
1	08/13/24	3, 5	Removed textured surface test results