

LEADVISION INTERNATIONAL LTD

80, chemin Richelieu, Saint-Mathias, Qc, Canada J3L 0L5
PHONE : 450 658-7775 | FAX: 450 658-3662
leadvisioninternational.com | service@leadvisioninternational.com

TEST REPORT

REPORT NUMBER

180611002SHF-BP-2

ISSUE DATE

2018-07-05

PAGES

11

DOCUMENT CONTROL NUMBER

LFT-APAC-SHF-OP-10a

© 2018 INTERTEK



Test Report

Issue Date: 2018-07-05 Intertek Report No. 180611002SHF-BP-2

Applicant: LEADVISION INTERNATIONAL LTD

Applicant Address: 195/1 MOO 4, MAEHIA, CHIANG MAI, THAILAND 50100

Attn: Grace

Applicant: LEADVISION INTERNATIONAL LTD

Applicant Address: 80, chemin Richelieu, Saint-Mathias, Qc, Canada J3L 0L5

Attn: Marc D'Amico

SUBJECT: Performance testing
WPC CLADDING

Dear Sir,

This test report represents the results of our evaluation of the above referenced product(s) to the requirements contained in the following standards:

TEST METHODS AND STANDARDS		
Refer to the next following Pages.		

SAMPLE ID	MODEL	SPECIFICATION
S180611002SHF.001~008	YZS14814A-G	3660*148*14mm

SAMPLE RECEIVED: 2018-06-04
TESTED FROM: 2018-06-11 TO 2018-07-05

This report is for the exclusive use of Intertek's Client and is provided pursuant to the agreement between Intertek and its Client. Intertek's responsibility and liability are limited to the terms and conditions of the agreement. Intertek assumes no liability to any party, other than to the Client in accordance with the agreement, for any loss, expense or damage occasioned by the use of this report. Only the Client is authorized to permit copying or distribution of this report and then only in its entirety. Any use of the Intertek name or one of its marks for the sale or advertisement of the tested material, product or service must first be approved in writing by Intertek. The observations and test results in this report are relevant only to the sample tested. This report by itself does not imply that the material, product, or service is or has ever been under an Intertek certification program.

Test Report

Issue Date: 2018-07-05

Intertek Report No. 180611002SHF-BP-2

Test Items, Method and Results:

Test Item: Flexural properties

Sample Condition: 40 hours at a temperature of $23\pm 2^{\circ}\text{C}$ and relative humidity of $50\pm 5\%$

Test Span: 120mm, required by applicant

Test Items	Test Method	Test Results		
Flexural Properties	ASTM D7031-11 Section 5.5	Flexural strength (MOR):	22.3	MPa
	ASTM D6109-13	Flexural Stiffness (MOE):	2613	MPa

Test Report

Issue Date: 2018-07-05

Intertek Report No. 180611002SHF-BP-2

Test Items, Method and Results:

Test Item: Creep recovery

Sample Condition: 40 hours at a temperature of $23\pm 2^{\circ}\text{C}$ and relative humidity of $50\pm 5\%$

Test Span: 120mm, required by applicant

Test Items	Test Method	Test Results
Creep recovery	ASTM D7031-11 Section 5.10	Creep recovery: 96 %

Test Report

Issue Date: 2018-07-05

Intertek Report No. 180611002SHF-BP-2

Test Items, Method and Results:

Test Item: Freeze-thaw resistance

Sample Condition: Three cycles of water submersion, freezing and thawing.

Test Span: 120mm, required by applicant

Test Items	Test Method	Test Results		
Freeze-thaw Resistance	ASTM D7031-11 Section 5.20	Flexural strength (MOR):	14.1	MPa
	ASTM D6109-13	Flexural Stiffness (MOE):	1982	MPa

Note:

Exposure cycle condition:

- 1) Submerge underwater for 24 hours
- 2) Place in a freezer at -29°C for 24 hours
- 3) Return to room temperature for 24 hours

Test Report

Issue Date: 2018-07-05

Intertek Report No. 180611002SHF-BP-2

Test Items, Method and Results:

Test Item: Resistance to artificial weathering - Fluorescent UV lamps

Test Sample: WPC CLADDING

Test Method: ASTM G154-16 Cycle 1

Light Source: UVA-340

The Exposure cycle:

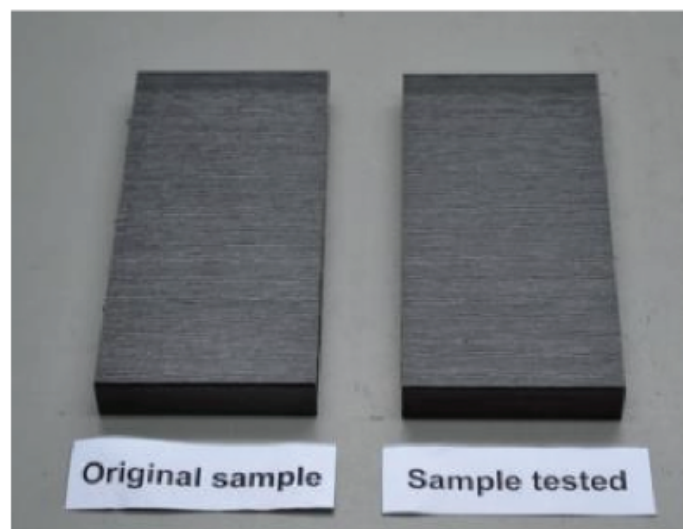
1) 8 hours dry, Irradiance: 0.89 W/m^2 at 340 nm, Black-panel temperature: $60 \text{ }^\circ\text{C} \pm 3 \text{ }^\circ\text{C}$

2) 4 hours condensation, Irradiance: UV lamps off, Black-panel temperature: $50 \text{ }^\circ\text{C} \pm 3 \text{ }^\circ\text{C}$

Test Duration: 300 hours

Test Result:

Exposure time	ΔL^*	Δa^*	Δb^*	ΔE^*	Grey scale	Observation
300 hours	-0.79	-0.02	0.06	0.79	4-5	Part showed slight color change



After test

Test Report

Issue Date: 2018-07-05

Intertek Report No. 180611002SHF-BP-2

Test Items, Method and Results:

Test Item: Specific gravity

Sample Condition: 40 hours at a temperature of $23\pm 2^{\circ}\text{C}$ and relative humidity of $50\pm 5\%$

Test Items	Test Method	Test Results
Specific Gravity	ASTM D7031-11 Section 5.14 ASTM D2395-17	1.197 g/cm ³

Test Report

Issue Date: 2018-07-05

Intertek Report No. 180611002SHF-BP-2

Test Items, Method and Results:

Test Item: Moisture content

Sample Condition: 40 hours at a temperature of $23\pm 2^{\circ}\text{C}$ and relative humidity of $50\pm 5\%$

Test Items	Test Method	Test Results
Moisture content	ASTM D7031-11 Section 5.15 ASTM D4442-16	0.36%

Test Report

Issue Date: 2018-07-05

Intertek Report No. 180611002SHF-BP-2

Test Items, Method and Results:

Test Item: Moisture absorption and thickness swell

Test Condition: Submersion in water at 23°C

Submersion Time: 24h

Test Items	Test Method	Test Results		
Moisture Absorption and Thickness Swell	ASTM D7031-11 Section 5.19	Water absorption:	0.44	%
	ASTM D1037-12 Section 23	Thickness swell:	0.14	%

Test Report

Issue Date: 2018-07-05

Intertek Report No. 180611002SHF-BP-2

Test Items, Method and Results:

Test Item: Coefficient of Linear Thermal Expansion
Test Method: ASTM D696-16
Conditioning: Condition the test specimens at 23±2°C and 50±10 % relative humidity for not less than 40 h
Test Sample: WPC CLADDING
Specimen Size: 80×10×10 mm (length × width × thickness)
Temperature Range: From -30°C (-22°F) to 30°C (86°F)

Test Result:

Test Item	Result
Coefficient of Linear Thermal Expansion	Mean value: 42.9 ×10 ⁻⁶ mm/mm/°C

Test Report

Issue Date: 2018-07-05

Intertek Report No. 180611002SHF-BP-2

APPENDIX: SAMPLE RECEIVED PHOTO



REPORT AUTHORIZED

When signed with physical or electronic signature, the contents of this report have been prepared and approved per Intertek's quality process in accordance with ISO 17025.

Torres Qi  *Kyle Wang*

Name: Torres Qi
Title: Reviewer

Name: Kyle Wang
Title: Project Engineer

Revision:

NO.	DATE	CHANGES	AUTHOR	REVIEWER
180611002SHF-BP-2	2018-07-05	First issue	Kyle Wang	Torres Qi