

# PRODUCT TESTING REPORT

## Introduction

The AliDeck System is a family of configurable aluminium metal decking products, including decking boards, joists, pedestals and accessories. With all elements of the AliDeck System being inter-compatible, unrivalled versatility is provided to cope with any balcony, terrace or walkway decking situation.

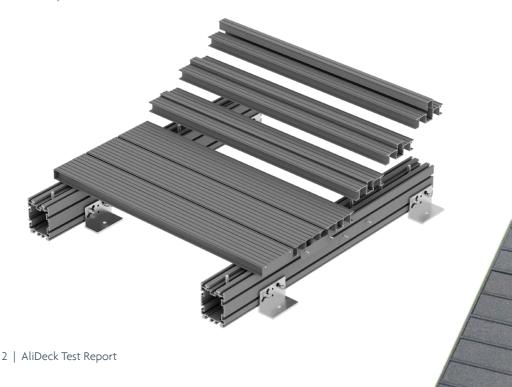
AliDeck is committed to manufacturing fully compliant products and to providing total peace-of-mind to our customers when using our range of aluminium metal decking products in their projects.

Accordingly, we are proud to publish and share the results of our extensive product testing on fire safety, deflection, slip resistance, and wear resistance.

Additionally, we have developed a full suite of detailed technical datasheets to assist you when specifying the AliDeck System, available in our website.

We are also proud to offer a **30-year** manufacturer product warranty for all of our AliDeck System components.

This document contains an overview of the AliDeck safety test results for our key products. All of our test result certificates are available to view and download at www.alideck.co.uk/downloads along with datasheets for our full range of products.





## AliDeck Fire Test Results

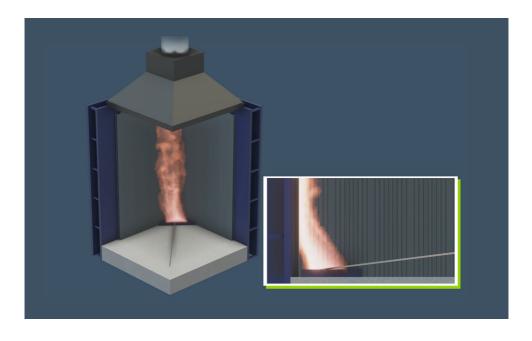
AliDeck has submitted all aluminium decking boards to extensive fire testing in order to understand the reaction to fire of the products.

Independently tested to EN 13823, EN 13501 and EN ISO 1716, the AliDeck System achieves Fire Ratings of A2-s1, d0 and A2fl-s1, satisfying all fire-safety legislation and ensuring compliance for new build and remediation projects.

The Euroclass ratings have several elements which each indicate a performance rating. The first element is regards combustibility and is rated from A to F, with A representing non-combustible materials.

The second element relates to smoke emission level and is rated 1 to 3, with 1 indicating smoke emission as weak or absent. The third element relates to production of flaming droplets and is rated 0 to 2, with 0 indicating no **droplets produced**. Finally, the inclusion of "fl" indicates that the products have been specifically tested for flooring applications.

We have also submitted our powdercoating to combustibility testing, with gloss, matte, and satin finishes tested to prove the non-combustibility of the powder coat range, achieving A2-s1, d0.





Warringtonfire Holmesfield Road Warrington WA1 2DS

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#### Title:

CLASSIFICATION OF REACTION TO FIRE **PERFORMANCE** IN ACCORDANCE WITH EN 13501-1: 2018.

#### **Product Name:**

"30mm Balcony Board"

#### **Report No:**

WF 504676

#### **Issue No:**

#### **Prepared for:**

#### Canoports UK Ltd T/A Milwood Group 27 Rochester Airport Industrial Est. Laker Road

Rochester Kent ME1 3OX

#### Date:

19th July 2021



# AliDeck Slip Test Results

AliDeck recognises that safety extends beyond simply achieving compliance with fire legislation and that all aspects of safe use of our products must be demonstrated.

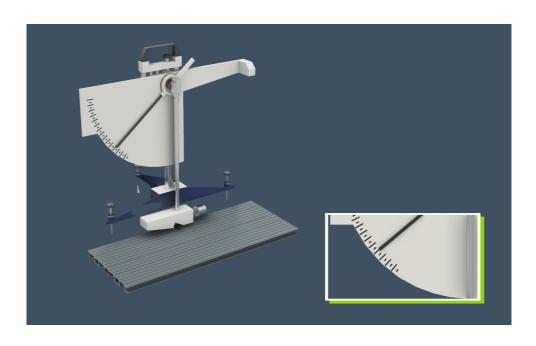
AliDeck has submitted all aluminium decking boards to extensive slip testing to understand the performance of the board surface underfoot.

Independently tested to BS7976 Part 2, the AliDeck System was subjected to Calibrated Certificated Portable Pendulum Instrument tests in three different directions in wet and dry conditions.

All AliDeck boards exceeded 36 PTV so were found to pose a "Low Risk" for slips in all conditions, the highest rating achievable.

Micro-roughness testing was also completed. The surface of AliDeck boards was found to exceed the required microroughness (Rz Value) of 20 micrometres so were rated as "Low Slip Potential".

Further explanation of these tests can be found at www.alideck.co.uk/slipresistance-tests.





**Advance Group** 

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Client: **Test Site:** 

ALIDECK ALUMINIUM DECKING First Floor South Wing 1 James Whatman Court

Turkey Mill Business Park Ashford Rd, Maidstone, Kent

ME14 5PP

10-JUN-19 Date of Test:

**Location of Test:** Advance Group HQ

Description of surface/material: Balcony board

Condition of surface/material: Good

20.5 °C (To 1 decimal place) Temperature:

Level / Gradient: Level

Operator ID: James Reporting Standard: BS 7976 Pendulum ID: C3011 Slider ID: Slider 55 Direction A: Right to left

Direction A: Direction of traffic; B: 90 Degrees; C: 45 Degrees



DIR' N	CONT' N				1	2	3	4	5	MEAN	PREV	RISK
Α	DRY	100	100	100	100	100	100	100	100	100	0	Low
Α	WET	85	86	85	85	84	84	83	82	84	0	Low
В	DRY	76	79	78	78	77	77	76	77	77	0	Low
В	WET	48	47	46	46	45	44	44	44	45	0	Low
С	DRY	99	99	98	97	97	96	95	97	96	0	Low
С	WET	59	58	57	56	55	54	54	53	54	0	Low

#### Observations and recommendations

The surface is at risk of water contamination, meaning the surface can become wet whilst in use.

The surface is at list of water containington, intenting the surface and become wet which it uses.

No further action is required as the surface is suitably rough? Profiled / conditioned to provide adequate levels of grip in wet conditions. The average PTV of the surface is equal to or greater than 36 which classifies the area as Low Risk. Spot clean small spills using absorbent cloth/paper towel. Provide training and then supervise. Ensure spills cleaning equipment is readily available for use.

Keep people off smooth wet floors – Barrier off/close off areas, wet mop out of hours when no-one is around. Reduce drying time –

dry mop the floors with a clean, proprietary dry mop.

Remove cones and signs as soon as cleaning is completed and floor is dry. Provide training and then supervise.

Ensure that the surface is maintained regularly in a way that ensures it is kept clean and free from contamination to ensure ongoing

slip resistance.

## AliDeck Wear Test Results

AliDeck is passionate about producing products that are not only safe but are able to sustain decades of reliable use. As such. AliDeck has submitted all aluminium decking boards to extensive wear testing to determine the durability and longevity of the products.

Independently tested to SATRA TM391:2016, the AliDeck System was subjected to Biomechanical Abrasion Of Flooring Materials testing.

With 100,000 footfalls simulated by a Standard Shoe machine apparatus and with observations made at every 25,000 footfalls, no wear of the AliDeck board surface was recorded at all and only "Verv Slight" sole marking was observed after **100,000 footfalls**. For reference, 100,000 footfalls is the equivalent of a person taking 10 steps on their balcony every day for 27 years.

Additionally, AliDeck boards were submitted to the "Chair Leg" Wear Test, recording no effect other than "Very Slight" transfer of brass with 70KG and 100KG masses applied and dragged across the board surface.





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Alideck (part Of Milwood Group) 27 Rochester Airport Industrial Estate Laker Road Rochester Kent ME1 3QX

20	SATRA reference:	FLO0295312 2008 1
	Report ID/Issue number:	11760/1
	Your reference:	PO2117AD
4	Date samples received:	25/02/2020
	Date(s) work carried out:	25/02/2020 to 09/03/2020
	Date of report:	10/03/2020

#### TECHNICAL REPORT

Testing of one product described by the customer as "Alideck Balcony Board", to SATRA TM391:2016 to 100,000 footfalls, visual assessment only.

#### 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.

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.

Please note uncertainty of measurement has not been applied to the results in this report. SATRA uncertainty of measurement values are available on request

Report signed by: Philip Weal

Department: Furniture and Floor Coverings

SATRA Technology Centre Ltd (a subsidiary of SATRA).

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# AliDeck Deflection Test Results

AliDeck take structural integrity of our products very seriously as it underpins all aspects of safety and durability. As such. AliDeck has submitted all aluminium decking boards to load testing to determine the deflection performance of the products.

Independently tested in-line with the criterion set out in BS8579:2020 (decking boards) and BS8118 "Structural Use of Aluminium"; BS6399 "Design Loads for Bulidings"; BS EN 1991-1-1 2002: "Actions on Structures" (decking joists).

BS8579:2020 requires that "the pedestrian surface" (ie; the decking boards) deflect no more than 5mm under a static point

load of 2.0kN. For the support joists, the Standards state 1.4kN as a minimum acceptable point load which we have applied alongside a criteria of L/360 to define the maximum permissible deflection.

The results of these tests determine the maximum allowable span of the products, as below.

For reference, an average-sized person weighs around 62KG and exerts 0.62kN point load.

**Maximum Allowable Spans:** 

ALIDECK DECKING BOARDS

# Senior Board (v1): Senior Board (v2): **Junior Board:** Lite Board: XI Board: **ALIDECK JOISTS** 2.0kN Low Joist On Side:

Alideck Ltd, 27 Laker Road, Rochester, ME1 3QX

#### 2599 Alideck Ltd. **Point Load Testing** Load / Displacement Results



Job ref:	ref: 2599 Test Sample:		Flat Board 20mm Fixed at both ends								
	Test Load Details			Observations Prior To Testing							
Design load: Proof factor: Proof load:	2.00 1.00 2.00		No defects observed prior to testing. 75 x 75mm timber was used to apply a point load at the midspan. Displacement in the direction of load application positive. Measurement devices located as below:								
No. of rams: Tested length: Max load:	ed length: 600 mm			POT1 Midspan							
Max load/ram: No. increments:	load/ram: 2.00 kN			Observations During & After Testing							
Inc. load/ram: Max allowed deflection:	0.40 5.00	kN	No further defects observed during testing.								
Date: 28/04/2021 Ingineer TK											
	Load Values		Displacement (mm)								
Load (kN)	Load/Ram (kN)	Time	POT1								
0.00	0.00	10:31:00	0.00								
0.40	0.40	10:32:00 10:32:00	0.40								
1.20	1.20	10:33:00	1.15								
1.60	1.60	10:33:00	1.50								
2.00	2.00	10:33:00	1.83								
2.00 0.00	2.00 0.00	10:40:00 10:40:00	1.86 0.02								
0.00	0.00	10.40.00	0.02								
Max displacement (mm)  Recovery (%)			1.86 98.9%								
2.5				lacement Graph							
2.0 -											
1.5 -											
1.0 - 0.5 -							— POT1				
مرا ده											
0.0	0.9	5	1.0 Displacement	1.5	2.0	2.5					



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