

# ALIRAIL



## Vertical Infill Spindle Balustrade

## Specification Datasheet

### Concrete Fix 0.74kN option

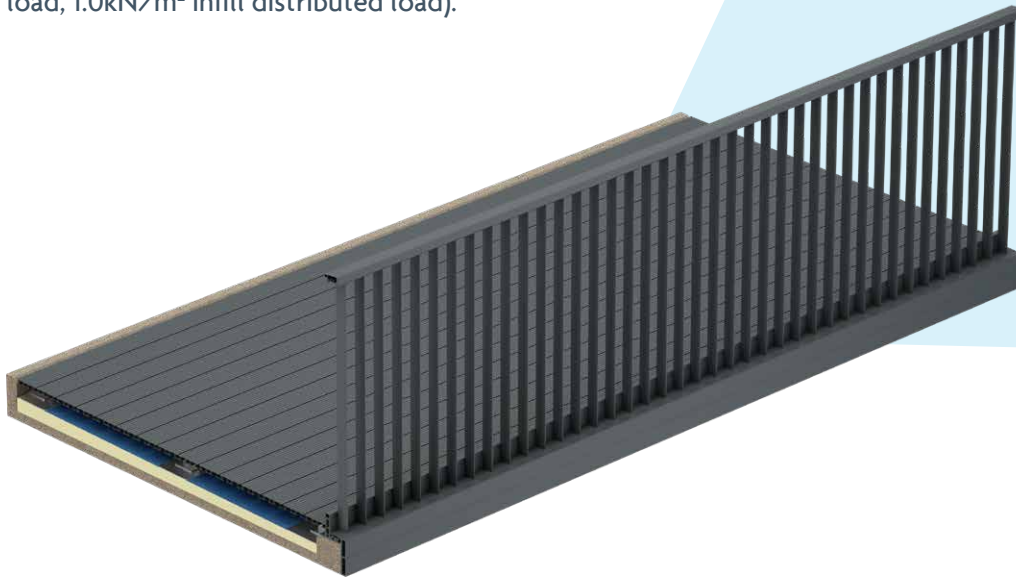
A contemporary balustrade system with aluminium vertical spindle infills, Specifically designed for Concrete Balconies available in our standard RAL Colours and with LED lighting options.

Compatible with all AliDeck Decking, Drainage, and Joist Systems and all AliClad Soffit Cladding Systems.

Load tested in accordance with **BS 6180:2011** (0.74kN/m horizontal line load, 0.5kN infill point load, 1.0kN/m<sup>2</sup> infill distributed load).

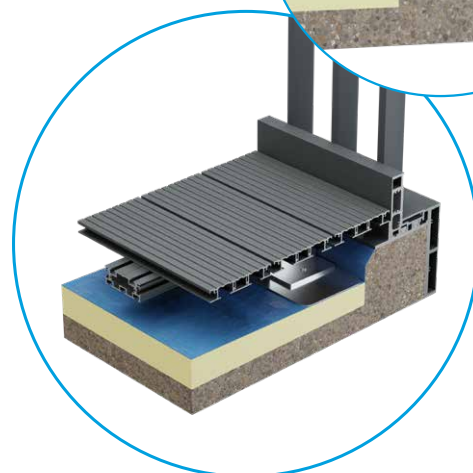
A2-s1, d0  
FIRE  
RATED

RANGE OF FOUR  
SPINDLE SHAPES  
AVAILABLE



## Benefits include:

- Kit-form, supplied in pre-fabricated elevations
- Spindle Size: 15mm x 50mm
- Spindle Material: Structural Grade Aluminium 6063 T6
- Handrail Material: Structural Grade Aluminium 6063 T6
- Warranty 30 Years
- Life Expectancy 60 years
- Loading capabilities: 0.74 kN, 0.5kN, & 1.0kN/m<sup>2</sup>
- LED Lighting options into the handrail
- Fire Rating: A2-s1, d0
- Top-Fix installation option also available



All AliRail products have been independently tested for fire performance to BS EN 13823, BS EN 13501, and BS EN ISO 1716; for loading performance to BS 6180; for deflection performance to BS 8118, BS 6399, and BS 1991; for wind performance to BS 1991.

Please note: Test result data is indicative only and loading performance for individual balcony designs is the responsibility of the balcony designer.

# Product Specification

- Fire resistant: A2-s1, d0
- Loading performance:
  - Horizontal line load: 0.74kN/m
  - Infill point load: 0.5kN/m
  - Infill distributed load: 1.0kN/m<sup>2</sup>
- Coating thickness - 60-80 microns
- Impact test - with an energy of 2.5Km to ensure that the coating adheres to the substrate to EN ISO 6272 / ASTM D2794
- Bend test - on 5mm mandrel to ensure adhesion after bending to EN ISO 1519
- Machu Test (accelerated corrosion test) - in a solution made up of sodium chloride acetic acid and hydrogen peroxide at 37degrees C Duration 48 hours
- Qualicoat 2.4.1. - cross hatch cuts are made at 2mm spacings with one being at 90 degrees to the other cut, tape is the applied left for 2 minutes and removed to check for adhesion of paint (EN ISO 2409 2013)
- Qualicoat 2.18 - sawing and drilling test to ensure no flaking after cutting (using sharp tools)
- Acid salt spray test - ISO 9227
- EN ISO 3231 - Resistance to humid atmospheres containing Sulphur Dioxide
- EN ISO 11341 - Accelerated weathering test
- EN ISO 20810 - Natural weathering test (Florida Test) (Carried out on Powder Type)
- EN ISO 12206-1 - Resistance to mortar (Carried out on powder type)
- EN ISO 6270 – 2 - Constant climate condensation water test.
- Choice of colours - Available in a wide range of RAL colours.

## Installation

The AliRail Vertical Infill Spindle Balustrade System (Concrete Fix) is designed for easy installation and is supplied in pre-fabricated elevations. Full installation guides are available on [www.alideck.co.uk](http://www.alideck.co.uk).

## Construction

AliRail is constructed completely from 100% aluminium (6063 T6 grade), up to 67% of which has been recycled to make this system eco-friendly and much better for the environment.

## Load Testing

The AliRail Vertical Infill Spindle Balustrade System has been subjected to independent testing for load performance. Test result data is indicative only and loading performance for individual balcony designs is the responsibility of the balcony designer.

## Maintenance

Due to the fact that AliRail is aluminium and finished using the Qualicoat system, little or no maintenance is required. General grime can be removed simply with a damp, lint free cloth or mop with warm soapy water.

## Colour Options

AliRail is available in our full range of standard colours. Please refer to our Standard Colour Range datasheet for colour options (available at [www.alideck.co.uk/downloads](http://www.alideck.co.uk/downloads)).

Non-standard colours are available on request as special orders, but may affect cost and lead-time.



## Protective Finish

AliRail is coloured using the Qualicoat powder coating finish. Qualicoat is a quality label organisation committed to maintaining and promoting the quality of coating on aluminium and its alloys for architectural applications.

## Warranty

AliRail is supplied with a **30 year warranty** against splitting, cracking, warping, splintering, rotting, twisting and material or manufacturing defects. It has a minimum **60 year life** expectancy.



A2-s1, d0  
FIRE RATED



ALL  
ALUMINIUM



HEAT  
RESISTANT



DURABLE  
TEXTURED FINISH



LOW  
MAINTENANCE



RECYCLABLE



STABLE IN ALL  
WEATHER  
CONDITIONS

Europa & Jenner House  
Victory Park  
1-2 Trident Close  
Medway City Estate  
Rochester ME2 4ER

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**ALIRAIL**  
Modular Balustrades