FINTRAX

LINEAR FACADES

APPLICATIONS + SPECIFICATION

WOODFORM ARCHITECTURAL

NO ORDINARY FIN SYSTEM

What is Fintrax?

Fintrax is the patented aluminium linear facade system specifically designed and engineered by Woodform Architectural for large-scale external facades.

Typical Fintrax applications are vertical exterior fins to the facade of multistorey carparks or the first six levels of commercial or multi-residential buildings.

What inspired Fintrax?

Since its launch in 2009, our Concept Click system has been embraced by designers around the world who discovered that this pre-engineered and pre-indexed clip-batten system provided them Freedom of Expression™, opening up a world of design possibilities aside from being very easy to install.

Designers however, wished that Concept Click also offered larger, fin-like profiles so they could specify it in their large-scale facade projects. Due to the insistent demand, Woodform Architectural collaborated with the facade engineers of Inhabit Group to develop the concept design of the Fintrax system.

CONTENTS

Freedom of Expression™ ____ 5
- Size ____ 6
- Shape ____ 7
- Space ____ 7

How does Fintrax work? ____ 8

Typical setup and limitations ____ 8

Application examples ____ 9

The Fintrax system ____ 10
- Fin to clip connection ____ 10
- Removability ____ 11
- Clip to rail connection ____ 11
- Stacking fins ____ 12
- The endcap ____ 12

The Fintrax engineering edge ____ 13

Finishes ____ 14
- Powder coat ____ 15
- Anodised ____ 16
- Woodgrain ____ 17

Available fin profiles ____ 18

Fintrax rail options ____ 20

Fintrax component specifications ____ 21

Sequence examples ____ 22

Warranty ____ 23

Specifying ____ 24

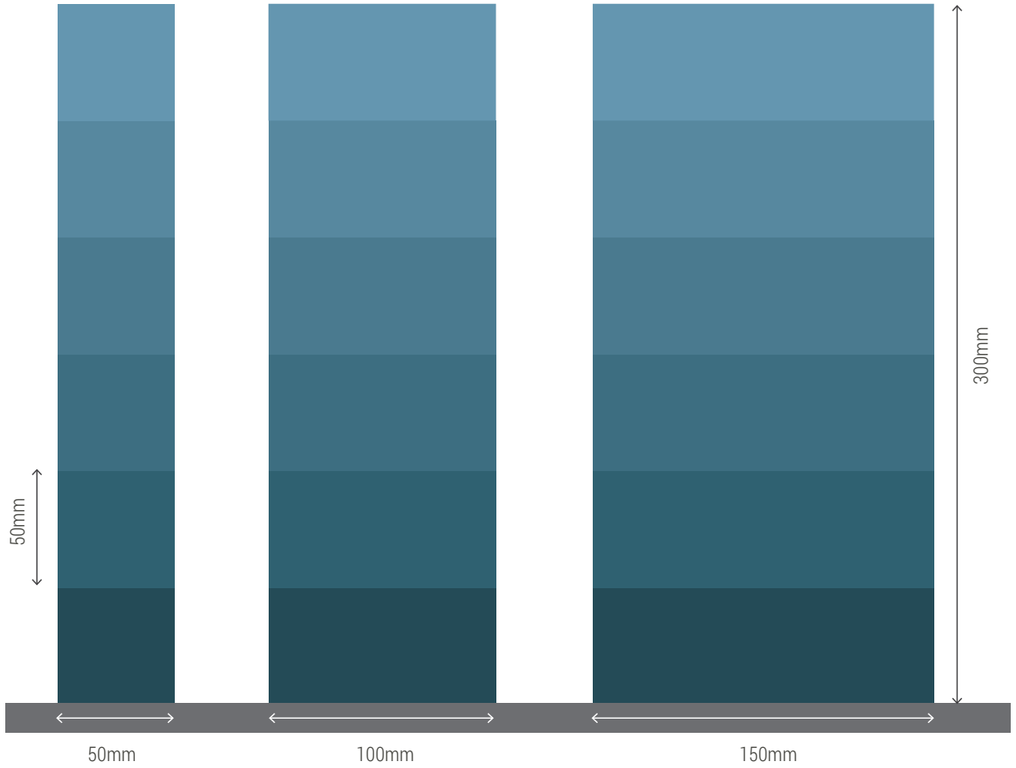
The Company ____ 25

FREEDOM OF EXPRESSION™

Size, **Shape** and **Space** are the specific elements of Fintrax that enable designers to realise their creative vision.

The freedom to be able to combine any of these sizes and shapes into a sequence of their choice, and to be able to dictate their own spacing (consistent or varying), launches the Fintrax system into infinite design territory.

Previously, such freedom could only be achieved with the uncertainty and inconsistency of their designs being custom-manufactured. Fintrax's modular system removes any surprises: architectural intent can now be met with clear-cut supplier quotes, accurate calculations of on-site installation time, and dependable customer support.



Size

Fintrax profile size options are developed as stackable building blocks that can be combined into virtually any sequence, to allow Freedom of Expression™. A total of 21 'building block' profile extrusions gives you 61 size and shape options to choose from. Anything from 50mm x 50mm to 150mm x 300mm in 50mm increments. The graph below shows all the sizing increments.

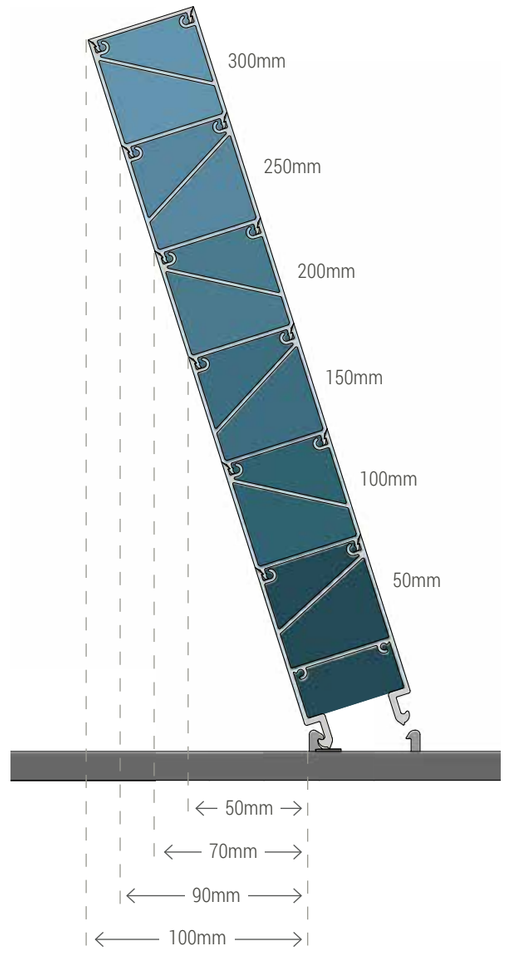
Shape

Nosing options are available in the following shapes: Peak, Block, Dome, and Flute. By offering a range of shapes, Fintrax frees you from having to default back to conventional rectangular designs.

Space

Fintrax allows you to choose your own spacing between fins (**minimum 50mm**). This selection is then accomplished by typing the sequence and space into our manufacturing software program, which then precisely indexes and rivets the fin connection clips to the aluminium rail.

The spacing you choose can be restricted by the depth of your selected fin. For example, if you have a 50mm x 300mm block fin sequence, your minimum spacing is 100mm. The diagram opposite shows the minimum spacing for each fin depth option.

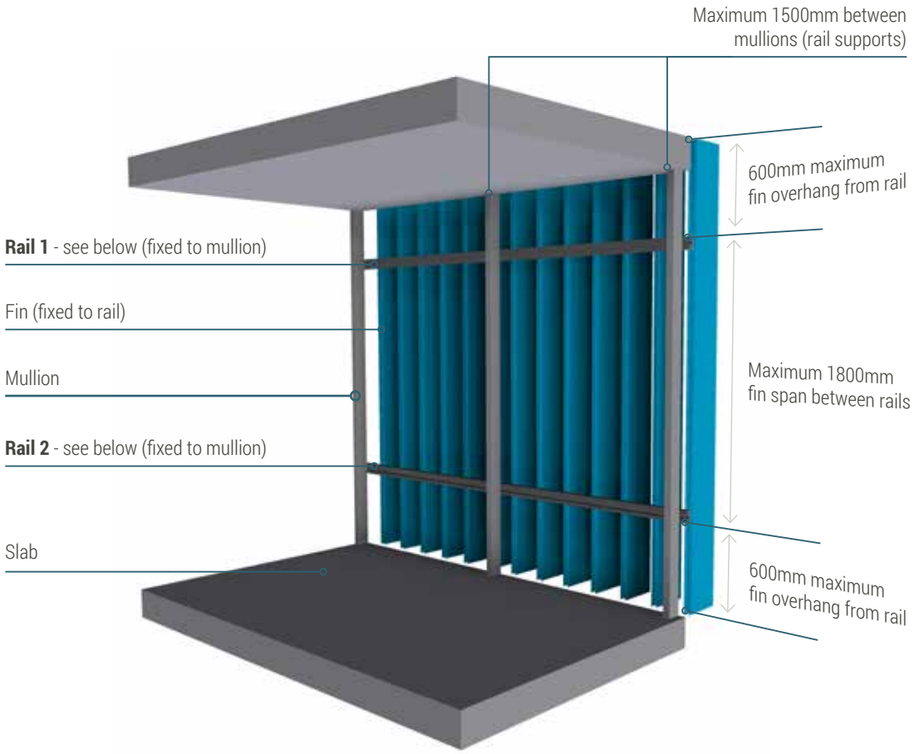


How does Fintrax work?

- You choose your sequence.
- We stack fins cut to exact length, install endcaps, and pre-revit clips onto rail in our factory to your desired sequence and spacing.
- Fintrax is delivered to site as a flat pack.
- Installers secure Fintrax rail to substrate (perpendicular to the fin orientation– typically two per standard 3.0m).
- Fins are lifted up and clicked into position.

Refer to our Fintrax Installation Manual for full details.

Typical setup and limitations

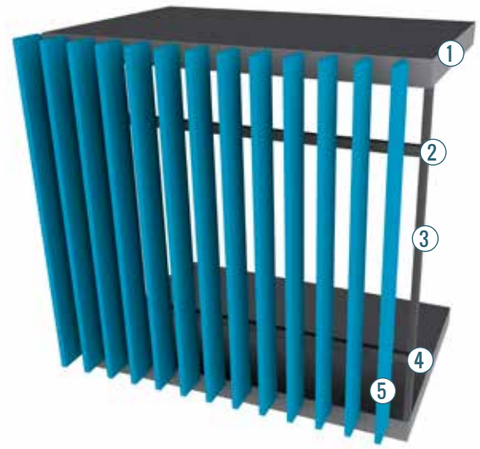


To allow for the thermal movement in aluminium, and building movement, measures must be taken to ensure there is no excess tension in the facade. The fins are locked into **Rail 1** (Deadload - fix clip version), however allowed to slide through clip at **Rail 2** (Windload - sliding clip version). This allows the aluminium to expand and contract freely with the temperatures. Additionally, a 25mm gap is required at the butt joins of fins (between each floor) where fins are continuous over multiple levels.

Application examples

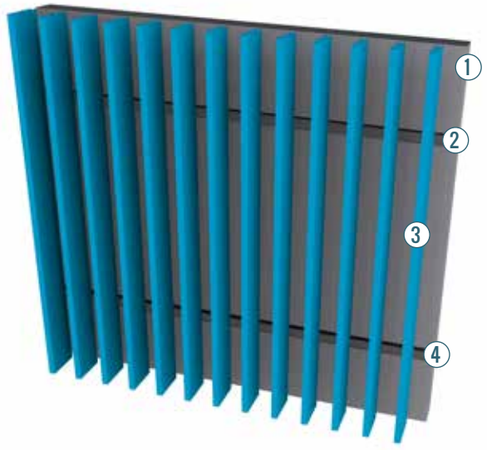
Fintrax is a very versatile linear facade system and can be used in a variety of applications. Below are just some of the applications that Fintrax could be used.

Carpark Facade



1 Slab edge
2 Deadload Rail
3 Mullion
4 Windload Rail
5 Fin

Solid Substrate

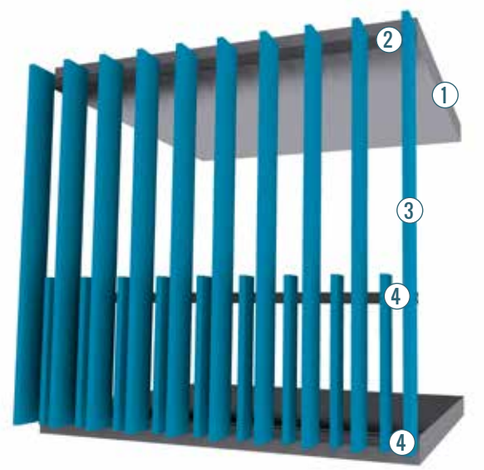


1 Substrate
2 Deadload Rail
3 Fin
4 Windload Rail

Facade Screen

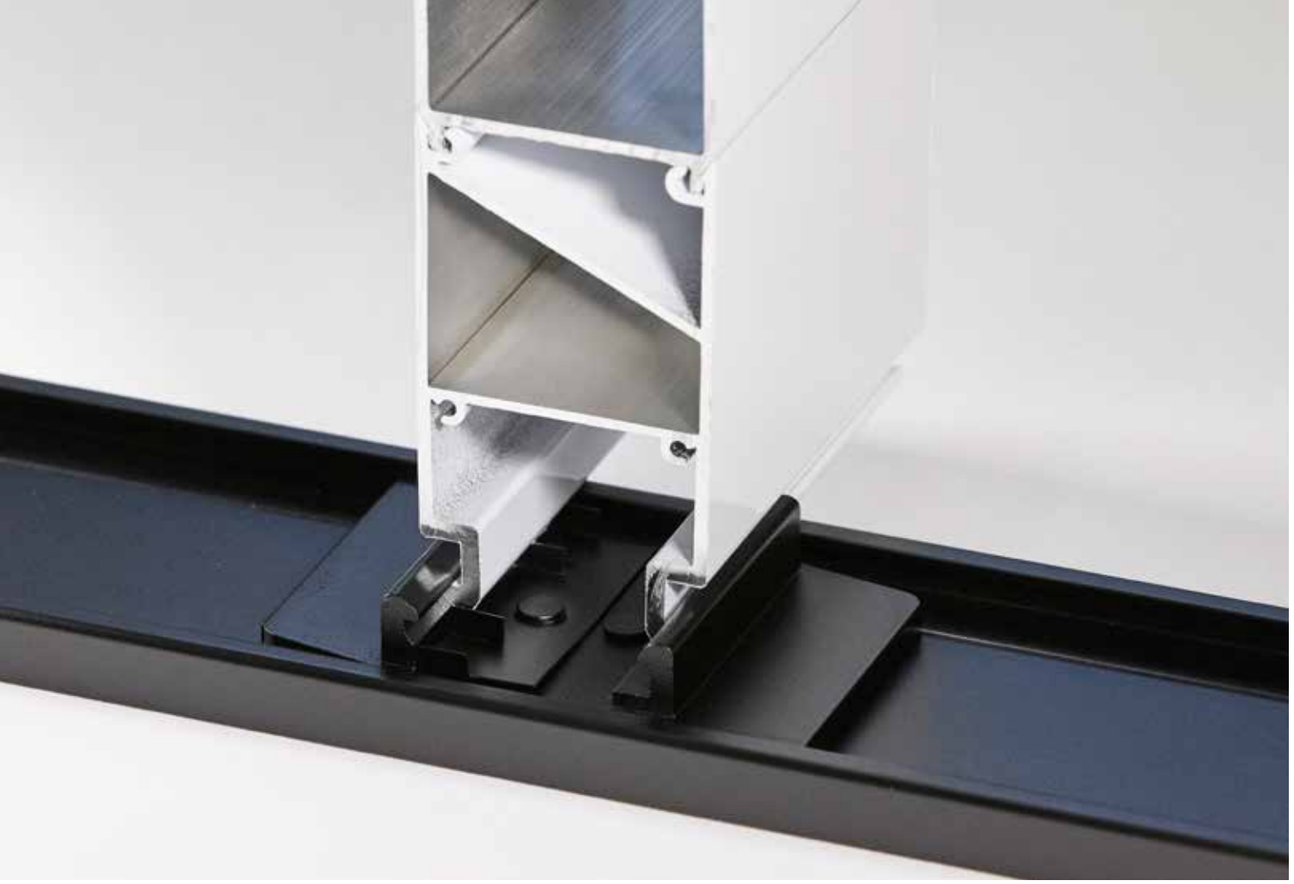
1 Facade
2 Frame
3 Deadload Rail
4 Windload Rail
5 Fin

Balcony (slab-edge to slab-edge)



1 Slab
2 Deadload Rail
3 Fin
4 Windload Rail

Note: Fintrax is not suitable for use as a carpark crash rail. Carpark crash rails should be used in addition to Fintrax.
Fintrax is not suitable for use as a balustrade. Balustrade system should be used in addition to Fintrax.

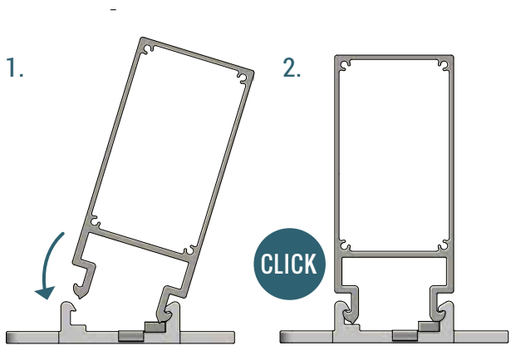


The Fintrax system

Fin to clip connection

The back of the fin profile is specifically designed and engineered to engage securely into the clip. This is achieved by a simple rotating action. The fin is engaged into one side of the clip and then rotated until a ‘Click’ is heard. In this action, a steel barb, which is connected to the clip, digs into the fin profile and creates a non-slip connection.

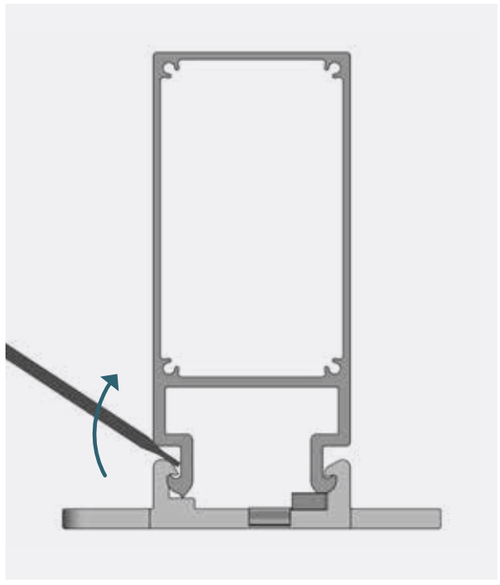
Steps of the click action



Removability

The Fintrax connection is designed so it could also be disconnected without affecting the integrity of the connection. A lever can be inserted into the connection to remove the fin as shown right. It is important to secure the fin while completing this action to prevent it from falling.

Note: to achieve removability, the spacing has to be taken into consideration. Your minimum space is limited by the length of your removing lever. For example, if using a standard 200mm-long flat head screwdriver, your minimum space is 200mm.



Clip to rail connection

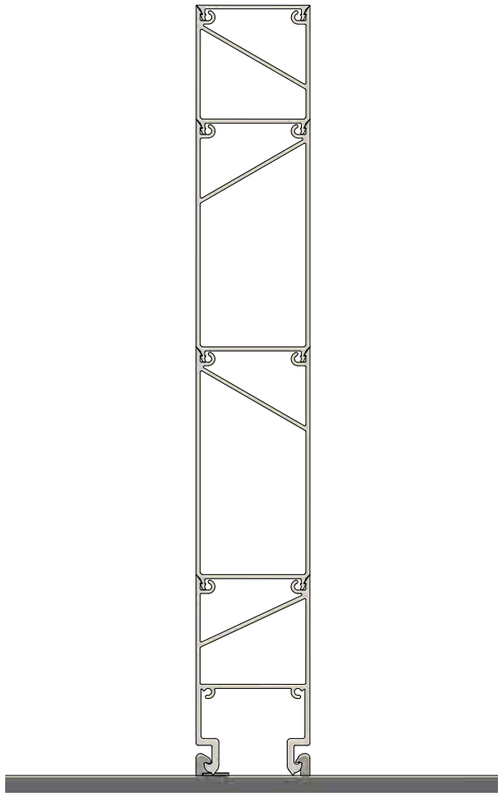
The Fintrax clip to rail connection uses the bayonet concept. The clip is inserted into the rail at a slight angle; once inside, it is rotated and engages into the sides of the rail. This engagement provides strength to the clip. Rivets are put into the clip to prevent it from rotating and disengaging.

If the case arises that some on-site space adjusting must occur, blank rails (no clips attached) and loose clips can be supplied. The installer will need to insert the clip into the rail at the desired position (ensuring the clip is fully rotated and engaged) and install two tek screws into the middle of the clip to replicate the rivet positions.

Stacking fins

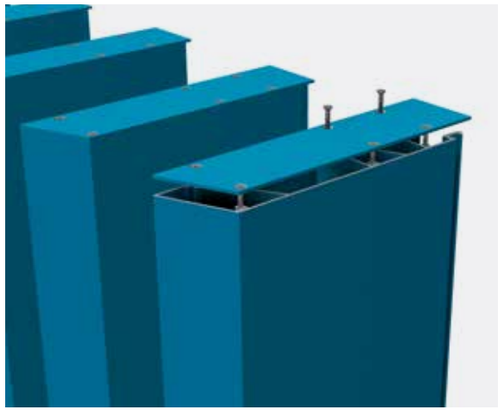
The Fintrax size and shape options are made up of 'building blocks'. These building blocks are a set of 21 aluminium extrusion profiles that can be connected together to create a total of 61 variants. The reasons we engineered them this way was to drive down costs for our clients, as extrusion wall thicknesses can be reduced with smaller extrusions, and obviously, to offer designers much more choice.

The webbed design of the extrusions offer tremendous lateral stability in extreme environments.



The endcap

The Fintrax endcaps are aluminium and coated to match the fin. They are then screwed onto the end of the fin to hide the hollow core while preventing the fins from sliding. The endcap screws also act to 'lock' the components together to form the integrated fin.



The Fintrax engineering edge

The Fintrax aluminium clip-and-rail system has been designed to support feature fins for use on external facades at heights of up to **25 metres above ground within Region A**. The 25-metre limit reduces engineering requirements.

The system has been designed to meet the relevant Australian standards including AS/NZS1170.0/.1/.2 and AS/NZS1664.1. Preliminary testing of critical elements of the system has been undertaken at a NATA accredited testing facility.

Projects with site conditions or geometry that vary from those of typical applications can be assessed by Woodform on an individual basis.

The Fintrax rails are designed to be used in multi-span applications with recommended maximum spacing of the support structure limited to 1500mm. The system is capable of supporting aluminium fins of varying profiles up to 300mm deep and 150mm wide.

Additional engineering and certification may need to be undertaken by a qualified building practitioner depending on project requirements and specifics.

Finishes

Fintrax fins are available in a large range of Powder coat, Anodised, and Woodgrain finishes.

The range of colours shown is representative only and has been reproduced as closely as possible. We suggest you request a sample before making final selections. You can download the complete range of colours from our website www.woodformarch.com

Powder coat

DURATEC®

- Appliance White
- Eternity® Linen Pearl
- Copper Metallic Kinetic®
- Zeus® Silver Grey
- Eternity® Bronze Pearl
- Zeus® Black

DURATEC® INTENSITY

- Intensity® Moonlight
- Intensity® Leaf
- Intensity® Summer

ELECTRO™

- Shimmering Champagne
- Golden Touch
- Green Tea

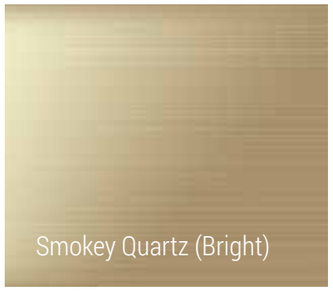
*FLUOROSET®

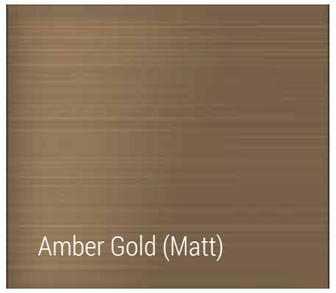
- Xtreme® White
- Xtreme® Champagne
- Xtreme® Charcoal

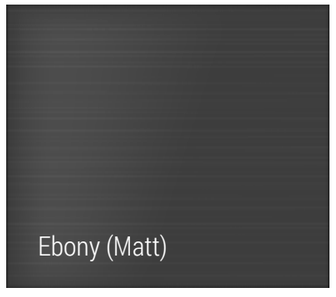
*30-year coating warranty

Note: Refer to www.duluxpowders.com.au for further information.

Anodised

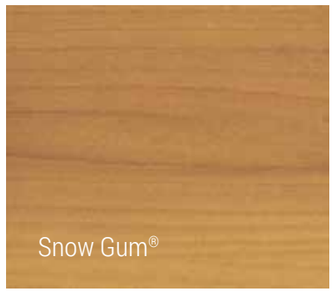


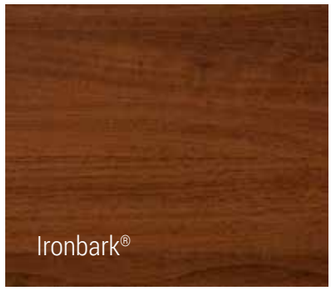


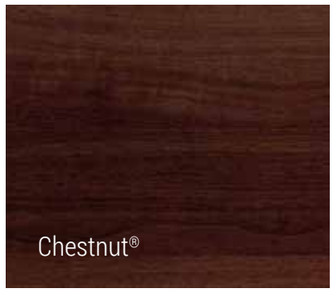


Note: Refer to www.aafonline.com.au for further information.

DecoWood Super Durable



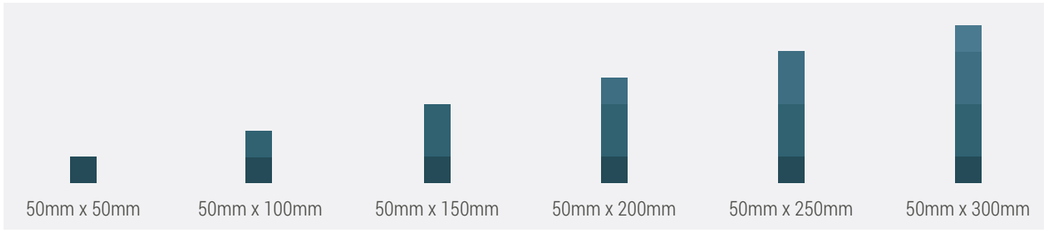




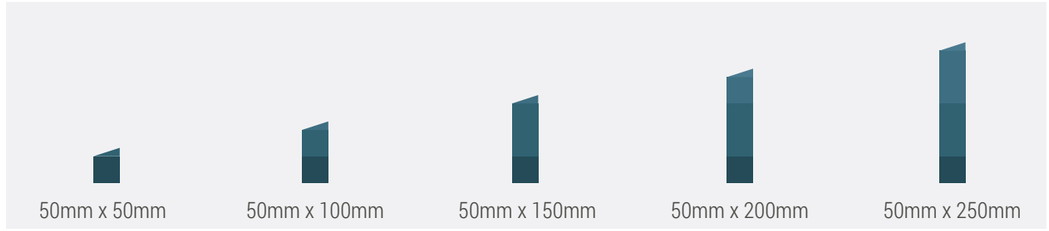
Note: These finishes are registered trademarks which are the property of Decorative Imaging Pty Ltd. Refer to www.decorativeimaging.com.au for further information. These are woodgrain powder coat colours on aluminium fins, not real timber.

Available fin profiles

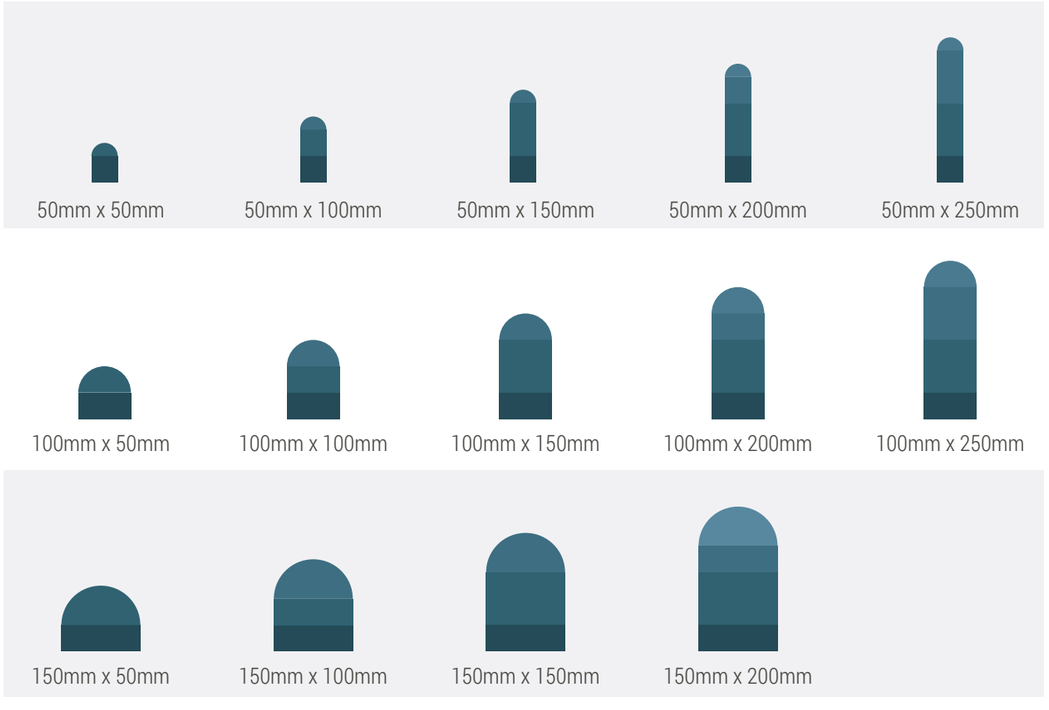
Block



Peak



Dome

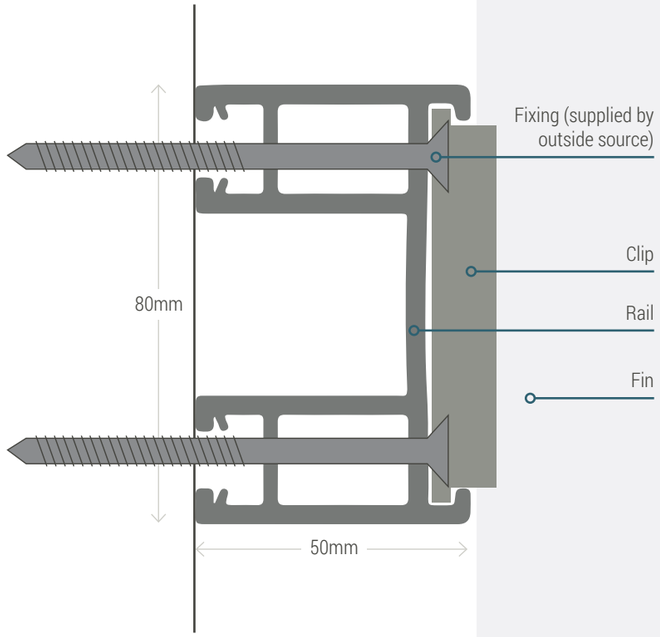


Flute

Fintrax rail options and fixings

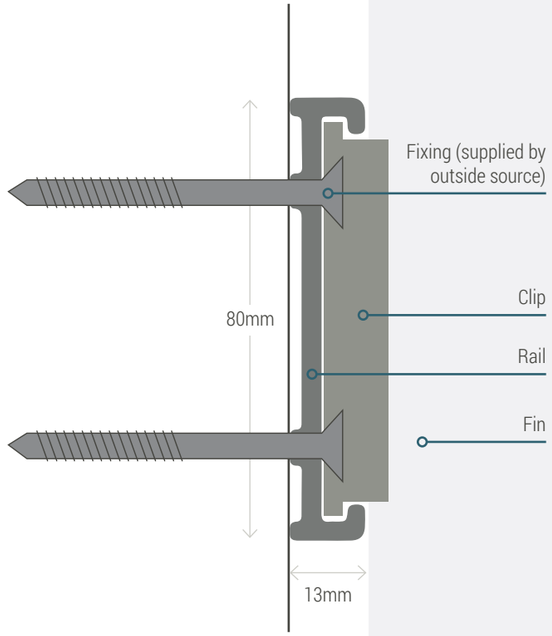
80mm x 50mm

Used for open facades and where the rail must span between supports.
Maximum span: 1500mm.

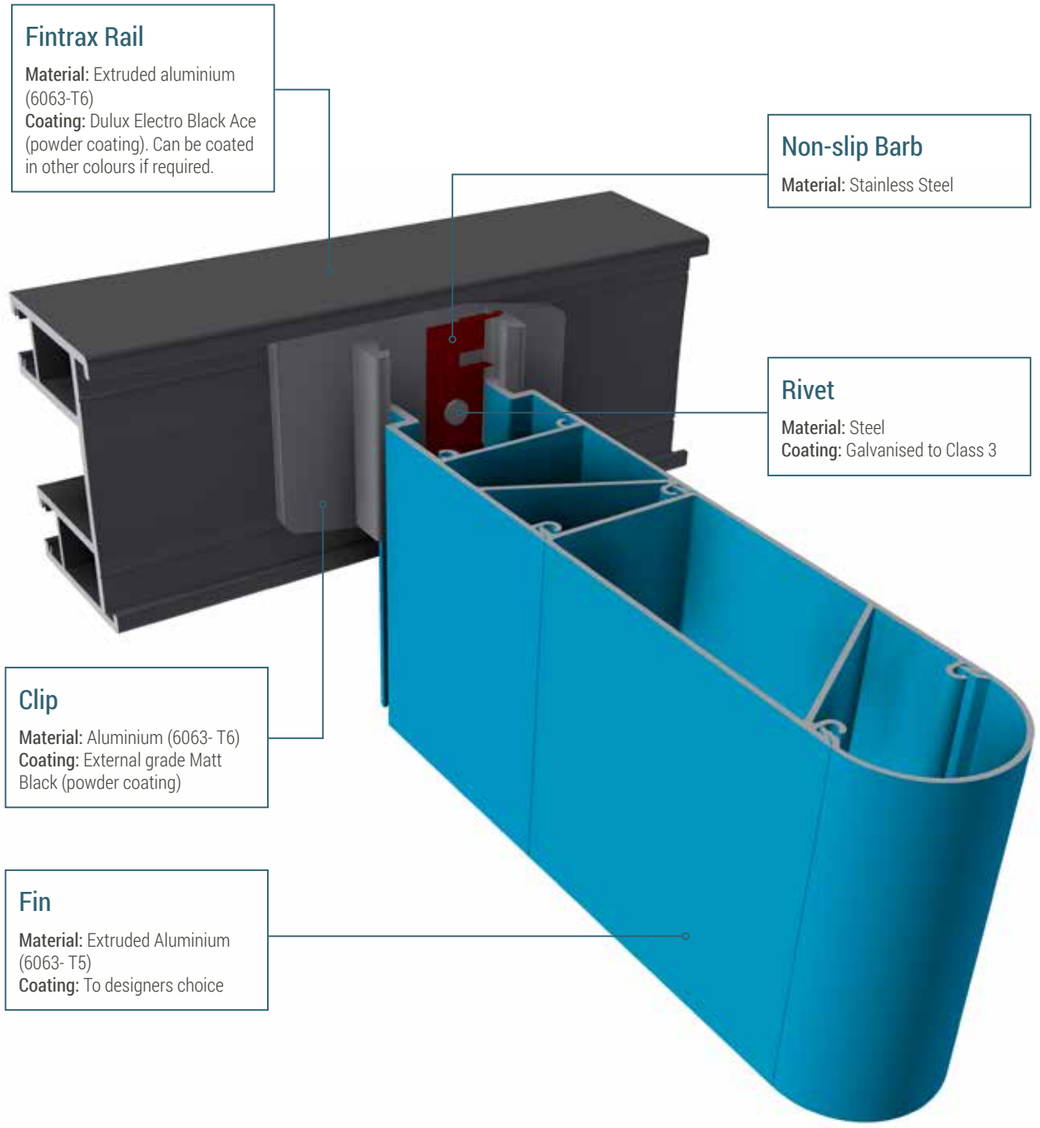


80mm x 13mm

Used for closed facades and curved applications.
Minimum curve: 3000mm radius.

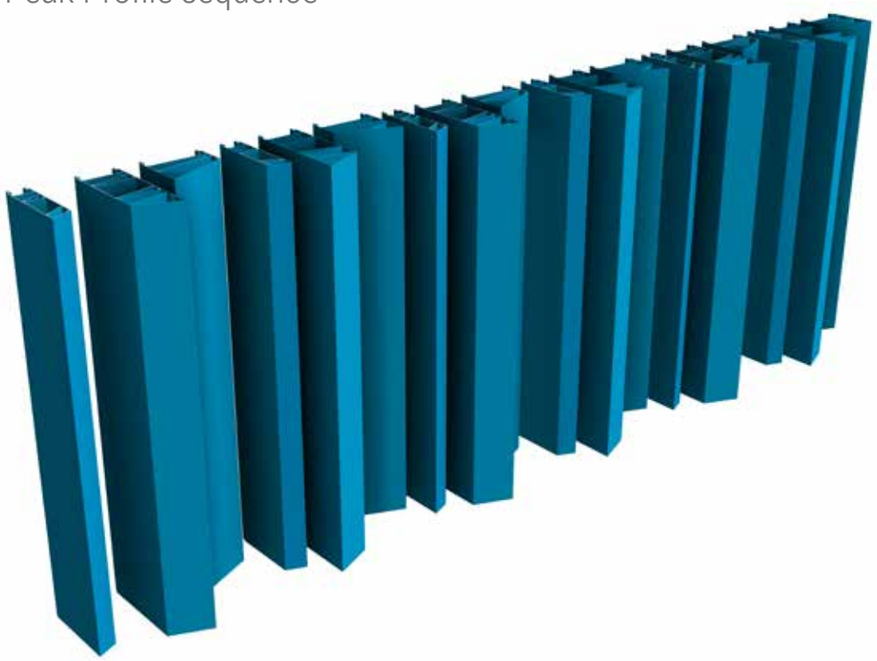


Fintrax component specifications

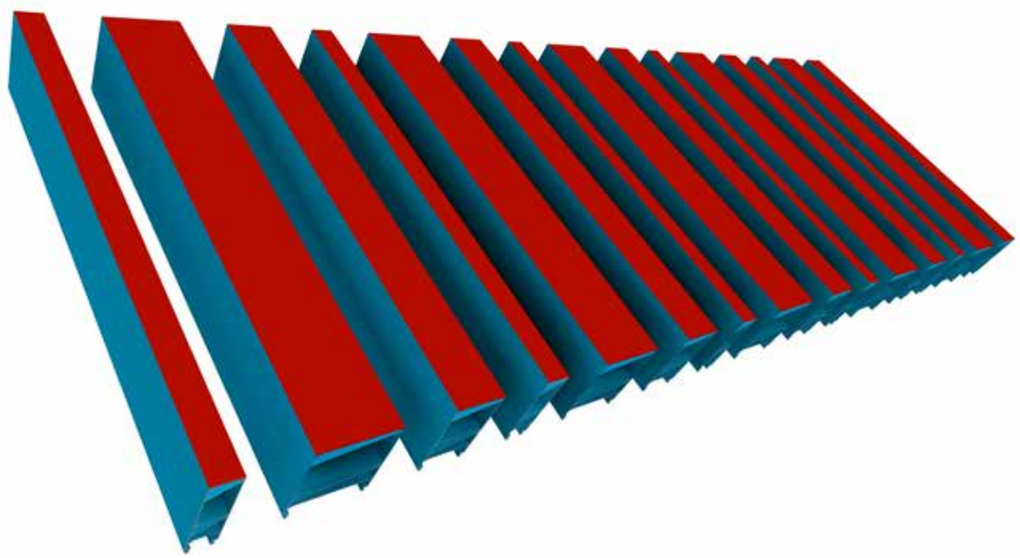


Sequence examples

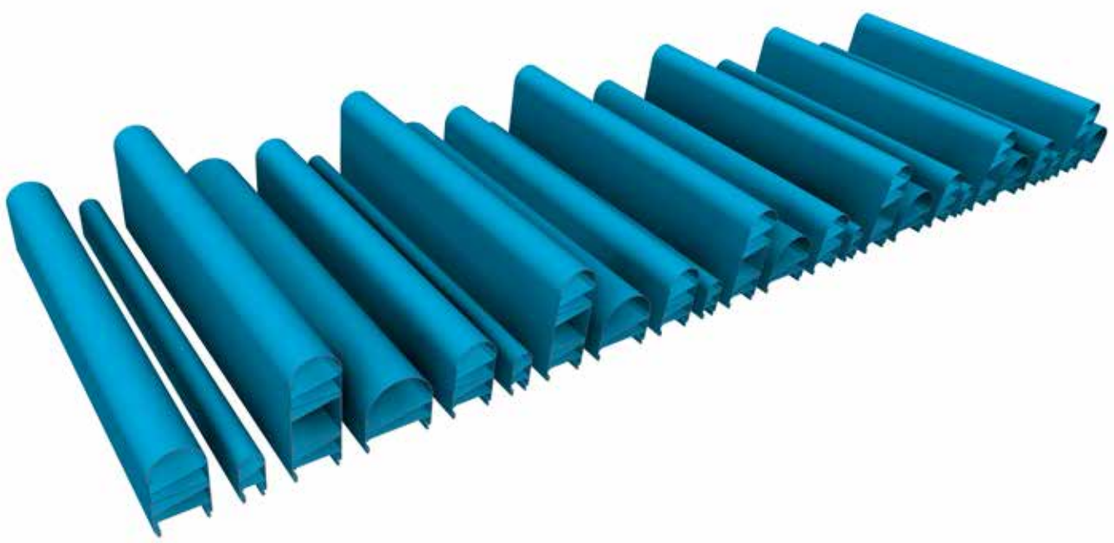
Fintrax Peak Profile sequence



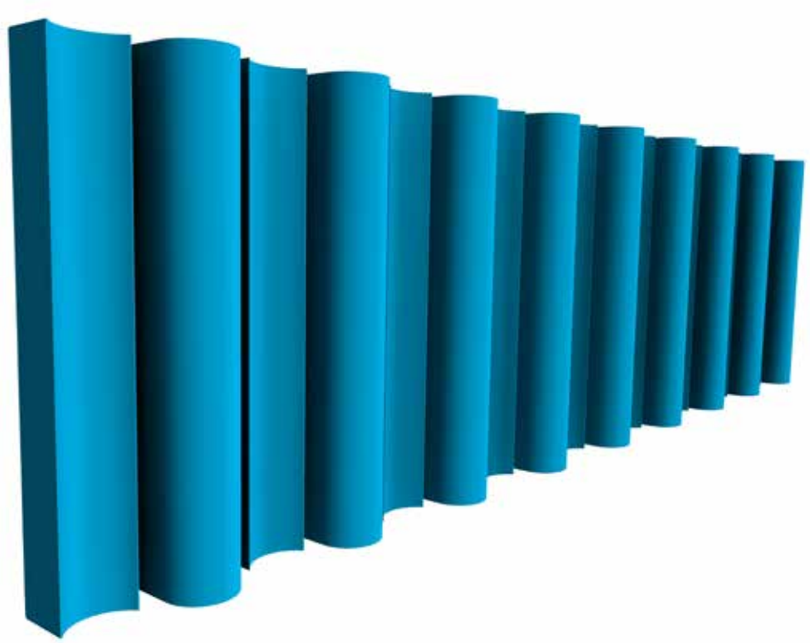
Fintrax Block Profile sequence using different colour nosings



Fintrax Dome Profile sequence



Fintrax Flute and Dome Profile sequence



Warranty

Woodform warrants that, subject to the exclusions and limitations outlined in the Woodform Warranty contract, found here: www.woodformarch.com/media/external-aluminium-warranty, the products will be free from defects in materials and workmanship for a period of ten (10) years from date of purchase (Warranty Period).

If a defect appears in the Products before the end of the Warranty Period and Woodform finds the Products to be defective in materials or workmanship, Woodform will, in its sole discretion, either: replace the defective Products free-of-charge; or, refund the purchase price of the defective Products.

Woodform reserves the right to replace defective Products with products of similar quality, grade and composition where an identical product is not available.

Specifying

We cannot emphasise enough the importance of a correct specification. A correct specification will ensure you achieve the required level of quality and the desired design outcome. Writing a specification however, can be a confusing and laborious process. For a quick and easy specification, we suggest contacting our customer service team who will assist you.

Example specification

Product Name
Fintrax Linear Facades

Supplier
Woodform Architectural

Sequence
50mm x 200mm Dome, 100mm space
100mm x 100mm Peak, 50mm space

Rail Profile
80mm x 50mm

Rail Colour
Electro Black Ace - Dulux

Fin Finish
Dulux, Duratec, Appliance White

THE COMPANY

Novartis, Architect: HDR Rice Daubney, Photographer: Tyrone Brannigan

What we do

Woodform designs and manufactures architectural lining systems for projects with enduring quality and aesthetic sophistication. Only Woodform creates signature design opportunities with modular concealed fixings and a wide range of linear textures. Our systems create limitless opportunities, offering designers the freedom to explore, innovate, and express themselves.

Consulting

Woodform's consultants advise on solid timber linings in architecture, including maintenance in early design, detailing during documentation, and on-site installation. We understand designing for low maintenance and achieving serviceability without compromising aesthetics.

Project costings

Our range of services include budgeting options through to pricing for tenders. We are set up to measure from PDF drawings, which are returned with itemised quotes, enabling cross-reference of quantities. Email estimating@woodformarch.com

CAD

Most Woodform products are available in Revit, with files available as .rfi or .rvt. Drawings include product componentry to general detailing for a wide range of applications. Basic 2D DWG are also available.

Disclaimers and important notes

Considerable care has been taken to ensure that all parties have been credited. Please email consult@woodformarch.com for missing or incorrect credits.

Images and colours have been reproduced as closely as possible; however, we suggest you request a sample before making final selections. Woodform reserves the right to alter specifications and delete product without notice.

This brochure has been designed to provide a basic understanding of our product range. Please refer to the technical manual when designing, detailing, or installing the product.

The project images in the this brochure are computer-generated renders only. These images were used because, at the time of the product launch, the relevant projects had not yet been completed. However, this look can be replicated with the Fintrax Linear Facade system.

WOODFORM
ARCHITECTURAL

freedom of expression™

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