eltherington architectural

Rainscreen cladding systems

eltherington
architectural solutions



eltheringtonarchitectural.co.uk



eltherington architectural solutions

Established over 60 years ago, Eltherington remain at the forefront of innovation and performance in terms of design and manufacture of architectural rainscreen façades.

We offer a fully tested range of rainscreen systems in an extensive choice of materials and finishes to help you bring your design to life.

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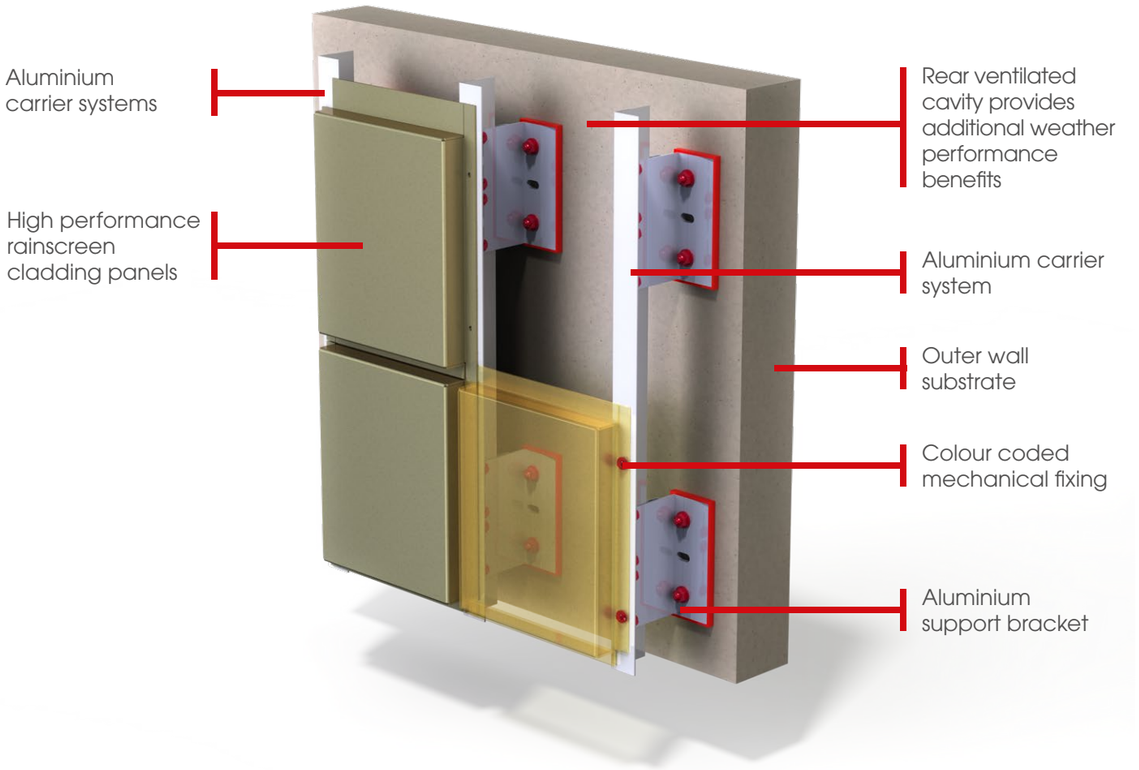
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TFS1 - through fix system



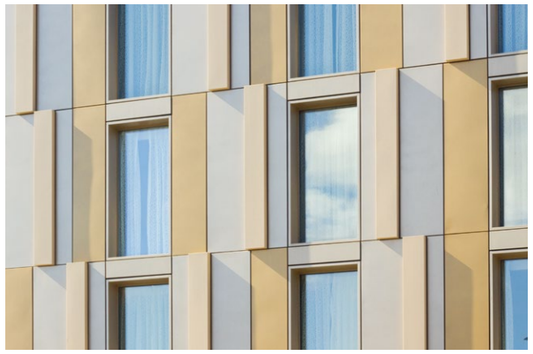
Specification

- Panel fire rating - A1 or A2
- Finish - PPC, Pre-paint, Anodised, Corten, Rimex
- Thickness - 2 / 3mm
- Panel size - 1480 x 3850mm max
- Horizontal joint - 20mm
- Fixings - Self drill mechanical fixings
- Rail centres - 600mm max
- Install method - 1st & 2nd fix layout
- CWCT tested with Hilti-Eurofox

TFS1 - case studies

Hilton Doubletree

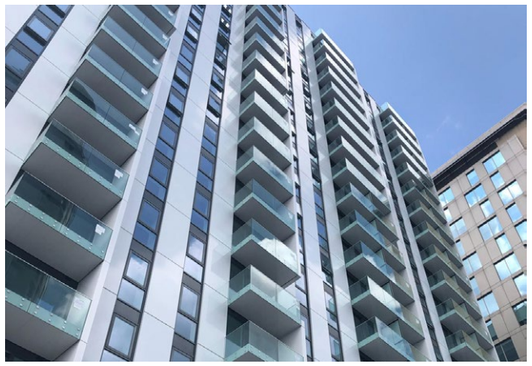
- 2mm aluminium
- Hilti subframe
- PPC finish
- 400m²
- Architect - Aros Architects





Media City UK

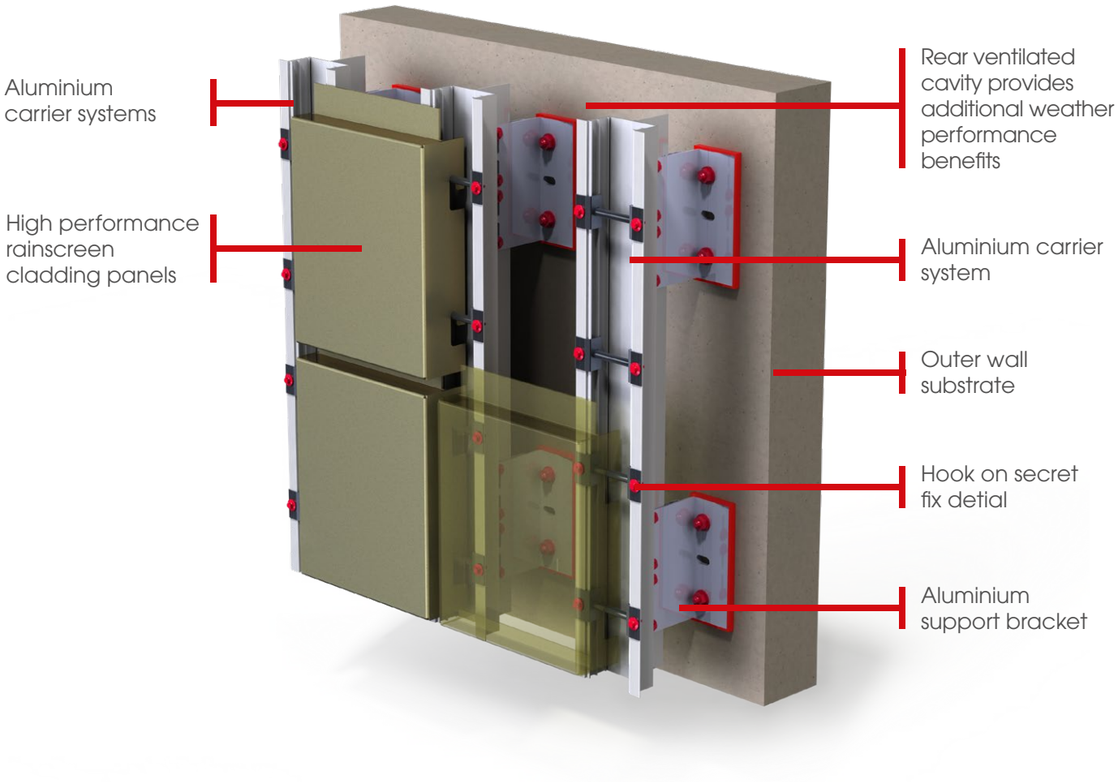
- 3mm aluminium
- Hilti subframe
- PPC, class 2, Florida spec finish
- 10,000m²
- Architect - AHR Architects





Download our specification guide at eltheringtonarchitectural.co.uk

SFS1 - secret fix system



Specification

- Panel fire rating - A1 or A2
- Finish - PPC, Pre-paint, Anodised, Corten, Rimex
- Thickness - 2 / 3mm
- Panel size - 1480 x 3850mm max
- Horizontal joint - 20mm
- Fixings - Self drill mechanical fixing
- Rail centres - 750mm max
- Install method - 1st & 2nd fix layout
- CWCT tested with Hilti-Eurofox

SFS1 - case studies

Bridgewater Place

- 3mm aluminium
- Hilti subframe
- Anodised natural silver
- 3,000m^2
- Architect - Aedas Architects

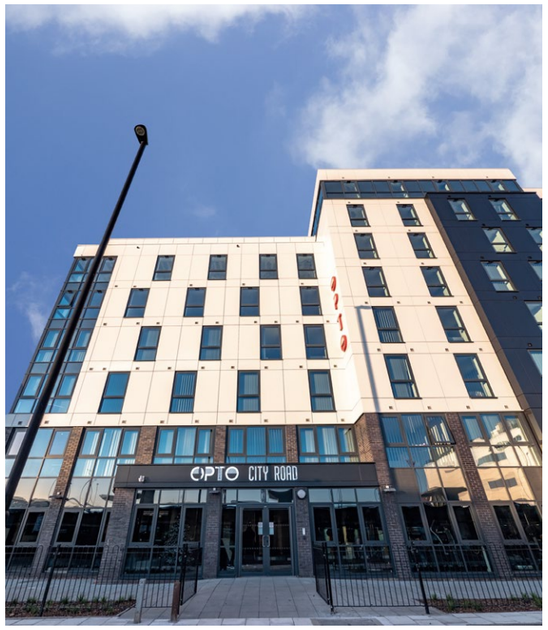




Opto Newcastle

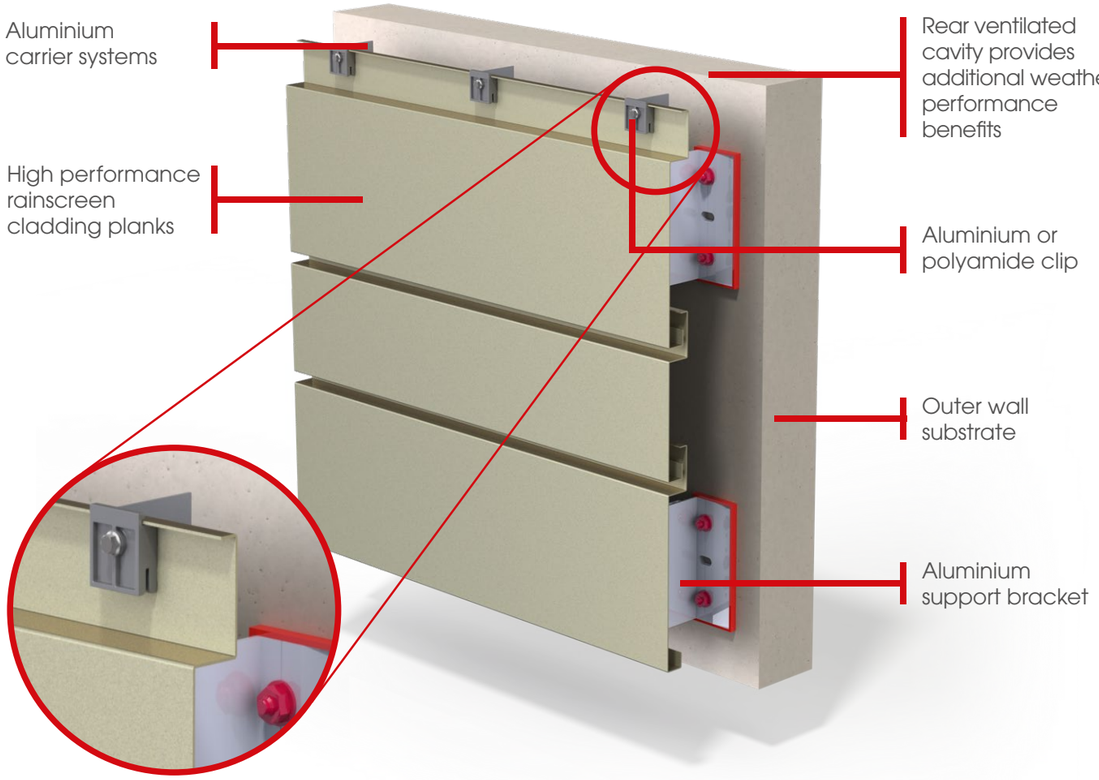
- 3mm aluminium
- Hilti subframe
- PPC finish
- 2,500m^2
- KDP Architects





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CPS - clip plank system



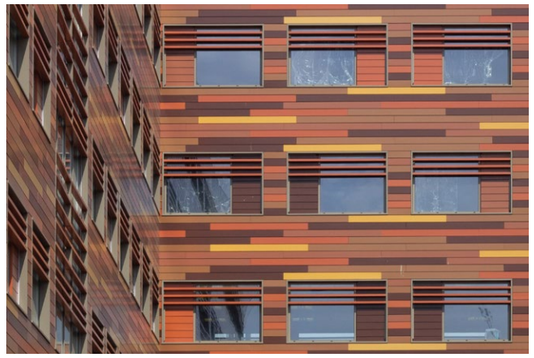
Specification

- Panel fire rating - A1 or A2
- Finish - PPC, Pre-paint, Anodised Corten, Rimex
- Thickness: 1 / 1.2 / 1.5 / 2mm
- Face height - 150mm to 450mm
- Face length - 6400mm max
- Horizontal joint - 10mm to 20mm
- Vertical joint - Open, closed return or butt strap
- Clip fixings - Self drill mechanical fix
- Fixing centres - 750mm max
- Install method - Bottom > up
- CWCT tested with Hilti-Eurofox

CPS - case study

Jesmond 360

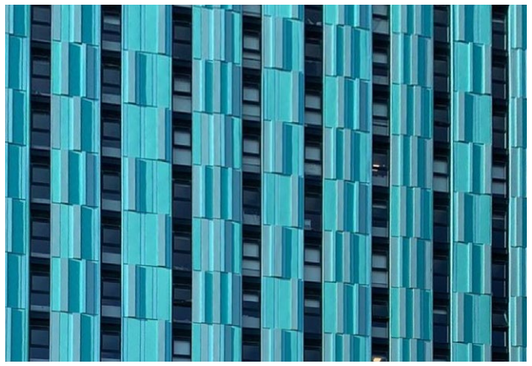
- 1.5mm aluminium
- Hilti subframe
- PPC finish
- 2,000m^2
- Architect - GT3 Architects

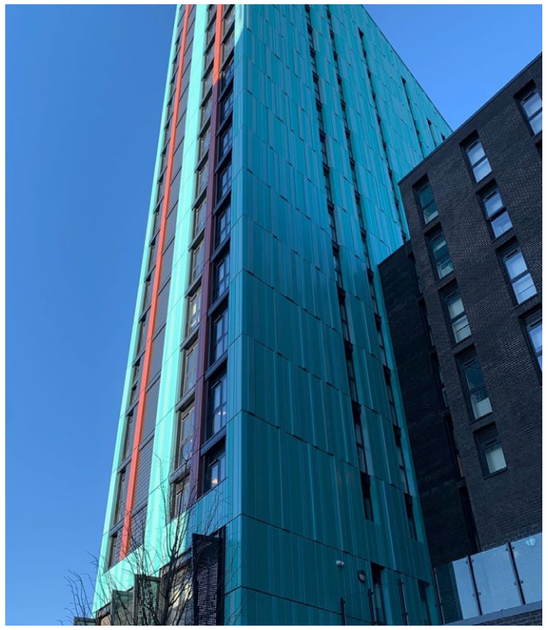




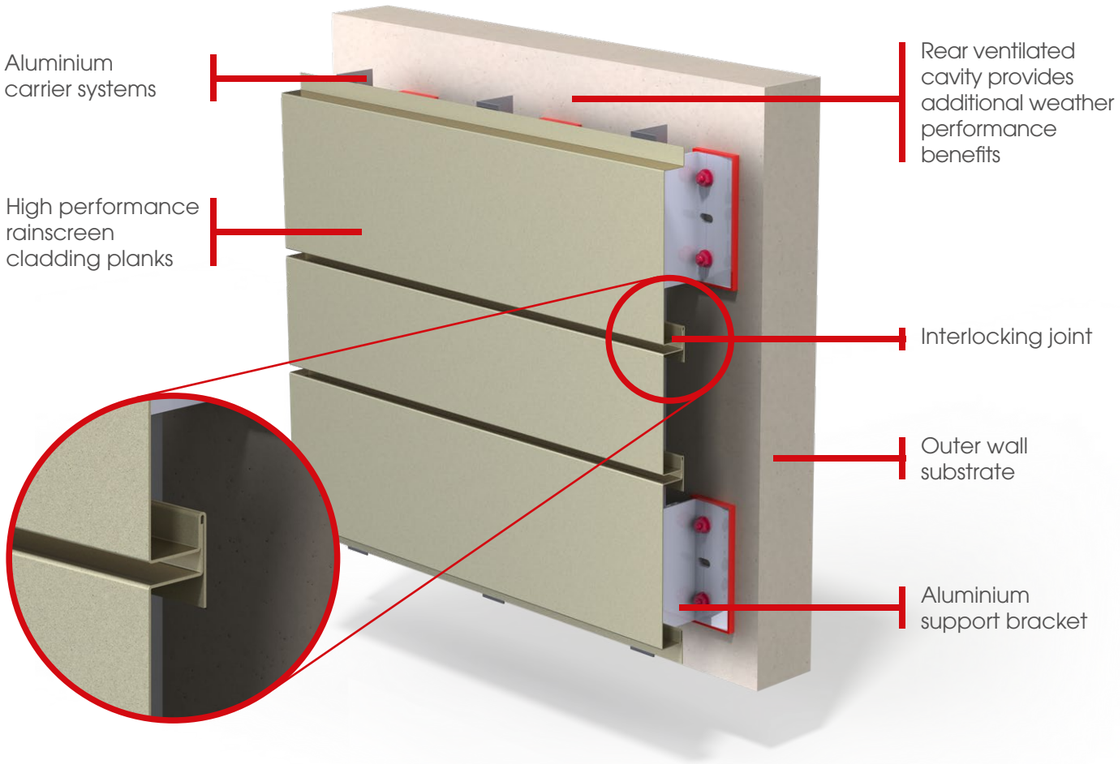
Swansea Fusion

- 2mm aluminium
- Hilti subframe
- Pre-paint finish
- 7,000m^2
- Architect - Corstorphine & Wright





IPS - interlocking plank system



Specification

- Panel fire rating - A1 or A2
- Finish - PPC, Pre-paint, Corten, Rimex
- Thickness - 1 / 1.2 / 1.5mm
- Face Height - 150 to 350mm
- Face length - 6400mm max
- Horizontal joint - 10 – 20mm
- Vertical joint - Open, closed return or butt strap
- Fixings - Self drill mechanical fix
- Rail centres - 750mm
- Install method - Top > down
- CWCT tested with Hilti-Eurofox

IPS - case study

Haggerston London

- 2mm aluminium
- Hilti subframe
- PPC finish
- 1,500m^2
- Architect - PRP Architects





Brookfield Retail Park

- 1.5mm aluminium
- Hilti subframe
- PPC finish
- 4,000m^2
- Architect - Pinnacle Architecture Ltd





Download our specification guide at eltheringtonarchitectural.co.uk

EPS - extruded plank system



Specification

- Fire class - A2-s1, d0
- Material - Aluminium
- Finish - PPC, Anodised
- Thickness - 1.8mm
- Face Height - 150mm
- Face length - 5600mm
- Horizontal joint - 5mm
- Vertical joint - 5mm
- Fixings - Self drill mechanical fix
- Fixing centres - 600mm
- Install method - top > down
- CWCT tested

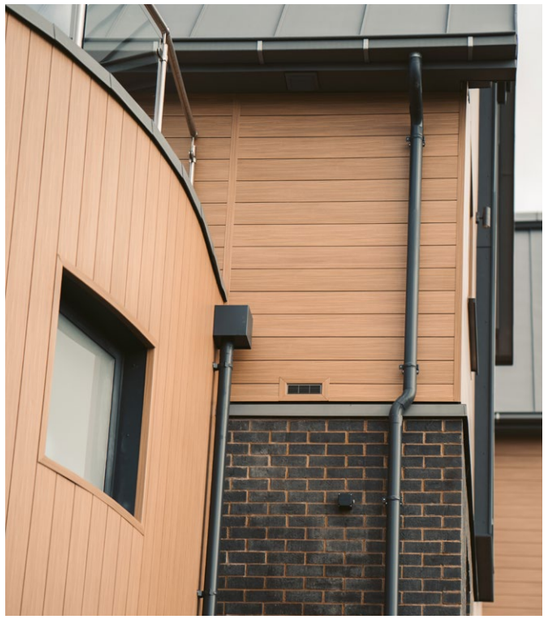


EPS - case study

The Lakes, Chelmsford

- 2mm aluminium
- Aluminium subframe
- Natural Oak PPC wood grain
- 850m²
- Architect – J.A.P Architects







EBS - extruded batten system



Specification

- Fire class - A1 or A2
- Material - Aluminium
- Finish - PPC wood grain
- 25 shapes - 25mm-200mm
- Face length - 5600mm max
- Concealed fix system
- End caps for exposed ends
- Fixings - Self drill mechanical fix
- Fixing centres - Span max 4000mm
- Install method - Two part clip

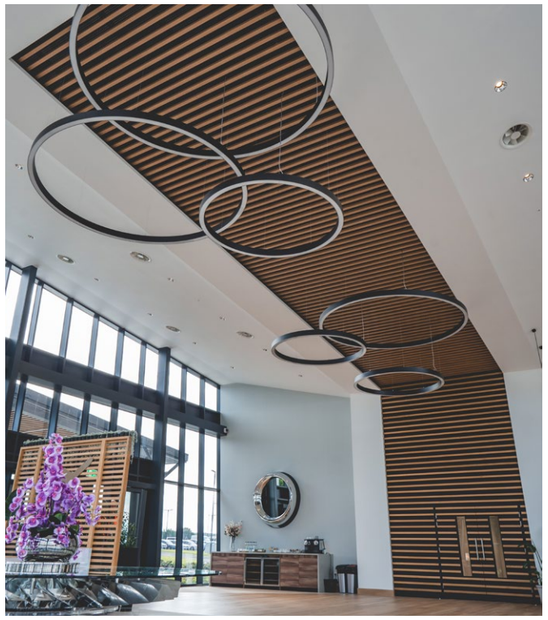


EBS - case study

Biggin Hill Airport

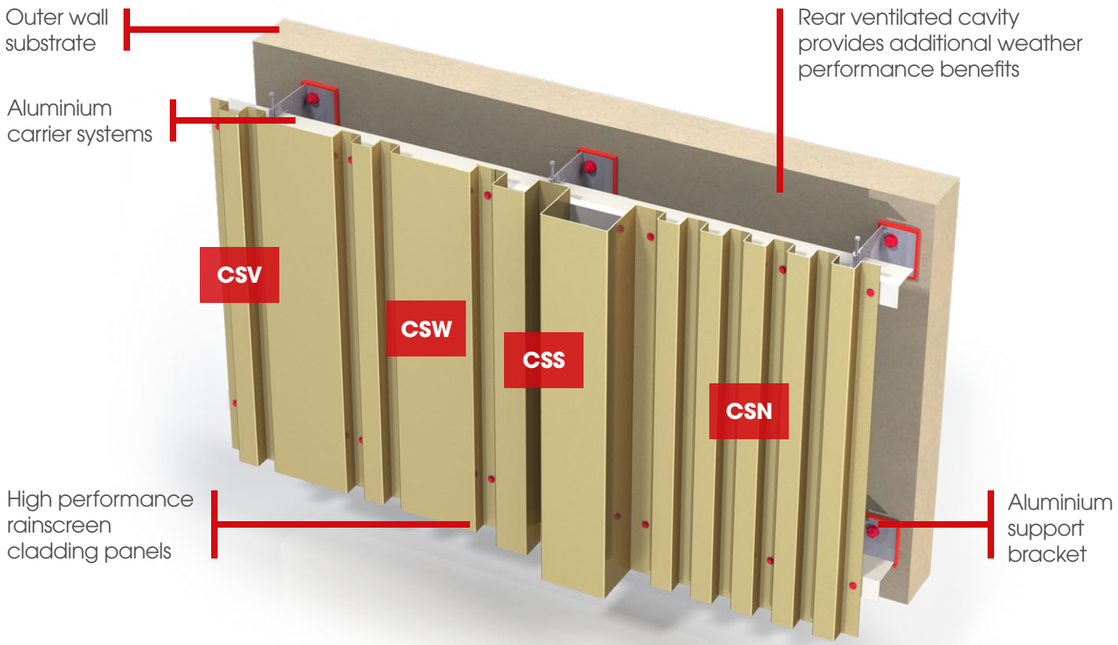
- 2mm aluminium
- Soffit application
- Natural Oak PPC wood grain
- 2,000 linear meters
- 50mm x 50mm profile
- Architect – Reid Steel







CS - castellation system



Specification

- Panel fire rating - A1 or A2
- Finish - PPC, Pre-Paint, Anodised
- Plank Lengths 6400mm max
- Horizontal Joint - Open or flashing
- Thickness - Max of 2mm
- Fixing - Self Drill mechanical fix
- Fixing centres - 300mm max
- Install method - Overlap
- CWCT tested with Hilti-Eurofox



CSV - Castellation System Varied



CSW - Castellation System Wide



CSS - Castellation System Step



CSN - Castellation System Narrow

CS - case study

Circle Square, Manchester

- 2mm aluminium
- Bespoke subframe
- PPC finish
- 2,500m^2
- Architect - Feilden Clegg Bradley Studios





Wirral Waters

- 2mm aluminium
- Castellation System Narrow
- Pre-Paint finish
- 25,000m^2
- Architect - Glenn Howells





Download our specification guide at eltheringtonarchitectural.co.uk

Spandrel Panels

Versatile, Interchangeable, & Superior Solutions

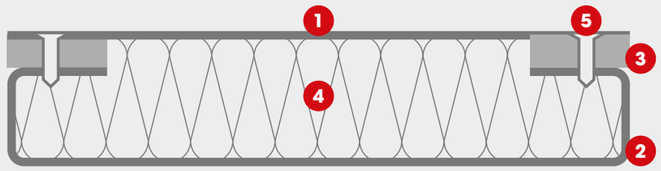
Our high performance spandrel panels are seamlessly inerchangeable with most glazing units and curtain walling systems. Suitable for both refurb and new build projects, our spandrel range is designed and tested to provide thermal, acoustic and fire performance in an unrivalled choice of sizes and finsihes.



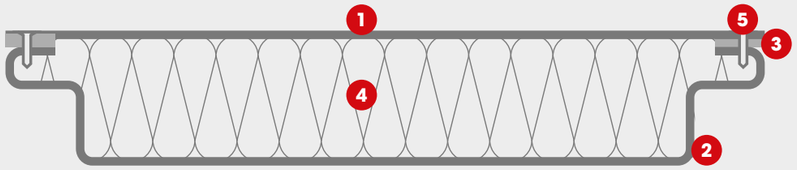
Spandrel Features

- A1 & A2 fire class
- Flat & stepped soluitions
- Panel depth 28mm to 157mm
- Landscape or portrait upto 3000 x1200mm
- Limitless colour options in Luxe Clad, PPC or anodised range

FS | Flat Spandrel



SS | Stepped Spandrel



1. **External Skin:** 2/3/4mm aluminium in mill, painted or anodised finish
2. **Internal Skin:** 2/3mm aluminium in mill, painted or anodised finish
3. **Thermal Break:** A1 multi-thermal
4. **Insulation:** A1 rated medium density mineral insulation
5. **Fixing:** Stainless steel screws

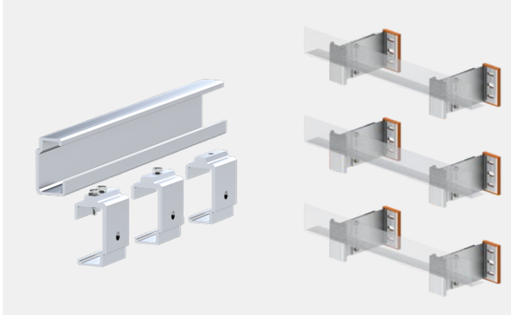
Support Systems

Our Facade Systems, manufactured in aluminium and stainless to the latest Eurocode designs

Facade systems can be recognised by the component parts; a range of helping hand brackets, vertical profiles designed for various panel types, structural support profiles for SFS construction detailing, cavity barriers for fire stop and ETA approved fixings for masonry, concrete and steel.

System Components

UL approved; helping hand brackets, aluminium profiles, panel brackets and substrate fixings.



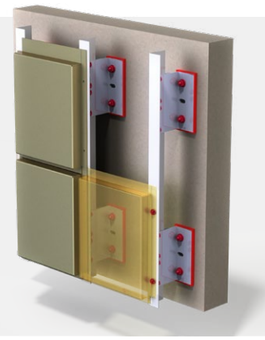
Cavity Barriers

Cavity barriers designed for ventilated facade design, including full fill and open state for 25mm or 50mm linear air gap



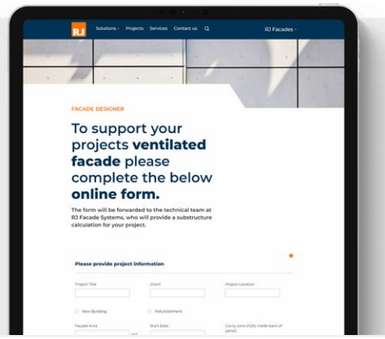
Facade Types

Market leading ventilated facade support structures designed and engineered for all facade panel types.



Facade Designer

On line application form to send the project design parameters directly to our engineers to start the design process.



Download our specification guide at eltheringtonarchitectural.co.uk

aluminium



About aluminium

Aluminium, while it has a relatively high initial energy cost, offers unparalleled manufacturing flexibility, the broadest range of finishes, an excellent strength-to-weight ratio, unlimited recyclables, and has a far better environmental profile than many specifiers believe. Above all, it offers architects the most elegant and satisfying design solutions.

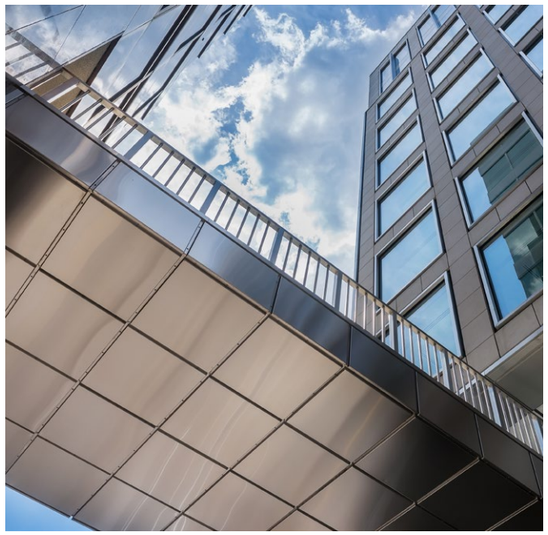
ACM (Aluminium Composite)



About ACM

Aluminium Composite Material (ACM) is the material of choice when panel flatness and a high performance finish are a must. Made from two sheets of 0.5mm aluminium, bonded to 3mm, fire rated A1 or A2 core. This simple concept gives a wide variety of advantages for both architects and installers. It is stable, yet readily mouldable, extremely weather resistant, and very easy to install.

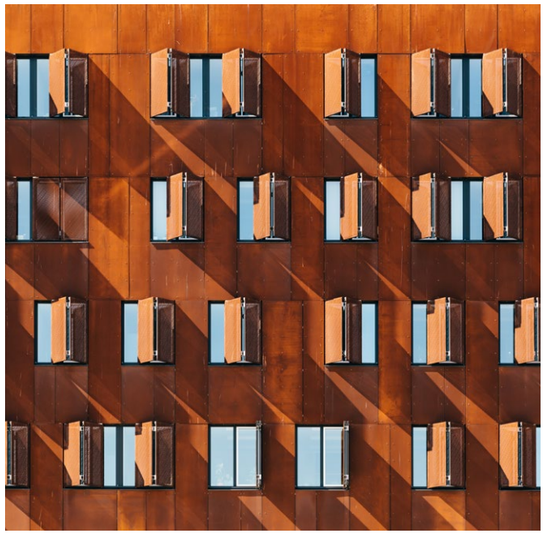
stainless steel



About stainless steel

Stainless steel is one of the most durable materials used in architecture. However stainless steel is not just one material; there are many different types with different properties and, most importantly, different levels of corrosion resistance.

cor-ten steel



About cor-ten steel

COR-TEN steel or weathering steel is a group of steel alloys which were developed to eliminate the need for painting, and form a stable rust-like appearance after several years exposure to weather.

The protective layer develops within 12-36 months under normal atmospheric conditions in which the steel surface is exposed to cycles of wet and dry conditions. The appearance changes throughout the oxidation period from a reddish brown to a dark brown, and the rust creates a protective coating that constantly forms, allowing the material to self heal.

PPC (Polyester powder coating)



About PPC

Powder coating is a type of coating that is applied as a free-flowing, dry powder. The main difference between a conventional liquid paint and a powder coating is that the powder coating does not require a solvent to keep the binder and filler parts in a liquid suspension form. The coating is typically applied electrostatically and is then cured under heat to allow it to flow and form a “skin”. Available in any RAL, Matt, satin or gloss finish. Our approved applicators use the following products: Syntha Pulvin, Akzo Nobel and Interpon.

CORECLAD® A1 (Prepainted)



About CoreClad A1

CoreClad A1 is the Eltherington range of unique pre-coated aluminium material finishes which are produced through a coil coating process. The process is continuous and highly automated providing advantages of superior quality, uniform paint layer and consistent colour. CoreClad A1 material have optimal cleaning, pre-treatment and paint application facilities, leading to unquestionable advantages in corrosions resistance, durability and sustainability. CoreClad A1 is A1 fire rated, 25% stronger than traditional PPC aluminium material and we are able offer a 30 year warranty.

anodised



About anodised

The aluminium is anodised by the passing of an electrical current from the anode to the cathode. The item to be anodised becomes the anode part of the electrical circuit whilst the cathodes are already in the anodising tank. The electrical current causes oxygen to be released at the anode which combines with the aluminium to form the aluminium oxide which is the anodic film. The depth of the anodic film and colour dyeing is determined by the time in the anodising tank; usually between 15 to 60 minutes creating an anodic film thickness of between 5 and 25 microns.

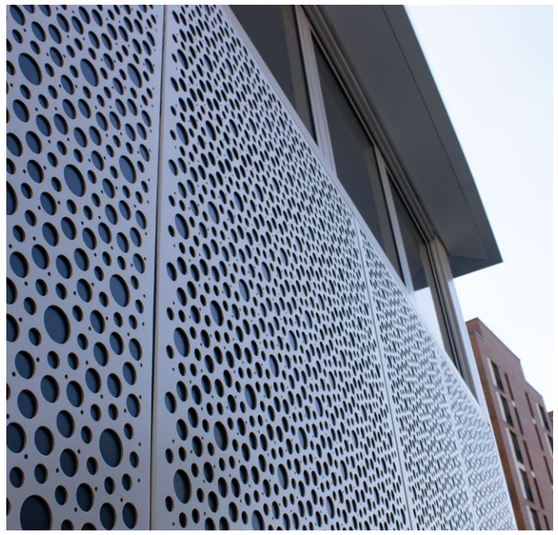
brushed aluminium



About brushed aluminium

Aluminium has a natural beauty and lustre. Its surface can be treated in various ways to produce different effects. A brushed finish can be achieved by polishing the aluminium with grinding belts. The 3 most common brushed finishes we offer are 240 grit dull polish, satin brush, and bright polish. Alternatively, we can offer pre painted finishes which provide a great alternative to real brushed surfaces.

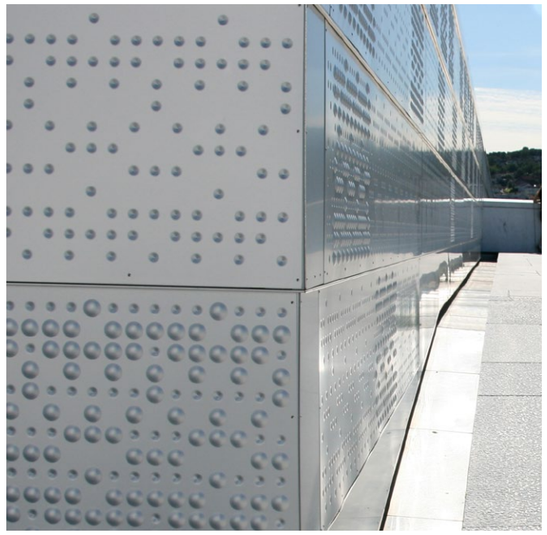
perforated



About perforated

Building on our experience in working with architects and designers, Eltherington offers an extensive range of precision perforated fascia and panel solutions. Our highly experienced team are able to work with customers to create bespoke designs that meet project requirements. We manufacture all our perforated solutions in-house using state-of-the-art production equipment. Functional and decorative, our perforated panels add a contemporary aesthetic to any project.

embossed



About embossed

We are able to offer a range of embossed finish options to provide many unique and innovative creative solutions. Within our CNC punch facility, we have numerous punch tools for embossed designs, either convex or concave. We are also able to offer full panel embossed solutions resulting from coil processing. We have the following emboss patterns: Stucco, Hammered, Cedar Woodgrain, and Alugrain. An additional benefit of embossing is the material work hardening properties resulting from the embossing process to provide a much stronger panel solution.

rimex steel



About Rimex steel

Rimex's metal finishes include patterned / textured cold rolled finishes, Linen, Squares, Treadtex Treadplate, coloured stainless steel, vibration polishes, bead blast finishes and etched finishes.

geometric plank



About geometric plank

Geometric plank is a folded geometric faced metal plank that is secretly fixed on the plank returns with our aluminium or polyamide clips. This engineered system allows for a larger plank face and joint detail resulting in a striking and bespoke linear design.

The Geometric plank is a bottom to top system when installed horizontally, meaning the install starts at the bottom of the elevation and each plank locks into the clip below.

Our horizontal and vertical Hilti-Eurofox subframe will accommodate the planks being installed in any orientation whilst applying the same clip fixing method.

CWCT

About CWCT

Eltherington is a member of The Centre for Window and Cladding Technology (CWCT). The CWCT is a leading provider of information to everyone involved in the design, specification, or installation of building envelopes.

CWCT sets the industry standard in the UK for high specification architectural projects. Eltherington rainscreen cladding solutions have been independently tested and accredited to the specific requirements of CWCT.

News & document downloads

We produce a monthly newsletter that includes our latest case studies and products.

If you would like to receive the newsletter please email us at **info@eltherington.co.uk** or subscribe on our website.

All our specification and technical guides are available on our download page at **eltheringtonarchitectural.co.uk/downloads**

ISO

Quality
ISO 9001

ISO 9001 is a standard of requirements against which our Quality Management System is evaluated. We are actively advertising our company's commitment to quality, traceability, continual improvement and customer satisfaction.

Environmental
ISO 14001

ISO 14001 environmental management system indicates to our stakeholders and customers that this business is committed to reducing our environmental impact, as well as reducing costs associated with waste management.

Health & safety
ISO 45001

ISOHAS 45001 is a standard of requirements against which our Health & Safety Management System can be evaluated. We are required to identify the risks associated with our operations and mitigate their impact.

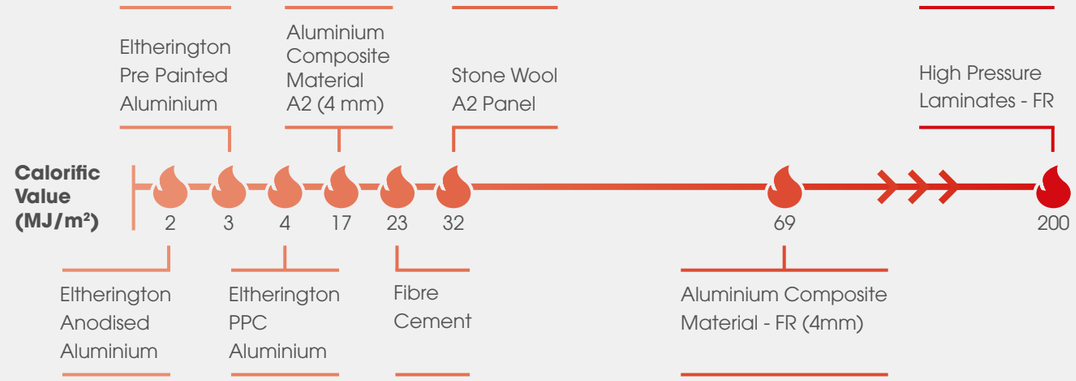
EN 13501-1 standards

EN 13501-1 is a European testing standard for building products, fire classification of construction products and building elements.

Building materials are classified according to their contribution to a fire. Not only are fire properties considered, but also smoke emissions and the possible formation of burning drips.

The reaction to fire properties of powder coated aluminium are A2 -s1, d0 which means it is classified as having no or negligible contribution to the fire. In addition, producing little or no smoke, and no burning droplets or particles.

Calorific Value
The energy released from combustion of a material. The lower the number means less heat and contribution to spread of fire.



Fully tested A2-s1,d0

- Cassette (TFS1)
- Castellated (CS)

Classification of reaction to fire performance in accordance with EN 13501-1: 2018.

15 TO 40 YEARS PPC WARRANTY

CLASS A2 FIRE PERFORMANCE

LARGE FORMAT PANELS 4000MM X 1000MM

IMPACT AND WIND RESISTANT

eltherington
architectural solutions

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