

eltherington architectural

Rainscreen cladding systems



eltherington
architectural solutions



eltheringtonarchitectural.co.uk



eltherington architectural solutions

About us

Established over 50 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.

Contents

Systems

TFS1 - through fix system	4
SFS1 - secret fix system	6
CPS - clip plank system	8
IPS - interlocking plank system	10
EPS - extruded plank system	12
Hilti - Eltherington support system	14

Materials

Aluminium	16
ACM	16
Steel	17
HPL Formica	17

Finishes

PPC	18
CoreClad	18
Anodised	19
Brushed aluminium	19
Perforated	20
Embossed	20
Rimex steel	21
Cor-ten steel	21

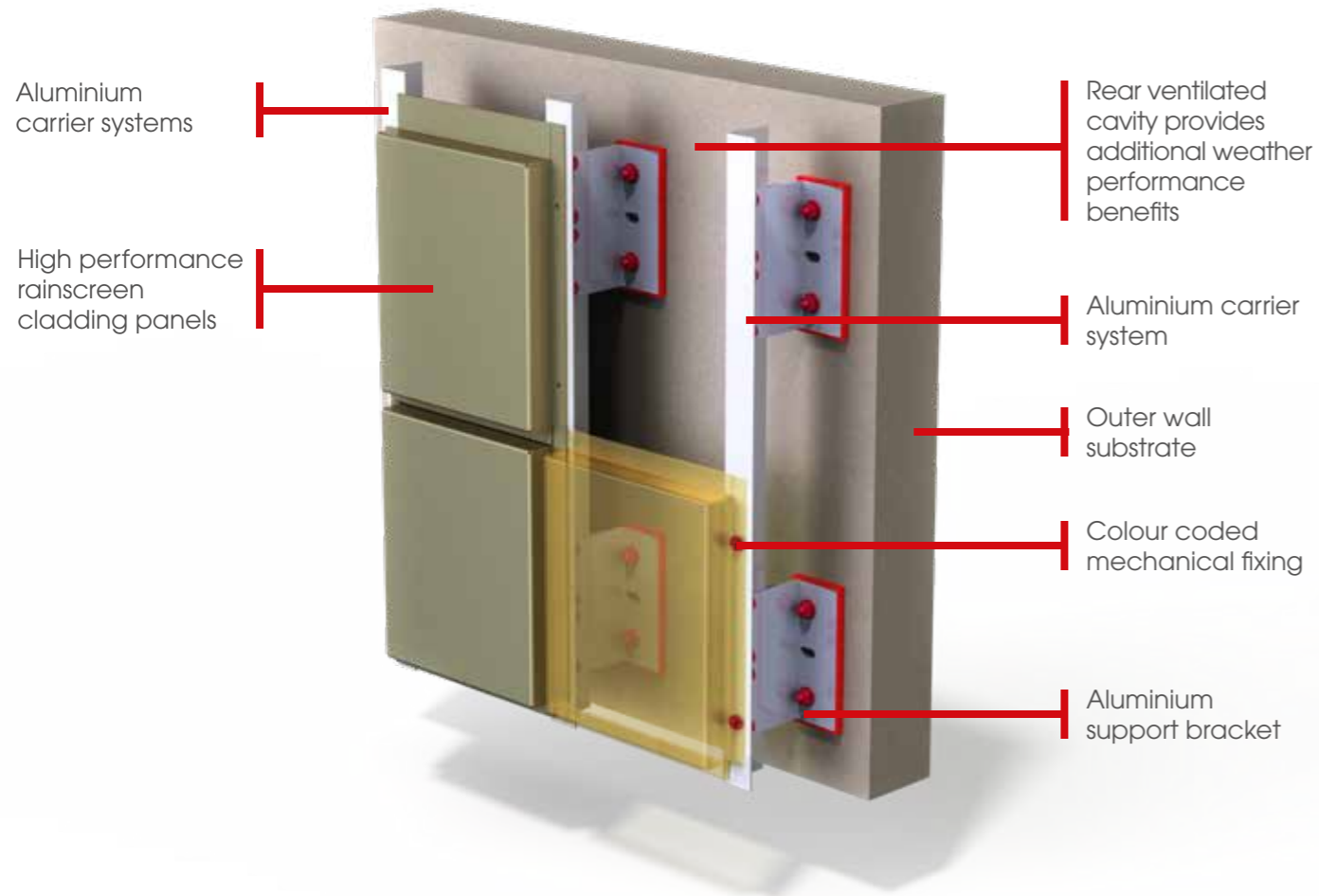
Architect and Installer

CWCT	22
NBS	22
CPD	22
ISO	23

News & downloads	23
------------------	----

Systems

TFS1 - through fix system



Specification

- Material - Aluminium, Steel
- 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



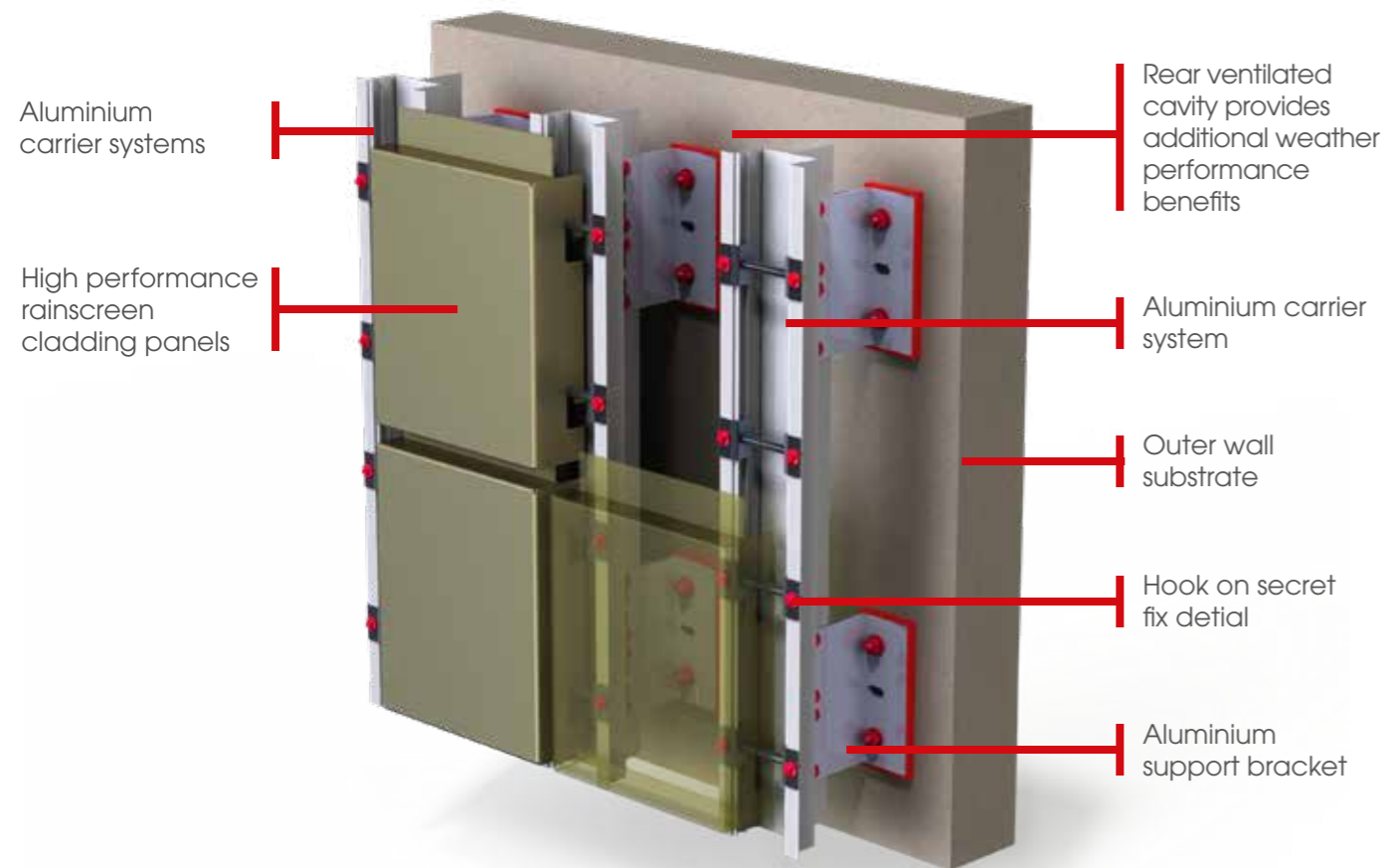
Media City UK

- 3mm aluminium
- Hilti subframe
- PPC, class 2, Florida spec finish
- 5000m²
- Architect - AHR Architects



Systems

SFS1 - secret fix system



Specification

- Material - Aluminium, Steel
- 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
- 3000m²
- Architect - Aedas Architects



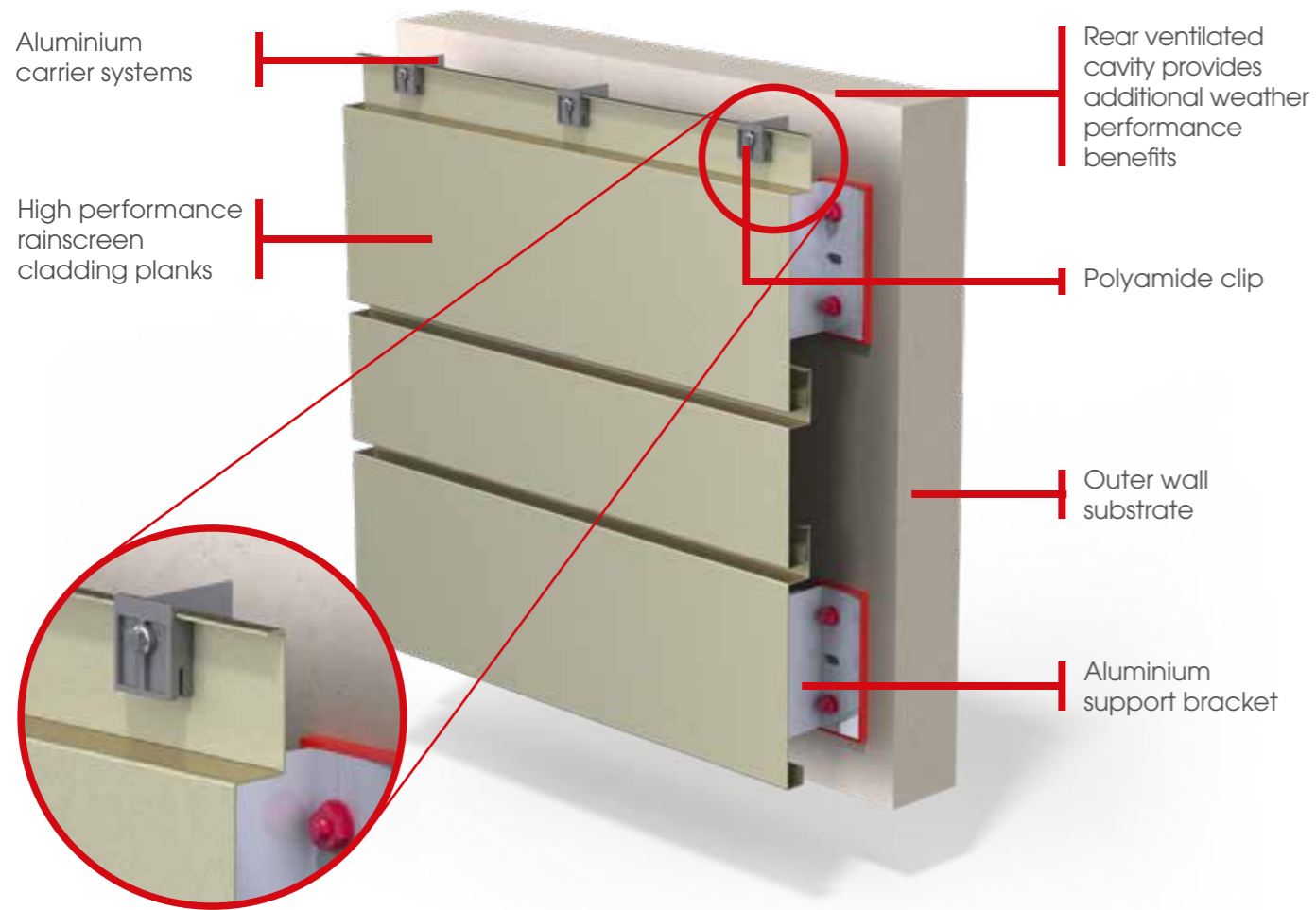
Southbank

- 3mm aluminium
- Hilti subframe
- PPC IGP metallic
- 2500m²
- Mansell Architects



Systems

CPS - clip plank system



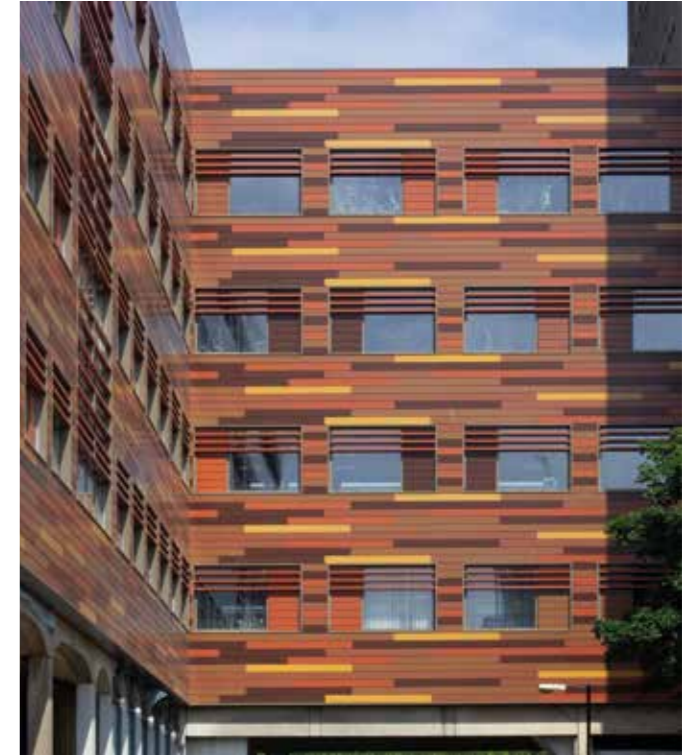
Specification

- Material - Aluminium, Steel
- 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

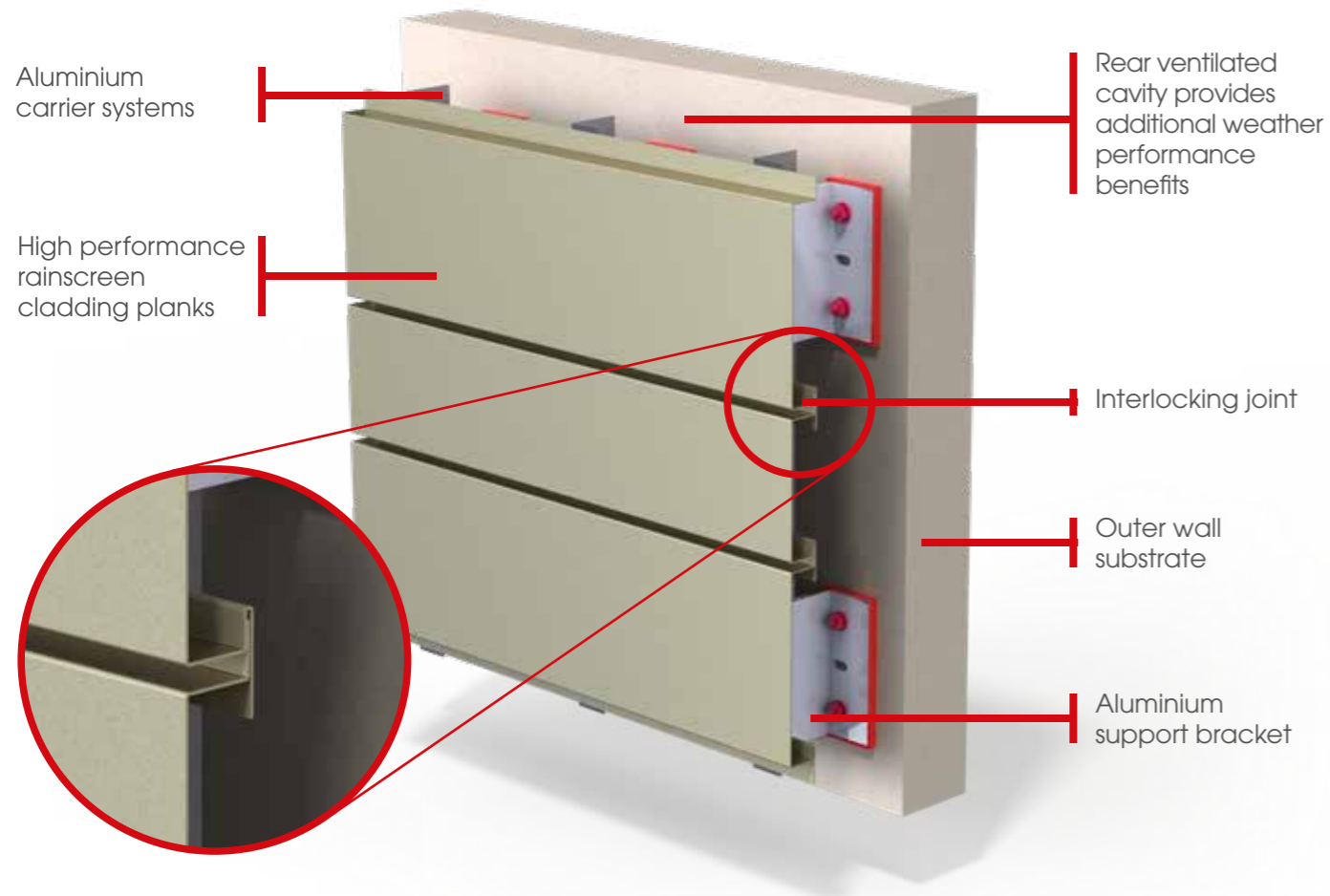
Jesmond 360

- 1.5mm aluminium
- Hilti subframe
- PPC finish
- 2000m²
- Architect - GT3 Architects



Systems

IPS - interlocking plank system



Specification

- Material - Aluminium, Steel
- Finish - PPC, Pre-paint, Corten, Rimex
- Thickness - 1 / 1.2 / 1.5mm / 2mm
- 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

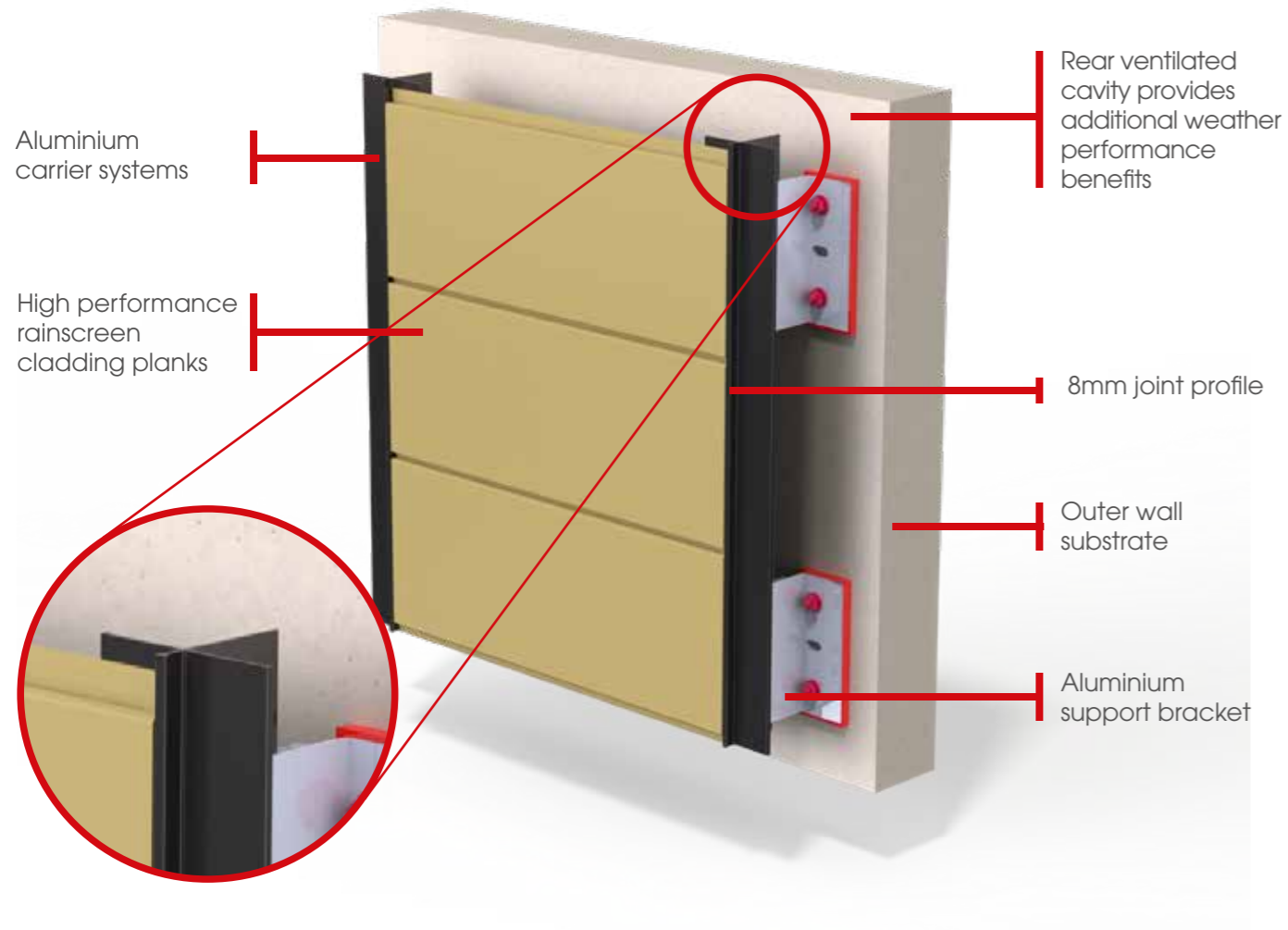
Haggerston London

- 2mm aluminium
- Hilti subframe
- PPC finish
- 1500m²
- Architect - PRP Architects



Systems

EPS - extruded plank system



Specification

- Material - Aluminium
- Finish - PPC, Anodised
- Thickness - 2mm
- Face Height - 210mm only
- Face length - 6010mm max
- Horizontal joint - 8mm
- Vertical joint - Open or 8mm T profile
- Fixings - Self drill mechanical fix
- Fixing centres - 750mm max
- Install method - Bottom > up
- CWCT tested with Hilti-Eurofox

EPS - case study

Burgas city high school

- 2mm aluminium
- Bespoke subframe
- PPC finish
- 4500m²
- Architect - Todorov Architects



Support Systems

Hilti - eltherington



The complete rainscreen solution

At Eltherington, we offer a fully tested range of façade system solutions, along with technical and engineering support from Hilti, our preferred supplier. See the diagram below to find out how we work with Hilti to support our projects.

With solutions for both horizontal and vertical applications, our systems include all fixings, fastenings and support structures, as well as nationwide on site support from the Hilti Building Envelope Specialists team.

In addition to this, we can also provide Hilti Fox-T bracket systems; a thermal bridge free façade solution to help achieve higher U-Values.

Design →	Measure →	Brackets →	Fixing brackets →	Mounting insulation →	Firestop →	Profiles and alignment →	Rainscreen cladding ●
					 Application Cavity closer between wall and rainscreen Application Cavity closer between wall / floor and rainscreen		

Materials

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 FR 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. We offer 3 Steel finishes – stainless, Rimex and Cor-ten. Please see page 21 for further information on Rimex and Cor-ten steel.

HPL formica



About formica VIVIX

VIVIX® solid phenolic, engineered exterior façade panels, have a decorative surface on both sides. This lightweight rainscreen cladding solution combines excellent weather and UV resistance properties for enhanced durability and ease of maintenance. They are easily machined and can be cut into a variety of shapes and sizes; in addition, they can also be field modified as needed. They are available in 6mm, 8mm and 10mm thicknesses.

Finishes

PPC

(Polyester powder coating)

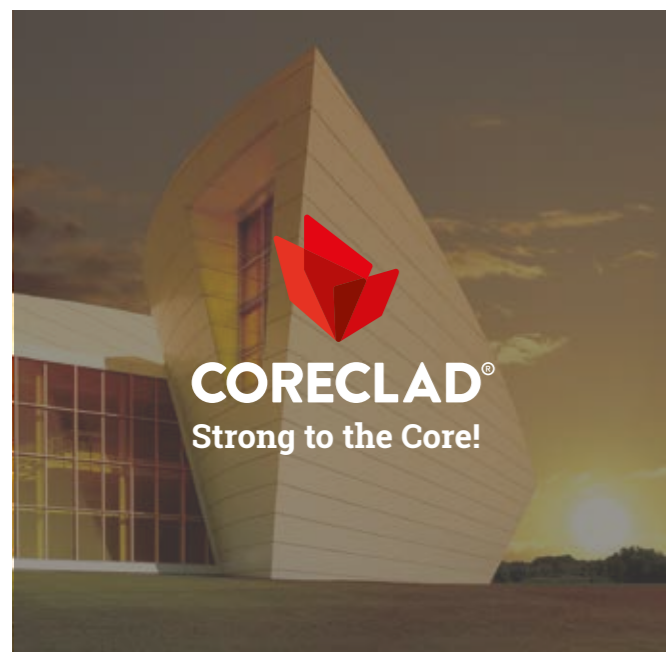


About PPC

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 Inerpon.

CORECLAD[®]

(Prepainted)



About CoreClad

CoreClad 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 material have optimal cleaning, pre-treatment and paint application facilities, leading to unquestionable advantages in corrosion resistance, durability and sustainability. CoreClad is A1 fire rated, 25% stronger than traditional PPC aluminium material and we are able offer a 30 year warranty.

Finishes

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.

Finishes

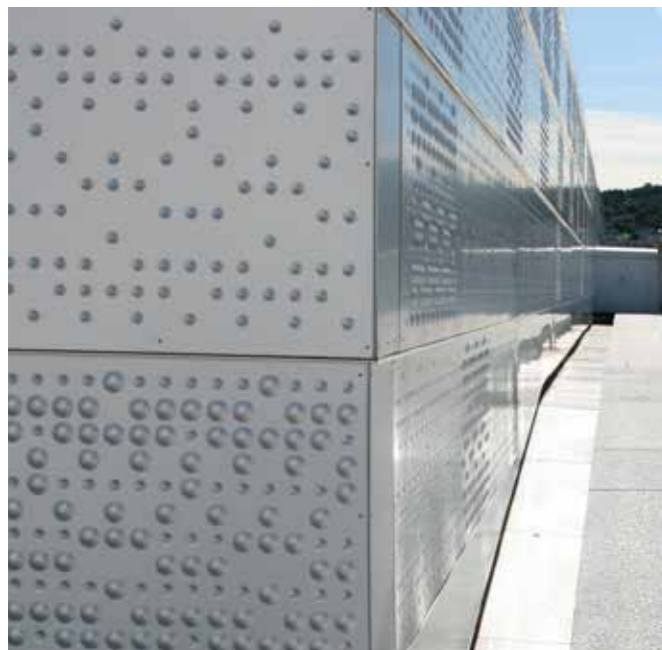
perforated



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.

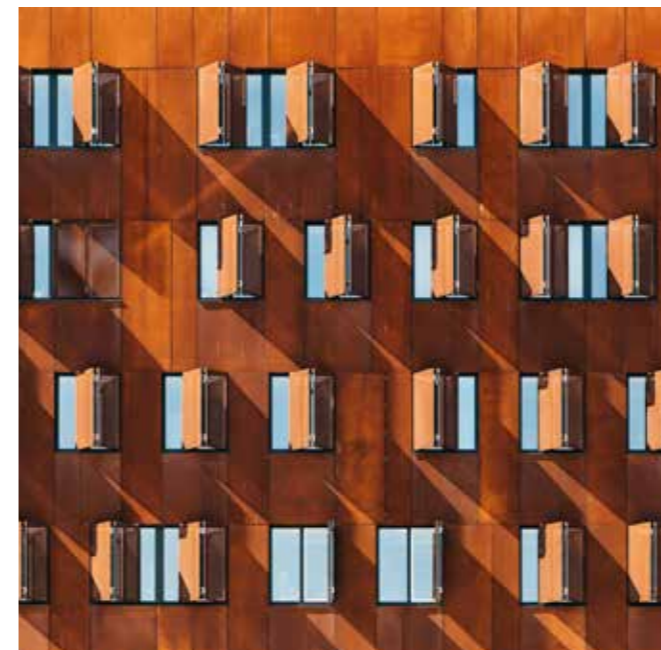
rimex steel



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.

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.

Architect and Installers

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.

NBS



About NBS

nbsPlus is an essential part of all specification processes. Here at Eltherington, we have written our specifications to cover many elements of the exterior façade of a building. Our aim is to offer you well written specifications that enhance project delivery plus save time and money.

CPD



About CPD

Eltherington architectural solutions provide rainscreen system CPD's which are independently approved and certified by RIBA.

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 and safety - ISO 18001

ISOHAS 18001 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.

news & downloads



Keep up to date

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



eltherington
architectural solutions

contact us

Get in touch

T: 01482 320336

F: 01482 329956

E: info@eltherington.co.uk

A: Eltherington Group Ltd,
1305 Hedon Road,
Hull, East Yorkshire,
HU9 5QD

www.eltherington.co.uk