

cladding,

fixing &
framing

VIVALDA



All the market leading brands



In-house fabrication



On-site training & assistance



Nationwide coverage

Established in London in 1999, VIVALDA is the number one distributor of reputable, external decorative cladding, building boards and fixing system solutions to the construction industry.

Complete Façade Solutions

With offices in London, Birmingham, Manchester, Hull, Scotland and Ireland, VIVALDA offers a fast, efficient and reliable nationwide service.

Industry Leading Brands

VIVALDA supplies the construction industry with high specification rainscreen cladding from all the leading manufacturers. We hold stocks of external cladding in the most popular colours, as well as building boards and accessories for immediate delivery.

Employing People with Passion

VIVALDA represents integrity, passion, and commitment. With extensive industry knowledge, we are able to offer customers complete confidence in our products and services.

cladding,
fixing &
framing

Unrivalled Service, Uncompromising Standards

Our growth in recent years is testament to the convenience of having pre-cut building boards and decorative cladding delivered direct to site. Our in-house fabrication services can support the most demanding of projects, with the promise of accuracy and speed. Boards can be cut to size™, shaped, drilled and finished to any specification.

VIVALDA supplies impartial and independent advice on any size project. This includes drawing take-offs, technical analysis and advice on accessories, fixings and framing systems. A complete end-to-end service, with delivery direct to your site.

We support our contractor and installer networks with independent advice on all our fixing and framing systems, offering safe, robust and cost-

effective solutions to fit the brief. VIVALDA are experienced when it comes to supplying through-wall solutions for new builds and we understand modern building methods to achieve the best insulation, acoustic and aesthetic result in one design.

VIVALDA hold large volumes of accessories to fit any brand of exterior cladding panel. From colour matched screws and rivets for secret fixings, framing, adhesive systems, profiles, trims, and rails, the list goes on. With so many options to choose from, VIVALDA can guide you to the most suitable fixing method and offer a choice of systems with direct support from our manufacturers.

VIVALDA



There are a number of factors to consider before selecting a fixing method:

- The thickness of the cladding panel required and the material type.
- The size of the panel you require to achieve the desired external aesthetic design.
- The effect of wind loading in certain areas or at a certain height of the façade.
- The substructure being fixed back to and the required pull-out strength.
- Overall aesthetics required versus budget

If your project is at design stage or not yet out of the ground, you have the flexibility to weigh up each method of framing and fixing in terms of suitability and cost. If the project is an over clad or involves cladding applied to a particular part of a building, the fixing method will also be determined by the existing sub structure of the building. VIVALDA can help cost up a number of methods for comparison.

contents

Types of Fixing System	4-5	Cavity Fire Barriers	12
Face Fix	04	Siderise	12
Secret Fix	04	Tenmat	12
Mechanical Secret Fix	04		
Specialist Manufacturer Framing Systems	05	Insulation	13
		Rockwool	13
Fixing System Manufacturers	6-11	Accessories	14-15
NVELOPE® Thermal Solutions	6-7	Profiles & Gaskets	14
NVELOPE® Systems	8-9	Fixings & Adhesives	15
Plastetrip Fastframe	10-11		
		Contact Us	16

cladding, fixing & framing

Introduction

There are three types of common fixing methods used to fix façade cladding panels back to a timber batten or aluminium rail substructure. First is face fix, otherwise known as through fix or visible fix, which include rivets or screws. Then secret fix or concealed fix, which involves bonding the panels with recommended adhesive product systems. Finally there are also manufacturer specialist fixing systems, which include mechanical secret fixing systems using EJOT PTS thread cutting screws, SFS TUF-S blind fasteners or KIEL undercut anchor fixings.

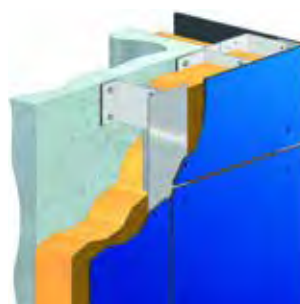
Nvelope and Plastestrip are the leading suppliers of rainscreen cladding frame and fixings in the UK.

Types of Fixing Systems

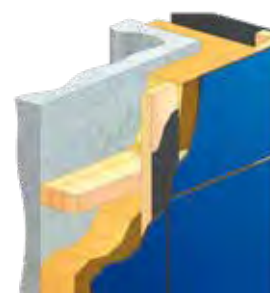
Face Fix

The simplest and least expensive method of fixing cladding is by screw or rivet, directly onto a timber batten or aluminium vertical rail which itself has been fixed to the substructure. Vandal resistant torx screws can be powder coated to colour match the cladding and are generally used with a neoprene gasket as protection for the timber substrate and to give a shadow line effect.

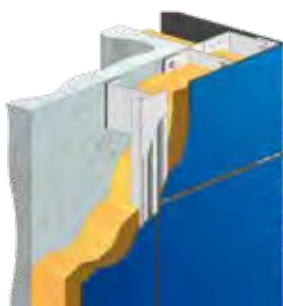
For a lightweight and low maintenance alternative to timber, cladding can be fixed to an aluminium sub frame using rivets. The system is fully adjustable to accommodate even the most awkward and uneven scenario. It is available with cavity ranges from 50mm to 420mm allowing for consistent smooth lines that façade cladding is known for.



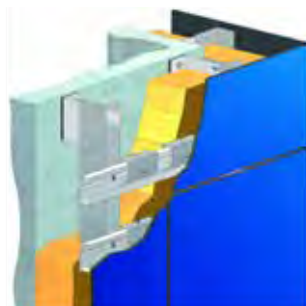
Rivet fix to aluminium



Screw fix to timber



Adhesive fixing with
'Secret Fix'



Mechanical secret fix:
Rails and screws

Secret Fix

If the required finish is for the fixings not to be seen, a secret fixing using adhesive is a possibility. This gives you clean looking, un-inhibited lines and contours and is often a more cost-effective alternative to a mechanical secret fix option using hangers and rails. You can achieve a seamless appearance using adhesive to either a timber or aluminium substrate. Adhesive can be used within a temperature range of 5 to 35 degrees with air humidity of no more than 75%. A bead of adhesive is usually applied vertically in a strip along the cladding panel, by using a gun.

Mechanical secret fix

A fixing method can be designed using an aluminium frame structure onto which the cladding panel can be hung using a variety of brackets, appropriate screws and hanger systems. The system will vary depending on the cladding material used.

Specialist Manufacturer Framing Systems

VIVALDA offers a vast range of framing systems suitable to support any type of façade. Wall cladding framing systems are fully engineered sub-frame systems constructed from modern high strength materials. Both secret fix (mechanical and structural bonding) and visible fix solutions are available.

Rockpanel, Cembrit, Ceramapanel, Trespa and Equitone are among the specialist façade manufacturers that carry secret fix systems.

SFS TUF-S

The TUF-S is the next generation for the secret fix of high pressure laminate (HPL) and fibre cement rainscreen panels. The product is available in a range of lengths to suit panels as slim as 8mm and fits into a standard drill hole without the need for a complicated undercut.

Rockpanel Premium

Rockpanel's A2 rated boards employ secret fix systems up to a thickness of 11mm, providing a high quality, seamless look. Both the TU-S x6 13 and TU 6x11 systems are made from durable stainless steel and hung on an aluminium subframe.

Rockpanel Tack S

In collaboration with Bostik, a fire safe European certified adhesive fixing system called Rockpanel Tack S has been developed. With Rockpanel Tack-S your boards can be bonded safely, reaching a fire class of B-s2,d0 onto a timber sub-frame using a Rockpanel strip or onto an aluminium sub-frame.

Equitone Mechanical Secret Fix

This secret fix system is suited to panels with a minimum thickness of 12mm when using Keil anchors. Hangers are fixed to the rear of the cladding panel, with the hangers hooking into horizontal rails. This in turn is then fixed to a vertical P.T.D.

Trespa TS300:

This secret fix system is exclusively designed for use with Trespa HPL cladding panels, to allow for a profiled edge. Panels with a minimum thickness of 8mm may be installed by fitting their profiled horizontal edges into continuous aluminium TS300 rails.

Trespa TS200:

This is a secret fix system using hangers and screws. TS200 consists of helping hand brackets and vertical panel profiles supporting the TS200 rails and hangers. Trespa HPL panels are individually height adjustable using these adjustable hangers.



cladding, fixing & framing

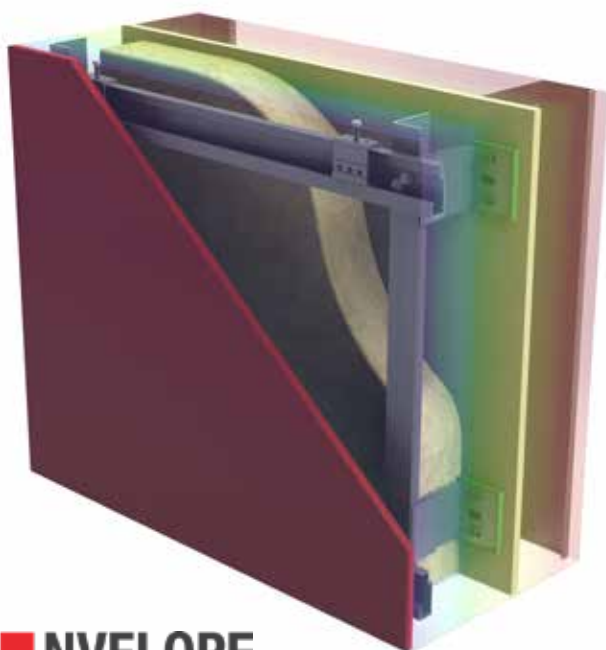
- BBA certified
- Manufactured to ISO 9001 quality management standards
- 35 years durability 'Systems selector' to help identify the best Nvelope system for the cladding type
- Manufactured in the UK
- Brackets sourced from sustainable aluminium

NVELOPE® Thermal Solutions

Utilising its UK Patent Pending technology SFS have been able to create a high performing solution that guards against thermal degradation due to compression of the thermal pad, ensuring no loss in thermal performance. This combined with the bracket material of aluminium or stainless-steel ensures that a full range of tailored solutions can be created for any project.

Benefits:

- 4 ranges across many NVELOPE® rainscreen sub-frame systems
- Range includes aluminium and stainless-steel brackets
- Non-compressible thermal pad reduces thermal performance gap
- Thermal insulation bonded to the bracket to save on installation time
- Good to exceptional thermal performance
- BBA certified
- Manufactured to ISO 9001 quality management standards
- Manufactured in the UK
- Brackets sourced from sustainable aluminium



Fire Safety:

- All NVELOPE® aluminium and stainless-steel brackets are defined as Euroclass A1 Non-Combustible EC
- Directive – 94/611/EC. The Thermal pad has an A2
- Non-Combustible Euro classification.

Thermal performance and heat loss

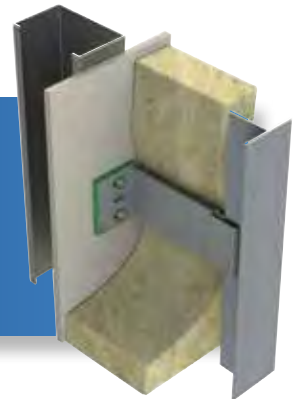
The NVELOPE® rainscreen support brackets, primary fixings, rails and carriers are an integral part of the Rainscreen Cladding build up and their impact on heat loss in the construction plays a key role.

As dwellings have become better insulated, the importance of thermal bridging has increased. In very well insulated dwellings, the effect that thermal bridging can have on the overall thermal performance of a dwelling can be significant.

Using NVELOPE® Thermal Solutions Range

NVELOPE® VB/HB

NVELOPE® VB/HB aluminium brackets are supplied with a green plastic 'isolator' which offers a degree of thermal benefit. However, its principal function is to eliminate any potential of galvanic corrosion between masonry and aluminium substrates.



NVELOPE VB/HB + Thermal

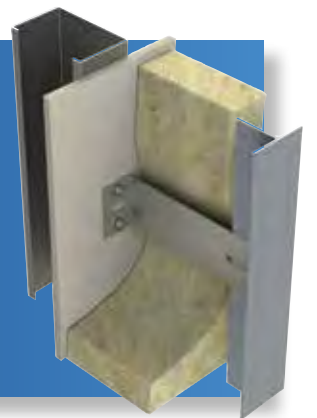
Whilst strong and easy to install aluminium is very thermally conductive e.g. $> 200 \text{ W/mk}$. Therefore, the thermal point loss affects can be significant when aluminium brackets are utilised depending on the combination of various elements within the rainscreen build-up.

The NVELOPE® VB/HB + Thermal range includes an insulation pad at the base of the bracket. This dramatically improves the thermal performance of the rainscreen build-up.



NVELOPE® NVS

For greater performance SFS have recently introduced a complete range of stainless-steel brackets to complement NVELOPE® vertical aluminium ranges. NVELOPE®'s stainless steel range is made from superior 316 grade which exhibits far greater resistance to localised corrosion in marine and in contact with atmospheric pollution found in most built-up environments. Stainless steel will demonstrate a much-improved increase in thermal performance. Stainless Steel has lower conductivity than carbon at 16 W/m.k . This represents a 12-x thermal improvement over and above aluminium. Additionally, stainless steel brackets have no requirement to utilise an isolator to alleviate galvanic corrosion.



NVELOPE® NVS + Thermal

For optimum thermal performance NVELOPE® NVS + Thermal is the ideal choice. It offers the combined benefits of high thermal performance with high corrosion resistance for coastal environments. Where rainscreen build up designs prescribe demanding thermal solutions, this option could offer the ideal high-performance answer!



cladding, fixing & framing

NVELOPE® Systems

The NVELOPE® range is made up of brackets and rails in various configurations to suit your application. All systems are available in aluminium, and all systems can be supplied with the insulation pad for enhanced thermal performance. Most systems are also available with stainless steel brackets to improve thermal capabilities even further.

NV1 is the NVELOPE® back frame - vertical cladding applications.



NV2 is suitable for concealed fix cladding applications - structural bond (ie. Sika Sikatack Panel System)



NV3 is the NVELOPE® system for concealed fix/mechanically fixed applications.



NV4 (TS200) is the NVELOPE® system for concealed fix/mechanically fixed applications - vertical cladding applications (Trespa Meteon).



NV5 (TS300) is the NVELOPE® system for concealed fix applications (Trespa Meteon HPL Only).



NV6 is the NVELOPE® system for supporting a timber batten - vertical cladding applications (to support vertical and/or horizontal cladding elements).



A System available in aluminium

SS Brackets available in stainless steel

Fire safety

All NVELOPE[®] aluminium and stainless-steel brackets are defined as Euroclass A1 Non-Combustible EC Directive - 94/611/EC and the Thermal Pad has an A2 Non-Combustible Euroclassification.

Warranty

As with all SFS products NVELOPE[®] offer an industry leading warranty.

NV7 is the NVELOPE[®] system for secret fix cassette (ACM/zinc/aluminium) - vertical cladding applications.

A SS



NV8 is the NVELOPE[®] system for concealed fix/mechanically fixed and structurally bonded applications.

A SS



NVF2F is the NVELOPE[®] back frame - vertical floor to floor cladding applications.

A



NH3 is the NVELOPE[®] system used to support horizontal elements

A



Reduced performance gap

Non-compressible insulation pad on the NVELOPE[®] VB + Thermal, NVELOPE[®] HB + Thermal and the NVELOPE[®] NVS + Thermal products reduces the effects from thermal degradation due to compression of the insulating pad. This helps to reduce the performance gap from the design to real world installation.

Materials

Aluminium brackets are manufactured from extruded 6005A T6 alloys conforming to EN 573-3 materials and EN 755 production standards providing exceptional strength and durability and ideal for good thermal performance.

The stainless-steel brackets utilise the superior 316 grade of material which provides increased resistance to localised corrosion such as in marine or polluted environments. The stainless-steel brackets also provide superior thermal performance. The Thermal options incorporate the options to incorporate the addition of thermal insulant in the form of a bonded non-compressible insulating pad to enable exceptional thermal performance to be achieved.

Thermal enhancement

NVELOPE[®] VB + Thermal, NVELOPE[®] HB + Thermal and the NVELOPE[®] NVS + Thermal come with a preinstalled thermal insulated pad. There is no need to assemble these on site which ensures that all brackets are installed correctly with the insulated pad saving time on rework or assembly on site.

cladding, fixing & framing

Plastestrip

Plastestrip offer a wide range of bespoke framing solutions to suit even the most complex fixing challenge. VIVALDA distribute the FastFrame fixing system and accompanying Plasticlad accessories. Also available is the ThermaFrame system that uses stainless steel brackets to reduce heat loss through the facade support structure

Fastframe Fixing Systems

FastFrame is an adjustable cladding fixing system that suits most brands of exterior cladding panels. VIVALDA offers advice and technical support to calculate the safest yet most cost-effective bracket spacings to support your facade.

The bracket's integral heat stabilised PVC isolation pad allows for thermal and long-term reliability advantages. Corrosion and weakening of the framing is completely avoided. Further, the addition of a 3mm thick bracing plate allows for effective base thickness which strengthens the bracket and facilitates wider spanning.

FastFrame Benefits:

- BBA approved
- The FastFrame system presents the fastest, simplest and most cost-effective facade support solution on the market.
- The adjustable, universal bracket made from 5251 H22 grade aluminium comes complete with an isolation clip and is suitable for almost all building substrates.
- The T & L rails are made from high specification 6063 T6 grade aluminium.
- Compatible with various facade finishes, including spun rock, HPL, cement-based sheets, ACM, render systems, timber & many more.
- On-site pull out tests by trained technicians.
- Fully backed by an independent structural engineer offering PI cover.
- Suitable for marine environments.



PLASTESTRIP

Rivet Face Fix:

Panels are fixed to the vertical aluminium rails with powder coated blind rivets.



Secret Adhesive Fix:

Panels are fixed using a high strength bonding system to fix the panels to a prepared aluminium rail.



Mechanical Secret Fix:

Carrier brackets are fixed to the rear of the panel with specialised fixings that then hang on to a horizontal carrier rail.



Timber Carrier System:

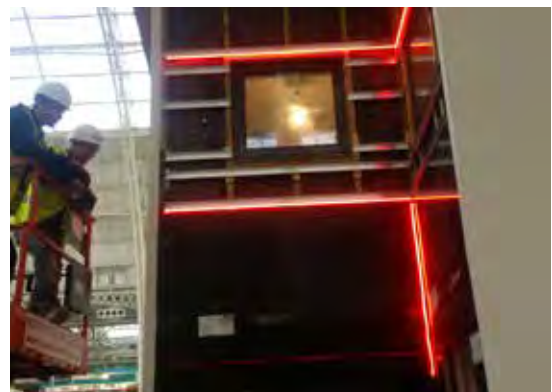
With the use of helping hand brackets and short lengths of rail to support timber battens, this system is suitable for supporting weatherboard systems, timber cladding and nailed panels.



Plasticlad Accessories

VIVALDA stock a comprehensive range of accessories from Plasticlad to suit 6, 8 & 10mm cladding panels. Some profiles are also available for other panel sizes. Accessories include:

- **Colour matched trims in PVC or aluminium**
- **EPDM gaskets and shadow line strips**
- **Colour matched stainless screws and rivets**
- **Custom trim and flashing facilities**



Cavity Fire Barriers

Use of effective fire cavity barriers can enhance the fire safety of a building, particularly when specifying for project builds with multiple levels. VIVALDA supplies market leading products from the leading manufacturers. The wide choice of fire break systems we supply work by blocking the airflow cavity behind the cladding, allowing effective control of fire by reducing the spread of flame. We offer an extensive range with two market leading solutions as follows:

SIDERISE®

SIDERISE® Cavity Barriers allow for continuous ventilation and drainage behind the cladding while providing a hot smoke and fire seal. SIDERISE® fire barriers are composed of a non-combustible stone wool lamella core, faced on exposed surfaces with a reinforced aluminium foil. This system includes products for both horizontal and vertical solutions.

The following SIDERISE® products are available:

- SIDERISE® 'Open State' horizontal cavity barriers - RH25 & RH50
- SIDERISE® vertical cavity barriers - RV
- SIDERISE® aluminium jointing tape - RFT-120
- SIDERISE® support brackets - galvanised (G) or stainless-steel (S) options

SIDERISE RH 'Open State' horizontal cavity barriers are specifically used on a ventilated façade. The system will drain any moisture within the façade construction, as well as maintain airflow. The system will provide an effective hot smoke and fire seal in the event of a fire. The Siderise 'Open State' systems are available for air gaps of up to 25mm - RH25 and 50mm - RH50. SIDERISE RH25 is suitable for use in cavities widths up to 425mm wide and RH50 for cavities up to 300mm.



SIDERISE RV vertical cavity barriers fully seal the void between the external envelope and internal structure. The cavity barrier assists ventilated façades to function by maintaining air-pressurisation. The product's unique stone wool lamella core enables the vertical barriers to accommodate movement associated with rainscreen façades. Intersections between horizontal and vertical cavity barriers are simply abutted.

SIDERISE cavity barriers have been tested at Warrington-Fire and are 3rd Party Certified under EWCL5 (Certificate ME 5101). The barriers are available to suit 30, 60, 90 and 120 minute applications.

SIDERISE Cavity Barriers are supplied in 1200mm long strips and can be pre-cut in width to suit on site construction void sizes.



TENMAT

TENMAT offers Ventilated Fire Barriers suitable for a wide range of cavity sizes and constructions. Modern constructions often require external cladding and façades to be held away from the building structure to allow ventilation and improve building energy efficiency.

This resulting cavity creates a serious fire protection threat to structures and people. The void acts like an open chimney and allows the fire to spread quickly both vertically and horizontally around the building. TENMAT's range of Intumescent Ventilated Fire Barriers or 'Open State' Cavity Fire Barriers are designed to maintain the ventilated cavity in normal conditions but will rapidly expand to seal off the gap in the event of a fire.



Insulation

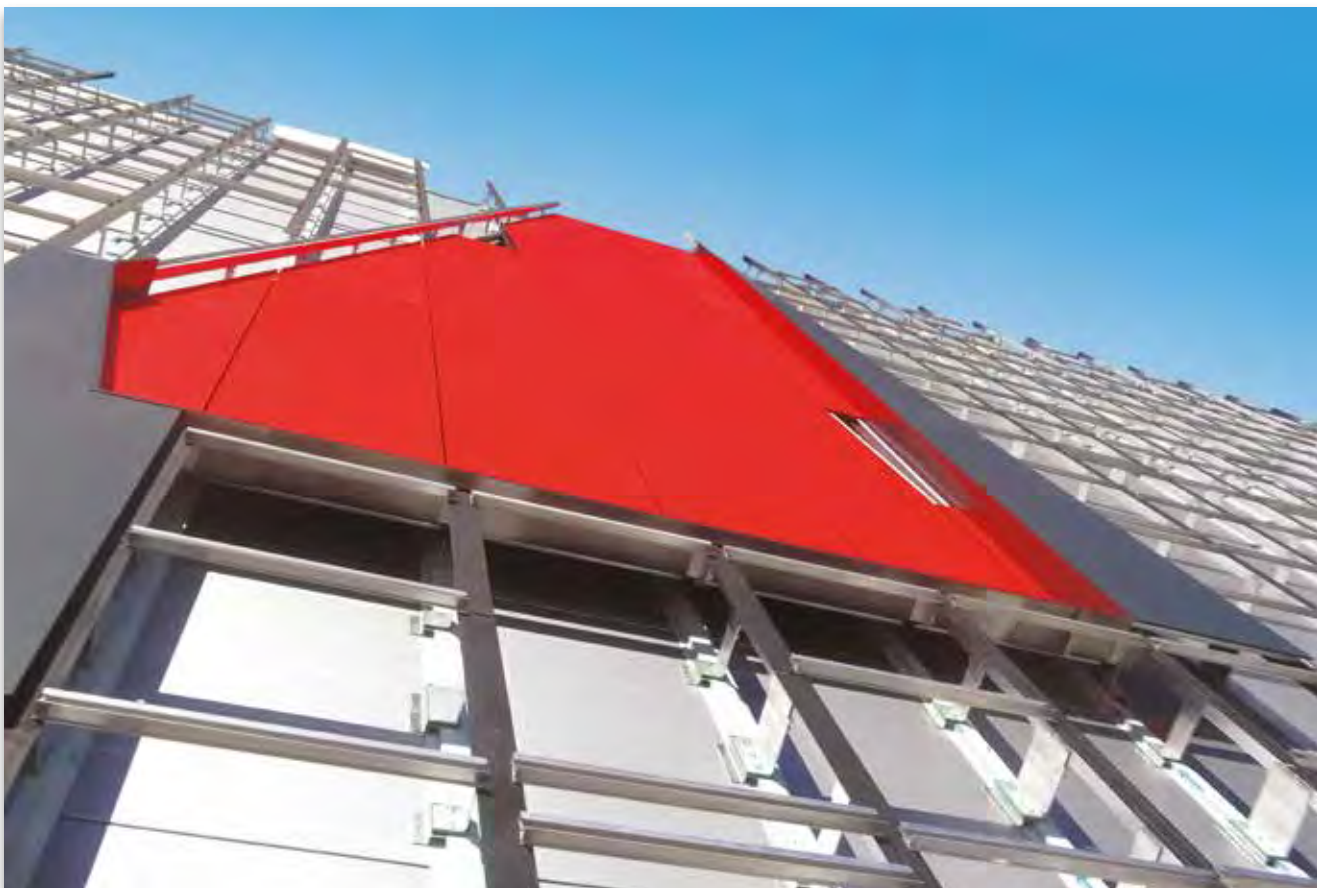
Once a building is complete, insulation is invisible to the eye. However, getting the specification right from the outset is vital to deliver a safe building that maintains the U-values required. That is why VIVALDA provides impartial advice and guidance on selecting the right insulation product for your project.

ROCKWOOL

ROCKWOOL's Rainscreen Duo Slab insulation is comprised of two specially designed unique layers, a robust outer and a resilient inner surface. Each surface of the insulation has specific properties which ensure that the building is fully insulated. The robust outer layer will withstand the harsh onsite conditions protecting the inner layer as it works with the substrate. This unique dual layer double density construction lowers the number of fixings required to secure the slab to the substrate; this reduces the costs and the time taken for installation.

Rockwool Duo Slab panels will knit together to form an effective insulation barrier that provides impressive thermal efficiency. Once knitted together the gap free insulation will provide further protection against the elements, improving weather resistance. Furthermore, ROCKWOOL Rainscreen Duo Slab is an environmentally friendly insulation option due to its natural and sustainable mineral wool composition.

- BBA approved
- Specifically designed for use on high rise buildings
- A1 fire rated
- Improved thermal efficiency and acoustic comfort
- Fewer fixings required to install
- Moisture resistant



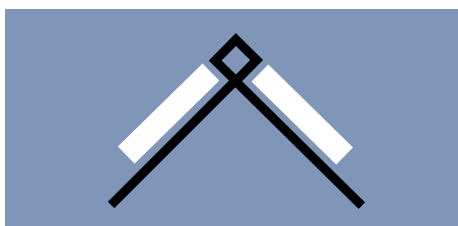
cladding, fixing & framing

Accessories

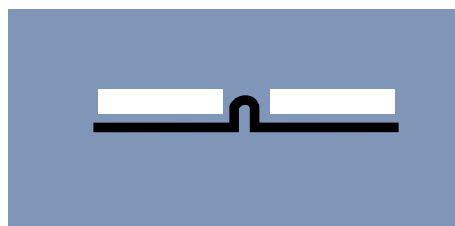
VIVALDA offers the widest range of profiles, fixings and adhesives to fit any brand of exterior cladding panel. Our accessories portfolio can accommodate all panel thicknesses, plus our profiles and fixings can be colour matched to RAL and BS specified colours.

Profiles

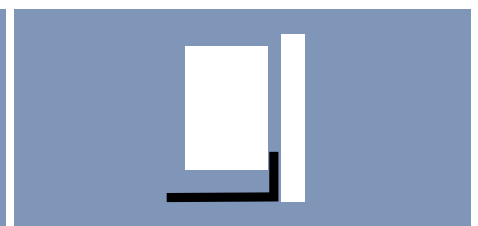
VIVALDA can support profile requirements with ease, ensuring they enhance the façade both technically and visually. We can manufacture made-to-measure colour matched aluminium rain repelling flashings and sills. Gaskets for every application are available at VIVALDA. These include flexible joint strips with fins, flexible flat joining strips and self-adhesive foam joining strips.



External corner profiles



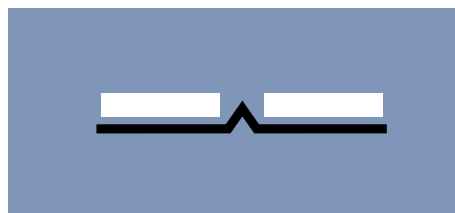
Universal joint profile



Vent profiles



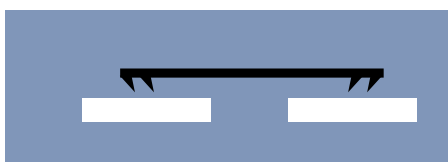
Edge profile



Universal joint profiles



Bottom drip profile



Flexible joint strip with fins



Flexible flat joining strip



Self adhesive foam joining strip

PLASTESTRIP



Speak to a VIVALDA representative for further technical advice on our varied choice of vent profiles for different applications and cavity depths.

Fixings

VIVALDA's comprehensive range of low-profile panel screws and panel rivets are colour matched to enhance aesthetics and are available in a vast range of sizes to support clients' requirements. Our range can accommodate both visible panel fasteners as well as secret fix panel fasteners.

- Large/small head torx screws
- Self-drill torx screws
- Nails
- Shiplap nails
- Rivets
- Ejob screws
- Balcony bolt set
- Framing screws
- Substrate fixings

Adhesives

As an alternative to visible fixings, adhesive fixings offer a great solution when sleek and uninterrupted lines are a design must. VIVALDA's adhesive systems range offers solutions to bond cladding panels to both timber and metal sub frames.

SikaTack

The SikaTack panel system consists of an adhesive, prefixing tape and surface pre-treatment agents. As a globally recognised name, the adhesive system is suitable for variety of substrates, which include aluminium (including anodized), wood, fibre cement, ceramic materials, glass and plastics.

SikaTack is a moisture-curing single component polyurethane resin-based adhesive, capable of withstanding extreme dynamic and static loads and climatic conditions. Once cured, the adhesive remains permanently elastic to accommodate differing thermal expansion of various building substrates. It eliminates stress fatigue at corners of panels and prevents cold bridging.

Benefits of SikaTack

- Aesthetically pleasing - no screws or rivets are visible
- Elastic bonding - uniform tension over the whole panel and therefore no deflection of panels
- Extremely cost effective due to fast and economical installation
- Adhesive layer prevents galvanic corrosion
- Increased thermal performance on exterior wall
- BBA accreditation

Rockpanel Tack-S

This fire safe adhesive fixing system has been specially developed for Rockpanel boards. The Rockpanel Tack-S system is compliant with the strict fire-safety rules of exterior cladding systems. With Rockpanel Tack-S your boards can be bonded safely, reaching a fire-class of B-s2,d0, onto a timber sub-frame using a ROCKPANEL strip or onto an aluminium sub-frame.

The Rockpanel Tack-S adhesive system consists of a highly elastic adhesive, board primers for the back of boards, pre-treatments for use on timber or aluminium support profiles, plus foam tape for the initial bonding of the panel and a spacer to obtain a sufficient adhesive layer thickness.

Benefits of Rockpanel Tack-S

- B-s2,d0 fire rated adhesive
- Can be bonded on timber and aluminium sub-frames
- Quick and easy mounting
- Durable, highly elastic, with optimum stress distribution
- Good moisture and weather resistance



cladding,
fixing &
framing

VIVALDA's specialist production centres have the capability to manufacture bespoke composite panels to suit an extensive range of specifications. Contact us today sales@vivalda.co.uk

vivalda.co.uk

London • Birmingham • Manchester • Hull • Scotland • Ireland