CI/SfB (4-) X





Installation instructions EDITION 1

EUROBRICK A-CLAD

Before starting any Eurobrick Systems installation, please read the instructions carefully. A-Clad MUST be installed in accordance with these instructions by installers who have completed Eurobrick's A-Clad training course.

If any questions do arise, please contact our Technical Support Department by calling 0117 971 7117 or emailing info@eurobrick.co.uk. Alternatively, you can write to us at: Eurobrick Systems Limited, Unit 5 Newbridge Trading Estate, Newbridge Close, Bristol BS4 4AX

IMPORTANT

All drawings in these instructions and on our website are indicative only. Design responsibility remains with the architect, designer or engineer.

Product data

Panel: 12mm thick fibre cement panel with ribs to external face. Each panel measures approximately 1200mm x 765mm. The horizontal ribs running along the 1200mm width, align and support the brick slips so that brick courses are formed accurately and easily.

Brick slips: All Eurobrick Systems brick slips are kiln-fired clay.

Britannia range brick slips are nominally sized;

Straight slips: 215mm x 65mm x 14-15mm

Corner slips: 215mm x 65mm x 102.5mm x 65mm x 14-15mm

Classic range brick slips are cut in thicknesses from 20-25mm. Length and height are nominally UK metric size but are subject to variation.

Fasteners: A-Clad panels are fixed to cladding rail systems with EJOT JT4 STS – 3, 4.8 x 35mm stainless steel screws. These fixings are designed specifically to secure the panels to aluminium rails from 1.5mm - 3mm thickness.

Adhesive: Adhesive used with A-Clad system to attach brick slips is pre-mixed cement-based dry powder which is mixed with water to create workable paste for application to panels.

Mortar: Eurobrick Systems' Europoint premixed pointing mortar is specially formulated to enhance ease of application, adhesion properties and flexibility. Supplied in 25Kg bags dry-powder form for mixing with water.

Installed system weight: System weight complete with brick slips and pointing mortar in place – from 60Kg/m².

Applications

A-Clad is designed for exterior applications where a non-combustible or limited combustibility brick slip system is required. A-Clad panels can be attached to aluminium cladding rails or timber battens. The design must ensure that self-loads and imposed loads are adequately transferred to the structure of the building being clad.

Certified system performance

Where required, Eurobrick Systems will provide test data demonstrating the physical properties of the system, including resistance to moisture, hard and soft body impact, wind loads and performance in reaction to fire.

Limitations

1. Application temperature range

Eurobrick Systems' A-Clad system must only be installed within the temperature range 5°-25°C.

2. Supporting frame member spacing

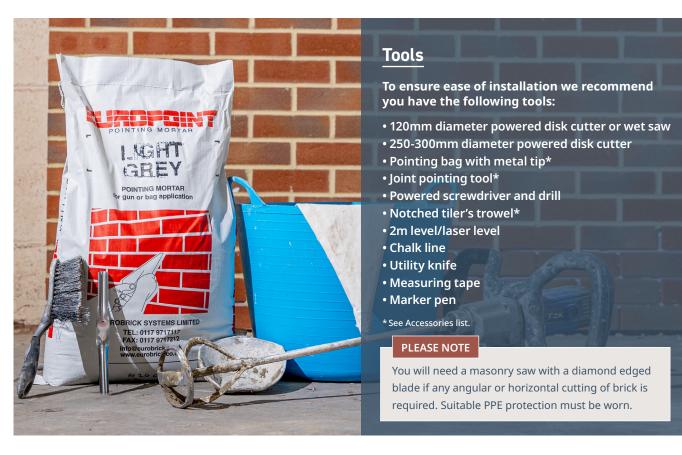
Where A-Clad panels are to be fixed to battens or cladding rails, these must be set out to satisfy system fixing requirements. Typically, 1200mm wide panels will require 3 vertical rails to attach to at spans of NO MORE than 600mm.

3. Fire rating euro classification

Fire Rating: The A-Clad system achieves Class A1.

4. Installation

The A-Clad system is to be installed by installers who have completed Eurobrick's A-Clad installation training.



Ordering

System materials are priced to suit particular project requirements.

When ordering, please state the nett area of the wall and give the total linear metreage of the corner length with separate quantities for external corners of the building, window reveals and window heads. Or provide drawings for a material take-off.

A-Clad has a lead time of approximately 12 weeks, if there is not sufficient stock, so this should be taken into account when ordering. Please call us to enquire about stock levels.

Delivery

Materials are normally palletised. Delivery can be made by pallet network or dedicated vehicle, in either case these may be equipped with self-offload facilities. Please advise of any particular site requirements or restrictions at time of ordering.

All deliveries must be thoroughly inspected prior to signing delivery note and any damaged or missing items should be noted on the delivery note and notified to Eurobrick immediately.

Material handling and storage

System materials must be safely handled and stored to prevent damage. A-Clad panels should be kept covered prior to installation. Brick slips should be kept clean and dry. Cement adhesive and pointing mortar should be stored under cover in dry conditions. Any damaged, open or partially used bags should not be used.

Panel installation

Before fitting system panels to supporting frame, check;

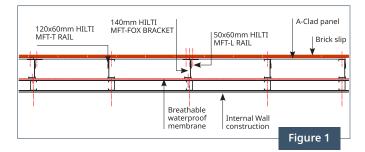
1 . Supporting frame rails are vertical and plumb and on a consistent plane.

2 . Supporting frame rails are located correctly to align with system fixing requirements. See Figure 1.

3 . Supporting frame has been engineered correctly to transfer self-loads and imposed loads of the system to the structure of the building.

4. If insulation is incorporated in the construction, ensure this is in place and properly secured.

5 . If fire breaks and fire defence materials are required, ensure that these are properly installed.



Placement of first panel

The first panel may be positioned anywhere on an elevation however we recommend that the first panel should be installed either at the external corner of the building or to the foot of the installation area at either the far left or the far right.

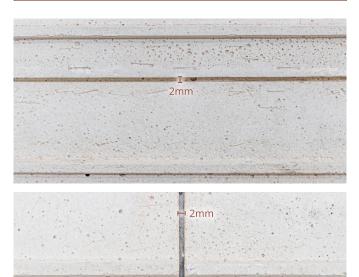
Setting out of the panels should be co-ordinated with the window head height or another reference point.

Panel should be levelled using spirit level or laser level.

3-4 fasteners should be used to secure the first panel before any further panels are added. Once a number of panels have been installed and spacing and setting out has proven to be satisfactory, the remaining fasteners **MUST** be installed.

IMPORTANT

At panel abutments, allow a 2mm gap between edges.



Cutting panels

Where panels have to be cut, a circular saw or grinder can be used.

The cutting process will create dust. Cutting of panels should be carried out in an approved location with adequate ventilation/ dust extraction. Suitable protective equipment should be used including safety glasses, dust masks and ear defenders, in addition to any usual site safety items.

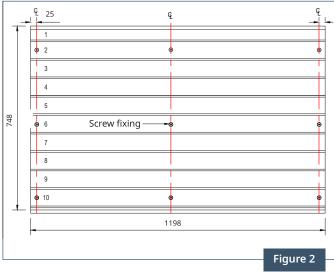
Panel fixings

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The fastening screws supplied as part of the system **MUST** be used – failure to use correct fasteners will invalidate the warranty

and may compromise the safety of a completed installation.

Fastening screws should be located on the top full course, the bottom full course and the middle course of each panel. Fastening screws should be approx. 25mm from the vertical edges of the panel and at the midpoint of each course (approx. 575-600mm centres). See Figure 2.



Additional fasteners may be required in some locations such as openings or building corners in areas of high exposure.

The top (full course) and the bottom (full course) must be fixed.

Where offcuts or trimmed panels are used, fixings are required at the top and the bottom courses plus a central course with vertical spacing of fixings, not to exceed 4 courses.

The prescribed fixing pattern equates to approximately 10 fasteners per m².

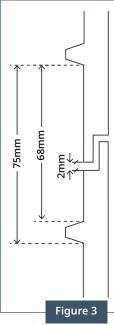
Holes for fasteners may be predrilled through the fibre cement panels using a 5mm masonry bit.

PLEASE NOTE

When stacking panels one above another, a weather joint is provided and should be incorporated where whole panels are used.

Ensure that spacing at the panel joint is accurate to maintain brick coursing. See Figure 3.

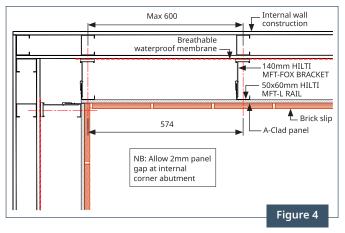
When installing heavier stone slips or thicker brick slips than normally used, additional fasteners should be installed every other course (15 per panel).



Panel installation at corners

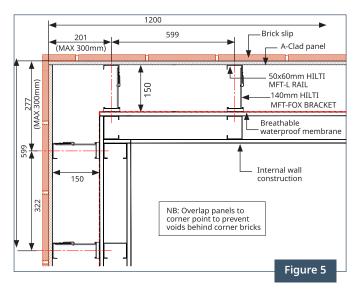
Internal corner

When installing panels at an internal corner, butt the edge of the panel up to the face of the panel on the adjoining wall. Ensure that brick courses align correctly from one panel to the other. See Figure 4.



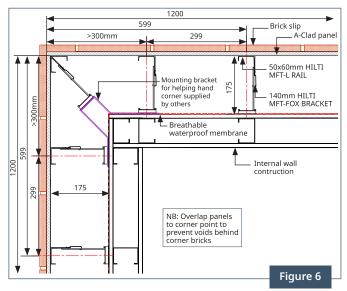
External corner

When installing panels at an external corner, panels should overlap slightly at the vertical joint to avoid creating a void behind corner bricks. The size of supporting rails at corners should be carefully selected to provide support as close to the edges of the panels as possible and should be located as close to the structural corner of the building as possible. A-Clad panels can then be installed. See Figure 5.



Where A-Clad panels oversail the last fixing rail at the edge of a structure by more than 300mm, a corner bracket and corner fixing rail should be installed. See Figure 6.

Great care should be taken to ensure that the line of the brick coursing is consistently continued around the corner of the building.



Panel installation at doors, windows and other obstructions

When cutting and fitting panels around windows, doors and other obstructions allow a clearance of 3mm - 5mm between the edge of the panel and the obstruction. If brick slip detailing requires brick reveals at windows and doors, part panels may be used to line reveals but should be stopped 3mm - 5mm from abutting with any window or door frame.

Columns and piers

When planning columns and piers, consideration should be given to size and especially thickness of brick slips and corners, and the thickness of the backer panel. The supporting structure should be constructed to allow the system to achieve the desired finished brick dimensions. Keep in mind that some brick types are prone to large variations in length which may affect designs and setting out of columns or piers.

Movement joints

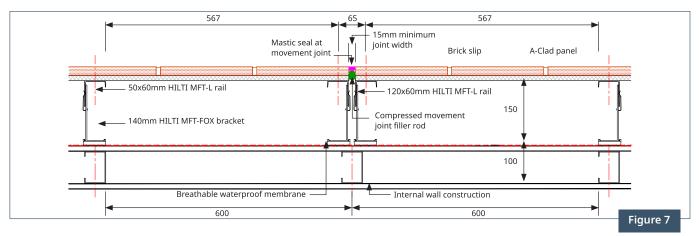
The system requires movement joints at:

- **1**. Abutments with other material/construction type.
- **2** . At horizontal intervals of not more than 6m and may be required 1.2 2.4m from external corner.
- **3.** At vertical intervals of not more than 6m, or in some cases at every floor level.

Movement joints comprise a complete break in both backer panels and brick slips, typically of 15mm. Joints should be filled with appropriate compressible filler and finished with mastic sealant. Movement joints should be planned and set out during installation of backer panels.

PLEASE NOTE

Panel abutments incorporating a movement joint, two L rails should be provided. See Figure 7.



Fire breaks

Fire breaks should be planned, designed and positioned by a qualified engineer or architect. Vertical breaks should fill the depth of the cavity behind the brick slip panel. Horizontal breaks should incorporate an intumescent element to allow free movement of air in the cavity, but which will close the cavity in the event of fire.

Any illustration or description of fire breaks in these instructions is indicative only.

Window and door openings

Flush

When applying brick slips around window and door openings (which incorporate frames or trims projecting beyond the face of the brick slips) ensure slips are installed with a consistent alignment at the termination, allowing a 3mm space for a seal/ joint to be applied between slips and window frame/trim. Where cut brick slips are used in this location, apply slips with the factory edge nearest to the window frame/trim.

Recessed

When installing cladding to window and door reveals, check that there is sufficient space in the construction to accommodate the thickness of the backer panel and the brick slips/corner bricks.

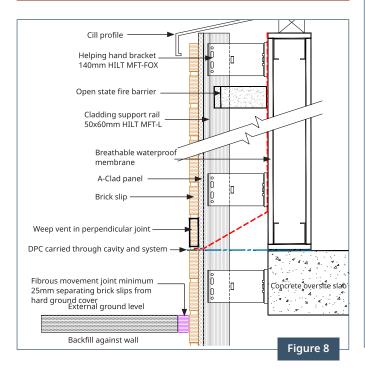
In the event that there is not sufficient space, brick slips can be applied directly to the substrate without the backer panel, provided the fabric of the reveal has been properly weathered and sealed. Where the substrate material is timber covered by a waterproof membrane, we recommend that mesh is attached to this before fixing brick slips with adhesive.

Cills

Window and door cills should be designed to extend beyond the face of the brick slips and incorporate a suitable drip edge to ensure water runoff does not track back to faces of brick slips below cill.

PLEASE NOTE

Where system and brick slips intersect with ground level, a movement joint should be installed to separate brick slips from hard ground cover. See Figure 8.

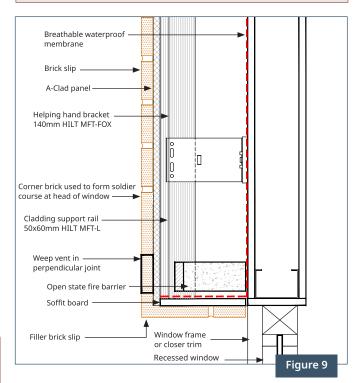


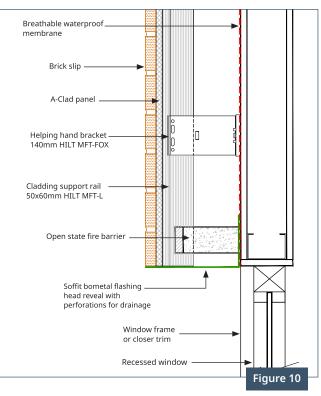
Window and door heads

Corner bricks may be used to create a soldier course with return into a head. Alternatively, a metal trim may be used to close the soffit and mask the edge of the system.

PLEASE NOTE

The inclusion of drainage to a cavity in each option. See Figures 9 and 10 for possible details for heads of opening.





Brick Application

Surface preparation

Ensure that excess dust on faces of panels is brushed off prior to applying adhesive to attach brick slips. Brick slips should also be clean and dust-free.

Adhesive preparation

Dry pack cement adhesive should be mixed with water in a clean bucket and mixed thoroughly to a workable paste. Consistency of mixed adhesive needs to allow ease of application without slumping or excessive dripping.

IMPORTANT

Only use cement adhesive from unopened bags.

Setting out

Adhesive should not be applied in temperatures below 5°C or above 25°C. If practicable, we recommend starting with a brick slip corner at an external corner of the building. If it is not possible to start at an external corner, start at a fixed reference point such as the edge of a door or window, movement joint or an internal corner.

Cement adhesive should be applied to the face of a panel at the corner, with application of adhesive limited to where corner bricks will be attached. A thin layer of adhesive should also be placed on the reverse face of the corner brick before it is pushed into the correct location.

Install corner bricks to the full height of the corner as access allows, usually alternating the orientation of the corner bricks.



While the adhesive is still fresh and soft, use a straight edge to square up the corner bricks and make any small adjustments as necessary to create an accurate looking brick corner.

To determine correct brick spacing, apply adhesive to two courses only and apply a thin layer of adhesive to reverse faces of brick slips before pushing slips into the panel. Continue two courses from the external corner (or agreed reference point) and the next natural break or termination. Brick joints should be 10mm however, ideally runs of brickwork should end with a full or half brick. Joints can be adjusted from 8mm to 15mm (depending on the brick type) to achieve good spacing of brick slips.

Adjust the two courses of slips quickly while adhesive is still fresh and soft. Ensure that the brick spacing reflects the desired bond pattern. In cases of stretcher/ half bond patterns, joints between bricks in one course should be central over the bricks in the course below.

Once the desired spacing is achieved, use a spirit level or laser level to align with edges of the setting out brick slips and mark vertical plumb lines on the face of the panel. These should be drawn every 5-6 bricks across the wall. Pairs of lines should be drawn to ensure correct alignment of alternating brick courses. Fix slips at plumb lines first, before filling in any remaining spaces.

Brick slip installation

After plumb lines have been drawn and brick slips have been installed to align with these, the remaining spaces can be filled. Where practical, apply adhesive and attach brick slips working from the top of the elevation downwards to avoid drips of adhesive staining slips. If not practical, provide cover for finished work before continuing above. Apply adhesive to the face of the panel using notched trowel to comb adhesive to consistent thickness and even coverage.



A thin coat of adhesive should be applied to the reverse of brick slips prior to application. Care should be taken to keep the faces of brick slips clean.

Brick slips should be placed on the panel and pushed into the adhesive to provide strong, consistent contact.



Once brick slips have been installed, use a straight edge to check the faces of brick slips are consistently flat and true. Adjust slip alignment and any joint size corrections quickly, before adhesive sets too much.

Brick mixing

PLEASE NOTE

Brick slips can vary in length and colour shade. Slips should be mixed from various boxes/pallets to ensure an even distribution of brick characteristics.

Soldier courses

Where a soldier course detail is required, the backer panel may be turned through 90 degrees to orient ribs vertically. However, in most instances, soldier courses occur as a design detail within areas of standard brickwork. In this instance, the panel must be modified to accommodate brick slips installed vertically, by removing ribs which obstruct the soldier course.





This can be easily achieved using a hammer and bolster.

The adhesive should be applied to the panel and brick slips as usual as slips are pushed into place.

Care should be taken to ensure that soldier courses are vertical, consistently spaced and co-ordinated with adjoining brick bond.

While adhesive is curing, a temporary support may be required to hold bricks in place. This may be a timber batten fixed to the face of the backer panel or a suitable straight-edged piece of panel or timber held in place with props.

Pointing

Mortar

Eurobrick Systems' Europoint pointing mortar is specially formulated and packaged in easy-to-use 25Kg bags.

Mixing mortar

Mortar is easily mixed in a clean 25 litre bucket using an electric paddle mixer (or adapted drill with paddle).

Mix thoroughly to a creamy paste ensuring mix is fully wetted and free from lumps. The mix should be wetter than standard laying mortar. We recommend about 4-4.5 litres of water per 25Kg bag.

At the correct consistency, the mortar mix should fall from the tip of the pointing bag in drops (not a consistent stream). If the mortar mix does not drip from the pointing bag tip at all, or pours out in a continuous stream, the mix needs to be adjusted.





Filling the pointing bag

Roll back the top edge of the pointing bag once to create as wide an opening as possible. With a scoop, fill the bag to $\frac{1}{2}$ to $\frac{2}{3}$ full. Try to avoid getting mortar around the top edge of the bag.

After filling the bag, twist the open end to close the opening and make the bag ready for use.

Pointing the joints

Pointing mortar should not be applied in temperatures below 4°C. Where very cold or wet conditions are anticipated, freshly completed mortar pointing work should be covered with hessian or suitable sheeting to prevent material being washed out by rain or damaged in freezing conditions.





To apply mortar

- Apply pressure to the pointing bag by twisting the end to maintain the shape of the bag and alternating this with squeezing the bag to force mortar through the tip into the brick joint.
- Joints should be filled almost to the point of overflow. Ensure joints are properly filled with no voids or air gaps.
- **3.** For consistent finish, pointing of whole elevations should be completed on the same day if possible.

Tooling the joints

Allow the applied mortar to set until firm. It should have a dull finish, be moist but not wet and somewhat gritty. The mortar joint should be tooled to a bucket handle finish with a standard pointing tool. Where thicker slips (20mm+) are being pointed, a recessed or weather-struck mortar joint finish can be achieved using appropriate tools.

Using the pointing tool begin striking or tooling the bed (horizontal) joints first and then the vertical joints. Ensure all mortar joints are tightly sealed to brick edges.





When tooling the joints you may discover holes or voids in the mortar; fill the holes with mortar droppings and retool.

CAUTION

Do not tool the joint too soon or too deep. Tooling too early will give a poor finish with "tear" marks and fissures in the mortar surface.

Brushing down

After the mortar joints have been tooled, the area must be brushed with a soft bristle brush.

Allow the area to dry until the excess mortar on the brick edges has dried. Brushing too soon will create permanent brush marks in the mortar.

Brushing down should be done at 45° angle to ensure the mortar is not pulled away from the brick edges.

Cleaning

After job completion, it may be necessary to clean the brick to remove mortar snots and stains or other contamination. The initial clean should not take place sooner than 48 hours after pointing using clean water and a hard bristle household brush. If further cleaning is required, use a proprietary brand masonry cleaner. Refer to the manufacturer's instructions and precautions before cleaning Eurobrick System's material. Always conduct a trial clean on a sample area before commencing more widespread cleaning.

IMPORTANT

Do not begin cleaning until mortar has properly cured. Allow a minimum of 48 hours.

Sealing

To ensure weather tightness all joints and abutments should be properly sealed as described throughout the installation guide.





Accessories

All necessary accessories are available from stock. Please see our Accessories Leaflet for more details. Please call +44 (0)117 971 7117 with any queries you may have.

Notes





Visit our showroom

You can see all of our cladding systems and finishes at our showroom which is open to visitors Monday-Friday (excluding bank holidays) 9am - 4.30pm. An appointment is not necessary but if you would prefer to make one you can do so by calling us on 0117 971 7117.

Please note

Our brick slips are kiln fired natural clay products and while every effort is made to ensure consistency, variations in size, colour shade and texture can occur. This should not be viewed as a fault in production and should be taken into account at the design stage of the project. Mortar colour variations can be expected due to the porosity of the brick, finishing techniques, mixing procedures and weather conditions (temperature, humidity and wind) at time of application.



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As part of its continuing product development and improvement policy, Eurobrick Systems Ltd reserve the right to change product specifications without prior notice.

Terms and conditions apply, please see our website for more details.

