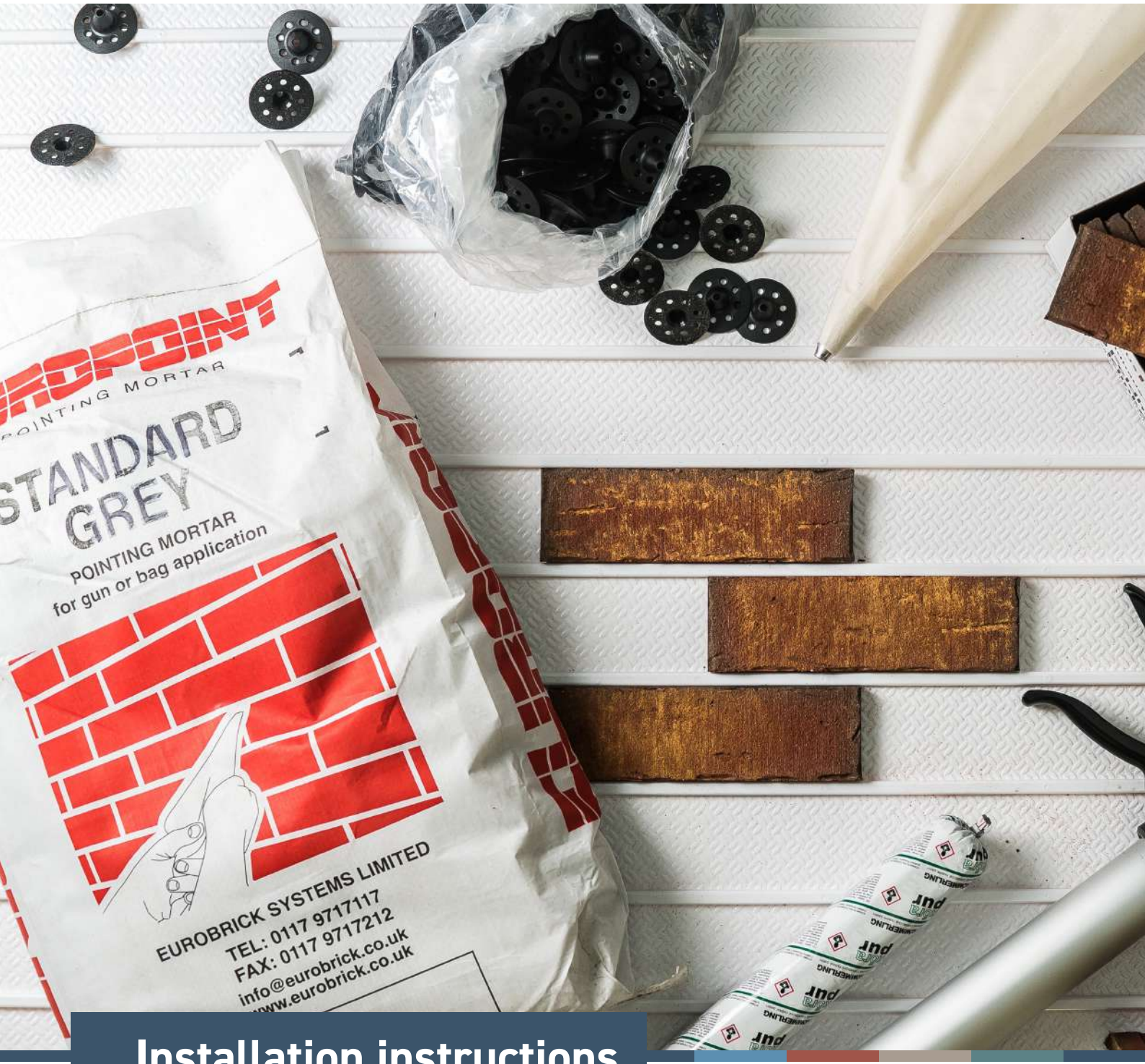
EUROBRICK
BRICK SLIP SYSTEMS

X-CLAD®



Installation instructions

EDITION 2

Before starting any Eurobrick Systems installation, please read the instructions carefully.

If any questions do arise, contact our Technical Support Department by calling 0117 971 7117 or emailing info@eurobrick.co.uk.

Product data

PANEL: Vacuum formed polystyrene skin bonded to 17/25/50mm thick, extruded polystyrene closed-cell foam insulation. Up to 100mm thick insulation may be provided. Each Eurobrick Systems panel measures, nominally, 1200mm x 2400mm and has horizontal brick tracks running the 1200mm width.

Bricks: All Eurobrick Systems brick slips are kiln fired clay. All Britannia Range bricks are nominally sized:

Slips	215mm x 65mm x 14–15mm
Corners	215mm x 65mm x 102mm x 65mm x 14–15mm

Classic Range brick slips are cut in thicknesses from 20–25mm thick.

Fasteners: Nylon plastic washer, 45mm diameter, used in conjunction with a wood or metal screw and specialist masonry fixings.

Adhesive: Specifically formulated one part polyurethane moisture curing, non-hardening which remains gunable even at temperatures as low as 2˚C, for normal applications. Alternatively, one part high grab MS polymer adhesive.

Mortar: Eurobrick Systems' Europoint pointing mortar is specially formulated to enhance ease of application, adhesion properties and flexibility. Just add clean water.

Installed System Weight: System weight approx 36–40kg/square metre, subject to specification.

Applications

Eurobrick Systems can be applied over any structurally sound flat surface:

- Sheathing on metal or timber framing – Figure 1
- Masonry – Figure 2
- Existing timber or metal cladding.

Application over asbestos, steel, aluminium, or vinyl cladding is not recommended unless building is framed to allow Eurobrick Systems panels to be mounted flush. Framing must be attached directly to the existing stud configuration.

PLEASE NOTE

Substrate surfaces must be dry, flat and stable.

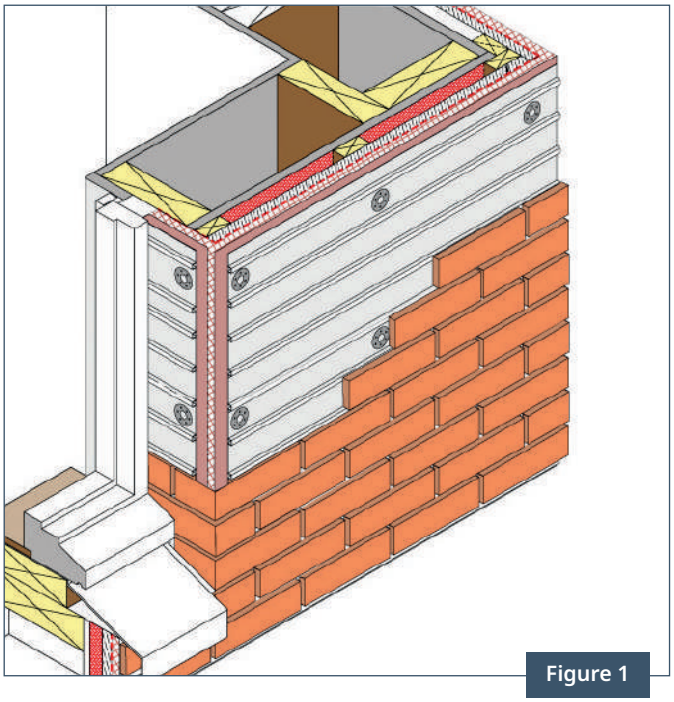


Figure 1

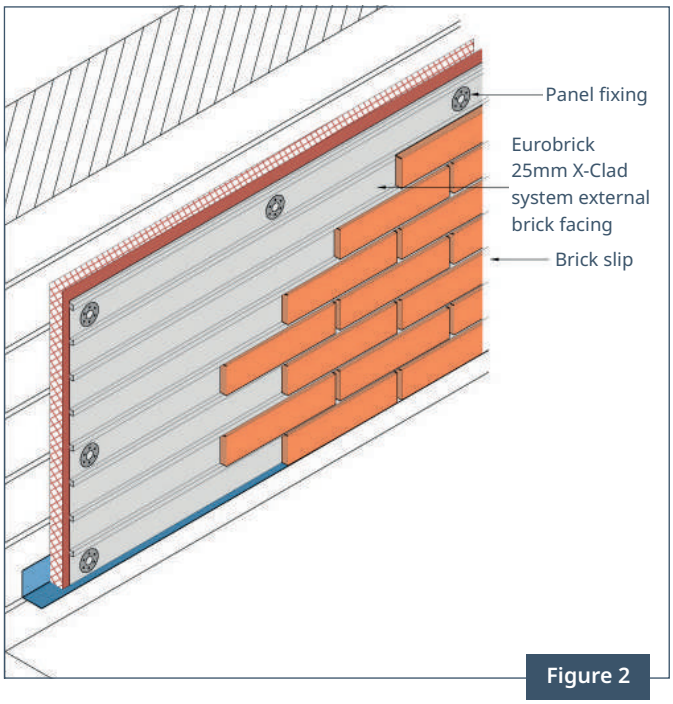


Figure 2



Limitations

1 Application Temperature Range Eurobrick Systems should not be applied to surfaces that will exceed 140˚F (60˚C).

2. Supporting Frame Member Spacing Where X-Clad panels are to be fixed to battens or studs (creating a cavity), these MUST be set out to satisfy system fixing requirements. There must be 4 vertical fixing members behind each 1.2m wide panel. See Figure 3.

3. Fire Rating Euro Classification
17mm thick X-Clad Euro Classification of Reaction to Fire EN 13501-1: Class B-s1, d0
50mm thick X-Clad with MS55 high grab adhesive achieved Class B-s1, d0
100mm thick X-Clad Euro Classification of Reaction to Fire EN 13501-1: 2018; Class E

Ordering

Eurobrick Systems is priced per square metre. Included in the per square metre price are; panel, fasteners, adhesive, brick straights, and mortar. Base trim and pistol corners are priced separately.

When ordering please state the nett area of the wall and give the total linear metres of the corner length, identifying dimensions of external corners, window reveals and heads. Please also advise base trim and expansion joint requirements.

Fasteners: To be installed 15 per square metre (minimum). Please specify substrate type (wood, metal or masonry) when ordering.

Mortar: Specially formulated to provide superior bonding strength. Packaged in 25kg bags; 1 bag covers approximately 2.5–5 square metres subject to brick thickness.

PLEASE NOTE

Eurobrick Systems kit components must be used and fixed in accordance with these installation instructions.

Tools

To ensure ease of installation we recommend you have the following tools:

- **120mm diameter powered disk cutter or wet saw**
- **Adhesive applicator gun***
- **Pointing bag with metal tip***
- **Joint pointing tool***
- **Powered screwdriver**
- **2m level**
- **Chalk line**
- **Utility knife**
- **Measuring tape**
- **Marker pen**

* See Eurobrick's accessories list

PLEASE NOTE

You will need a masonry saw with a diamond edged blade if any angular or horizontal cutting of brick is required. Suitable PPE protection must be worn.

Delivery

Materials are normally palletised. Delivery may be by tail lift or dedicated vehicle and may have self-offload equipment. 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 damage 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. X-Clad Panels should be protected from direct sunlight and wind damage. Brick slips should be kept clean and dry. Mortar and adhesive should be stored under cover in dry conditions.

Panel installation

Placement of first panel

The first panel may be positioned anywhere along the wall, we suggest beginning at an outside corner.

Align the panel in such a way as to obtain a full 65mm brick at the soffit or top edge of the wall or refer to another consistent datum such as window head height.

When you have established the proper height, place the 2m level in the brick track and level the panel.

Cutting panels

Where panels have to be cut, this must be done carefully, using a utility knife or saw.

Panel fastening

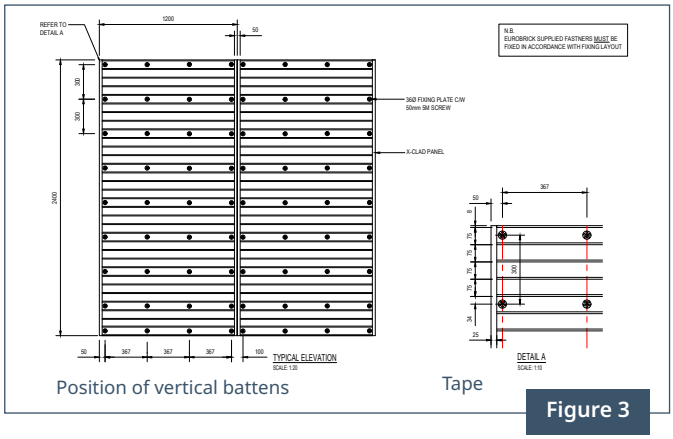
Fastening layout

Fasteners should be used at a rate of 15 per square metre or: 1 fastener every 4 courses vertically and 4 across the panel horizontally starting 50mm from each edge. See Figure 3. Fasteners should be fixed every other course at building corners and openings.

When installing stone slips or heavier brick slips, extra fasteners should be used every other course. Refer to stone fixing layout on website.

Panel jointing tape or adhesive to be used at all horizontal and vertical joints to prevent the ingress of moisture.

When stacking panels one above another for multi-storey application, be sure to overlap bottom polystyrene skin drip edge of top panel over highest tracking rib of lower panel and all joints must be sealed.



Position of vertical battens

Tape

Figure 3

Jointing tape

Jointing tape should be used to seal panel abutments to prevent water penetration. Adhesive or sealant can be used.



CAUTION

PPE SHOULD BE WORN DURING INSTALLATION

Fastening to wood or metal studs

1. Insert wood or metal screw into the plastic washer.

2. Drive the fastener in with the electric screw gun.

Masonry



1. Drill through backer panel into substrate a hole approximately 8mm diameter preferably using a hammer drill.



2. Drive the masonry fixing, using a hammer or mallet, full depth into the hole until the fixing faceplate is flush with the backer panel surface.



3. If centre pin fixing is used, drive centre pin fully home to a level surface with the fixing faceplate.

IMPORTANT

To achieve proper attachment the panel fasteners must penetrate the various substrates as shown in Figure 4. The substrate must be flat and stable and strong enough to provide firm anchorage for fixings. Where fixing to thinner sheathings, it is recommended that fixings penetrate the sheathing and the supporting member. See Figure 4.

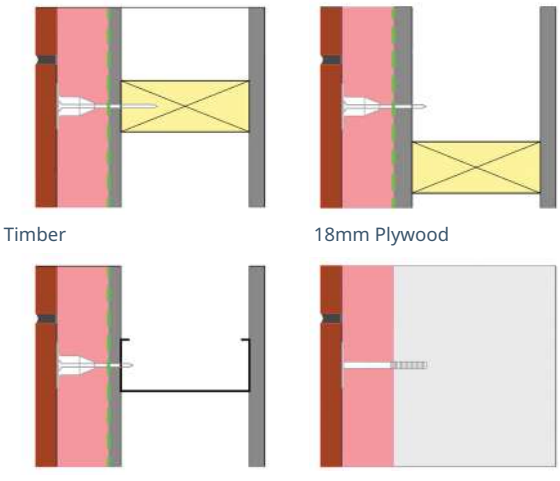


Figure 4

For Fixings Layout drawing, please visit eurobrick.co.uk/downloads or call +44 (0) 117 971 7117

Base trim

Before fastening the bottom 610mm of the panel, we recommend the installation of our base trim. The base trim will protect the bottom edge of the panel from damage caused by rodents or insect infestation. See Figure 5.

Aluminium base trim can be supplied.

Installation

1. Trim the lowest rib from the bottom edge of the panel.
2. Insert the base trim.
3. Use a single brick as a guide to set the trim at the proper height.
4. Fasten the base trim and panel-together to the substrate following the instructions for panel fastening.

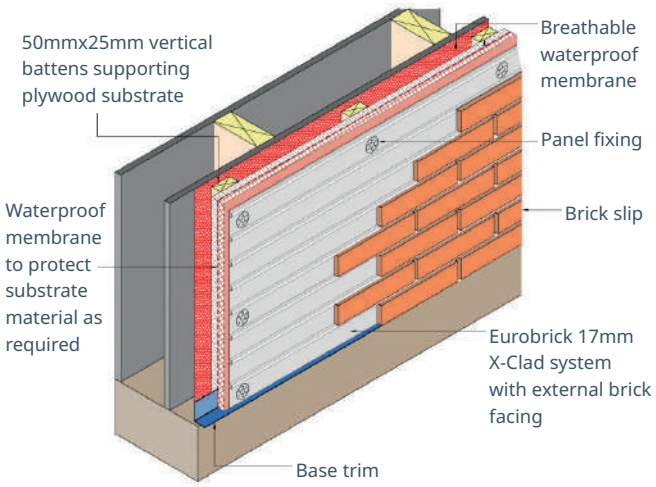


Figure 5

Panel installation at corners

Inside corner

When installing the panel at an inside corner, butt the edge of the panel up to the face of the panel on the opposite wall and seal with adhesive. Brick slips should be cut into corners on alternate courses so as to replicate the alternate course internal corner bonding of full brickwork. See Figure 6.

If required, mastic sealant can be applied to close corner joint.

Outside corner

When installing panels at an outside corner there are two important things to remember.

1. Panels must overlap and be sealed with tape or adhesive to prevent the creation of a void in the area behind brick. See Figure 7.
2. Fasteners should be installed every other course at external corners.
3. Align the brick tracks of the two corner panels, at the corner very carefully to ensure continuity of the working level around the building.

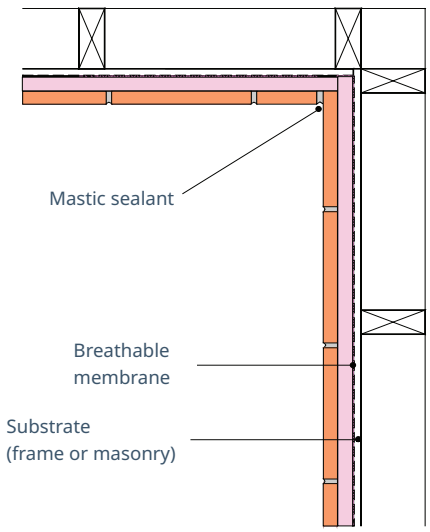


Figure 6

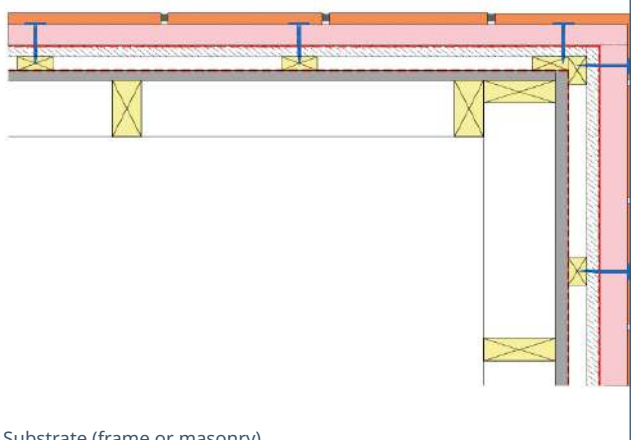


Figure 7

Panel installation at doors, windows and other obstructions

When cutting panels to fit around windows, doors and other obstructions, allow a clearance of approximately 3mm between the edge of the panel and the obstruction. See Figure 8.

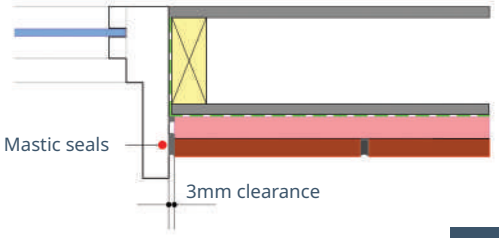


Figure 8

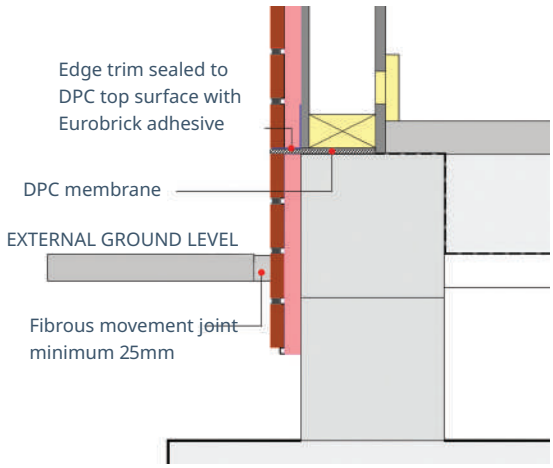


Figure 9

Panel installation at termination

Below ground

When pavement or road surfaces are to be installed next to Eurobrick Systems, care must be taken to prevent damage caused by movement through settling, expansion and freeze/thaw cycles. A fibrous control joint (minimum 25mm) must be placed between the building and the pavement, road or natural ground to allow independent movement. See Figure 9.

Please note, where cavity included, provide weepholes through the system at 2.4m centres. See Figure 10.

Above ground

A minimum of 40mm between Eurobrick Systems termination and pavement or road is required. This is to allow for expansion/heave and prevents damage to the bottom of the cladding system. In colder climates or expansive soils, allow greater clearance as required.

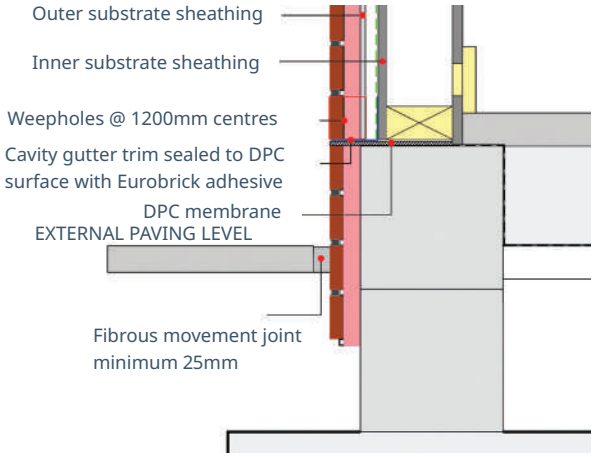


Figure 10

Panel expansion joint Installation

To prevent damage resulting from the natural expansion and movement of brick, expansion joints must be constructed. The following is a general guide for expansion joint location. See expansion joint Figure 11.

1. In large walls, every 6m horizontally and vertically. The initial movement joint should be located 1200mm to 2400m from the building corners.
2. Where walls of different heights intersect.
3. Between new and existing construction.
4. Where dissimilar exterior wall materials meet.
5. Between every other floor.

PLEASE NOTE

Eurobrick cladding movement joints may not necessarily align with substrate expansion joints.

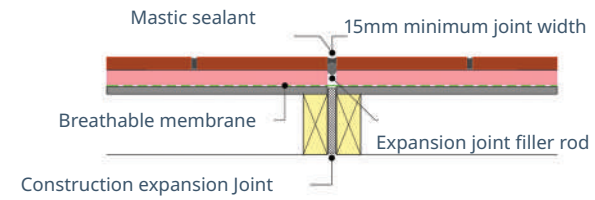


Figure 11

Fire breaks

Some installations will require design and construction of fire break details to cavities and/or the system. Please note all fire breaks/defence design remains responsibility of qualified consultant or architect.

CAUTION

Do not leave unbricked panels exposed to direct sunlight for more than 24 hours. Excessive exposure may have a detrimental effect on panel composition, from UV light and climate conditions.

Brick application

Surface preparation

Make certain that panel and brick surfaces are dust free and dry. Failure to do so will result in poor adhesion to the brick panel.

Corner installation

Begin the brick application at the most visible outside corner.

1. Apply enough adhesive to bond only the corner pieces to the panel. Push a single 90 degree corner into the top track. Then, moving down the edge of the building, push the 90 degree corners into the brick tracks alternating the 215mm leg with the 102mm leg. Use a straight edge to ensure all corners are in line.



2. Adhesive should be applied in a 9mm bead about 3/4 of the way up each course. The adhesive should cover the fastener heads.



Wall layout

The next step in brick application is to determine brick spacing or wall layout.

The best way to layout a wall is to run two courses of brick from one end of the wall to the other. When spacing brick please remember the “Joint Size Rule”.



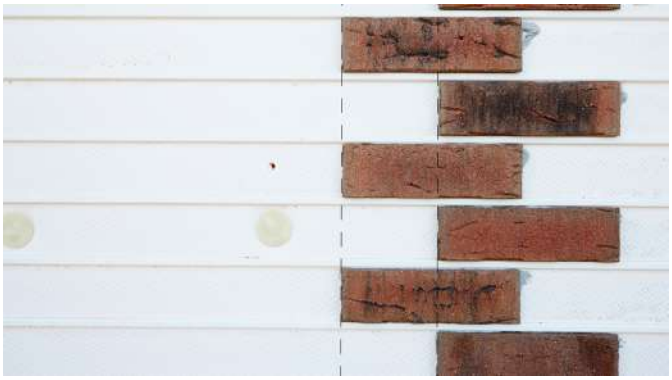
Joint Size Rule: Eurobrick Systems has pre-determined the bed joint with our vacuum formed rib between the brick tracks. The standard size of the vertical joint should be 10mm, however, when it becomes necessary to adjust the joint size, the smallest acceptable is 7mm; the largest is 15mm.

Another factor in brick spacing is whether or not there are obstructions in the wall.

Without obstructions

If the wall has no obstructions lay one course of brick working to the next inside or outside corner or expansion joint. Space the brick to allow a full brick at the corner; remember the joint size rule.

When you have achieved the desired spacing, section the wall with plumb lines. To achieve proper brick spacing throughout the wall, draw plumb lines even with a brick edge every 5 or 6 bricks. The plumb line serves as a reference for every other course. For courses with no plumb line, be sure to centre the brick on the vertical joint of the course above and below.



With obstructions – doors, windows and other obstructions

Adjust the brick spacing to prevent the need for a mortar joint or very small piece of brick at the edge of the window, door or obstruction. Try to avoid using pieces smaller than a half brick adjacent to doors and windows.

Remember the joint size rule. When the desired spacing has been achieved, section the wall as described previously.

Expansion joint

Space brick to allow a full brick on both sides of the expansion joint. See Figure 12. Apply appropriate sealant to the expansion joint after brick application.

CAUTION

Do not apply the adhesive or mortar to the expansion joint area.

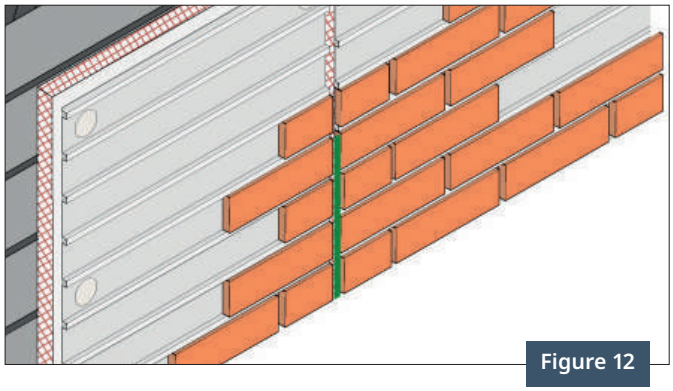


Figure 12

Brick layout exception

There are times when it is not possible to run a course of brick to determine proper layout and spacing. In these cases determine the layout mathematically.

The length of a brick is 215mm and the standard mortar joint is 10mm; use 225mm as the standard increment.

Brick slips installation

Standard

After plumb lines have been drawn, apply a 9mm bead of adhesive 3/4 of the way up the course. Continue adhesive application for approximately 20 courses.

After applying adhesive, push bricks into brick tracks. Repeat the procedure for each successive section.

Soldier course

Installing brick slips in vertical soldier courses uses 3 'brick tracks' on the backer panel. To prepare the panel:

1. Score through the skin either side of the 2 ribs 'obstructing' the soldier course and peel these ribs off the panel.
2. Apply some adhesive to the 'scar' created and smooth off, sealing the cut edges of the skin.
3. Apply adhesive to the upper and lower edges of the soldier course, or to the back of the slips if preferred.
4. Attach slips in soldier formation taking care to achieve appropriate bond.
5. A temporary piece of batten may be required to hold bricks in place while adhesive cures. This can be screw fixed to substrate through the brick joints.

Window and door openings

Flush

When applying brick around window or door openings which have linings, trims or frame with front faces that are slightly set back from the front face of the brick slips, place the factory formed edge of the brick slip (not a cut edge) against the lining, trim or frame to provide the best finish. See Figure 13.

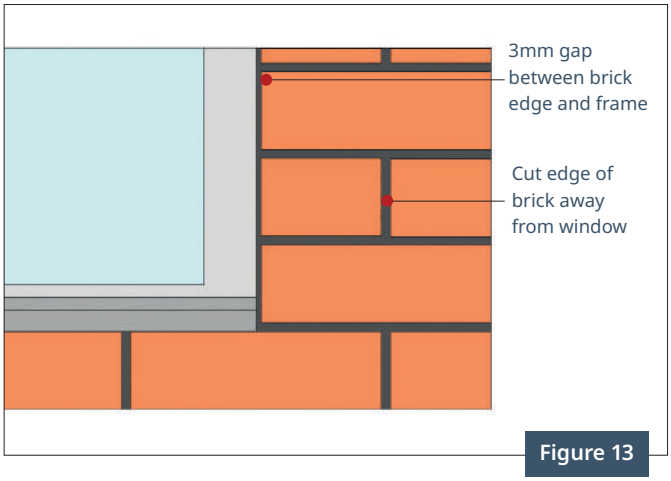


Figure 13



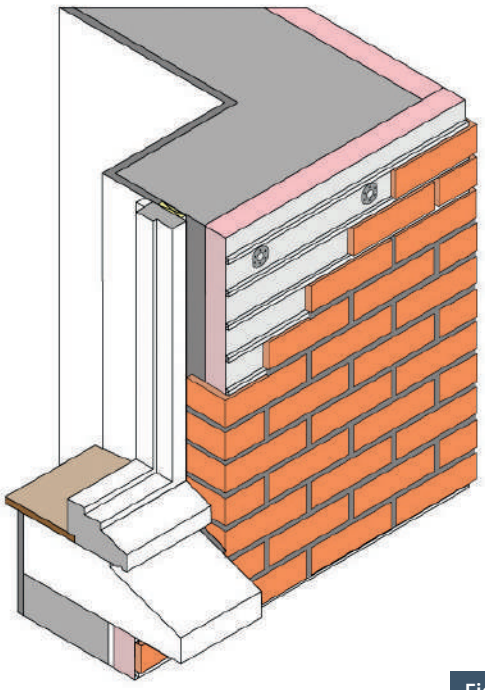


Figure 14

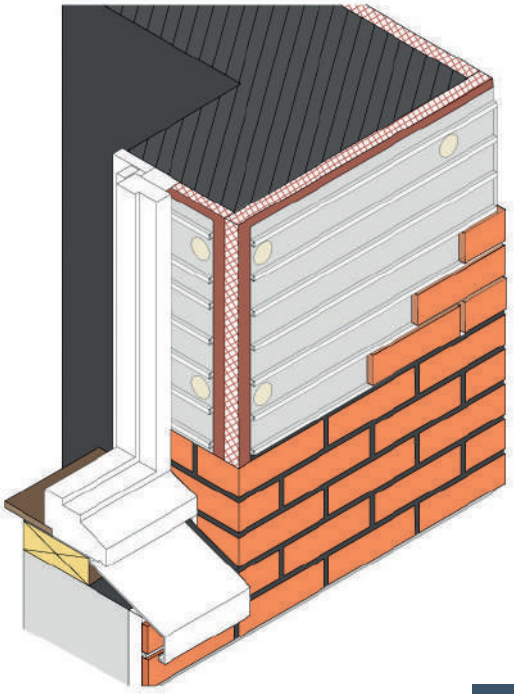


Figure 15

Recessed

When working around recessed window and door openings, install the backer panel allowing a 3mm wide expansion gap back from the edge or external corner to the opening reveal. In many cases, the backer panel will not be installed over the reveal to the opening because the thickness of the brick slip and backer panel combined may be too wide for the width of the window or door frame creating an obstruction.

The detail for installing brick slips in the reveal will vary depending on the depth of the reveal and the thickness of the wall construction.

Masonry: Brick may be attached directly to the masonry surface. To install brick, apply a bead of adhesive under the top edge of the brick track on the panel and onto the surface of the reveal. Push corner brick into the brick track. See Figure 14.

Wood: To install cladding over wood, the wood surface must be covered with a waterproof membrane. Apply the brick slips as outlined under MASONRY. Where panel cannot be used on the reveals to an opening, the wood surface should be covered with a waterproof membrane and a fine gauge wire mesh or expanded metal lath nailed in place as a key for the brick slip adhesive and mortar.

CAUTION

Do not attach brick directly to any wood surface.

PLEASE NOTE

If the length of the return exceeds 102mm, a combination of corners and straight slips must be used. Where Eurobrick Systems panels are not installed over the window/door reveal area and the brick straights can not be pushed into the brick tracks, we recommend that the slips are held in place using nails tapped into the wall surface at the bottom edge of the brick. Remove nails when you are certain that the brick slips are firmly attached. See Figure 15.

Cills

Be sure that window cills extend beyond the brick edge. See Figure 16.

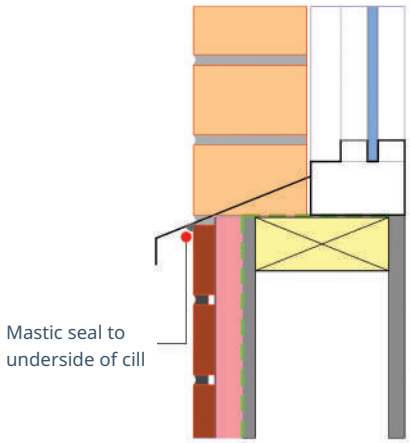


Figure 16

Pointing

Europoint instructions are available to download eurobrick.co.uk/brochures or call for a copy 0117 971 7117. Europoint video also available to view on our YouTube channel.

Mortar

Eurobrick Systems Europoint mortar is specially formulated and packaged in easy to use 25kg bags.

Mixing mortar

Mortar is easily mixed in a 25 litre bucket, using an electric drill with a “paddle” mixer attachment. The consistency should be slightly wetter than standard mortar. We recommend about 4–4.5 litres of water per 25kg bag, water requirement for lime based mortar is different. A final test of proper consistency is the flow of the mortar from the grout bag; it should flow slowly from the tip.

Filling the pointing bag

Roll back the top edge of the pointing bag once to create as large an opening as possible. With a scoop, fill the bag 2/3 full being careful not to get any mortar on the top edge of the bag. After filling the bag hold it just above the fill point with one hand and twist with the other until the opening is closed tightly.

CAUTION

Mortar should be mixed outside or in well ventilated areas. Appropriate PPE should be used.

Point the joints

Pointing mortar should not be applied in temperatures below 4˚C.

To apply mortar

1. Squeeze the bag with a slight twisting motion at the end to keep the bag firm at the tip.
2. Fill the horizontal or bed joints first.
3. Joints should be filled almost to the point of overflow. Ensure joints are properly filled with no voids or gaps.
4. Apply mortar to the vertical joints when the bag is about 1/4 full. It is easier to do all of the stopping and starting required for the short joints when the bag is not full.
5. For consistent finish, pointing of whole elevations should be completed on the same day, if possible.

IMPORTANT

Only point as large an area as can be tooled before the mortar becomes too stiff.



Applying mortar



Tooling

Tooling the joints

Allow mortar to set until firm. It should have a dull finish, be moist but not wet and somewhat gritty. The mortar joint shall be tooled to a “bucket handle finish” as can easily be achieved with a standard joint slicker tool.

With a joint tool or 18mm piece of pipe begin striking or tooling the bed joints first, and then the vertical joints. All mortar joints must be tightly sealed to the brick edge.

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

CAUTION

Do not tool the joint too soon or too deep.
Tooling early will create a creamy surface on the mortar.

Brushing

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

Allow the area to dry for 10–15 minutes or until the excess mortar on the brick edges has dried. Brushing too soon will create permanent brush marks in the mortar.

Brushing should be done at a 45 degree angle to ensure that the mortar is not pulled away from the brick edges.



CAUTION

Newly pointed brickwork should be protected from frost or inclement weather with hessian or similar covering.

Important cleaning

After job completion, it may be necessary to clean the brick. 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 manufacturers mixing instructions and precautionary steps before cleaning Eurobrick Systems.

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 illustrated in Figure 17 and throughout the installation guide.

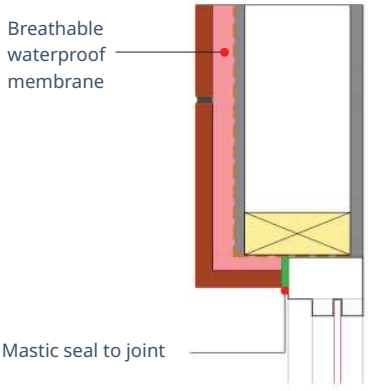


Figure 17



Accessories

All necessary accessories are available from stock.
Please see our Accessories Leaflet for more details.

Remember, any questions will be gladly answered by our Technical Support Department



Visit our showroom

You can see all of our cladding systems and finishes at our showroom which is open to visitors Monday-Friday, 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.

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.

ISO 9001 Certificate No. GB2003636 ISO 14001 Certificate No. EM2000881

EUROBRICK®

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

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