
briklok
brick facades reimagined

Briklok by RJ Facades

The new briklok™ system from RJ Facades, introduces a strength of backing support wall, new to ventilated facades.

The new patent pending briklok™ system is a unique interlocking design that creates a solid, flat aluminium inner cavity.

Briklok design creates the opportunity to offer bespoke off-site solutions in the construction of the typical details, that are complicated and time consuming to build in site conditions.

Details, such as columns are fabricated into sections for simple installation on site. All elements are designed to meet the building and site requirements.

Briklok at a glance

- Simple cavity barrier installation that removes the complicated notching details difficult to QA in real site conditions
- System strength from interlocking profile design creates a wall of aluminium to support the brick façade.
- Made in UK using 6063 T6 Anodised aluminium with a 44% recycled post consumer content.
- Accurate time saving on-site installation using gauging tools allow for site tolerances +/-1mm tooling
- Off-site construction increasing accuracy and reducing installation time with production of column details
- Natural bricks system cut from a natural brick with no bonded corners

Contents

Briklok partners to Ibstock

Briklok partners to Ibstock Futures for both Ibstock bricks and 3rd party bricks to be fabricated into Briklok slips.

Partnering with Ibstock provides architects, developers, and contractors access to the UK's first fully automated brick slip manufacturing centre. The facility modernises the production of slips, with the production capacity of 50 million brick slips per year.

Combined with briklok system, brick slips enable light weight construction, with the timeless aesthetic appeal of brick even in high-rise applications and offer architects and developers almost limitless options when it comes to design and finish.

Briklok works with either an Ibstock brick, or 3rd party brick selected by the client or architect. RJ Facades will confirm the project brick complies to the specification of the Briklok system.

The brick slips used in the Briklok system enable light weight construction are well suited for rainscreen façade applications. Manufactured to UK tolerances the brick offers A1 fire rated, & F2 Frost rated.

With hundreds of brick designs, fabricating the brick details from a full brick removes the requirement of bonded corners, ensuring all bricks are mechanically fixed.

Ibstock manufacturer declaration of performance to BS EN 771-1:2011+A12015. The range has a large range of colours and textures, with standard sizes, with bespoke sizes and bespoke profiles available.

Briklok brick facade system

A closed-back aluminium brickslip system, made to carry natural clay brick slips.

Featuring an interlocking profile design, which allows for fast and accurate on-site installation. Briklok is designed to fully support the internal side of the brick, providing additional strength to the brick façade, providing containment for the mortar in both the horizontal and vertical position. This removes the need for vertical perp joint infill pieces, so the brick can be positioned similar to standard bricklaying techniques which allow for the natural tolerances in brick dimensions.

Briklok built in installation tolerance for brick course height

Designed to work to 75mm brick courses consisting of a 65mm brick with a 10mm mortar joint. Due to the tolerances on the building, the system allows each briklok row to be increased or decreased by 1mm to enable the installer to align the brick façade to the other key features on the building. For example, by increasing the last 5 rows by 1mm, the brick façade increases by 5mm. This follows the methodology and techniques of traditional brick installation.

Standard & XL briklok version

The system works with various types of natural clay bricks.

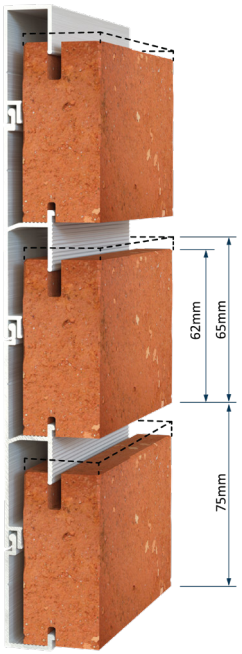
Natural clay bricks differ in dimensions due to the variations in clay, and how it reacts during manufacturing. Briklok 'standard' is designed for a brick with dimensions from 62mm to 65mm which covered most UK manufactured bricks, similar to the Ibstock FC range. Briklok 'XL' is designed for a brick with dimensions from 64mm to 67mm to suit engineering bricks, and European clay bricks where less shrinkage occurs during manufacture.

Working with a larger range of natural clay bricks

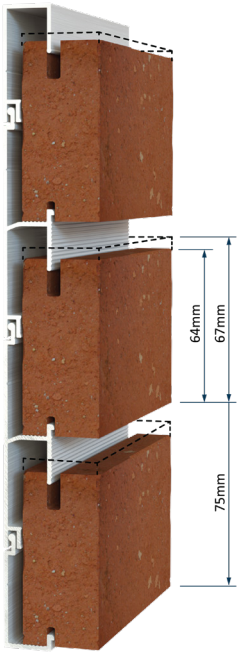
Briklok XL and Briklok S enables heritage natural bricks of 62 to 64mm and 64 to 67mm height to be used in a ventilated façade system while maintaining the 75mm course height.

If the length of the brick is under, or over typical tolerances the vertical perp joint can be increased or decreased to allow for the variation.

The size of profile required will be determined pre-project, based on a sample of bricks.



Briklok S (standard) for bricks 62 to 65mm in height

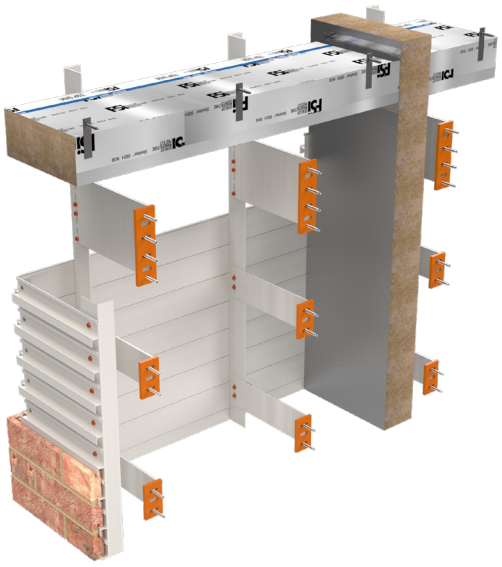


Briklok XL (large) for bricks 64 to 67mm in height

Designed for simple cavity barrier installation

The briklok interlocking rail system provides a continuous aluminium backing surface facing into the rainscreen cavity. This gives a solid and continuous surface to compress the vertical cavity barrier against.

Briklok system has been tested to TGD-019 in conjunction with cavity barrier system FSi Horizontal Ventilated Cavity Barriers rated E90 I30, achieved a combined rating of E90 I30, unaffecting the performance of the barrier.

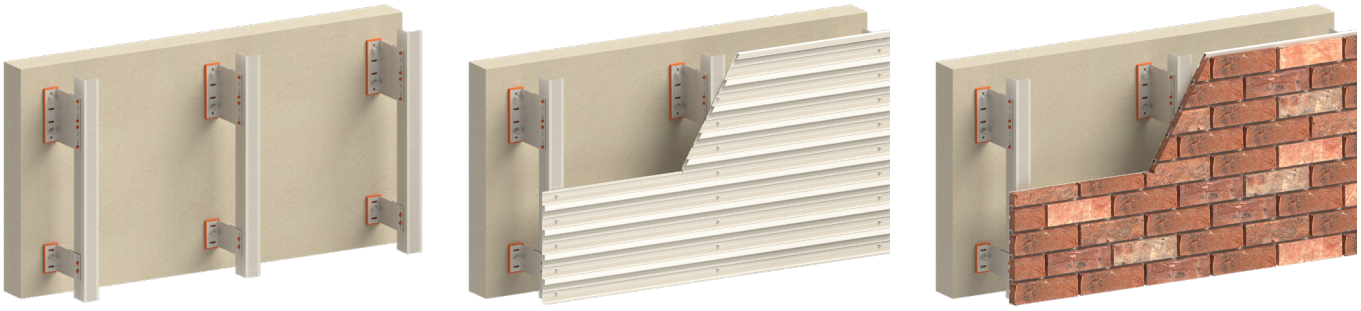


Traditional brick detailing made simple using modern techniques

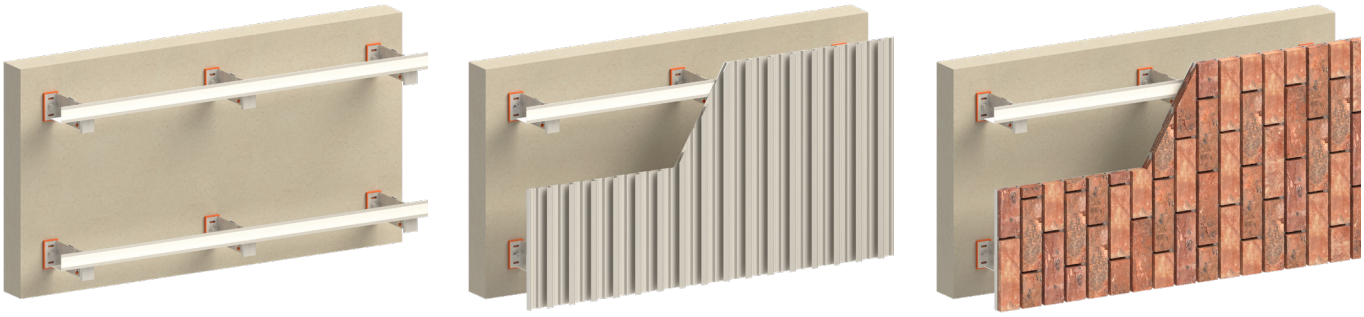
Briklok provides the ability to create the look and aesthetic of a brick building, using a traditionally produced clay brick, using modern traditional facade building techniques.

All details are have been tested to CWCT sequence B, conforming to the latest NHBC approved test standard.

Running Bond

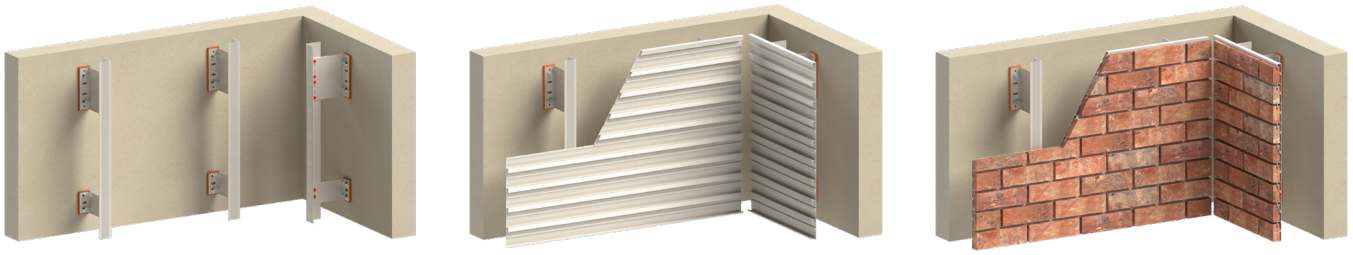


Vertical Running Bond

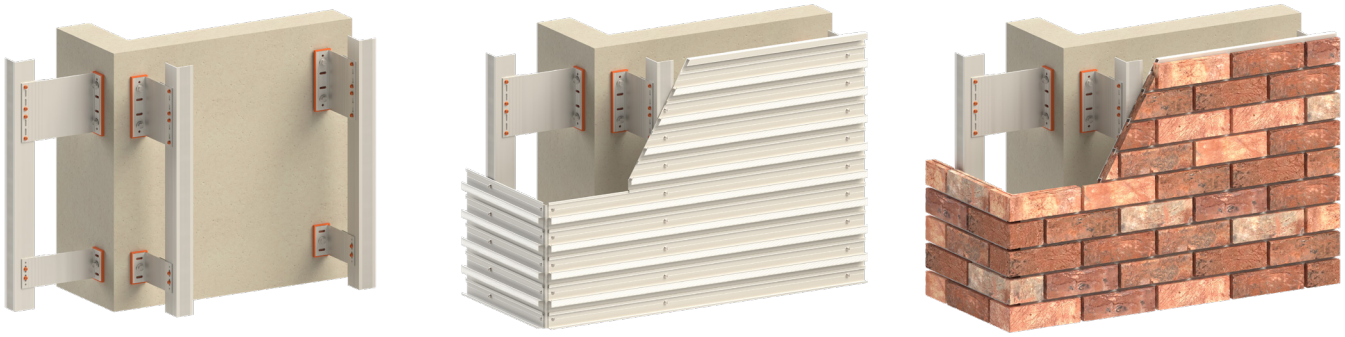


Vertical Stack Bond

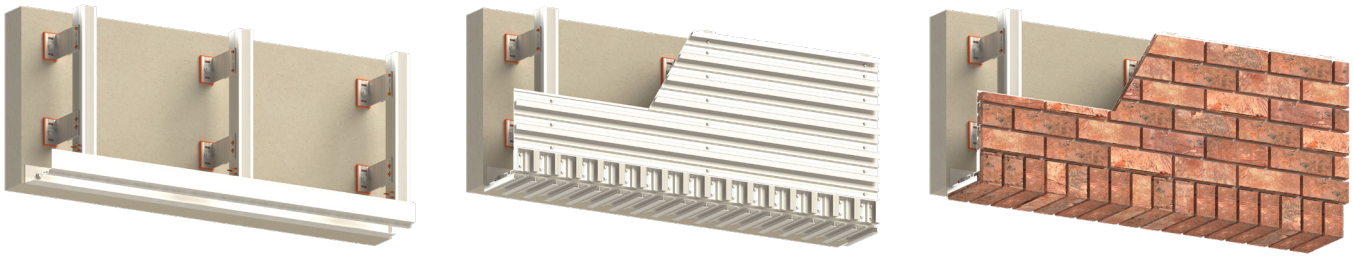
Internal Corner



External Corner



Window header & Soffit return



UK Certification & Accreditation

NHBC Approved, UL UKAS Accreditation, CWCT Sequence B Testing, A1 Warrington Fire Classification report to EN 13501-1: 2018, Fire Testing – TGD 019

UL UKAS Accreditation, CWCT Sequence B Testing

Briklok systems provide full UKAS accreditation certificate. To achieve accreditation the briklok system has been tested by UL to the new CWCT Sequence B.

Test includes; air leakage (infiltration and exfiltration), water tightness (static and dynamic), Impact testing (retention of performance & safety to persons), and wind resistance (serviceability and safety).

UKAS accredited, NHBC accepted UL certification, formerly Winmark by Wintech. The approval covers all elements of the facade system; material specification, facade design to relevant Eurocode, and traceability through the RJ manufacturing.

A1 Warrington Reaction to Fire Classification report.

This classification report defines the classification assigned to “Briklok”, in line with the procedures given in EN 13501-1: 2018. Approval includes; EVT II aluminium and stainless brackets, Briklok profiles, Ibstock brick, Sika Parex Historic mortar KL, stainless system fixings.

Fire Testing – TGD 019

Briklok system has been tested to TGD-019 in conjunction with cavity barrier system FSi Silverliner OSCB1 Horizontal Ventilated Cavity Barriers rated E90 I30. Cavity barrier tested: integrity 90 minutes, insulation 30 minutes

warringtonfire Proud to be part of element

CENTRE FOR WINDOW AND CLADDING TECHNOLOGY

UKAS PRODUCT CERTIFICATION 4705

UL

Off-site column construction

The unique design of briklok, coupled with the structural ridged nature of aluminium, enables the profiles to be fabricated into pre-made columns.

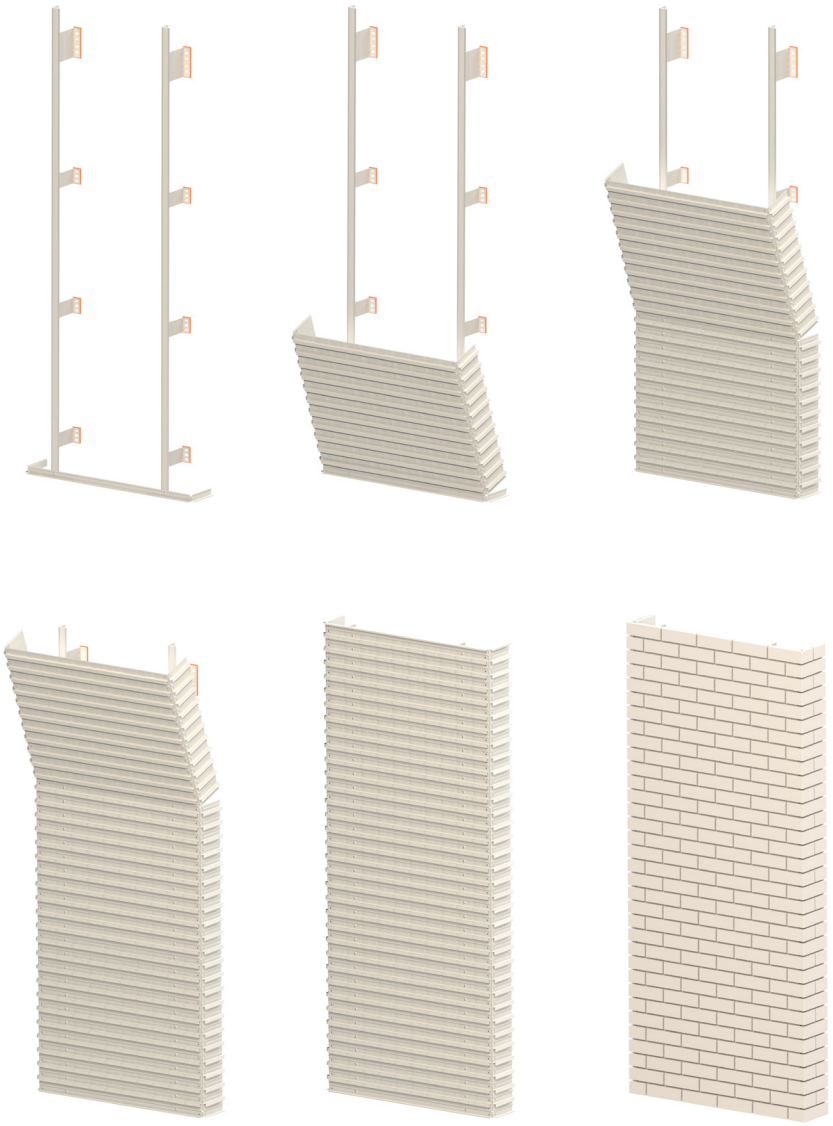
Reduce wastage, while producing a flawless final product.

The ability to pre-form corners and returns off-site, can significantly reduce site installation time and improve difficult site detailing. The column pieces can be produced in various widths, and pre-assembled up to 16 rows at a time.

The returns are cut, assembled off-site, and palletised to be ready to install. Automated cutting, machining and assembling off-site produces clean and accurate briklok parts, at a precision that would be difficult to achieve in site conditions.

These parts will be fabricated for the project, taking into account the requirements for profile, and sizes of returns.

In some instances it can be more efficient to build details on-site. Both methods have been CWCT, Sequence B Tested.



RJ Façade Systems project, Miles Street London scheme comprising of 37 floors of student accommodation using RJ Facades substructure systems to support various façade materials.

Engineering, safety, & design

The core values for RJ facade systems are engineering, safety, & design. Briklok, designed by RJ, provides architects, engineer practices, developers and contractors with a tried, tested and accredited substructure system used on UK landmark projects over the past one and a half decades.

Engineering, coupled with product development driven by the demands of the contractor continues to be our core value. All systems are manufactured in the UK to the UL Approval (formerly Winmark by Wintech) UKAS accreditation approved by the NHBC for facade systems.

The process of facade design starts with the project calculation. RJ support in the collation of the relevant information required to design a facade substructure. All final calculations produced by RJ in-house structural engineering by engineers are covered with a £5m PI insurance.

Low carbon aluminium made in UK

Product design, with the environment in mind. High performing facade substructure made from 44% recycled, post-consumer aluminium

Pushing the boundaries for high-quality recycled, Hydro Recycled Low-Carbon Aluminium 4.0 program is Hydro's brand of recycled aluminium made with 44% recycled, post-consumer aluminium scrap. Using recycled aluminium, drastically reduces energy use in the production phase whilst still offering high-quality aluminium.

Using recycled aluminium in the production process means that only 5% of the energy is used compared to primary Aluminium This energy usually contributes to CO2 levels in the atmosphere, so by reducing the amount of energy required to create the material, we're proactively doing our bit to reduce climate change.

RJ Facades aluminium systems, designed, engineered & manufactured in UK

RJ Facades single sources all our aluminium extrusions from Hydro UK.

RJ High performing facade substructure products exclusively made in the UK from Hydro low carbon 4.0 aluminium in 6060T6 grade. from where we fabricate and warehouse locally for delivery to your project.

RJ's goal is to provide the construction industry with the lowest carbon aluminium systems available in the UK.

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by RJ Facades

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