Briklok

From FGF

briklok
by RJ Facades

Contents

The FGF Difference: Your Trusted Partner

- **Over 70 Years of Excellence:** Founded in 1954, FGF has built a reputation for quality, expertise, and strong partnerships across the construction and engineering industries.
- **Comprehensive Solutions:** We provide a full range of external envelope solutions, including:
  - Façade systems
  - Cladding
  - Building boards
  - Insulation
  - Fire protection products
  - Brick slip systems
- **Value-Added Services:** Beyond materials, we offer expert fabrication, re-manufacturing, and CNC machining, all backed by a rigorous 5-stage quality control process.
- **Commitment to the Future:** Dedicated to continuous innovation, investment in cutting-edge equipment, and a focus on sustainability.

Briklok: The Modern Brick Slip System from FGF

- **What it is:** A mechanically fixed brick façade system engineered to replicate traditional brickwork with the speed, precision, and performance of a modern solution.
- **Built for Performance:**
  - **Testing & Technical Support:** NHBC Approved, UL UKAS Accreditation, CWCT Sequence B Testing, and comprehensive FIRE Testing (TGD 0119) ensure reliability and compliance.
  - **Ease & Speed of Install:** Fast, consistent installation significantly reduces on-site build time, thanks to its mechanically fixed slips (not adhesive bonded).
- **Key Advantages Over Other Systems:**
  - **Simple Cavity Barrier Integration:** Easily incorporates fire-stopping cavity barriers.
  - **Superior System Strength:** Features a low-carbon aluminium substructure and ETA-approved fixings for robust, long-term performance.
  - **Accurate Time Savings:** Designed for efficient, predictable project timelines.
  - **Off-site Construction Ready:** Flexible design supports modular and off-site building approaches.
  - **Natural Bricks:** Utilises authentic brick slips (e.g., Ibstock) for the classic brick aesthetic.
- **Ideal For:** High-rise residential, commercial, education, and mixed-use developments seeking a durable, aesthetically pleasing brick finish.

Briklok System

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Briklok brickslip system

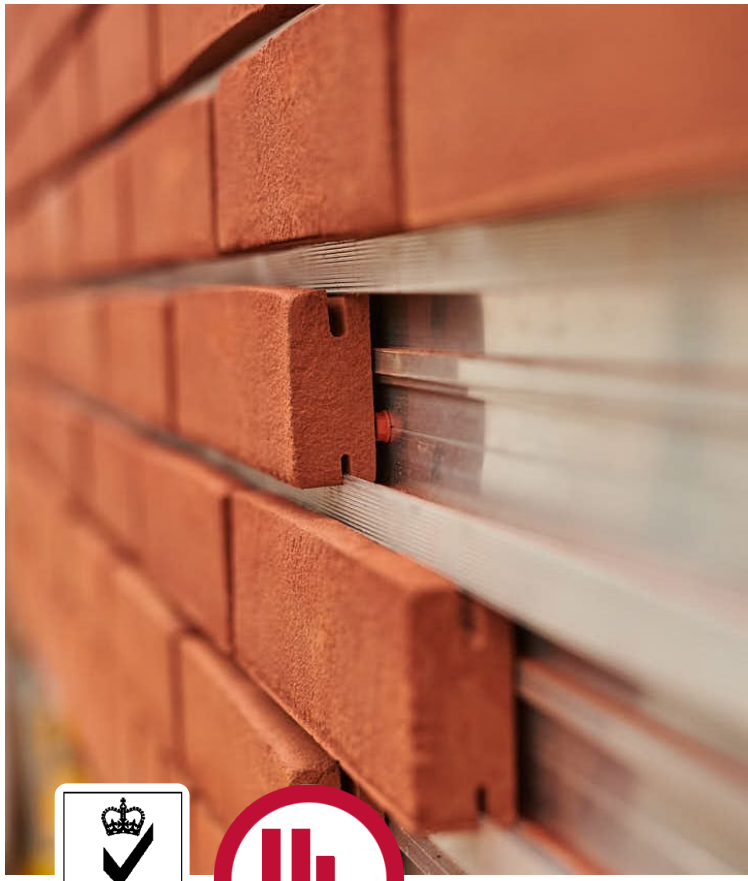
A **closed-back aluminium** brickslip system, made to carry natural brick slips.

Featuring an **interlocking profile** design, which allows for **fast and accurate** on-site installation, or **rigid and simplified** construction off-site.

No requirement for vertical perp joint infill pieces.

Allowance for lateral movement and tolerance on bricks, similar to standard bricklaying techniques

TGD-019 Fire test, **CWCT Sequence B**, A1 Warrington Fire Classification report to **EN 13501-1: 2018**



UKAS PRODUCT CERTIFICATION 4705

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Unique advantages

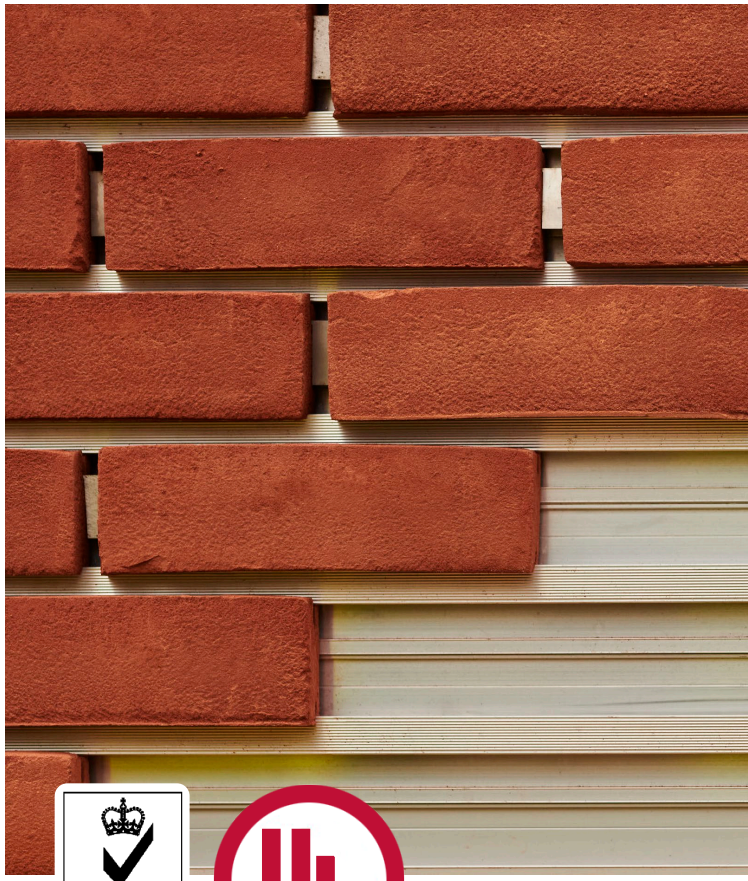
Simple cavity barrier installation – removes the complicated notching details difficult to QA in real site conditions

System strength – interlocking profile design creates a wall of aluminium to support brick facade

Accurate time saving on-site installation – gauging tools allow for site tolerances +/-1mm tooling

Off-site construction – production of column details

Natural bricks – cut from a natural brick with no bonded corners



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Brick Height Specific Systems

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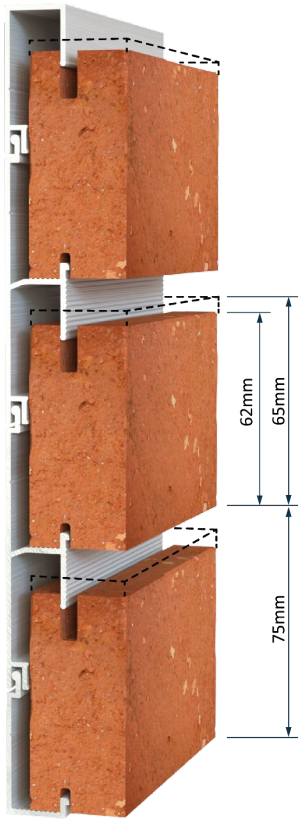
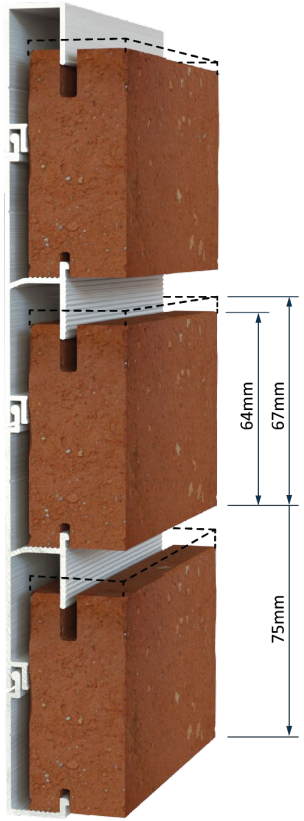
Briklok S





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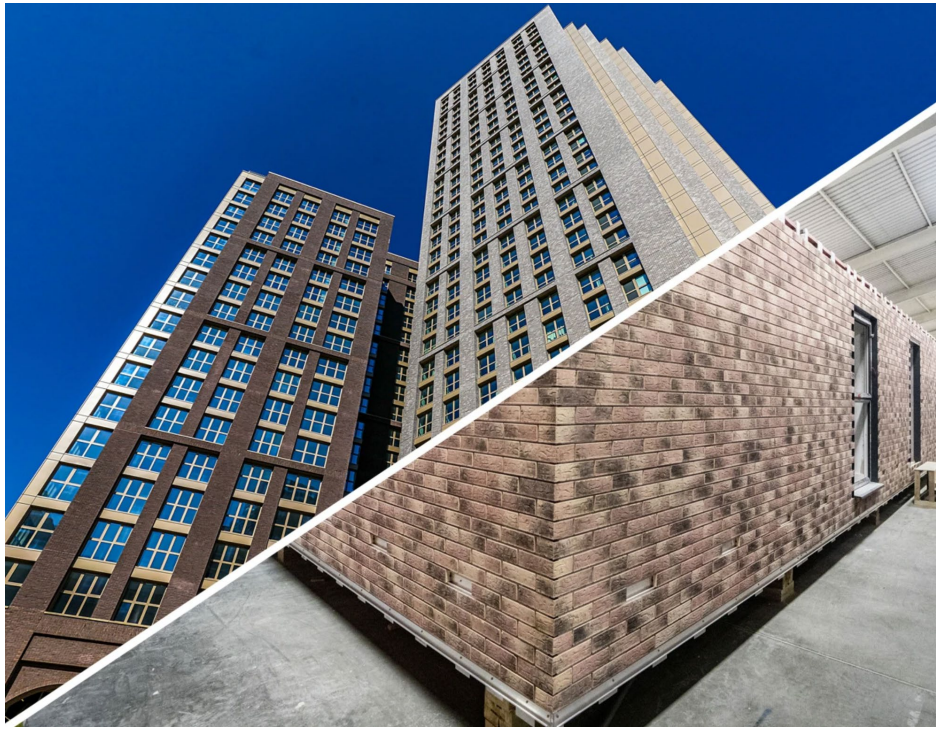
Bricks by Ibstock

Designed for a **natural brick from Ibstock or 3rd party clay bricks**

Partnering with **Ibstock**, market leader of mechanical brick slips, for brick fabrication.

A1 Fire Rated / F2 Frost Rated

Briklok fabrication designs for briklok system



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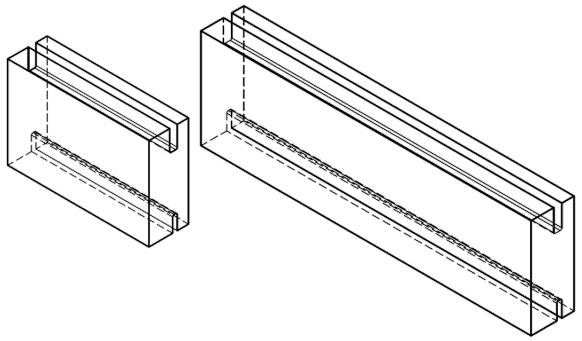
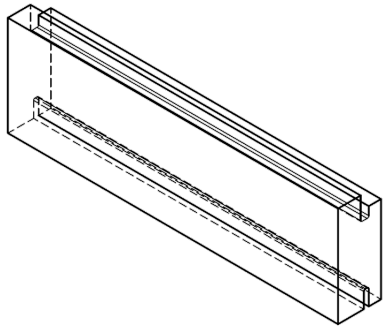
Brick Type Examples

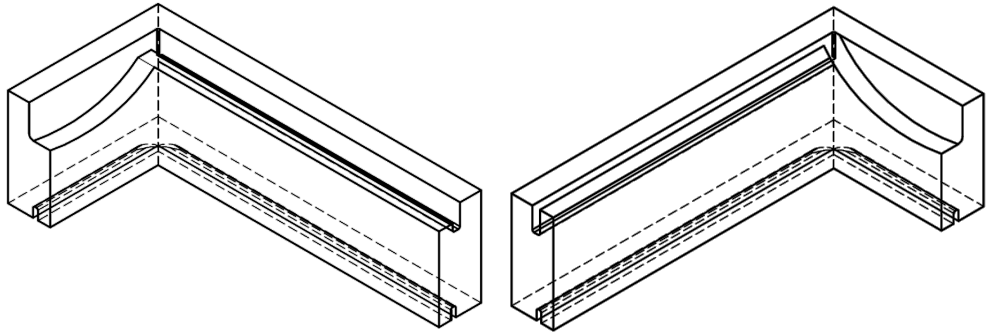
Standard Slips



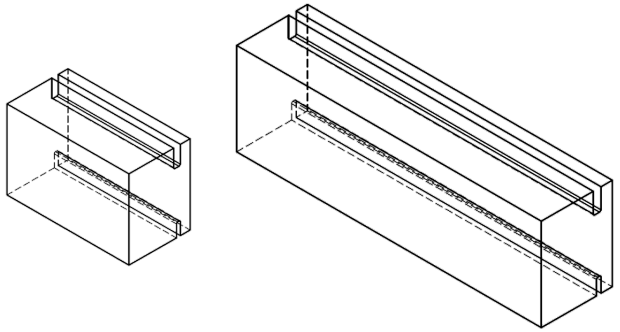
Movement Joint Slips



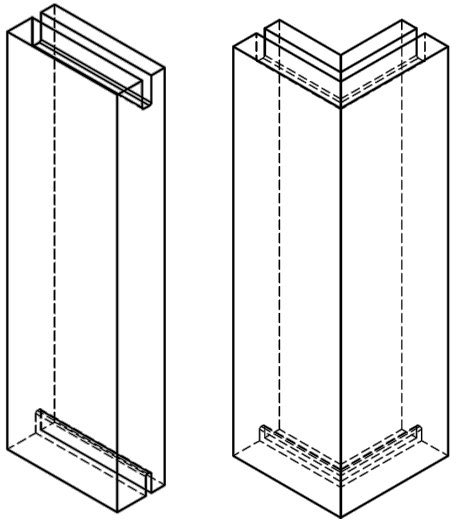
Corner Slips



Projecting Slips



Soldier Slip and corner



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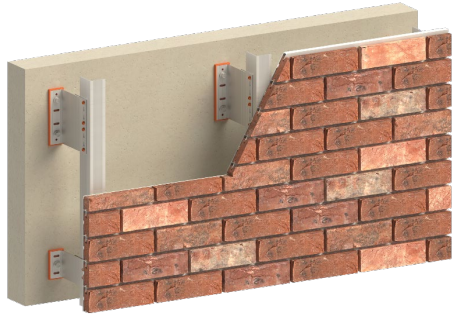
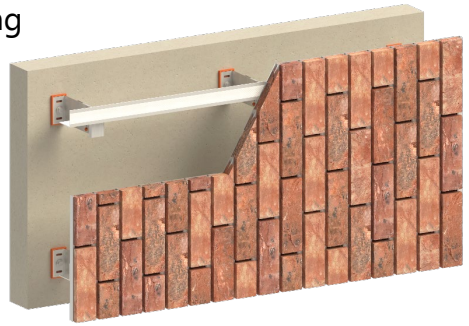
Standard Details

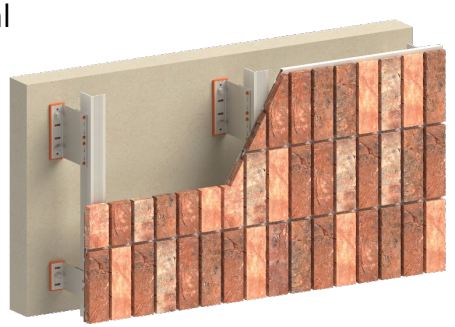
Running Bond



Vertical Running Bond

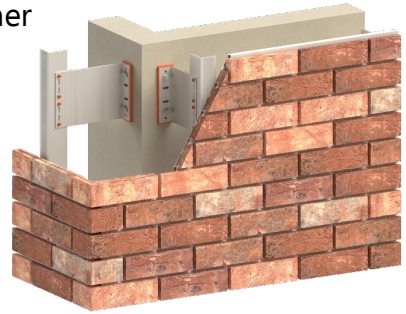


Vertical Stack Bond

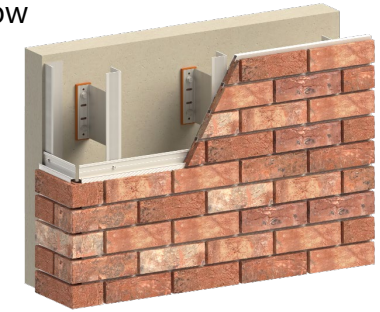


Internal Corner

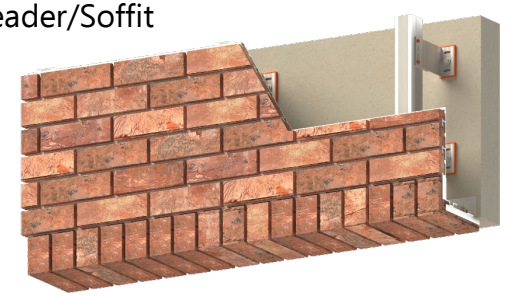
External Corner



Window Jamb



Window Header/Soffit



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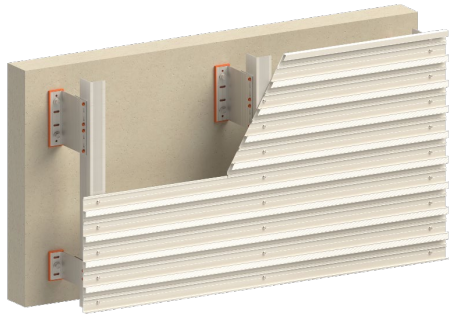
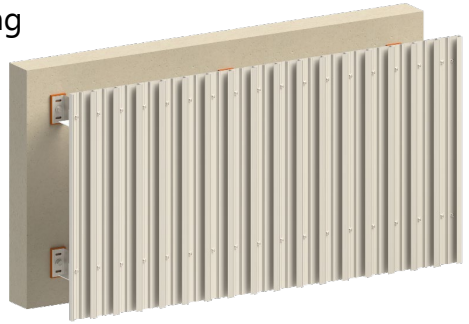
Standard Details

Running Bond

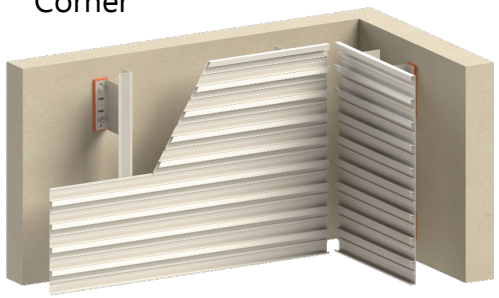


Vertical Running Bond

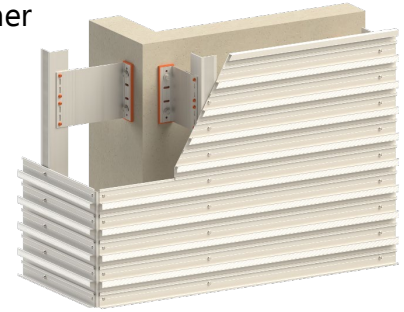


Vertical Stack Bond

Internal Corner



External Corner



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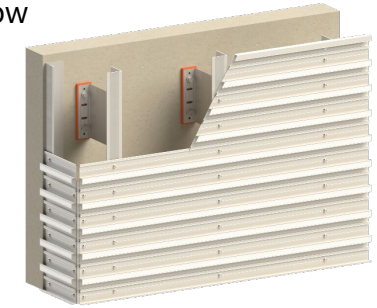

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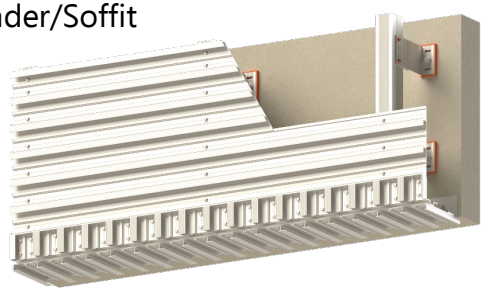

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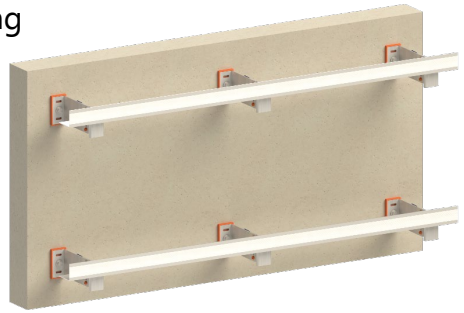
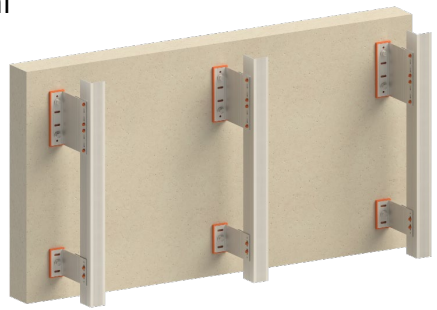
Standard Details

Running Bond

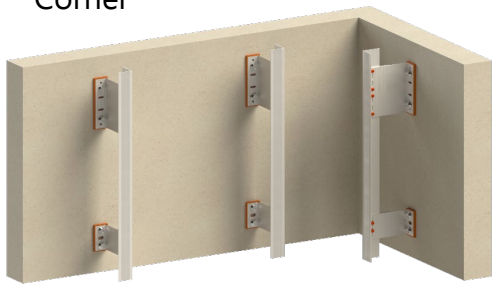
Vertical Running Bond



Vertical Stack Bond



Internal Corner



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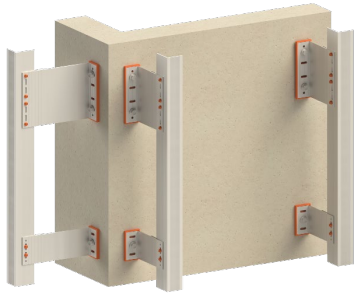

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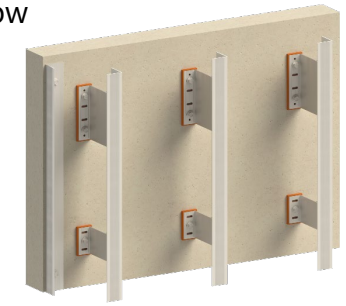

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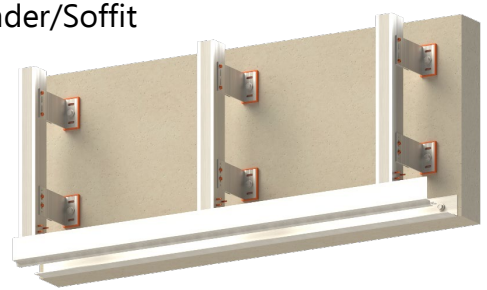

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Offsite construction

Cavity Barrier Intregation

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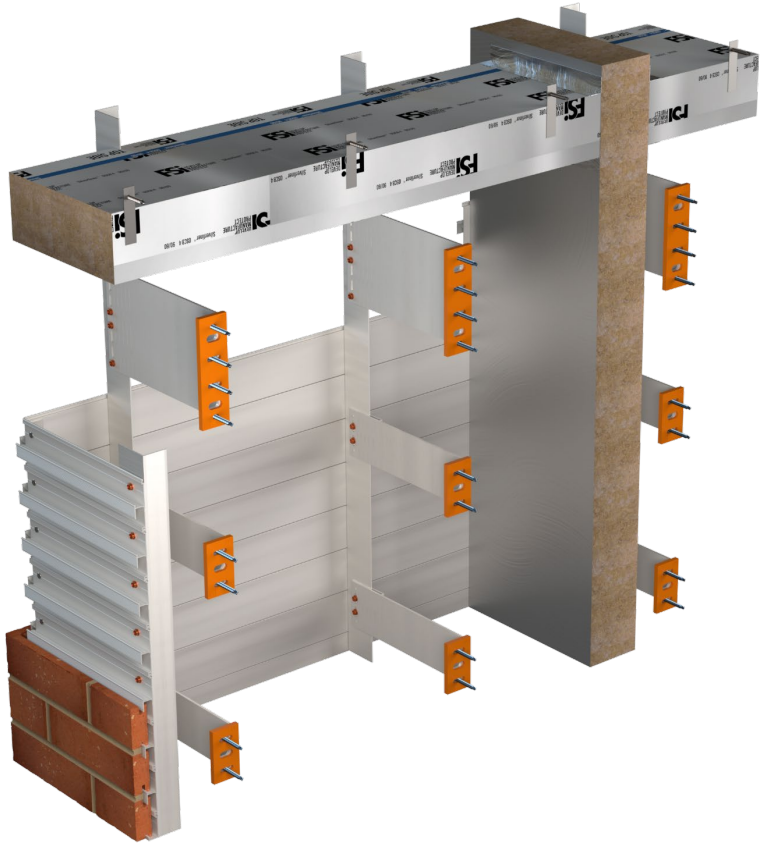
A closed-back aluminium brickslip system

Simple cavity barrier installation – removes the complicated notching details difficult to QA in real site conditions



NHBC Approved, UL UKAS Accreditation range

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Certificate

Certificate No.
R41245-1

Issue date
28-04-2024

Expiration date
27/04/2027

This is to acknowledge that

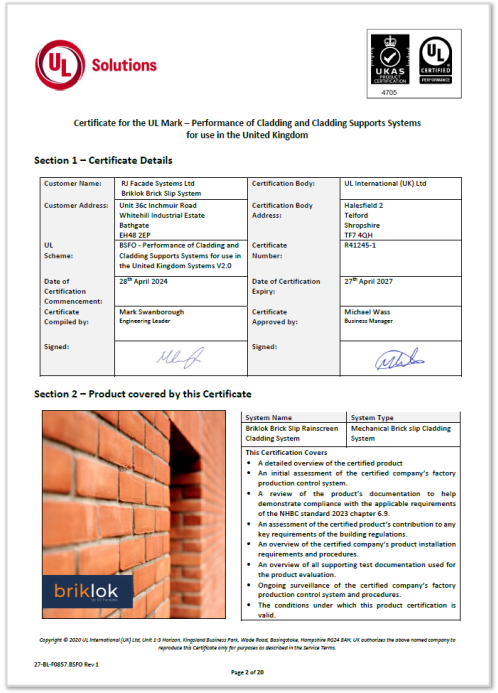
RJ Facade Systems Ltd, Briklok

Mechanical Brickslip Cladding System

- Briklok Brick Slip Rainscreen Cladding System

Evaluated and meets the requirements of the certification scheme.

BSFO - Performance of Cladding and Cladding Supports Systems for use in the United Kingdom Systems V2.0



UL Solutions

4705

Certificate for the UL Mark – Performance of Cladding and Cladding Supports Systems for use in the United Kingdom

Section 1 – Certificate Details

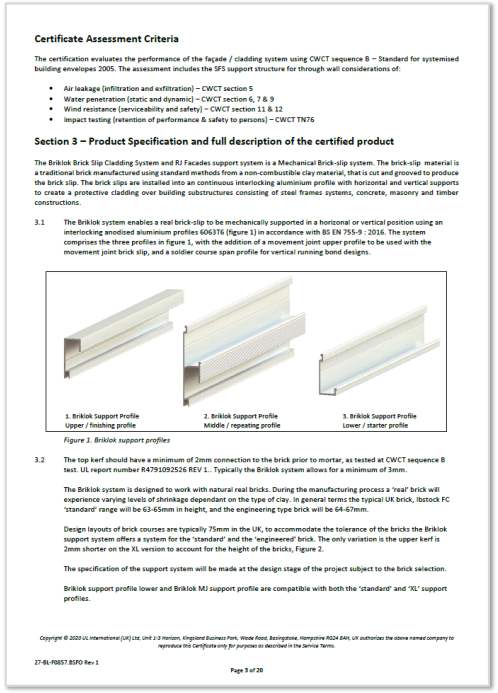
Customer Name:	RJ Facade Systems Ltd Briklok Brick Slip System	Certification Body:	UL International (UK) Ltd
Customer Address:	Unit 36c Inchmuir Road Whitehill Industrial Estate Bathgate EH48 2EP	Certification Body Address:	Halesfield 2 Telford Shropshire TF7 4QH
UL Scheme:	BSFO - Performance of Cladding and Cladding Supports Systems for use in the United Kingdom Systems V2.0	Certificate Number:	R41245-1
Date of Certification Commencement:	28th April 2024	Date of Certification Expiry:	27th April 2027
Certificate Compiled by:	Mark Swanborough Engineering Leader	Certificate Approved by:	Michael Wass Business Manager
Signed:		Signed:	

Section 2 – Product covered by this Certificate

System Name	System Type
Briklok Brick Slip Rainscreen Cladding System	Mechanical Brick slip Cladding System

This Certification Covers

- A detailed overview of the certified product
- An initial assessment of the certified company's factory production control system.
- A review of the product's documentation to help demonstrate compliance with the applicable requirements of the NHBC standard 2023 chapter 6.9.
- An assessment of the certified product's contribution to any key requirements of the building regulations.
- An overview of the certified company's product installation requirements and procedures.
- An overview of all supporting test documentation used for the product evaluation.
- Ongoing surveillance of the certified company's factory production control system and procedures.
- The conditions under which this product certification is valid.



Certificate Assessment Criteria

The certification evaluates the performance of the façade / cladding system using CWCT sequence B – Standard for systemised building envelopes 2005. The assessment includes the SFS support structure for through wall considerations of:

- Air leakage (infiltration and exfiltration) – CWCT section 5
- Water penetration (static and dynamic) – CWCT section 6, 7 & 9
- Wind resistance (serviceability and safety) – CWCT section 11 & 12
- Impact testing (retention of performance & safety to persons) – CWCT TN76

Section 3 – Product Specification and full description of the certified product

The Briklok Brick Slip Cladding System and RJ Facades support system is a Mechanical Brick-slip system. The brick-slip material is a traditional brick manufactured using standard methods from a non-combustible clay material, that is cut and grooved to produce the brick slip. The brick slips are installed into an continuous interlocking aluminium profile with horizontal and vertical supports to create a protective cladding over building substructures consisting of steel frames systems, concrete, masonry and timber constructions.

3.1 The Briklok system enables a real brick-slip to be mechanically supported in a horizonal or vertical position using an interlocking anodised aluminium profiles 6063T6 (figure 1) in accordance with BS EN 755-9 : 2016. The system comprises the three profiles in figure 1, with the addition of a movement joint upper profile to be used with the movement joint brick slip, and a soldier course span profile for vertical running bond designs.

Figure 1. Briklok support profiles

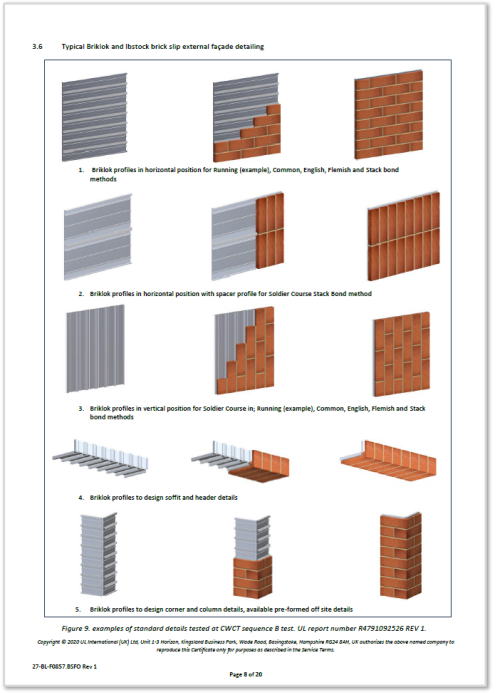
3.2 The top kerf should have a minimum of 2mm connection to the brick prior to mortar, as tested at CWCT sequence B test. UL report number R479109526 REV 1.. Typically the Briklok system allows for a minimum of 3mm.

The Briklok system is designed to work with natural real bricks. During the manufacturing process a 'real' brick will experience varying levels of shrinkage dependant on the type of clay. in general terms the typical UK brick, Ibstock FC 'standard' range will be 63-65mm in height, and the engineering type brick will be 64-67mm.

Design layouts of brick courses are typically 75mm in the UK, to accommodate the tolerance of the bricks the Briklok support system offers a system for the 'standard' and the 'engineered' brick. The only variation is the upper kerf is 2mm shorter on the XL version to account for the height of the bricks, Figure 2.

The specification of the support system will be made at the design stage of the project subject to the brick selection.

Briklok support profile lower and Briklok MJ support profile are compatible with both the 'standard' and 'XL' support profiles.



3.6 Typical Briklok and Ibstock brick slip external façade detailing

1. Briklok profiles in horizontal position for Running (example), Common, English, Flemish and Stack bond methods
2. Briklok profiles in horizontal position with spacer profile for Soldier Course Stack Bond method
3. Briklok profiles in vertical position for Soldier Course in; Running (example), Common, English, Flemish and Stack bond methods
4. Briklok profiles to design soffit and header details
5. Briklok profiles to design corner and column details, available pre-formed off site details

Figure 9. examples of standard details tested at CWCT sequence B test. UL report number R479109526 REV 1.

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CWCT Sequence B Testing

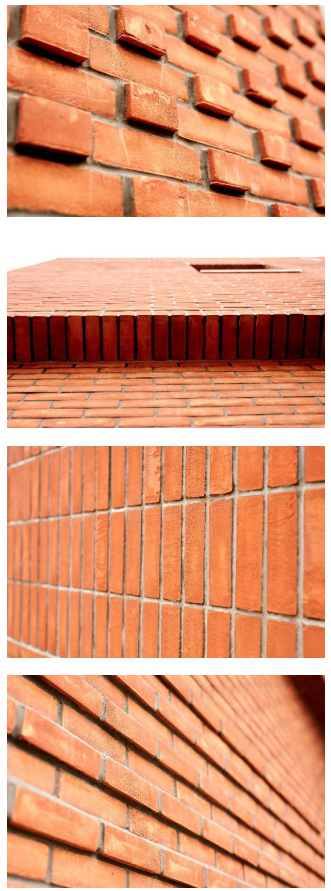
NHBC approved CWCT Sequence B Test

Test to specification:

Replicates full 2 storey building.

Test includes SFS structure for water and pressure test

Impact pass for all standard applications



CWCT Sequence B Testing

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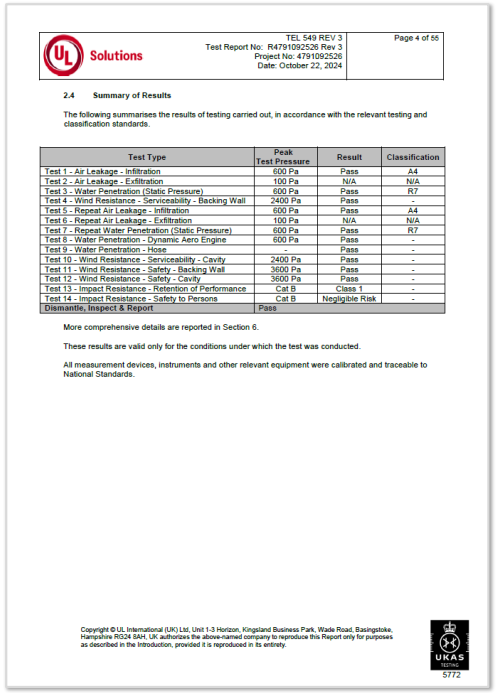
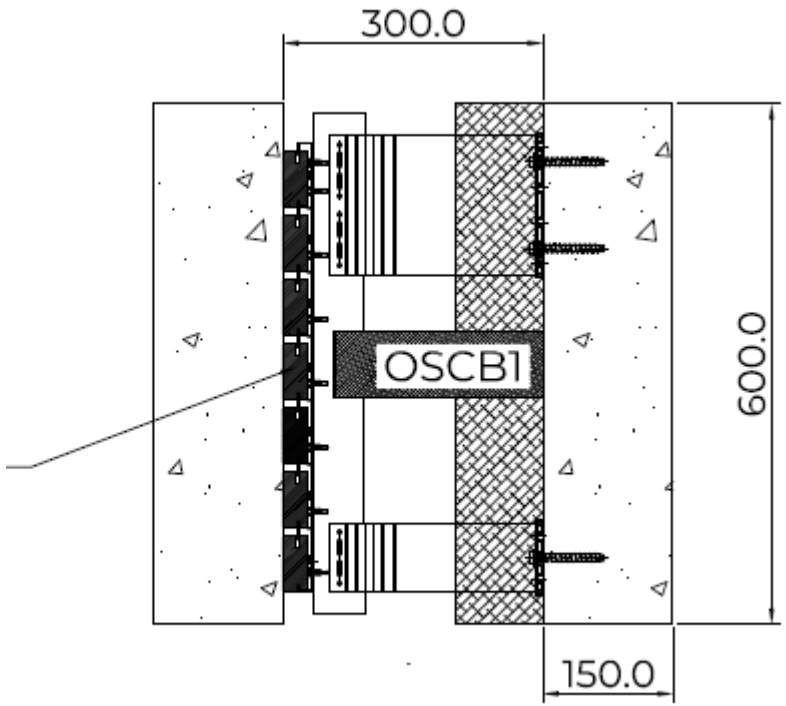


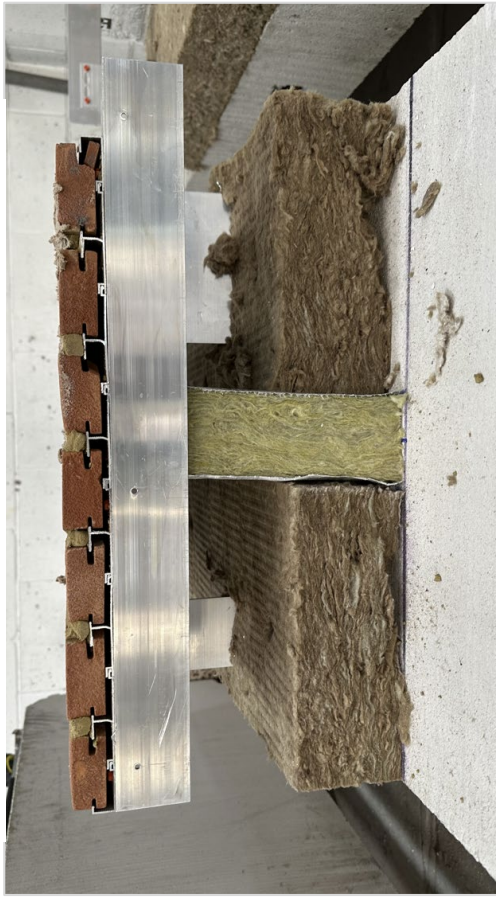
Test Type	Peak	Result	Classification
Test 1 - Air Leakage - Infiltration	600 Pa	Pass	A4
Test 2 - Air Leakage - Exfiltration	100 Pa	N/A	N/A
Test 3 - Water Penetration (Static Pressure)	600 Pa	Pass	R7
Test 4 - Wind Resistance - Serviceability - Backing Wall	2400 Pa	Pass	-
Test 5 - Repeat Air Leakage - Infiltration	600 Pa	Pass	A4
Test 6 - Repeat Air Leakage - Exfiltration	100 Pa	N/A	N/A
Test 7 - Repeat Water Penetration (Static Pressure)	600 Pa	Pass	R7
Test 8 - Water Penetration - Dynamic Aero Engine	600 Pa	Pass	-
Test 9 - Water Penetration - Hose	-	Pass	-
Test 10 - Wind Resistance - Serviceability - Cavity	2400 Pa	Pass	-
Test 11 - Wind Resistance - Safety - Backing Wall	3600 Pa	Pass	-
Test 12 - Wind Resistance - Safety - Cavity	3600 Pa	Pass	-
Test 13 - Impact Resistance - Retention of Performance	Cat B	Class 1	-
Test 14 - Impact Resistance - Safety to Persons	Cat B	Negligible Risk	-
Dismantle, InsQect & Report	Pass		

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



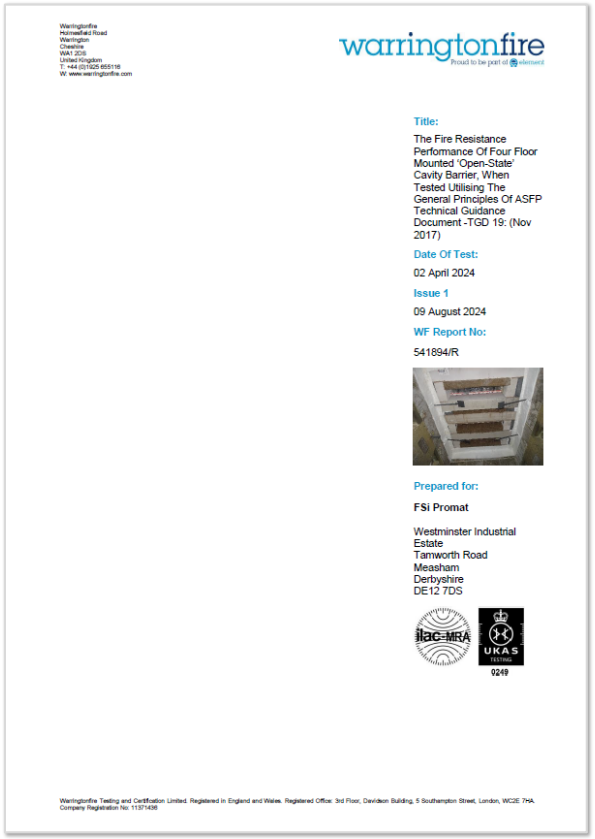


Fire Testing – TGD 019

Test was concluded at the results of:

Integrity 130 minutes
Insulation 60 minutes

Performance of cavity barrier was unaffected by the integration of the briklok system.



warringtonfire

Title:

The Fire Resistance Performance Of Four Floor Mounted 'Open-State' Cavity Barrier, When Tested Utilising The General Principles Of ASFP Technical Guidance Document -TGD 19: (Nov 2017)

Date Of Test:

02 April 2024

Issue 1

09 August 2024

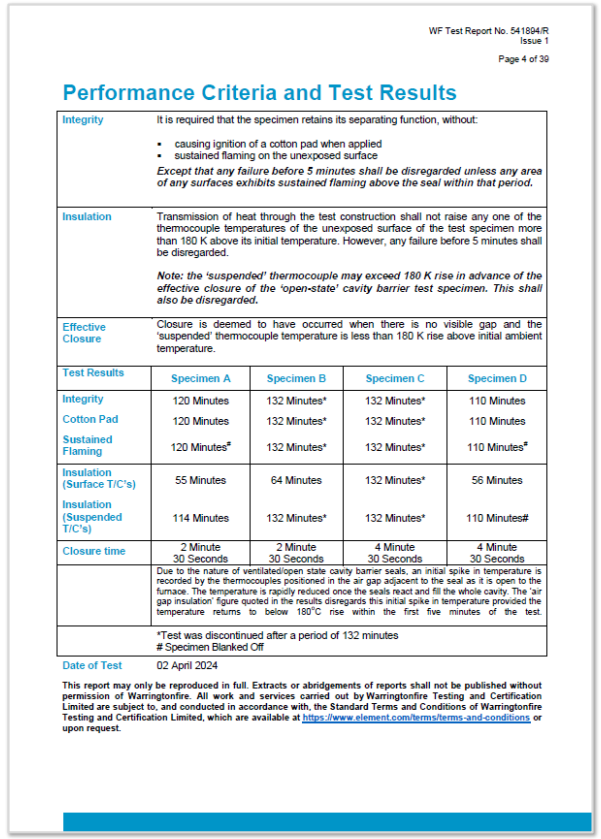
WF Report No:

541894/R

Prepared for:

FSi Promat

Westminster Industrial Estate
Tamworth Road
Measham
Derbyshire
DE12 7DS



WF Test Report No. 541894/R
Issue 1

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Performance Criteria and Test Results

Integrity	It is required that the specimen retains its separating function, without: ▪ causing ignition of a cotton pad when applied ▪ sustained flaming on the unexposed surface ***Except that any failure before 5 minutes shall be disregarded unless any area of any surfaces exhibits sustained flaming above the seal within that period.***			
Insulation	Transmission of heat through the test construction shall not raise any one of the thermocouple temperatures of the unexposed surface of the test specimen more than 180 K above its initial temperature. However, any failure before 5 minutes shall be disregarded. ***Note: the 'suspended' thermocouple may exceed 180 K rise in advance of the effective closure of the 'open-state' cavity barrier test specimen. This shall also be disregarded.***			
Effective Closure	Closure is deemed to have occurred when there is no visible gap and the 'suspended' thermocouple temperature is less than 180 K rise above initial ambient temperature.			
Test Results	**Specimen A**	**Specimen B**	**Specimen C**	**Specimen D**
Integrity	120 Minutes	132 Minutes*	132 Minutes*	110 Minutes
Cotton Pad	120 Minutes	132 Minutes*	132 Minutes*	110 Minutes
Sustained Flaming	120 Minutes#	132 Minutes*	132 Minutes*	110 Minutes#
Insulation (Surface T/C's)	55 Minutes	64 Minutes	132 Minutes*	56 Minutes
Insulation (Suspended T/C's)	114 Minutes	132 Minutes*	132 Minutes*	110 Minutes#
Closure time	2 Minute 30 Seconds	2 Minute 30 Seconds	4 Minute 30 Seconds	4 Minute 30 Seconds
	Due to the nature of ventilated/open state cavity barrier seals, an initial spike in temperature is recorded by the thermocouples positioned in the air gap adjacent to the seal as it is open to the furnace. The temperature is rapidly reduced once the seals react and fill the whole cavity. The 'air gap insulation' figure quoted in the results disregards this initial spike in temperature provided the temperature returns to below 180°C rise within the first five minutes of the test.			
	*Test was discontinued after a period of 132 minutes # Specimen Blanked Off			
Date of Test	02 April 2024			

Warrington Fire Approval

A1 Warrington Fire Classification report to EN 13501-1: 2018

Approval includes:
EVT II aluminium and stainless brackets, Briklok profiles, Ibstock bricks, Sika Parex mortar, stainless system fixings

warringtonfire
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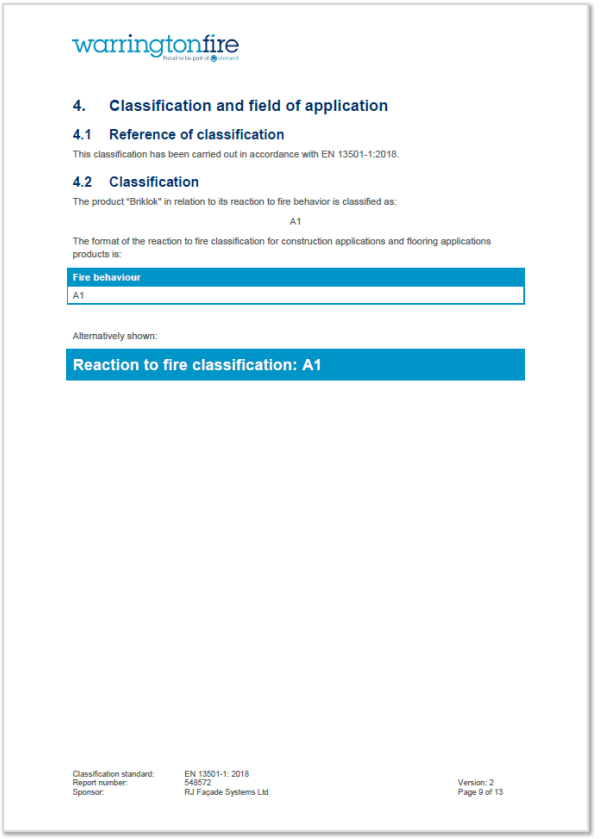
Reaction to fire classification report

Issuing laboratory: Warringtonfire Testing and Certification Limited

Classification standard:	EN 13501-1: 2018
Sponsor(s):	RJ Façade Systems Ltd
Product(s):	"Briklok"
Report number:	548572
Version:	2

Warringtonfire Testing and Certification Limited , accredited for compliance with ISO/IEC 17025:2017 – Testing

egolf



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4. Classification and field of application

4.1 Reference of classification

This classification has been carried out in accordance with EN 13501-1:2018.

4.2 Classification

The product "Briklok" in relation to its reaction to fire behavior is classified as:

A1

The format of the reaction to fire classification for construction applications and flooring applications products is:

Fire behaviour
A1

Alternatively shown:

Reaction to fire classification: A1

Classification standard: EN 13501-1: 2018
Report number: 548572
Sponsor: RJ Façade Systems Ltd

Version: 2
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briklok

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