

Technical Data SheetIG Brick Panel System



Product overview

IG's Brick Panel System is a prefabricated, A1 fire-rated brick slip soffit system. The system enables designers and specifiers to create deeper soffits and ensure compliance with <u>Fire Safety: Approved Document B</u>.

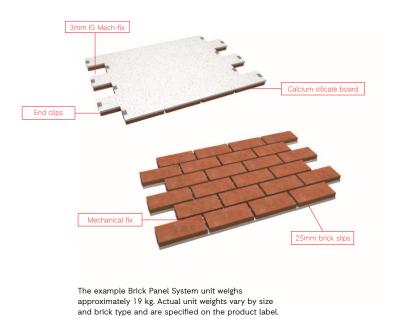
The interlocking panels are manufactured offsite and delivered to site complete with brick slips mechanically secured and adhesively bonded to calcium silicate board. Fixings are supplied to suit the substructure which is designed by others. The BBA-certified components are designed to integrate with brickwork constructed onsite.

The Brick Panel System is manufactured from 25mm thick brick slips cut from standard brick masonry units to BS EN 771-1:2011 or BS EN 771-2:2011. The calcium silicate board is 12mm thick with 3mm thick IG Mech-fix adhesive and stainless steel mechanical fixings.

This BBA certified unit is manufactured completely from A1 fire rated materials and is <u>Fire Safety: Approved Document B</u> compliant, meaning it can be used in buildings of any height and purpose.

Key Benefits

- A1 fire rated
- Mechanically fixed brick slips
- Suitable for all heights and types of buildings
- No brick cutting required onsite
- Substructure completely hidden
- Achieve deep brick soffit detail
- Blends with surrounding traditional brickwork







Technical Data SheetIG Brick Panel System

Product design and testing

IG's Brick Panel System has been independently assessed by by the British Board of Agrément to evaluate and validate the physical performance and long term durability of all components as well as ensure the products are fit for purpose and conform to regulations.

Key factors assessed by the BBA (British Board of Agrément)

Tests were carried out on the system and the results assessed to determine:

- Bond strength after accelerated ageing
- Pull-out resistance of fixings
- Pull-through resistance of fixings
- Integrity of the bond at maximum design deflection.

An assessment was made of data relating to:

Properties in relation to fire

All components of the system are classified as A1 in accordance with BS EN 13501-1:2018.

The supporting timber subframe and plywood detailed on the BBA certificate are not classified in accordance with BS EN 13501-1:2018 and may be subject to restrictions on building height or proximity to boundaries. The substructure must be designed by an appropriately qualified design engineer on a project-specific basis.

Structural performance

The system has adequate strength and stiffness to sustain its own weight and wind actions when fixed to an adequately designed substructure. Substructures must be designed and installed by an appropriately qualified individual to withstand the loads and limit the deflections. The characteristic wind loads on the system should be calculated in accordance with BS EN 1991-1-4:2005.

Condensation risk

External soffits will adequately limit the risk of surface condensation when the thermal transmittance (U value) does not exceed 0.7W/m² K (in England and Wales) or 1.2W/m² K (in Scotland) at any point and the junctions with walls are in accordance with the relevant requirements of Limiting thermal bridging and air leakage: Robust construction details for dwellings and similar buildings TSO 2002 or BRE Information Paper IP 1/06.

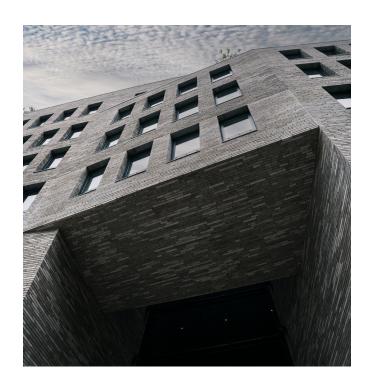
Durability

Provided that the system is designed, installed and used in accordance with its BBA Certificate, it will have a service life of at least 60 years when used in the normal climatic conditions found in the UK.

IG Masonry Support has committed to ongoing internal testing and regular surveillance of production in order to assess:

- Brick quality
- Bond strength

Full information on the assessment carried out by the British Board of Agrément on B.O.S.S. A1 can be found in <u>Agrément</u> Certificate 15/5250: Product Sheet 6.





Technical Data Sheet IG Brick Panel System

Design considerations

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IG's Brick Panel System is satisfactory for use on external and internal soffits of buildings.

Interlocking system

The interlocking panel system enables simple installation and eliminates the need for any brick cutting or bonding of brick slips onsite. The individual interlocking panels are fixed to the substructure within the mortar joints and hidden once pointed. Recommended fixings are provided in IG Masonry Support's Construction Issue Drawings.

Bond patterns

Each system is designed by our engineers to suit specific project requirements and various soffit depths and bond patterns can be achieved. The calcium silicate board will always be 12mm thick.

Substructure

IG's Brick Panel System can be fixed to materials such as concrete and steel. The substructure must be designed to suit the buildings performance requirements by an appropriately qualified design engineer on a project-specific basis.

Mechanical fix

For added security, the brick slips on this BBA-approved product are secured to the brick carrier with a patented stainless steel mechanical fix.

Specification clauses

IG Masonry Support's Brick Panel Systems are designed and manufactured to suit each project. Various bond patterns, soffit sizes and finishes are achievable. Full specification data can be found on NBS Source.

Brick cutting

Brick cutting for all IG Masonry Support brick slip systems is carried out at our dedicated Brick Cutting Facility in Overseal, South Derbyshire. Suitability of bricks is determined at quotation stage and delivered to the Brick Cutting Facility in advance of manufacturing.

ISO 9001:2015

IG Masonry Support has strict control measures to ensure the highest quality of product and manufacturing. The company is certified by the BBA (British Board of Agrément) in accordance to BS EN ISO 9001:2015 and EN 1090-1:2019.

Safety

IG Brick Panel System components are produced from sheared plates and may have sharp edges. Care must be taken when handling units and suitable workwear should be worn at all times.

When lifting or carrying a Brick Panel System, you should undertake a personal risk assessment paying attention to the size and weight of the product which is clearly detailed on each product label and each 1200mm by 800mm pallet delivered. To avoid lifting strains and product damage, all units must be lifted by at least two people or alternatively by mechanical means.

Disposal

The Brick Slip Panels steel and brick components are fully recyclable, minimising waste and reducing its carbon footprint at the end of its service life.







Installation training

Correct installation is essential for the success of each project. Therefore, IG Masonry Support has made every effort to help installers by creating an installation guide for Brick Panel Systems. Guidance may vary depending on the substructure designed for the project. IG's Technical Team will advise on a project basis.

IG Masonry Support also offers onsite installation training and support from its experienced team of structural and civil engineers.



IG Masonry Support's designers and engineers provide a complete 2D CAD design and structural engineering service and will develop your concept into quality, cost effective prefabricated brick slip soffit solutions.





Brick Panel System Sales and Enquiries

For more information please contact our Technical Team

+44 (0)1283 200 157

IG Masonry Support Swadlincote

Ryder Close Cadley Hill Industrial Estate Swadlincote South Derbyshire DE11 9EU

T +44 (0)1283 200 157 E support@igmss.co.uk

IG Masonry Support Cookstown

Ballyreagh Industrial Estate Cookstown Co. Tyrone Northern Ireland BT80 9DG

T +44 (0)28 8676 0334 E info@igmss.co.uk