WE ARE
Facades and more.

NEXUS®
BRICK-FACED
SUPPORT SYSTEMS
REACHING NEW HEIGHTS
We offer a diverse range of building products, solutions and expert technical and design services that enable our customers to create inspirational spaces and places.

Everything we do revolves around our valued customers and we continuously strive to exceed their expectations. We pride ourselves on leading for new, innovative and sustainable products and solutions, both for today and for a new era of building.

WE ARE at the heart of building. WE ARE Ibstock.
Brick, the UK’s favourite cladding material, is increasingly being used to deliver visually stunning buildings, with design elements that can sometimes appear to challenge normal structural principles.

Among these, and rising in popularity, are deep reveals and soffits where the main façade extends seamlessly to large areas of exposed brickwork forming overhangs and recesses. These aesthetically pleasing features pose complex engineering issues, as these areas of brick must be held in place but with the necessary supporting steelwork remaining unseen.

To answer this challenge, Ibstock and Ancon, two of the UK’s foremost innovators in prefabricated brickwork manufacture and support, created NEXUS, a range of advanced lightweight solutions that make modern brick-faced soffits and lintels achievable and easy-to-install.

And now, the range has been extended, developed further in response to the changing legislative landscape post-Grenfell.

One of the major issues facing our industry today is fire safety, and companies such as ours, industry organisations and legislators are continually looking to develop new, innovative solutions to make the world a safer place.

At Ibstock and Levot we want to do ‘the right thing’ - our sense of responsibility stretches not just to our customers but to all those who encounter our work. So when faced with challenges such as major changes in legislation, we see this not as an obstacle to overcome but as an opportunity to improve our product offering.

On 1st June 2022, ‘Approved document B: Fire Safety - Volume 1 & 2’ was amended, with a direction that all materials used for cladding on residential buildings above 11 metres in the UK must be of ‘limited combustibility’. Within this guidance, allowed materials are those classed as A1 or A2 under the European Classification system.

It was these changes that led us to develop our world leading mechanically-fixed NEXUS soffit and lintel solutions, this family of products now extended to include the innovative NEXUS XI.
THE NEXUS® FAMILY
FULLY COMPATIBLE RANGE OF PRODUCTS

NEXUS ORIGINAL
Suitable for buildings up to 11m high
- BBA approved up to 11m
- Brick slips bonded to stainless steel units using high strength adhesive
- Established, proven system

NEW NEXUS XI
Suitable for buildings over 11m high
- BBA Approved for all building heights
- Brick slips mechanically fixed to stainless steel unit at a minimum of three locations
- Complies with Building Regulations Approved Document B: Fire Safety 2022
- A' Fire Rating

WITH NEXUS® YOU GET DOUBLE

Double the expertise - combining the expertise of two of the UK’s leading construction specialists
Double the technical support - technical experts in both fields
Double the knowledge - more than 150 years’ experience in high integrity brickwork support and brick engineering
Double the commitment - two companies with a history of innovation, quality and excellent customer support
NEW NEXUS® XI BRICK-FACED SOFFIT AND LINTEL SYSTEMS

NEXUS XI, the latest addition to the NEXUS family, provides an innovative mechanically fixed suspended brickwork soffit and lintel solution.

NEXUS XI has secured an ‘A’ fire safety rating from the BBA, meaning it can be specified and installed with confidence on high-rise residential buildings over 11 metres, in compliance with the recent amendment to Approved Document B of the Building Regulations.

The system comprises a stainless steel soffit tray or lintel with a semi-flexible bedding agent retained in the system to reduce vibration between the stainless steel and brick slip, securing a fire rating of A2,S1,D0.

Alongside its key safety credentials, NEXUS XI packs a number of other primary benefits, including:

✓ Quicker to install - no mechanical lifting
✓ 70% lighter on average than precast alternatives
✓ Simply lift into position
✓ Designed and prefabricated to fit any size or shape soffit
✓ Any brick type and bond pattern can be accommodated

For ultimate durability, NEXUS XI has been engineered as a mechanical fix solution. This means that each individual brick on the suspended brickwork system is held in place at a minimum of three mechanical fix locations.

MECHANICAL FIX SOLUTION

100% stainless steel mechanical fix solution, fixes straight into stainless steel tray. Proven durability and maximum corrosion resistance.
NEXUS® ORIGINAL AND NEXUS® XI
BRICK-FACED SOFFIT SUPPORT SYSTEMS

The NEXUS range of brick-faced soffit systems comprises both standard and bespoke solutions to enable the creation of deep reveals and soffits. Typical solutions are shown below. Bespoke solutions including other brick arrangements can be designed to suit project requirements. Please contact us for more information.

✓ Available in NEXUS Original and NEXUS XI
✓ Two-part system allows full adjustment for perfect alignment
✓ Lightweight design - simply bolt into position
✓ Designed and prefabricated to fit any size or shape soffit
✓ Any brick type and bond pattern can be accommodated

65 x 215mm
WITH HEADER BOND

A simple, effective means of creating feature header details and reveals, with the header bond differentiating the soffit from the main façade.

Brick slip facings can be manufactured from the same batch as the main brickwork to present a perfect colour and texture match.

65 x 440 x 65mm
WITH STRETCHER BOND

Used to create double-sided soffit details providing continuity to the main brickwork façade.

Each soffit unit is designed to interlock with the adjacent unit providing a flawless transition once the brickwork is pointed.

65 x 215mm
WITH SOLDIER BOND

A simple, effective means of creating feature soldier course details above door and window openings.

Brick slip facings can be manufactured from the same batch as the main brickwork to present a perfect colour and texture match for a flawless transition.

65 x 665 x 65mm
WITH STRETCHER BOND

Used to create double-sided soffit details providing continuity to the main brickwork façade.

Each soffit unit is designed to interlock with the adjacent unit providing a flawless transition once the brickwork is pointed.

215 x 102mm
WITH SOLDIER BOND

A simple, effective means of creating feature soldier course details above door and window openings.

Brick slip facings can be manufactured from the same batch as the main brickwork to present a perfect colour and texture match for a flawless transition.

65 x 440 x 65mm
WITH STRETCHER BOND

Used to create double-sided soffit details providing continuity to the main brickwork façade.

Each soffit unit is designed to interlock with the adjacent unit providing a flawless transition once the brickwork is pointed.
NEXUS® ORIGINAL AND NEXUS® XI
BRICK-FACED LINTELS

NEXUS brick-faced lintels are designed to carry a single leaf of a cavity wall. Prefabricated from stainless steel for maximum corrosion protection, they offer a quick and simple way of creating deep soffits above window and door openings.

- Available in NEXUS Original and NEXUS XI
- Manufactured off-site
- Lightweight, one-piece design – simply lift into place
- Designed to suit a variety of spans and loads
- Variable face and soffit depths available

They are ideal where speed is important - the permanently bonded brick slips, applied off-site, are manufactured from the same batch as the main brickwork providing a seamless blend meaning no compromise on quality or appearance. The lightweight design means the lintels can be simply lifted into place by hand, with no mechanical lifting equipment required, saving time on site.
To discuss your NEXUS® requirements, simply call us on 0844 736 0350 or email nexus@ibstock.co.uk

HOW TO SPECIFY NEXUS®

Technical and Design Support

Design Advice
An integral part of Ibstock’s service is a full 3D CAD design and structural engineering service. This ensures that we can turn your design concepts into quality, cost-effective, easy to build structural elements. Contact us with your requirements.

CPD Seminars
Delivered by Ibstock’s design advisors, who have considerable experience of these systems and in answering questions from both specifiers and contractors.

Project Management
We will work closely with you to coordinate the design, manufacture and delivery of the complete system to suit site progress.

Contract Support
Our technical and design staff are available to attend office and site meetings to provide assistance at any stage in the process including pre-tender and pre-contract.

Specification Clauses

Ancon MDC Systems are tailored to suit each project. Each system is based on the cavity size at the support and the unfactored masonry load to be carried. An economical configuration of channel, bracket and angle will be designed. Specify MDC NEXUS Original / cavity / unfactored masonry load e.g. MDC NEXUS Original /75 / 5.6.

Ibstock Nexus Original Soffit Unit
Brick or masonry slips permanently bonded direct to a grade 1.4301 stainless steel unit using a high strength bedding agent. The size of the unit and bond pattern of the brick slips are tailored to suit project requirements.

Ibstock Nexus Original Lintel
Brick or masonry slips are permanently bonded direct to a grade 1.4301 stainless steel unit using a high strength bedding agent. The size of unit and bond pattern of the brick slips are tailored to suit project requirements.

Ancon MDC NEXUS XI Bracket Angle Support System
Ancon MDC Systems are tailored to suit each project. Each system is based on the cavity size at the support and the unfactored masonry load to be carried. An economical configuration of channel, bracket and angle will be designed. Specify MDC NEXUS XI / cavity / unfactored masonry load e.g. MDC NEXUS XI /75 / 5.6.

Ibstock Nexus XI Soffit Unit
Engineered brick or masonry slips are mechanically fixed to a grade 1.4301 stainless steel unit. The size of the unit and bond pattern of the engineered brick slips are tailored to suit project requirements. Specify face and soffit dimensions and bond pattern to be included on the Nexus XI unit.

Ibstock Nexus XI Lintel
NEXUS XI lintels are designed to carry a single leaf of a cavity wall. Tailored to suit each project, specification is based on the span of the opening and load to be supported. Engineered brick or masonry slips are mechanically fixed to the grade 1.4301 stainless steel lintel. Specify opening size, face and soffit dimensions and load to be supported.

Product Specifications

Steelwork
High grade stainless steel, manufactured in a BS EN 1090-1 approved factory and CE marked.

Fixings
Stainless steel grade 1.4301 slotted nuts, set screws, circular washers and Rivnuts.

Brick Slips
25mm thick and manufactured in accordance with BS 4729 and BS EN 771-1 and CE marked.

Bedding Agent
Brick-Fix 31 A2 Firebond Reaction to fire classification A2-s1, d0.

NEXUS XI has been tested by Lucideon for long term durability, including resistance of cladding and metal support tests, to comply with a robust BBA certification process as well as NHBC approved.

Ibstock Nexus XI Lintel

NEXUS® BRICK-FACED SUPPORT SYSTEMS
NEXUS® BRICK-FACED SOFFIT AND LINTEL SYSTEMS INSTALLATION GUIDE

Brick-Faced Soffit Systems

NEXUS soffit units are designed to be simply lifted and bolted to pre-installed Ancon MDC brick support angles. Each soffit unit comprises a stainless steel carrier with integrated Ancon channel to simplify installation to the brick support angle.

**STEP 1**

Install MDC NEXUS masonry support system in line with Ancon MDC Masonry Support Systems Installation Guide to the point where the fixing bolts are fully torqued.

**STEP 2**

Place the NEXUS soffit unit’s T-head bolts in the 28/15 channel to align with the slots in the angle and lift the soffit unit to the underside of the masonry support angle. The soffit unit should continue to be supported through steps 3 and 4.

**STEP 3**

Add washer and nut to bolts and finger tighten onto angle. Ensure the T-head bolt is fully turned and engaged in the channel. If the angle is correctly levelled there should be no need to add shims between the soffit unit and the angle. If however shimming is required then they should be added now. Horse shoe shims must surround the bolt and extend for the full contact area between soffit and angle. They must NOT be placed in any other location other than around the bolt as this will lead to deformation of the angle when the bolts are torqued.

**NOTE:** The bolt should have a minimum of two threads visible above the nut, if shimming has reduced this clearance, longer bolts will be required.

**STEP 4**

Once satisfied with the line and level of the soffit unit, the bolts should be torqued to 20Nm. The support to the soffit unit can now be removed.

**STEP 5**

Point soffit unit to match main brickwork.

Both NEXUS Original and NEXUS XI are installed in the same simple way.

Brick-Faced Lintels

NEXUS lintels are designed as a lightweight one-piece system which can be simply lifted into place.

**STEP 1**

Raise the inner and outer leaves simultaneously to avoid excessive eccentricity of loading, with a maximum height difference of 225mm. Masonry should be laid on a full mortar bed and all perpendicular joints should be fully filled. Allow the mortar to cure before applying floor or roof loads.

**STEP 2**

Lintels must be suitably propped during construction at approximately 1 metre centres. On small openings, a central prop can be used. A board should be used between lintel and prop to protect the finished surface and spread the load evenly.

**STEP 3**

Lintels should be installed with at least 150mm end bearing and be fully bedded on bricklaying mortar. Ensure lintel is level along the length and width.

**STEP 4**

The NHBC P366/97 recommends a damp-proof course (DPC) or cavity tray is installed over all openings in external cavity walls.

**STEP 5**

Weep-holes should be provided in the outer leaf above the lintel to drain moisture from the cavity. A minimum of two weep-holes should be provided per lintel. For fair-faced masonry, weep-holes should be provided at centres not greater than 450mm.

**STEP 6**

Precautions must be taken to prevent mortar dropping through the cavity onto the lintel and obstructing the weep-holes.

**STEP 7**

Brick slips should be pointed using the same mortar as the rest of the brickwork, but only after the full load has been applied to the lintel.
CASE STUDY

BOW RIVER VILLAGE, LONDON

PRODUCTS

NEXUS® brick-faced soffit units and lintels used at door and window heads.

T: 0844 736 0350
E: nexus@ibstock.co.uk
CASE STUDY

SILCHESTER ESTATE, KENSINGTON, LONDON

PRODUCTS
NEXUS® brick-faced soffit units and lintels supplied to window heads and entrance.
CASE STUDY

MUIRFIELD COMMUNITY CENTRE, SCOTLAND

PRODUCTS

235 custom-designed NEXUS® window head and colonnade soffits and lintel units.
CASE STUDY

GREAT EASTERN QUAYS, LONDON

PRODUCTS

2,300 lineal metres of NEXUS® lightweight brick-faced soffit units.
CASE STUDY

BEAK STREET, LONDON

PRODUCTS

Bespoke glazed brick-clad soffit units.
To discuss your NEXUS® requirements, simply call us on 0844 736 0350 or email nexus@ibstock.co.uk

Ibstock
T: 0844 736 0350
www.ibstockbrick.co.uk/nexus

Ancon Masonry Support Products
T: 0114 275 5224
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