

Technical Data Sheet

Pro-Steel Brick Faced Lintels

Stretcher Bond

- ✓ **BS EN 845-2 Lintel Design**
- ✓ **BS EN 846-9 Lintel Testing**
- ✓ **BS 5977 Lintel Specification**
- ✓ **Accelerated Weather Tested**
 - Saturated Freeze-Thaw
 - Bond Strength - Pre & Post Weathered
 - Impact Strength - Pre & Post Weathered
- ✓ **Austenitic Stainless Steel**
 - Grade 304 (1.4301) 316 (1.4404)
- ✓ **CE Marked**



Lintels tested by The
Building Research
Establishment



LUCIDEON

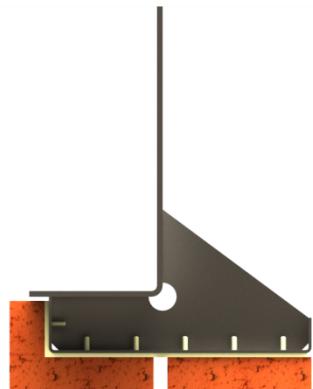
Brick Slip Bond Strength & Durability
Tested by Lucideon



BS EN 845-2
BS EN 1090



Meets the Requirement
of the NHBC Standards



Technical Data

The Fab-Steel Stretcher Bond Lintel Range is designed to allow an opening to be created in a single leaf of masonry, typically the external leaf of a cavity with an integrated brick slip soffit feature. The brick slip soffit feature is bonded to the lintel carrier using a specially formulated resin adhesive in a stretcher/running bond to match seamlessly with the facing brickwork and reveals where relevant.

Design & Testing

Both the lintels and the brick slips have been independently tested by Notified and Technical Approval Bodies to evaluate and validate the load capacity, physical performance and long term durability of all components. The lintels have been designed in line with the requirements of BS EN 845-2 & BS 5977-1 and tested in line with BS EN 846-9. The brick slips are tested using the guidance of ETAG 034 to evaluate the accelerated Freeze/Thaw weather resistance both saturated and dried of the slips bonded to backing structures of various materials including stainless steel and powder coated galvanised steel. The tests include the evaluation of bond strength and durability of the brick slips bonded to stainless steel where a service life of 60 years can be achieved. The bond strength and impact resistance of the brick slips was tested before and after the accelerated cyclic weather tests to validate the integrity and durability of the system. The tests included:

- Heat / Rain weathering to ETAG034 – Weathered samples only.
- Bond Strength testing using ETAG004 as guidance- Control and Weathered samples
- Impact testing to ISO 7892 - Control and Weathered samples



Agreement Certificate
16/5328

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BS EN ISO 9001:2008

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Installation

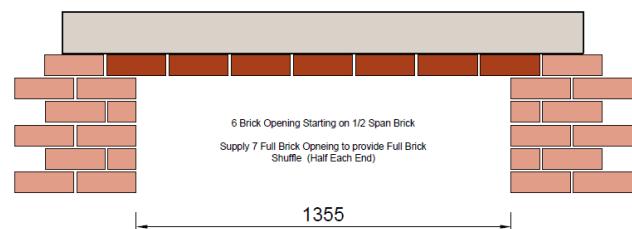
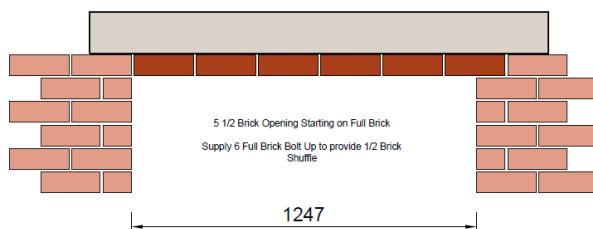
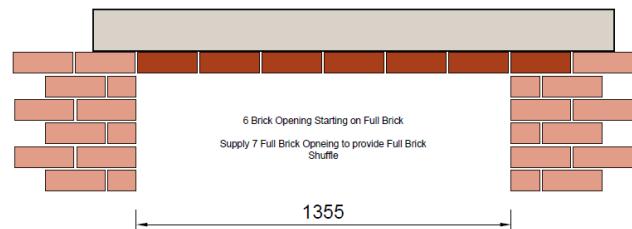
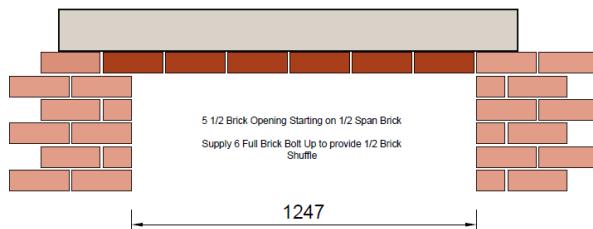
Lintels should always be propped during construction to achieve the safe working load capacities declared in the design tables below. A separate DPC is required above the lintel. Wall ties should be installed within 300mm of the lintel at a maximum of 450mm centres to ensure that the masonry carried by the lintel is restrained and any potential overturning and deflection is minimised.

The standard lintel range is supplied in 150mm incremental lengths. Lintels of alternative lengths and load capacities outside of the details provided in the following load tables can be designed and supplied to meet with project specific requirements. Lintels should be selected to ensure that a minimum of 150mm bearing either side of the opening is always achieved.

Shuffle Brick

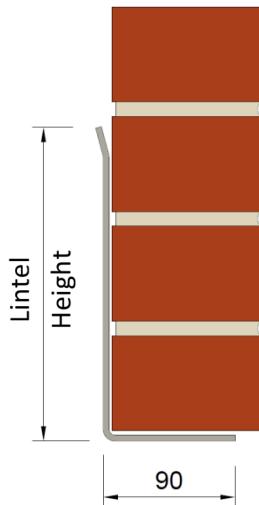
Fab-Steel brick faced lintels in Stretcher Bond are typically supplied with a 'Shuffle Brick' arrangement to allow the lintel to be coursed into the facing brickwork regardless of the bond pattern at the head of the opening (i.e starts on a half or full brick). Structural openings are most typically set at divisions of full or half brick dimensions, although we can adjust this to suit the bond pattern required. The illustration below demonstrates how the stretcher bond lintel should be set to accommodate for the various coursing conditions.

- Azure Brick Slip, Bonded to Steel Bolt Up Unit
- Standard Facing Brickwork



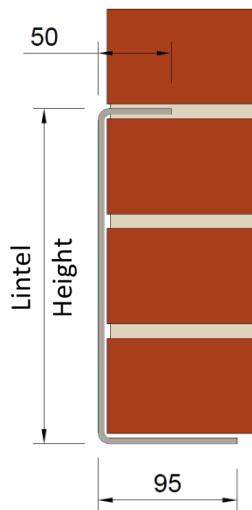
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Standard Duty 'L' Section Lintel



L Section Lintels						
Standard Lengths (mm)	600-1200	1201-1500	1501-2100	2101-3000	3001-3900	3901-4500
Total UDL (kN)	4	7	6	6	8	9
Lintel Height (mm)	88	131	167	215	215	215
Weight / Metre (kg)	2.90	3.58	4.16	4.93	7.37	9.79

Heavy Duty 'C' Section Lintel



C Section Lintels						
Standard Lengths (mm)	600-1200	1201-1500	1501-2100	2101-3000	3001-3900	3901-4500
Total UDL (kN)	9	12	12	11	13	13
Lintel Height (mm)	154	229	229	229	229	229
Weight / Metre (kg)	3.59	4.28	4.86	5.63	8.38	11.10

Alternative lintels can be designed to suit specific loading requirements outside of the standard range detailed in the tables above.