

This technical article provides additional guidance on concrete lintels faced with brick slips. It covers the following:

1. Executive summary
2. The product
3. Warranty position

## Executive summary

The industry is looking to alternative solutions to constructing traditional brick arch and soldier course detailing on steel lintels over external openings and has moved to using various products including the application of brick slips applied to concrete lintels.

The following identifies our warranty position and that unless sufficient proof of design and quality processes are in place, these products will not satisfy our standards.

## The product

These products may arrive on site in a multitude of shapes and sizes, with decorative slip facings adhered to a concrete lintel or cast into as part of the concrete lintel manufacturing process. The slips themselves can be cut from facing bricks or from other products, e.g., concrete bricks, artificial stone or even natural stone.

Some concrete lintel products use steel tangs, either flat plate or angles, projecting beyond the concrete component to act as the structural supporting mechanism – cast into the concrete backing.

These products are typically produced by a concrete lintel manufacturer or brick cutting companies – who either buy in the concrete lintels or manufacture them themselves and then adhere brick slips.

## Warranty position

The lintels should be tested as a 'whole product' and not in isolation.

Evidence of design testing and quality management processes must be provided for the whole assembly.

Manufacturers of these products must be able to provide evidence to the warranty provider that their product meets one of the following options:

Either:

1. Provide a third-party 'product conformity certification' (BBA, BDA KIWA, BRE or similar organisation acceptable to the warranty provider) for the product as a whole.

Or:

2. The product manufacturer or distributor must provide evidence to demonstrate the product (as a whole) meets the following:
- CE/UKCA marking: construction products must be supported by evidence of testing carried out on the product. A copy of the CE/UKCA marking and 'Declaration of Performance' will be required to be provided to the warranty surveyor.
  - Lintel: concrete structural lintels must be proven to conform with BS EN 845-2/BS 8297
  - Structure: the manufacturer must be able to provide a copy of structural design for the lintels using BS EN 1996, clearly indicating the maximum span, section, profile including reinforcement details and cover, minimum end bearing and maximum permitted loadings and confirming a 60-year life expectancy will be achieved
  - Test evidence: the manufacturer must be able to provide test evidence to demonstrate the lintels will be able carry the loads as per their design.
  - Adhesive: all adhesives must hold valid third-party accreditation (BBA or similar) and be suitable for the substrate. A minimum period of 15 years must be confirmed for the durability of the bond between the slip and the concrete lintel.
  - Slip facings: the performance standards for the slip facing product (to be adhered to the lintel) must be confirmed and be appropriate for the exposure location.
  - Evidence of a quality management process for the manufacture of the lintel and slip facings application must be provided that satisfies ISO 9001 or equivalent.
  - Structural steel: where a lintel includes structural steel which requires to be embedded in the supporting masonry, evidence must be provided that the steel is adequately protected against corrosion to a minimum rate of 450g/m<sup>2</sup> or austenitic stainless steel is used for sites in a coastal locations.

*Every care was taken to ensure the information in this article was correct at the time of publication (July 2021). Guidance provided does not replace the reader's professional judgement and any construction project should comply with the relevant Building Regulations or applicable technical standards. For the most up to date Premier Guarantee technical guidance please refer to your Risk Management Surveyor and the latest version of the [Premier Guarantee Technical Manual](#).*