

Keystone Lintels
Experience in
design, innovation,
and specification.

Product Standards

EN 845-2

Specification for ancillary components for masonry: Lintels

EN 846-9

Methods of test for ancillary components for masonry. Determination of flexural resistance and shear resistance of lintels

PD 6697

Recommendations for the design of masonry structures to BS EN 1996-1-1 and BS EN 1996-2

Product Certification

UKCA Marking: Lucideon – 1289

CE Marking: TZUS - 1020

Agrément: BBA – 98/3493

Agrément: BBA – 18/5499

Agrément: BBA – 24/7284

Agrément: BBA – 23/6860

ISO 9001: BBA – 18/Q059

ISO 14001: BBA – 18/E019

EN 1090 UKCA: BBA – 0836

EN 1090 CE: EuroFins – 0809

EN 845-2 Table C.1

L1	– Stainless Steel 316
L3	– Stainless Steel 304
L10	– Galvanised Steel 100 µm
L11	– Galvanised Steel 65 µm
L12.1	– Galvanised Steel 42 µm
L14	– Galvanised Steel 42 µm
L16.1	– Galvanised Steel 20 µm
L16.2	– Galvanised Steel 20 µm



Technical Guidance

Propping Steel Lintels to Prevent Rotation

Keystone Lintels are designed and tested to EN 845-2 and EN 846-9, having been independently assessed by Lucideon, Technical and Test Institute for Construction Prague (TZUS) and the BBA for compliance to Construction Product Regulations and Building Regulations. Keystone lintels are manufactured from high quality grade pre-galvanised mild steel and are available also in austenitic stainless steel grade 304 or grade 316.

Lintels must be installed according to our published guidelines (Refer to the Keystone lintel manual). Lintels should have sufficient end bearing, placed onto a mortar bed, ensuring the lintel is level along its length and width.

Propping of a steel lintel can also be introduced to facilitate the speed of construction.

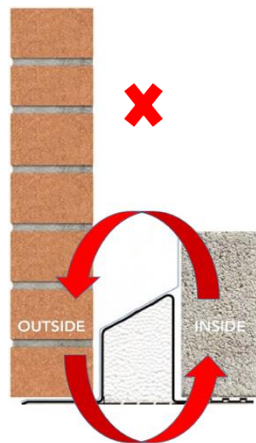


Figure 1



Figure 2

- It is important to apply an initial masonry load onto the lintel to a height of 225 mm before the installation of any suitable prop.
- To prevent rotation of the steel lintel (Fig 1) during construction, both leaves of a cavity wall should be raised simultaneously, and to avoid excessive eccentricity of loading a maximum height difference of 225 mm should be maintained.
- It is recommended to position a timber plank beneath the steel lintel to prevent point loading that could occur when utilizing props (Fig 2).
- Suitable props must be tight fitting and at centres not exceeding 1200 mm.
- It is important to note that newly constructed masonry should not exceed a rise of 1500 mm per day to avoid overstressing mortar.
- Any props installed should remain in place until the masonry above the lintel has cured. This curing period will depend on environmental factors and/or mortar type used.
- When introducing roof loads, it is essential that any props installed below a steel lintel remain in place until the masonry above has cured and that a continuous wall plate has also been established prior to roof installation.

Suitability of props is the responsibility of site management.

For further information please contact Keystone Lintels technical team.