

Steel Lintel Installation Instructions

Handling

Lintels are delivered to site or to a merchant's yard and are labelled, which provides a description of the lintel and basic measurement details. Lintels are supplied with a semi punched or expanded mesh to the appropriate lintels to provide a suitable substrate for plastering. Reasonable care should be taken during unloading stacking and storage to avoid damage to the lintel leaves, plaster key and corrosion protection. Lintels should be stored off the ground in such a manner as to avoid the risk of either mechanical damage or contamination by corrosive substance. Lintels that have suffered deformation to the leaves, the plaster key or major damage to the protective coating must not be used until the lintel has been repaired. Any operation likely to drain the protective coating or impair the strength of the lintels (e.g. cutting, welding or drilling) should not be undertaken.

Installation

Lintels must be installed with at least the minimum end bearing dimension of 150mm for spans up to 2250 and 200mm thereafter, be fully bedded on bricklaying mortar on full sized masonry unit. Lintel up stands should be located centrally within the cavity. In cavity walls the inner and outer leaves supported by the lintel must be raised together to avoid excessive eccentricities while filling vertical joints. Masonry should not overhang either lintel flange by more than 25mm. Normal precautions must be taken in cavity wall construction to prevent mortar dropping through the cavity and onto the lintels. Lintels should be suitably propped if applying floor of roof loads before mortar has fully cured.

Point loads and concrete floor units should not be applied without prior consultation with Steelite technical department or a structural engineer.

DPC

The lintels must be used in conjunction with an appropriate damp-proofing course, to deflect any water running down the wall clear of the lintel. The cavity tray must be installed in accordance with normal good practice. It must fully protect the lintel and extend the lintel by a minimum 100mm beyond the end of the lintel, or 25mm beyond any cavity closer, whichever is greater.

Assembly

Lintels supplied in sections will have matching endplates at the join and should be joined together with the bolts provided when raised into position.

Posts

The support posts are supplied with an open end to locate over the lintel studs and a base plate which is fixed to a solid pad. The base plates should be bolted down on top of solid footings at least 300mm below finish floor level. The base plate is normally 10mm thick with 4 No. 14mm dia holes provided. The solid Pad can be made up of the 300mm cavity wall from the foundations filled with concrete or 300mm wide solid block work from the foundations. The post should locate just inside the outer leaf as to line up with the outer window frame and should be kept vertical. Provide 25mm insulation between the standard 75mm dia post and the inner leaf, where the post is inside the cavity to prevent a cold barrier.

Note

Lateral restraint must be incorporated in the roof design.

Contact

For further information or advice please call our office on 045 524307 or mail info@steelite.ie