



Installation Guides

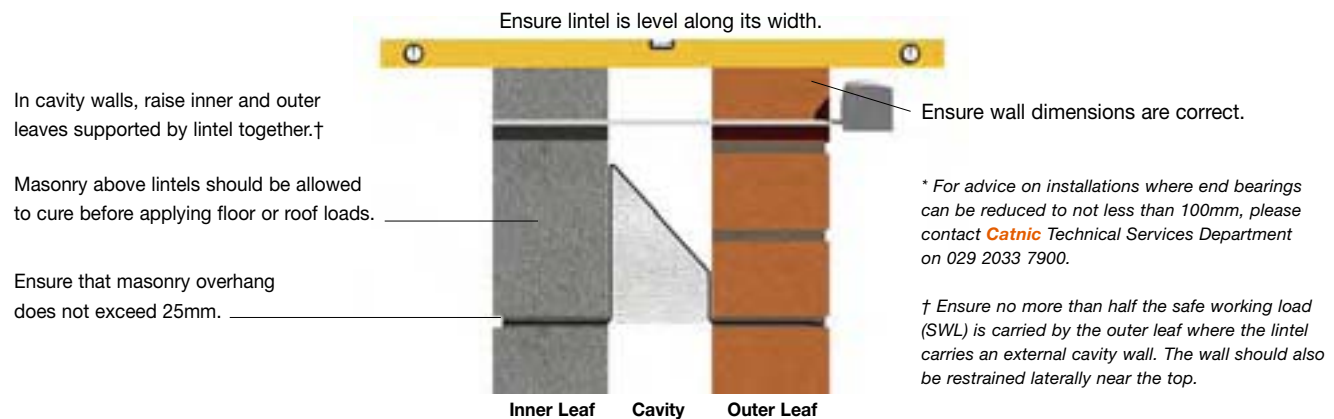
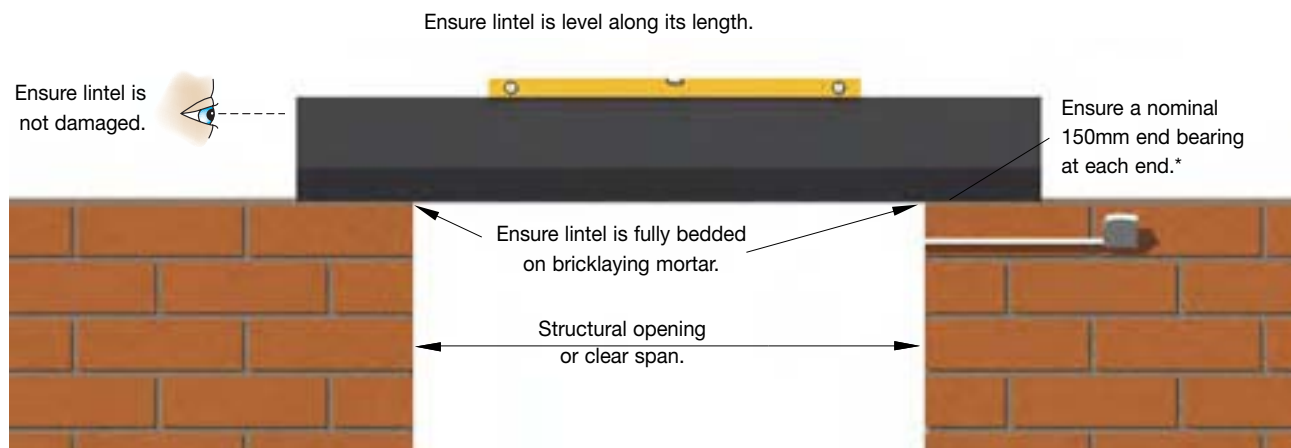
Catnic is committed to trouble free installation



Installation

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Installing a Cavity Wall Lintel



Do

- Install a separate DPC in severe exposure conditions. A **Catnic** Cougar Open Back lintel with an additional DPC membrane installed in accordance with normal practice provides the best possible protection (page 76)
- Locate the window/door frame so that the drip on the front of the lintel projects forward of the drip on the front of the frame. It is good building practice to insert a flexible joint between the lintel and the top of the frame
- Ensure that timber floor joists and roof trusses have a full block depth between them and the lintel flange on Cougar Open Back Lintels
- Refer to the **Catnic** 'How to Install a Lintel Supporting Concrete Floors' or the Steel Lintel Manufacturers Association guidelines (available on request) when using CH & CX Open Back Lintels to support concrete floors
- Consider the use of our soffit cladding for all coastal sites (refer to page 65)

Do not

- Use damaged lintels
- Apply point loads without prior consultation. Where the loading or a substantial part of it is applied as concentrated loads, each concentrated load must be supported over a length of lintel of not less than 200mm. In such cases, the total loading must not produce bending moments or shear forces greater than those produced by the uniformly distributed loads specified in the relevant data tables
- Allow blockwork to overhang the lintel by more than 25mm
- Apply concrete floor loads without ensuring that the total loads are checked by a structural engineer, or by **Catnic** Technical Services
- Do not cut CG type lintels under any circumstances
- Apply point loads directly on lintel flanges

Installing a Cavity Wall Lintel

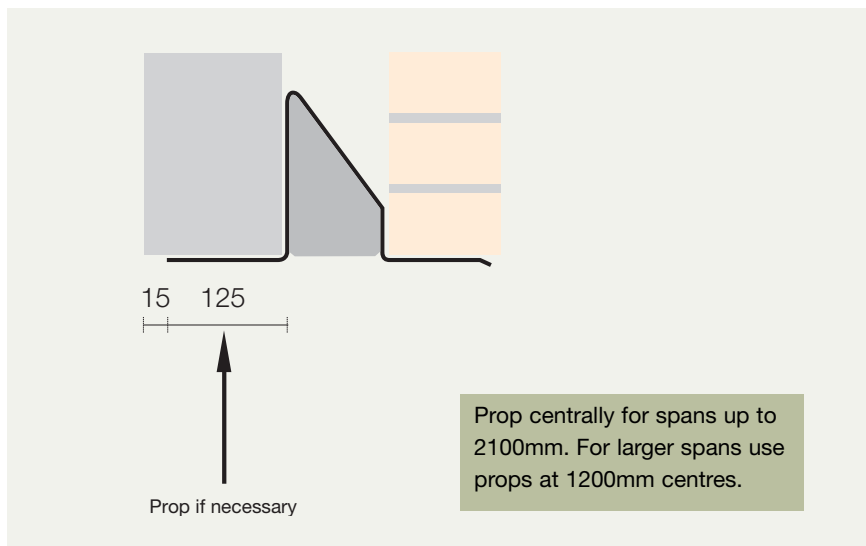
cougar Open Back - Wide Inner Leaf lintels used with 140mm dense blocks

To ensure the flanges are equally loaded the Code of Practice should be strictly adhered to when building the masonry

i.e. one row of blocks should be raised on the inner leaf, then three courses of brick on the outer leaf. Wall ties should then be installed and another row of blocks on the inner leaf followed by three courses of brick on the outer and so on.

This process ensures that the lintel flanges are equally loaded and helps prevent rotation.

The open back lintel should also be suitably propped during construction when being used with wide dense blocks.



Propping

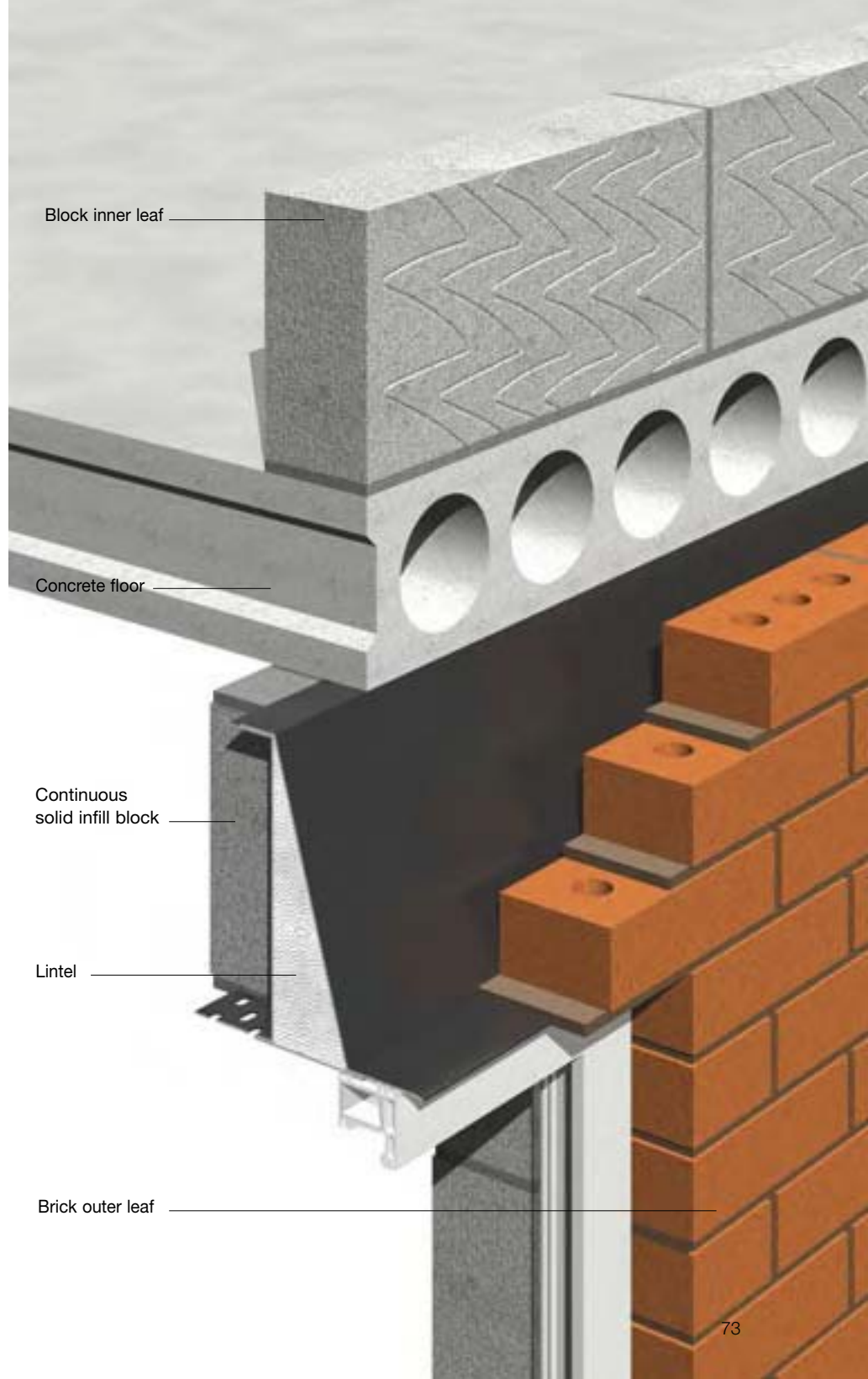
- When propping, a horizontal board should be placed along the underside of the lintel soffit, this will prevent any point loading, which could cause localised deformation of the lintel. On small openings a single prop should be placed centrally within the openings and wedged into place. The prop can be removed after the wall ties are effective. The number of props used should be increased for larger openings.
- The 140 mm dense blocks should be installed tight against the inner web of the lintel.
- Therefore, the overhang of blockwork on the lintels inner flange could be measured at 15mm.
- If after considering the above information it is not practicable to carry out the mentioned construction process on site, we are able to offer an alternative box style lintel in place of open back. These products are more robust due to the design of the box section and therefore, open to greater abuse on site during the construction stage.

Installing a Lintel Supporting Concrete Floors

In addition to the **Cavity Wall Installation Guide**, please read the following for installing concrete floors with **Catnic** steel lintels

- Check that the correct lintel is being used according to the manufacturer's lintel schedule/design criteria
- Bed the lintel on full blocks and allow mortar to cure before applying concrete floor loads
- Raise both leaves of cavity wall together and allow masonry to cure sufficiently before applying heavy loads. Alternatively prop the lintel if large loads are to be applied to fresh masonry
- When using the **Catnic** CH & CX Open back range with concrete floors, always ensure that the blockwork is built tight against the inner vertical face of the lintel, and that a mortar joint is added to the top of the blockwork so that the floor units have an even spread over the inner flange of the lintel
- Avoid shock loading lintels during the installation of concrete floor units and also any sideways loading while being lifted into position
- Precast flooring units should be laid on a mortar bearing of the full inner leaf wall width and should not be dragged over supports
- Avoid loading newly laid floors with building materials
- Lintels must be built-in as illustrated, ensuring that the blockwork infill is well-jointed during construction and compatible with the strength of the masonry above

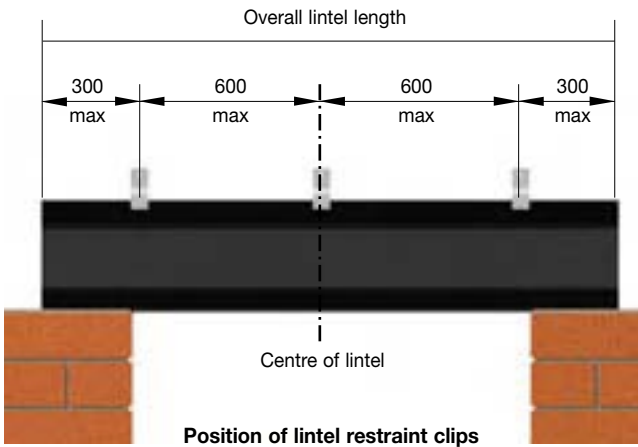
Typical CX Lintel, supporting a concrete floor



Installing a Timber Frame Lintel

In addition to the Cavity Wall Installation Guide, please read the following for **Catnic** timber frame lintel installation

- When propping, a horizontal board should be placed along the flat underside of the lintel soffit; this will prevent any point loading, which could cause localised deformation of the lintel flange.
- On small openings a single prop should be placed centrally within the opening and gently wedged into place.
- The number of props should be increased for larger openings. Generally props should be installed at maximum centres of 1 metre.
- The prop can be removed after the mortar has cured and the wall ties become effective.
- A timber pinch batten should be fixed at the heel of the timber frame lintel in order to minimise any rotation.
- **Catnic** timber frame lintels (e.g. CTF's) are intended only to support an outer skin of brickwork where it is tied to an inner skin of timber frame and must be suitably propped during construction.

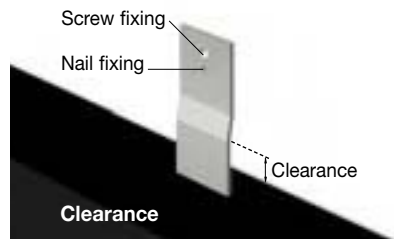


Note: lintels should be suitably propped during construction. Lintels for timber frame construction are supplied with lintel restraint clips (free of charge), which must be screw or nail fixed to the timber frame to allow for differential movement between the timber structure and the brick facing.



Typical application showing lintel over window

Lintel Length (mm)	Number of clips
Up to 1800	3
1950-3000	5
3300-4200	7
4575-4800	9



Lintel code	Length (mm)	Clip fixings
CTF5, 7 & 9	750-3600	50mm x 3.35mm diam. Plain head galvanised nails
CTF5, 7 & 9	3900-4800	38mm x No10 RD/HD sherardised wood screws
CN23	Up to 4800	38mm x No10 RD/HD sherardised wood screws