

Installation Guide

Kooltherm[®] K12 Framing Board

Wall Insulation



Kooltherm[®]


Kingspan[®]

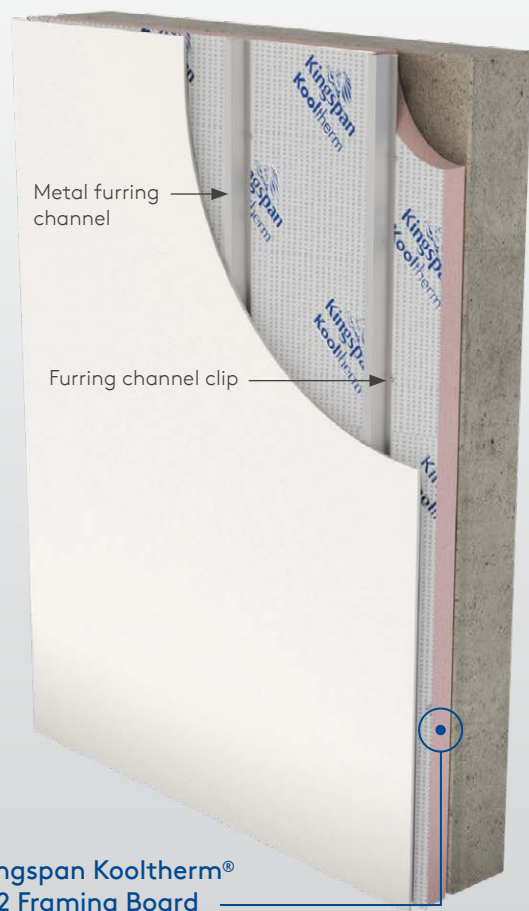
Kooltherm® K12 Framing Board

Product Description

Kooltherm®

Kooltherm K12 Framing Board is a super high performance, fibre-free rigid thermoset phenolic insulation, faced on both sides with a low emissivity composite foil autohesively bonded to the insulation core during manufacture. This reflective low emissivity surface improves the thermal resistance of a cavity adjacent to the board.

Kooltherm K12 is manufactured without the use of CFCs/HCFCs and has zero Ozone Depletion Potential (ODP) and low Global Warming Potential (GWP).



Kingspan Kooltherm®
K12 Framing Board

Figure 1.
Concrete Wall Installation (Clip/Channel System)

- High performance rigid thermoset phenolic insulation
- Fibre-free, closed cell insulation core
- Can be used between wall framing or as continuous insulation
- Can eliminate thermal bridging
- Easy to handle and install
- Ideal for new build or refurbishment
- No CFC or HCFC used in manufacture
- Has zero ODP and low GWP
- NZBC and AS/NZS 4859.1:2018 compliant
- CodeMark-certified for NZBC compliance



Kooltherm® K12 Framing Board Installation Instructions

Insulation to Concrete Wall (Clip/Channel System)

See Figure 1.

1. Install chosen furring channel clips at required spacing for plasterboard lining.
2. Fit Kooltherm K12 over furring channel clips by pushing over the clips to abut the wall, and so that the wings of the clips penetrate the board. Care should be taken to avoid the foil facing of the Kooltherm K12 separating from the insulation core by neatly trimming the foil face at the point where the furring channel clip penetrates the insulation. See Figure 2.
3. Butt join boards of Kooltherm K12 to provide a continuous insulation layer.
4. Install furring channels by clipping into channel clips. Furring channels should be tight against the face of the Kooltherm K12. Where furring channels are not tight to the insulation contact Kingspan Insulation Technical Service for further advice.
5. Install plasterboard lining.

Taping

It is considered best practice to tape joins of Kooltherm K12 boards in this system with 48 mm wide reinforced aluminium foil tape. When taping a plastic squeegee or blade must be used to apply appropriate pressure to the tape. Surfaces must be dry and free from dust, oil or grease prior to taping.

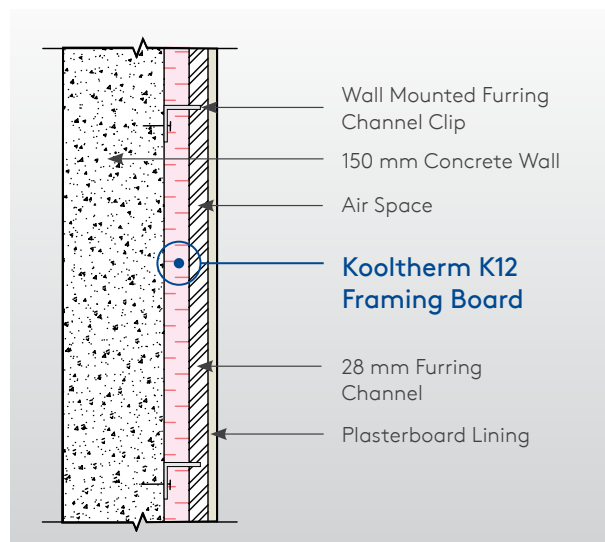


Figure 2. Side elevation of Kooltherm K12 Framing Board clip-and-channel system

Insulation between Timber Wall Studs

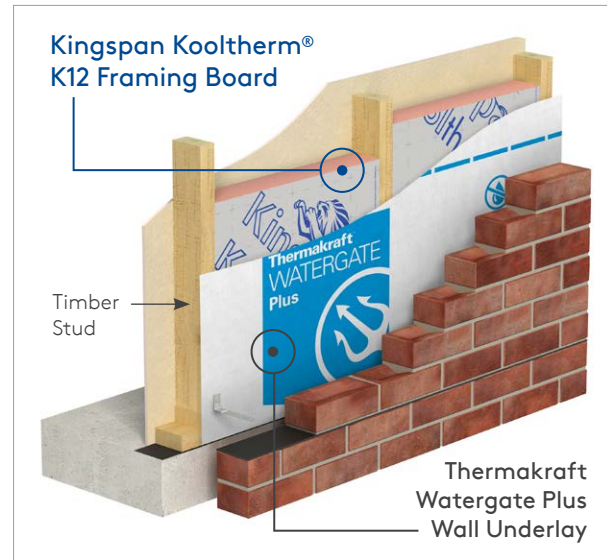


Figure 3. Kooltherm K12 Framing Board fitted between timber wall studs.

1. If insulation boards are to be fitted so that they are flush with the inside surface of the timber studs, nail treated battens to the side of the studs, to provide a 'stop' to prevent the insulation boards from moving within the stud cavity.
2. This 'stop' should be positioned to allow the insulation boards to finish flush with the inside surface of the studs.
3. Insulation boards may be temporarily held to the 'stop' battens with large headed clout nails.
4. The boards will be further restrained by the plasterboard/insulated plasterboard lining, fixed to the inside face of the studs.
5. To avoid air leakage, any penetrations through the insulation (electrical sockets, plumbing and wiring etc) should be sealed with flexible sealant or equivalent, or a combination of flexible polyurethane foam and flexible sealant or equivalent.
6. Any remaining gaps between boards/sheets of insulation should be filled with flexible sealant or equivalent, or a combination of flexible polyurethane foam and flexible sealant or equivalent. Do not leave gaps or voids between the insulation boards, which would negatively impact the thermal efficiency of the system.
7. If the insulation boards are to be fitted so that they are flush with the outside surface of the timber studs, tight up against pre-installed rigid sheathing or rigid air barrier, insulation boards must be cut and fitted in the spaces between the studs.
8. Once the boards are fitted in place, nail treated battens to the side of the studs, to provide a 'stop' to prevent the insulation boards from moving within the stud cavity.

Kooltherm® K12 Framing Board Installation Instructions

9. In all cases, measure the distance between studs before cutting Kooltherm K12 to size, as spacings can vary.
10. Cutting should be carried out either by using a fine toothed saw, or by scoring with a sharp knife, snapping the board over a straight edge and then cutting the facing on the other side. Ensure accurate trimming to achieve close-butting joints and continuity of insulation.
11. Ensure there is a tight fit between the boards and the adjoining studs and other timbers, and fill all gaps with expanding polyurethane foam.

Handling and Storage

The polythene packaging of Kingspan Kooltherm should not be considered adequate for long term outdoor protection. Ideally, boards should be stored inside a building. If, however, outside storage cannot be avoided, then the boards should be stacked clear of the ground and covered with a polythene sheet or weatherproof tarpaulin. Boards that have been allowed to get wet should not be used.

Kooltherm K12 Framing Board should be protected from getting wet during periods of inclement weather prior to the application of the weatherproof render.



Product Warranty

Standard Kingspan Insulation Warranty applies. Refer to Kingspan Insulation Warranty statement for further details. This is available online at kingspaninsulation.co.nz; or call us on 0800 806 595; or email info@kingspaninsulation.co.nz

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Furthermore, as the successful performance of the relevant system depends on numerous factors outside the control of Kingspan (for example quality of workmanship and design), Kingspan shall not be liable for the recommendations in that literature and the performance of the Product. For other applications or conditions of use, Kingspan Insulation offers a Technical Advisory Service, the advice of which should be sought for uses of Kingspan Insulation products that are not specifically described herein. Please check that your copy of the literature is current by contacting us or visiting www.kingspaninsulation.co.nz E&OE

