

Cavity Wall Insulation

Cavity wall insulation will prevent heat transfer and build-up to the inner leaf of sun exposed walls. Moisture within the cavity is prevented from condensing onto and penetrating through the inner leaf when IsoBoard is installed. The insulation restricts heating ingress to temperature controlled and passive cooled environments.

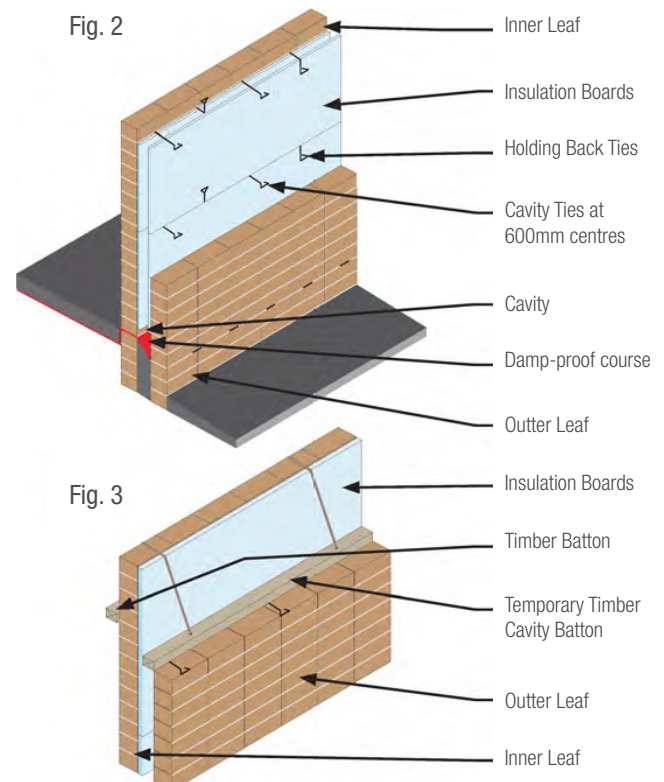
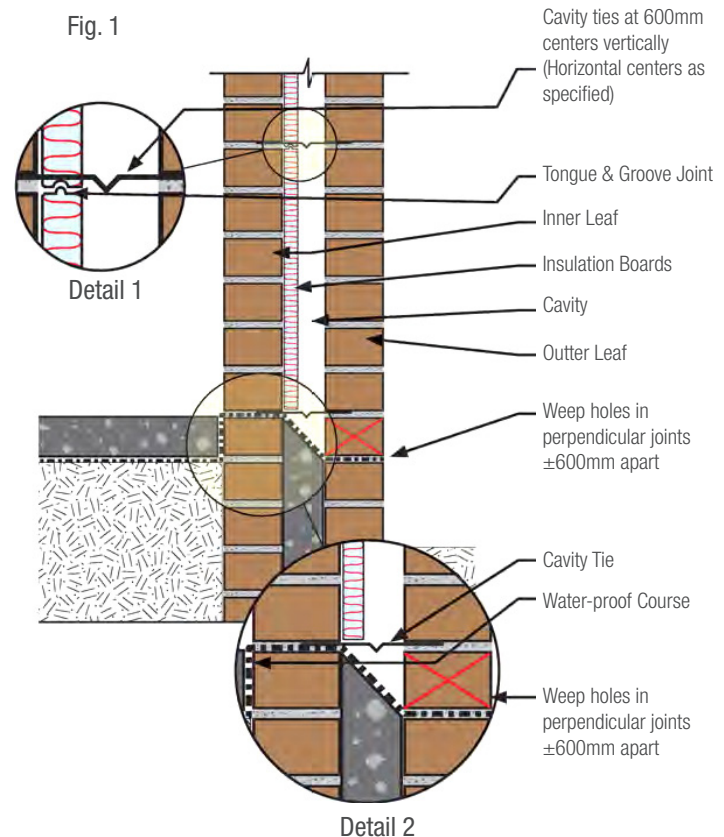
As a general rule for cavity wall applications, 30mm IsoBoard will be effective in dwellings and 40/50mm in temperature controlled buildings.

Typical uses for IsoBoard in this application

1. Residential homes designed for comfort and energy efficiency;
2. Cold storage applications;
3. Designs which function with minimum of mechanical cooling;
4. Passive cooled building systems;
5. Agricultural, pharmaceutical, medical and commercial applications with temperature controlled environments requiring stable internal temperatures.

Installation guidelines

1. Walls are constructed, leading with the initial 1.4m of inner leaf containing the first two rows of wall ties, spaced 600mm apart;
2. Space the cavity ties, with holding back ties in between, to be embedded as per building standards (see detail 1 & figure 2).
Board support ties to be 2mm galvanised wire with fish-tail ends;
3. Excess mortar to be cleaned from the cavity face of the leading leaf;
4. The initial two rows of IsoBoard sheets are placed on edge against the leading leaf with shiplap joint installed to shed moisture away from the inner leaf, or with tongue facing upwards, and secured with the holding back ties (see figure 2);
5. A run of boards may commence below a damp-proof course level to provide some edge insulation for the floor;
6. IsoBoard can be placed in a potentially damp position without losing excessive thermal performance in the long term;
7. Construct the outer leaf taking care to keep the residual cavity clean and secure the cavity ties. Please note that the construction of a cavity wall with insulation requires competent supervision, to ensure that the cavity is cleaned and the cavity ties properly secured (see figure 3);
8. IsoBoard is easily trimmed on site using a sharp blade or hack-saw to neatly notch board edges around wall ties and fit snugly around window and door frames.



Suggested bill of quantity specification

“IsoBoard” high density 32-36 kg/m³ rigid extruded polystyrene 100% closed cell insulation board of __mm thickness and 600mm width with tongue and groove/butt-ended joints fixed to inner skin of block cavity wall such as to shed moisture. Galvanized mild steel ties size __mm with fish tailed ends built into horizontal joints in wall at maximum 300mm centres along top and bottom edges, including neatly notching board edges around wall ties, window and door frames. Alternate ties are used to secure boards to the inner leaf.

Ordering information

- 1,2m and 2,4m lengths are practical for this application.
- Thicknesses range from 25mm, 30mm, 40mm up to 80mm, with board thicknesses above 50mm made to order.
- IsoBoard is always 600mm in width, with a tongue and groove or shiplap edge profile so that adjacent boards interlock.
- Please consult a representative for the appropriate thickness of IsoBoard for use in your region.



Double layer wall insulation, Maun Hospital



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