



MANNOK ISOCAVITY

FULL FILL CAVITY WALL INSULATION GUIDE

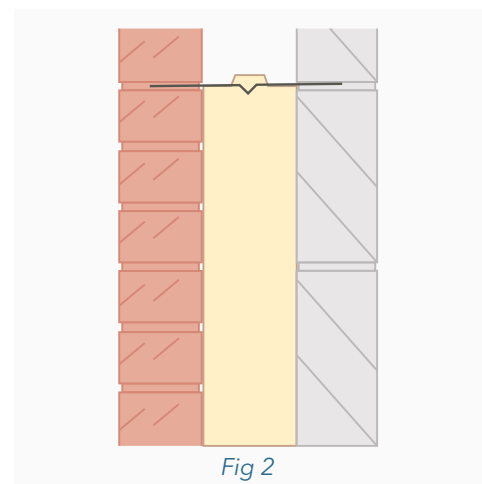
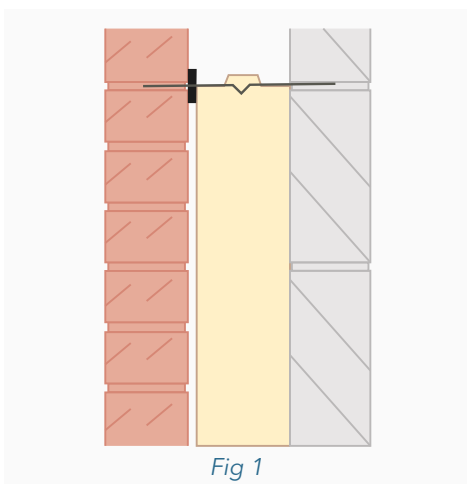
1 GENERAL

- 1.1. The product should be stored, handled and installed in accordance with the Certificate holder's instructions and this Certificate.
- 1.2. It is recommended that the inner leaf is constructed ahead of the outer leaf, as the boards are restrained to the cavity face of the inner leaf. It is essential that the spacing of wall ties/clips allows one long edge of each full-length board to be secured at a minimum of two points.
- 1.3. Vertical joints in the boards must be staggered and all joints tightly butted. Where protrusions occur in the cavity, the boards should be carefully cut to fit.
- 1.4. If installation of the boards is terminated below the highest level of the wall, the top edge of the insulation must be protected by a cavity tray and alternate perpend joints raked out, to provide adequate drainage of water from the tray.
- 1.5. Wall corners must be constructed in accordance with section 2.11 and must incorporate a vertical dpc as shown in Figures 3 and 4.

2 PROCEDURE

- 2.1. A section of the inner leaf is built, with the first row of wall ties at approximately 600 mm horizontal spacing where the insulation is to begin. The wall ties should not be placed directly on the dpc. The first run of boards should commence a minimum of 150 mm below the dpc level to provide some edge insulation for the floor. The boards must fit flush against the internal leaf, maintaining up to a 10 mm residual cavity where specified between the insulation board and the external wall leaf.
- 2.2. The leading leaf is then built up to the required height, with wall ties placed at a vertical spacing of 450 mm, ensuring the drip of the tie is located halfway across the cavity width. Excess mortar should be cleaned from the cavity face of the leading leaf, and the boards placed on the wall ties behind the retaining clips (where a residual cavity is used), to form a closely butt-jointed run.
- 2.3. The second row of wall ties is fitted to retain the tops of the boards. It is essential that all wall ties slope downwards towards the outer leaf (see Figures 1 and 2) and are placed at centres not exceeding 900 mm*, to ensure that each board is secured at a minimum of three points. It is also important that the first row of insulation boards is not in contact with the ground or all board edges are sealed.

* Where buildings need to comply with NHBC Standards, the spacing should be no more than 600 mm.



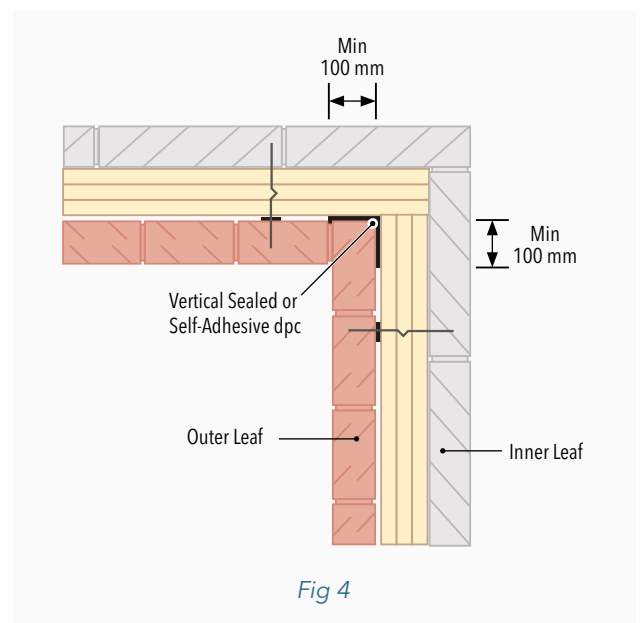
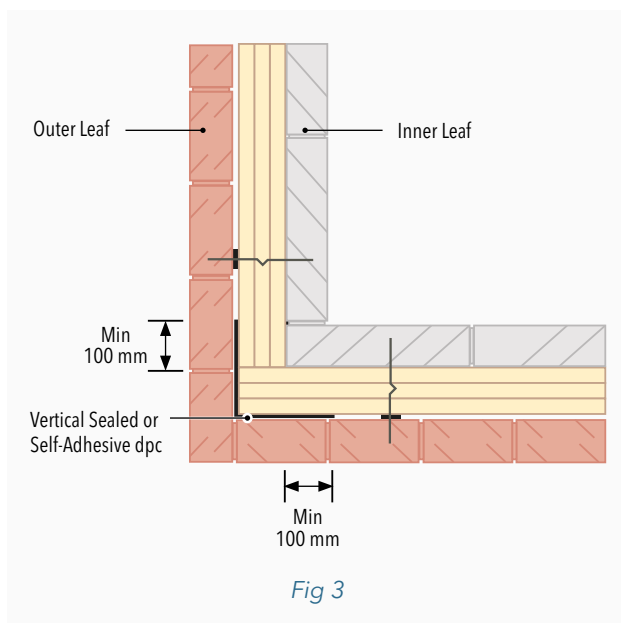
- 2.4. Additional ties may be required to satisfy the structural requirements of BS EN 845-1 : 2013, BS EN 1996-1-1 : 2005, BS EN 1996-2 : 2006 and BS EN 1996-3 : 2006 to ensure adequate retention of boards or cut pieces. 14.5 The other leaf is built up to the level of the top of the boards.
- 2.5. All boards should be interlocked , with vertical joints staggered. Insulation boards and wall ties should be staggered as construction proceeds and carried up to the highest level of the wall, except where protected by a cavity tray. All boards require slots to be cut in the top tongue, to allow for placement of the wall ties (including insulation retainers).

MORTAR DROPPINGS

- 2.7. After each section of the leading leaf is built, excess mortar should be removed from the cavity face and mortar droppings cleaned from exposed edges of the installed board, before installation of the next run of boards. Use of a cavity board or a cavity batten will protect the installed board edges and help to keep the cavity clean as the following leaf is built.

CORNERS

- 2.8. Boards should be arranged in a 'blocking' arrangement to ensure staggered corner edge joints. The boards at the corner should be butt-jointed. All presenting edges must be flush-cut by removing, at minimum, the groove or tongue. It is important that all cuts are accurate to ensure all edges are butted tightly with no air gaps, thus achieving continuity of the thermal envelope around the corners (figures 3 and 4). If the tongue of the board is exposed at the corner edge, this should be removed using a sharp specialist insulation saw or insulation knife. There is no need to cut or fill the groove of the board when it is exposed at the corner edge.



- 2.9. Where the boards 'interlock' as part of the blocking arrangement, a section of the tongue at the top of the lower board should be cut and removed, to ensure a flush fit with the board above.
- 2.10. When positioning the corner boards in a blocking arrangement, it is important to maintain the staggered pattern required to avoid vertical joints on each row. Corner boards should be cut to size where necessary, taking into consideration the butt-joint, to achieve this.
- 2.11. All corner details should incorporate a vertical sealed or self-adhesive dpc with a minimum 100 mm overlap beyond the board ends at all courses (see Figures 3 and 4). To achieve this overlap, the width of the dpc should be selected based on the thickness of the board being installed.

WALL OPENINGS

- 2.12. Where openings such as doors and windows are in close proximity, it is recommended that a continuous lintel or cavity tray is used. Individual lintels or cavity trays should have stop ends and be adequately drained. Insulation boards should be cut to butt tightly against the cavity barrier/closer/dpc.

CUT PIECES

- 2.13. The product can be cut using a sharp knife or fine-toothed saw to fit openings, eg around windows, doors and airbricks. It is essential that cut pieces completely fill the spaces for which they are intended and are adequately secured.

PROTECTION

- 2.14. Exposed areas of boards should always be covered at the end of a day's work or in driving rain.
- 2.15. All building involving the product, particularly interrupted work, must conform to BS EN 1996-2 : 2006, Sections 3.2 Acceptance, handling and storage of materials and 3.6 Curing and protective procedures during execution.