

2L2

THERMAL INSULATION

SHORT INSTALLATION SPECIFICATION FOR ALREFLEX 2L-2

IMPORTANT: To be read by the site agent and bricklayers before the installation of Alreflex 2L-2 in conjunction with the relevant schematic drawings showing roll widths, wall-tie centres, details at corners, reveals, window heads, meter boxes

- 1 Wall to be built up all around the building to a height shown on the Installation Layout i.e. 8-blocks or (for installation onto brickwork) 24-bricks if possible with 2L-2 wall-ties at normal horizontal centres and vertical centres as shown on the drawing. **N.B. In windy conditions a minimum of 3-blocks or 9 bricks can be built up.**
- 2 For the initial lift a roll width of 1200mm or 1500mm is used (except for ground bearing slabs cast against the blockwork as shown on sequence B6 where a standard 1050mm roll width can be used throughout) to suit the installation to the three wall-ties as shown **and to allow for the material to be dressed down to trench-block level to insulate the slab and block wall.**
- 3 After the wall-ties have set sufficiently the first width of 2L-2 should be installed as given in the "Schematic Drawing of the Installation Procedure" on Page 2 of this brochure.

- 4 The brickwork is then built up **to a maximum of one brick below the top wall-tie to allow for the 150mm weathered horizontal lap (see detail on Installation Layout Drawings).**
- 5 1050mm roll-widths are then used as shown (see Installation Layout) to the top of the building and installed from corner to corner or to reveals as given above and on the detail sheets.
- 6 Details for using special widths for the insulating dpc and at window heads are given on the detail sheet "Detail at Reveals, Window Heads, Cills and Cavity Closer".
- 7 At the top of the wall the 2L-2 is either dressed under the cavity closer or alternatively fixed to the top of the blockwork with clout nails incorporating our special blue plastic washers (see Detail at Window Head and Details at Gable Peak).

SAFETY WARNING!

As is the case with other types of wall-ties the Alreflex 2L-2 wall-ties have sharp protruding ends. Due care and attention must be exercised when installing and working around the ties. The use of eye protection is recommended.

Wall-ties with plastic tips on the ends are available if required.

General precautions with regard to prevention of fire, naked flames etc. Which have to be followed during the installation of ALREFLEX 2L-2

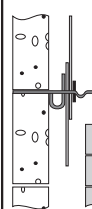
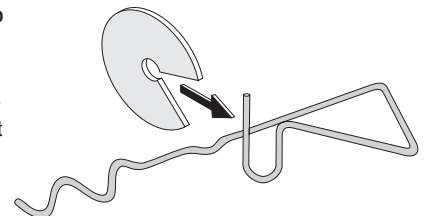
N.B. To be read by all personnel involved with the supervision and installation of Alreflex 2L-2 (including subcontractors such as plumbers etc.) before commencement of the installation of Alreflex 2L-2. See also information sheet "PLUMBERS DETAILS REGARDING THE INSTALLATION OF PIPING ETC. NEAR ALREFLEX 2L-2" enclosed with this brochure.

As is the case with other partial fill cavity insulation materials such as polystyrene, polyurethane etc. certain basic precautions must be taken against fire and the spread of flame and these are given in the BBA Certificate for the Alreflex products as follows:

1. No naked flame or sparks should be allowed near the material either in storage or during installation. This also means that after installation the cavity should not be reopened by for instance a plumber trying to "sweat" a pipe joint which may have broken in the cavity.
2. Cavity walls always have to have a cavity closer at the top of the cavity and around openings. This is required in all cases both to maintain the required insulation value and reduce the air ventilation against the spread of flame. i.e. the Alreflex 2L-2 BBA Certificate paragraph 6, states "If fire does penetrate into an unventilated cavity the amount of air present will be insufficient to support combustion" reducing flame spread.
3. The material must not be taken past fire stops or cavity closers and must be installed within 'cavity' area.
4. Alreflex materials have a class 1 spread of flame when tested on the foil faces.

Detail Wall-Tie and Clip

Clip installed horizontally and pushed back against 2L-2

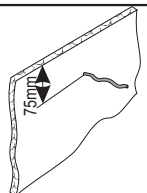


N.B.

During construction/installation detail at 2L-2 laps as shown above i.e. brick leaf always 1-brick lower to allow for 150mm 2L-2 lap.

N.B.

At all laps top edge of 2L-2 positioned 75mm (3") above top line of wall-ties. Retaining clip positioned after width above has been installed.



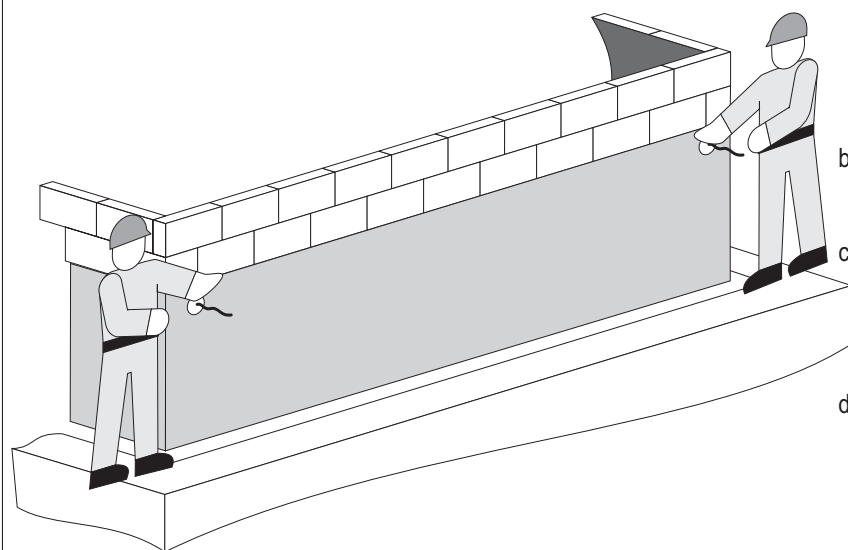
Installation of Wall-Tie and Fixing of Alreflex 2L-2

1. Install wall-tie with U-Spacer pushed up against face of blockwork.
2. Pierce 2L-2 on to tie and push up against U-Spacer.
3. Secure with clip.

2L2

THERMAL INSULATION

SCHEMATIC DRAWING OF THE ALREFLEX 2L-2 INSTALLATION PROCEDURE

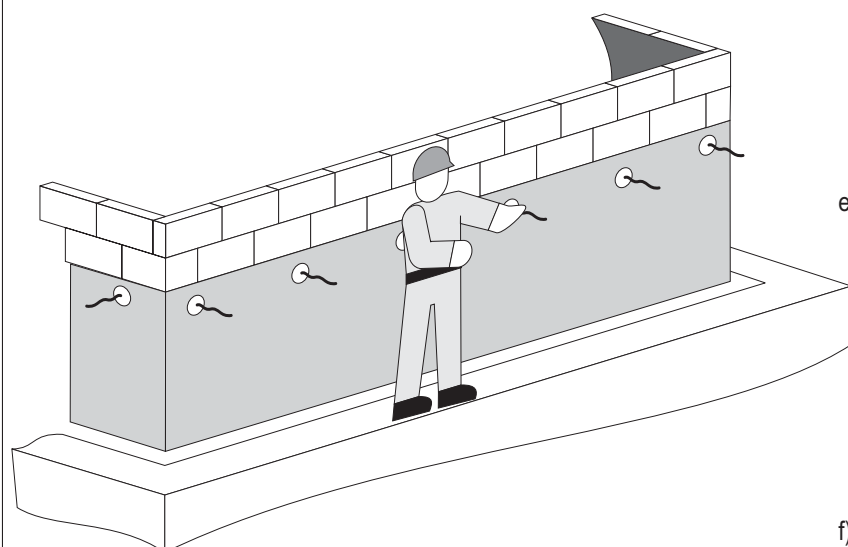


a) A length of 2L-2 should be cut from the roll sufficient to insulate a length of end gable wall from corner to corner. **In each case a sufficient length has to be cut to insulate the wall area and create the required 150mm vertical laps on the wall-ties (see Details At Corners). N.B. Do not attempt to install the material directly from the roll.**

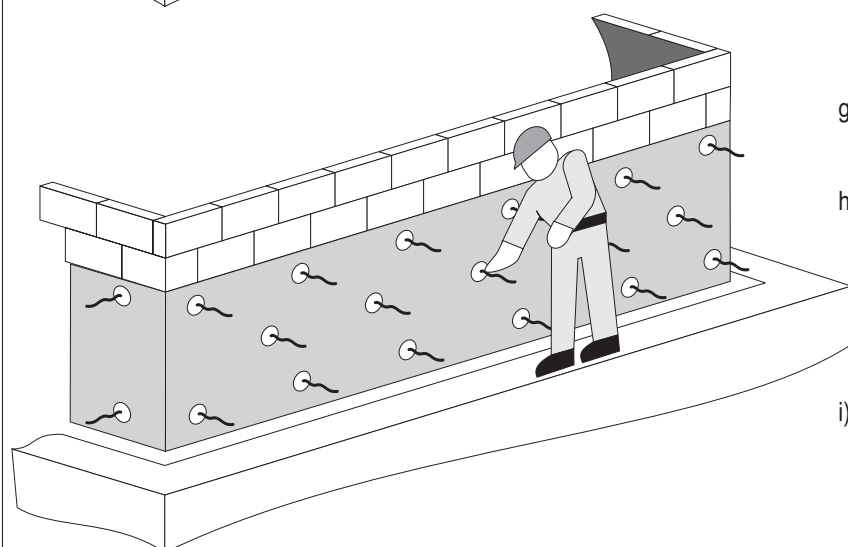
b) Small openings or where the roll partially covers the bottom of window areas can be cut out later (see Cill Detail).

c) The cut length of 2L-2 is tensioned-out over the end gable area by two bricklayers **with the foil face facing both of them and into the cavity (see sketch "Installation of Cut-Length of Alreflex 2L-2" on rear of page).**

d) Holding the ends of the tensioned 2L-2 each bricklayer positions the material onto the topmost end wall-tie only (see wall-tie detail) making sure that the top edge of the material is protruding 75mm (i.e. one course) above the tie and the vertical edge is a minimum of 75mm (3") past the end ties to create the required 150mm laps.



e) Whilst making sure that the top edge of the 2L-2 is always 75mm (i.e. One course) above the topmost wall-tie the bricklayers then move along the wall piercing the tensioned 2L-2 onto the topmost wall-ties only.



f) The material is then dressed down over the wall-ties below and secured against the wall tie "spacer loop" with the wall-tie clips as shown in the details below.

g) The bottom edge of the material can now be dressed down the cavity to trench block level to insulate the edge of the ground floor.

h) Lengths of 2L-2 are then installed around the building with 150mm vertical laps at joints as shown (see Vertical Lap Joint and Corner Detail) and with the chosen detail at reveals (see Alternative Reveal Details on sheet "Detail at Reveals, Window Heads, Cills and Cavity Closer").

i) If conditions permit the preferred wall height of 8-blocks (or 24-bricks) to be built then a second width of 2L-2 now 1050mm wide is installed around the building as given above and detailed on the Installation Sheet and Detail Sheets. **N.B. In windy weather it may be advisable to use shorter lengths of 2L-2 creating the 150mm vertical laps on the wall-ties at each joint.**

INSTALLATION LAYOUT FOR ALREFLEX 2L-2 & WALL TIES

Application to Blockwork u/s floor 32-courses = 2400 + G.F.

No screed or floor finish to ground floor

150mm cut block or 2-slip blocks at u/s first floor level

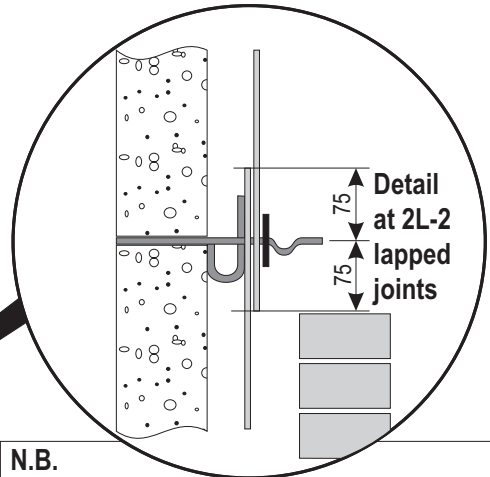
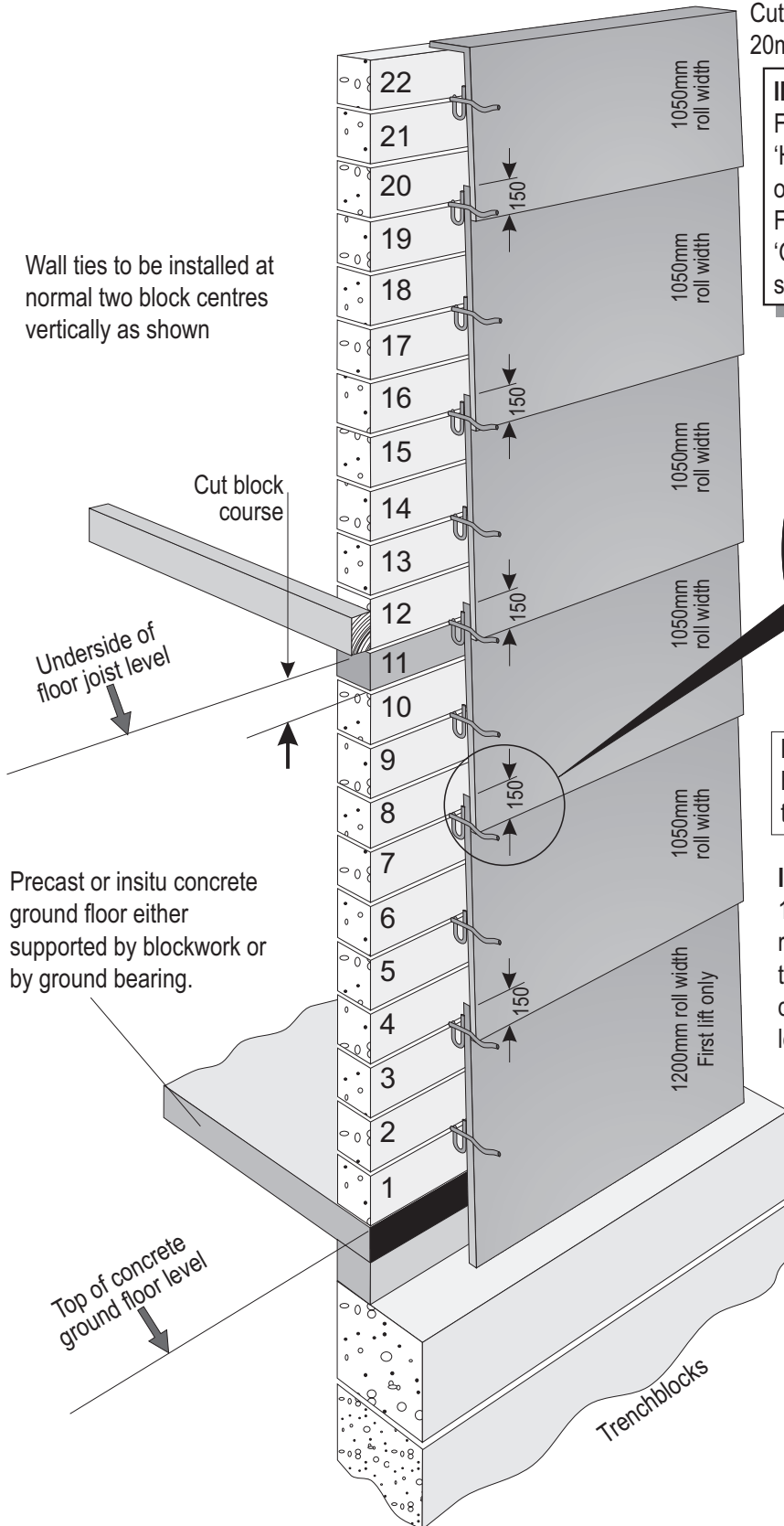
Cut and folded to sit
20mm under cavity closer

IMPORTANT - WALL TIES

For buildings up to two storeys in height use 2L-2 'Housing Ties' i.e. 2.8mm diameter stainless steel or 3.6mm diameter trigalv.

For buildings higher than two storeys use 2L-2 'General Purpose' i.e. 4.0mm diameter stainless steel.

Wall ties to be installed at normal two block centres vertically as shown



N.B.
Brickwork always one course lower than blockwork to facilitate lap-joint on wall-ties.

IMPORTANT
1200mm roll width is required for first lift only to allow 2L-2 to hang down to trench block level.

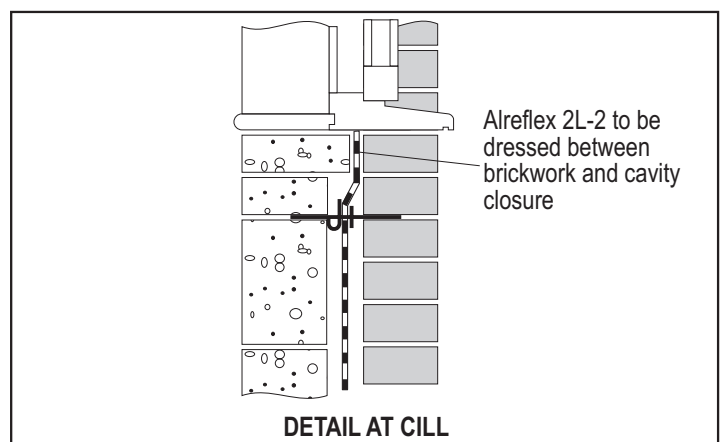
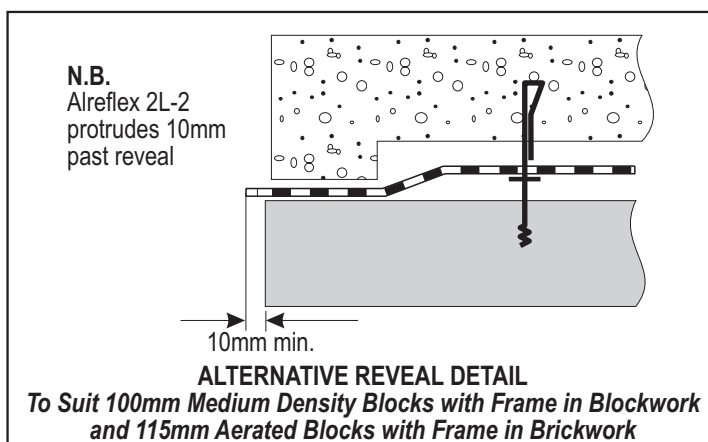
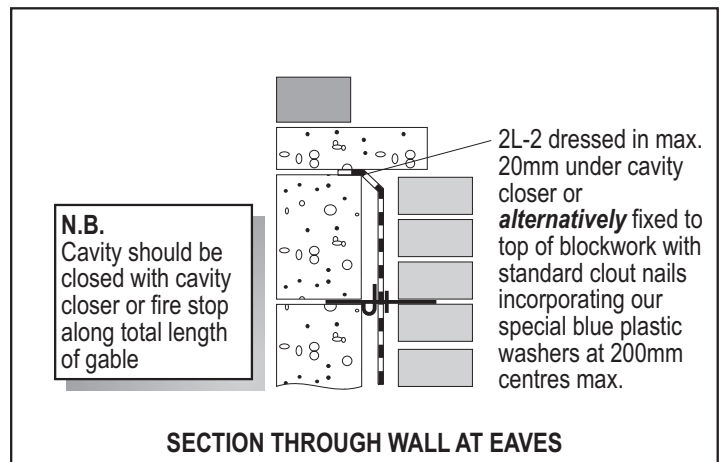
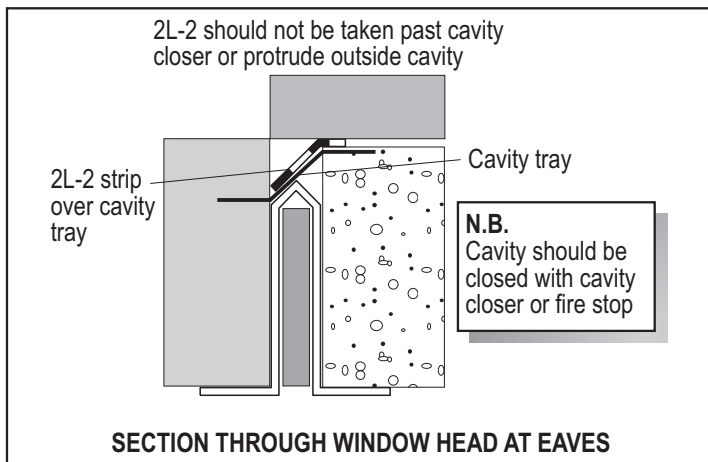
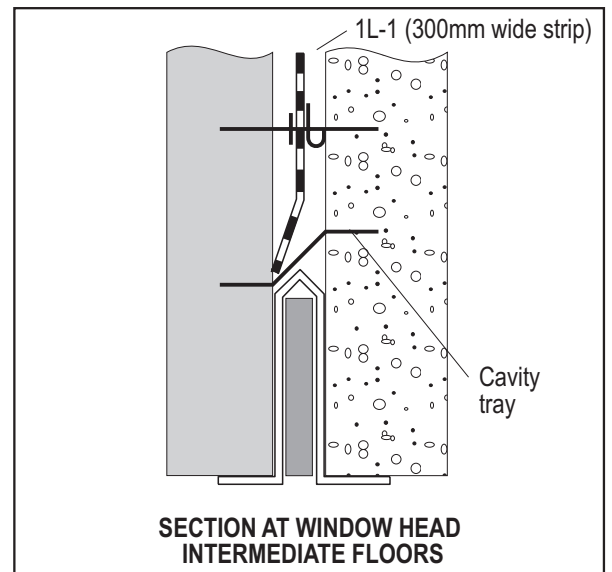
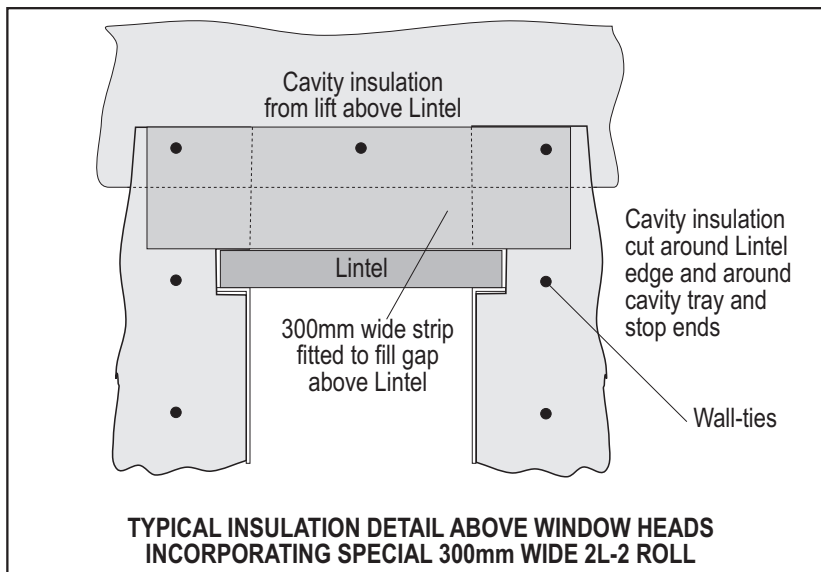
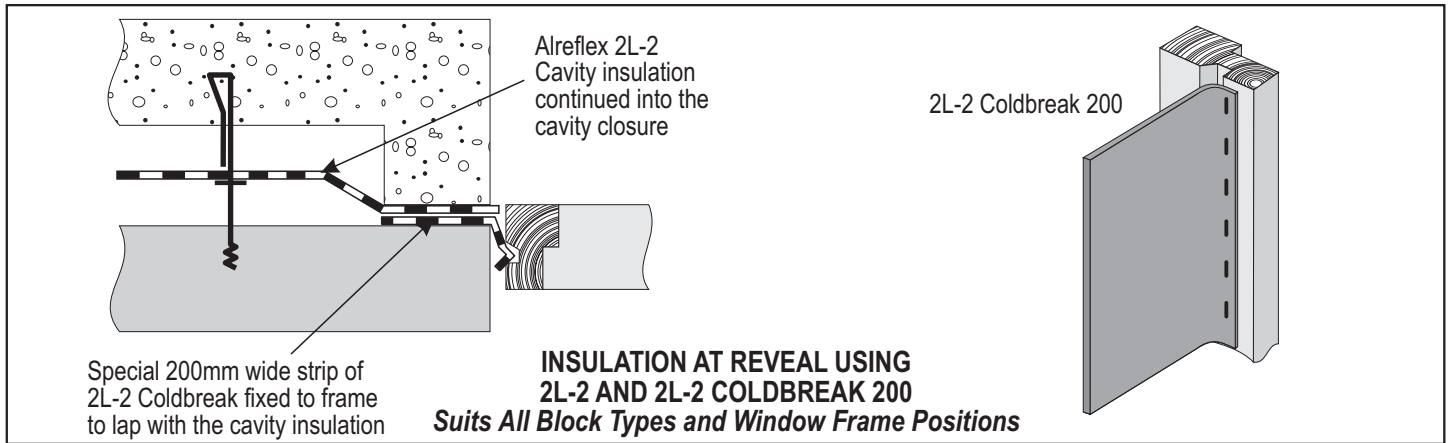
N.B.
Where 2-blocks are required between trench blocks and floor use a 1500mm roll level.

N.B.
Similar detail for raft foundation. 2L-2 brought down to foundation beam.

N.B.
As shown 6-roll widths required for ground and first storey housing. For 2-storey housing or flats each extra standard floor requires 3-1050mm widths.

ALREFLEX 2L-2 FIXED TO BLOCKWORK

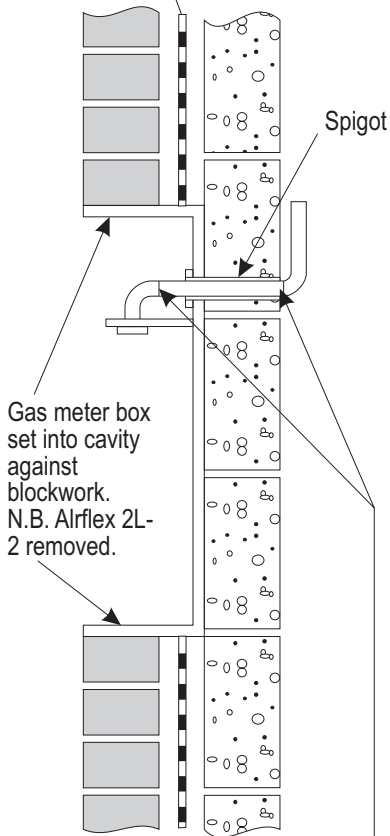
Details at Reveals, Window Heads, Cills and Cavity Closer



ALREFLEX 2L-2 FIXED TO BLOCKWORK

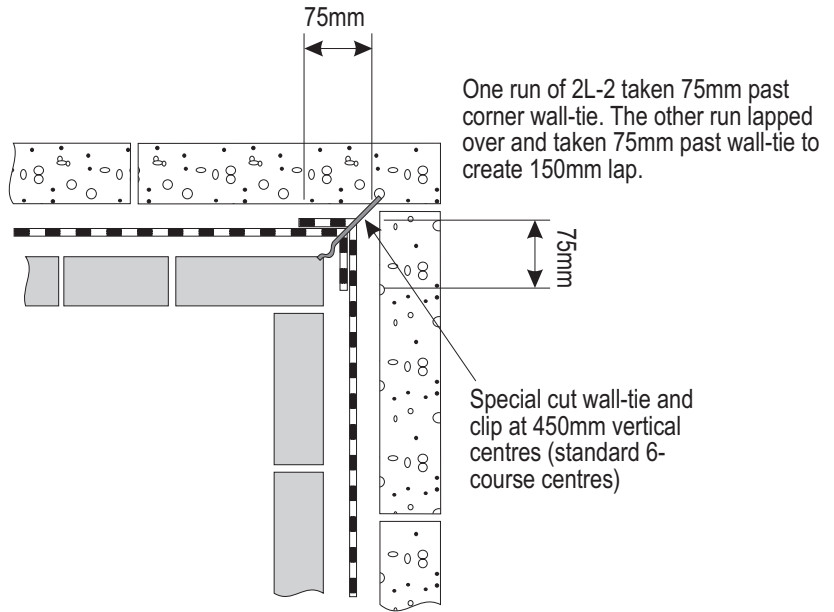
Details at Vertical Lap Joints and Around Meter Box

Alreflex 2L-2 to be cut out totally around gas meter box (normally 420mm wide x 600mm high) and at all times to be cut out in this way before welding/sweating of pipes both at internal joint and external joint at bend to gas meter.

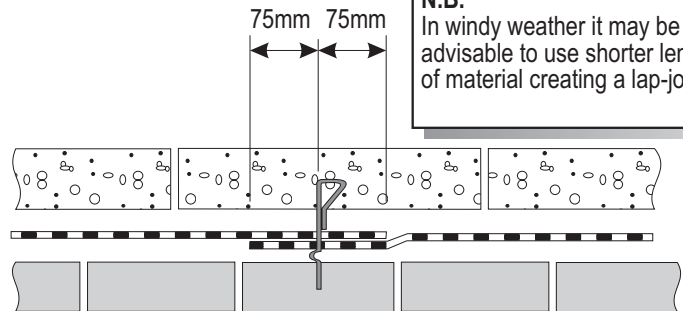


Welded/sweated joints in gas pipe. These joints to be made preferably after spigot is placed through wall to protect against sparks and meter box is in place.

DETAIL ALREFLEX 2L-2 AT GAS METER BOX MATERIAL CUT AWAY AROUND BOX AS SHOWN

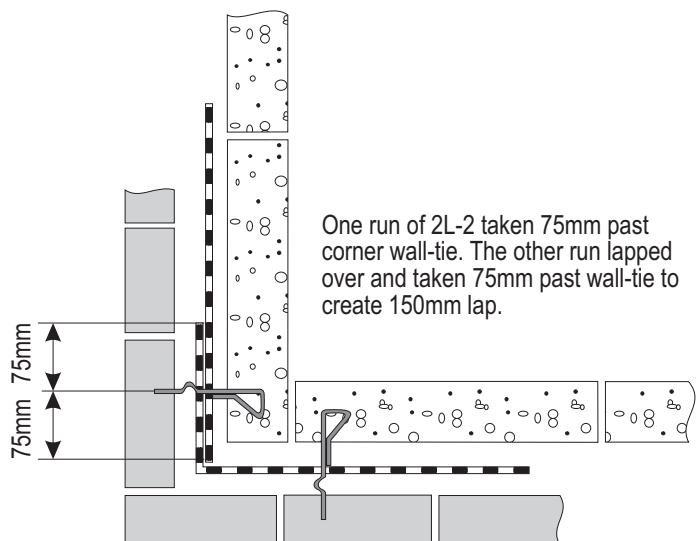


DETAIL AT INTERNAL CORNER 2L-2 TO BLOCKWORK

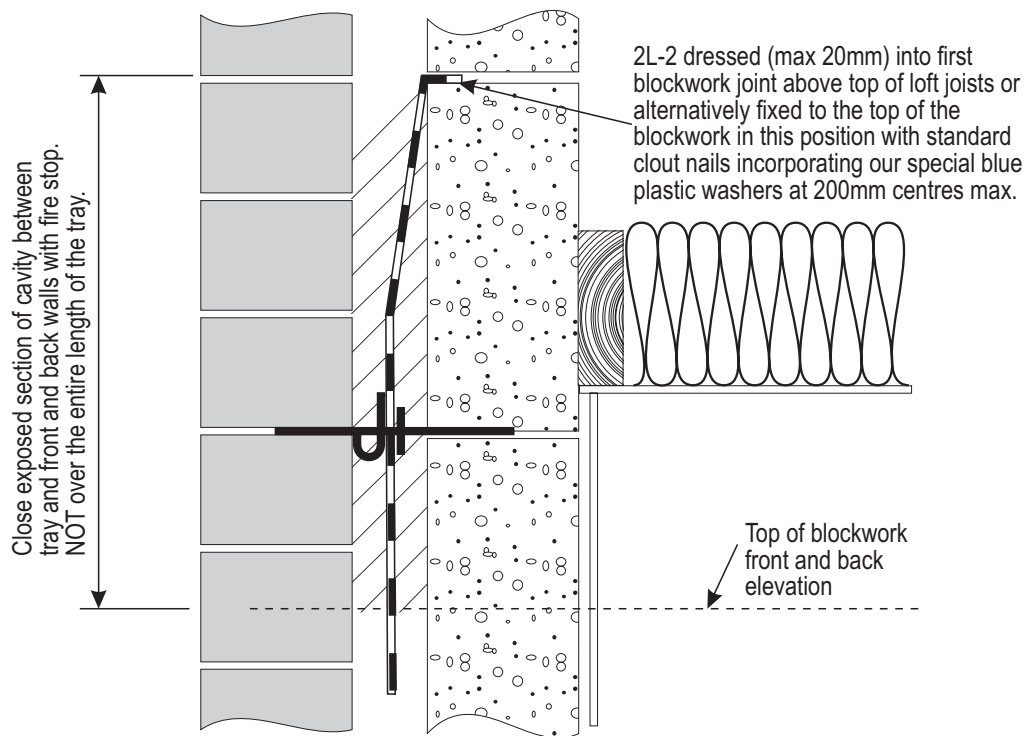


N.B.
In windy weather it may be advisable to use shorter lengths of material creating a lap-joint

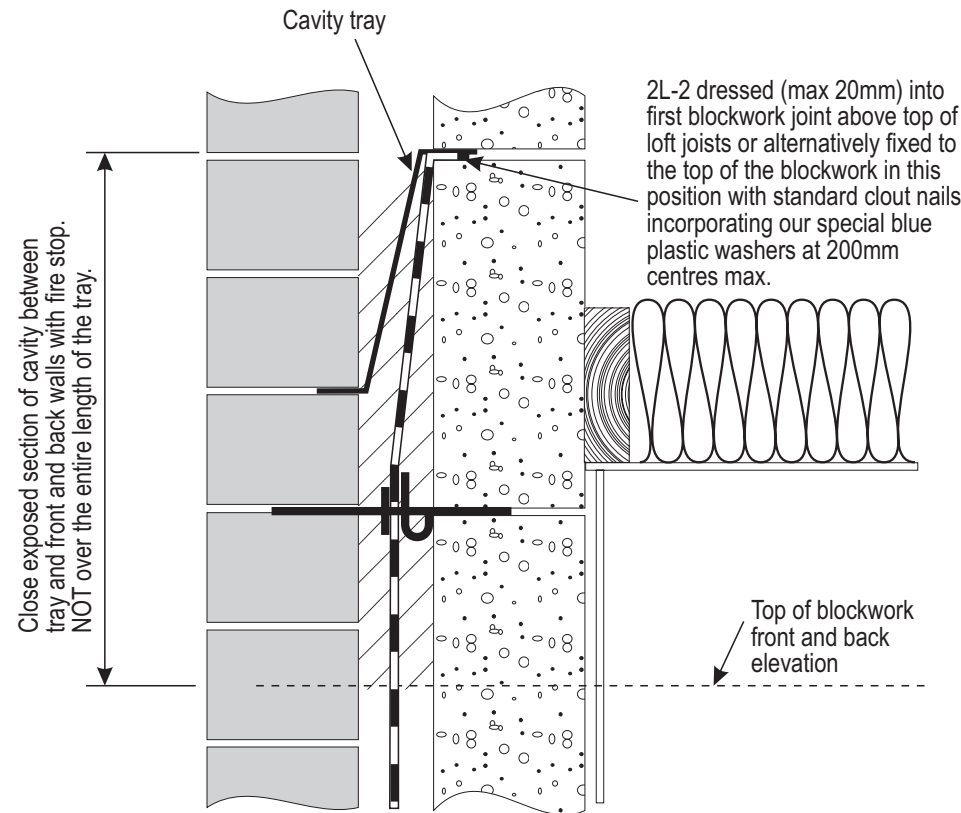
DETAIL AT VERTICAL JOINT 2L-2 TO BLOCKWORK



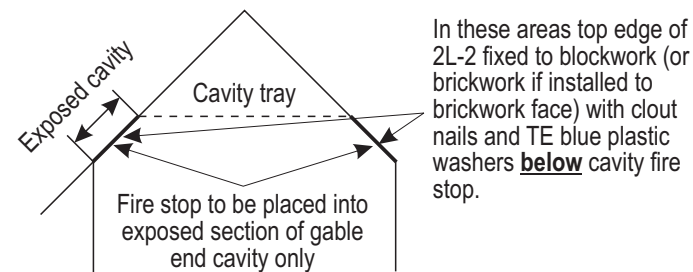
DETAIL AT EXTERNAL CORNER 2L-2 TO BLOCKWORK



DETAIL AT END GABLE – LOFT LEVEL, 2L-2 TO BRICKWORK FACE



DETAIL AT END GABLE – LOFT LEVEL, 2L-2 TO BLOCKWORK FACE



STANDARD DETAIL AT END GABLE



ALREFLEX 2L-2 – DETAILS AT END GABLE PEAK