

SHORT INSTALLATION SPECIFICATION FOR ALREFLEX 1L-1(AS)

To be read by the site agent and bricklayers before the installation of Alreflex 1L-1 in conjunction with the relevant schematic drawings showing Installation Procedure, roll widths, wall-tie centres, details at corners, reveals, window heads, meter boxes etc.

N.B. SEE ALSO SCHEMATIC DRAWING OF INSTALLATION PROCEDURE ON PAGE 2

- 1** Wall to be built up all around the building to a height shown on the schematic drawing with 1L-1 wall-ties at normal horizontal centres and vertical centres as shown on the drawing.
- 2** For the initial lift a roll width of 1200mm or 1500mm is used 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 a length of 1L-1 to suit (say corner gable to corner gable) is cut from the roll. The material is installed by two bricklayers **WITH THE FOIL FACE TO THE CAVITY**. One holding the roll tight and installing the 1L-1 on the first vertical row of wall ties at say a corner and allowing 75mm minimum past the wall-ties to create the 150mm taped vertical lap (see detail). The second bricklayer pulls the 1L-1 tight and **installs it firstly only onto the top wall ties to get it reasonably tight against the face**. The material should always be aligned min. 75mm above the top wall-tie to create the 150mm weathered horizontal lap with the next roll width. **Only after the material is on the top wall-ties is it then dressed down onto the lower wall-ties.** N.B. In windy weather it may be advisable to use shorter lengths of 1L-1 creating a taped vertical 150mm lap on the wall-ties at each joint.
- 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 as shown.**
N.B. Only vertical joints and all cut edges of material to be sealed with Alreflex Alu-Tape. Our approved Alreflex Alu-Tape is only available from Thermal Economics or their nominated distributors.
- 5** 1050mm roll-widths are then used as shown (see schematic drawing) to the top of the building and installed as given above.
- 6** Details for using special widths for the insulating dpc and at window heads are given in the drawings.
- 7** At the top of the wall the 1L-1 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.
- 8** If due to high winds – or for any other reason – it is proving difficult to get the L-1 between the wall-ties flat against the wall to an acceptable level then clout nails incorporating our special blue plastic washers or suitable industrial galvanised staples at say 200 - 250mm centres can be used to hold the material against the wall face where required. The use of clout nails with the plastic washers or suitable industrial galvanised staples at say 200 - 250mm centres is also recommended to secure exposed 1L-1 intermittently to the blockwork between the wall ties when high winds are expected.

General precautions with regard to prevention of fire, naked flames etc. Which have to be followed during the Installation of ALREFLEX 1L-1 or ALREFLEX 2L-2

N.B. To be read by all personnel involved with the supervision and installation of Alreflex 1L-1 (including subcontractors such as plumbers etc.) before commencement of the installation of Alreflex 1L-1. See also information sheet "PLUMBERS DETAILS REGARDING THE INSTALLATION OF PIPING ETC. NEAR ALREFLEX 1L-1" enclosed with this brochure.

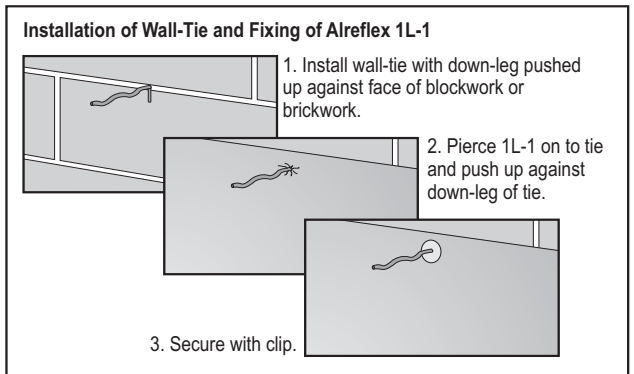
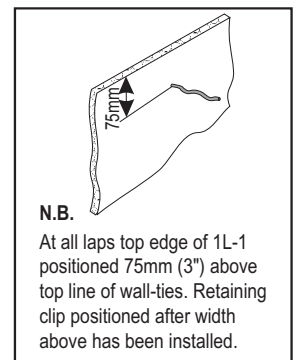
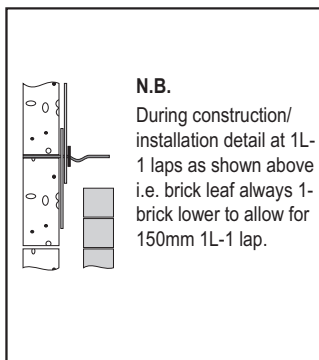
As is the case with other partial fill cavity insulation materials such as polystyrene, polyurethane etc. certain basic precautions must be taken against fire and the spread of flame and these are given in the BBA Certificate for the Alreflex products as follows:

- 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 1L-1 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 face.**

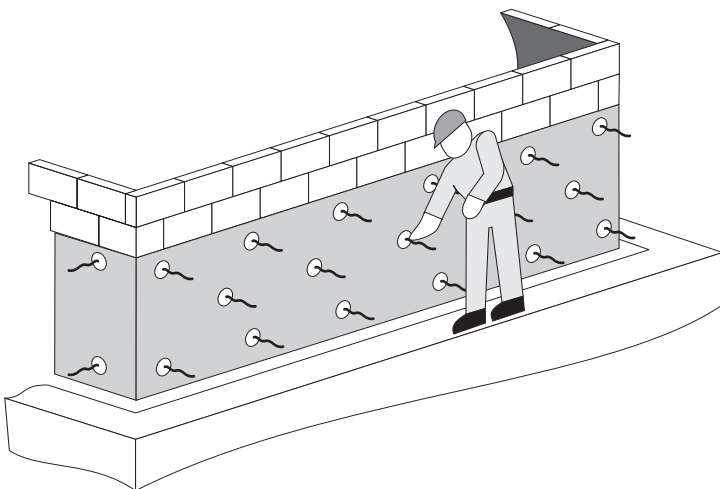
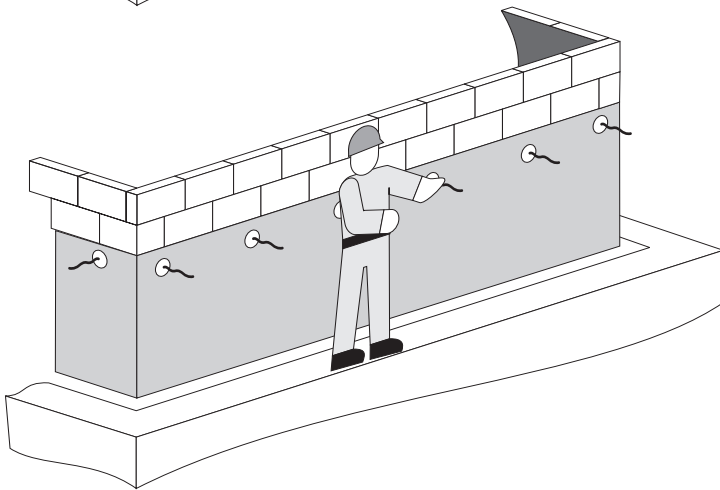
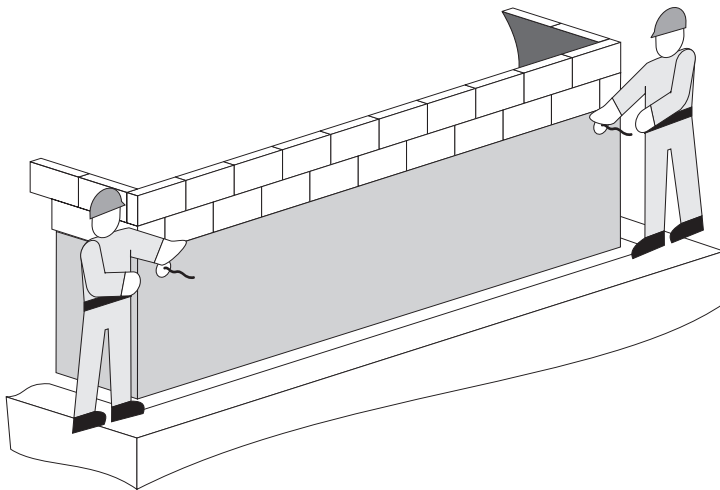
SAFETY WARNING!

As is the case with other types of wall-ties the Alreflex 1L-1 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.



SCHEMATIC DRAWING OF THE ALREFLEX 1L-1(AS) INSTALLATION PROCEDURE



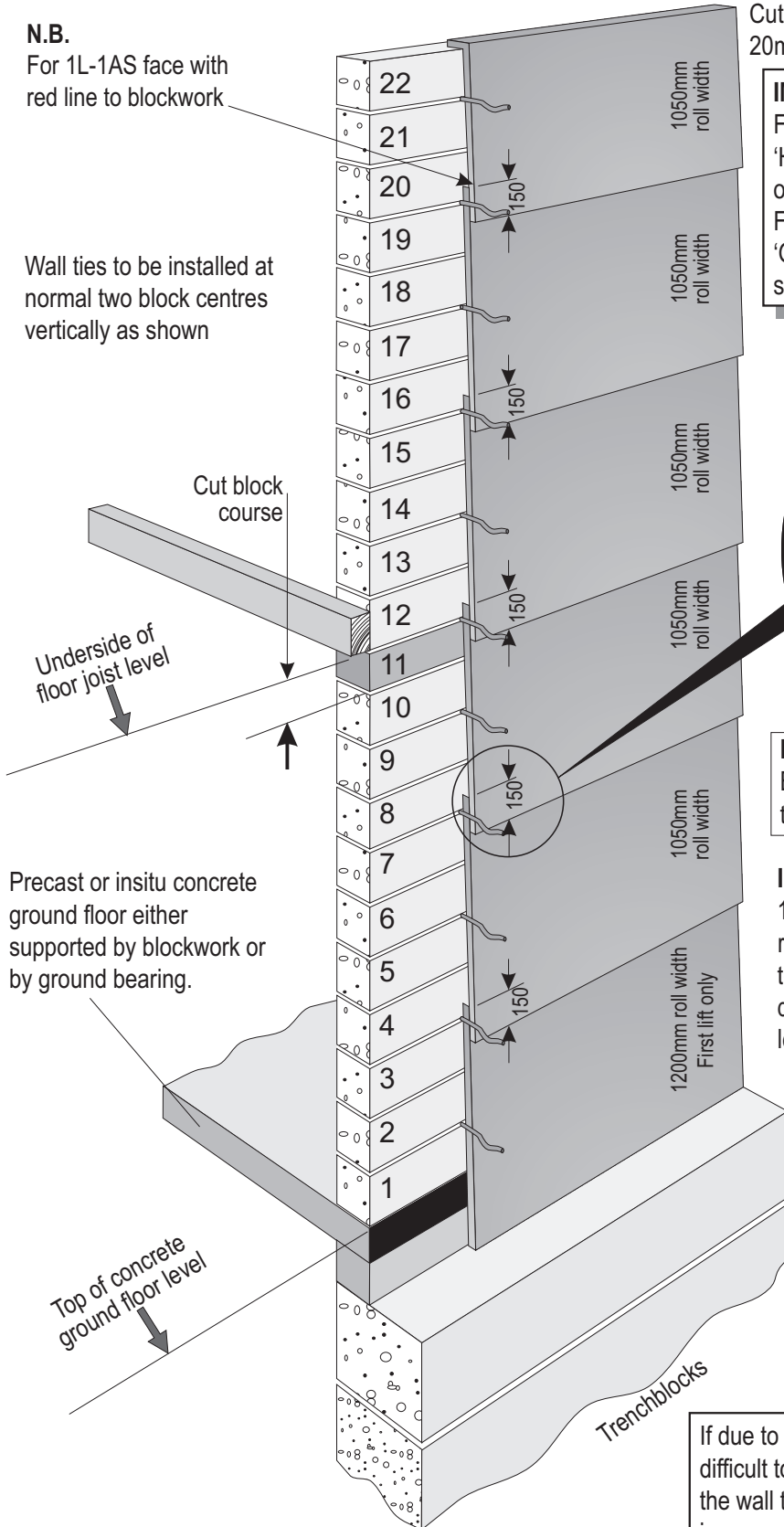
- a) A length of 1L-1 should be cut from the roll sufficient to insulate a length of end gable wall from corner to corner. **In each case a sufficient length has to be cut to insulate the wall area and create the required 150mm vertical laps on the wall-ties (see Details At Corners). N.B. Do not attempt 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). **Please note all cut edges of 1L-1(AS) have to be sealed at the edges with Alreflex Alu-Tape.**
- c) The cut length of 1L-1 is tensioned-out over the end gable area by two bricklayers **with the foil face facing both of them and into the cavity. N.B. For 1L-1AS the face marked with the red line has to be installed onto the wall!**
- d) Holding the ends of the tensioned 1L-1 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 1L-1 is always 75mm (i.e. One course) above the topmost wall-tie the bricklayers then move along the wall piercing the tensioned 1L-1 onto the topmost wall-ties only.
- f) The material is then dressed down over the wall-ties below and secured against the end of the ties with the wall-tie clips. N.B. If due to high winds, or for any other reason, it is proving difficult to get the 1L-1 between the wall-ties flat against the wall to an acceptable level then clout nails incorporating our special blue plastic washers or suitable industrial galvanised staples at say 200 - 250mm centres can be used to hold the material against the wall face where required. The use of clout nails with the plastic washers or suitable industrial galvanised staples is also recommended to secure exposed 1L-1(AS) intermittently to the blockwork between the wall ties when high winds are expected.
- 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 1L-1 are then installed around the building creating 150mm horizontal "weathered" laps with the roll width below and with 150mm vertical laps to suit taped with Alreflex Alu-Tape 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"). N.B. Use only Thermal Economics approved Alreflex Alu-Tape.
- i) If conditions permit the preferred wall height of 8-blocks (or 24-bricks) to be built then a second width of 1L-1 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 1L-1 creating the 150mm vertical taped laps on the wall-ties at each joint.**

INSTALLATION LAYOUT FOR ALREFLEX 1L-1(AS) & 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

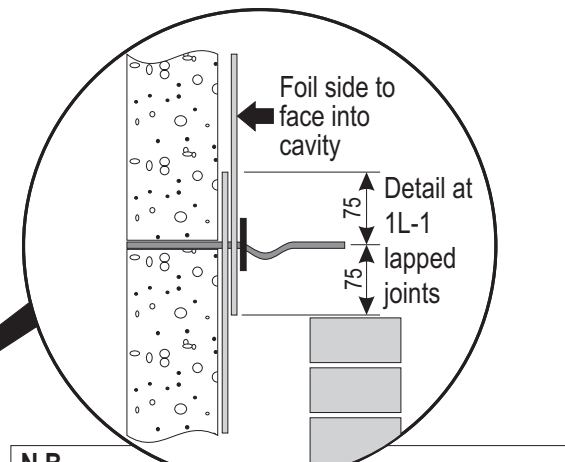


N.B.
For 1L-1AS face with red line to blockwork

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

Cut and folded to sit 20mm under cavity closer

IMPORTANT – WALL TIES
For buildings up to two storeys in height use 1L-1 'Housing Ties' i.e. 2.8mm diameter stainless steel or 3.6mm diameter trigalv.
For buildings higher than two storeys use 1L-1 'General Purpose' i.e. 4.0mm diameter stainless steel.



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 1L-1 to hang down to trench block level.

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

N.B.
Similar detail for raft foundation. 1L-1 brought down to foundation beam.

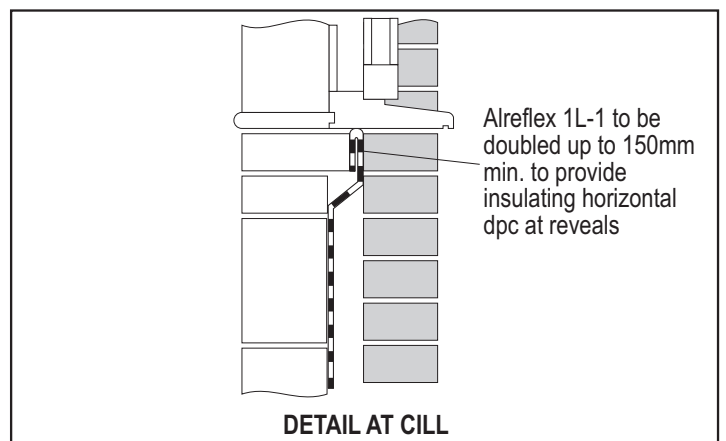
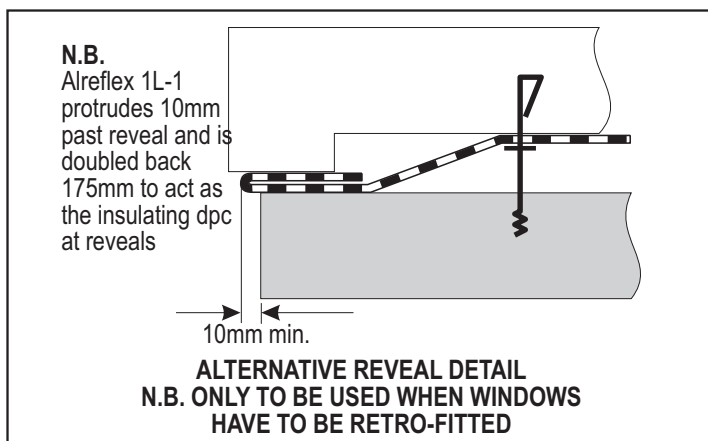
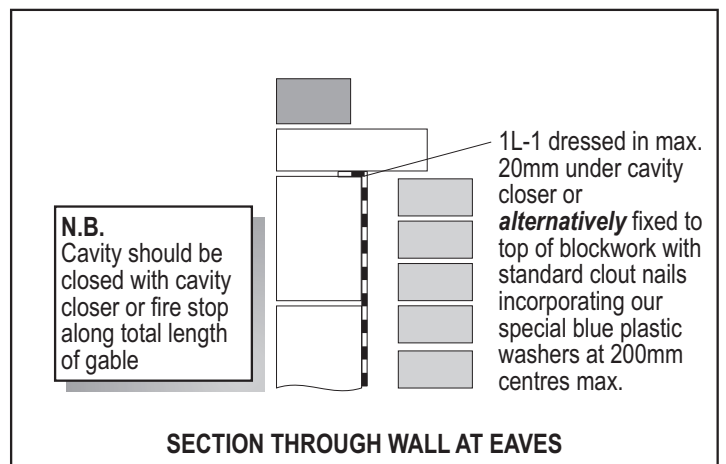
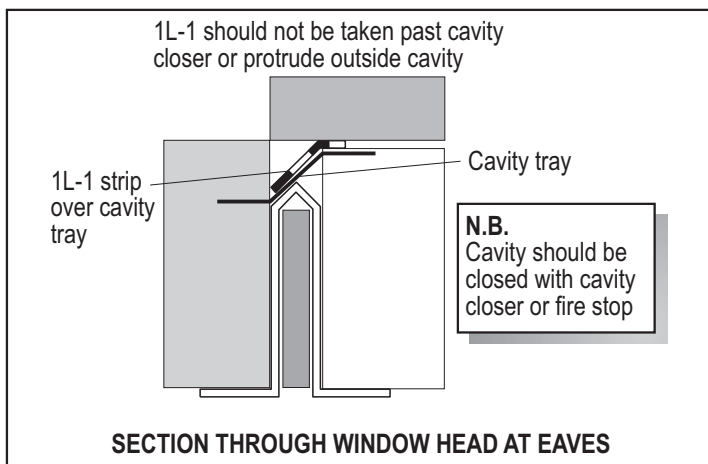
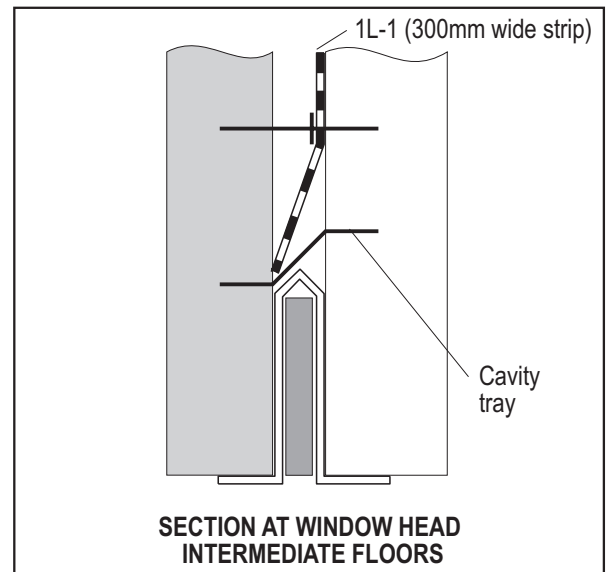
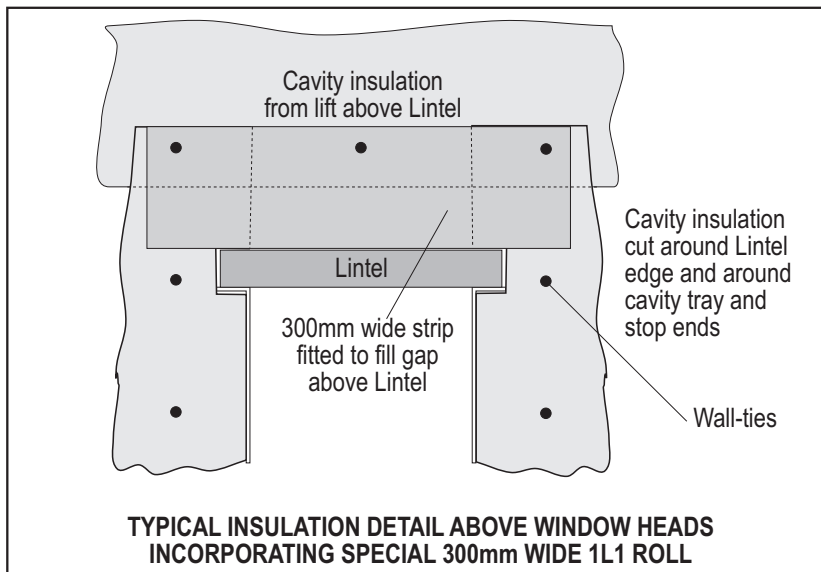
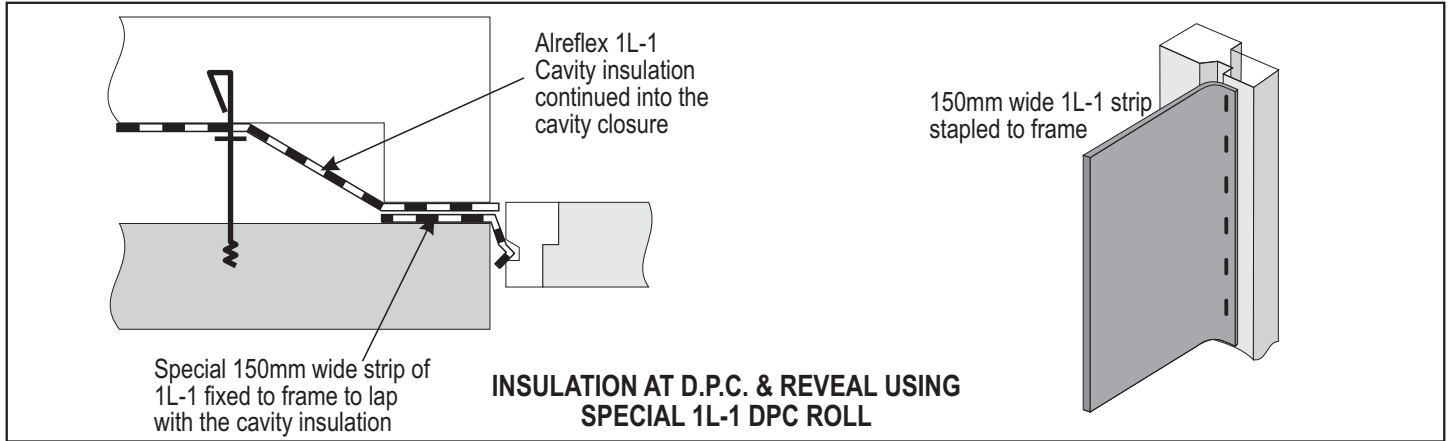
N.B.
As shown 6-roll widths required for ground and first storey housing. For 2-storey housing or flats each extra standard floor requires 3-1050mm widths.

If due to high winds – or any other reason – it is proving difficult to get the 1L-1 between the wall ties flat against the wall to an acceptable level then clout nails incorporating our special blue plastic washers can be used to hold the material against the wall face where required.

ALREFLEX 1L-1(AS) FIXED TO BLOCKWORK

Details at Reveals, Window Heads, Cills and Cavity Closer

N.B. For Barratt House Types comprehensive details are given on Barratt Design Group Drawings 1289/DET/01 and 1289/DET/52



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Details at Vertical Lapped and Taped Joints

