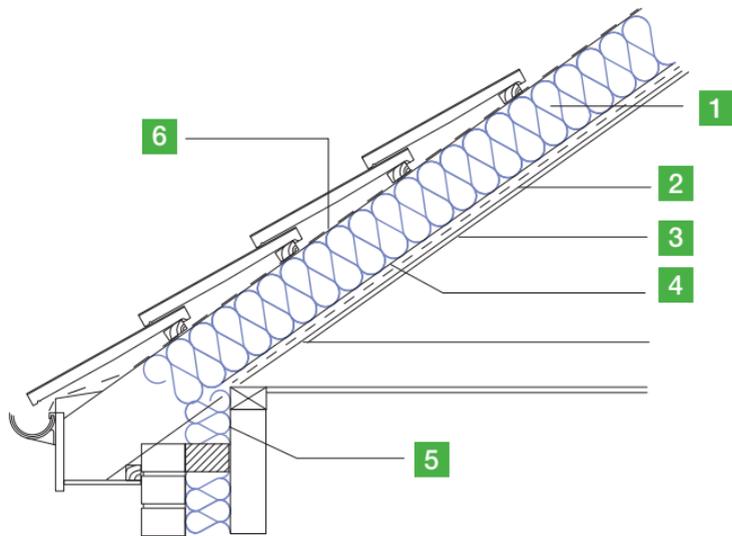


## Typical detail:

### New roof with breathable underlay



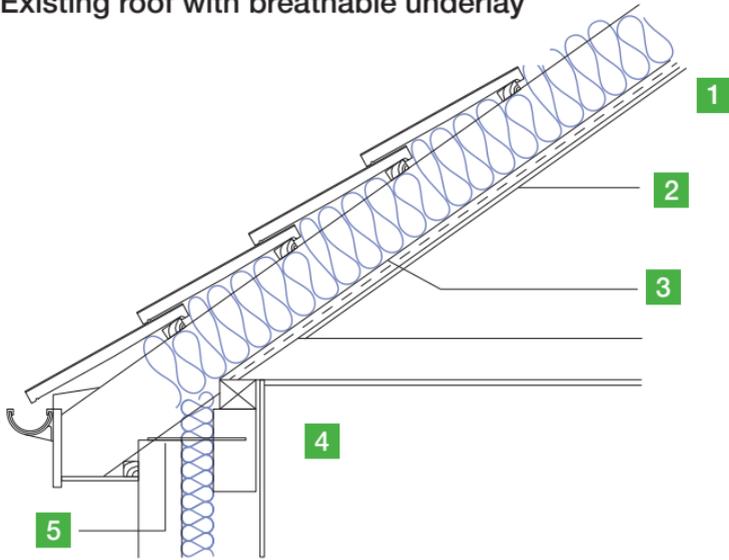
1. WALLTITE CL100 insulation to achieve target U-value
2. Vapour control layer
3. Plasterboard and skim
4. Unventilated air space
5. WALLTITE returned to insulated cavity stop at head of wall
6. Breathable roof tile underlay

Habitable space: plasterboard and skim/VCL with taped joints VCL to be carefully cut and sealed around struts, ceiling joists and penetrations); batten/counter batten rafters as necessary to achieve insulation depth, confirm rafter strength sufficient to receive counter battening and boarding if required.

Loft space only, non habitable: insulated between and over rafters to achieve target U-value. WALLTITE may remain exposed.

## Typical detail:

### Existing roof with breathable underlay



1. WALLTITE CL100 insulation to achieve target U-value
2. Plasterboard and skim (optional)
3. Unventilated air space
4. WALLTITE returned to insulated cavity stop at head of wall
5. Non-combustible cavity stop, well bedded and sealed

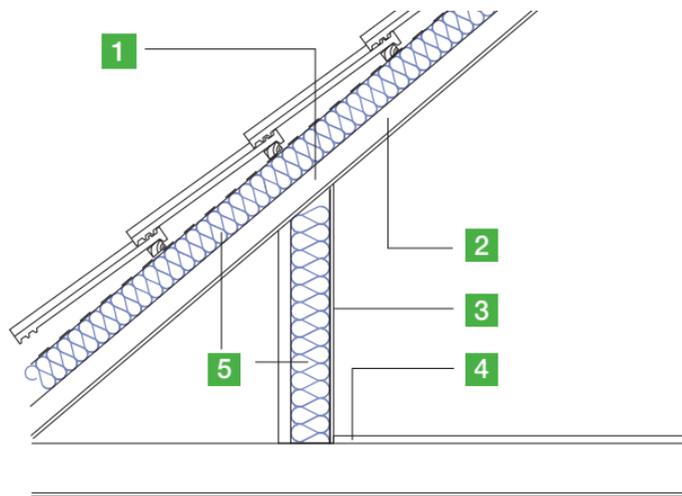
Habitable space: plasterboard and skim/VCL with taped joints (VCL to be carefully cut and sealed around struts, ceiling joists and penetrations); batten/counter batten rafters as necessary to achieve insulation depth, confirm rafter strength sufficient to receive counter battening and boarding if required.

Loft space only, non habitable: insulated between and over rafters to achieve target U-value. WALLTITE may remain exposed in a non-habitable loft space.

Repair all roof defects and thoroughly overhaul where necessary prior to spraying.

## Typical detail:

### Room in a roof insulation

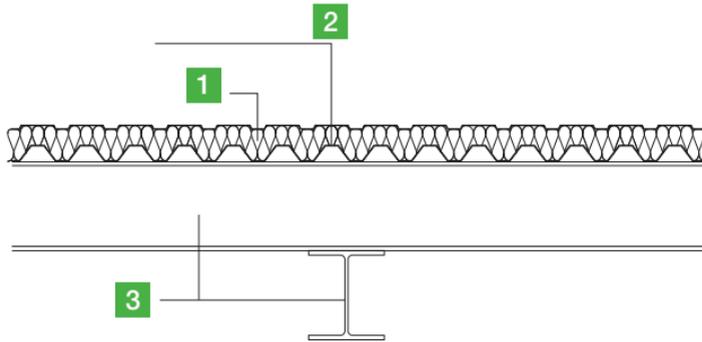


1. 100mm x 50mm rafter
2. Unventilated air space
3. Plasterboard and skim
4. Flooring
5. WALLTITE CL100 insulation to achieve target U-value

Habitable space: plasterboard and skim/VCL with taped joints VCL to be carefully cut and sealed around struts, ceiling joists and penetrations); batten/counter batten rafters as necessary to achieve insulation depth, confirm rafter strength sufficient to receive counter battening and boarding if required.

Loft space only, non habitable: insulated between and over rafters to achieve target U-value. WALLTITE may remain exposed.

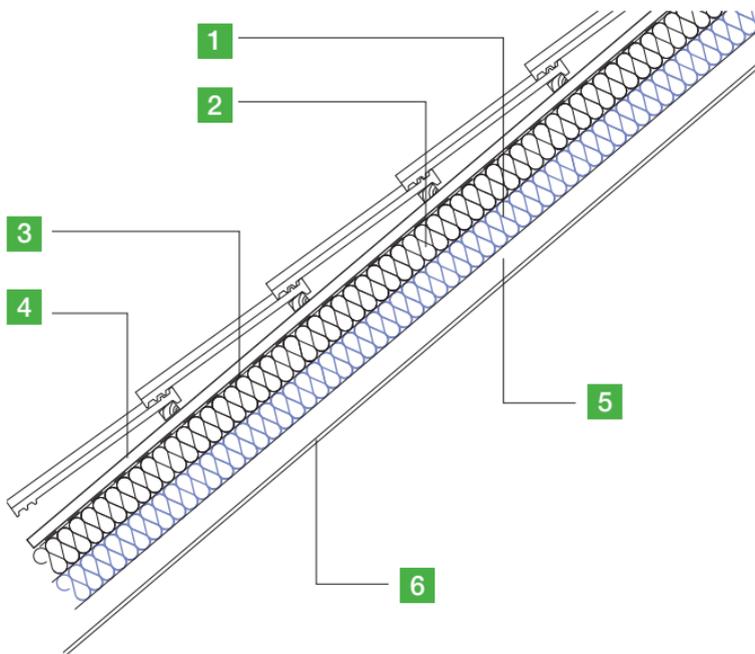
## Typical detail: External industrial roof



1. ELASTOSPRAY insulation to achieve target U-value
2. Metal deck
3. Roof beams

## Typical detail:

### New roof with board insulation



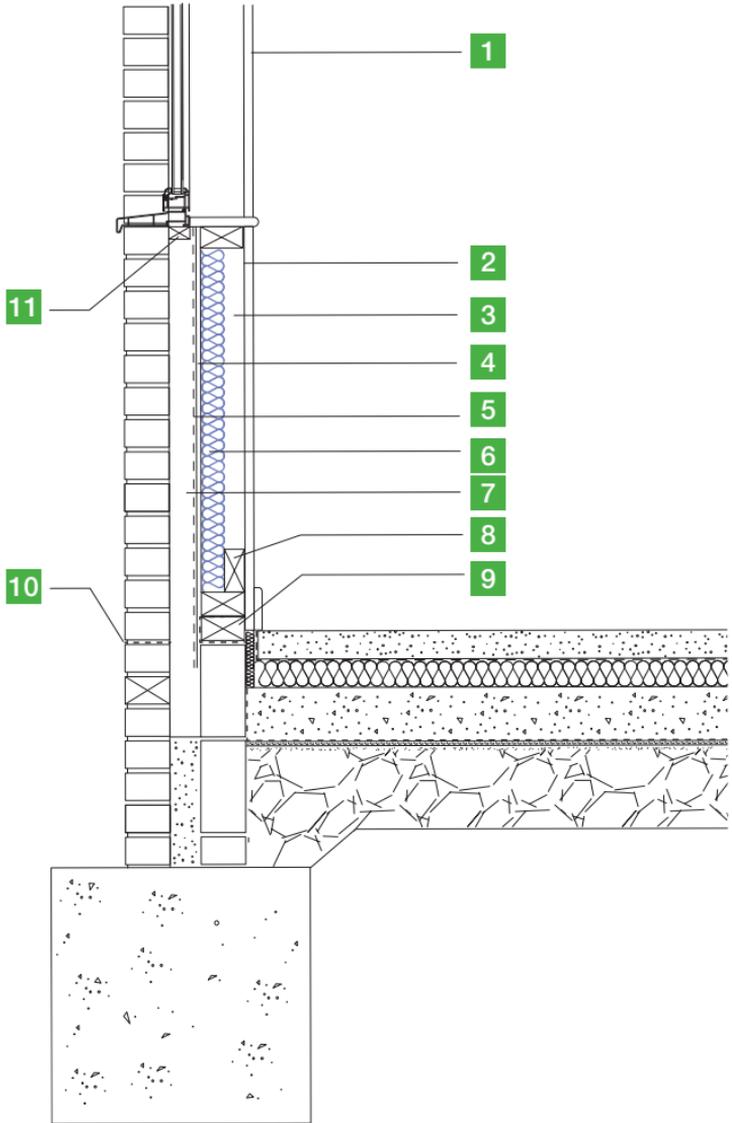
1. WALLTITE CL100 insulation between rafters to achieve target U-value
2. Over rafter PIR board insulation (minimum 50mm thick)
3. Breathable roof tile underlay
4. Counter-batten
5. Unventilated air space
6. Plasterboard and skim

Habitable space: plasterboard and skim/VCL with taped joints VCL to be carefully cut and sealed around struts, ceiling joists and penetrations); batten/counter batten rafters as necessary to achieve insulation depth, confirm rafter strength sufficient to receive counter battening and boarding if required.

Loft space only, non habitable: insulated between and over rafters to achieve target U-value. WALLTITE may remain exposed.

## Typical detail:

### New timber frame wall

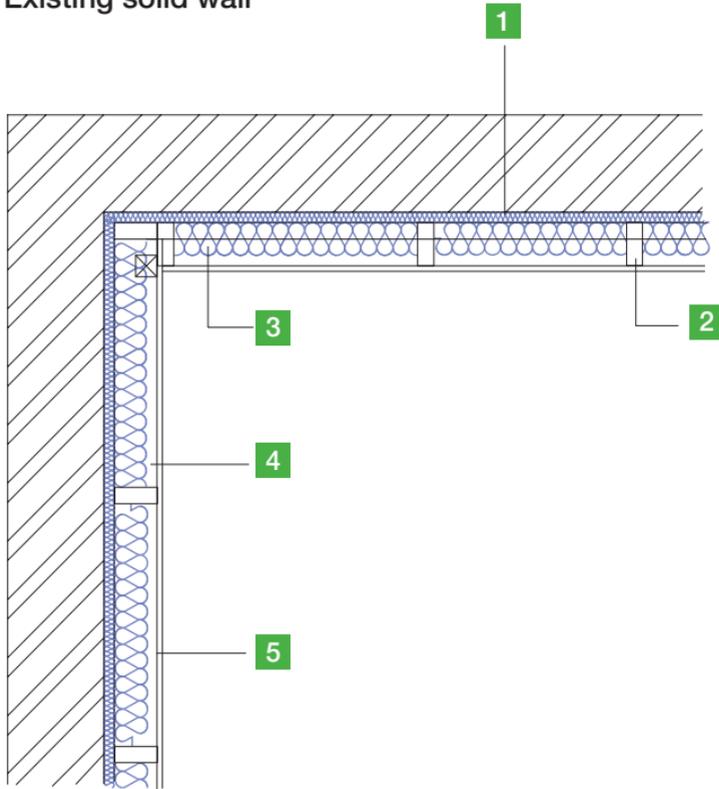


1. Plasterboard and skim
2. Vapour control layer to be lapped over DPC at floor level and returned to window reveal and jambs
3. Unventilated air space
4. Sheathing ply
5. Breather membrane
6. WALLTITE CL100 insulation to achieve target U-value
7. 50mm air gap
8. Noggin to support plasterboard
9. Sill plate
10. DPC
11. Treated timber cill support fixed to timber frame, clad and protected in DPC with insulation set above

Allow for differential movement at ALL openings, i.e. at window cill and window heads, as recommended by the timber frame manufacturer/UKTFA/TRADA: to accommodate differential movement and provide weather resistant and durable joint.

## Typical detail:

Existing solid wall

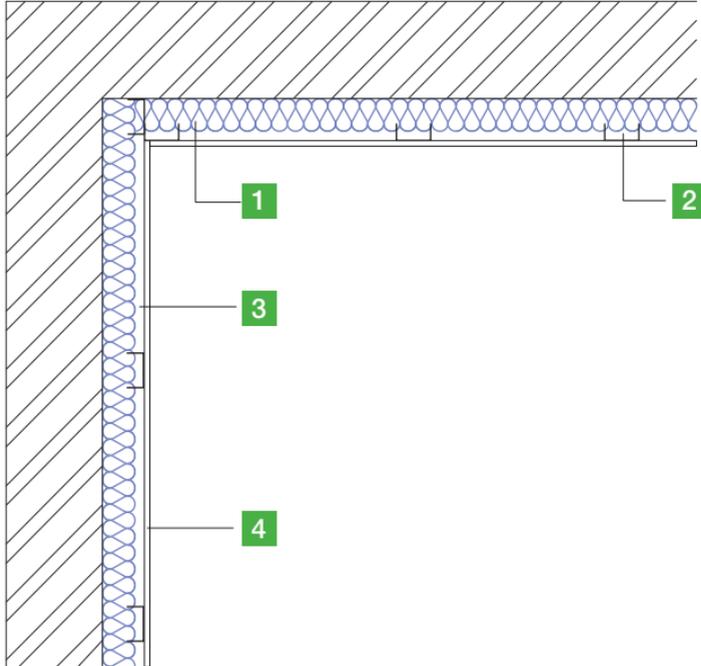


1. 25mm WALLTITE behind studwork
2. Treated timber studs set off by wall by brackets
3. WALLTITE CL100 insulation between and behind studwork to achieve target U-value
4. Unventilated air space
5. 12.5mm vapour check wallboard and skim finish

At corners of internal and external walls to rooms, set frame to external wall back from corner a minimum of 25mm and set batten to line with vapour check wall boarding to receive board end to internal wall.

## Typical detail:

### Existing solid wall



1. WALLTITE CL100 insulation between and behind studwork to achieve target U-value
2. Galvanised metal frame independent of the wall
3. Unventilated air space
4. 12.5mm vapour check wallboard and skim finish

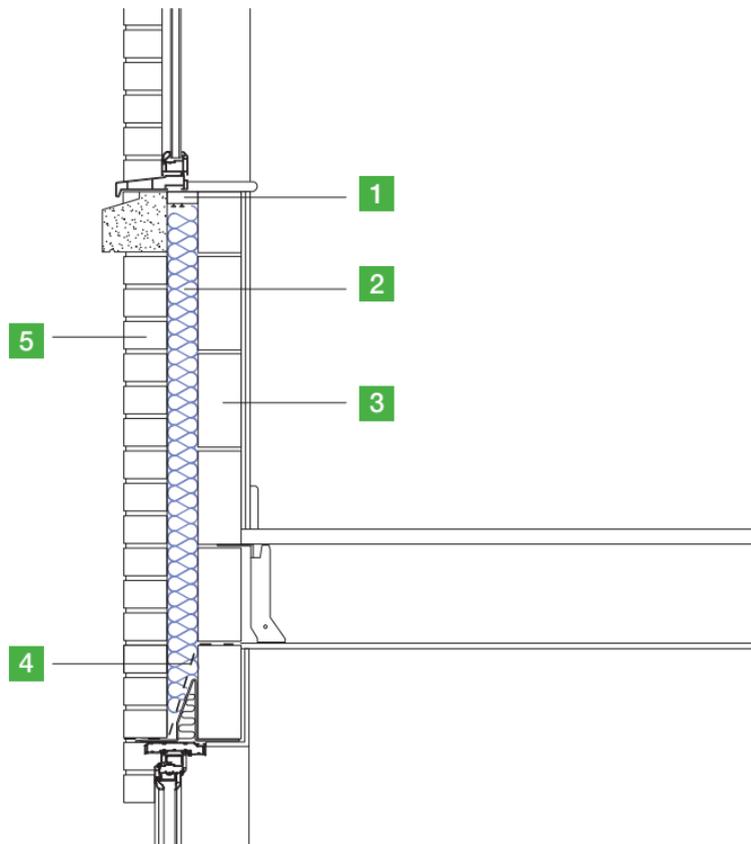
## Typical detail:

### New cavity wall

1. Insulated DPC cavity closer to be well sealed at edges
2. WALLTITE CV100 insulation injected into cavity to achieve target U-value
3. Lightweight blockwork
4. Cavity tray
5. New masonry brick

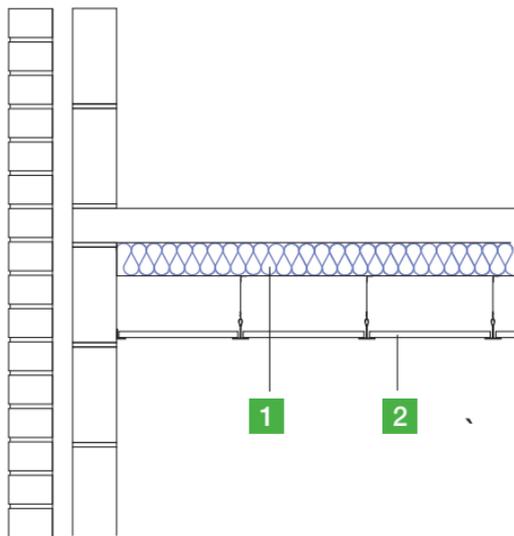
Habitable space: plasterboard and skim/VCL with taped joints (VCL to be carefully cut and sealed around struts, ceiling joists and penetrations); batten/counter batten rafters as necessary to achieve insulation depth, confirm rafter strength sufficient to receive counter battening and boarding if required.

Loft space only, non habitable: insulated between and over rafters 7to achieve target U-value. WALLTITE may remain exposed.



## Typical detail:

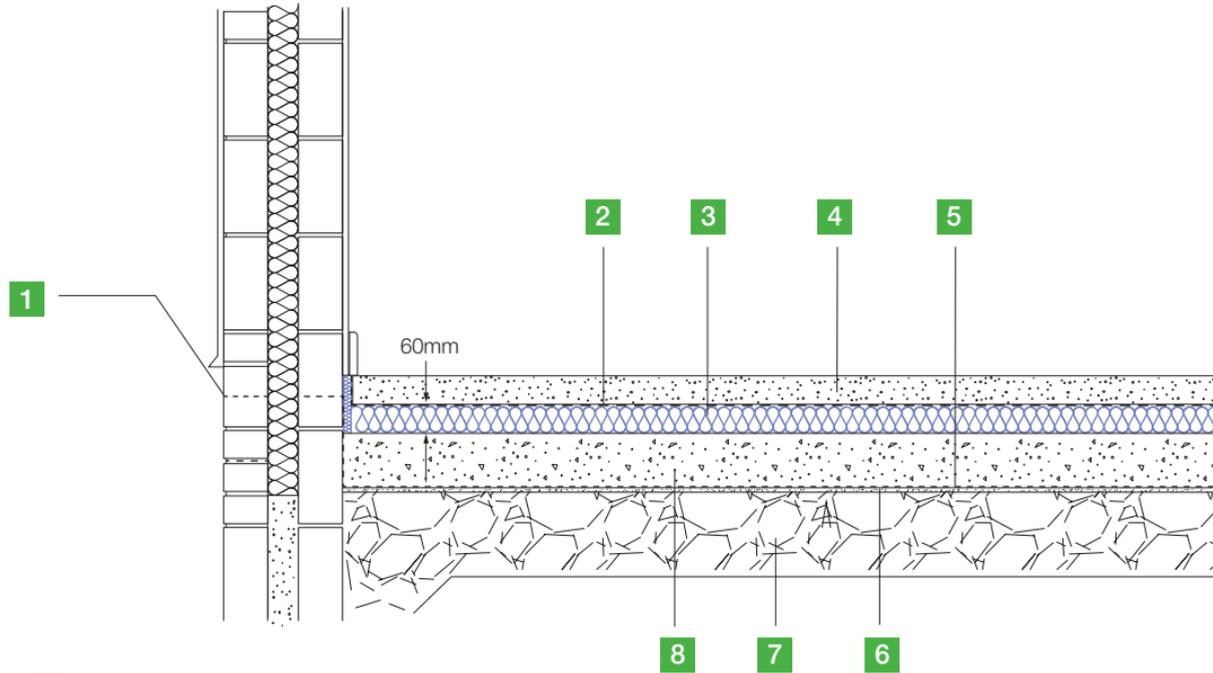
### External soffit insulation



1. WALLTITE CL100 insulation to achieve target U-value
2. Suspended ceiling

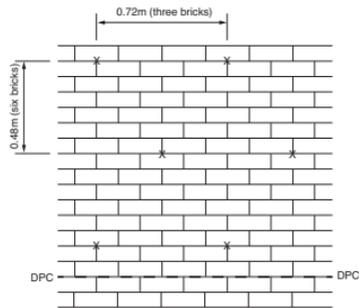
## Typical detail:

### Ground floor insulation (concrete slab)

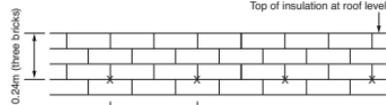


1. DPC
2. Separating layer 500 gauge DPM returned up wall at perimeter
3. WALLTITE returned to form wall perimeter insulation
4. Screed
5. DPM set below slab
6. Sand blinding
7. Well consolidated hardcore
8. Concrete slab

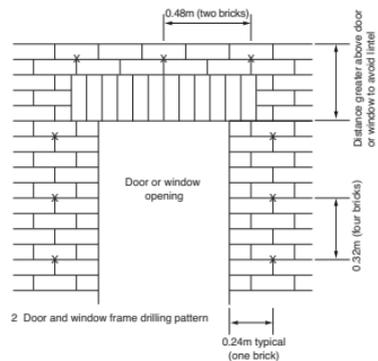
## Drilling patterns for cavity widths between 40 mm and 150 mm



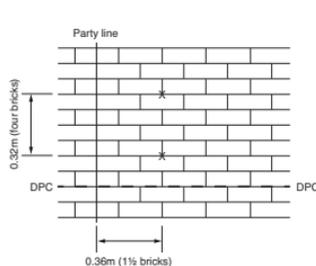
1 Staggered drilling pattern



3 Drilling pattern at roof level

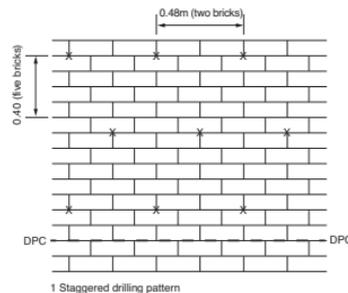


2 Door and window frame drilling pattern

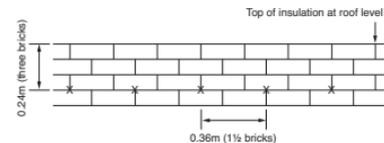


4 Drilling pattern at a party wall

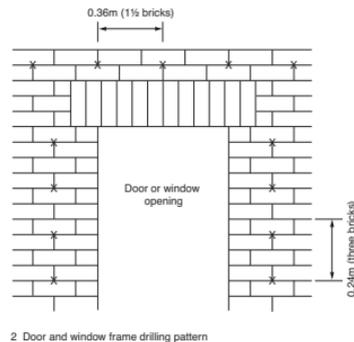
## Drilling patterns for cavity widths between 150 mm and 200 mm



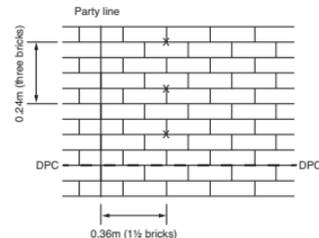
1 Staggered drilling pattern



3 Drilling pattern at roof level



2 Door and window frame drilling pattern



4 Drilling pattern at a party wall