

SUMMIT XPS

UNDER FLOOR, CAVITY WALL & PERIMETER INSULATION

TYPICAL USES : CAVITY WALL INSULATION

- Buildings aimed at energy efficiency and comfort living
- Cold storage/buildings designed with minimum mechanical cooling or passive cooling systems
- Agricultural and pharmaceutical buildings

TYPICAL USES : UNDER-FLOOR INSULATION

- Between mesh-reinforced floor screeds and surface bed, to prevent heat loss and increase comfort
- Below ice rinks, freezer rooms and certain agricultural applications, to minimise heat flow into cold-rooms
- Below domestic and commercial screeds where under-floor heating systems are installed

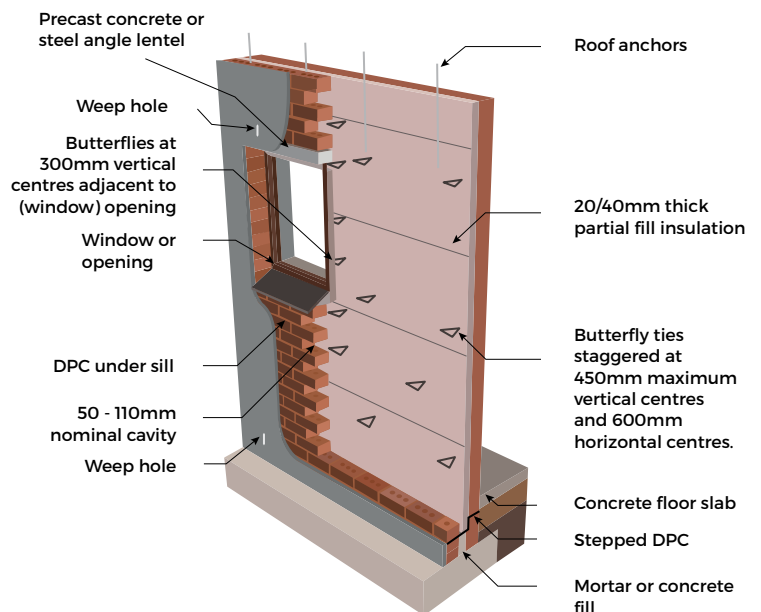
XPS INSULATION BOARD USAGE

Summit XPS Insulation Board is used to prevent the transfer of heat through conduction and convection. The greater the thickness, the more insulation it will provide. All other factors being equal, temperatures will be more stable in better-insulated buildings.

APPLICATION GUIDELINES

- In taller residential homes, the ratio of roof area to wall area decreases, which increases the impact of heat transfer through walls. Cavity wall insulation is an excellent way to control that. It also helps prevent condensation and penetration of the inner leaf.
- Summit XPS Insulation Board can be installed in a potentially damp area without losing long-term thermal performance. It can also start below the damp-proof.
- Foundation perimeter application is similar to under-floor slab insulation, however it can be a retrofitted.
- Summit XPS Insulation Board insulation will keep the floor slab at an even, moderate temperature, helping to control the overall temperature of the building.

- Summit XPS Insulation Board can be installed either below the screed (if reinforced) above or below the floor slab.
- In applications with under floor heating, Summit XPS Insulation Board should be installed below the screed.
- SANS 10400-XA requires that all heated floors be insulated to a minimum thermal resistance of 1 - the equivalent of a 30mm Summit XPS Insulation Board.
- Summit XPS Insulation Board should be installed below the floor slab in solar water-heating applications.
- Insulated floors will be about 5°C warmer.



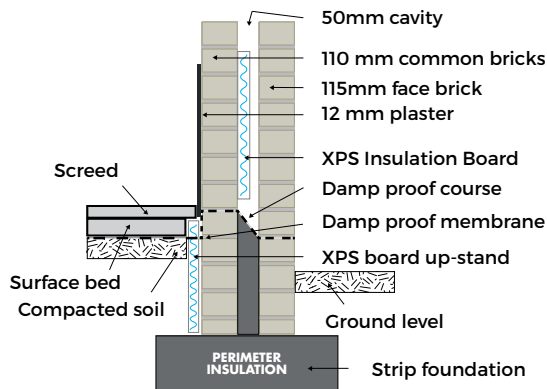
For instructions on storage, handling and finishing
Summit XPS insulation board visit www.summitxps.co.za

SUMMIT XPS

FULL FILL CAVITY

In areas where cavity is not built to perform moisture barrier function, the cavity width should be the thickness of the required insulation (e.g. 30mm).

PERIMETER INSTALLATION GUIDELINES



1. Construct walls, leading with the inner leaf, to height of approx. 1400mm which contains the first two rows of wall ties.

2. Wall ties (in accordance with SANS 28) shall be fixed at not greater than 450mm spacing in height and 600mm horizontal intervals. Additional wall ties shall be fixed adjacent to openings and movement joints at minimum 300mm vertical spacing and within 150mm of opening.

3. Clean any excess dirt from the cavity face of the leading leaf.

4. Place the first two rows of Summit XPS Insulation Board on edge against the leading leaf, with tongue-and-groove installed to shed moisture away from the inner leaf (or with tongue facing upwards). Mark where brick ties pushes against insulation and, using a sharp blade, cut slits in the insulation so wall ties can be pulled through. Drip of wall tie to be visible on outer edge of insulation – this assists in holding the board in place.

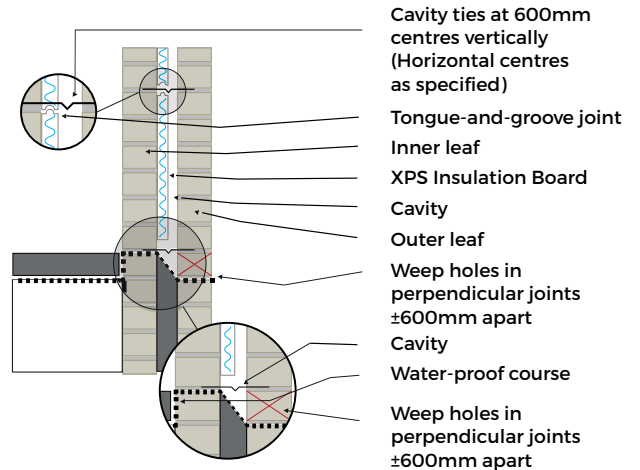
5. Construct the outer leaf, ensuring that the residual cavity is kept clean, and secure wall ties.

6. Trim Summit XPS Insulation Board on site with a sharp blade to fit snugly around window and door frames.

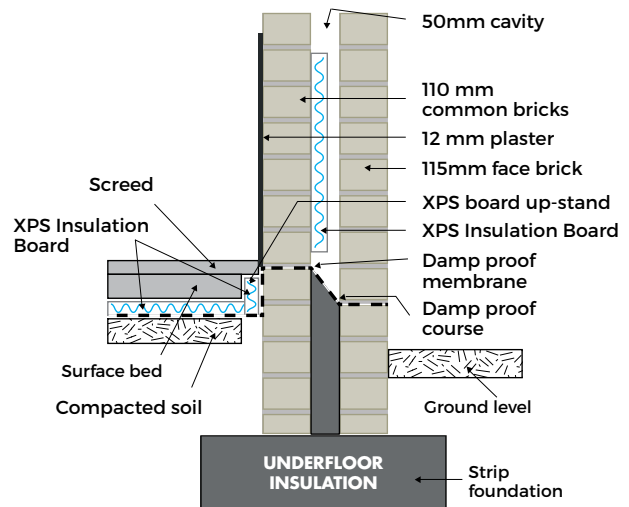
7. Insert Summit XPS Insulation Board against the outside foundations of the building, from the surface to the depth of the foundation or 600mm (whichever is greater). By insulating to this depth, the building will be protected from heat transfer through the floor from adjacent soil, which may vary in temperature from 40°C to frozen.

PARTIAL FILL CAVITY

In areas where insulation is to be installed in a cavity that also acts as moisture barrier, the residual cavity is recommended to be at least 20mm wide plus the thickness of the insulation (between 50-110mm).



UNDERFLOOR INSTALLATION GUIDELINES



1. Prepare soil foundation, and treat with weed killer.

2. Place the DPC – the first layer of brick laid over a damp-proof membrane as a moisture barrier, which will prevent moisture rising into the building's brickwork.

3. After cleaning, place Summit XPS Insulation Board panels with the tongue-and-groove edge profile to ensure secure jointing between boards.

4. Pour the reinforced concrete slab above the Summit XPS Insulation Board, following the specifications of a structural engineer. space reinforcing above the board.

NB: Prevent board flotation when pouring of the slab.