

**Plasti-Fab Design Manual**

**Exterior Perimeter  
Foundation  
Insulation Systems**



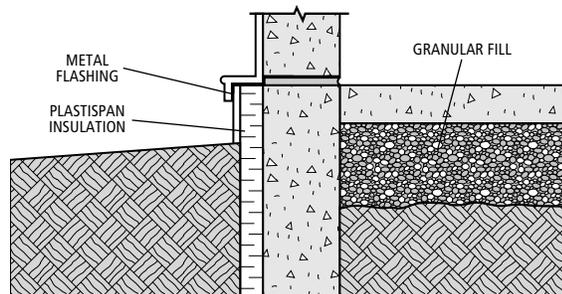


# PlastiSpan™ Insulation

## Exterior Perimeter Foundation Insulation Systems

Plasti-Fab PlastiSpan insulation board can be applied to the exterior perimeter of a foundation or footing which will be subsequently buried in backfill. Prior to the application of insulation, the below grade portions of the foundation wall should be damproofed or waterproofed as required.

PlastiSpan insulation can then be applied using adhesive or loose laid and held into position during the backfill process. When applied to the exterior of the wall, the exposed surface above grade must be protected using a galvanized iron flashing or another suitable method.

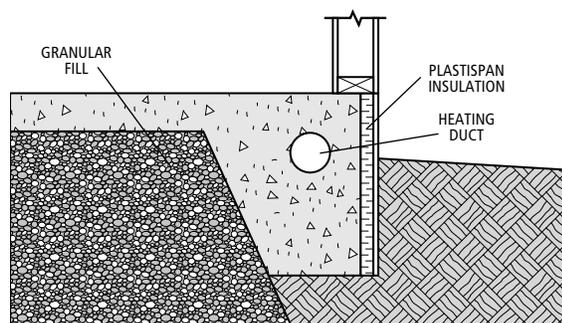


### Slab on Grade

PlastiSpan insulation around the foundation creates a continuous blanket of insulation over the exposed wall.

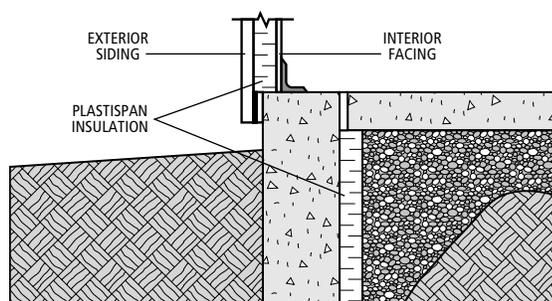
It is often applied to the exterior and should extend from the edge of the wall insulation or top of the foundation down to at least 600 mm (24") into the soil. Hold in place with a few spots of asphalt mastic until the protective covering and the soil has been placed.

Protect the exposed surface of the insulation with galvanized iron flashing, or Portland cement stucco, and then install a metal flashing along the top edge to act as a water deflector. Extend the finish into the soil only to a sufficient depth to prevent insulation exposure.



### Interior Perimeter

Insulation may be placed on the interior of a foundation wall to raise the floor temperature. There are often thermal shorts where the wall and foundation insulation do not overlap. The insulation is covered and usually placed in a well-drained location ensuring continued effectiveness.

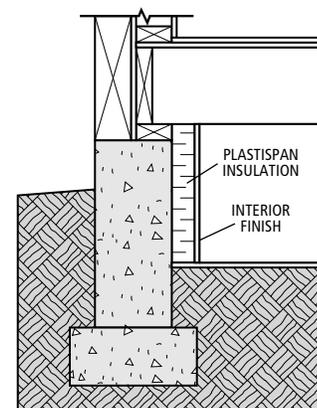


### Crawl Spaces (heated, not ventilated)

A typical application for perimeter insulation would be a crawl space where the wall assembly is not a full story in height but extends from the underside of the floor system to below the maximum anticipated frost depth.

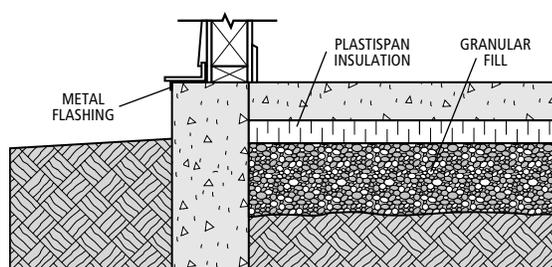
Use of PlastiSpan insulation board on the surface of the foundation wall creates additional heated spaces, increases the temperature of the enclosed space and eliminates the need for insulation of ducts and pipes located in the crawl space.

Ensure that the vapour barrier film on the floor of the crawl space is intact and sealed to the wall (repair or replace it if necessary).



### Slab Perimeter

As an alternative to insulating the interior of a foundation wall, the perimeter of the underside of the floor may be insulated.



## Application

Choose application instructions from the general application instructions of the Plasti-Fab brochure "Foundation Insulation: Selection, Application and Specification."

The following instructions apply specifically to insulation installed in Exterior Perimeters, Slab on Grade, Interior Perimeters, and Crawl Spaces, Under Concrete Floors or Over Concrete Floors.

### Preparation

#### Exterior - Perimeter, Slab on Grade

Place metal flashing along top edge of insulation unless building finish can be extended down to cover insulation to grade level.

### Insulation

#### Exterior Perimeter - Slab on Grade - Interior Perimeter

Place insulation boards dry against foundation wall.  
Backfill immediately to hold in place;

OR

Adhere insulation boards to wall with adhesive.

#### Crawl Space

Insulation to extend 600 mm (2 feet) below finished grade.

Adhere insulation board to wall with adhesive;

OR

Where a finish is required to meet the building code, see the Plasti-Fab brochure "Wall Insulation: Interior Systems."

## Finish

### Exterior Perimeter - Slab on Grade

Attach stucco mesh through to the nailers or to the concrete using Gripcon fasteners with galvanized steel washers. Use galvanized diamond mesh reinforcing at corners or at openings. Extend stucco mesh 300 mm (12") below expected ground level. Backfill to just below the stucco mesh or the finish board. Apply 12 mm (1/2") parging (2 coats) to the stucco mesh;

OR

Attach asbestos cement board through the insulation to the nailers using nails or Gripcon fasteners. Extend 300 mm (12") below expected ground level;

OR

Attach preservative treated plywood through the insulation to the nailers using nails or Gripcon fasteners. Extend 300 mm (12") below expected ground level. Complete grading so that there is a slope away from the foundation.

### Crawl Space

Ensure that the vapour barrier film on the floor of the crawl space is intact at the completion of the work. Repair or replace it as necessary.

## Specification

Choose specification from Specification section of the Plasti-Fab brochure "Foundation Insulation: Selection, Application and Specification."