


**Building &  
Construction**

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## INSTALLATION RECOMMENDATIONS FOR STYROFOAM™ BLUEGUARD™

# Exterior Foundation, Interior Crawl Space, Under Slab

The instructions outlined here describe how to install STYROFOAM™ BLUEGUARD™ extruded polystyrene insulation on exterior basement walls, interior crawl space walls and under a slab or basement floor. STYROFOAM BLUEGUARD insulation is a termite-resistant insulation that contains the Preventol\* HS100 insecticide to protect the foam from termites and other wood-destroying insects. STYROFOAM BLUEGUARD has been field tested and exceeds the performance requirements set forth by the U.S. EPA and the ICC-ES EG-239 Evaluation Guideline for Termite-Resistant Foam Plastic, which enables code approval for use in below-grade applications in very heavy termite infestation areas.

Consult pest management professionals and local building codes in your area before starting construction.

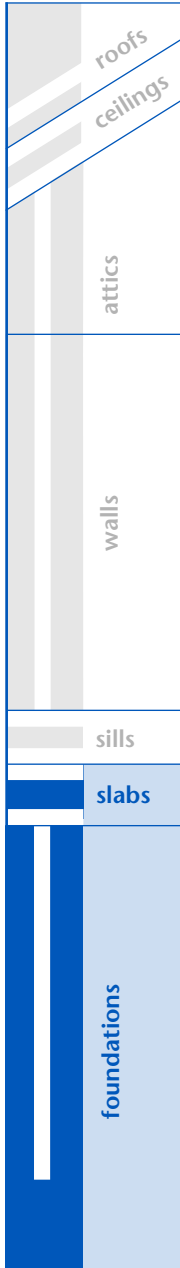
STYROFOAM™ BLUEGUARD™ is a termite-resistant insulation, not a barrier system. Normal code-approved termite control treatments are required to protect the home from termites. STYROFOAM BLUEGUARD insulation should be used in conjunction with a total insect management program available from a reputable pest management professional.

Before installing STYROFOAM BLUEGUARD insulation, remove anything that will interfere with installation. In exterior basement and crawl space applications, best results are achieved when water-proofing or damp-proofing is applied from footer to grade on the exterior foundation wall. Install foundation drainage per code requirement.

### Materials Checklist

STYROFOAM™ BLUEGUARD™ insulation contains an insecticide. Gloves are required when handling. Long-sleeve shirt and pants are also recommended. See Material Safety Data Sheet (MSDS) for more information. Other materials and equipment needed for installing STYROFOAM BLUEGUARD insulation vary depending on application. Some common and recommended equipment includes:

- Utility knife or small handsaw
- Safety glasses
- Straight edge
- Polystyrene-compatible adhesive (optional; for exterior basement wall or crawl space application)
- Concrete fasteners and corrosion-resistant washers (for attachment to masonry walls)



## Exterior Foundation/ Basement Wall or Slab Edge

(Figures 1 and 2)

Install STYROFOAM™ BLUEGUARD™ insulation after providing proper drainage at the footer and applying the foundation waterproofing or damp-proofing coating. (Note: Allow sufficient time for coating to cure to prevent solvent attack of the foam insulation.)

1. If needed where foam insulation will extend above grade, install a J-channel suitable for insulation thickness. If a sill termite shield/flashing is not installed, a 2"-6" termite inspection strip between the top of the J-channel and the exterior wall finish may be required by local code or your pest management professional.

2. Measure and cut foam insulation to fit from the top of the footer up to the exterior wall finish, termite shield/flashing or J-channel.
3. Secure foam in place by any combination of appropriate construction adhesives, corrosion-resistant fasteners with washers, backfill or adhesive bond to the waterproofing/damp-proofing coating. Make sure foam edges are tightly butted. When using mechanical fasteners, take care to place fasteners above where waterproofing or damp-proofing is needed. A fastening pattern of every 16" o.c. vertically and horizontally is suggested. Apply adhesives according to manufacturer instructions. The use of backfill only may result in foam insulation movement over time as the backfill settles.

4. Protect foam insulation left exposed above grade from UV exposure and physical damage with an appropriate protective covering that covers the foam and extends approximately 6" below grade.
5. Backfill with appropriate material, providing a proper slope away from the foundation wall.

Exterior Foundation/Basement Wall

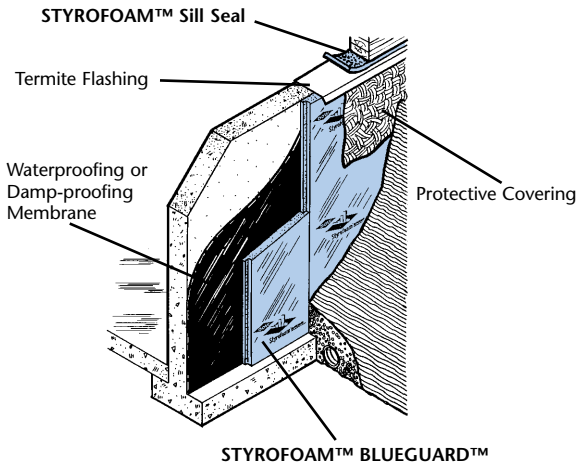


Figure 1

Monolithic Slab With Perimeter Insulation

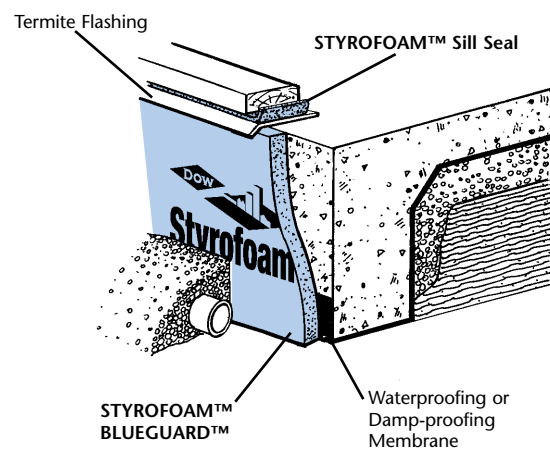


Figure 2

## Interior Crawl Space Wall (Figure 3)

Install STYROFOAM™ BLUEGUARD™ insulation after floor and wall vapor retarders are installed and all wall junctures, seams and edges are properly sealed in accordance with crawl space design requirements.

1. Measure and cut foam insulation to fit from grade up to the sill plate. If required by local code officials or your pest management professional, leave a 2"-6" termite inspection strip at the top of the foam insulation. When required, also allow a 3" gap at the bottom of the wall.

2. Secure foam in place with corrosion-resistant fasteners with washers. Make sure foam edges are tightly butted. A fastening pattern of every 24" o.c. vertically and every 48" o.c. horizontally is suggested.
3. Measure and cut foam insulation pieces to fit snugly between joists in the band joist area.
4. Refer to ICC-ES Evaluation Report NER-699 and consult local code officials to determine if and what code-approved coverings are required for the foam insulation.

## Underneath Concrete Slab (Figure 4)

Install STYROFOAM™ BLUEGUARD™ insulation after providing an appropriate tamped and drained floor slab surface and installing the slab vapor barrier.

1. If foam insulation is used to insulate between the foundation wall and the concrete slab, cut foam insulation pieces to the appropriate size and place against the foundation wall with foam ends tightly butted. Ensure design provides an acceptable covering of the foam at the interior floor level.
2. Cover floor area with foam insulation boards with edges tightly butted.
3. Install concrete slab.

Interior Crawl Space Wall

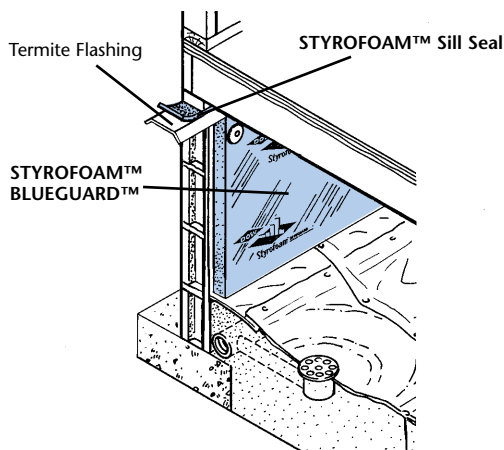


Figure 3

Non-monolithic Slab With Perimeter and Under-slab Insulation

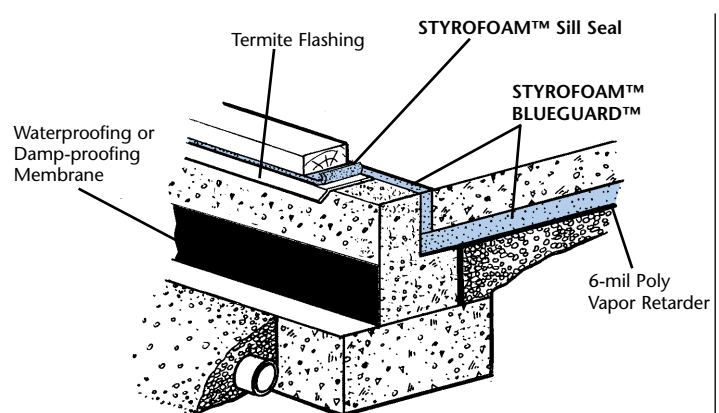


Figure 4

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**IN THE U.S.:**

- For Technical Information: **1-866-583-BLUE (2583)**
- For Sales Information: **1-800-232-2436**

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