

Insulating Concrete Forms and Termite Code Requirements

Termites are responsible for over \$1.5 billion in damages in the U.S. each year so the importance of addressing the issue cannot be overstated. This document is intended to provide you with recommendations for procedures and products to protect your structure from termites.

Most local building codes require termite protection for every structure. It is important to consult your local building codes to determine the procedures and products that are approved for use in your area.

Below-grade use of foam insulation products like ICFs are banned in “very heavy” termite infestation regions unless an approved method of protecting the foam and structure from subterranean termite damage is applied to the ICF. Again, it is very important that you refer to your local building codes in regard to what constitutes “approved methods of protection” in your area.



Termites and ICFs

Termites avoid light, are attracted by moisture, and eat only wood or wood-based materials. The EPS foam in BuildBlock[®] insulating concrete forms (ICFs) is not a food source for termites but they may burrow into unprotected foam surfaces in search of food (wood). While termites cannot compromise the strength or integrity of the BuildBlock wall, they could burrow through the foam to reach and damage untreated wood.

It is also important to note that termites are tenacious insects and more than one solution may be required to ensure structures are free of termites. Ants and beneficial nematodes are natural enemies of termites. If the population of these organisms is high in a given area, termite populations will be low. Some of the poisons that kill termites will also kill ants and beneficial nematodes. Keep this in mind when a termite solution is employed for your property.

BuildBlock Building Systems recommends the following procedures and products to protect your building from the threat of termites.

Site Management

- Divert all water away from the foundation of the structure.
- Remove and dispose of all wood construction debris.
- Avoid any direct contact between wood and soil.
- Do not allow vegetation to become overgrown.
- Conduct an annual inspection of your structure for termites or termite damage.

Barriers

- A sand barrier can be installed as a bedding material beneath a concrete slab and in a trench adjacent to the foundation wall. The barrier should be 4" to 6" thick and 8 feet deep. If sand is used, it must be 16-grit in order to work effectively. Lava, basalt, or **Granitgard** can be used instead of sand. Granitgard is a physical barrier made with graded stone. Like 16-grit sand, Granitgard stone particles are small enough that termites cannot pass through but heavy enough that they cannot move them out of the way with their mandibles.
- **PolyGuard** and **Resisto** are **peel-and-stick waterproofing membranes** which are termite proof. These membranes are applied directly to the ICF and effectively address two major below grade issues: moisture and termite protection.

- **Termimesh** and **Termistop** are tightly woven **stainless steel fabrics** that termites cannot penetrate. These mesh products are also applied directly to the ICF.
- **YorkShield 106 TS** is a **copper barrier** that is installed through the EPS and attached or imbedded into the concrete of the above grade wall. Termites cannot pass through it so they exit the structure above grade in the light. The material is too slick for termite tunnels to attach.

Bait Stations

Bait systems are less intrusive and eliminate the entire colony. The bait stations are spaced 8 to 10 feet apart and inspected regularly. When the bait stations show termite activity the bait is replaced with a poison that termite workers take back to the colony. The poison is spread throughout the colony, eliminating it. The best bait systems are installed and monitored by a professional. The following is a list of some professional services that may be available in your area.

Bait Station Options

- Sentricon
- Advance
- Exterra
- FirstLine
- Terminate
- Subterfuge

Poison

Poisons are applied by digging a trench around the perimeter of the structure and spraying the poison the trench. The poison must be reapplied regularly because it leaches into the soil and becomes less effective over time.

Most poisons kill only invading termite workers but also may repel termites that approach the treated area. Examples of these include **Dragnet**, **Demon TC**, and **Talstar**. Some of the newer poisons do not contain a repellent but are transported by the worker termites to the colonies, eliminating them. These slow acting poisons include **Phantom**, **Premise**, and **Termidor**.

Termiguard is a poison barrier system. Its delivery system consists of a pipe imbedded in sand around the perimeter of the foundation and around any penetrations. The pipe is charged with poison regularly and the poison is dispersed throughout the pipe and sand trench.

Links to Resources

Advance	http://www.advancetermitecontrol.com/
Demon TC	http://www.demontermitecontrol.com/proven_performance/proven_performance.htm
Dragnet	http://www.abftermite.com/DRAGNET.htm
Exterra	http://www.termite.com/exterra.html
FirstLine	http://www.fmcprosolutions.com/
Granitgard	http://www.granitgard.com.au/
Phantom	http://www.phantomhome.com
Polyguard	http://www.polyguardproducts.com/products/Underseal/index2.htm
Resisto	http://www.resisto.ca/
Sentricon	http://www.sentricon.com/us/index.htm
Spectricide	http://www.spectracidetermine.com/BrandNav/BrandNews/TermitesUpdate.htm
Termidor	http://www.termidorhome.com/
TermiGuard	http://www.termiguardusa.com/
Termimesh	http://www.termimesh.com/
Termistop	http://www.termistopusa.com/
YorkShield	http://www.yorkmfg.com/termitebarrier.asp

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