TECHNICAL DATA

TERMITE PROTECTION FOR BELOW-GRADE APPLICATIONS OVERVIEW

The EPS foam in BuildBlock® 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.

Below-grade use of foam insulation products like ICFs are banned in "very heavy" termite infestation regions, except when applied with "an approved method of protecting the foam plastic and structure from subterranean termite damage." It is very important that you refer your local building codes in regard to what constitutes "approved methods of protection" in your area.

TERMITES PREVENTION STRATEGIES FOR ICF CONSTRUCTION

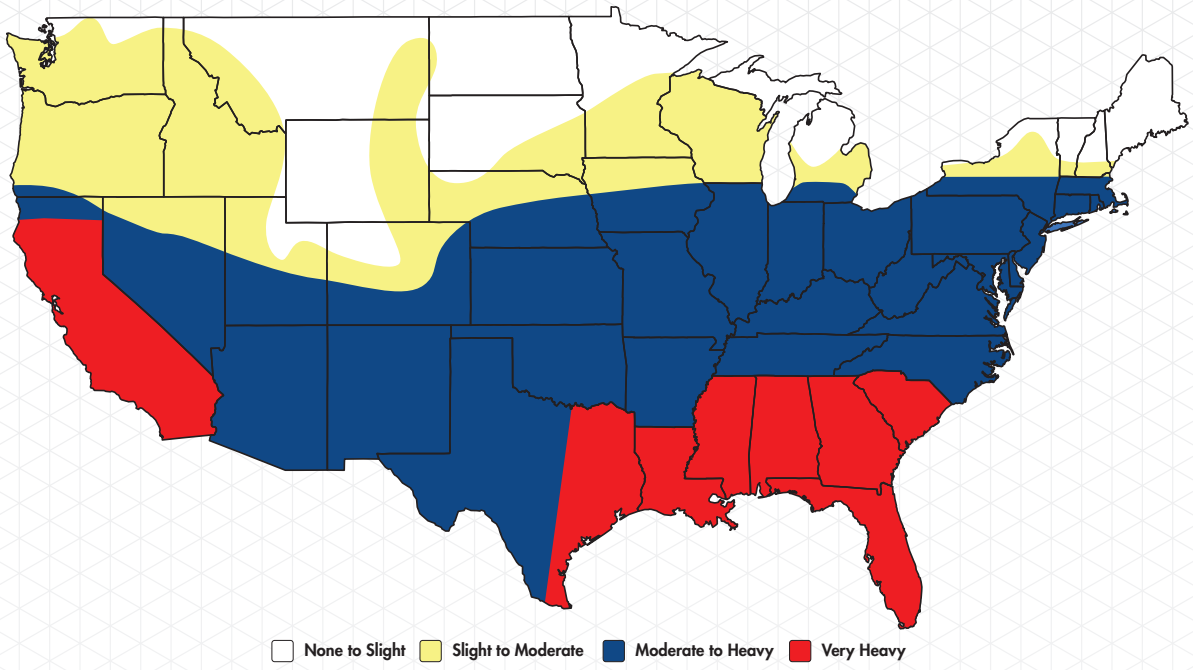
Termites cause substantial damage each year in unprotected homes. As more and more ICF buildings are being built in termite prone areas, it is important to review means to control termite infestations. One advantage of building with ICF is that the structure of the ICF foundation or wall will not be affected by termites unlike wood framed homes. Neither the EPS foam nor the polypropylene webs are a food source for termites.

It is a misconception to say that ICF homes are termite proof since termites can tunnel through the EPS foam and remain unseen. Some jurisdictions have reacted by banning all foam plastic in contact with the soil. This is an overreaction, and does not allow for the many solutions that have been developed over the years.

There are a number of options when building with ICFs to protect your home from termites.

BuildBlock BUILDING SYSTEMS

TERMITE INFESTATION PROBABILITY ZONE MAP



Source: National Pest Management Association

Note: Lines defining areas are approximate only. Local conditions may be more or less severe than indicated by the region classification. This is for subterranean termites only.

PREVENTOL

One of the simplest methods is to use ICFs that were molded with Preventol, a termiticide developed by Lanxess, added to the EPS foam during manufacturing. This product coats each bead with a thin layer of protection, preventing termites from tunneling through the foam.

BuildBlock Building Systems currently offers this product in our Orlando, Florida facility, and is planning to expand this offering in the future. BuildBlock believes this is the best solution, and should be used exclusively below grade in high termite infestation areas, as well as for the first few courses above grade.

TERMITE SHIELD

Termite shields are designed to create a barrier that the termites cannot tunnel through, and thus they are forced out of the foam. They are typically used as a cap, extending across the full width of the ICF and out up to 3 inches, or embedded into the concrete to prevent access on the inside, forcing them out of the sheltered environment of the foam. This creates a highly visible location to inspect for mud tubes.

Mud tubes are created by termites to shield them from the sun and dry air. They also provide an easily identifiable trail during a visible inspection. The termite shield doesn't actually block them; it merely forces them into the open where they can be seen. Once you know they are there, make a quick call to your local pest control center to have a treatment program started.

Other termite barriers are used below grade as part of the ICF installation. Some ICF waterproofing materials have been shown through testing to be termite resistant (Colphene ICF and Polyguard XT). Tamko TW-60 has not been tested, but should perform similarly.

Other methods include using a stainless steel mesh (Termimesh) on the outside of the waterproofing to prevent their entry. It is also a good idea to caulk any exposed cracks or expansion joints with a good quality silicone based caulking. Cold Joints can also be sealed with waterstops or other mechanical seals that are embedded into the concrete.

Local pest control companies also have multiple solutions that they can place into the soil which will keep them a good distance from the home, and prevent them nesting in the area. Often these will need to be reapplied on a regular basis. It is important to have an application of this sprayed around exterior areas with foam below grade, as well as under porches and slabs before pouring them.

PREVENTIVE MAINTENANCE

Keep the area around your home clear of wood products and brush. Do not pile or stack wood near the walls. This can create a haven for them and draw them to the home.

Each of these alone will provide a small measure of protection against termite infestation, but together can be a very effective termite deterrent. It is recommended to use a combination of these, to better protect your valuable property.

Termites look for the easiest food source and the more barriers you create between your home and them, the more likely they will pass you by.