

Although termites are not as common in Canada as they are in the United States of America, there are locations within Canada where termites have been identified (Figure 1). Typically, there are three common species of termites found in Canada that include the Eastern subterranean termite (*Reticulitermes Flavipes*), the Western subterranean termite (*Reticulitermes Hesperus*), and the Pacific dampwood termite (*Zootermopsis Angusticollis*).

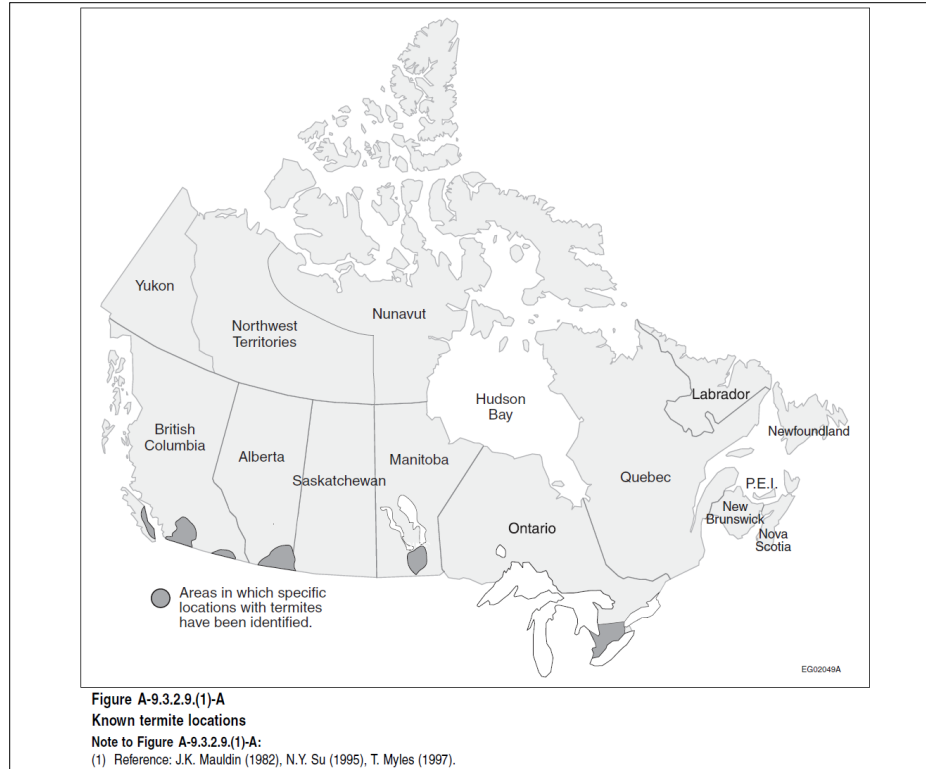


Figure 1: Protection from Termites A-9.3.2.9. (1) 2015 National Building Code of Canada

Termites do not consume foam plastic insulation for a food source, however they will tunnel through it as the insulation provides potential protection from any predators and could be a source of moisture. Termite habitats in Canada are often identified in wood that is below grade or in contact with the grade. Due to the habitat location of termites the 2015 National Building Code of Canada has specific requirements for foundations that are insulated below grade. These requirements include:

9.3.2.8. Termite and Decay Protection

- 2) In localities where termites are known to occur and foundation are insulated or otherwise finished in a manner that could conceal a termite infestation,
 - a) a metal or plastic barrier shall be installed through the insulation and any other separation of finish materials above finished ground level to control the passage of termites behind or through the insulation, separation or finished materials, and
 - b) all sides of the finished supporting assembly shall be visible to permit inspection.

Termites in the United States of America are more common (Figure 2), with approximately 50 different species present in the country. The 50 species can be broken down into three categories that include Subterranean termites, Drywood termites, and Formosan termites. Each category of termites have unique characteristics, however, they all share the common characteristic of chewing through wood undetected and creating habit in foam plastic insulation.

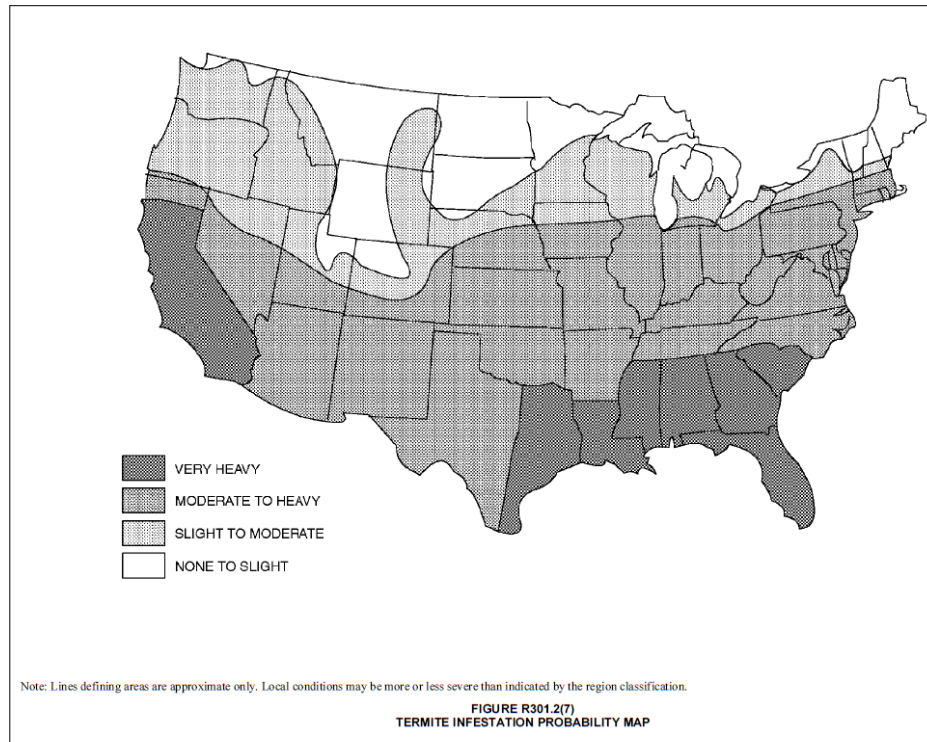


Figure 2: Termite Infestation Probability Map - Figure R301.2(7) – 2018 International Residential Code

With the infestation of termites in the United States of America, the 2018 International Residential Code (IRC) sets forth specific requirements for termite protection. Section R318.4 lays out the requirements for protection of foam plastic insulation in areas where the probability of termite infestation is “very heavy” as indicated by Figure R301.2(7) in the IRC. Foam plastic insulation is permitted in these regions where in addition to the requirements of Section R318.1., an approved method of protecting the foam plastic and structure from subterranean termite damage is used. Section R318.1 defines the requirements for protection against subterranean termite control methods that include:

1. Chemical termiticide treatment in accordance with Section R318.2.
2. Termite-baiting system installed and maintained in accordance with the label.
3. Pressure-preservative-treated wood in accordance with the provisions of Section R317.1.
4. Naturally durable termite-resistant wood.
5. Physical barriers in accordance with Section R318.3 and used in location as specified in Section R317.1.
6. Cold-formed steel framing in accordance with Sections R505.2.1. and R603.2.1.

Logix Brands recommends implementing a termite barrier in areas that have been identified with termites in Canada and the United States of America. To achieve compliance with the requirements in the National Building Code of Canada and/or the International Residential Code Logix Brands recommends the following termite mitigation solutions.

LOGIX TX

Currently available by special order through our Wichita, Kansas, plant only, LOGIX TX are ICFs where each individual foam bead that makes up the EPS form panels are coated with imidacloprid, an ICC (International Code Council) approved compound that protects the form panels from termite damage without affecting the material properties of EPS. Since each bead is individually protected, LOGIX TX is more effective than Borate treated EPS. LOGIX TX kills termites before they chew through the outer surface of the form panels¹.

INSPECTION STRIPS

A six-inch concrete strip is placed around the entire perimeter of the building just above grade. As termites avoid sunlight the concept of the inspection strip is to force them out of the foam insulation and to begin building mud-walled tubes to travel in. The inspection strip does not prevent termites, rather notifies an individual that termites are present and treatment should occur.

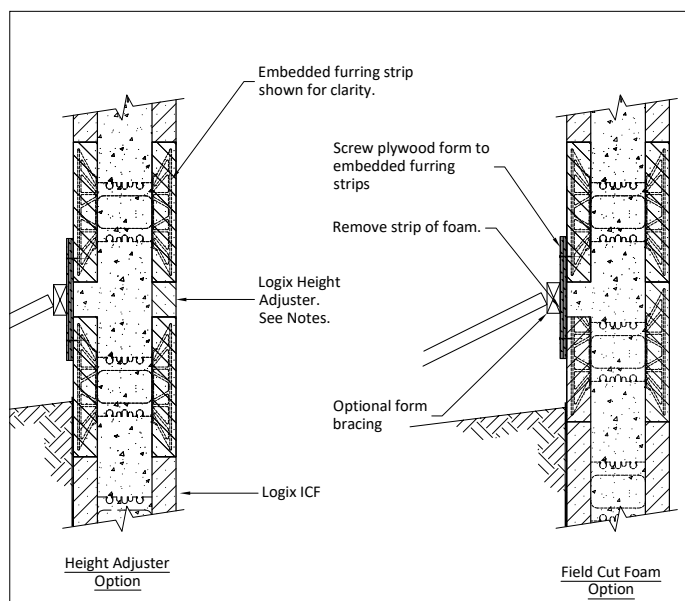


Figure 3: Termite Inspection Strip Logix Brands – Drawing 5.2.3.6.-R2

BELOW-GRADE TERMITE BARRIER

Through testing Soprema has shown their peel and stick Colphene ICF waterproofing membrane can also function as an effective termite barrier. No additional detailing is required provided installation complies with the Soprema recommended installation instructions.

The test was developed at Texas A&M University and was performed by Trinity/ERD. Results indicated the ICF membrane showed no evidence of exaction or penetration by termites.

A copy of the Soprema test report may be obtained upon written request to the technical department of Logix Brands.

In addition, Logix Brands recommends making the environment surrounding the area of the building less favorable for termites to prevent a possible infestation from occurring. This can be achieved by reducing moisture levels around the building by directing water out and well away from the building. Any vegetation should not come into contact with the building and wood-based materials should be stored well away from the building in a dry setting.

For more information, please contact your local Logix representative or email info@logixicf.com.

1. For more information see Technical Bulletin No.24, Logix TX - First Line of Defence Against Termite Attacks.