




Florida Department of Agriculture and Consumer Services
CHARLES H. BRONSON, Commissioner
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April 23, 2007

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MEMORANDUM NO. 807

TO: All Pest Control Licensees, Certified Operators, and Identification Cardholders

FROM: Michael J. Page, Chief 
Bureau of Entomology and Pest Control

SUBJECT: Preventive Termite Treatments using Bora-Care®

Applications of Bora-Care® have become a popular choice for treating new construction as a stand-alone preventive treatment for the prevention of termite infestations. This insecticide has met the performance requirement for this use established in Chapter 5E-2.0311, F.A.C. for structures configured with wood frame exterior walls supported by cellulosic sill plates. The demonstration of efficacy needed to meet this performance standard resulted from the application of a continuous horizontal and vertical barrier to wood frame construction by treating all areas that termites could come into contact with structural wood and foundations. This includes structural wood of both internal and external walls (sill plates, base plates, wall studs and exterior wood sheathing), foundations (concrete surfaces), bath traps, plumbing protrusions, door and window frames and other areas. Recent inspections by the Department have identified a number of situations in new construction in Florida that require the attention of licensees, certified operators and service technicians who are making applications of this product to protect structures against termites.

During a recent Special Enforcement Operation (SEO) which focused on preventive termite treatments in South Florida, DACS Inspectors noted a number of homes treated with Bora-Care® did not meet the label requirement which directs that for new construction treatments the total linear footage of the cellulosic base plates must be a minimum of 60 percent of the total *linear footage of all base plates in the structure to include interior and exterior walls* in order for a structure to qualify for treatment with Bora-Care®.

This requirement is important because the demonstration of the product's effectiveness was based on construction configured with continuous wood base plates extending under a support feature or a constructed wall. This product's use has however expanded to other types of construction and construction materials such as CBS block, concrete insulated forms and steel frame. Homes constructed primarily out of these non-cellulosic materials may not qualify for a borate treatment if they do not include continuous base plates which extend between a slab and support features. It was noted during Department inspections that applicators qualified homes for stand-alone treatment with Bora-Care® by including wood placed in the trays of metal studs which were in



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direct contact to the slab as linear footage. Licensees cannot qualify a structure for Bora-Care[®] treatment with this construction configuration until product efficacy is demonstrated under the Department's Efficacy Standard (Chapter 5E-2.0311, F.A.C.).

New concrete block and slab construction may qualify for a Bora-Care[®] treatment, even if a continuous wood base plate does not exist on every exterior wall, as long as the total linear footage of all continuous base plates on interior walls present in the structure is 60 percent cellulose or more. Horizontal furring strips located at the base of exterior concrete walls would not be counted in the measurement.

Example 1: A structure with a slab foundation and concrete block exterior walls that has interior walls with all steel studs and all metal trays in contact with the slab would not qualify even if wood was placed in the trays. In other words, there is no wood in contact with the slab. This structure would not qualify for a Bora-Care[®] treatment.

Example 2: A structure with a slab foundation and concrete block exterior walls that have interior walls with wood base plates in contact with the slab throughout the structure may qualify for a Bora-Care[®] pretreatment. If the actual wood in contact with the slab measures 60% of the total framing of the structure, this structure would qualify as a Bora-Care[®] treatment.

It is important to note that treatments performed in these structures must include **all non-wood** structural components to a height of 2 feet and extend out onto the slab from a minimum of 2 inches to a maximum of 8 inches. This includes treating exterior wall concrete block and or interior wall metal studs. Again, the primary objective of the treatment is to install a continuous protective barrier within the structure.

The decision to utilize borates as a preventive treatment for termites in new construction may be made by a construction firm without knowledge of the label requirement. The decision to utilize Bora-Care[®] may therefore be made prior to making actual measurements which would properly qualify a structure for this type of preventive treatment option. Licensees must realize that they are responsible for the treatment of structures and are advised to ensure that homes are properly qualified (meet the 60% label requirement) before stand-alone Bora-Care[®] treatments are performed. Accordingly, in structures which do not qualify for a stand-alone borate treatment a licensee may still utilize Bora-Care[®] as a secondary treatment in accordance with Chapter 5E-14.106(9), F.A.C. as long as a proper primary treatment has, or will be made to the structure in accordance with Chapter 5E-14.105(6), F. A.C. Enforcement action will be taken if an application of Bora-Care[®] is utilized as a stand-alone treatment in structures that do not properly meet label requirements.

DACS Inspectors also noted a number of other items which require the attention of individuals using and applying the product.

- *Improper preparation prior to treatment with Bora-Care[®].* Treatment areas not cleaned of debris and obstructions prevent the establishment of a protective barrier. It was noted that debris and other obstructions were not being removed from the areas requiring treatment.

The directions for use for this product require treatment of the concrete surface adjacent to the wall being treated. Presence of debris such as sawdust, dirt, wood shavings, and other types of construction debris on the surface prevent this label requirement from being met. The presence of debris or wet soil would similarly prevent a soil treatment from being conducted properly.

- *Untreated wood is added to structures subsequent to the initial Bora-Care® application.* Inspectors noted that builders often add untreated wood to structures at various stages of a home's construction and licensees may need to address this by periodically returning to the structure to ensure that a protective barrier established has been maintained. This is similar to the need to retreat disturbed soil areas subsequent to additional plumbing or electrical work. The directions for use include an enforceable requirement that a second visit of the treated area be made by the applicator if the original treatment was performed before the framing inspection has been completed. The label directs that the best time to do an application is after final framing inspection. The Department may take enforcement action in those cases where this second required visit and treatment are not made.
- *Plumbing protrusions, windows and door frame areas are not adequately treated.* DACS inspector's consistently noted inadequate treatment of plumbing areas within newly constructed structures. This is important as it is a primary entry point for termites. The directions for use require that these areas be treated and enforcement action may be taken if label directions for use are not followed.
- *Block construction fitted with foam insulation.* The combination of block construction built on a supported slab creates an expansion joint that may provide access to structural wood if not treated properly. The Bora-Care® label directs that a treatment must be performed prior to the installation of insulation. This label requirement may result in having builders notify licensees to perform a treatment before the addition of foam insulation to create an effective barrier against termites. It may also be advisable to treat the foam insulation subsequent to its installation, although this is not a label requirement. DACS has documented infestations in homes where foam insulation has been treated on only the inside of the structure after installation of the foam insulation.
- *Improper applications and/or mixing of the product may lead to an inadequate concentration of the product being applied to wood surfaces.* DACS has documented cases where termites have breached a barrier due to an inadequate treatment concentration of Bora-Care®. This may have resulted from not making the proper application; specifically, a second application to one side of the interior wall or to wood where less than 3 faces can be treated such as exterior wall sill plate and married studs. In addition, some licensees have commented on mixing problems associated with the product, especially in cold weather. It is recommended that applicators mix the product in a container other than that being used for the application to ensure complete dissolution. Once mixed, the finished product can be poured into an appropriate application device.

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- Bora-Care[®] has been shown to be an effective product when applied to new construction as a preventive treatment for termites. Licensees are advised to ensure the product is being utilized in structures that qualify according to label requirements and be aware of other issues noted by DACS inspections.

Please contact this office if there are any questions.

MJP/bk