

## Technical Bulletin No. 015

### Woodpeckers & Carpenter Ants

The SmartGuard® process is a backbone of LP® SmartSide® trim and siding products. This process treats the product throughout its cross section with a blend of premium adhesive resins, moisture inhibitors and the preservative zinc borate (ZB).

Zinc Borate ( $2\text{ZnO} \cdot 3\text{B}_2\text{O}_3 \cdot 3.5\text{H}_2\text{O}$ ) is a registered pesticide with the US EPA and Canadian PMRA. It is an ideal additive for protecting wood composite products used in above ground, weather protected applications. It is the only preservative standardized by the American Wood Protection Association for the non-pressure treatment of engineered wood composites.

Zinc Borate helps SmartSide products resist fungal decay and damage from termites. However, it does not provide protection against surface mold or mildew. Surface molds feed on organic matter and free sugars that are present on the product surface, including painted surfaces that can usually be cleaned.

Zinc Borate is a systemic preservative and is effective against termites because they consume wood (cellulose) as food source. This cellulose is digested by symbiotic organisms inside the termite's digestive tract. These organisms are killed by the preservative and the termite starves.

Other insects, such as carpenter ants or carpenter bees excavate holes & tunnels into wood, but do not consume the wood as a food source. Therefore they are not exposed to the preservative at a high enough level to cause mortality. Wood based siding that suffers from fungal decay is softened and easier to excavate by these insects. Treating with zinc borate prevents decay and associated softening of the substrate. SmartSide siding should be less prone to attack by these insects.

Birds, such as woodpeckers and flickers may cause damage to siding products by 'drumming' to establish territory and attract a mate. Walls that sound hollow and echo when struck are the most attractive, regardless of siding type. Another possibility is that they are excavating for a nesting site. Woodpeckers do not consume the wood they excavate as a food source. Zinc Borate is not effective in protecting composite wood products from woodpeckers and flickers.