# MINIMIZING FIRE THREATS

### By Kim Smallwood, Duradek

The Importance of Deck Building Products Fire Ratings

The summer of 2017 brought significant awareness to the danger and damage caused by wildfires. Thousands of wildfires have been burning throughout western North America with a state of emergency being declared in several states and provinces.

As of September 6, 2017, state and provincial government fire status websites report that there are still more than 140 wildfires active in British Columbia, 11 in Washington, 18 in Idaho, 26 in Montana and 24 in California.

While these wildfires are extreme circumstances and no preventative measures will stop such a destructive force in its path, homes in proximity to fires can minimize damage from hot ash and embers by using fire rated building products.

#### MINIMIZING FIRE THREATS WITH DECK BUILDING PRODUCT

In some high-risk districts, officials have been designated to do property assessments to help people make their homes more resilient to wildfire. One such official recently sought advice on fireresistant decking materials, stating, "Wood decks are a hazard that we frequently see, so I was wondering whether you are aware of any fire-resistant decking materials...that people could opt for."

This inquiry is an excellent example of how to minimize fire risk on residential properties. Traditional slatted wood decks are very vulnerable to fire but using a fire rated deck building product can reduce the risk; potentially saving not only the deck, but the entire home.

#### CHOOSE A DECKING PRODUCT WITH A CLASS A & CLASS C FIRE RATING

Vinyl decking is a little different from many deck waterproofing products.

Some sheet vinyl products are not only a pedestrian surface, but also a roofing membrane. Further, some vinyl membranes are distinguished further as a classified roofing membrane. This means its product testing and performance requirements to meet building code classifications are much higher than for a deck wear surface alone.

PVC intrinsically has a degree of fire resistance, although on its own it is not necessarily a fire-resistant product. There are vinyl products on the market that provide a fire-resistant assembly. It is the whole assembly in its applied use that must be considered in classifying the fire rating.

• When applied directly to untreated plywood, fire resistant vinyl can achieve a **Class C fire rating**.



•When applied to a substrate assembly of plywood and cement board it can achieve a **Class A fire rating**.

## CHOOSING A FIRE RATED DECK BUILDING PRODUCT

There really is no magic deck building product that is completely invulnerable to fire with the exception of concrete. However, concrete decks have their own challenges for installation and maintenance. For the average homeowner, choosing a deck fire resistant vinyl in a class A assembly with cement board over wood framed deck construction is a great choice. It meets the fire ratings set by roofing building codes and is a good measure to reduce the impact of fire from falling ash and embers.

Falling ash and embers can make a weathered, slatted wood deck act like tinder, while fire resistant vinyl deck surfaces are resistant to those effects, and in some cases, may be a contributing factor to stopping small, isolated fire exposure from being an entirely destructive force on residential properties.

### FIRE RATINGS & DECK BUILDING PRODUCT TESTING

The importance of choosing building products that have been tested to building code requirements cannot be overstated

While each municipality may have their own set of governing building codes, a good place to start is by ensuring your building products meet national building codes and are evaluated to the standards of the National Building Code of Canada (NBC) or the International Code Council (ICC).

#### FIRE-RATING REQUIREMENTS IN CANADA

The National Building Code of Canada tests Roof Covering Classification in accordance with CAN/ULC-S107, "Fire Tests of Roof Coverings".

If you would like to talk to a Duradek decking specialist about your next deck project, you will be sure to get a product that has been tested to achieve a Class A or Class C fire rating. Feel free to reach out to a Duradek™professional in your area, or contact us for more information. www.duradek.com