

The difference between FireLine™ and PPC™

By Brad Bain and Dr. Arindam Samanta

Fire. It's a basic combination of three elements that surround us every day: heat, fuel, and oxygen. While we recognize it's a danger, most people rarely think about fire as they go about their lives, unless they see something in the news that sparks interest. Is that because people feel protected from fire by local fire departments or know that their significant investments (house or car) are covered by fire insurance? Or is it simply that people think fire won't happen to them because they're careful and smart? But many fires occur due to circumstances beyond a person's control, such as a spark from a broken wire in a wall, an appliance overheating, a pilot light going out, or maybe a lightning strike.

While fire may not be on everyone's mind all the time, fortunately it's a constant concern of the property/casualty insurance industry. Structure fires are a leading cause of loss for insurers. The estimated fire loss for structure fires in 2013 was more than \$18 billion; in 2014 it was more than \$20 billion. Because the risk for loss is so high, insurers use various tools to determine fire loss potential for properties they insure. Two of these tools are from Verisk Analytics: the ISO Public Protection Classification (PPC™) program and Verisk Insurance Solutions' FireLine™.

Both of the programs uniquely address various aspects of fire prevention and loss. This article is meant to define their very important differences.

ISO's PPC program

The PPC program has existed in various forms for more than 100 years. In the late 1800s, the National Board of Fire Underwriters began a report development program that provided valuable data on the conditions in a given community. The reports included code enforcement, fire protection equipment and capabilities, water supply capabilities, and more to help inform insurers of the loss potential in a specific jurisdiction. The goal was to let insurers more effectively price fire insurance.

Over the years, the original program evolved into today's PPC, which evaluates a community's ability to prevent or suppress fires. PPC is based on ISO's Fire Suppression Rating Schedule (FSRS), the system we developed to measure ten levels of classifications, with class 1 meaning superior fire protection and class 10 indicating the community does not meet ISO's minimum criteria.

The FSRS uses nationally recognized standards to review the fire protection needs within a community and provides points based on the communities available resources to meet those needs. The FSRS evaluates four sections that total 105.5 available points and tend to follow the general progression of dealing with structure fires. Those four sections are as follows:

- **Fire Department:** Fifty points are possible when we review the fire department itself. The assessment includes all fire department resources, including fire station locations, fire apparatus and associated equipment, available personnel to operate the equipment, and the level of fire training that personnel receive.

- **Water Resources:** The water resource section accounts for 40 points. The analysis includes a comparison of buildings in the community, their flammability, and the capability of the water supply systems to provide enough water to extinguish a fire.
- **Emergency Communications:** ISO examines the community's ability to receive fire calls, process the information, and dispatch the appropriate fire department in a timely manner. Ten points are allotted for this section.
- **Community Risk Reduction:** ISO reviews a community's commitment to adopt and enforce fire prevention codes using appropriately trained personnel, conduct public education about fire potential, and investigate structure fires with trained personnel. This section is worth up to 5.5 points.

PPC is designed to provide predictive fire loss data for typical structure fire problems. It is not intended to provide predictive capabilities for more prescriptive conditions such as wildfire. Where specific conditions provide for specific challenges, the property/casualty industry turns to alternative products such as FireLine.

Verisk Insurance Solution's FireLine

Wildfire is a unique peril because the environmental factors around a property influence the risk of loss. FireLine was developed specifically to address that loss potential. A study completed in 2015 found that nearly 4.5 million homes were at high or extreme risk of loss due to wildfire. FireLine has fewer elements than the PPC program, but it provides a similar scoring mechanism that's translated into a risk score or loss potential classification to help insurers appropriately price fire insurance for properties in an environment at greater risk for loss due to wildfires.

Three key elements are used to develop the FireLine score for a given property. These factors are also recognized by the National Fire Protection Association (NFPA).

- Fuel — Grass, trees, or dense brush feed a wildfire.
- Slope — Steeper slopes can increase the speed and intensity of wildfire.
- Access — Limited access and dead-end roads can impede firefighting equipment.

Scores range from negligible (0) to low (1), moderate (2–3), high (4–12), and extreme (13–30). Research conducted on the 2014 California wildfires indicated that 88 percent of damaged or destroyed homes were rated as high or extreme. Ninety-nine percent were identified as exposed to the wildfire hazard. Similarly, 97 percent of properties damaged or destroyed in the Butte fire in 2015 were at moderate to high or extreme risk from wildfire. Studies on wildfires in other western states show comparable results.

Fire risk is part of our daily lives. For many, it's a threat to our largest investments—our homes and businesses. To protect those investments, we look to the insurance industry for help. Insurers have the

difficult challenge of balancing risk with affordable and competitive premiums. The tools they use are the keys to developing appropriate fire insurance pricing for the potential loss. Where the risk is great, the right tools produce the appropriate premiums for the many factors involved.

Two of the most effective tools are PPC and FireLine. For more information, please contact your Verisk representative.