Personal Communication from Dr. Jack Cohen
Research Physical Scientist
United States Forest Service - Fire Lab (Ret.)
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Re: HIZ v. Home Hardening

The term "home hardening" is not appropriate to describe how an ignition resistant HIZ is created. I don't know where it came from but I've heard it from the fire group at NIST (National Institute for Standards and Technology), IBHS, and others. Often it is used as "home hardening and defensible space." The terms are not the same as HIZ ignition resistance; the semantic difference is significant. I will explain.

The HIZ refers to a home's ignition conditions/vulnerability *in relation to* burning embers (from any source) and flames within 100 ft (30 m) of a home. This describes an interaction of a home's response to an ignition exposure and scales that interaction within 100 ft of the home. The HIZ definition/description is very important for making trade-offs to achieve ignition resistance and satisfy a homeowner's desires for their home's ambiance. This can be critical for keeping them engaged. It also maintains focus on the principal issue, the process of ignition and not a specified list of rules using specified secondary factors (e.g., materials not the ignition process).

Recent code and standard applications I've reviewed use of the term "home hardening" without recognizing this HIZ interaction with or without the accompanying "defensible space" term. When used together, it separates the factors for activities, it doesn't relate the factors for achieving ignition resistance.

I have found that those using the term "home hardening" tend to focus on building materials and not the materials related to the design configuration of those materials. That is, flammable materials, like wood can be used if the design configuration eliminates contact at junctions and geometries that enhance sustained combustion.