

NINE-POINT CRITERIA ANALYSIS
BY THE
CALIFORNIA DEPARTMENT OF FORESTRY (CDF) & FIRE PROTECTION
AND THE
OFFICE OF THE STATE FIRE MARSHAL (SFM)
REGARDING THE CALIFORNIA BUILDING CODE (CBC) &
THE CALIFORNIA FIRE CODE (CFC)
CALIFORNIA CODE OF REGULATIONS, TITLE 24, PARTS 2 & 9
REGARDING WILDLAND-URBAN INTERFACE FIRE AREAS BUILDING STANDARDS

Health and Safety Code Subsection 18930(a) requires building standards submitted to the California Building Standards Commission for approval; to be accompanied by an analysis, which will, to the satisfaction of the Commission, justify their approval. The approval of these proposed building standards is justified as follows:

1) The proposed building standards do not conflict with, overlap, or duplicate other building standards.

The building standards as proposed by the SFM, do not conflict with, overlap, or duplicate other building standards. The scope of the SFM's proposed regulations applies to the construction of new structures in any Wildland-Urban Interface Fire Areas.

There are no other regulations in the California Code of Regulations, Title 24 that specifically address ignition resistant construction for buildings within Wildland-Urban Interface Fire Areas. The 2001 California Building and Fire Codes do not address the threat of wildland fires and their impact on the built environment.

2) The proposed building standards are within the parameters established by enabling legislation, and are not expressly within the exclusive jurisdiction of another agency.

The building standards as proposed by the SFM are within the parameters established by the enabling legislation, and are not expressly within the exclusive jurisdiction of another agency. The enabling legislation for these proposed building standards are Government Code Section 51189 and Health and Safety Code Section 13108.5.

The Legislature gave very specific authority to the Office of the State Fire Marshal to promulgate building standards for buildings that are constructed in any Wildland-Urban Interface Fire Area to resist the intrusion of flame and burning embers projected during a conflagration or wildfire.

3) The public interest requires the adoption of the building standards.

The public interest requires the adoption of these building standards. The estimated structural damage and destruction, and cost of response from three major federally-declared disasters over the past 12 years (1991 Oakland Hills, 1993 Southern California, 2003 Southern California) was \$10 billion.

Wildland-Urban Interface Fires occur every year in California; in 2003 alone, the total number of structures destroyed or damaged was approximately 5,046. It has been determined that 74% of these losses were a result of the "California Fire Siege, 2003" as reported in, "The Story."

Those who lost their homes in past fires are applying for building permits today to build on the same property where their homes were destroyed. It is in the public's interest that these new building standards become enforceable in these Wildland-Urban Interface Fire Areas as quickly as possible to help mitigate the devastation that California experienced in 2003.

4) The proposed building standards are not unreasonable, arbitrary, unfair, or capricious, in whole or in part.

The building standards as proposed by the SFM are not unreasonable, arbitrary, unfair, or capricious, in whole or in part for the following reasons:

- (a) The building standards as proposed by the SFM are not unreasonable. These standards for Wildland-Urban Interface Fire Areas are mandated by Assembly Bill 1216 as authored by Assemblyman Vargas. Legislative analysis does not indicate that the Assembly members enacted an unreasonable law but rather one that proved unknowingly timely in light of the California Fire Siege, 2003.*
- (b) The building standards as proposed by the SFM are not arbitrary. These standards serve a specific purpose. That purpose is to provide building standards that clearly specify the materials and construction methods for new roofs, roofing assemblies, roof coverings, attic and eave vents in any Wildland-Urban Interface Fire Area that are designed to resist the intrusion of flame and burning embers projected during a conflagration or wildfire.*
- (c) The building standards as proposed by the SFM are not unfair or capricious, in whole or in part. People who choose to live in any Wildland-Urban Interface Fire Area of the state must share in the responsibility of protecting California's natural resources as well as their own preservation.*
- (d) The proposed SFM standards were developed by CDF experts, building and fire officials, other state agencies and building industry concerns. Although the proposed regulations focus on performance based criteria, prescriptive measures are also included providing the owner, developer, designer or builder a wide range of building material options and construction methods within a broader range of costs.*

- (e) *The SFM is proposing a phased regulatory plan that provides a “systems approach” to the mitigation of wildfires in any Wildland-Urban Interface Fire Areas. The SFM and CDF worked with interested parties and stakeholders to reach consensus on the Phase 1 regulations.*
- (f) *The SFM and CDF did reach consensus on the intent of the Phase 1 regulations that are designed to address the materials and construction methods for new roofs, roofing assemblies, roof coverings, attic and eave vents.*
- (g) *Phase 1 regulations will not become effective until December 1, 2005. This delayed effective date will give the enforcing agency and the public time to prepare and plan for these regulations accordingly.*

5) The cost to the public is reasonable, based on the overall benefit to be derived from the building standards.

The cost to the public is reasonable based on the overall benefit.

 *See Appendix 2, page 67 of “The Story.” Appendix 2 provides summaries of cost for suppression, firefighters as well as the tragic loss of lives for each fire. These summaries clearly indicate the need for new, forward thinking for prevention measures outside of the conventional home construction methods. These measures and these regulations are only geared towards those limited number of homes and structures built in Wildland-Urban Interface Fire Areas.*

It is estimated that these regulations may affect approximately 11% of the single-family home construction in California. Persons that elect to live in Wildland-Urban Interface Fire Areas must be made and become responsible for their impact upon California’s natural resources, neighbors and their community.

6) The proposed building standards are not unnecessarily ambiguous or vague, in whole or in part.

The SFM proposed regulations are not unnecessarily ambiguous or vague, in whole or in part.

The SFM proposed regulations were carefully drafted to avoid vague and ambiguous language in their scope and application. These regulations are outside of conventional construction methodologies because they have a strong element or emphasis on fire prevention that is not typically incorporated into the enforcement duties of a building official. Therefore these regulations must be as clear and easy to enforce by the building official as possible. Phase 1 will acquaint the building official in a less hurried fashion so that when Phase II is implemented they will have exceeded their learning curve.

These proposed building standards for buildings in are a systematic approach that includes requirements for materials and construction methods for buildings in Wildland-Urban Interface Fire Areas. Used in conjunction with well established vegetation management principles these building standards will be the cornerstone of future standards and mythologies that will rebuild and make safe the communities in Wildland-Urban Interface Fire Areas.

The statistical modeling of structure loss and survival on the 1990 Santa Barbara Paint fire revealed that brush clearance alone only accounted for 11% of the variation seen in the structure survival patterns. When brush clearance was combined in the statistical model with building construction (in this case roof type) and the effect of defensive actions was accounted for, the model accounted for 59% of the variability in structure loss.

See attached 2004 Community Wildfire Protection Plan Workshop handout “Wildland-Urban Interface Ignition Resistant Building Construction Recommendations.”

The SFM proposed regulations are not with out cause. The SFM is responding to the Legislature’s mandate for the development of regulations for new structures in any Wildland-Urban Interface Fire Areas. The development of these regulations is supported by Governor Schwarzenegger’s Blue Ribbon Commission report following the California Fire Siege, 2003. See the following attachments

- ◆ *“Governor’s Blue Ribbon Commission Report”- findings regarding building standards in Wildland-Urban Interface Fire Area as follows:*
 - *Page 13 – Finding 3 – Currently appropriate minimum building standards are not mandated nor consistently enforced in all communities in WUI Fire Areas,*
 - *Page 47 – Finding 1 - The protection of life and property from wildfire cannot simply rely on the availability of firefighting resources,*
 - *Page 22 - The Governor’s recommendation – The State Fire Marshal is to continue the research towards the development of but is not limited to, fire test protocols for vents, radiant heat and improvement of ignition resistant construction techniques.*

7) The applicable national specifications, published standards, and model codes have been incorporated therein as provided in this part, where appropriate.

Applicable national standards include the International Code Council (ICC), Urban Wildland Interface Code (2002ed.) and the NFPA 1144 Standard for Protection of Life and Property from Wildfire (2002 ed.). These standards were used as a model for the SFM’s proposed regulations.

However, due to copyright concerns and the fact that neither national standard provided the needed level of detailed information for California’s Wildland-Urban Interface Fire Areas, the SFM gleaned information from many reports and data sets on this subject from nationally

recognized testing labs, scientist, Fire Protection Engineers and many others when developing these proposed regulations.

8) The format of the proposed building standards is consistent with that adopted by the Commission.

The SFM has endeavored to maintain the format of these proposed building standards to be consistent with that adopted by the Commission. The presentation of these proposed regulations to the Commission and to the public is in the same format as that of the 2001 California Building Code as published by the International Conference of Building Officials (ICBO), which to the SFM's understanding is the adopted format of the Commission.

9) The proposed building standards, if they promote fire and panic safety as determined by the State Fire Marshal, have the written approval of the State Fire Marshal.

The SFM has determined that these proposed building standards, will promote fire and panic safety in new structures built in any Wildland-Urban Interface Fire Areas.