

May 10, 2017

The Honorable Councilmember Robert Blumenfield 200 N. Spring Street Los Angeles, CA 90012

Re: Response to the letter from The Los Angeles-Ventura Chapter of The Building Industry Association of Southern California regarding Motion (Blumenfield – Wesson for Huizar) Council File #14-1688-S2 and 16-116

Dear Councilmember Blumenfield:

Thank you for your call for a review of the changes made to the building codes that now permit the construction of very large buildings like the DaVinci Apartments with combustible framing materials.

I am writing on behalf of the thousands of members of the Steel Framing Industry Association who manufacture, design, and erect buildings with noncombustible steel framing in Los Angeles and the Southland. We would like to respond to the January 9, 2017 letter by the Los Angeles-Ventura Building Industry Association (BIA-LAV), which contains a series of misrepresentations and untruths that must be corrected.

We fundamentally disagree, and history is proving, that building materials *do* matter and can be an enormous problem when used in certain types of structures. This is not just the opinion of an industry but is demonstrated by the practice of the insurance industry which will charge significantly higher insurance premiums for combustible construction and the concerns expressed by the fire service and first responders.

To correct the statements made in the BIA-LAV letter, we offer the following:

Wood construction is not the only economically viable solution.

The wood industry and their allies will claim that wood frame systems are anywhere from 22% to 80% less expensive that steel or concrete alternatives. This is intended to mislead the reader to conclude that a building that cost \$10 million using combustible wood framing would cost anywhere from \$12.2 million to \$18,000,000 if built with concrete and steel.

In fact, the framing system of a building represents between 10% and 15% of the total cost of construction. Data provided in 2014 by developers for comparable mid-rise buildings constructed with both wood and cold-formed steel found that wood framing had a first-cost advantage of 3.6%. So, when put into true perspective, the difference between a wood frame and a steel frame system is only \$288,000. But that's not the complete story, either.

A cold-formed steel system offers a builder a number of efficiencies that lower construction costs, and thus narrow the cost gap, but one of the most significant savings is for Builders Risk insurance. Because combustible framing systems represents a significantly higher risk, premiums are priced accordingly. Consequently, a builder on average will *save* \$55,000 on insurance if that \$10,000,000 building is constructed with noncombustible cold-formed steel framing. When costs associated with construction defects and installation requirements are factored in, the gap between wood and steel framing effectively evaporates.

We agree that the housing shortage in Los Angeles needs some common-sense solutions, including higher density development. However, permitting the use of acres of combustible framing is not the solution but merely increases the risks of more urban forest fires like the DaVinci Apartments – which cost the taxpayers of Los Angeles \$80 million due to damage to city property and firefighting expenses.

In practice, city and state governments do not place their trust entirely in the International Code Council.

The letter from the BIA-LAV ignores the primary role that city and state governments play in determining the laws that apply to commerce in their jurisdictions. The ICC develops the base model building code, but new editions of the code must be adopted by a state or jurisdiction before they can go into effect. *Elected officials have the statutory right and responsibility to revise provisions in the code to ensure the public welfare in their communities is properly protected.* This is why there is a California Building Code, a Florida Building Code, as well as numerous versions of amended codes in effect around the nation.

Further, the letter from the BIA-LAV asserts that the International Code Council determines the "highest levels of safety" in the development of the building code. This conflicts with the ICC's self-description that it "provides **minimum** safeguards for people at home, at school, and in the workplace."

In light of the direct experience provided by the DaVinci Apartment fire, and the literally dozens of similar fires that have occurred around the country since the building codes were changed in 2006, we believe that *minimum* requirement is not being met and encourage further study and then legislative action your motion suggests (Council File #14-1688-S2 and 16-116), and to put into effect changes that will protect the citizens and first responders of Los Angeles.

Steel and concrete are noncombustible. Wood burns.

When a flame or heat source over 500 degrees is applied to a wood stud it will catch on fire. If there are other wood products nearby they will, in turn, catch fire and burn. When you have a very large amounts of wood in one place, like the DaVinci, one wood stud that catches fire is likely to have catastrophic results.

What happens when you apply a flame or heat source to a steel stud or concrete wall? Nothing. The studs will not ignite. They will not support the spread of the flame to another stud. Even after a seismic event, a cold-formed steel building will maintain its structural integrity when exposed to a fire.

This was recently proven by the University of California, San Diego, which built a 6-story cold-formed steel structure that was subjected to Northridge-scale seismic forces. Fire tests were then performed in eight rooms with temperatures reaching as high as 1,800 degrees. Then even larger seismic loads were applied to the structure. Although the building was badly damaged by the series of tests, there structure was still standing after all the abuse it had been subjected to. And it certainly didn't burn.

I think anyone could fairly conclude that a wood framed building would not have fared as well.

Finally, I would like to address the attempt by the BIA-LAV to deflect the focus of discussion away from the problem of combustible framing materials and on to the arson as the sole cause of concern.

The fact is that arsonists look for things to burn. Wood burns. So, perhaps the best way to control arson is not just harsher penalties for arsonist but to also limit enormous temptation posed by these new lumberyards in the sky.

Thank you for your attention to this issue now permitted by recent changes to the allowable heights and areas in the building code, and we encourage and support further action that will put the safety and welfare of Angelenos first.

Sincerely

Larry W. Williams
Executive Director