

From: Jon Simpson <jwsdesign53@gmail.com>

Sent: Friday, September 27, 2019 10:48 AM

To: DES SBCC <sbcc@des.wa.gov>

Cc: 'Jon Simpson' <jwsdesign53@gmail.com>; 'Joe Herr' <joe@terrenehomes.com>

Subject: Comments on the proposed changes to the WSEC

Greeting Members of the State Building Code Council,

I want to make a brief but what I believe are crucial comments to the proposed changes to the WSEC. As follows,

1. Eastern/Western Washington – Combining the criteria is not an accurate to the regions and climates,
 - a. Prior to the implementation of the 2015 WSEC changes, the Eastern and Western portions of the state were separated in the compliance criteria, combining them together seems to be mandating that the eastern side of the state comply with the criteria which best fits the western side. It appears not consideration was made for the climate, energy resources or what works best for energy efficient home construction in Eastern Washington.
 - b. In planning with home builders around the region, the method of energy credit compliance has been determined to utilize the following for category 2. Medium Dwelling Unit: 3.5 Points (most common sized homes in the NW)
 - i. Option 1a. Building Envelope – 0.5 credits,
 - ii. Option 3b. High Efficiency Heat Pump – 1.0 credits,
 - iii. Option 5a. Efficient Water Heat – 0.5 credits
 - iv. Option 5c. Efficient Water Heat – 1.5 credits
 - v. Total Option Credits Selected – 3.5 credits
 - c. As an example, Option 5c requires an electric heat pump water heater, the gas (not available), propane (more expensive than electricity) or solar (more expensive than electricity) be installed however the significant cost of this type of unit over a standard water heater means that in the service life of the appliance as compared to the low cost of energy in Eastern Washington (lowest energy costs in the nation), energy savings do not cover the higher cost of the appliance in its anticipated service life. Yet, it is the only viable way of meeting the mandatory level of Energy Credit compliance in the lowest overall cost to construct a new residence.
 - d. As stated the Eastern Washington regions benefit from low electric energy costs which is significantly different from Western Washington and likewise, alternative energy sources such as natural gas are not readily available in all parts of the region. Propane fueled systems are available but at a significantly higher cost per BTU than electric energy is per KWH. The current 2015 WSEC did not take into account Climate or Energy Sources is its impact on Eastern Washington construction practices.
2. Affordability – Affordable Housing,
 - a. Eastern Washington is facing a serious shortage of affordable housing, for each dollar of increase in cost to construct affordable housing, families are eliminated from the ability to secure permanent housing which they can afford to own.
 - b. The 2015 WSEC when implemented, on average added approximately \$5k in added construction costs to each new residence built in the region. Since its implementation and with the rise in construction costs due to market influences, demand for housing, added

regulatory requirements and fees that cost is even higher today and barring low to moderate income families from affording housing.

- c. Local jurisdictions (cities and counties) around the state but specifically Eastern Washington are trying to find ways to help support cost effective and affordable housing for their citizens.
 - i. Does the increase in WSEC compliance criteria help or hinder affordable housing? Again, cost increases eliminate a growing sector of the population from affordable housing, any further changes beyond the 2015 WSEC will only further restrict in achieving affordable housing efforts by cities and counties and other concerned agencies and businesses.
 - ii. Does an increased WSEC provide greater energy efficiency commensurate with the cost to construct compliant dwellings? After studying the proposed increases and the significant cost impact they will have, it is easy to arrive at the answer to this question – No, the added energy savings achieved to not merit the cost it will take to reach those goals... a diminishing cost to value curve is apparent to the design profession and construction industry and especially so for the Eastern Washington region.
 - iii. Anything beyond what has been achieved through the 2015 WSEC is costing consumers (families) more than it is returning in energy savings and quality of life benefits.

So, in summary to these points, I believe it is important and necessary for the State Building Code Council to take a step back and seriously evaluate its action,

First, in combining both sides of the state into one set of criteria when doing so has proven to be to the disadvantage of the eastern side of the state.

Second, consider the energy resources available to the region and make appropriate energy savings criteria specific to the region,

Third, Consider the families and lives of the people impacted by costly and ineffective criteria. Affordability has to be a strong consideration otherwise the outcome is mandated with indifference to the people and their housing needs.

Finally, Effective consideration of energy consumption regardless of the cost is appropriate but pressing onward to a goal which penalizes the families of this state is not prudent. The SBCC along with the energy code needs to take a balanced approach. It may be worthwhile for there to be more thorough studies of the energy and economic impact of increasing the criteria before any further changes are made. The combined (eastern and western sides together) approach to energy code mandates is not an accurate method of management of the code.

It is my grave concern that the proposed changes to the WSEC are going to have significant and negative economic impacts on the families, businesses, jurisdictions and ultimately the state as a whole if and when implanted. Home construction is a big part of the economic engine which benefits all parties and helps to provide greater economic security and provision to all who live here. Do not trifle with something that could bring such a huge impact on all Washingtonians without thorough consideration of the downside consequences first. Increase criteria for the sake of increase is not a thorough consideration. A broader study needs to be done before any further changes are made.

Jon W Simpson
JWS Design, Inc
519 N Wilson St. Chelan, WA 98816
Phone: (425) 503-6796, Email: jwsdesign53@gmail.com