

Dear Board of Supervisors and County Staff,

We believe in considering the new revisions to the Class K Ordinance it is important to consider its original intention. In his book *Design for Life*, Sim Van Der Ryn speaks of his role in drafting Class K in the late 1970's as head of the State Office of Appropriate Technology in cooperation with the State Department of Housing and Community Development. "The final item on my Sacramento agenda was to reform building codes for rural areas. The codes seemed unnecessarily restrictive, designed for mass-produced suburbs with infrastructure such as sewers, electrical grids, and unlimited water. My own experience building in Inverness and at Occidental, and the bureaucratic horror stories conveyed to me by new rural migrants trying to build simple homes in the country using their own labor convinced me we needed a special code designed for rural owner-builders, not suburban consumers."

Please let these intentions ring true in the adoption and enforcement of the amendments and additions to the Class K ordinance. With the rate of over consumption and waste creation in this country tied to negative effects on the environment, individuals should have the right to live simply, to not buy in to the over consumptive standardized building methods, to build simple homes from local materials with their own hands as humans have done for millennia. Mendocino County is the 13th poorest County in California and also has a severe lack of affordable housing. These factors combined with the rural nature of the County makes inexpensive owner-built homes made from local resources a valuable method of providing housing to county residents.

As Natural Builders we feel the building code as written contains too many impediments to allow building on extremely low budgets. We are urging the department to continue to identify the most important improvements a person building their own home might need to know and exclude unnecessarily cumbersome requirements. Public records show that the reason the Class K ordinance is being revised at this time is due to a member of a Contractors Association pushing the issue. Might it be said that some of the increased costs County residents are complaining about with the new amendments shall be in part fees to professional electricians and plumbers in order to ensure that the owner-builder can comply with all the codes? Could these amendments be industry driven, to require so much compliance that ordinarily capable handymen/women builders begin to doubt their own knowledge and commonsense and feel the need to hire consultants or professionals just to get them

though the onerous process?

Adopting the entire Electrical and Plumbing Codes creates an unnecessarily difficult process. While we all agree that proper sizing of wires is critical, the number and spacing of required outlets does not impact life safety issues. We hope that this is kept in mind when inspectors read and interpret Section 18.23.380 Installation Requirements "Exceptions to Installation Requirements. In structures where electrical usage is confined to one or more rooms of a structure, the remainder of the structure shall not be required to be wired or otherwise fitted for electrification unless the enforcement agency determines that electrical demands are expected to exceed the confinement and capacity of that room(s). In such instances, the enforcement agency may require further electrification of the structure." Please keep cost and simple living in mind when deciding what to require or not require.

Existence of plumbing vents is important, heights of unions for plumbing vents less so. Rather than adopting the code in its entirety, we urge an allowance of the judgment of an inspector with possibly the backup of an appeals process which might involve soliciting opinions from a group of local builders to establish what might be safe and reasonable in a situation. We hope that this is kept in mind when inspectors read and interpret Section 18.23.410 Plumbing Specifications "Alternative materials and methods shall be permitted provided that the design complies with the intent of the Code, and that such alternatives shall perform to protect health and safety for the intended purpose."

The sprinkler requirements also create extra costs. If a building is made from natural materials that do not burn sprinkler systems should not be required. We believe that dwellings whose exposed surfaces are made from 90% non-combustable earthen materials that are at least 2 inches thick should be exempt from the sprinkler requirements. The Cal Fire Wildland Urban Interface Code requires the use of siding materials that are on the approved list on their website, or materials that are non-combustable. The definition of non-combustable in the California Building Code in Section 202 is "material of which no part will ignite and burn when subjected to fire". Studies done on earthen building materials show that when non-combustable clay and sand are combined with 4% or less straw by weight, the resulting material still performs as a non-combustable material. Straw is an essential ingredient in earthen building as it adds tensile strength and while straw it self is flammable, in the right proportions it does not change the fire resistant qualities of earthen building. If the exterior and interior exposed surfaces of a dwelling are covered in these materials it should satisfy the WUI standards and also be exempt from the sprinkler requirements.

We have been gathering many documents on the qualities of earthen building including tests, studies, and codes that support fire resistance and performance in earthquakes and natural disasters. For example New Zealand wrote an Earth Building Code in 1998, an appendix on Straw Bale Construction was included in the International Residential Code in 2015, and research has been done at several Universities. We would like to schedule a meeting with the Building Official to present this information and answer any clarifying questions regarding the various forms of Natural Building.

Thank You,

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