

Oregon Senate Committee on Business and General Government
Chair Chuck Riley
From: Tom Bowerman, Consultant to Square One Villages, Eugene, Oregon
RE: HB2423 - Legislation on Small Homes

I have received an unpublished amendment to HB2423 which I believe may confuse the hearing of HB2423 A Engrossed. Because I expect testimony in the hearing to be addressing the topics of this unpublished amendment, my comments relevant unpublished document are included herein below.

I am a designer builder and consultant to Square One Villages which builds small home villages principally to serve as homeless transitional housing. Life safety issues are paramount and closely tied to housing pricing and availability. HB 2423 has a complex and convoluted history reaching back to the 2017 legislative session, including legislation passed in that session subsequent administrative rulemaking. Fire sprinklers are not required in Oregon residential buildings although fire sprinkler advocates have been trying to specify sprinklers for very small homes, even when doing so significantly raises the price of the dwelling. Sprinkler advocates have chronically overestimated the benefits and underestimated the cost of sprinklering a small detached residence.

HB2423 has appeared this session in a manner in which primary stakeholders have been largely omitted a deliberative process. Below captioned "Draft for discussion purposes" I received last Friday from our City of Eugene Building Official, a late minute proposal to amend some unintended consequences of the HB2423 dash 3 amendment. I am told the document below was circulated to a number of municipal building officials and the Building Codes Administration with their tacit approval and that I was not part of constructing the main body text as below. I observe numerous problems in this proposal being circulated and include margin notes to address some misgivings I have.

The process indicates to me that this bill is not yet ready for prime time.

I will provide oral testimony in your hearing tomorrow unless you choose to bump hearing this bill until a later date, in which case I would most appreciate early notification so I do not make a fruitless trip to Salem for this hearing.

HB 2423 A Amendment (*received late afternoon 5.3.2019 by Bowerman via Mark Whitmill, Eugene Building Official*)

Draft for discussion purposes only 5/02/19

Background: HB 2423 A establishes the 2018 IRC with Appendix Q as a small home specialty code for small houses that are 400 square feet or less, sets design criteria for sprinkler systems, requires the installation of a heat detector unit alarm or photoelectric smoke detector unit, and allows local control over the location of sprinkler heads within the small home.

Concept: A few minor technical fixes could be made to clarify the intent of the bill to facilitate implementation and enforcement of the bill. These amendments would clarify that:

- The technical provisions of the 2018 IRC with Appendix Q apply to the construction of a small home

- The small home specialty code technical provisions supersede any existing conflicting technical provisions of the state building code
- The bill does not change any existing state building code administrative or scoping provisions
- For sprinkler system design purposes the small home is a single compartment and uses two sprinkler heads for flow rate calculations
- The local building official can substitute the location of a particular sprinkler head or heads with heat detector unit alarms
- The local building official can substitute the entire sprinkler system with heat detector unit alarms

Proposed Amendments to HB 2423 A

SECTION 2. (1) As used in this section, 'small home' means a single family residence that is not more than 400 square feet in size.

(2) Notwithstanding ORS 455.020 and 455.030, ~~Appendix Q of~~ the 2018 International Residential Code **with Appendix Q** is adopted as a Small Home Specialty Code applicable to the construction of a small home.

(3) Notwithstanding ORS 455.035 and 455.110, the Director of the Department of Consumer and Business Services shall amend the Low-Rise Residential Dwelling Code as necessary to ensure that for a small home the **technical** provisions of the Small Home Specialty Code adopted under this section supersede any conflicting **technical** provisions of the Low-Rise Residential Dwelling Code. ~~[Except to the extent superseded by the Small Home Specialty Code, the construction of a small home is governed by the Low-Rise Residential Dwelling Code. Specialty code provisions that conflict with the Small Home Specialty Code or with the Low-Rise Residential Dwelling Code do not apply to a small home.]~~ **Small homes shall only be permitted to be occupied as one-family dwellings for residential purposes.**

(4) Notwithstanding ORS 455.020 and 455.030, the director may not adopt rules amending the Small Home Specialty Code. The director may report recommendations for amendment of the Small Home Specialty Code to an interim or regular committee of the Legislative Assembly related to business, in the manner provided under ORS 192.245.

(5) A small home must be built with at least one listed photoelectric smoke alarm. The alarm must be installed and located according to the listing requirements specified by the manufacturer, as determined by the Department of Consumer and Business Services or the State Fire Marshal

~~(6)~~**(6)** Each small home shall be considered a single compartment for purposes of residential fire sprinkler design. The design calculation for a small home sprinkler system shall consider a maximum of two fire sprinklers. **These fire sprinklers shall have a maximum combined design flow demand of less than 20 gallons per minute, and shall be served by the standard default water meter size of the local municipality.** The residential fire sprinklers in a small home shall be located according to the location requirements of the installation standard referenced in the ~~[state building code]~~**2018 International Residential Code, for coverage purposes.**

~~(6) A small home must be built with a listed heat detector unit alarm or a listed photoelectric smoke alarm. The alarm must be installed and located according to the listing requirements specified by the manufacturer, as determined by the Department of Consumer and Business Services or the State Fire Marshal, and may be an alternative or addition to the installation of a second residential fire sprinkler.~~

(7) The building official of the local municipality may permit increased detection and occupant notification, including the installation of one or more listed heat detector unit

Commented [tB1]: This looks like a simple word relocation but with the strike-through later in subsection (3) this necessitates that designers and builders must maintain two distinctive building codes for their base platform - the IRC and the ORSC. Stakeholders opposed this in the 2017 and '18 discussions. Even though Oregon Residential Code is modeled after the IRC it differs sufficiently to require designers to maintain two base residential codes, expensive and time consuming. I suspect the IRC may be favored by fire sprinkler advocates because the International Code model stipulates sprinklers even though 47 of the 49 states do not require fire sprinklers. Thus the crossed out portion in this paragraph should be retained.

Commented [tB2]: This is already in both Oregon and IRC residential codes, not sure why it needs to be reiterated, it's redundant.

Commented [tB3]: Evaluating the optional prescriptive fire sprinkler design requirements in Oregon Residential Specialty Code Appendix T, the minimum design flow rate is 8 gallons per minute. The 20 gallon per minute specification here appears arbitrary given that the entire concept of the sprinkler requirement may be a design for one sprinkler. The code already provides design specifications which are based on highly specific variables and an arbitrary 20 gallons per minute should be omitted. Sections 7 and 8 could sufficiently provide Building Official common sense discretion on this specification using best practice although a legislative prescription, even if arbitrary, will likely prevail in practice.

Commented [tB4]: It appears conceivable that this sentence may pose a conflict with the precise limits of two sprinkler heads. Standard practice in architectural specifications say that when two specifications conflict, "the specific shall overrule the general". I am not sure if this is how a building official will resolve this. Mutual interest of stakeholders aims to reduce ambiguity.

alarms, either in replacement of one or more fire sprinkler heads located for coverage purposes or in replacement of the entire fire sprinkler system. Replacement determinations are not required to be established as equivalent.

(8) A building official may alter, modify, or waive any code requirement for a small home when strict adherence to the Small Home Specialty Code is impractical or infeasible.

Commented [tB5]: This is an interesting change and could address a concern we've been discussing when sleeping pods are provided as short term transitional housing, technically a "dwelling", is not individually provided with a water supply - e.g. Opportunity Village occupying City property in Eugene. And the following statement as not required alternative detection methods to be equivalent is definitely an improvement of what we proposed last week.

Commented [tB6]: This (8) subsection is good and must remain, this conforms to ORS 455.015 and elsewhere directing code enforcement discretion for innovation, experimentation and cost effectiveness. We're not asking for open door discretion but we do hope that in the evolution of tiny homes that Building Officials retain discretion where new approaches do not reduce life safety or common sense.

DRAFT