



STATE OF WASHINGTON

STATE BUILDING CODE COUNCIL

1500 Jefferson Street SE • P.O. Box 41449 • Olympia, Washington 98504
(360) 407-9280 • fax (360) 586-9088 • e-mail sbcc@des.wa.gov • www.sbcc.wa.gov

June 13, 2013

**TO: Building Fire and Plumbing Codes Committee Members
All Interested Parties**

FROM: CO Alarm Special Technical Advisory Group

SUBJECT: CO TAG Report

The CO TAG has reviewed two proposals submitted by the March 1, 2013 proposal deadline. The CO TAG met to review the proposals on May 6, 2013. The following is a summary of their recommendations for Council action.

Code Change Proposals

The Council received two proposals to amend the 2012 IFC and IBC Section 908.7. Both proposals were considered by the CO TAG at their meeting on May 6, 2013. The TAG came to consensus on both proposals, with a recommendation for adoption of Log #13-001, and for non-adoption of Log #13-002.

Existing State Amendments

Under existing state amendments to the 2009 Building and Fire Codes (WAC 51-50 and 51-54), CO alarms are required for residential occupancies, with several specific exceptions. The current rules apply only to certain Group R categories, with exceptions allowed for some hotel/motel situations, supervised licensed care, and college dormitories. These rules had a statutory deadline for compliance by January 1, 2013 and required installation of alarms in all residential occupancies except for those listed above.

2012 ICC Code Changes

Changes to the 2012 IBC and IFC incorporated requirements for Group I occupancies to install CO alarms. This new requirement was discussed by the 2012 Fire Code TAG and was maintained by the Council during the review of the 2012 codes.

Review of 2013 Proposed Amendments

Log 13-001: Exception for DOC Prisons and Work Releases: This proposal would exempt 'DOC prisons and work releases' from the requirement to install CO alarms in R-2 occupancies. The original proposal did not address Group I occupancy. The proponent was not available for the meeting, but he had informed staff that the concern of the Department of Corrections was related to installation of CO alarms in supervised work release housing. The TAG discussed whether this would apply to both new and existing structures, or only to new construction. They recommended that it be inclusive of both, and that staff modify the proposal to amend the pertinent section on existing facilities (IFC 1103.9).

The TAG agreed that these types of housing would meet the intent of the previous work of the TAG to develop appropriate exceptions, focused on supervised housing elements. The TAG reached consensus to send this proposal to the Standing Committee with a recommendation for approval as modified.

2013 Proposed changes to 2012 Fire and Building Codes

Log #	Proponent	Code Section(s)	Title or Subject	TAG Review			Committee Action
				Meet Criteria?	Economic Impact	Recommendation	
13-001	DOC Jack Olsen	908.7	CO Alarms in DOC residential facilities			AM	
<p>[F] 908.7 Carbon monoxide alarms. Group R occupancies</p> <p>908.7 Carbon monoxide alarms. Group I or Group R occupancies shall be provided with single station carbon monoxide alarms installed outside of each separate sleeping area in the immediate vicinity of the bedrooms in dwelling units or sleeping units and on each level of the dwelling. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720-2012 and the manufacturer's instructions.</p> <p>Exceptions:</p> <ol style="list-style-type: none"> 1. For other than R-2 occupancies, the building does not contain a fuel-burning appliance, a fuel-burning fireplace, or an attached garage; or 2. Sleeping units or dwelling units in I and R-1 occupancies and R-2 college dormitories, hotel, <u>DOC prisons and work releases</u> and DSHS licensed boarding home and residential treatment facility occupancies which do not themselves contain a fuel-burning appliance, or a fuel-burning fireplace, or have an attached garage, need not be provided with carbon monoxide alarms provided that: (the rest of this section remains unchanged) <p>[F] 1103.9 Carbon monoxide alarms.</p> <p>1103.9 Carbon monoxide alarms. Existing Group I or Group R occupancies shall be provided with single station carbon monoxide alarms in accordance with Section 908.7. An inspection will occur when alterations, repairs or additions requiring a permit occur, or when one or more sleeping rooms are added or created. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720-2012 and the manufacturer's instructions.</p> <p>Exceptions:</p> <ol style="list-style-type: none"> 1. For other than R-2 occupancies, if the building does not contain a fuel-burning appliance, a fuel-burning fireplace, or an attached garage. 2. Work involving the exterior surfaces of dwellings, such as the replacement of roofing or siding, or the addition or replacement of windows or doors, or the addition of a porch or deck, or electrical permits. 3. Installation, alteration or repairs of noncombustion plumbing or mechanical systems. 4. Sleeping units or dwelling units in I and R-1 occupancies and R-2 college dormitories, hotel, <u>DOC prisons and work releases</u> and DSHS licensed boarding home and residential treatment facility occupancies which do not themselves contain a fuel-burning appliance, a fuel-burning fireplace, or have an attached garage, need not be provided with carbon monoxide alarms provided that: (the rest of this section remains unchanged) 							

Log 13-002: Exception for CO Alarms in Condominiums: This proposal would exempt certain condominiums from the requirements to install CO alarms. The TAG discussed the proposal in light of their earlier work to develop exceptions on the installation of alarms in residential settings, and noted that those exceptions were very limited. Exceptions are allowed in very few situations, i.e., only where the residents are in a supervised environment.

The TAG discussed how condos are classified under the IFC and IBC, i.e., they are treated like apartments for purposes of code enforcement. There is data that shows that even where code restrictions are in place, e.g., for barbecues on a balcony, occupants may ignore them; enforcement is very challenging for the local jurisdictions. The proposal also suggested that where a parking garage is on the premises, that the CO alarms would not be required; data reviewed by the TAG Chair and others indicates that poisonings are more common under those circumstances.

The TAG reached consensus to send this proposal to the Standing Committee with a recommendation for disapproval. This proposal does not meet any of the five **Policy Criteria** for adoption of statewide amendments as listed in **WAC 51-04-020**.

Log #	Proponent	Code Section(s)	Title or Subject	TAG Review			Committee Action
				Meet Criteria?	Economic Impact	Recommendation	
13-002	CO Alarms in Condos	204	CO Alarms in Condos	no	no	D	

[F] 908.7 Carbon monoxide alarms. Group R occupancies shall be provided with carbon monoxide alarms. The carbon monoxide alarms shall be listed as complying with UL 2034 and be installed and maintained in accordance with NFPA 720 and the manufacturer's instructions.

EXCEPTION:

Sleeping units or dwelling units in R-1 occupancies and R-2 college dormitories, hotel, and DSHS licensed boarding home and residential treatment facility occupancies which do not themselves contain a fuel-burning appliance, or a fuel-burning fireplace, or have an attached garage, but which are located in a building with a fuel-burning appliance, or a fuel-burning fireplace, or an attached garage, need not be provided with carbon monoxide alarms provided that:

1. The sleeping unit or dwelling unit is not adjacent to any room which contains a fuel-burning appliance, a fuel-burning fireplace, or an attached garage; and
2. The sleeping unit or dwelling unit is not connected by duct work or ventilation shafts with a supply or return register in the same room to any room containing a fuel-burning appliance, a fuel-burning fireplace, or to an attached garage; and
3. The building is provided with a common area carbon monoxide alarm system.
4. An open parking garage, as defined in the International Building Code, or enclosed parking garage ventilated in accordance with Section 404 of the International Mechanical Code shall not be deemed to be an attached garage.
5. R-2 condominiums which do not contain any fuel-burning appliances, or any fuel-burning fireplaces, have open-air garages with no vents or ducts to dwelling or common spaces, face the street on only two sides, are set back from both the street and the sidewalk, have no parking in the alley, are staffed by a resident manager, have no residences below the fourth floor, and have a carbon monoxide alarm near an emergency diesel generator which is not vented to any dwelling or common space, need not install carbon monoxide alarms elsewhere in the building.

(the rest of this section remains unchanged)