Code Amendment Proposal Form

For public amendments proposed to the 2021 editions of the International Codes

Instructions: Upload this form and all accompanying documentation. If you are submitting your proposal on a separate sheet, make sure it includes all information requested below.

All proposals must be received by **July 23, 2021.**

CONTACT INFORMATION

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Organization or Representing Self: TLH Fire

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Signature: *Jeffrey M. Arnold*

AMENDMENT PROPOSAL

Please use a separate form for each proposal.

1) Code(s) associated with this proposal. Please use acronym: DBC-907.3.3.2

If you submitted a separate coordination change to another code, please indicate which code: _____

Acronym	Code Name	Acronym	Code Name
DBC-AP	Denver Building Code–Administrative Provisions	**IFC**	International Fire Code
DBC-*xxxx*	Denver Building Code–*xxxx (code)* amendments (e.g., DBC-IBC, DBC-IEBC)	**IFGC**	International Fuel Gas Code
		IRC	International Residential Code
IBC	International Building Code	**IMC**	International Mechanical Code
IEBC	International Existing Building Code	**IPC**	International Plumbing Code
IECC	International Energy Conservation Code	**DGC**	Denver Green Code

2) Please check here if a separate graphic file is provided: ☐
Graphics may also be embedded within your proposal below.

3) Use this template to submit your proposal or attach a separate file, but please include all items requested below in your proposal. The only formatting needed is **BOLDING**, ~~STRIKEOUT~~ AND UNDERLINING. Please do not provide additional formatting such as tabs, columns, etc., as this will be done by CPD.

Code Sections/Tables/Figures Proposed for Revision:

907.3.3.2 Sprinklers in elevator shafts and machine rooms, spaces, or control rooms or spaces.

Note: If the proposal is for a new section, indicate (new).

Proposal:

Revise as follows:

907.3.3.2 Sprinklers in elevator shafts, ~~and~~ machine rooms, machinery spaces, or control rooms or spaces. Where sprinklers are provided in the top of elevator shafts, ~~and~~ machine rooms, machinery spaces, or control rooms or spaces, elevator power shunt trip shall be activated prior to sprinkler operation in accordance with NFPA 72.

Supporting Information:

With the previous adoption of the 2019 amendments to the 2018 International Fire Code and 2019 NFPA 72, an adverse interaction with the long standing amendment for elevator shunt trip upon sprinkler activation within any area of a sprinklered shaft, and NFPA 72 2019 21.3.7 has occurred. 2019 NFPA 72 21.3.7 stipulates fire alarm devices installed within a hoistway be accessible for service, testing, and maintenance from outside the hoistway.

Upon adoption of the 2019 NFPA 72 and in conjunction with the 2019 IFCA, the requirements became one of three options: air aspiration and linear heat detection, two different temperatures of linear heat detection, or installing a rated hatch to access the pit devices from outside of the pit. Due to this, a decrease in construction practicality and increase of cost without increasing the level of life safety has developed.

However, as the interaction of ANSI A17.1 and NFPA 13 already regulates that when an elevator pit is sprinklered the sprinkler must be within 24" of the pit floor (NFPA 13 9.3.6.1) , that all elevator electrical equipment shall be weatherproof, all elevator wiring (except traveler cables) shall be identified for use in wet locations when sprinklers are installed within 24" of the pit floor (A17.1 2.8.3.3.4), and shunt trip (mainline power disconnect) shall only occur when application of water could cause unsafe elevator operation (A17.1 2.8.3.3.2), the present amendment which has in the past been interpreted to require both recall and shunt trip operation within the elevator pit should be revised to reflect present code cycles and clarify that main line power disconnect is required prior to activation of sprinklers in the top of shaft. Additionally, NFPA 72 21.3.3.2 provides a direct solution that conveys a means of maintaining, servicing, and testing of fire alarm devices from outside of the elevator pit by means of an isolated waterflow switch without time-delay dedicated to the pit, that initiates elevator recall.

As the Denver Building Code does not presently amend, revise, or remove any requirements as stipulated by A17.1 for weatherproofing of electrical circuits within the elevator pit, the existing amendment provides no additional level of safety in construction by requiring shunt trip prior to water dispersal within the elevator pit. By revising this amendment, and permitting the recommendations of the present NFPA 72, the level of safety of personnel associated with fire alarm maintenance and testing is increased while construction costs and coordination are reduced.

Referenced Standards:

Note: List any new referenced standards that are proposed to be referenced in the code.

Impact: If approved the proposed change will reduce construction costs, improve fire alarm inspection testing accuracy due to ready access to components, reduce recurring costs associated with coordination of elevator contractors for inspections within hoistways, improve site safety, and bring the present amendments and Denver codes more in-line with the most recent information basis as determined by current NFPA 72 and ANSI A17.1 publications.

Note: Discuss the impact of this proposal in this section AND indicate the impact of this amendment proposal for each of the following:

- The effect of the proposal on the cost of construction: ☐ Increase ☒ Reduce ☐ No Effect
- The effect of the proposal on the cost of design: ☐ Increase ☒ Reduce ☐ No Effect
- Is the proposal more or less restrictive than the I-codes: ☐ More ☐ Less ☒ Same

Departmental Impact: (To be filled out by CPD staff)

Note: CITY STAFF ONLY. Discuss the impact of this proposal in this section AND indicate the impact of this amendment proposal for each of the following:

- The effect of the proposal on the cost of review: ☐ Increase ☐ Reduce ☐ No Effect
- The effect of the proposal on the cost of enforcement/inspection: ☐ Increase ☐ Reduce ☐ No Effect