

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Reuben Verdoljak*Date:* 03/13/2025*Email address:* Reuben.Verdoljak@lhbcorp.com*Model Code:* 2024 IBC*Telephone number:* 218-260-2502*Code or Rule Section:* 1904*Firm/Association affiliation, if any:* LHB*Topic of proposal:* Durability
Requirements*Code or rule section to be changed:* 1904.3*Intended for Technical Advisory Group ("TAG"):* Structural**General Information****Yes No**

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|--|-------------------------------------|-------------------------------------|
| A. Is the proposed change unique to the State of Minnesota? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| B. Is the proposed change required due to climatic conditions of Minnesota? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| C. Will the proposed change encourage more uniform enforcement? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| D. Will the proposed change remedy a problem? | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| E. Does the proposal delete a current Minnesota Rule, chapter amendment? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| F. Would this proposed change be appropriate through the ICC code development process? | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Proposed Language

1. The proposed code change is meant to:

☐ change language contained the model code book? If so, list section(s).☒ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
1904.3☐ delete language contained in the model code book? If so, list section(s).☐ delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).☒ add new language that is not found in the model code book or in Minnesota Rule.2. Is this proposed code change required by Minnesota Statute? If so, please provide the citation.
No

3. Provide *specific* language you would like to see changed. Indicate proposed new words with underlining and ~~strike through~~ words proposed for deletion. Include the entire code (sub) section or rule subpart that contains your proposed changes.

1305.1904 SECTION 1904, DURABILITY REQUIREMENTS.

IBC section 1904.3 is amended to read as follows:

1904.3 Corrosion protection. Where bonded reinforcing and pre-stressing steel is located in concrete assigned to ~~Exposure Class F3 or~~ Exposure Class C2, the steel shall be protected from corrosion by one of the following methods:

1. impermeable barrier;
2. epoxy coating in accordance with ACI 318; or
3. hot dipped galvanizing in accordance with ACI 318.

4. concrete shall meet all applicable provisions of ACI 318 Design and Durability Requirements, in addition to requiring the following minimum concrete cover for reinforcement:

a. For cast-in-place concrete:

- i. 2 inches for walls and slabs
- ii. 2 ½ inches for other members

b. For precast concrete members manufactured under plant control conditions:

- i. 1 ½ inches for walls and slabs
- ii. 2 inches for other members

4. Will this proposed code change impact other sections of a model code book or an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.

No

Need and Reason

1. Why is the proposed code change needed? Please provide a general explanation as well as a specific explanation for any changes to numerical values (heights, area, etc.)

The current code language is overly restrictive, requiring protection of reinforcement above and beyond what is required by ACI 318. Exposure Class F3 is deleted because it applies to the concrete, not the corrosion protection of reinforcement, and it is redundant.

2. Why is the proposed code change a reasonable solution?

The commentary language of ACI 318-19, R20.5.1.4.1, is incorporated into the change, making ACI recommended minimum concrete cover an acceptable alternative to the three previously available options.

3. What other factors should the TAG consider?

None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain and provide estimates if possible.

Decrease. For instance, many slabs on ground exposed to salts will no longer require additional corrosion protection because they can easily meet the minimum concrete cover. The same is true for 8" walls with centered reinforcing; they already meet the requirements.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain. If the benefit is quantifiable (for example energy savings), provide an estimate if possible.
N/A
3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.
N/A
4. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
No
5. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city ([Minn. Stat. § 14.127](#))? A small business is any business that has less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain.
No

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
Engineers, contractors, developers, building owners, building officials
2. Can you think of other means or methods to achieve the purpose of the proposed code change? What might someone opposed to this code change suggest instead? Please explain what the alternatives are and why your proposed change is the preferred method or means to achieve the desired result.
No
3. What are the probable costs or consequences of not adopting the code change, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
Ultimately, all building owners bear the costs of the overly restrictive corrosion protection when a reasonable alternative given by ACI 318 exists.
4. Are you aware of any federal or state regulation or requirement related to this proposed code change? If so, please list the federal or state regulation or requirement and your assessment of any differences between the proposed code change and the federal regulation or requirement.
No

***Note: Incomplete forms may be returned to the submitter with instruction to complete the form. Only completed forms can considered by the TAG.