DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

Email address: Greg.Metz@State.MN.US

Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Date: 12/30/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Code or Rule Section: MR 1323.0100, Subp. 2

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): IBC and IBC/IFC Coordination

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☒	☐
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☐	☒
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

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). MR 1323.0100, Subp. 2

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Subp. 2. Scope. This code applies to ~~commercial~~ non-residential buildings, residential buildings more than three stories in height, historic residential buildings less than three stories in height and not classified as IRC-1, IRC-2, IRC-3, or IRC-4; building sites, and the associated systems and equipment.

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?

   1. The term "commercial" does not adequately describe all of the building types within the code scope. For example, institutional buildings, and large residential buildings. The code scope is more all-encompassing and the revised description is more accurate.
   2. Historic buildings pose special challenges not readily addressed by the Minnesota Residential Energy Code. Affirmatively moving historic buildings to this code will provide more flexibility in code application.

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

   It provides the greatest clarity for determining scope, and allows for much greater flexibility for historic buildings such as those at Fort Snelling.

3. What other considerations should the TAG consider?

   The scope change allows integration of the Conservation Code for Existing Buildings for historic buildings used for residential purposes that are three stories or fewer in height. The residential energy code and conservation code are at odds with regards to preserving historic buildings undergoing a change of occupancy.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.

4. 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? 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.

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

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

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

Email address: Greg.Metz@State.MN.US

Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Date: 12/31/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Code or Rule Section: 2.2 Scope

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): IBC and IBC/IFC Coordination

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☒	☐
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☒	☐
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s). 2.2 Scope

   ☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ 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).
   1323.0100 Scope

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   2.2 The provisions of this standard do not apply to:
   a. IRC-1 Single-family dwellings, IRC-2 Two-family dwellings, IRC-3 Townhomes, IRC-4 Utility buildings, residential multi-family structures of three stories or fewer above grade (except historical buildings), manufactured houses (mobile homes), and manufactured houses (modular), or
   b. buildings that use neither electricity nor fossil fuel.

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?

   1. The term "commercial" does not adequately describe all of the building types within the code scope. For example, institutional buildings, and large residential buildings. The code scope is more all-encompassing and the revised description is more accurate.
   2. Historic buildings pose special challenges not readily addressed by the Minnesota Residential Energy Code. Affirmatively moving historic buildings to this code will provide more flexibility in code application.
   3. The model code has a section for scoping, so the rule does not need a separate and duplicate section.

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

   It provides the greatest clarity for determining scope, and allows for much greater flexibility for historic buildings such as those at Fort Snelling.

3. What other considerations should the TAG consider?

   The scope change allows integration of the Conservation Code for Existing Buildings for historic buildings used for residential purposes that are three stories or fewer in height. The residential energy code and conservation code are at odds with regards to preserving historic buildings undergoing a change of occupancy.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
   No change or small decrease in construction costs for historical buildings.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   N/A

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. N/A

4. 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? 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. N/A

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result. No

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals? Historical buildings will require a professional analysis to determine best practices for improving non-historically protected areas.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   Historical buildings used for residential purposes (common) that are three-stories and less will struggle to meet residential energy code requirements and have no compliance path for relief.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

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

DEPARTMENT OF LABOR AND INDUSTRY

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(Must be submitted electronically)

Author/requestor: Greg Metz

Email address: Greg.Metz@State.MN.US

Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1323

Date: 12/30/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Code or Rule Section: 4.1.1.6 Mixed Occupancy

Intended for Technical Advisory Group ("TAG"): MR 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☐	☒
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☒	☐
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s).
   4.1.1.6 Mixed Occupancy Buildings

   ☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ 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). **MR 1323.0100, Subpart 6. Mixed Occupancy Buildings**

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Delete Minnesota Rule 1300.0100, Subpart 6 in its entirety.

   Add ANSI/ASHRAE/IEC Standard 90.1, Section 4.1.1.6 to read as follows:

   4.1.1.6 Mixed occupancy.
   Where a building includes both residential and non-residential occupancies, each occupancy shall be separately considered and meet the applicable provisions of the code. Where residential portions are less than four stories in height, those residential portions shall comply with Minnesota Rule 1322.

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?

   There are varying energy compliance criteria for different building uses. When buildings are used for both residential and nonresidential purposes, there may be confusion regarding which criteria applies.

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

   The proposed model code change section incorporates language similar to an existing Minnesota Rule Part, MR 1323.0100, subpart 6 and clarifies the application.

3. What other considerations should the TAG consider? None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   No cost change. The modification carries forward an existing requirement.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   N/A

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   None

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   Mis-application of the residential provisions of MR 1323 for overall buildings scoped to MR 1323 which may have residential portions that are under 4 stories in height.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

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Email address: Greg.Metz@State.MN.US

Telephone number: 651-284-5884

Date: 12/30/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Code or Rule Section: 4.1.1.7 Prohibition of Conditioning Public Commercial Parking

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): IBC and IBC/IFC Coordination

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☒	☐
B. Is the proposed change required due to climatic conditions of Minnesota?	☒	☐
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☒	☐
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s).
   Add: **4.1.1.7 Prohibition of Conditioning Public Commercial Parking**

   ☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ 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). **MR 1323.0100, Subpart 7. Prohibition of Conditioning Public Commercial Parking**

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Delete Minnesota Rule 1323.0401, Subpart 2 Section C401.3 in its entirety.

   Add ANSI/ASHRAE/IEC Standard 90.1, Section 4.1.1.7 to read as follows:

   4.1.1.7 Prohibition of Heating Public Commercial Parking.
   Heating of public commercial parking facilities for three or more vehicles is prohibited in accordance with Minnesota Statute 216C.20, subdivision 3.

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?

   To ensure continued compliance with the ban on public commercial parking heating.

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

   It inserts the current rule language into the body of the model code where it is more likely to be found and followed.

3. What other considerations should the TAG consider? None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   No cost change. The modification carries forward an existing requirement.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   N/A

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   None

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   The requirement could be missed, heating equipment installed in public commercial parking garages at a waste of taxpayer dollars.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

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Email address: Greg.Metz@State.MN.US

Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Date: 12/30/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Code or Rule Section: 4.2.1.1 New Buildings

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): IBC and IBC/IFC Coordination

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☒	☐
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☐	☒
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

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).

   ☒ delete language contained in the model code book? If so, list section(s).
   4.2.1.1 New Buildings, Part c

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   ~~a. Normative Appendix G, "Performance Rating Method."~~

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?

   - Elimination of the Performance Rating Method will remove a highly complex and very challenging compliance method to enforce and regulate. The Performance Rating Method includes and integrates items not part of the real-estate, like appliances, in calculating overall performance. Meaning that a change of appliances could bring a building into non-compliance at a later time.

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

   - It reduces complexity of an already complex code.

3. What other considerations should the TAG consider? None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   No cost change. Elimination of the Performance Rating Method still provides two viable compliance options.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   N/A

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   None

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   - Not eliminating the Performance Rating Method will create an entire new energy compliance industry in Minnesota adding to the complexity of code enforcement, additional training, credentialing, and ultimately increasing construction costs.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

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(Must be submitted electronically)

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Email address: Greg.Metz@State.MN.US

Telephone number: 651-284-5884

Date: 12/30/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Code or Rule Section: 4.2.1.2 Additions to Existing Buildings

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): IBC and IBC/IFC Coordination

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☒	☐
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☐	☒
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

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).

   ☒ delete language contained in the model code book? If so, list section(s).
   4.2.1.2 Additions to Existing Buildings, Part c

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   ~~a. Normative Appendix G, "Performance Rating Method."~~

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?

   - Elimination of the Performance Rating Method will remove a highly complex and very challenging compliance method to enforce and regulate. The Performance Rating Method includes and integrates items not part of the real-estate, like appliances, in calculating overall performance. Meaning that a change of appliances could bring a building into non-compliance at a later time.

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

   - It reduces complexity of an already complex code.

3. What other considerations should the TAG consider? None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   No cost change. Elimination of the Performance Rating Method still provides two viable compliance options.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   N/A

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   None

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   - Not eliminating the Performance Rating Method will create an entire new energy compliance industry in Minnesota adding to the complexity of code enforcement, additional training, credentialing, and ultimately increasing construction costs.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

Email address: Greg.Metz@State.MN.US

Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1323

Date: 12/30/2020

Model Code:
ANSI/ASHRAE/IES Standard 90.1-2019

Code or Rule Section: 4.2.1.3

Intended for Technical Advisory Group ("TAG"): IBC and IBC/IFC Coordination

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☒	☐
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☐	☒
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☒	☐
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s).
   4.2.1.3 Alterations to Existing Buildings

   ☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Alterations to an existing building, building system, or portion thereof shall conform to this code as related to new construction without requiring the unaltered portion(s) of the existing building or building system to comply with this code. Alterations shall not create an unsafe or hazardous condition or overload existing building systems. Alterations of existing buildings shall comply with the provisions of Sections 4.2.2 thorough 4.2.5 and one of the following:
   a. Section 5, "Building Envelope"; Section 6, "Heating, Ventilating, and Air Conditioning"; Section 7, "Service Water Heating"; Section 8, "Power"; Section 9, "Lighting"; and Section 10, "Other Equipment," or
   b. Section 11, "Energy Cost Budget Method," or
   ~~c. Normative Appendix G, "Performance Rating Method."~~
   in accordance with Section 4.2.1.1.

   Exception to 4.2.1.3
   A *historical building* ~~that has been specifically designated as historically significant by the adopting authority or is listed in the National Register of Historic Places or has been determined to be eligible for listing by the U.S. Secretary of the Interior need not comply with these requirements~~ shall comply with this code to the greatest extent possible without requiring alteration of elements or features determined to be historic by the historic authority having jurisdiction. Exempted components, elements, or systems shall be specifically identified by the designer as historic and exempt.

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?

   - Preamble added to this section from MR 1323.0100, Subpart 3 in order to eliminate that section and retain the material provisions/ allowances.
   - Elimination of the Performance Rating Method will remove a highly complex and very challenging compliance method to enforce and regulate. The Performance Rating Method includes and integrates items not part of the real-estate, like appliances, in calculating overall performance. Meaning that a change of appliances could bring a building into non-compliance at a later time.
   - Addition of language to exempt historic elements of historic buildings will ensure that even historic projects address energy conservation, but not to the extent of damaging the historic character of the building.

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

   - It integrates the previous guidance regarding alterations into the new model code context so that the information is all in one location.'
   - It reduces complexity of an already complex code.
   - Makes reasonable provisions for historic buildings without allowing a carte blanc exemption.

3. What other considerations should the TAG consider?

    - MR 1300.0100, Subpart 3 exceptions which are added by amendment to Section 5.1.3.
    - Inclusion of new language within the exception regarding historical buildings as defined by MR 1300.
    - Elimination of the Performance Rating Method via Appendix G.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

    No cost change. Much of this amendment is integrating existing rule language into the model code. Elimination of the Performance Rating Method still provides two viable compliance options. Inclusion of language limiting the exemption for historic buildings may result in increases in initial construction costs.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.

    The modification to only exempt historically significant elements or systems of historic buildings may result in increased construction costs in order to provide a more energy efficient building envelope or other systems that are not deemed historically significant. The overall cost increase is similar to that of other changes of occupancy or alteration.

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

    There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

Cost for determining if existing conditions are historically significant and integration of building envelope improvements and building systems improvements for non-historically significant elements.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

    - Confusion because of language duplication and conflicting directions between the model code and the rule.
    - Not eliminating the Performance Rating Method will create an entire new energy compliance industry in Minnesota adding to the complexity of code enforcement, additional training, credentialing, and ultimately increasing construction costs.
    - Not including the specific exceptions within historic buildings will allow them to continue with a blanket exemption allowing all historic buildings to be altered and re-used without regard to energy conservation.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

    No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

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Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Date: 12/31/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Modify Section 5.1.2 Space Conditioning

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☒	☐
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☐	☒
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s).
   5.1.2 Space Conditioning

   ☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Modify the exception to 5.1.2.3 Space Conditioning as follows:

   Exception to 5.1.2.3 A space may be designated as either a semiheated space or an unconditioned space only if approved by the building official. Unconditioned and semi-heated spaces shall not be approved with automatic fire sprinkler systems unless those systems are designed to operate in below freezing temperatures. Semi-heated spaces shall be posted near the main entry location indicating the maximum Btu heating input permissible by the energy code. Posted signs shall be of an approved legible permanent design and shall be maintained by the owner or the owner's authorizing agent.

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?

   There is a general assumption that a building designed to meet the building envelope criteria of a semi-heated space will be able to be kept above freezing. This is not true, even in the southern-most parts of Minnesota. The amount of heat allowed to be used to condition a semi-heated space is insufficient to keep it above freezing when given the reduced thermal envelope criteria. The exception clarifies the concern and requires posting so that owners don't simply add more heating equipment to what is supposed to be a low-energy-use space.

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

   The proposed change identifies a current concern and posts notification so that the requirements remain clear into the future, at the cost of a sign. The cost for a dry sprinkler system is not additional because the dry sprinkler system would be required under the basic criteria.

3. What other considerations should the TAG consider? None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   No Cost change (except for the cost of one sign.)

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   The increased costs are all offset by the energy savings.

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   None

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   Continued construction of non-compliant semi-heated spaces that become equipped with more heating capacity than allowed by code so that the spaces don't freeze. Ultimately using more energy than a compliant building because of thermal losses through the reduced thermal envelope.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

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Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1323

Date: 12/31/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Modify Section 5.1.3 Envelope Alterations

Intended for Technical Advisory Group ("TAG"): 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☒	☐
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☐	☒
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s).
   5.1.3 Envelope Alterations

   ☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

Exceptions to 5.1.3 shall be modified as follows:

3. Alterations to roof, wall or floor cavities that are insulated to full depth with insulation having a minimum nominal value of R-3.0/inch and having a vapor retarder installed to separate the insulation from the conditioned space in accordance with the Minnesota Building Code.

Exception 8 shall be deleted and replaced:

~~8. Replacement of existing fenestration, provided that the area of the replacement fenestration does not exceed 25% of the total fenestration area of an existing building and that the U-factor and SHGC will be equal to or lower than before the fenestration replacement.~~

8. Where insulation is provided above the roof deck and the required R-value for a roof replacement cannot be provided because of the thickness limitations that occur with the existing rooftop conditions, including heating, ventilation and air conditioning equipment, low door or glazing heights, parapet heights, or proper roof flashing heights, the maximum insulation compatible with the available space and existing rooftop conditions shall be installed, as approved by the building official. In no case shall the R-value of the roof insulation be reduced or the U-factor of the roof assembly be increased as part of the roof replacement. When utilizing this exception not less than 20% of the reroofing project budget shall be utilized for other energy conservation measures in the following order: 1) Whole-Building Air Leakage Testing per Section 5.4.3.1.1 with infiltration mitigation, 2) exhaust energy recovery, 3) Other energy efficiency improvements approved by the building official.

Add Exception 9:

9. Historical buildings undergoing renovations or a change of occupancy shall not be required to comply with the energy code for those portions or elements of the building determined by the historical authority having jurisdiction as contributing to the historic significance of the building and upon approval of the building official. Portions or components that can be modified to comply without impacting the historic significance of the building shall be modified to comply with the current requirements to the greatest extent possible.

Add Exception 10 (from previous C402.2.1.2 Exception with modifications)

10. Where the required R-value cannot be provided because of existing structural capacity limitations or because of the thickness limitations that occur with the existing rooftop conditions, including heating, ventilation and air conditioning equipment, low door or glazing heights, parapet heights, or proper roof flashing heights, the maximum thickness of insulation compatible with the available space and existing rooftop conditions shall be installed, as approved by the building official. In no case shall the R-value of the roof insulation be reduced or the U-factor of the roof assembly be increased as part of the roof replacement. Where the roof insulation will not comply with the minimum prescriptive insulation criteria, that portion of the building shall comply with Section 5.4.3.1.1 whole-building air leakage. Buildings that do not pass shall follow the procedure identified in Exception 2.

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?

   Exception 3: Insulation without a vapor retarder is worse than useless because it tends to trap moisture within the wall cavity and cause material degradation. Including a vapor retarder requirement in order to utilize the exception will ensure greater insulation efficiency and reduce building deterioration due to moisture damage.

   Existing Exception 8: This exception is being eliminated because compliant window systems are readily available and the conservation code for existing buildings allows a one-for-one- replacement with like-in-kind, so building owners will not be forced into reducing fenestration area. Eliminating the exception will mean that replacement windows will meet the current standards which is required for all other alterations work.

   New Exception 8: This exception is being imported from the current rule, Section C402.2.1.2 so that existing roofs that do not have adequate freeboard to install fully compliant roof insulation can reduce their insulation levels to ensure positive drainage. There is additional new language requiring other energy improvements to the building where this exception is being used. Similar to the 20% rule for accessibility, the goal is to encourage overall energy efficiency upgrades to the current codes wherever possible when the roof that is being altered is being allowed to continue in non-compliance.

   New Exception 9: This exception gives historic buildings relief from building envelope requirements where specific parts of the building are deemed historic and require maintaining the existing construction. The language is written to apply energy code criteria where it will not impact the historic character of the building in order to achieve best compliance while maintaining the historic character.

   Exception 10: The current language simply allows non-compliance with minimum roof insulation requirements where the existing conditions present challenges. The added language includes structural capacity as a mitigating consideration and also adds a new requirement to test for air infiltration when the roof will not comply with the minimum insulation requirements.

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

   Modification of Exception 3: This exception adds a vapor retarder requirement which is relatively inexpensive and ensures the effectiveness of the insulation.

   Deletion of Exception 8: There is no reason to allow non-conforming new work for up to 25% of a brand new fenestration area. This existing amendment is counter to the Minnesota Conservation Code as well as providing a continuous loophole for avoidance.

   New Exception 8: This new exception adopts and modifies existing rule language relaxing insulation requirements for existing roofs. The exception is necessary to ensure that existing roofs can safely provide positive drainage and not overburden the existing roof structure. An additional new requirement for supplemental energy conservation measures will help to ensure that this exception is used only when necessary, and when it is, that additional energy conservation measures are included elsewhere to help offset the energy loss through the continued non-compliant roof.

   New Exception 9: There is currently no criteria for addressing historic buildings and energy code compliance. This exception will require some level of compliance where possible and still allow preservation of historic character.

Exception 10: Relocated from the Minnesota amendment at C402.2.1.2 the exception is modified to include limited structural capacity so that existing roofs with less than code required structural capacity will not be required to add weight to the roof by adding insulation. The air infiltration testing is added in order to mitigate the additional energy loss through the non-compliant new roof system. Air infiltration is the leading cause of energy loss in existing buildings. Requiring infiltration testing and sealing of identified air leaks will help to offset the energy loss through the roof.

3. What other considerations should the TAG consider? None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   Exception 3: The cost increase to include a vapor retarder is minimal.

   Deletion of Model Exception 8: No projected increase in cost. Most windows being installed comply with the codes now. There is really no premium to utilize code compliant windows over those that are not.

   Addition of New Exception 8: There will be cost increases for existing buildings where the roofs can not comply with the current insulation requirements due to clearance issues. The cost savings from providing less insulation will be offset into making energy improvements in other areas of the building in order to 1) incentivize the roofing designers to do their best to make the roof compliant first, and 2) make those other improvements mandatory in order to offset some of the energy loss through the non-compliant roof.

   Addition of New Exception 9: The existing model code provides a blanket exemption for all historic buildings. There will be an increase in cost because the exception will now require energy code compliance where it does not affect the historic character of the building.

   Exception 10: This existing code language is modified to include structural capacity challenges which will tend to lower construction costs. In order to offset the energy loss through an under insulated roof, portions of the building undergoing reroofing with under-insulated roof conditions will be required to provide an air infiltration test and building sealing. There will be some additional costs to test and seal the building which will be quickly offset by energy savings.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain. The increased costs are all offset by the energy savings.

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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? Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   Need further study on probable costs to building owners.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   Exception 3: Continued degradation of buildings having insulation but no vapor retarders to protect the wall cavities from moisture.

   Exception 8 deletion: Buildings with new work that does not conform to the current code requirements and phased projects to allow complete renovation of a building over a period of time with no energy code compliance.

   Exception 8 New: Continued non-compliant roof replacements with no incentives to improve the existing conditions, resulting in continuing underperformance of existing buildings.

   Exception 9: Continued renovation and adaptive re-use of historic buildings with no regard to energy code. Many of these adaptive re-use projects are for low-income housing which means that those who can least afford higher energy bills going into the future will be saddled with substandard housing.

   Exception 10: Existing buildings with non-compliant roofs will continue to be in non-compliance with no improvement whatsoever in energy performance.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

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Date: 1/4/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Modify Section 5.5.3.1 Roof Insulation

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☐	☒
B. Is the proposed change required due to climatic conditions of Minnesota?	☒	☐
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☐	☒
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s).
   5.5.3.1 Roof Insulation

   ☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Modify 5.5.3.1 Roof Wall Insulation as follows:

   5.5.3.1 Roof Insulation
   All roofs shall comply with the insulation values specified in Tables 5.5-0 through 5.5-8. Skylight curbs shall be insulated to the level of roofs with insulation entirely above deck or ~~R-5.0~~ R-10, whichever is less.

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?

   Skylight and equipment curbs are a major thermal bridge/heat loss location costing energy resources and contributing to interior condensation and microbial growth. Increasing the thermal resistance will significantly mitigate both the heat loss and the condensation development.

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

   Equipment curbs insulated to R-10 are readily fabricated, and prefabricated curbs to the same insulation level are available. Ducts from rooftop units that pass through curbs are not required to be insulated, but ducts that are exposed to the exterior are required to be insulated to a minimum R-12. Were there no curb, the duct would be insulated to R-12 instead of R-5. It is reasonable to require at least R-10 which is available with 2 inches of extruded polystyrene foam insulation.

3. What other considerations should the TAG consider? Ductwork from rooftop units typically pass through the curb area with minimal insulation, yet the curb is directly exposed to the exterior. Increasing the thermal resistance to R-10 more closely approximates the R-12 required for ducts exposed to the exterior as found in Table 6.8.2. Curbs for flues and kitchen exhaust would be exempted.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   Minimal cost increase.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   The increased costs are easily offset by the energy savings. The additional insulation will keep the inside of the curbs dry during cold weather and reduce moisture related microbial growth and wetting of other building materials.

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   Cost of an insulated curb is minimal.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   Continued perpetuation of moisture related damage within buildings due to condensation build-up during cold weather, and continued energy losses through under-insulated curbs.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

Email address: Greg.Metz@State.MN.US

Telephone number: 651-284-5884

Date: 1/4/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Modify Section 5.5.3.2 Above Grade Wall Insulation

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☐	☒
B. Is the proposed change required due to climatic conditions of Minnesota?	☒	☐
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☐	☒
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s).
   5.5.3.2 Above Grade Wall Insulation

   ☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Modify 5.5.3.2 Above Grade Wall Insulation as follows:

   5.5.3.2 Above Grade Wall Insulation
   All above-grade walls shall comply with the insulation values specified in Tables 5.5-0 through 5.5-8.

   Exception to 5.5.3.2
   Alternatively, for mass walls, where the requirement in Tables 5.5-0 through 5.5-8 is for a maximum assembly U-0.151 followed by footnote "b," ASTM C90 concrete block walls, un-grouted or partially grouted at 32 in. or less on center vertically and 48 in. or less on center horizontally shall have un-grouted cores filled with material having a thermal conductivity of 0.44 Btu in./h ft2 F. Other mass walls with integral insulation shall meet the criteria when their U-factors are equal to or less than those for the appropriate thickness and density in the "Partly Grouted, Cells Insulated" Column of Table A3.1-3.

   When a wall consists of both above-grade and below-grade portions, the entire wall for that story shall be insulated on either the exterior ~~or the interior~~ or be integral.

   ~~a. If insulated on the interior, the wall shall be insulated to the above-grade wall requirements.~~

   b. ~~IF insulation on the exterior or integral,~~ the below-grade wall portion shall be insulated to the below-grade wall requirements, and the above-grade wall portion shall be insulated to the above-grade wall requirements

   ~~In addition, for Climate Zone 0, above-grade walls shall comply with one of the following:~~

   ~~a. Fore east and west walls, a minimum of 75% of the opaque wall area shall have a minimum SRI of 29. For the portion of the opaque wall that is glass spandrel area, a minimum solar reflectance of 29% determined in accordance with NFRC 300 or ISO 9050 shall be permitted. Each wall is allowed to be considered separately.~~

   ~~b. For east and west walls, a minimum of 30% of the above-grade wall area shall be shaded through the use of shade providing plants, man-made structures, existing buildings, hillsides, permanent building projections, on-site renewable energy systems, or a combination of these. Shade coverage shall be calculated at 10 a.m. for the east walls and 3 p.m. for the west walls on the summer solstice.~~

   ~~The building is allowed to be rotated up to 45 degrees to the nearest cardinal orientation for purposes of calculations and showing compliance.~~

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?

   There is typically a significant thermal short circuit that occurs at the top of a foundation wall when transitioning to the above grade construction condition. Moving the insulation to be on the exterior side or integral to the wall will reduce or eliminate this thermal short circuit. In addition, moving the insulation to either the exterior or an integral part of the exterior wall will significantly reduce the likelihood of condensation on the interior surfaces thereby ensuring better indoor air quality.

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

Insulation on either the exterior or the interior requires a finish. Moving the insulation toward the exterior reduces or eliminates the thermal short circuit at the top of the foundation wall.

3. What other considerations should the TAG consider? Moisture control, microbial growth mitigation, potential complexity in exterior finish treatment at grade.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   Minimal cost increase due to potential for additional exterior insulation protection at grade.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain. The increased costs are easily offset by the energy savings and reduction in moisture damage to building materials.

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   Potential incremental cost of exterior insulation protection at grade.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

Continued perpetuation of moisture related damage within buildings due to condensation build-up during cold weather, and continued energy losses through thermal short circuits at foundation wall to floor/exterior wall transition.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

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Telephone number: 651-284-5884

Date: 1/4/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Modify Section 5.5.3.3 Below-grade Wall Insulation

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☐	☒
B. Is the proposed change required due to climatic conditions of Minnesota?	☒	☐
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☐	☒
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s).
   5.5.3.3 Below Grade Wall Insulation

   ☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Modify 5.5.3.3 Below-grade Wall Insulation as follows:

   5.5.3.3 Below Grade Wall Insulation
   Below-grade walls shall have a rated R-value of insulation no less than the insulation values specified in Tables 5.5-0 though 5.5-8. Walls shall be insulated on the exterior side of the wall or integral to the wall.

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?

   There is typically a significant thermal short circuit that occurs at the top of a foundation wall when transitioning to the above grade construction condition. Moving the insulation to be on the exterior side or integral to the wall will reduce or eliminate this thermal short circuit. In addition, moving the insulation to either the exterior or an integral part of the exterior wall will significantly reduce the likelihood of condensation on the interior surfaces thereby ensuring better indoor air quality.

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

   Insulation on either the exterior or the interior requires a finish. Moving the insulation toward the exterior reduces or eliminates the thermal short circuit at the top of the foundation wall.

3. What other considerations should the TAG consider? No

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   Minimal cost increase.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   The increased costs are easily offset by the energy savings. The additional insulation will keep the inside of the curbs dry during cold weather and reduce moisture related microbial growth and wetting of other building materials.

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   Potential incremental cost of exterior insulation protection at grade.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   Continued perpetuation of moisture related damage within buildings due to condensation build-up during cold weather, and continued energy losses through thermal short circuits at foundation wall to floor/exterior wall transition.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

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Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Date: 1/4/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Modify Section 5.5.3.5 Slab-on-grade Floor Insulation

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☐	☒
B. Is the proposed change required due to climatic conditions of Minnesota?	☒	☐
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☐	☒
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s).
   5.5.3.5 Slab-on-Grade Floor Insulation

   ☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Modify 5.5.3.3 Below-grade Wall Insulation as follows:

   5.5.3.5 Slab-on-Grade Floor Insulation
   All slab-on-grade floors including heated slab-on-grade floors and unheated slab-on-grade floors, shall have comply with the insulation values specified in Tables 5.5-0 though 5.5-8. Perimeters shall be insulated on the exterior side of the slab foundation wall.

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?

   There is typically a significant thermal short circuit that occurs at the top of a foundation wall/slab edge when transitioning to the above grade construction condition. Moving the insulation to be on the exterior side will eliminate this thermal short circuit.

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

   Moving the insulation toward the exterior eliminates the thermal short circuit at the top of the foundation wall/ slab edge. It is an easy low-tech solution.

3. What other considerations should the TAG consider? Requiring a minimum of R-5 under all slab-on-grade conditions. Ground temperatures are low enough that the slab condition even mid-building can represent a significant heat loss.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   Potential minimal cost increase to protect exterior insulation from ultraviolet exposure.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   The increased costs are easily offset by the energy savings.

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   Potential incremental cost of exterior insulation protection at grade.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   Continued significant energy loss at the building perimeter foundation connection. Perpetuation of moisture related damage at the base of wall due to condensation build-up during cold weather.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

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Telephone number: 651-284-5884

Date: 1/4/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Modify Section 6.1.1.3.6 Alterations to Existing Buildings- Rooftop HVACR

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☒	☐
B. Is the proposed change required due to climatic conditions of Minnesota?	☒	☐
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☐	☒
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

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).

   ☐ 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.
   6.1.1.3.1.6 Rooftop HVACR

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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Add 6.1.1.3.6 Rooftop HVACR as follows:

   6.1.1.3.1.6 Rooftop HVACR
   New and replacement rooftop equipment shall be provided with new insulated curbs in accordance with Section 5.5.3.1 of sufficient height to allow roof replacement with insulation thickness to comply with Tables 5.5-6 and 5.5-7.

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?

   Minnesota currently has an exception that allows sub-standard insulation when mechanical equipment curbs or other drainage components do not allow full depth of roof insulation at roof replacement. This section will prevent the perpetuation of non-compliance when rooftop mechanical equipment is not replaced at the same time that roof replacement occurs.

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

   The intent of the Conservation Code for Existing Buildings is to move buildings toward compliance as alterations occur. Since curbs are directly related to the rooftop mechanical equipment and would not be installed otherwise, it is right to require their replacement with compliant work when the overall equipment is being replaced so that a future roof replacement can also be done in a compliant manner.

3. What other considerations should the TAG consider? None.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   Potential increase in cost for new insulated mechanical curbs and roof patching where curbs are replaced.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   The increased costs are easily offset by the future energy savings of a fully compliant roof replacement.

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   Potential incremental cost of providing new insulated curbs and cost of installation flashing them into the existing roof system.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   Continued significant energy loss at the building roof in perpetuity because it is rare when mechanical equipment is replaced at the same time that roofing is replaced.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

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Telephone number: 651-284-5884

Date: 1/6/2021

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Modify 6.5.6.1.2 Energy Recovery- Spaces other than non-transient dwelling units- Exception 6

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☐	☒
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☐	☒
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

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).

   ☒ delete language contained in the model code book? If so, list section(s).
   Exceptions to 6.5.6.1.2 Exception 6

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Exceptions to 6.5.6.1.2-

   Exception 6. ~~Where the sum of the airflow rates exhausted and relieved within 20 ft of each other is less than 75% of the design outdoor airflow rate, excluding~~ Exhaust air that is:
   a. Used for another energy recovery system,
   b. Not allowed by ASHRAE/ASHE Standard 170 for use in energy recovery systems with leakage potential, or
   c. Of Class 4 as defined in ASHRAE Standard 62.1.
   d. Up to 25% of the design outdoor airflow rate.

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?
   The current exception 6 is a loophole used to circumvent energy recovery simply by decentralizing exhaust systems across the building.

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

   The code intent is to recover energy from conditioned air before discharging from the building. Modifying this exception to require recapture of energy from at least 75% of the exhaust/relief air while allowing up to 25% of incidental building exhaust to be discharged without energy recovery is a reasonable solution that meets the intent of the model code.

3. What other considerations should the TAG consider? None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   There will be an increase in construction costs.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   Energy recovery units can recapture up to 90% of the energy from outgoing air. For a small business with 50 employees such as office space, 7,500 square feet of office space will require

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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.

   A small business, like an office, with 50 employees will be approximately 7,500 square feet and require 700 cfm of outdoor ventilation air in accordance with the mechanical code. 75% of that is 525 cfm. The cost for a 525 cfm energy recovery unit is approximately $3,500. Assuming natural

gas as the fuel source located in the twin cities (8,000 heating degree days), the anticipated cost savings on recovered energy is $2,150/year providing a less than two-year payback.

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There will be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   Cost is dependent upon the size of the facility, but a small office for 50 persons can expect an added cost of approximately $3,500 which will be recovered in the first two years of operation.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   Designers will continue to utilize the current loophole to circumvent this initial construction cost at the expense of years of energy consumption. Higher operating costs to building owners, and occupants.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A

DEPARTMENT OF LABOR AND INDUSTRY

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Date: 12/31/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

MR 1323.0100

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☒	☐
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☒	☐
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

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).

   ☐ 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).
   1300.0100

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Delete all of 1323.0100. The model code or other parts of the Administrative Provisions address all of these areas within the appropriate context or will have new similar amendments within the appropriate model code section context as follows:

MR 1300.0100 Reference		Replaced by:	
Subp. 1	Application	The existing language is merely charging language to the other subparts and does not require a parallel section	
Subp. 2	Scope	2.2	Scope
Subp. 3	Additions, Alterations, Renovations, and Repairs	4.2.1.2 4.2.1.3 5.1.3	Additions Alterations Renovations & Repairs. Related exceptions
Subp. 4	Change of Occupancy	Add 4.1.1.6	No Existing section, will require an amendment to the related
Subp. 5	Change of Space Conditioning	4.1.1.5	Change in Space Conditioning
Subp. 6	Compliance	2.2	Duplication of scoping provisions
Subp. 7	Mixed Occupancy	4.1.1.7	No Existing section, will require an amendment to the related
Subp. 8	Compliance Materials		Covered by MR 1300.0130
Subp. 9	Previously repealed		
Subp. 10	Info on construction documents	4.2.2	Compliance Documentation

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?

   The model code includes related sections. Duplication of those sections may cause confusion and opens opportunity for inconsistency and error.

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

   It incorporates the same related provisions within the context of the model code so that the sections occur where they make sense and can be more easily found rather than in a detached document.

3. What other considerations should the TAG consider?

   None.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
   More of a clarification than a code change. No anticipated increase in costs.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.

   No increase in costs. The change is a clarification.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies and no effect on state revenue.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result. No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   No additional costs to comply with the revision.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   The model code will contain related sections that conflict with these provisions. Since the model code contains the body of work most referenced, the related model code language will more likely be followed than that found in the isolated rule language.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement. No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

   None.

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

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

Email address: Greg.Metz@State.MN.US

Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Date: 12/30/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Code or Rule Section: Section 1: Purpose

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☒	☐
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☐	☒
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s). 1.1

   ☐ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

~~1. Purpose~~

~~1.1 To establish the minimum energy efficiency requirements of buildings other than low-rise residential buildings for~~
~~a. Design, construction, and a plan for operation and maintenance, and~~
~~b. Utilization of on-site, renewable energy resources.~~

1. Administration: Refer to Minnesota Rules, Chapter 1300, for administrative provisions of the Minnesota State Building Codes.

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?

   The current language does not include administrative provisions and does not integrate with the body of Minnesota State Building Code chapters.

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

   It incorporates the administrative provisions common to all Minnesota State Building Code chapters into the Minnesota Energy Code.

3. What other considerations should the TAG consider?

   None.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
   More of a clarification than a code change. No anticipated increase in costs.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.

   No increase in costs. The change is a clarification.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies and no effect on state revenue.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result. No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   No additional costs to comply with the revision.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   The rule will reference model codes no longer adopted.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement. No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

   None.

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

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

Email address: Greg.Metz@State.MN.US

Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Code or rule section to be changed: MR 1323

Date: 12/30/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Code or Rule Section: Section 3.2 Definitions

Intended for Technical Advisory Group ("TAG"): 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☐	☒
B. Is the proposed change required due to climatic conditions of Minnesota?	☐	☒
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☒	☐
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

Proposed Language

1. The proposed code change is meant to:

   ☒ change language contained the model code book? If so, list section(s). 3.2 Definitions

   ☒ change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
   1323.0202 General Definitions: Building Entrance,

   ☐ delete language contained in the model code book? If so, list section(s).
   3.2 Computer Room

   ☒ delete language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
   1323.0202 General Definitions: Infiltration, U-Factor,

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Modify definition of Building Entrance as follows:

   Building Entrance. "Building entrance" means any doorway, set of doors, revolving door, vestibule, or other form of portal that is ordinarily used to gain access to the building or to exit from the building by its users and occupants. This does not include doors used solely used to directly enter mechanical, electrical, and other building utility service equipment rooms. This does include ancillary doors from conditioned spaces to the exterior such as those found in offices, classrooms, and break rooms.

   Retain the Minnesota definition for Computer Room and delete the ANSI/ASHRAE/IEC Standard 90.1 definition for Computer Room.

   COMPUTER ROOM. "Computer room" means a room whose primary function is to house equipment for the processing and storage of electronic data and that has a design electronic data equipment power density of greater than 20 watts per square foot (20 watts per 0.092 m^2) of conditioned floor area or a connected design electronic data equipment load of greater than 10 kW. (difference underlined).

   Delete Minnesota amendment defining "Infiltration." ANSI/ASHRAE/IEC Standard 90.1 is the same.

   Delete Minnesota amendment defining "U-Factor." ANSI/ASHRAE/IEC Standard 90.1 is the same.

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?

   The current language does not include administrative provisions and does not integrate with the body of Minnesota State Building Code chapters.

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

   It incorporates the administrative provisions common to all Minnesota State Building Code chapters into the Minnesota Energy Code.

3. What other considerations should the TAG consider?

   None.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.
   More of a clarification than a code change. No anticipated increase in costs.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.

   No increase in costs. The change is a clarification.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies and no effect on state revenue.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result. No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   No additional costs to comply with the revision.

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   The rule will reference model codes no longer adopted.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement. No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

   None.

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

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Greg Metz

Email address: Greg.Metz@State.MN.US

Telephone number: 651-284-5884

Firm/Association affiliation, if any: DLI/CCLD

Date: 12/31/2020

Model Code:

ANSI/ASHRAE/IES Standard 90.1-2019

Code or Rule Section: C401

Code or rule section to be changed: MR 1323

Intended for Technical Advisory Group ("TAG"): 1323 Minnesota Energy Code

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General Information	**Yes**	**No**
A. Is the proposed change unique to the State of Minnesota?	☒	☐
B. Is the proposed change required due to climatic conditions of Minnesota?	☒	☐
C. Will the proposed change encourage more uniform enforcement?	☒	☐
D. Will the proposed change remedy a problem?	☒	☐
E. Does the proposal delete a current Minnesota Rule, chapter amendment?	☒	☐
F. Would this proposed change be appropriate through the ICC code development process?	☐	☒

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).

   ☐ 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). **MR 1323.0401, Subparts 1 through 4.**

   ☐ 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 words proposed to be deleted. Include the entire code (sub) section or rule subpart that contains your proposed changes.

   Delete Minnesota Rule 1323.0401, Subparts 1 through 4.

   ~~Subpart 1.~~

   ~~**C401 General.**~~

   ~~IECC section C401 is amended by adding three new sections C401.3, C401.4, and C401.5 to read as follows:~~

   ~~Subp. 2.~~

   ~~**C401.3 Heating of commercial parking facilities prohibited.**~~

   ~~Heating commercial parking facilities is prohibited in accordance with Minnesota Statutes, section 216C.20, subdivision 3.~~

   ~~Subp. 3.~~

   ~~**C401.4 Prohibition of once-through water use permits.**~~

   ~~Once-through water use permits are prohibited in accordance with Minnesota Statutes, section 103G.271, subdivision 5.~~

   ~~Subp. 4.~~

   ~~**C401.5 Parking lot lighting.**~~

   ~~Parking lot lighting is regulated by the Minnesota Department of Transportation in Minnesota Rules, chapter 8885.~~

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?

   To coordinate with the current model code and update the rule to reflect changes in code requirements.

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

   A. Deletion of Subpart 1 deletes the charging language for the remaining sections. No material change to delete this subpart.
   B. Deletion of Subpart 2 because similar language is being amended into ANSI/ASHRAE/IES Standard 90.1, Section 4.1.1.7.
   C. Deletion of Subpart 3 because once-through water use equipment is not permissible by ANSI/ASHRAE/IES Standard 90.1 compliance paths identified in Section 6.2.
   D. Deletion of Subpart 4 because the restrictions on parking lot lighting in ANSI/ASHRAE/IES Standard 90.1, Section 9.2.3.2 is more restrictive than that of Minnesota Rules Chapter 8885.

3. What other considerations should the TAG consider? None

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain.

   No cost change. The modification carries forward existing requirements or existing rule requirements are surpassed by model code.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain.
   N/A

3. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain. No.

4. 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? 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?
   Architects, Engineers, Construction Contractors, Building Officials and Inspectors.

2. What are the probable costs to the agency and to any other State agencies of implementing and enforcing of the proposed rule? Is there an anticipated effect on state revenues?

   There should be no additional costs to state agencies.

3. Are there less costly intrusive methods for achieving the purpose of the proposed rule?
   No.

4. Can you think of other means or methods to achieve the purpose of the proposed code change? If so, please explain what they are and why your proposed change is the preferred method or means to achieve the desired result.
   No.

5. What are the probable costs of complying with the proposed rule, including the portion of the total costs that will be borne by identifiable categories of affected parties, such as separate classes of governmental units, businesses, or individuals?

   None

6. What are the probable costs or consequences of not adopting the proposed rule, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?

   None.

7. Are you aware of any federal regulation or federal requirement related to this proposed code change? If so, please list the federal regulation or requirement and your assessment of any differences between the proposed rule and the federal regulation or requirement.

   No.

8. Please include an assessment of the cumulative effect of the rule with other federal and state regulations related to the specific purpose of the rule.

N/A