

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Patrick Murray

Date: 8/26/24

Email address: pmurray@j-berd.com

Model Code: 2024 IMC

Telephone number: (320) 656-0847

Code or Rule Section: 407

Firm/Association affiliation, if any: J-Berd Mechanical Contractors Inc.

Code or rule section to be changed: 407 AMBULATORY CARE FACILITIES AND GROUP I-2 OCCUPANCIES

Intended for Technical Advisory Group ("TAG"): Mechanical and Fuel Gas Code

General Information

Yes **No**

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

Proposed Language

1. The proposed code change is meant to:

- change language contained the model code book? If so, list section(s).
- change language contained in an existing amendment in Minnesota Rule? If so, list Rule part(s).
- 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 ~~striketrough~~ words proposed for deletion. Include the entire code (sub) section or rule subpart that contains your proposed changes.

407.1 General. Mechanical ventilation for ambulatory care facilities and Group I-2 occupancies shall be designed and installed in accordance with this code, ASHRAE/ASHE 170, including addenda c, g, i, and j, and NFPA 99.

4. Will this proposed code change impact other sections of a model code book or an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.
No.

Need and Reason

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

The added addenda include important changes to filter MERV ratings and ventilation rates. The addenda address a discrepancy with *Facility Guidelines Institute Residential Health, Care and Support Facilities* requirements for these types of facilities.

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

The proposal to include the addenda will be bring uniformity across code books and important clarifications.

3. What other factors should the TAG consider?

If the proposed addenda are not included there will be a conflict between ASHRAE 170 and FGI *Residential Health, Care and Support Facilities*.

Cost/Benefit Analysis

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

The cost will stay the same as the requirements are already required in one of the code books.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain. If the benefit is quantifiable (for example energy savings), provide an estimate if possible.

N/A.

3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.

N/A.

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

Decrease in enforcement cost. When conflicts exist in code books it leads to wasted time on enforcement and design mistakes.

5. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city ([Minn. Stat. § 14.127](#))? A small business is any business that has less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain.
No.

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?

Building officials, inspectors, engineers, designers, architects, state health department officials, state department of labor officials, equipment manufacturers, and those in the trades.

2. Can you think of other means or methods to achieve the purpose of the proposed code change? What might someone opposed to this code change suggest instead? Please explain what the alternatives are and why your proposed change is the preferred method or means to achieve the desired result.

I cannot think of a reason anyone would want a conflict to be present in code books.

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

Increased plan review and inspection time. There is the possibility that the incorrect equipment will be installed and be replaced. This would have a large cost impact to the construction team and owners.

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

The Minnesota Department of Health requires compliance with FGI *Residential Health, Care and Support Facilities*.

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CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Staff

Date: 10-24-24

Email address: chris.rosival@state.mn.us

Model Code:

Telephone number: 651-284-5510

Code or Rule Section: 506.5

Firm/Association affiliation, if any:

Topic of the proposal: Exhaust equipment

Code or rule section to be changed: MN Mechanical Code 1346.0506.5

Intended for Technical Advisory Group ("TAG"):

General Information

Yes No

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

Proposed Language

1. The proposed code change is meant to:

change language contained in 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).
1346.0506.5

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.

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

506.5 Exhaust equipment.

IMC Section 506.5 and all subsections are deleted in their entirety. Exhaust *equipment* shall comply with NFPA 96, ASHRAE 154. Pollution control units shall comply with Section 506.5.1.

506.5.1~~2~~ Pollution-control units. The installation of pollution-control units shall be in accordance with all of the following:

1. Pollution-control units shall be *listed* and *labeled* in accordance with UL 8782.
2. Fans serving pollution-control units shall be *listed* and *labeled* in accordance with UL 705.
3. Bracing and supports for pollution-control units shall be of noncombustible material securely attached to the structure and designed to carry gravity and seismic loads within the stress limitations of the *International Building Code*.
4. Pollution-control units located indoors shall be *listed* and *labeled* for such use. Where enclosed duct systems, ~~as required by Section 506.3.11~~, are connected to a pollution control unit, such unit shall be *listed* and *labeled*, in accordance with UL 2221 or ASTM E2336, for location in an enclosure having the same fire-resistance rating as the duct enclosure. Access shall be provided for servicing and cleaning of the unit. The space or enclosure shall be ventilated in accordance with the manufacturer's installation instructions.
5. *Clearances* shall be maintained between the pollution-control unit and combustible material in accordance with the listing. Where enclosed grease duct systems, ~~as required by Section 506.3.11~~, are connected to a pollution control unit installed indoors, all of the following shall apply:
 - 5.1. The unit shall be *listed* and *labeled*, in accordance with ASTM E2336 or UL 2221, for location in an enclosure.
 - 5.2. The unit shall be installed in a dedicated room or space enclosure, ~~constructed as required by Section 506.3.11~~, and have the same fire-resistance rating as the duct enclosure.
 - 5.3. Access shall be provided for servicing and cleaning of the unit.
 - 5.4. The dedicated room or space enclosure shall be ventilated in accordance with the manufacturer's installation instructions.
6. Clearances shall be maintained between the pollution-control unit and combustible material in accordance with the listing.
7. Roof-mounted pollution-control units shall be *listed* for outdoor installation and shall be mounted not less than 18 inches (457 mm) above the roof.
8. Exhaust outlets for pollution-control units shall be in accordance with MR 1346.0501.3. ~~Section 506.3.13~~.
9. An airflow differential pressure control shall be provided to monitor the pressure drop across the filter sections of a pollution-control unit. When the airflow is reduced below the design velocity, the airflow differential pressure control shall activate a visual alarm located in the area where cooking operations occur.
10. Pollution-control units shall be provided with a factory-installed fire suppression system.
11. Service space shall be provided in accordance with the manufacturer's instructions for the pollution control unit and the requirements of Section 306.
12. Wash-down drains shall discharge through a grease interceptor and shall be sized for the flow. Drains shall be sealed with a trap or other *approved* means to prevent air bypass. Where a trap is utilized it shall have a seal depth that accounts for the system pressurization and evaporation between cleanings.
13. Protection from freezing shall be provided for the water supply and fire suppression systems where such systems are subject to freezing.

14. ~~Grease duct connections to~~ [Ducts serving](#) pollution-control units shall be in accordance with [ASHRAE 154 and NFPA 96, Section 506.3.2.3](#). Where water splash or carryover can occur in the transition duct as a result of a washing operation, the transition duct shall slope downward toward the cabinet drain pan for a length not less than 18 inches (457 mm). ~~Grease d~~[Ducts](#) shall transition to the full size of the unit's inlet and outlet openings.

15. Extra-heavy-duty *appliance* exhaust systems shall not be connected to pollution-control units except where such units are specifically designed and listed for use with solid fuels.

16. Pollution-control units shall be maintained in accordance with the manufacturer's instructions.

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

No

Need and Reason

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

[This proposal adds information needed for pollution-control units that ASHRAE 154 and NFPA 96 do not.](#)

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

[ASHRAE 154 Informative Appendix F has only limited information for pollution-control units.](#)

3. What other factors should the TAG consider?

N/A

Cost/Benefit Analysis

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

N/A

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain. If the benefit is quantifiable (for example energy savings), provide an estimate if possible.

N/A

3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.

N/A

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

N/A

5. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city ([Minn. Stat. § 14.127](#))? A small business is

any business that has less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain.

N/A

Regulatory Analysis

1. What parties or segments of the industry are affected by this proposed code change?

Building owners, HVAC installers and jurisdictions.

2. Can you think of other means or methods to achieve the purpose of the proposed code change? What might someone opposed to this code change suggest instead? Please explain what the alternatives are and why your proposed change is the preferred method or means to achieve the desired result.

No

3. What are the probable costs or consequences of not adopting the code change, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
4. Are you aware of any federal or state regulation or requirement related to this proposed code change? If so, please list the federal or state regulation or requirement and your assessment of any differences between the proposed code change and the federal regulation or requirement.

N/A

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

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Staff

Date: 10-24-24

Email address: chris.rosival@state.mn.us

Model Code:

Telephone number: 651-284-5510

Code or Rule Section: 509.5.5

Firm/Association affiliation, if any:

Topic of the proposal: Exhaust equipment

Code or rule section to be changed: MN Mechanical Code 509.5.5

Intended for Technical Advisory Group ("TAG"):

General Information

Yes No

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

Proposed Language

1. The proposed code change is meant to:

change language contained in the model code book? If so, list section(s).
509.5.5

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.

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

509.5.5 Makeup air. *Makeup air* from all sources shall be provided during operations at a rate approximately equal to the rate that air is exhausted by the hazardous exhaust system. *Makeup air* shall be provided by ~~gravity or~~ mechanical means ~~or both~~. Mechanical *makeup air* systems shall be automatically controlled to start and operate simultaneously with the exhaust system. The *makeup air* shall not reduce the effectiveness of the exhaust system. *Makeup air* intakes shall be located in accordance with **Section 401.4**.

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

No

Need and Reason

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

This proposal removes language allowing gravity make-up air which Minnesota has not allowed because of climate conditions and energy efficiency.

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

This code change follows other make-up air provisions in the Minnesota Mechanical and Fuel Gas Code.

3. What other factors should the TAG consider?

N/A

Cost/Benefit Analysis

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

There will be no cost increase from our existing code.

2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain. If the benefit is quantifiable (for example energy savings), provide an estimate if possible.

N/A

3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.

N/A

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

N/A

5. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city ([Minn. Stat. § 14.127](#))? A small business is any business that has less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain.

N/A

Regulatory Analysis

1. What parties or segments of the industry are affected by this proposed code change?

Building owners, HVAC installers and jurisdictions.

2. Can you think of other means or methods to achieve the purpose of the proposed code change? What might someone opposed to this code change suggest instead? Please explain what the alternatives are and why your proposed change is the preferred method or means to achieve the desired result.

No

3. What are the probable costs or consequences of not adopting the code change, including those costs or consequences borne by identifiable categories of affected parties, such as separate classes of government units, businesses, or individuals?
4. Are you aware of any federal or state regulation or requirement related to this proposed code change? If so, please list the federal or state regulation or requirement and your assessment of any differences between the proposed code change and the federal regulation or requirement.

N/A

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CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: John G. Smith, P.E.

Date: October 20, 2024

Email address: jgsmith76@gmail.com

Model Code: 2024 IFGC

Telephone number: 612 867 3145

Code or Rule Section: Section 503.5.11

Firm/Association affiliation, if any: ACEC

Code or rule section to be changed: 503.5.11 Insulation Shields

Intended for Technical Advisory Group ("TAG"): 1346 Mechanical and Fuel Gas Code

General Information

Yes No

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

Proposed Language

1. The proposed code change is meant to:

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

Section 503.5.11 Insulation shield

- 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 ~~strikethrough~~ words proposed for deletion. Include the entire code (sub) section or rule subpart that contains your proposed changes.

503.5.11 Insulation shield. Where a factory-built chimney passes through insulated assemblies, an insulation shield constructed of steel having a thickness of not less than 0.0187 inch (0.475 mm) shall be installed to provide clearance between the chimney and the insulation material. The clearance shall be not less than the clearance to combustibles specified by the chimney manufacturer's installation instructions. Where chimneys pass through attic space, the shield shall terminate not less than 2 inches (51 mm) above the ~~installation~~ insulation materials and shall be secured in place to prevent displacement.

4. Will this proposed code change impact other sections of a model code book or an amendment in Minnesota Rule? If so, please list the affected sections or rule parts.
No

Need and Reason

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

It is an obvious error in selection of words. Also, changing to "insulation" will then make this section match the description in Section 502.4, Insulation shield, for vents.

2. Why is the proposed code change a reasonable solution? It clarifies the intent to avoid confusion.
3. What other factors should the TAG consider?

None.

Cost/Benefit Analysis

1. Will the proposed code change increase or decrease costs? Please explain and provide estimates if possible.
No cost change
2. If there is an increased cost, will this cost be offset by a safety or other benefit? Please explain. If the benefit is quantifiable (for example energy savings), provide an estimate if possible.
3. If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.
4. Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
None.
5. Will the cost of complying with the proposed code change in the first year after the rule takes effect exceed \$25,000 for any one small business or small city ([Minn. Stat. § 14.127](#))? A small business is any business that has less than 50 full-time employees. A small city is any statutory or home rule charter city that has less than ten full-time employees. Please explain. No.

Regulatory Analysis

1. What parties or segments of industry are affected by this proposed code change?
Owners, contractors, building officials.
2. Can you think of other means or methods to achieve the purpose of the proposed code change? What might someone opposed to this code change suggest instead? Please explain what the alternatives are and why your proposed change is the preferred method or means to achieve the desired result.
No

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

Confusion of what is meant by “above the installation material”

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

No

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