DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Nick Erickson

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Telephone number:612-210-8332

Firm/Association affiliation, if any: Housing First MN

Code or rule section to be changed: (1309) R. 325.9

Intended for Technical Advisory Group ("TAG"): IECC

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

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).

 \boxtimes 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.

Date: 3/17/2025

Model Code: IECC

Code or Rule Section: 1309

Topic of proposal: Commissioning

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

R325.9 **Commissioning.** Forced air heating systems on new construction dwellings shall be designed in accordance with R.303.10R325.8, with certification provided to the building official along with the building permit application. Installed heating systems shall be performance-tested to show compliance with design submitted at permit application. The system must perform within the manufacturer's specifications for Total External Static Pressure, Temperature Rise and airflow within plus or minus 20% or 25 CFM (whichever is greater) delivered to each room while on the Hheating setting, in accordance with R.303.10 R325.8. Documentation of testing result numbers must be submitted to the building official prior to the issuance of the certificate of occupancy.

NOTE THIS REQUIRES THE ADOPTION OF THE CORRELATION CODE CHANGE SUBMITTED

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.

Possible connection to the administrative portions. But that will need to be determined by technical staff.

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.) *Minnesota's home designs are becoming more complex, and homebuilders and their energy raters have reported that with the adoption of the 2024 IECC and beyond, performance path utilization will increase dramatically in MN. As Minnesota moves beyond the IECC standard through 2038, the performance path will be critical in achieving and consideration of affordability in the energy code.*

With performance path adoption increasing, there will be less predictability in the home design and code officials will need to know that these homes are built in accordance with their design. Much of this work is already being done in conjunction with the energy rater during their work in the home.

- Why is the proposed code change a reasonable solution?
 This ensures that the system is installed and functioning as designed; the rater is most qualified to address this issue.
- 3. What other factors should the TAG consider? The amount of training and re-inspections due to the proliferation of the performance path will place stress on the building officials and general contractors. This is the approach taken in several other markets and does function well. This language itself was inspired by Fort Collins.

Cost/Benefit Analysis

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

Depending on how homebuilders and their HVAC trade partners currently structure their contracts, there may be no increased cost specific to this provision.

For homebuilders not currently requiring performance testing of heating systems in their contracts with HVAC trade partners there will be an added cost. The cost of this provision would depend on the size of the system, and with today's marker could range from \$100 - \$300.

While not universal, performance testing heating systems is becoming a standard industry practice among builders, especially with production builders.

When used as part of the performance path, the potential increased cost of performance testing is offset by the others savings provided in the performance path. Fewer materials will be used as the systems will be operating off properly sized equipment. Today, the standard practice is to oversize systems, leading to overbuilt systems which does add cost.

Overall cost warranty claims, costs which can come after the home has been sold, will be reduced with systems that are properly sized and performance tested.

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.

Increased comfort and operation will be achievable because these systems will be property sized and designed. As the system will operate within manufacture specifications and to optimal conditions, the operating life of the system is likely to be extended, delaying replacement costs.

- If there is a cost increase, who will bear the costs? This can include government units, businesses, and individuals.
 The cost increase, in the situation in which it exists, would be incurred by the homebuilder.
- Are there any enforcement or compliance cost increases or decreases with the proposed code change? Please explain.
 If there is any added compliance or performance cost increase or decrease, it would de minimis as the inspector would need to review the performance testing results while conducting the final inspection.
- 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 (<u>Minn. Stat. § 14.127</u>)? 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, this specific provision does not include any changes that will \$25,000 for any one small business or small city.

Regulatory Analysis

- 1. What parties or segments of industry are affected by this proposed code change? *Homebuilders, Energy Raters, Code 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*

- 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 as the performance path proliferates. Delays in permitting and inspections due to the varying approaches taken. Confusion around possible re-inspections and change orders caused by misinterpretation of the performance path design.
- Are you aware of any federal or state regulation or requirement related to this proposed code change? If so, please list the federal or state regulation or requirement and your assessment of any differences between the proposed code change and the federal regulation or requirement. *No*

***Note: The information you provide in this code change proposal form is considered Public Data and used by the TAG to consider your proposed modification to the code. Any code change proposal form submitted to DLI may be reviewed at public TAG meetings and used by department staff and the Office of Administrative Hearings to justify the need and reasonableness of any proposed rule draft subject to administrative review and is available to the public.

****Note: Incomplete forms will be returned to the submitter with instruction to complete the form. Only completed forms will be accepted and considered by the TAG. The submitter may be asked to provide additional information in support of the proposed code change.

DEPARTMENT OF LABOR AND INDUSTRY

CODE CHANGE PROPOSAL FORM

(Must be submitted electronically)

Author/requestor: Chris Rosival	Date: 04/10/2025		
Email address: chris.rosival@state.mn.us	Model Code: 2024 IF	RC	
Telephone number: 651-284-5510Code or Rule Section		n: R325	.10
Firm/Association affiliation, if any: DLI			
Code or rule section to be changed: 2024 IRC Section R325.10			
Intended for Technical Advisory Group ("TAG"):			
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 C. Will the proposed change encourage more uniform enforce D. Will the proposed change remedy a problem? E. Does the proposal delete a current Minnesota Rule, chapt F. Would this proposed change be appropriate through the Id development process? 	of Minnesota? ement? er amendment?		
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 \boxtimes add new language that is not found in the model code book or in Minnesota Rule. R325.10

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 <u>underlining</u> and strikethrough words proposed for deletion. Include the entire code (sub) section or rule subpart that contains your proposed changes.

R325.10 Forced air duct systems. A forced air *duct system* shall not penetrate the walls, floors or ceilings separating *dwelling units*.

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.

Need and Reason

 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.) M1602.2 has language that does not allow forced air ducts systems to be shared in dwelling units. Odors, disease and other contaminates should not be allowed to be transferred form one dwelling unit to another.

[MP] DUCT SYSTEM. A continuous passageway for the transmission of air that, in addition to ducts, includes duct fittings, dampers, plenums, fans and accessory air-handling equipment and appliances. For the definition applicable in Chapter 11, see Section N1101.6

[RB] DWELLING UNIT. A single unit providing complete independent living facilities for one or more persons, including permanent provisions for living, sleeping, eating, cooking and sanitation. For the definition applicable in Chapter 11, see Section N1101.6. For the definition applicable in Chapter 24, see Section G2403.

M1602.2 Return air openings. Return air openings for heating, ventilation and air-conditioning systems shall comply with all of the following:10. Return air from one dwelling unit shall not be discharged into another dwelling unit.

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

This will keep ducts from penetrating separation walls in dwelling units.

3. What other factors should the TAG consider?

Cost/Benefit Analysis

- Will the proposed code change increase or decrease costs? Please explain and provide estimates if possible. No 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.

- 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 (<u>Minn. Stat. § 14.127</u>)? 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? IRC builders, contractors and installers
- 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.
- 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.

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