July 30, 2020

The Honorable Judge Lipman

Office of Administrative Hearings

600 North Robert Street

PO Box 64620

St. Paul, Minnesota 55164-06290

RE: **Possible Amendments to Rules Governing the Minnesota Residential Energy Code, Minnesota Rules, Chapter 1322; Revisor’s No. R-4512**

**OAH Docket No.**8-9001-36776

Dear Judge Lipman:

Thank you for accepting the Builders Association of Minnesota’s comments in response to the Notice of Hearing regarding possible amendments to the Minnesota Residential Energy Code.

The Builders Association of Minnesota opposes the adoption of the 2018 International Energy Conservation Code (IECC) for residential construction without the recommended amendments noted below.

Our opposition is based in part on the DOE's preliminary analysis for energy savings that does not account for Minnesota specific items which results in undervaluing the energy efficiency of new homes built in Minnesota.

The 2018 energy code includes an Energy Rating Index Compliance alternative with a threshold ERI (Energy Rating Index) or HERS (Home Energy Rating System) of 61 for the southern half of the state and 58 for the northern half. This code alternative is supported by BAMN as well as all other Energy Code Technical Advisory Group stakeholders.

According to RESNET (Residential Energy Services Network), the average HERS index in Minnesota for 2019 is 50. This average is from 7,287 homes, primarily in the metro area as part of the Xcel/Centerpoint energy efficient home program.

Only three States (Vermont, Hawaii, & South Dakota), had better 2019 HERS averages and the largest number of homes certified from those three states was in Hawaii with only 189 homes certified.

<https://www.resnet.us/articles/over-241000-homes-hers-rated-in-2019/>

This average HERS score of 50 is approximately 18% better than the 2018 IECC ERI of 61 for climate zone 6 and 14% better than the ERI of 58 for climate zone 7. It is worth noting that this score also exceeds the proposed 2021 IECC ERI scores.

This measurement of actual energy savings demonstrates that Minnesota builders are already building homes that far exceed, the energy efficient performance requirements of the 2018 IECC and, the DOE’s analysis of energy savings.

Accordingly, the adoption of the unamended 2018 IECC does not reflect evidence-based policy making since it does not incorporate actual Minnesota in-field construction practices and performance.

One of our builder members primary concerns with adopting the 2018 Energy Code as written is the prescriptive requirement for R-5 continuous insulation on the exterior of our wall assemblies. The Minnesota Department of Labor and Industry had previously amended that requirement out of the code when it adopted the 2012 energy code due to concerns raised about durability and cost, these concerns have not changed.  Adding continuous insulation to the exterior wall can improve the R-value of the exterior wall, however, it will also affect Minnesota builders' current exterior water management and interior vapor retarder practices which could negatively impact the overall durability of the exterior wall.

An unintended consequence of adopting the 2018 energy code prescriptive requirements unamended is that homebuilders who do not have utility program support, effectively those in greater Minnesota, will find it difficult to obtain a cost-effective ERI rating as an alternative path to meeting the code requirements, and therefore will have no option other than to add exterior continuous insulation to their wall assemblies.

The Builders Association of Minnesota supports the opportunity to adopt certain provisions of the 2018 that reflect practical and cost-effective measures noted in the DOE analysis, that compose the bulk of the energy savings associated with the updated code, specifically:

* RE31 (Fenestration): Lowers (improves) fenestration U-factors in climate zones 3 through 8, and;
* RE127 (Lighting): Increases high-efficacy lighting from 75% to 90% of permanently installed fixtures in all homes.

To that end we recommend the department adopt and amend the 2018 IECC Residential Energy Code as follows:

1. Amend Table R402.1.2 to reflect the existing 2015 Minnesota Residential Energy Code Wood Frame Wall R-Values as: Climate Zone 6: 20, 13+5; Climate Zone 7: 21.
2. Amend Table R402.1.2 to reflect the existing 2015 Minnesota Residential Energy Code Slab R-Values & Depth as: Climate Zone 6: 10, 3.5 ft; Climate Zone 7: 10, 5 ft.
3. Delete section R402.4.4 Rooms containing fuel-burning appliances.
4. Replace section R402.2.9 Basement Walls with Minnesota 2015 Residential Energy Code section R402.2.8 Basement Walls.
5. Replace section R403.6 Mechanical Ventilation with Minnesota 2015 Residential Energy Code section R403.5 Mechanical Ventilation.

We trust that these comments are helpful as you issue your Report and Recommendation to the Minnesota Commissioner of Labor and Industry.

Sincerely,

Grace Keliher  
Executive Vice President