

At the time of the announcement on Friday July 7th about adopting Tier 1 across the board, SBM was working on getting organizations to sign onto the following open letter;

Announcement by Government of Manitoba: [Province of Manitoba | Labour | Labour and Immigration | 2020 Construction Codes Adoption \(gov.mb.ca\)](#)

Good day,

We, the undersigned, write to you today asking that you adjust your proposal to adopt Tier 1 for houses and small buildings to start instead at Tier 3 or Tier 2 as the minimum. It should be stated that we do applaud the Manitoba government on their recent decision to adopt the 2020 National Model Codes.

For commercial and residential sectors alike, it is critical to develop a clear roadmap to reach the top performance tier. This roadmap must be developed in collaboration with industry, and with all stakeholders in mind. We recognize the need for commercial (Part 3) buildings to begin at Tier 1, attributable in part to recently bypassing the 2015/17 codes. As such, our letter focuses on the case for initial adoption of higher tiers in residential and small buildings (Part 9) of the National Building Code.

The intent of energy efficiency tiers in building codes is to adopt progressively higher standards as soon as they are within reach for industry. For those building to absolute minimums, a newly adopted code should be a stretch. In this way codes benefit everyone; lifting the bottom without impacting those who have already invested in progress. Since Manitoba homebuilders are already building to a Tier 2 equivalent and have demonstrated a capacity to build to Tier 3 and beyond, adopting Tier 2 or Tier 3 today uses these new codes for their intended purpose.

Energy efficiency tier adoption presents a significant opportunity for Manitoba to leverage existing strengths and lead the way in environmental and economic progress. Our recommendations aim to strike a balance between our current state and the direction we need to move towards as a sector and society.

RECOMMENDATIONS

We recommend the province of Manitoba:

1. Adopt Tier 2 for houses and small buildings as a minimum requirement.
2. Publish a roadmap indicating the intended progression and accelerated adoption of Tier 3 and timely adoption of Tiers 4 and 5. This will allow industry to plan for and invest into capacity building and knowledge enhancements to comply with future tiers.
3. Retain the requirement for **both** heat recovery ventilation and drain water heat recovery systems in new homes in Manitoba. These technologies have been

- requirements in Manitoba's code for many years. As they contribute to healthy indoor air quality and household energy efficiency, they should not be removed.
4. Establish a code implementation task force to lead development of the roadmap to higher tiers and identify the resources necessary to achieve higher tier adoption. A mechanism for industry to submit questions or issues with the code should be established and communicated to code users and stakeholders, forming a knowledge bank of Manitoba-specific findings that can be leveraged to ensure the streamlining of future tier implementation.
 5. Invest in compliance. Oversight will be required to ensure codes are universally applied and successfully implemented across the province of Manitoba, protecting consumers as intended.

IMPACT ON MANITOBANS:

Building Code serves as a policy tool that provides consumer protection. Canada's Building Code has been evolving over decades to ensure the improvement of quality and performance of housing nationwide. High performance housing is especially critical in our province due to our extreme climate conditions.

Manitobans expect that the homes built in our communities will be safe, affordable, and energy efficient both today and in the future. Homes with lower performance levels shift a financial burden to the families that live in them, leading to higher energy bills and costly future retrofits. This is especially true for remote, northern, and Indigenous communities who are disproportionately affected by climatic conditions, higher energy use, and the ongoing housing crisis. With over 5,000 new housing starts expected in the Winnipeg CMA next year¹, this code adoption cycle is a pivotal opportunity to make a change that will immediately benefit thousands of Manitoba families.

IMPACT ON INDUSTRY

In the Impact Analysis completed by Natural Resources Canada, the incremental costs for builders in Climate Zone 7a to adopt Tier 2 were not impactful (between \$200-1200²). A recent made-in-Manitoba analysis³ reveals that the incremental cost for Manitoba builders from current code to Tier 2 or Tier 3 is only \$500, mainly representing the cost of conducting a blower door test to measure air tightness.

One rationale for pursuing lower energy tiers provided by the province in this final round of consultation was a lack of industry capacity. Currently, Manitoba has a surplus of recently trained Registered Energy Advisors who represent the trade required to conduct air tightness testing and energy assessments for all tiers other than Tier 1. Through the adoption of Tier 2, Manitoba would support green jobs and maintain the capacity recently built in this growing industry⁴. Tier 1 adoption risks losing these workers, and stagnating the growing green building economy due to a lack of interim work. It will also force industry to rebuild existing capacity when Tier 2 is eventually adopted and air tightness testing becomes mandatory.

Homebuilders in Manitoba have been historically outspoken about the commendable air tightness of their buildings. Achieving good air tightness helps to improve energy efficiency by reducing the amount of conditioned air (heated or cooled) that is lost or gained through leaks. This means that less energy is required to maintain a comfortable indoor temperature, leading to lower heating and cooling costs. Tier 1 of Canada’s 2020 National Building Code sets out a minimum air tightness value of 2.5 air changes per hour as a minimum requirement. Impressively, single detached new homes in Manitoba already achieve levels of 1.5 air changes per hour or better when tested – consistent with Tier 4 or Tier 5 air tightness performance! This detail underlines the fact that the majority of homebuilders are ready now to align with higher levels of code.

Adoption of higher tiers not only protects the interests of Manitoba homebuilders, architects and engineers, but also safeguards them from competition from firms in neighboring provinces such as Ontario, where the adoption of Tier 3 for houses and small buildings has been proposed. Arbitrarily aligning ourselves with other prairie provinces ignores the fact that we have invested in the means and methods and have the experience to reliably comply with higher tiers today.

In its June 2023 justification report, the province of Manitoba stated there was “a lack of engineering analysis” to support the claim that houses in Manitoba already perform at Tier 2. Recent energy modelling undertaken confirms Manitoba homebuilders are already achieving compliance with the performance path and prescriptive paths of Tier 2. Many builders are in fact at Tier 3 (performance)⁵. Lastly, the typical program submission to Efficiency Manitoba’s New Homes Program – a program most of Manitoba’s large homebuilding organizations have participated in – is compliant with Tier 4. We summarize these findings below in Figure 1:

Fig. 1

Tier compliance analysis for new homes in Manitoba

	Current code	Tier 1	Tier 2 Prescriptive	Tier 2 Performance	Tier 3 Performance	Tier 4 Performance	Tier 5 Performance
Typical Manitoba new home*	Meets	Meets	Meets	Meets	May meet	Does not meet	Does not meet
Typical New Homes Program submission**	Meets	Meets	Meets	Meets	Meets	Meets	Does not meet

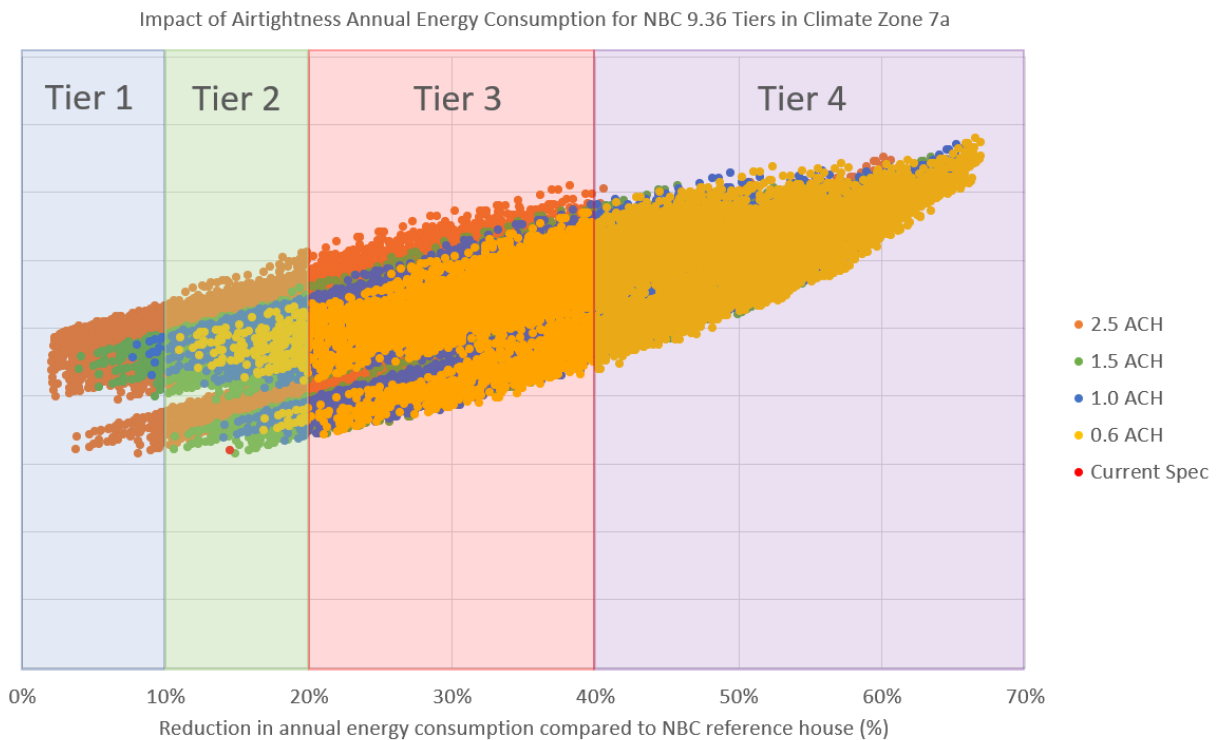
* Based on prairieHOUSE NBC 2020 Tier analysis
 ** Based on Efficiency Manitoba New Homes Program data

Far from improving the transition to a new code, adopting at Tier 1 will require builders, inspectors, and code officials to learn a new code that has fewer benefits. Going directly to Tier 2 avoids additional training that will ultimately be required and reduces red tape.

Adoption of Tier 1 would undermine the efforts that programs such as Efficiency Manitoba’s New Homes Program have made in support of the advancement of energy efficiency. Since 2016, the New Homes Program has supported the design and construction of over 1,000 housing units⁶, paid hundreds of thousands of dollars in performance-based incentives, and worked to prepare homebuilders for future code requirements.

Figure 2 below shows the impact that air tightness can have on energy efficiency on housing in Manitoba. Each dot represents a unique energy simulation that was conducted on an archetype located in Climate Zone 7a. In this analysis, 60,000 HOT2000 simulations were completed to understand how an exhaustive set of construction packages could be impacted by various levels of air tightness⁷. The findings from this analysis demonstrate that the current spec (which represents the current code package most builders are using and includes 1.5 ACH) achieves Tier 2 performance. Across thousands of packages, air tightness – as a single energy conservation measure – is enough to achieve the energy savings required for Tier 2.

Fig. 2



IMPACT ON THE PROVINCE

The adoption of higher tiers supports the province's Made-in-Manitoba Climate and Green Plan, which states it is striving for a "bold new vision for a clean, green Manitoba". Furthermore, it promotes standardization across the province and nationwide, a key priority outlined in the Harmonized Construction Codes Policy, to which Manitoba has pledged its commitment.

It is crucial that we ensure energy in Manitoba is sustainable, affordable, and reliable. In its 2023 Integrated Resource Plan: Preliminary Outcomes⁸, Manitoba Hydro identifies the following findings:

- Energy policy will be a major influence on the pace of decarbonization and is a needed tool to manage the energy transition.
- All scenarios result in increased winter peak demand (up to 2.5 times current demand) requiring new generation, transmission, and distribution infrastructure.
- Energy efficiency measures that reduce peak electricity demand are most valuable to the electricity system.

As revealed in the above analysis, energy conservation measures associated with higher tiers can significantly reduce the impact of new buildings on Manitoba's electrical grid. The economic impact of these measures cannot be overstated. The implementation of mandatory energy efficiency codes represents a vital opportunity to enhance capacity and avoid or defer spending on generation infrastructure projects.

It is the responsibility of the province to consider the interests of **all** stakeholders in its building code decision. Stakeholders from all areas of Manitoba's housing sector have advocated for the adoption of higher tiers, with only homebuilders in opposition. By choosing to adopt the lowest and least stringent standard from Canada's 2020 National Building Code, Manitoba is throwing away an opportunity to improve its building stock, conserve energy, save money, and regain its leadership position in the building sector.

Given the available data, feedback received from stakeholders, and the stated goals of government, we firmly assert that adopting Tier 2 for houses and small buildings represents the absolute minimum level of performance that Manitoba should adopt, particularly at this critical juncture in our province's history.

Follow the url to download the PDF of the footnotes and appendix -

<https://www.sustainablebuildingmanitoba.ca/wp-content/uploads/2023/06/SBM-Submission-Appendix.pdf>

Sincerely,

(list of signers)

The letter was planned to be sent to the following MLAs and government employees;

To:

- Honourable Jon Reyes – Minister of Labour and Immigration (final decision maker)
- Honourable Andrew Smith – Minister of Municipal Relations
- Honourable James Teitsma – Minister of Consumer Protection and Government Services
- Honourable Jeff Wharton – Minister of Economic Development, Investment and Trade
- Honourable Sarah Guillemard – Minister of Advanced Education and Training
- Honourable Doyle Pivniuk – Minister of Transportation and Infrastructure
- Honourable Cliff Cullen – Minister of Finance
- Honourable Kevin Klein – Minister of Environment and Climate Change
- Premier Heather Stefanson

Cc

- Wab Kinew - Leader of the Opposition
- Maylaya Marcelino - Critic for Labour and Immigration
- Lisa Naylor - Critic for Municipal Relations and Manitoba Liquor and Lotteries Corporation
- Mark Wasyliv - Critic for Economic Development, Investment and Trade & for Environment and Climate Change and Efficiency Manitoba
- Mintu Sandhu - Critic for Consumer Protection and Government Services
- Dougald Lamont - Leader of the Manitoba Liberals
- Ryan Delury - Chief Inspector and Director - Inspection and Technical Services
- Joe Kasprick - Program Manager – Building Codes, Inspection and Technical Services Labour and Immigration