

The expert voice of the residential construction industry.

Housing Matters

Saskatoon & Region
Home Builders'
Association



KEY INDUSTRY ISSUE: Fire sprinklers in new homes

BACKGROUND >> The case has recently been evaluated

In December 2018, the Canadian Commission on Building and Fire Codes (CCBFC) rejected proposed changes to the National Building Code (NBC) to make automatic sprinklers mandatory in single-family homes and residential buildings up to three storeys. The Saskatoon & Region Home Builders' Association supports this decision, which came after a decade of research made it clear that the costs associated with mandating sprinklers would far exceed the benefits, and the number of fires occurring in Canada has fallen dramatically over the years. This reduction in fires was achieved through better education and technology for smoke alarms without the need for mandatory sprinklers.

INDUSTRY POSITION >> The NBC serves as the model for building regulations across the country

The Association actively supports the expertise and process of Codes Canada. The Government of Canada's National Research Council has an excellent process in place to improve the National Building Code (NBC) on a 5-year cycle. They have an evidence-based approach and a consensus-based process. It is the right model in place, bringing a diverse group of experts around the table from across the country. They focus on improving homes and they also bring a cost-benefit analysis, scientific research, and industry realities to the reviews. When regulation is the best route to address a specific issue, the national process improves the likelihood that building regulations across the country will evolve to address the best interests of Canadians, because the NBC serves as the model for building regulations across the country.

The City of Saskatoon – and in fact most municipalities - do not have the proper extensive expertise, processes, or resources in place to evaluate going above the NBC, especially after the National Research Council concluded that this suggested improvement should not be included in the NBC.

ACCEPTABLE LEVELS OF PERFORMANCE, COSTS & BENEFITS >> Affordability is critically important to homebuyers

The mandate of the national model codes is to establish provisions that reflect the minimum acceptable level of performance within the context of the objectives of the codes. The determination of minimum acceptable levels depends, in part, on establishing the costs associated with potential changes to requirements in relation to the benefits generated. Consideration must also be given to industry capacity, product availability, enforcement implications, maintenance costs and other costs that would be handed down to consumers.

Association professionals commonly offer levels of finish performance, safety and other benefits that exceed code minimums, and that can be selected at the discretion of homebuyers who are both able and wish to invest more in their homes. However, given the critical importance of affordability for more Canadian homebuyers, the level of performance provided by code minimums is very high, and more than acceptable for today's new housing (for example, homes built to minimum code requirements today are almost 50% more energy efficient than homes built 30 years ago).

HOUSING AFFORDABILITY >> Believe it or not, we can actually improve ourselves out of being competitive

Given the Association's ongoing interest in housing affordability, quality, and choice for Saskatchewanians, the Association has been supportive of the direct involvement of our national office team, the CHBA, in discussions on residential sprinklers since the first related code change request was received by Codes Canada many years ago. CHBA has participated in discussions of both the Standing Committee on Housing and Small Buildings, the Joint Task group on Residential Sprinklers and the CCBFC, providing input on reports from proponents and third parties on the costs and benefits of residential sprinklers.

The April 2017 Final Report of the Joint task Group on Residential Sprinklers considers a wide range of issues in its cost-benefits analysis which shows that the costs of mandating sprinklers would far outweigh their potential benefit. The research estimates that investing more than \$1 billion per year would prevent only 1 death and 3 injuries per year. This is orders of magnitude higher than internationally accepted values for lives saved and injuries prevented – and money that could be spent much more effectively elsewhere.

In the end, it does not matter if we have great jobs in Saskatoon, top notch amenities, sports complexes and hospitals, and even great schools.

If housing is out of reach, if housing choice and price brackets are poor in diversity, people will not move to Saskatoon or they won't stay. Research shows people are more than willing to drive 30 minutes out of the City where the price difference caused by regional disparities in building standards means a more affordable home. Once affordability has been eroded, we have yet to find a solution to fix it. Other large municipalities are still trying, let's be the one that keeps a watchful eye on it.

EFFECTIVE FIRE SAFETY >>

While sprinklers offer benefits in relation to fire safety, the considerable costs involved have always limited their acceptability as code-mandated requirements. For ground-oriented homes, and especially for detached housing, there are other fire safety measures that are much less expensive, much more effective, and that have fewer potential unintended negative consequences (like water damage). Smoke alarms, for example, are one of the most important measures in saving lives, and they do so at a fraction of the cost of sprinklers.

Several additional studies reinforced the assessment of the Joint Task Group and identified significant factors that affect fire safety in houses. The research found that flashover times are an important measure of fire performance. Flashover is affected by interior lining material, ventilation conditions and building contents – modern furniture burns faster than legacy furniture. Untenable conditions – incapacitation caused by toxic gases, asphyxiant gases, heat exposure and obstructed vision – occur *before* structure failure. In both cases, smoke alarms are key to early detection and intervention.

Thank you to CHBA-National for their efforts on this file and for much of the writing for this document.

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The Saskatoon & Region Home Builders' Association is the professional association representing approximately 280 companies involved in the housing industry and provides the only certifications available for professional home builders and renovators. It is the expert voice focused on improving affordability, quality and choice of housing in Saskatoon and area, and works collaboratively with stakeholders and governments to get us there. For more information, visit www.saskatoonhomebuilders.com.