

# TOWN OF ACUSHNET

## FIRE & EMERGENCY MEDICAL SERVICES DEPARTMENT

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Kevin A. Gallagher  
*Chief of Department*

Mr. Brian Gale, Chairman  
Board of Building Regulations and Standards  
One Ashburton Place, Room 1301  
Boston, MA 02108

March 6, 2014

Dear Chairman Gale and Members of the Board of Building Regulations and Standards:

I am submitting this testimony in support of code change #2011-05-04, 51.0 relative to draft stopping in one and two family buildings (R302.12A).

As you know, this code change proposal, and this issue, have been on the agenda of the BBRS for several years. As the proposal approaches a final vote on promulgation, I would ask that the Board take into consideration the following:

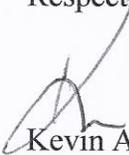
- The current code relative to draft stopping requires that the void not exceed 1,000 square feet. Despite best efforts, no rationale was found for establishing this linear trigger. Of particular concern is the void space created during the assembly of prefabricated (modular) construction, where the void space has the additional dimension of height, often 20 inches. A fire penetrating into the void has considerable volume of space to travel and can be fed by the presence of polyurethane foam structural adhesive, a product that we know burns easily and generates significant heat energy.
- Large, open void spaces pose a threat under fire conditions due to horizontal spread that often goes unnoticed during the initial phase of firefighting activities. Minimizing the size of the void compartmentalizes the products of combustion thus reducing the speed with which the fire spreads. To be clear, this proposal is not intended to require fire blocking. The goal is to reduce the size of problematic void spaces found in certain types of residential construction.
- This code change proposal targets construction techniques that include a void defined by a membrane above and a membrane below with both supported by separate and distinct structural supports. If this condition is triggered in the factory or field settings, the proposal would require that the void spaces not exceed 500 square feet. An exemption is provided for concealed spaces filled with noncombustible insulation that follows the NFPA guidelines.

- Written testimony from the modular industry states that this type of draft stopping can be engineered at a cost of approximately \$350 per void space (letter from Muncy Homes to the BBRS dated 3/7/2011). In accordance with MGL c 143 s. 94 (c), which reads in part, “relating to the construction of buildings to ascertain their effect upon the cost of building construction and the effectiveness of their provisions for health, safety, energy conservation and security.” It is felt that an additional \$700 per home and the overall improved safety and ability to slow fire growth within this concealed space fulfills the intent of this section. I believe the cost to install draft stopping versus the “loss” in the event of fire is clearly effective.
- Written comments to the Board from the Modular Building Systems Association, dated 2/11/2014, seems to confuse the issue of reducing the size of the void with the need to provide fire rated assemblies in structures not required by the residential code. I will leave those criticisms to the individual members for interpretation.

This Board has taken several steps to ensure that prefabricated construction entering the Commonwealth meets our standards on safety, cost, quality and efficiencies. You have been provided by the fire service documentation of what can occur to a structure when fire enters a large void space, filled with combustibles and glue. Despite assurances (letter to BBRS from Modular Building Systems Association dated 1/6/2011) that testing would be done on the issue of fire spread in void spaces, that data has not been forwarded to this Board for review.

I would ask that the members of the Board support a final vote for draft stopping when it comes up for a vote and I stand ready to address any issues or concerns.

Respectfully submitted on behalf of the Fire Chiefs Association of Massachusetts,

  
Kevin A. Gallagher

