



# City of Naperville

400 S. Eagle Street  
Naperville, IL 60540

## Meeting Minutes

### Building Review Board

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Wednesday, May 16, 2018

2:00 PM

City Council Chambers

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#### A. CALL TO ORDER:

#### B. ROLL CALL:

Present 8 - Brockman, Smith, Jurjovec, Kuhrt, Meyer-Smith, Kronewitter,  
Castagnoli, Russell

Absent 1 - Ghassan

#### C. PUBLIC FORUM:

#### D. PUBLIC HEARINGS:

#### E. REPORTS:

1. Approve the minutes of the January 17, 2018 Building Review Board meeting.

A motion was made by Brockman, seconded by Kronewitter to approve the minutes of the January 17, 2018 Building Review Board meeting.

Aye 8 - Brockman, Smith, Jurjovec, Kuhrt, Meyer-Smith, Kronewitter,  
Castagnoli, Russell

Absent 1 - Ghassan

2. Approve the minutes of the April 18, 2018 Building Review Board meeting.

A motion was made by Jurjovec, seconded by Castagnoli to approve the minutes of the April 18, 2018 Building Review Board meeting.

Aye 8 - Brockman, Smith, Jurjovec, Kuhrt, Meyer-Smith, Kronewitter,  
Castagnoli, Russell

Absent 1 - Ghassan

#### F. OLD BUSINESS:

1. Provide feedback on significant changes identified through the 2018 International Building Code Update.

Trevor Dick, Development Manager continued staff's presentation from last month's meeting where the BRB discussed significant changes to the 2018 International Building Codes.

Trevor provided an overview of the purpose for the updates, the establishment

of committees, and provided an overview of the 2018 Building Code Update schedule and milestones is provided in the packet as Table 1. Although a complete list of the significant changes identified by the Committees is provided as Attachment 1 that staff has also provided separate memorandums with additional information for: 1) the ICC 2018 Code requirements for residential fire suppression and 2) how the ICC 2018 Code supports smart home technologies.

Trevor provided an overview of the smart home technologies included in the packet as Attachment 2. The memo that summarizes the Code requirements for what type of power source is needed, and second, when smart home technologies are allowed.

Trevor also discussed that since the time of the board packets being distributed, staff continued to meet to discuss this item.

- o It's important to note that there is nothing in our current codes, or the 2018 codes that prevents our residents from using smart smoke alarms.
- o It's also important to keep in mind how smart smoke detectors need to receive their power.
- o We should also keep in mind that Smart Technology is not always fool proof. Our phone batteries go dead regularly and our home wi-fis can also go down.
- o In our discussion with home builders - they do not support making smart home technology mandatory. Although many residents want it, there are also residents who do not like the cost, and not all residents have smart phones.

While keeping those items in mind, staff also felt that clarity was needed to help address the issue of battery smoke alarms. To do that staff has worked on a proposed code change. A copy of that code change proposal was provided to members of the BRB. Staff's proposed amendment is that smoke detectors installed as part of alterations, repairs or additions cannot be battery powered, instead they must be powered by the house domestic 110V power with battery backup, but the other areas may remain battery powered. All detectors and alarms will still need to be interconnected, and code permits for that interconnection to be wireless between the units. Staff believes that the proposed code change will be a benefit to staff, our residents, and our builders.

There were no questions from the BRB on this item.

Mr. Scott Scheller, Fire Marshal, presented information regarding the 2018 ICC Code requirement for Residential Fire Sprinklers. Mr. Scheller began by presenting data showing the need for sprinklers, the positives to installation, and statistics from other communities, such as Scottsdale Arizona, that have required residential sprinklers. Mr. Scheller noted that the contents in a home create the biggest fire hazard. Furnishings from just 30-40 years ago would cause a room to flash over in about 17 minutes, today rooms flash in just over 3 minutes. In Naperville, in the past 15 years we have built 3955 new homes, of that 2616 were over 5000sqft. (66%). Piping or sprinkler head failure no more or less than other water pipes or fixtures in the home

Mr. Scheller stated that these systems do come at a cost, However, these are

not a commercial system and therefore no increase or upsize of domestic water hook up is necessary.

- o National average decreased between 2009 to 2013 from \$1.61 per sprinklered square foot to \$1.35

- o Design methods, construction trade-offs, incentives have helped lower costs

- o Local sprinkler contractors have stated on average between \$1.70 to \$1.80, NIFSAB states in northern Illinois the rate is just over \$2.00/sqft. These averages include jurisdictions that need storage tanks and mini pumps, Naperville does not need any of this.

- o Basically 1-2% of the construction cost

- o NFPA 13D system requirements, no attics, crawl spaces, closets under 24sq.ft., porches or garages need sprinklers

Mr. Scheller noted benefits include providing life safety, reducing injuries, reducing damage by preventing a fire from ever reaching the flashover stage and giving occupants more time to escape the fire

In summary, Mr. Scheller stated that to delete sections of the code would be to reduce the level of safety to our residents and the community. Especially when we know that sprinklers reduce property damage, reduce injuries, and save lives. We can solve this problem at what we feel is a reasonable cost. People have an expectation that a product they buy is going to be safe, similar to when smoke detectors were first introduced, or when air bags were installed in vehicles, there was a cost associated with it but, the requirement has saved lives. Results of this change may not be apparent now but in the future, we can reduce injuries, property damage and save lives. We are not asking to make the code more stringent. This request is to adopt the model code as written for this section.

The following are questions and discussions that occurred in response to Mr. Scheller's presentation.

Mr. Brockman asked if this would add to the fixture count? Mr. Scheller responded that he is looking only at new homes and not remodeling.

Mr. Brockman asked how the City defines an addition or a remodel? The City of Naperville considers a home renovation that is over 50% in home value or square footage to be new construction.

Mr. Smith asked if the 5,000-square foot calculation included basements? Mr. Scheller responded that he is not recommending a square footage trigger. But if square footage was the direction City Council wanted to go that he would use the same calculations that the building department does now. Mr. Filippo added that basements would be considered occupiable space, and therefore are counted in the square footage.

Mr. Smith stated that by including a basement a 2,500 above grade house is small in Naperville. Mr. Felstrup added that the Fire Department is looking to move away from a square footage requirement, and instead looking at all new residential dwellings. The last time our Codes were reviewed some concessions were made when it was decided to eliminate the requirement for residential

sprinklers including second points of egress, smoke/carbon detectors, etc....

Mr. Smith asked if this would be for new homes? Older homes? Where are the

fires now? Mr. Scheller responded that over the last ten years that the majority were in homes 9-25 years old, primarily because Naperville is a relatively new community. The age of a home doesn't impact the potential fire dangers of appliances, cooking, and electronics.

Mr. Russell asked if there have been studies to show that cold weather sprinkler systems don't freeze? Mr. Scheller stated that he could not find a lot of information on that. Believes

that the emphasis should be on the designer and the installer to make sure the pipes don't freeze.

Mr. Castagnoli asked if we would allow a self-contained Ansel unit? Mr. Scheller answered that it would not be an alternative to a residential sprinkler.

Mr. Brockman noted there will be significant costs. Mr. Scheller said there is a definite concern regarding costs and it is a real challenge.

Mr. Smith said that there should be a size requirement for the larger homes, such as those over 10,000 square feet above grade. Those larger homes would also be able to absorb the additional cost of sprinklers. Mr. Scheller asked Mr. Smith if there were any trade-offs that could be made? Mr. Smith responded he would have to hear what potential trade-offs the City would be proposing.

Mr. Brockman is interested in knowing if the fire system is considered an additional system, for example, if the resident would not have to increase the size of the water line - does it add to the fixture count? What if pressure is lost? Mr. Scheller responded that he believes because this is for new housing that all fixtures would be counted at once. He doesn't believe it will add to the fixture count.

Mr. Smith asked if this is interconnected to the fire station? Mr. Scheller answered that it could alert 911, or could have a separate alarm, that would be up to the customer.

Mr. Castagnoli asked if we would allow copper. Mr. Scheller answered yes.

Mr. Jurjovec stated that cost is a big issue. There is likely going to be push back. As the City is approaching buildout what number of homes are we looking at for this? There is also a question of reliability - If there is a leak it will be bad, especially because these pipes are running in the ceiling without drains. Liability is a big issue. Mr. Scheller acknowledged these were big issues. There is a lot of education that will be part of this.

Mr. Russell asked if there are any nearby municipalities that do this. Mr. Scheller responded he is aware of some counties as well as Clarendon Hills, Glen Ellyn, Barrington and Long Grove.

## **G. NEW BUSINESS:**

## **H. ADJOURNMENT:**

3:00PM