

BUILDING BOARD OF APPEALS MINUTES

MARCH 13, 2002

The regular meeting of the Building Board of Appeals was held on Wednesday, March 13, 2002 at 1:00 p.m. in the Seventh Floor Conference Room of the City Center Building, 220 E. Huron, Ann Arbor, Michigan.

I. The meeting was called to order at 1:00 p.m. by Chairman Kenneth Winters.

II. Roll Call:

Members Present: (5) K. Winters, S. Callan, P. Darling, D. Darling, J. Wurst

Members Absent: (1) R. Reik

Staff Present: (2) L. Pickel, L. Bowen

III. Approval of minutes

No minutes available.

IV. APPEALS & ACTION - UNFINISHED

1. 2001-B-53, 224 Charles Street

An exception from R907.3 2000 MRC to allow new roofing over 2 existing layers of roofing. (2000 MRC 9, Section R907.3) Zone R2A.

Lisa Brush and Frank Farmer (American Roof) were present to speak on behalf of this appeal.

Staff Report

The petitioner proposes to install a new aluminum shingle roof over 2 existing layers of roofing, one layer of cedar shakes and one layer of asphalt shingles.

R907.3 of the above Code requires that existing roof coverings be removed prior to installation of new roofing if two or more applications of any roof covering are in place.

An application for an appeal needs to be based on a claim that:

- a. The true intent of the Code or the rules legally adopted have been incorrectly interpreted,
- b. The provisions of the Code do not fully apply, (or)
- c. An equivalent form of construction is to be used.

Staff

Staff cannot support this request, as what is proposed is not as good or better than what the Code requires.

Discussion

L. Brush explained request as well as introducing Frank Farmer from American Roof.

F. Farmer explained in detail regarding the new roof that is being requested for installation. Mr. Farmer also brought samples of the proposed roof to show the Board members.

L. Pickel **asked Mr. Farmer if there had been any testing or research from BOCA**

F. Farmer **passed a report from Dade County for the overall system.**

L. Pickel **asked Mr. Farmer to state the width of the shingle.**

F. Farmer **stated the shingle is 1 foot by 2 foot.**

L. Pickel asked Mr. Farmer is there is a guarantee the roof can get rid of the snow.

F. Farmer **stated yes, and also stated the roof will not form ice.**

J. Wurst **asked the measurements of the pitch of the roof.**

F. Farmer **stated 12/12 pitch.**

After further discussion;

P. Darling moved, supported by, D. Darling to grant an exception from R907.3 2000 MRC to allow new roofing over 2 existing layers of roofing with the following contingencies:

1. All existing flashings are removed at the roof penetrations and wall intersections.
2. The roof deck shall be exposed at least 6 inches around the penetration.
3. The overhang condition at the soffit is removed so ice and the water shield can be installed per the code requirements.
4. Due to the steepness of the roof, it will be found to meet the code requirements.
5. The roof shall have no valley condition.

The vote to grant the variance was as follows:

Ayes: (4) K. Winters, P. Darling, D. Darling, J. Wurst

Nays: (1) Sam Callan

Absent: (1) R. Reik

Motion carried. Variance granted as stated.

V. APPEALS & ACTION - NEW

1. 2002-B-7, 603 Spring Street

Variance requested from minimum required ceiling height for a habitable space. (2000 MBC, Section R305.1) Zone R2A.

Anne Eisen was present to speak on behalf of this appeal.

Staff Report

Petitioner is proposing to finish a portion of the existing basement to create a craft room, TV room, and bathroom. Petitioner is proposing to relocate and reconfigure certain areas of mechanical equipment but cannot fully raise all of the equipment to the height required by the MRC (7 ft. for habitable spaces and bathrooms and beams projecting to no lower than 6 ft. 6 in.)

Petitioner has indicated that four egress windows have been added to the basement. There is no indication as to whether a smoke detection system is proposed.

Staff

Staff does not oppose this request provided:

- (a) The egress windows meet the requirements of MRC 310.1;
- (b) A building wide, hardwired, interconnected smoke detection system be provided; and
- (c) All ductwork be raised to the maximum extent possible.

Discussion

A. Eisen explained request, as well as passing pictures of the basement to the Board members.

L. Pickel asked Ms. Eisen if there would be sleeping in the basement.

A. Eisen stated, no.

L. Pickel asked Ms. Eisen the height from the floor to the window seal.

A. Eisen stated approximately 44 ¼ - 45 inches.

A. Eisen asked if the Board felt it would not be safe for anyone to sleep in the basement

L. Pickel stated the measurements of the ceiling height (6 ft. 9 in.) did not seem like a big different, it will be if a fire were to take place.

After further discussion

D. Darling moved, supported by, P. Darling to grant a minimum required ceiling height for a habitable space was granted with the following contingencies:

1. The ceiling shall not come below 6 feet 9 inches, and is kept as tight as possible below the ducts.
2. The ducts shall be re-worked according to the Building Department.
3. Hardwired interconnected smoke detectors be installed per minimum one on every floor per Fire Marshal approval.
4. Four egress windows have been added to the basement.

The vote to grant the variance was as follows:

Ayes: (4) K. Winters, S. Callan, P. Darling, D. Darling

Nays: (1) J. Wurst

Absent: (1) R. Reik

Motion carried. Variance granted as stated.

2. 2002-B-9, 3140 Dolph Drive

Variance requested from minimum required ceiling height for a habitable space. (2000 MRC, Section R305) Zone R1C.

Jean Kluge was present to speak on behalf of this appeal.

Staff Report

Petitioner is proposing to provide a higher level of finish in an existing basement for a storage area, washer/dryer area, and exercise area. Petitioner indicates that there will be no "living space" in the basement, and thus staff assumes there will be no sleeping areas included. The exercise area, however, would be considered "habitable" space.

The ceiling height in the basement is presently 7 ft. 2 in. which is code compliant. However, when the heating ducts are enclosed with the new finish work the height beneath them will be only 6 ft. 2 inches, or 4 inches lower than code allows. For basements without habitable space, a 6 ft. 4 inch height is allowed beneath beams.

Staff

Staff does not oppose this request provided:

- (a) **A building wide, hardwired, interconnected smoke detection system be provided; or at least one detector on each level interconnected.**

The proposed use of the basement is relatively infrequent and staff does not believe that a variance would jeopardize safety, even given the fact that an exercise room is technically a “habitable” space.

Discussion

J. Kluge **explained request.**

P. Darling **asked if the home has hardwired interconnected smoke detectors.**

K. Kluge **stated yes.**

K. Winters **stated he would like to see a higher soffit, also expressing the difficulty Fire Personnel would have.**

K. Winters **stated the 6 feet 1 inch measurements are very low.**

L. Pickel **suggested more smoke detectors could be installed.**

K. Winters asked if this space is used only for storage.

J. Kluge **stated yes, the only other use for this space is for laundry and bathroom facilities.**

After further discussion;

P. Darling moved, supported by, D. Darling to grant a variance requested from minimum required ceiling height for a habitable space with the following contingencies:

1. No sleeping will be allowed in the basement.
2. The ceiling height shall not be less than 6 feet 1 inch at the soffit.
3. The ceiling height shall not be more than 1 inch below the existing ductwork.
4. Hardwired interconnected smoke detectors be installed on both sides of the soffit in the basement that connect to the smoke detectors in the house.

The vote to grant the variance was as follows:

Ayes: (5) K. Winters, S. Callan, P. Darling, D. Darling, J. Wurst

Nays: (0) None

Absent: (1) R. Reik

Motion carried. Variance granted as stated.

3. 2002-B-10, 2520 Hawthorn Road

Variance requested from minimum required ceiling height for a habitable space. (2000 MRC, Section R305) Zone R1A.

Paul Schulte was present to speak on behalf of this appeal.

Staff Report

Petitioner is proposing to renovate a portion of an existing basement. The basement contains a bedroom, family room, laundry, craft room, and furnace rooms. The plans indicate that the basement appears to be a walk-out style, with 2 doors opening directly to the outside. One door opens from the bedroom and one from the family room, both apparently directly to grade. Petitioner is asking for a wide area of the family room to have a ceiling height of 6 ft. 5 inches below a beam, ductwork and plumbing. The code allows beams to drop to 6 ft. 6 inches providing they are no closer than 4 ft. to another beam.

Staff

Though a portion of the egress from the basement passes under the 6 ft. 5 inch area, staff is not opposed to this request. Doors directly to the outside are a valuable commodity in emerging situations and this basement has two. Neither door is required by code, assuming the windows qualify as egress windows in the bedroom and family room. Staff suggests a hardwired, interconnected smoke detection system be included as a condition.

Discussion

P. Schulte explained request as well as passing revised floor plans for the Board to review. Mr. Schulte went into details describing the plans to the Board.

L. Pickel asked Mr. Schulte if there was an emergency escape window in the craft area.

P. Schulte stated yes.

After further discussion;

D. Darling moved, supported by, P. Darling to grant a variance from minimum ceiling height for a habitable space.

1. Hardwired interconnected smoke detectors are installed per Fire Marshal approval.
2. The request will be built according to the Building Department.

The vote to grant the variance was as follows:

Ayes: (5) K. Winters, S. Callan, P. Darling, D. Darling, J. Wurst

Nays: (0) None

Absent: (1) R. Reik

Motion carried. Variance granted as stated.

4. 2002-B-8, 3133 Override

Variance requested from placing flashing beneath masonry lintels above window openings. (1996 BOCA, Section 1405.3.10) Zone R2A.

Robert Murray was present to speak on behalf of this appeal.

Staff Report

Petitioner is constructing a new residence using the provisions of the 1996 BOCA National Building Code. The code requires that flashings be provided at the top and sides of all exterior window openings, and allows an exception for a building with water-resistant sheathing along with a water-resistant caulking. Petitioner is alleging this building meets the criteria and the exception should be allowed to preclude the use of flashing at the brick veneer/lintel as shown on the attached detail.

Staff

In response to the request to use the exception, staff doubts that the O.S.B. Sheathing is water resistant. Even if it is alleged that the building wrap is water resistant, that cannot be considered to adequately protect the sheathing unless it has been carefully placed around all parts of the building and especially so at the window and door openings.

The purpose of the flashing requirements contained in the code are to adequately direct water to the exterior of the structure. Water is continually migrating through building structures in a variety of paths and the effects on materials over time can be highly destructive.

The requirements of the 1996 BOCA Code are not as specific as the Michigan Residential Code. However, they are nonetheless intended to achieve the same result albeit on a performance, rather than a prescriptive, basis. Flashing is not prescriptively required at lintels and sills, giving the authority having jurisdiction the necessity to evaluate these areas on a case by case basis.

Staff does not support the variance request, although staff is more concerned with the sill condition than the lintel. The flashing/caulk on the sill will have a greater amount of moisture working on it than the lintel, and staff is concerned that over time the caulking will deteriorate and flashing loosen in a manner that will be destructive to the building. Though the lintel will be subject only to migrating moisture it too may be subject to decay if adequate protection, such as flashing and weepholes, is not provided.

Discussion

R. Murray explained request, as well as passing information to the Board to review.

L. Pickel stated the reason we have a four-week cut off date is so that all information regarding an Appeal is to be turned in to be evaluated. Mr. Pickel suggested the Board table the Appeal until the next meeting, so the material can be evaluated.

P. Darling moved, supported by, D. Darling to table a variance requested from placing flashing beneath masonry lintels above window openings.

The vote to grant the variance was as follows:

Ayes: (5) K. Winters, S. Callan, P. Darling, D. Darling, J. Wurst

Nays: (0) None

Absent: (1) R. Reik

Motion carried. Variance tabled as stated.

5. 2002-B-11, 2017 Marra Drive

Variance requested from requirement that guardrails not be climbable. (1996 BOCA Sections 1021.3, 1022.2) Zone R1C.

Joyce Krantz and Barry Gates were present to speak on behalf of this appeal.

Staff Report

Petitioner is building a new single family residence. The permit was issued under the 1996 BOCA National Building Code. Section 1021.3 of the code contains the restriction that. . . .

“Guards shall not have an ornamental pattern that would provide a ladder effect”.

The code also requires, in Section 1022.2, that. . . .

“The clear space between the handrail and the adjacent wall or surface shall not be less than. . . .
2-1/4 inches for stairways. . . .”

Determining the “climbability” of a guardrail is generally a judgment call as there are no published, objective standards available by which to judge such construction. Though there have been numerous studies of this issue by a variety of different groups and agencies, none have resulted in the specific types of code language needed. The closest language usually referenced is that associated with swimming pool guards in BOCA 421.10.1(6). That Section limits mesh size chain link fences to 1-3/4 inches maximum width. That dimension is the average width of a child approximately 9 months old, the earliest assumed age a child begins walking.

Critical to determining “climbability” is not only the area available for the initial toe-hold, but the pattern formed by the other parts of the rail. A guard of 100% horizontal rails is clearly a ladder, while a guard of 100% vertical rails is usually not. In between, there are unlimited shapes and patterns as evidenced in this appeal.

Staff

Staff does not support the request, and believes the pattern shown is clearly climbable. While the department regrets that contrary information may have been conveyed, the safety of the public is always the primary concern of the department and the code requirements it enforces.

Discussion

J. Krantz explained request, and also showed the Board an example of the guardrail.

S. Callan stated the guardrail seemed very climbable

L. Pickel read the code regarding guardrails.

K. Winters asked petitioners if there were any children or grandchildren at the residence.

B Gates stated the guardrail is already installed.

K. Winters asked what if the homeowners decide to sell the home.

J. Krantz agreed if the house is sold, the present guardrail will be removed and another guardrail will be installed.

K. Winters asked Mr. Pickel his opinion on the promise of another guardrail be taken down if the home is sold.

L. Pickel stated it would be difficult to make sure this promise is kept in the event the home is sold.

Part #1 of motion:

J. Wurst moved, supported by, D. Darling to grant a variance requested from requirement that guardrails not be climbable section 1021.3 of the 1996 BOCA Building code

The vote to grant the variance was as follows:

Ayes: (1) D. Darling

Nays: (3) J. Wurst, K. Winters, P. Darling

Absent: (1) R. Reik

Motion defeated. Variance denied as stated.

Part #2 of motion:

J. Wurst moved, supported by P. Darling to grant a variance from clear space requirements of handrails in Section 1022.2 of the 1996 BOCA code with the following contingencies:

- 1. The handrail be allowed to pass by the stairway trim at a distance less than 2 ¼ inches.**
- 2. A distance of 1 ½ inches is maintained or a span no greater than 2 inches.**

The vote to grant the variance was as follows:

Ayes: (5) K. Winters, S. Callan, P. Darling, D. Darling, J. Wurst

Nays: (0) None

Absent: (1) R. Reik

Motion carried. Variance granted as stated.

I. UNFINISHED BUSINESS

None.

VII. NEW BUSINESS

None.

VIII. REPORTS & COMMUNICATIONS

D. Darling discussed emergency lighting.

IX. AUDIENCE PARTICIPATION - GENERAL

None.

X. ADJOURNMENT

There being no further business to come before the Board, K. Winters moved that the meeting be adjourned. The meeting was adjourned at 3:07 p.m. by Chairman Kenneth Winters.