

VIRGINIA:

BEFORE THE  
STATE BUILDING CODE TECHNICAL REVIEW BOARD

IN RE: Appeal of James O. McGhee, Architects, P.C.  
Appeal No. 10-7

Hearing Date: August 20, 2010

DECISION OF THE REVIEW BOARD

I. PROCEDURAL BACKGROUND

The State Building Code Technical Review Board (Review Board) is a Governor-appointed board established to rule on disputes arising from application of the Virginia Uniform Statewide Building Code (USBC) and other regulations of the Department of Housing and Community Development. See §§ 36-108 and 36-114 of the Code of Virginia. Enforcement of the USBC in other than state-owned buildings is by local city, county or town building departments. See § 36-105 of the Code of Virginia. An appeal under the USBC is first heard by a local board of building code appeals and then may be further appealed to the Review Board. See § 36-105 of the Code of Virginia. The Review Board's proceedings are governed by the Virginia Administrative Process Act. See § 36-114 of the Code of Virginia.

## II. CASE HISTORY

James O. McGhee (McGhee), an architect, appeals a decision of the City of Fredericksburg USBC official (building official) concerning the construction of a condominium/business/parking building (Wilson building) located at 915 Caroline Street, owned by Joe Wilson, a local businessman.

The building permit for the Wilson building was issued by the building official in March of 2006. The documents submitted to the building official represented the distance from the property line to the outside face of the southeast wall of the Wilson building to be more than three feet. It was later confirmed that the actual distance was less than three feet.

As the building had already been completed, the issue of how to address three openings in the southeast wall presented itself in light of the confirmation that the wall was less than three feet from the property line. The USBC prohibits openings in exterior walls located less than three feet from a property line.

McGhee proposed a thickening of the interior top and sides of the wall openings, extending down to the concrete floor slab, using fire-rated construction to meet or exceed that of the exterior wall in order to create an alcove to extend the distance between the property line to the opening in the wall to

be more than three feet as a method to achieve compliance with the USBC.

The building official rejected McGhee's proposal and McGhee appealed to the City of Fredericksburg Local Board of Building Code Appeals (City USBC board).

The City USBC board heard the appeal and ruled to uphold the building official's decision. McGhee further appealed to the Review Board.

### III. FINDINGS OF THE REVIEW BOARD

The question presented is whether the construction method proposed by McGhee is equivalent to that prescribed by the USBC. Section 112 of the USBC addresses the use of alternative methods or materials and states in pertinent part as follows:

"112.3 Documentation and approval. In determining whether any material, equipment, device, assembly or method of construction complies with this code, the building official shall approve items listed by nationally recognized testing laboratories (NRTL), when such items are listed for the intended use and application, and in addition, may consider the recommendations of [registered design professionals]. Approval shall be issued when the building official finds that the proposed design is satisfactory and complies with the intent of the provisions of this code and that the material, equipment, device, assembly or method of construction offered is, for the purpose intended, at least the equivalent of that prescribed by the code."

The requirements for exterior walls are contained in Chapter 7 of the USBC. The Wilson building has a sprinkler

system. In sprinklered buildings, unprotected openings in exterior walls are permitted when the fire separation distance exceeds three feet. The fire separation distance is measured from the property line perpendicularly to the exterior side of the wall opening.

Where a wall is not continuous, but contains offsets, the fire separation distance may vary as the face of the wall changes in its distance from the property line.

In this case, all parties agreed that if McGhee provided a wall offset long and deep enough to provide a section of the wall as well as the openings in the wall instead of only providing an alcove for the openings, that the fire separation distance would be measured to the outside face of the wall offset and would measure over three feet, thereby permitting the wall openings in that section of the wall.

The issue is whether the use of the alcove is sufficient to consider just the openings as being an offset wall and thereby justifying the measurement of the fire separation distance to be measured from the property line to the face of the openings, which would be more than three feet from the property line.

Testimony provided by McGhee, from his research and correspondence with other design professionals, evidences that alcoves are commonly used in exterior walls of apartment buildings in cities where buildings are typically very close to

property lines to provide for balcony openings and doors, to address this same issue.

Furthermore, testimony from Jules Elliott, a Virginia licensed professional engineer, attests to the equivalency of the alcove method for achieving an increased fire separation distance.

In addition, correspondence submitted from staff of the International Code Council, the organization responsible for the International Building Code, the nationally recognized model building code used by the USBC for the technical requirements for construction, collaborates that alcove construction is permissible to increase the fire separation distance, provided the top and sides of the alcove meet or exceed the required rating of the exterior wall, which was done in the Wilson building.

Given the criteria in Section 112.3 of the USBC permitting the building official to accept recommendations of registered design professionals and the evidence presented substantiating that the method of construction proposed by McGhee is equivalent to the requirements of the USBC, the Review Board finds that the alcove area with the openings in the exterior wall of the Wilson building complies with the USBC by meeting Section 112.3.

#### IV. FINAL ORDER

The appeal having been given due regard, and for the reasons set out herein, the Review Board orders the decisions of the building official and City USBC board to be, and hereby are, overturned and the proposed construction method offered by McGhee to be, and hereby is, approved.

  
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Chairman, State Technical Review Board

Oct. 15, 2010  
Date Entered

As provided by Rule 2A:2 of the Supreme Court of Virginia, you have thirty (30) days from the date of service (the date you actually received this decision or the date it was mailed to you, whichever occurred first) within which to appeal this decision by filing a Notice of Appeal with Vernon W. Hodge, Secretary of the Review Board. In the event that this decision is served on you by mail, three (3) days are added to that period.