

Jeanie Bourke - Re: 23 Emerson Street - BP#2015-01540

From: Jeanie Bourke
To: Tracie Reed
Date: 9/24/2015 12:14 PM
Subject: Re: 23 Emerson Street - BP#2015-01540
CC: Craig Messinger; Keith Gautreau; Peter Valcourt
Attachments: T-1 - Title Sheet.pdf

Hi Tracie,

Thank you for providing the findings from the code technical assistance. I have discussed this with Craig, he will accept this ruling.

To comply with the I-code you will need to reference the IEBC as I have noted on the attached plan. Please revise and submit, I think this is the only outstanding item prior to approving the permit.

Thanks again,
Jeanie

>>> Tracie Reed <traciereed@dextrouscreative.com> 9/24/2015 9:28 AM >>>

Jeanie, I've spoken to technical assistance at both the ICC and NFPA concerning the travel distance question.

-NFPA technical assistance noted that NFPA 101-2009 measures travel distance differently in apartment buildings from ICC as outlined in NFPA 101-2009 30.2.6.2, noting that travel distance is measured outside a dwelling door BUT travel distance within a dwelling unit can be up to 125'-0". The technical adviser also noted that a single exit was allowed per 30.2.4.4. This is actually for a new apartment building, not an existing one. The adviser said that we would fall under the new construction chapter since we're removing the back staircase - but that even then it would meet the life safety code because we're under 125'-0".

-ICC technical assistance confirmed the assumption in IBC 2009 10.21.2 that 50'-0" is the maximum travel distance within the dwelling per their code.

With both in enforcement they said it was up to the local AHJ's to determine which one to accept.

Tracie Reed, Maine Licensed Architect

On Wed, Sep 23, 2015 at 1:09 PM, Jeanie Bourke <JMB@portlandmaine.gov> wrote:

Hi Tracie,

Per our last discussion on your comments below, I recall on 9/10, I am summarizing the code requirements for the design of this single exit multi-condo building. Everyone is extremely busy and it has been very difficult to meet with the fire department on this review. This is complex as you know, as MUBEC does defer to NFPA in some code instances in both the new and existing codes.

I question your reference to NFPA Table A.31.1, as the implication here is that this applies to buildings/stories with more than one exit. When an exit is removed, even if the building is sprinkled, there are thresholds to be met. The given TD of 66'-9" does not meet IBC requirements for a single exit on the 2nd and 3rd floors. A maximum of 50' is allowed to an exit, which includes travel within the dwelling and a corridor, if applicable.

The only exception is in the IEBC and defers to compliance with NFPA, see Sec. 705.2(1), all other exceptions to a single exit building in Sec. 705.3.1.1 do not apply.

The only reference I can find in NFPA for TD limits in existing apartments seems to imply that this is to the required exits (2), see Sec. 31.2.6.1. The code chain is from Sec. 7.6.6. We know that a common path of travel is the exit access traveled before you have the choice of 2 paths to 2 available exits. Therefore, the TD for a single exit is considered within the DU to a protected exit enclosure. It may travel in a corridor and it may not. For IBC this is 50' on the 2nd and 3rd floors.

I can not move forward with the building code approval at this time. A suggestion would be to contact the ICC technical staff for a code determination, or confirm the NFPA requirement.

As an aside, keep in mind that if this were a new building this design would not be approved, however the stairwell could be located more central to the length of the building.

Let me know if you have any questions.

Thanks,

Jeanie

Jeanie Bourke
CEO/LPI/Plan Reviewer

City of Portland

Planning & Urban Development Dept./ Inspections Division

389 Congress St. Rm 315

Portland, ME 04101

jmb@portlandmaine.gov

Direct: (207) 874-8715

Office: (207) 874-8703

Permit status can be viewed at: <http://www.portlandmaine.gov/792/Permit-Status>

>>> Tracie Reed <traciereed@dextrouscreative.com> 9/7/2015 12:01 PM >>>

Jeanie, Attached please find revised sheets for the 23 Emerson Street project addressing your review notes.

Travel Distance | In regard to travel distance, the building commentary section of IBC 2009 1021.2 notes the intent of the travel distance regulation in allowing smaller buildings of limited size and configuration with access to a single-exit. Table 1021.2 allows for up to 4-dwelling units per floor to have a 50'-0" travel distance within the R-2 occupancy classification. In the 23 Emerson Street project there are only two units, one per floor, with single exits above grade. As noted, these units have a travel distance of approximately 66'-9". IBC would allow for up to four units per story, a much higher density. In this project the existing travel distance to the code-compliant front stair is over 50'-0" with the sprinklered balcony adding 5'-6" in travel distance. Note the existing building is not sprinklered, nor does it have a fire-rated corridor, or fire-rated doors.

This 66'-9" travel distance is within NFPA 101 2009's travel distance allowance of 75'-0" within an existing apartment protected by an automatic sprinkler system, per table A.31.1 Alternate Requirements for Existing Apartment Buildings According to Protection Provided.

While the building does not meet the 50'-0" travel distance threshold outlined in IBC 2009 table 1021.2 for a single-exit from a three-story, three-unit building, the fact that MUBEC defers to NFPA Life Safety 101 travel distance tables in section 7.6 suggests that a building falling

within NFPA 101's guideline of 75'-0" would be acceptable.

Basement Use/Separation | The basement is unoccupied space with no storage. The space will be separated from the first floor unit with a 1-hour rated assembly, with a STC-rating of 58, meeting UL L569 and insulated with 3 ½" Roxul Safe and Sound insulation. See detail 5/S-1.1.

Please let me know if you have any additional questions.

Regards,

Tracie Reed, Maine Licensed Architect

[207.409.0459](tel:207.409.0459) (cell)