

Edwin M. Lee, Mayor Tom C. Hui, S.E., C.B.O., Director

NOTICE OF DECISION Board of Examiners Meeting on August 12, 2014

Case No. 2014-01
Property Address: 1415 Mission Street

On August 12, 2014, the Board of Examiners held a duly noticed public hearing to consider applicant's request for approval of local equivalency for modification or alternate materials, design or methods of construction, in accordance with 2007 San Francisco Building Code Section(SFBC) 104A.2.8 and Administrative Bulletin AB-005. Details of applicant's proposed local equivalency are documented on Form AB-005, dated Feb. 26, 2014, and signed by Julie Heinzler as Project Sponsor and Jeffrey A. Maddox, P.E., as architect/engineer. Applicant's proposed local equivalency applies to permit application 2008-1031-5586.

Applicant proposes to omit "fire and smoke dampers at the exhaust from the residential units." Applicant further proposes to "provide a horizontal run of 0.019" thick metal duct and continuously operating exhaust fans on standby power in lieu of fire or smoke dampers where the unit exhaust ducts penetrate the corridor wall. These ducts will continue to the shaft where subducts are provided. Each duct will be between the unit and the corridor, but will not have direct unit to unit connections." Applicant contends "this satisfies [2007 SFBC Section] 716.5.5."

Department of Building Inspection mechanical plan check staff provided a general overview of relevant code requirements and explanation of denial of the proposed local equivalency during plan review, and responded to questions.

San Francisco Fire Department plan review staff provided comments related to their denial of the proposed local equivalency during plan review, and responded to questions.

Testimony was given by applicant. After a long and complete discussion by all parties present, and after all questions and issues were answered to members' satisfaction, Chair Flores called for vote. Motion by DG to deny failed for lack of second. On motion by RF, seconded by AW, the Board of Examiners voted 10 to 2 to approve the proposed local equivalency, as documented on Form AB-005, dated Feb. 26, 2014.

Members present: Manuel Flores (Chair), Dick Glumac (Vice Chair), Bradley Sugarman, Patrick

Buscovich, Dan Caracciolo, James Reed, Armin Wolski, Sam Alkhatib, Robert

Fuller, Michael Cashion, Jeremiah Schaub, Jamison Curry

City Staff present:

DBI - Howard Zee, Board Secretary, James Zahn, Danny Lau

SFFD - Capt. Micki Jones, Jon Corbett

Applicant:

Jeffrey A. Maddox, Julie Heinzler

Motion to approve made by Robert Fuller; seconded by Armin Wolski

Ayes: Sugarman, Buscovich, Caracciolo, Reed, Wolski, Alkhatib, Fuller, Cashion, Schaub, Curry

Opposed: Flores, Glumac

Motion adopted by resolution pursuant to SFBC Section 105A.1.11 on August 19, 2014.

Pursuant to 2007 SFBC 105A.1.12, a tape recording of the meeting is maintained at Board of Examiners, Department of Building Inspection. Tape recordings of meetings are available for duplication upon request, with all costs of duplication borne by party requesting duplication.

Ву:

Howard Zee, Secretary Board of Examiners August 19, 2014

copy: All members of Board of Examiners

SFFD attendees - Capt. Micki Jones, Jon Corbett

Applicant attendees

DBI Director – Tom C. Hui, S.E., C.B.O DBI attendees – James Zahn, Danny Lau



DEPARTMENT OF BUILDING INSPECTION

AB005

City & County of San Francisco 1660 Mission Street, San Francisco, California 94103-2414

REQUEST FOR APPROVAL OF LOCAL EQUIVALENCY FOR MODIFICATION OR ALTERNATE MATERIALS, DESIGN OR METHODS OF CONSTRUCTION

DATE SUBMITTED February 26, 2014
If no permit application has been filed, a Preapplication Review Fee is required for review of a request for local equivalency or modification, per SFBC Table 1-B, Item 8. Additional fee may be required by Fire Department and other City review agencies)
If a permit application has been filed, no additional fees are required for this review.
Permit Application #
Property Address: 1415 Mission St, San Francisco
Block and Lot: Occupancy Group: R-2 Type of Construction: I-B No. of Stories: 12
Describe Use of Building Residential and parking
Under the authority of the 2007 San Francisco Building Code, Section 108.7 the undersigned requests modifications of the provisions of these codes and/or approval of alternate materials, designs or methods of construction. Two copies of supporting documents, including plans showing the proposed modifications or

Regular Code Requirement (specify Code and Sections)

alternate materials, design or methods of construction, are attached.

2007 San Francisco Building Code Sections 710.7 and 716.5.4 require fire dampers and smoke dampers at the unit exhaust duct openings where they penetrate the corridor wall. Section 716.5.5 also requires a smoke damper at smoke barrier penetrations such as between the units.

Proposed Modification or Alternate

We propose to provide a horizontal run of 0.019 in thick metal duct and continuously operating exhaust fans on standby power in lieu of fire or smoke dampers where the unit exhaust ducts penetrate the corridor wall. These ducts will continue to the shaft where subducts are provided. Each duct will be between the unit and the corridor, but will not have direct unit to unit connections. This satisfies 716.5.5.

Case-by Case Basis of Request – Describe the practical difficulties presented in meeting the specific conditions of the code and how the proposed modification or alternate meets the intent of the code. A separate form should be filled for each requested modification or alternate. Attach copies of any Administrative Bulletin, Code Ruling, reference, test reports, expert opinions, etc., which support this request. The Department may require that an approved consultant be hired by the applicant to perform tests or analysis and to submit an evaluation report to the Department for consideration.

The alternate approach is based on 2007 CBC Section 716.5.3 exceptions 1.1 and 4 for shafts. Exception 1.1 refers to eliminating dampers at shafts where subducts and continuously operating fans are provided. This approach is deemed part of the smoke control system as demonstrated by the CONTAM air movement model undertaken as part of the smoke control rational analysis. Exception 4 to 716.5.3 refers to eliminating the smoke damper where they would interfere with the smoke control system, and a similar exception is allowed to eliminate the smoke damper at corridors for high rise SFM buildings per exception 1 to 716.5.4.1. If a damper is provided at the unit exhaust penetration, the airflow may no longer be continuous at the shaft. While this is a horizontal application and vertical subducts are not technically provided at the corridor penetration, the concept is the same.

applicable. The SFM indicates that these sections are to be updated in the 2010 code, in the attached SFM interpretation. The approach meets the exceptions of the 2010 CBC which we believe accurately reflects the original intent of the SFM. PROJECT SPONSOR ARCHITECT/ENGINEER Requested by: Jeffrey A. Maddox, P.E. Print name: The Fire Consultants Inc JULIE HEINZLER Signature: Telephone: PLAN REVIEWER COMMENTS: RECOMMENDATIONS: Approve Approve with conditions Disapprove [signed off/dated by:] Plan Reviewer: Division Manager: For Director of Bldg. Inspection For Fire Marshal: CONDITIONALS OF APPROVAL:

The horizontal runs of the ducts provide the same protection as a sub-duct since there are no direct penetrations from unit to unit. This in combination with a continuously operating exhaust fan will prevent the transfer of smoke from unit to unit by making the shaft more negative than any unit. Please note that the unit to unit separation is a smoke barrier, which is required to have much less protection than a shaft, for which these exceptions are

1415 Mission AB005 corridor / unit duct penetrations