The Commonwealth of Massachusetts
Executive Office of Public Safety and Security
Fire Prevention Regulations Appeals Board
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CHAIRMAN

Docket # 2025-01
131-153 Seaport Blvd.
Boston, Massachusetts

FIRE PREVENTION REGULATIONS APPEALS BOARD DECISION

A) Statutory and Regulatory Framework

This matter is an administrative appeal filed in accordance with Massachusetts General Laws Chapter 22D, section 5. The Appellant is seeking the Board of Fire Prevention Regulations' review of an Order of Notice of the Boston Fire Department to refuse/deny the Appellant's design to terminate a solid fuel exhaust system horizontally from the side of the building located at 131-153 Seaport Blvd., Boston, Massachusetts. The rejection/denial cites violations of NFPA 96 15.4.4. (2021 Edition) and 527 CMR 1.00, 50.1.1 (2021 Edition).

B) Procedural History

By notice dated December 30, 2024 issued by the Boston Fire Department and received by the Appellant on or about December 30, 2024, the Department refused/denied the Appellant's design to terminate a solid fuel exhaust system through the side of the building located at 131-153 Seaport Blvd., Boston, Massachusetts. The rejection/denial cites violations of NFPA 96 15.4.4. (2021 Edition) and 527 CMR 1.00, 50.1.1.

On January 8, 2025 the Appellant filed a timely appeal of the Boston Fire Department's determination with the Fire Prevention Regulations Appeals Board. The Board held a hearing relative to this appeal on February 19, 2025, via video conference.

Appearing on behalf of the Appellant were: Daniel Brennan, Jr., dpb Consulting Services; Sam Huebschmann, WS Development; Jim Lasky, owner/tenant, Maple and Ash, LLC; Chris Sowlakis, Rebecca Dunbaugh and Kerriann Broussard from Iron Bridge; Jeff Server, Advanced Hood Systems; Ari Golden, ADS Engineers; Matthew Bork, Director of Fire Protection, WS Development; and Jim Shea, Director, Sales Operations for Nelbud Services Group. Appearing on behalf of the Boston Fire Department was Christopher Nelson, Senior Fire Protection Engineer.

Present for the Board were: Jonathan Eisenberg, Presiding Chair; Dr. Paul Scheiner; Alfonso Ibarreta; and John Cox, Alternate. Rachel E. Perlman was the Attorney for the Board.

C) Issue(s) to be Decided

Whether the Board should affirm, reverse or modify the determination of the Boston Fire Department regarding the wall termination of a solid fuel exhaust system in accordance with NFPA 96 and 527 CMR 1.00, Chapter 50?

D) Evidence Received

1. Application for Appeal filed by Appellant (dated 1/8/2025)
2. Authorization for Representation to Daniel Brennan, Jr. from WS Asset Management (Property Manager for WS Seaport M, LLC for Maple & Ash, Boston, LLC) (dated 1/7/2025)
3. Request from Appellant's Representative to Boston Fire Department and Appeals Board for Variance for Appeal filed by Appellant (dated 1/8/2025)
4. Order of Notice – Solid Fuel Exhaust Denial from the Boston Fire Department (dated 12/30/2024)
5. Photograph Exterior view – Pier 4 & Pier 4 Courtyard – Kitchen Windows – vent locations
6. Correspondence to Maple & Ash Boston, LLC from Nelbud Services, LLC regarding Preventative maintenance exhaust cleaning and maintenance plan (dated 1/1/2025)
7. Detailed Plans and Specifications for Kitchen Equipment
7A. Solid Fuel Grill (W96" x D36")
7B. Jade Titan Cheese Melters (model JCM-36, 36" wide)
7C. Mibrasa Charcoal oven with cupboard below and heating rack
7D. Mechanical Levels 1 and 2 Floor Plans
7E. Specification for Captrate Grease-Stop Solo Filter from Advanced Hood Systems, LLC (15 pages)
8. Copy of Formal Presentation Document from Appellant
9. Copy of NFPA 96: Standard for Ventilation Control and Fire Protection of Commercial Cooking Operations (2021 Edition), Section 15.4.4, as submitted by the Boston Fire Department
10. Copy of 527 CMR 1.00, section 50.1.1, as submitted by the Boston Fire Department

E) Subsidiary Findings of Fact

1. Representatives for the Appellant testified that they are appealing to the Board to obtain a variance for a newly proposed restaurant called Maple and Ash to be located on the top floor of 131-153 Seaport Blvd. in Boston, which was described as Type 1A construction, non-combustible. The restaurant would occupy 11,237 s.f. of the building.

2. The Appellant's representatives testified that cooking operations would include a solid fuel grill, a charcoal oven and a gas cheese melter. The Appellant's representatives indicated that each piece of cooking equipment in the kitchen has its own separate hood, including two precipitators (air filtration system) to separately serve the gas cooking equipment and the solid fuel station.

3. The Appellant's representatives indicated that due to the unique circumstances related to

the property, the Appellant is unable to exhaust the solid fuel vertically, which is in violation of 527 CMR 1.00, section 50.1.1 and NFPA 96, section 15.4.4.

4. The Appellant's representatives stated that the restaurant is unable to vent the exhaust systems vertically through the roof, due to a swimming pool on the roof. However, after consulting with their subject matter experts, including licensed fire protection engineers, commercial cooking hood designers, and fire suppression companies, the Appellant believes that the proposed alternative design and construction method provides an equivalent level of safety despite not strictly adhering to the code.

5. Jeff Seward, President and CEO of Advanced Hood System testified that his company was responsible for the design of the exhaust hood system. He stated that the system includes Type 1 grease hoods and spark arrestor filters, as well as a cold-water mist, which provides a continuous spray of cold-water mist during the cooking operation involving the solid fuel grill.

6. The misting system was described as a water mist manifold, which utilizes a separate cold-water line plumbed into the plenum area of the hood and controlled by a 120-Volt solenoid valve. Once the operator turns the hood on, a power signal is sent to open up that valve, and the cold-water mist sprays the entire time the fan is in operation.

7. Mr. Seward further testified that the fire suppression system is a water-based UL (Underwriters laboratories) 300 fire system, rather than a fixed tank chemical system which would have a limited suppressant agent. The cold-water mist system is tied into the building sprinkler system as part of a UL300 listing and has unlimited water supply.

8. Mr. Seward stated that should a fire occur, there would be a constant flow of water through the system. He further described the hood as being ducted to a triple pass electrostatic precipitator, which is designed to reduce smoke particulate and grease particulate and smoke opacity as well as odor control and is also installed with the UL300 fire suppression system.

9. Mr. Seward also advised that the hood and PCU (pollution control unit) are reverse interlocked and stated that if a fire ever occurred, there would be total fire suppression at both ends of the system, including the hood and PCU side to quickly extinguish the fire.

10. Jim Shea, Director of Sales Operations for Nelbud, a fire protection and life safety company, testified that his company would oversee system maintenance if the proposed fire suppression plan (variance) was approved by the Board.

11. Mr. Shea testified that his company's approach to this system would include a full walk through during the entire construction phase of this project to ensure access panels are provided in accordance with the code, in addition to allowing free access to the entire ductwork to ensure that no piece of ductwork would be left uncleaned. He stated that Nelbud would continue to monitor construction every 2-3 weeks depending on the construction cycle and how quickly the system is built out.

12. Mr. Shea stated that once the system is built, Nelbud's goal, especially with solid fuels being used, is for the system to be inspected on a weekly basis to determine the rate of solid fuel build up until his company can establish the frequency of cleaning requirements in accordance with the Code.

13. Mr. Shea testified that once the restaurant is open and business is growing, he anticipates more frequent system inspections and cleaning schedules to ensure that ductwork is cleaned down to bare metal. In addition, Mr. Shea stated that the systems PCU's would also be inspected and cleaned on the same basis to ensure they are not overwhelmed by the grease, dust and particulate matter being collected.

14. Mr. Shea further opined that the restaurant's use of charcoal, in addition to solid fuel, would result in a significant reduction in creosote as compared to a standard solid fuel system. Further, the system design, which includes water misting capabilities, would allow ash to be knocked down.

15. When questioned by the Board about the solid fuel grill, the grill was described as being custom made for the Maple and Ash restaurants nationwide. It was described as a standalone grill manufactured by Demont. However, the unit is not certified or listed by UL or other similar safety organization.

16. Mr. Shea stated that the unique design of the CORE Fire Protection system uses electronic detection and is fully monitored and interconnected to a network system that gives notification should any critical component fail and has the ability to prevent cooking from occurring should a critical component fail.

17. Mr. Shea also stated that the system itself is required to be maintained and tested on a six-month interval, in which case a licensed fire suppression company will come out and inspect the system and perform a dump test to ensure that all the components are functioning, and then re-tag and recertify the system.

18. When questioned about the overall fire alarm system, the Appellant's representatives indicated that the fire suppression system is tied into the building's fire alarm system by a monitored valve with a pressure reducing valve. Mr. Seward testified that the valve opens either by someone pushing the remote push station (manual activation device), or if the fire reaches the set point threshold temperature rating, in which case that valve automatically opens. From there, sprinkler water flows, the tamper switch opens, and it would enunciate to the fire alarm control panel, which is tied into the main fire alarm system for the building, resulting in notification to the Boston Fire Department and the evacuation of the building.

19. In response to concerns raised by the Board regarding the systems emissions, specifically carbon monoxide, and whether the location of the wall termination could impact the pool deck space located directly above the restaurant, Mr. Shea testified that the location of the termination in a side wall would be a benefit, as the winds in the Seaport district (abutting Boston Harbor), would more easily carry the emissions away from the building versus a vertical termination.

20. Testifying in support of the Boston Fire Department's refusal of the system design for Maple and Ash was Christopher Nelson, Senior Fire Protection Engineer. Mr. Nelson stated that the Massachusetts State Fire Code, 527 CMR 1.00, section 50.1.1 and NFPA 96, section 15.4.4 both specifically prohibit wall terminations of solid fuel exhaust systems.

21. Mr. Nelson testified that the Department is concerned that if there is a buildup of solid fuel vapors, which he described as being "more sticky" and "more buildable" than normal grease laden vapors, that any resulting fire would travel up the side of the building.

22. Mr. Nelson also stated that the Department was further concerned that if this project was to be approved, it would set a precedent citywide for other restaurants to begin designing and installing horizontal exhaust wall terminations.

23. When questioned by the Board as to any other alternative designs proposed that the Department would have found acceptable, Mr. Nelson acknowledged that the code does allow the AHJ (authority having jurisdiction) to determine compliance and authorize equal deviations from it in all applications. However, Mr. Nelson testified that while the Department does not "oppose" this project, the Department did not feel comfortable in granting approval for this project out of concern that it would be precedent setting for other restaurants throughout the city. Accordingly, it was the determination of the Department to refuse this design plan and have the Appellant appeal the decision to the Fire Prevention Regulations Appeals Board.

F) Ultimate Findings of Fact and Conclusions of Law

1. The applicable sections of NFPA 96 and 527 CMR 1.00, Chapter 50 are as follows:

NFPA 96, 15.4.4. (2021 Edition)	Wall termations of solid fuel exhaust systems shall be prohibited.
527 CMR 1.00, 50.1.1*	The design, installation, operation, inspection and maintenance of all public and private commercial cooking equipment and mobile and temporary cooking operations shall comply with this chapter and NFPA 96.

2. The Board finds that the solid fuel exhaust termination plan, as submitted by the Appellant, terminates horizontally from 131-153 Seaport Blvd., Boston, Massachusetts, rather than vertically, as required by the State Fire Code.

3. However, based upon documentation entered into the record and the testimony provided during the hearing, the Board finds that the proposed alternative design and construction of the hood and fire suppression system provides an equivalent level of safety and preventative measures, including the installation of a CORE total flood fire system with a cold-water mist system and additional spark arrestor filters. (See Exhibit 3)

4. While the Board notes the concerns outlined by the Boston Fire Department regarding the use of a solid fuel grill and the horizontal termination of the same, the Board finds that the Appellant's commitment to increased inspection and proposed cleaning schedules for the solid fuel system, would provide an equivalent level of safety despite not strictly adhering to the Code.

G) Decision and Order

Based upon the forgoing reasons, this Board **reverses** the Order of the Boston Fire Department and grants a variance to Maple & Ash, LLC for the property at 131-153 Seaport Blvd, Boston, Massachusetts to allow the solid fuel exhaust system to be terminated through the wall subject to the following conditions[1]:

1. Appellant shall provide documentation to the Boston Fire Department regarding the construction type, specifically that the building is Type 1A non-combustible, protected.

2. Appellant shall obtain a listing or other approval of the solid fuel grill from a nationally recognized testing laboratory, or other certification body, and submit the same to the Boston Fire Department prior to the operation of the solid fuel grill.

3. Appellant is to install a hood fire detection and fire suppression system, wherever solid fuel cooking is performed, including a CORE total flood fire system (in accordance with Exhibit 3), to be reviewed and approved by the Boston Fire Department.

4. Appellant shall submit inspection reports, cleaning reports and preventative maintenance reports to the Boston Fire Department according to a timeline laid out by the Boston Fire Department. The Boston Fire Department shall then approve the frequency of inspections.

5. Installation of an automatic carbon monoxide detection and alarm system on the pool deck above the restaurant, as well as a fire alarm annunciation, as submitted to and approved by the Boston Fire Department.

6. A written statement documenting the expected percentage of carbon monoxide emissions in the exhaust, at the pool deck level, to be submitted to the Boston Fire Department.

H) Vote of the Board

Jonathan Eisenberg, Presiding Panel Member	In Favor
Dr. Paul Scheiner	In Favor
Alfonso Ibarreta	In Favor

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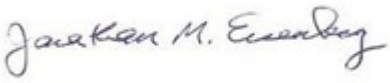
[1] The Board has the power to impose these conditions under G. L. c. 22D, § 5(b). See G. L. c. 22D, § 5(b) (Board can modify underlying order or decision and determine suitable alternate methods of compliance). *Caron v. City of Gardner*, No. 2285CV00201, 2023 WL 3095135, at *3 (Mass. Super. Apr. 07, 2023).

I) Right of Appeal

You are hereby advised you have the right, pursuant to section 14 of chapter 30A of the General Laws, to appeal this decision, in whole or in part, within thirty (30) days from the date of receipt of this order.

SO ORDERED,



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Jonathan Eisenberg, Presiding Panel Member
Fire Prevention Regulations Appeals Board

Dated: March 6, 2025

A COPY OF THIS DECISION AND ORDER WAS FORWARDED BY E-MAIL AND CERTIFIED MAIL, RETURN RECEIPT REQUESTED TO:

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