



FDNY

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Kam Chan P. E.

Lead Engineer / Administrative Engineer of Technology Management
Bureau of Fire Prevention

CERTIFICATE OF APPROVAL # 5877

**THIS CERTIFICATE IS REVOCABLE, NOT TRANSFERABLE
AND EXPIRES ON June 14, 2023**

June 15, 2020

Mr. William Griffin
VP of Engineering
Captive Aire Systems Inc.
4641 Paragon Park Road
Raleigh, NC 27616

RE: Certificate of Approval #5877
F. P. Index#: 2003006B FPIMS#: 40064156

By order of Fire Commissioner, Daniel A. Nigro, and pursuant to Section 112 of the New York City Fire Code, the following equipment or material may be acceptable for use provided the conditions outlined below are in full compliance.

Manufacturer: Captive Aire Systems, Inc.
Product: CORE Protection Fire System (CPFS)
Model Number: CPFS
Pertinent Code Sections: New York City Fire Code Section 901.4.5
Testing Laboratory: Intertek Testing Services
Prescribed Tests: UL 864, ULC S527, UL 300
Report: File No. 3132231SAT-004 Issued 01/30/2008 Revised: 06/19/2018
101196419NYM-001 Issued 07/31/2013 Revised: 03/28/2019

Description: The CORE Protection Fire System (CPFS) is a pre-engineered, fire system that utilizes a water spray system and chemical surfactant for fast flame knock-down and suppression. In the event of a fire in the exhaust hood, duct, or pollution control unit, CORE Protection is activated. If the exhaust hood, duct, or pollution control unit Firestat senses a temperature higher than its internal set point or a rapid rate of rise is detected, an electric signal is sent to the CORE Fire System Cabinet. An electric water solenoid mounted in the manifold is energized allowing the flow of water to the exhaust hood, duct, or pollution control unit. At the same time, surfactant is continually injected into the water stream to help suppress the fire. Once the fire system is activated, a "Fire System Activated" light is illuminated on

the CORE Fire System Cabinet and an audible alarm sounds. A timer is also energized upon fire system activation. The timer is factory set for 15 minutes and keeps the water spray system running a minimum of 15 minutes. The fire system is electrically operated and thus requires a battery backup system. The battery backup will automatically energize upon a loss of power. The battery backup will monitor the fire system circuit for a minimum of 24 hours and be able to operate the fire system circuit for a minimum of 30 minutes. Once power is restored, the battery will automatically recharge.

Conditions of Approval

1. Prior to installation of the above-referenced fire extinguishing system, plans shall be filed with the Fire Department for review and approval.
2. Automatic equipment interlocks, ventilation controls, smoke and heat vents and other features necessary for proper operation of the fire extinguishing system shall be provided as required by the design and installation standard utilized for the hazard.
3. Installation, use and maintenance of the above-referenced pre-engineered fire extinguishing system shall comply with all applicable requirements of the New York City Fire Code, the New York City Construction Codes (including the Building Code and Mechanical Code), the New York City Electrical Code, and the rules.
4. Intertek's listing requirements and limitations shall be complied with. Manufacturer's installation, maintenance procedures and limitations shall be complied with.
5. At least once a month, an inspection shall be conducted by a trained and knowledgeable person to assess whether the system is in good working order. A licensed master fire suppression piping contractor properly trained and having knowledge of the installation, operation and maintenance of the specific fire extinguishing system shall inspect, test, service and otherwise maintain such system in accordance with New York City Fire Code Section 904 and the manufacturer's specifications and servicing manuals at least on a semiannual basis. Tests shall include a check of the detection system, alarms and releasing devices, including manual stations and other associated equipment.
6. Certificate of Approval number shall be plainly and permanently stamped or otherwise affixed upon each product by the manufacturer or the local representative of the manufacturer.
7. All installations shall be subject to inspection by representatives of the Fire Department which may result in additional requirements being imposed.
8. The Fire Department may make periodic inspections of the above-referenced equipment without notice.
9. The Fire Department may withdraw this approval at any time in the event there is a reasonable doubt that the product does not operate or perform as required by code, the conditions of this resolution or as represented in your application.

Certificate of Approval #5877 for Captive Aire's
CPFS Pre-Engineered CORE Protection Fire System
June 15, 2020 **EXPIRED June 14, 2023**

10. The Fire Department's conditions of approval shall be provided to all New York City buyers, users and installers.
11. The Certificate of Approval does not constitute an endorsement or recommendation of your product by the Fire Department, but is a certification that your product is acceptable as of the date of issuance.
12. Any end user who fails to comply with the conditions as outlined in this approval will be subject to enforcement action.

Any change in company name or ownership, product name, chemical composition or model number of any product included on this certificate must be immediately reported to this Department in writing.

Very truly yours,



Kam Chan, P.E.

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