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

CERTIFICATE OF APPROVAL # 5753 **THIS CERTIFICATE IS REVOCABLE, NOT TRANSFERABLE** **AND EXPIRES ON November 6, 2022**

November 7, 2019

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

RE: **Amended Certificate of Approval #5753**
F.P. Index#: 1909023A FPIMS#: 39274758

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: Pollution Control Unit (PCU) **(Hood Accessory for Purposes of COA Review)**

Model Number: PCU,PCU-PF, PCU-PF-HE, PCU-PF-HEPA, PCU-PF-OC, PCU-PF-HE-HE, PCU-PF-HE- OC, PCU-PF- HE- HE- OC, PCU-PF- HE- OC- OC, PCU- PF- HE- HE- OC- OC, PCU- PF- HE- HEPA, PCU- PF- HE- HEPA- OC, PCU- PF- HE- HEPA- OC- OC, PCU- HE, PCU- HEPA, PCU- OC, PCU- HE- HE, PCU- HE- OC, PCU- HE- HE- OC, PCU- HE- OC- OC, PCU- HE- HE- OC- OC, PCU- HE- HEPA, PCU- HE- HEPA-OC, PCU-HE-HEPA-OC-OC; may be followed by ESP or ESP-ESP; followed by HEPA, HEPA-OC, HEPA-OC-OC, OC or OC-OC; followed by -1, -2, -3, -4, -5, -6, -7

Pertinent Code Sections: New York City Fire Code Section 901.4.5

Testing Laboratory: ETL Testing Labs (Intertek)
Underwriters Laboratories, Inc.

Prescribed Tests: UL1978, UL 705, UL 762, UL 710, ULC-S646 AND ULC-S647, ULC-S662, CSA Std. C22.2, UL 867, NFPA 96

Report: 3158877SAT Issued: 10-14-2013
3158877SAT-001 Issued: 10-27-2008 Revised: 03-15- 2018
3049729-001 Issued on 06-26-2015

Report:

MH116963

Issued on 09-29-2016

103624182COL-001

Issued: 08-10-2018

Revised: 07-23-2019

Description:

The Pollution Control Unit (PCU) aids in the removal of grease particles and abatement of smoke from the air stream. The PCU may be ordered with optional equipment: Odor Control, Exhaust Fan, Fire Suppression system. Unit is a multi -stage passive filter apparatus designed to be installed downstream of a UL 710 listed or NFPA 96 Compliant exhaust hood/damper assembly. Unit may be of single and multiple stage filter construction. An optional primary filter assembly (PCU-PF) may use the following; grease lock filters, Shepherd filters, pleated steel wire filters or UL1046 - rated baffle filters. A secondary assembly (PCU - HE) houses high efficiency medium density particle filters. Following these two assemblies is either a HEPA filter assembly (PCU-HEPA) or activated carbon filter assembly (PCU-OC), or both. Unit may be ordered with an optional electrostatic precipitator module the unit will contain electrostatic cells and pre and post metal filters to contain water in the module during an ESP wash. This unit does not include an extraction fan. Output of unit will be connected to an external extraction fan which, when sealed, will provide suction for the entire hood / extraction system. UL 762 exhaust blowers (KB10, KB14, KB18, KB20, KB25, KB32, KB Inline/USBI) as identified in Captive-Aire's Listing Report, Project No. 3158877SAT- 001 and 3049729- 001, can be installed a an alternate construction to the Pollution Control Unit Assemblies identified in this Report. The Pollution Control Unit is available with an optional Advance Filter Monitoring System (see Section 7, Illustrations 26 – 28) and a RUSKIN UL Classified 1.5 Rated Vertical Style Fire Damper (see Section 7, Illustrations 29-31).This PCU unit also includes a UL94V0 listed McMaster- Carr extreme temperature tubing which is connected to a CE Listed Dwyer Differential Pressure Switch. This switch is preset from the Captive-Aire factory to .15" w.c. above the internal static pressure of the PCU with clean filters. The switch monitors the pressure drop between the beginning of the first stage filter and the end of the last filter. Once filters become clogged, the switch closes and illuminates a light in the kitchen on the Hood Control Panel. User should then clean or replace filters as required. This PCU can include a fire suppression system. The system shall consist of a supervised self- contained fire system which can be remote mounted , or mounted on the PCU. Each discharge nozzle designed for the PCU fire suppression system shall be tested and listed. Each nozzle shall be marked designating the size of the nozzle. Each nozzle shall have a metal blow - off cap to keep the nozzle tip orifice free of cooking grease build- up. Distribution piping shall be Schedule 40 black - iron, chrome- plated, stainless steel, or Pro-press/ copper pipe. The detector shall be a fusible link style or electronic sensor (Detect-A-Fire's thermal sensor) designed to activate at 360°F-600°F depending on application. The fire suppression system used in then PCU is directly linked to appliances under the hood. If the fire system activates, the appliances will shut down. The fire suppression system used in the PCU shall be interlocked with the kitchen hood fire suppression system via a wired interlock network for simultaneous activation. A remote actuation device is also required for operator activation. In the event of a fire in the cooking appliance and the activation of the fire extinguishing system, the power and gas to the cooking appliances is terminated.

Conditions of Approval

1. Prior to installation of the above referenced PCU unit, plans shall be filed with and approved by the New York City Department of Buildings.
2. Approved automatic fire extinguishing system shall be provided for the component filter sections and the ductwork downstream of the equipment. The fire extinguishing system shall be suitable for the above referenced PCU units.
NOTE: This Certificate of Approval does not include the fire extinguishing system.
3. Prior to installation of the above-referenced PCU, plans for the fire extinguishing system shall be filed with the New York City Fire Department for review and approval. Pre-engineered non-water fire extinguishing system shall be of a type for which a Certificate of Approval has been issued by the New York City Fire Department.
4. The entire PCU shall be inspected, cleaned and replaced if necessary by a qualified person holding a Fire Department Certificate of Fitness. A record of such inspection and cleaning shall be kept on the premises for inspection.
5. Installation, use and maintenance (including cleaning) of the above-referenced PCU 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.
6. The Certificate of Approval number shall be plainly and permanently stamped or otherwise affixed upon each product by the manufacturer/applicant.
7. Listing requirements and the manufacturer's installation, operation and maintenance requirements shall be complied with.
8. All installations are subject to inspection by representatives of the Fire Department which may result in additional requirements being imposed.
9. The Fire Department's conditions of approval shall be provided to all New York City buyers, users and installers.
10. The equipment's technology does not violate any patent, trade name, trade secret or other intellectual right.
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. 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.
13. Any end user who fails to comply with the condition as outlined in the acceptance is subject to enforcement action.

Amended for COA #5753 for Captive Aire Systems

Captrate Grease-Stop Solo Filter Model 200

November 7, 2019

EXPIRES NOVEMBER 6, 2022

This Certificate of Approval is for the kitchen hood accessory in compliance with UL 710. Where the pollution control units are provided to comply with the requirements of the New York City Department of Environmental Protection Rules 15 RCNY Chapter 37 (Emissions Reduction Technologies for Char Broilers) and 38 (Emissions Reduction Technologies for New Cook Stoves), such units must comply with the requirements of these chapters, and emissions control device certification must be obtained from the New York City Department of Environmental Protection as per Rule 15 RCNY Sections 37-05 and 38-04, as applicable.

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.

KC: JN: COA#5753Amended.doc