## ACCUREX

## **XRRS Specification**

Residential Range (Fire Ready Hood) System

Provide Accurex hood model XRRS as shown on plans and in accordance with the following specification:

Note to User: This document is subject to copyright protection and is proprietary to Accurex Engineered Restaurant Systems. However, Accurex Engineered Restaurant Systems authorizes the user a limited non-exclusive license to use this document or portions of it for the purpose of preparing written product specifications. All information in this document as provided by Accurex Engineered Restaurant Systems is informational in nature and is provided without representation or warranty of any kind as to the user or any other party, including, without limitation, ANY IMPLIED WARRANTY OF MERCHANTABILITY, FITNESS FOR PARTICULAR PURPOSE, OR NON-INFRINGEMENT. To the greatest extent permitted by applicable law, Accurex Engineered Restaurant Systems assumes no liability, and User assumes all liability and risk, for the use or results from the use of this document or the information contained herein, whether as modified by the user or not. Users should consult <u>ACCUREX.com</u> to verify that this document represents the most current version.

Kitchen ventilation hood shall be exhaust only, and cover a domestic range (sizes 30" or 36") in commercial environments used for domestic purposes only. The hood shall be ICC evaluated and certified as compliant with International Mechanical Code (IMC), International Fire Code (IFC), and Uniform Mechanical Code (UMC). If provided with a fan, the fan shall be UL 507 listed or equivalent. Hood fire suppression shall be UL listed to the UL Subject 300A. Hood shall be either configured as wall style (supplied with wall mounting bracket) or island style. The hood shall be constructed by Accurex.

The hood manufacturer shall provide, on request, the necessary data that confirms compliance with the code authorities listed above.

Hood shall be constructed of 18 gauge minimum, 300 series stainless steel outer shell. Hood shall be either 30" long (to cover 30" range) or 36" long (to cover 36" range). Hood shell shall be manufactured and assembled with no visible outer welds or weld marks. All internal seams shall be sealed with NSF-approved caulk, standard. A metal mesh filter shall be provided. Two (2) 2200-2700K color LED recessed hood lights shall provide over 50 foot-candles of evenly-dispersed lighting on the range below.

ACCUREX

Hood shall include factory-installed UL Subject 300A fire suppression system, including fully monitored electronic detection and actuation. No braided cable or fusible links shall be accepted. Fire suppression shall consist of two (2) mounted metal-housed temperature sensors that monitor the cooking surface and upon reaching set-point, send a signal back to the main fire system control board, which activates the tank solenoid valve and expels the wet chemical from a pre-charged tank responsible for suppressing the fire. Tank pressure shall be monitored using tank pressure sensor and a fault must be displayed on the user interface if low pressure is detected.

All fire suppression and control components must be easily accessible by dropping the hood into a service position to allow for service without removing the hood. Latches shall be utilized to hold the hood into place for normal operation. No thumb screws or removable hardware are acceptable.

Hood system shall include either an electronic or gas shut off device that shall be field connected back to the hood via factory-provided plug and play cables. Prior to fire suppression release, the shut off device shall be responsible for disabling the range upon detecting a high temperature. Gas disconnect (if provided) shall include a <sup>3</sup>/<sub>4</sub>" gas valve supplied with plug and play cable and a 115VAC control receptacle. Electric disconnect (if provided) shall include a 4-prong 250VAC 50A power receptacle. Other electric disconnect receptacle types are also available upon special request.

Hood system with option for NFPA 101 compliance, must include: 500 CFM fan, locked (password protected) appliance disconnect with timed-automatic range deactivation, and manual pull station.

User interface shall be provided to control fan, range, and lights and view system statuses, including faults/alarms. User interface shall be full color 4.3" LCD touch screen. No toggle switches or rheostats shall be acceptable. All factory and configuration settings must be accessed by touchscreen through password-protected entry. For ADA compliance, the user interface can be shipped loose to be field mounted on a wall near the hood. If shipped loose, user interface shall be provided with factory supplied plug and play cable.

The hood system shall be configured as with either a factory-supplied integral fan, factorysupplied external fan, or fan by others. Integral fan options include either front recirculating or rear discharge. Front recirculating style shall include an easily accessible charcoal filter and opening in the front of the hood for filtering the exhaust air before discharging back into the space. Rear discharge shall direct the air to exit the back of the hood, to discharge through a wall to the outside. External fan options include either a factory-provided inline fan (with plug and play cable) or fan by others option with a top discharge hood configuration. Top discharge shall direct the air to exit the top of the hood, to discharge through a roof or wall to the outside All factory provided fan options shall include energy efficient electrically commutated motors (ECM) standard.

© 2019 Accurex, LLC

## ACCUREX

Basic hood operation shall be as follows:

- 1) User interface can be utilized to turn on and off fans, lights, and range disconnect.
- If configured for NFPA 101 life safety code, password entry will be required to engage disconnect. After range is turned on, count down timer will begin, and upon expiring will disengage the range disconnect.
- 3) Upon reaching specific set-point, exhaust fan will engage automatically if not already turned on and be forced to a speed based on a temperature range.
- 4) Upon reaching a second higher temperature set-point, the disconnect will be automatically shut off and a warning will appear on the user interface.
- 5) Upon reaching a preset temperature, the fire system will engage and discharge wet chemical on top of the range.

The system can also include the following options:

- 1) Enclosure panels to close-off the space above the hood to the ceiling (option for external fan configuration)
- 2) Finished top, when no overhead cabinets are enclosing the top of the hood (option for internal fan configuration)
- 3) Wall cap (option for rear discharge fan configuration)
- 4) Horn strobe, with plug and play cable
- 5) K-class 6 liter wet chemical fire extinguisher
- 6) Manual pull station, with plug and play cable (included automatically with NFPA 101 compliance)

Dry contacts are provided standard for tie into building alarm systems and supply fan integration.

Due to continuous research Accurex reserves the right to change specifications without notice.