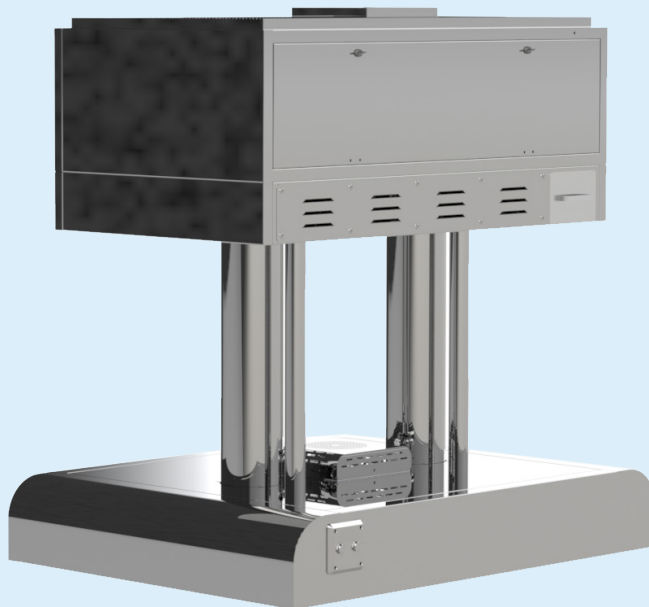


## JES-HD

### Heavy Duty Jet Extraction System



The Halton JES-HD commercial hood system has been specifically designed for display cooking areas or architectural cooking concepts. The JES-HD is designed for island applications with gas, electric or solid fuel appliances up to and including heavy duty appliances such as charbroilers, works or other high heat applications.

The JES-HD is highly effective providing full capture and containment thanks to the synergy of several features:

- Capture close to the cooking appliances.
- One or more inlets generating a powerful aspiration cyclone.
- Low profile containment shell with perimeter Capture Jet™ feature.

The JES-HD is ideally suited for production cooking in an open environment where direct communication with the customer is not a priority. The chef breathing zone is outside of the smoke and grease and the system is much less susceptible to cross drafts or changes in building pressure.

The low profile containment shell can also be utilized as a plate shelf.

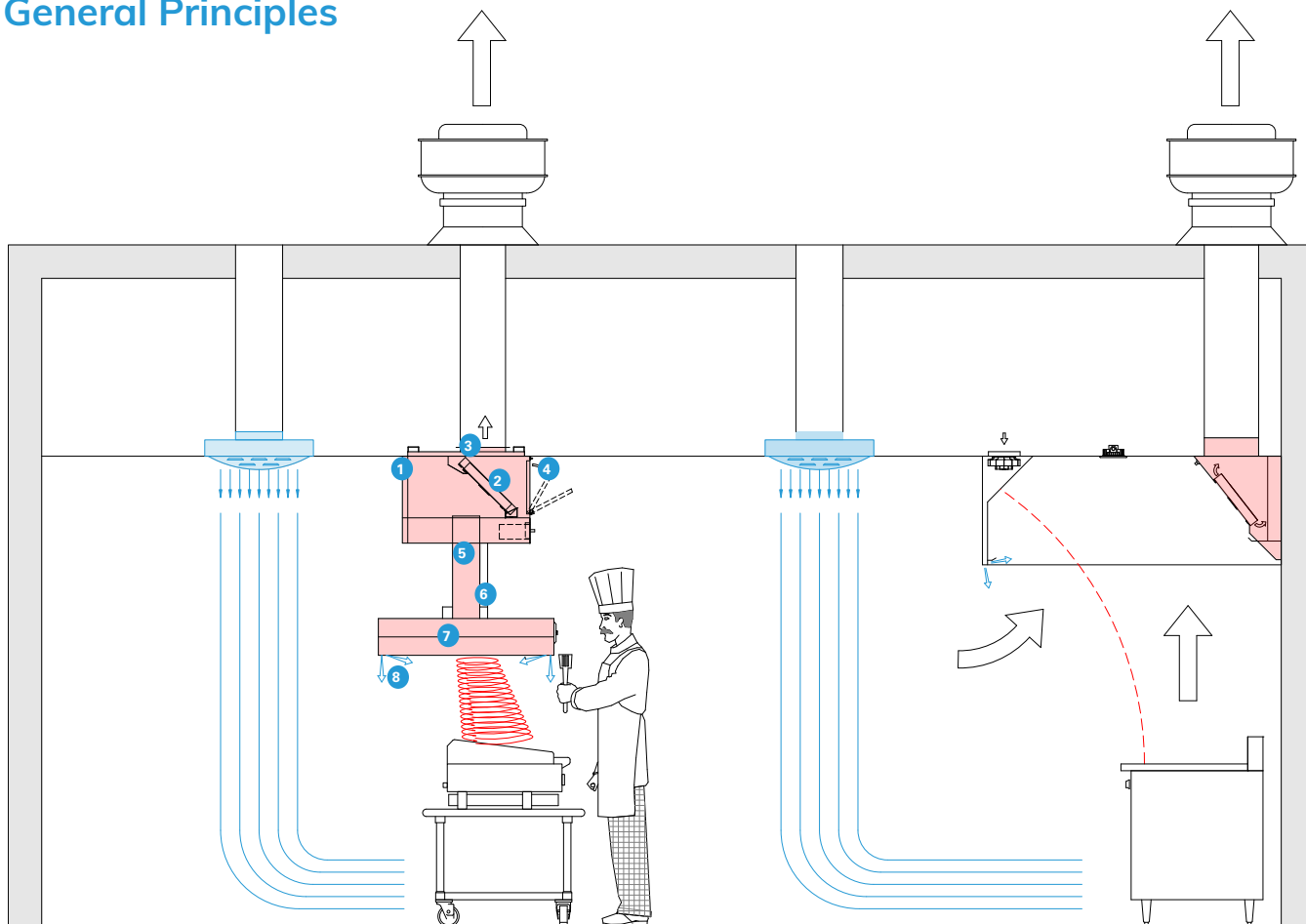
The exhaust plenum has been designed to allow a quick and easy access to the filters for regular maintenance.

The JES-HD comes fully equipped with a fire suppression system along with; Specifically designed for heavy duty display island applications.

- Highly efficient cyclonic effect for full capture
- KSA multi cyclone high efficiency grease extractors
- 50,000 hour LED lighting
- Aesthetically pleasing
- Maximum thermal and acoustic comfort
- Easy cleaning and maintenance
- Many customized opportunities



## General Principles



Form#: SS0140\_JES-HD  
Date: 07-2023 - Rev3

Exhaust plenum constructed from AISI 304 stainless steel, fully welded, U.L. 710 listed. T.A.B.™ (Testing and Balancing) port to verify exhaust air values.

Grease and condensates are collected in a drip tray easily removable for cleaning.

Access hatch to the KSA filters and the drip tray. Stainless steel tube(s), equipped with an aerodynamic nozzle, shaped to generate a highly efficient cyclonic suction effect.

18 ga 300 series stainless steel low profile containment shell with integral capture jet fan

- 1 - Exhaust plenum
- 2 - Filters condensate drip tray
- 3 - High efficiency KSA filters
- 4 - Access hatch to the filters
- 5 - Stainless steel tube
- 6 - Aspiration nozzle
- 7 - Low profile containment shell
- 8 - Capture Jet™

The smoke test demonstrates the synergy of the JES's 3 features:

- The proximity of the containment shell from the cooking source naturally increase its capture efficiency;
- The aerodynamic shaped nozzle creates an aspiration cyclone forcing the smoke plumes to go a circular direction.
- The containment shell and capture jets intensifies the cyclone efficiency since it entrains air along its surface, in the direction of the nozzle.

The behavior of the JES-HD is as impressive in real world as it is in the laboratory making its use:

- A viable solution for heavy duty display cooking.
- An alternative to traditional front cooking areas where the use of the canopies can have excessive exhaust rates and noise.

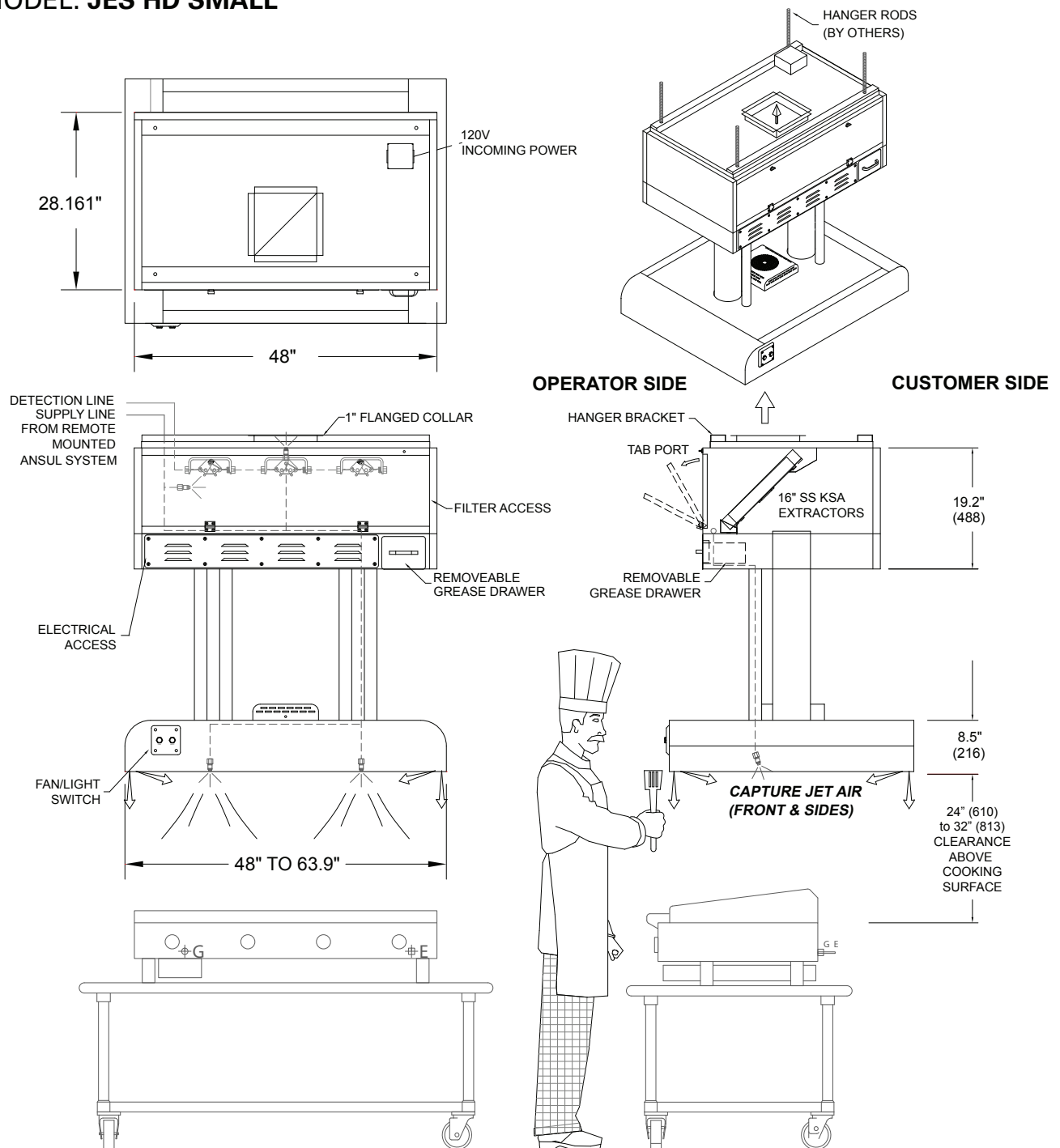
# JES\_HDS - Dimensions

Approx Weight: 600 lbs

Inches  
mm

Form#: SS0140\_JES-HD  
Date: 07-2023 - Rev3

## MODEL: JES HD SMALL

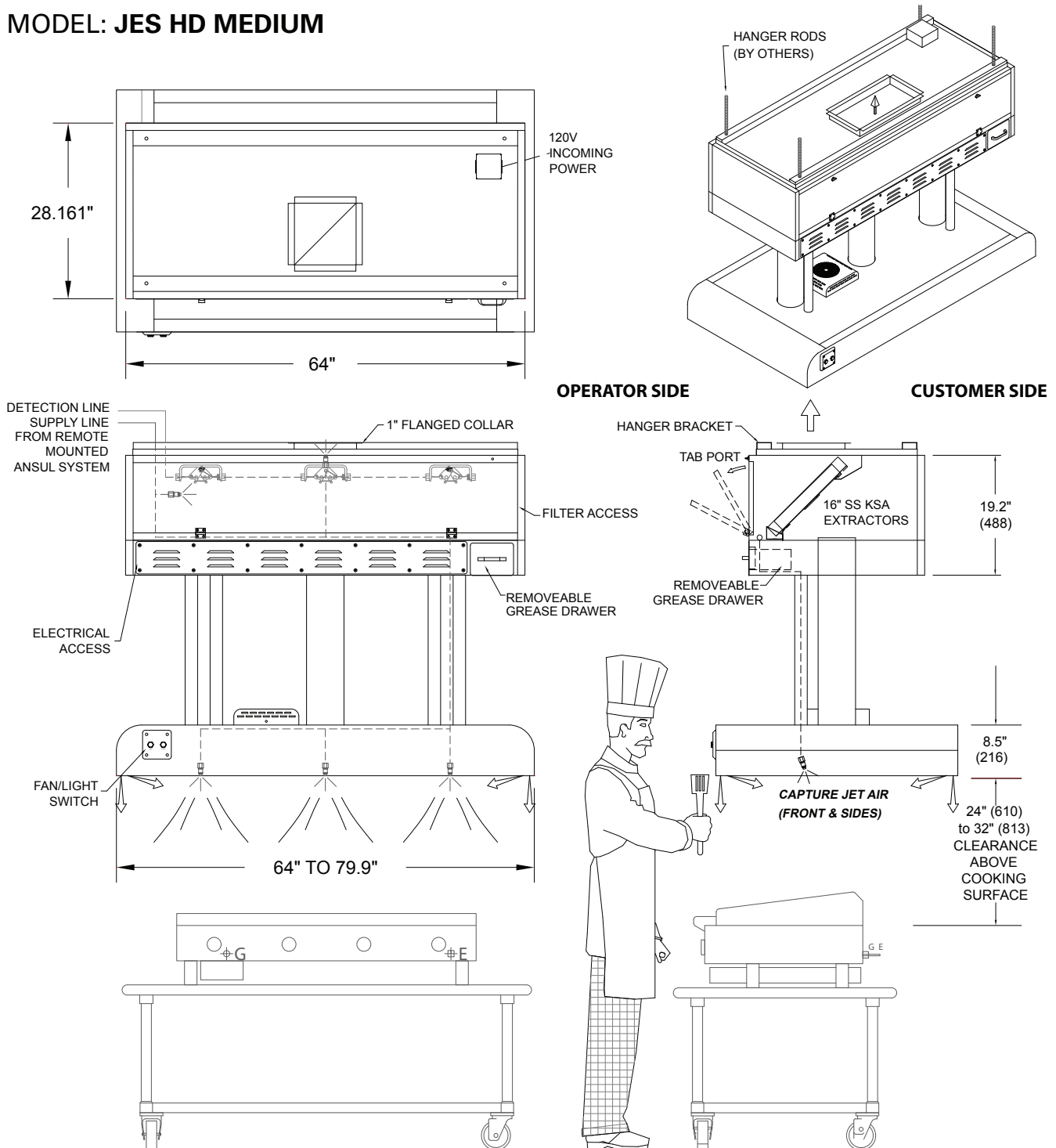


# JES\_HDM - Dimensions

Approx Weight: 600 lbs

Inches  
mm

## MODEL: JES HD MEDIUM



Form#: SS0140\_JES-HD  
Date: 07-2023 - Rev3

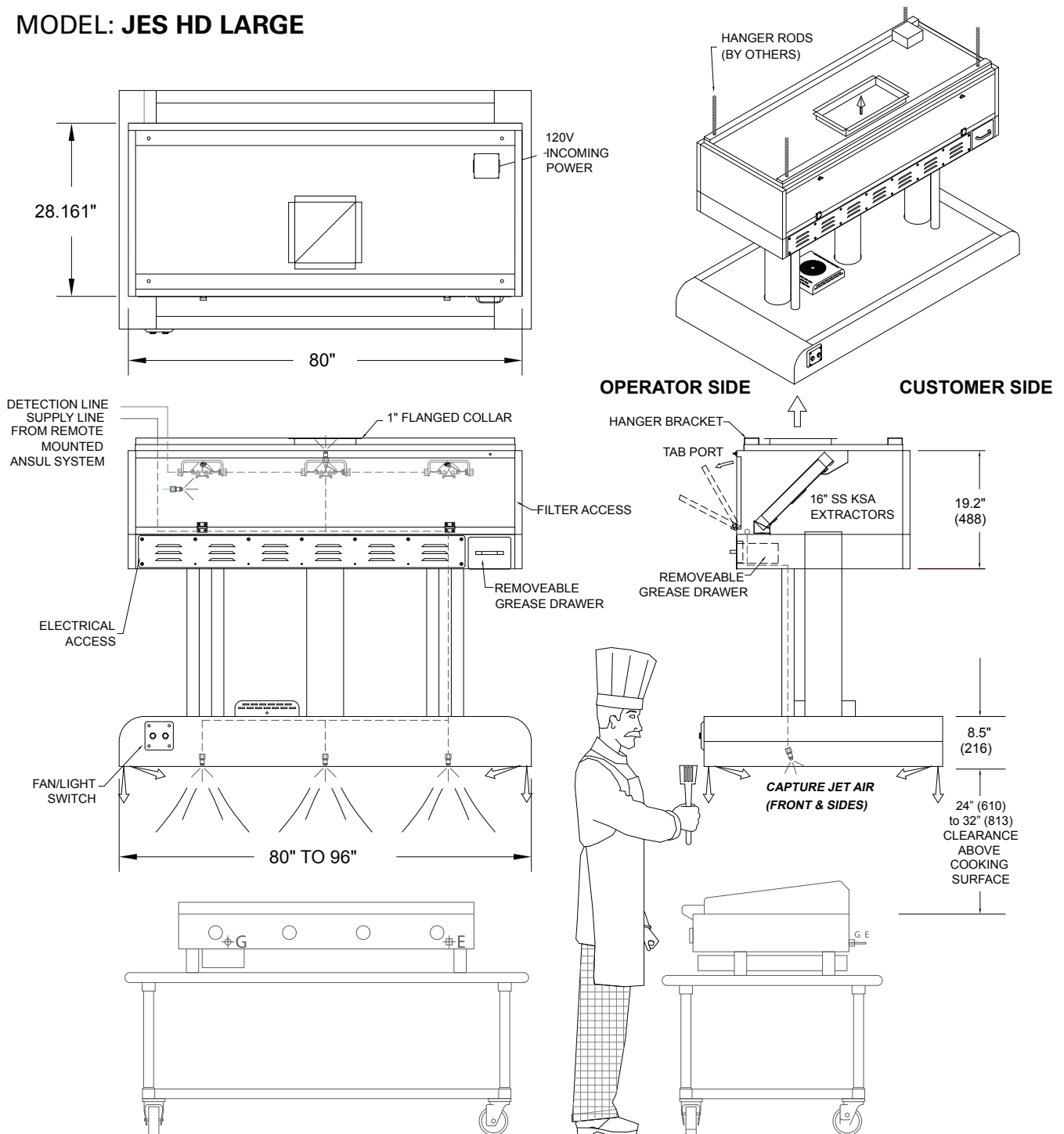
# JES\_HDL - Dimensions

Approx Weight: 600 lbs

Inches  
mm

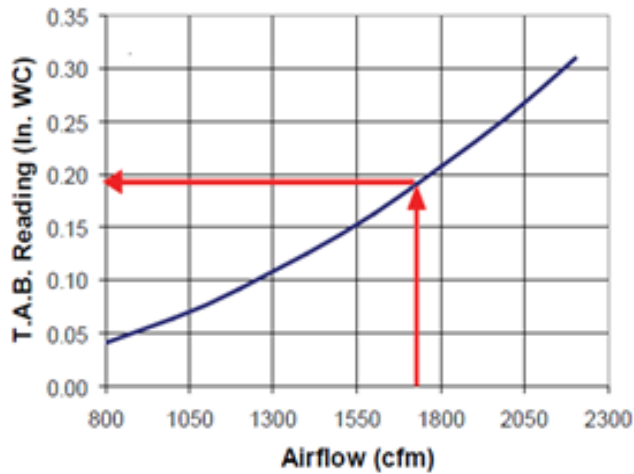
Form#: SS0140\_JES-HD  
Date: 07-2023 - Rev3

## MODEL: JES HD LARGE



## JES TAB Readings

Exhaust T.A.B. Readings vs. Airflow

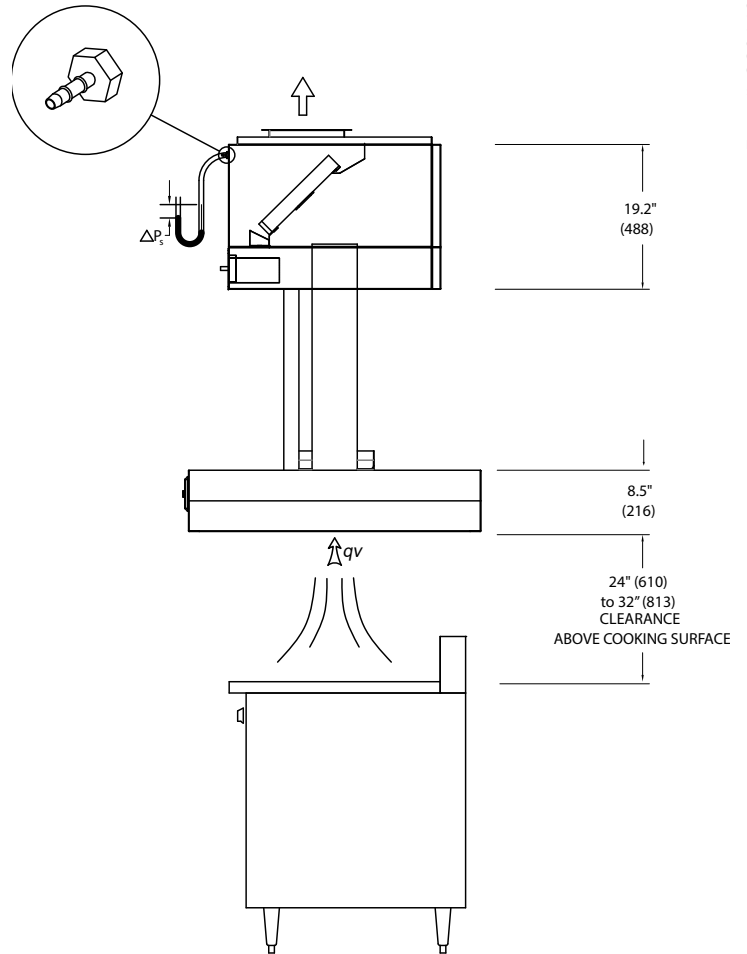


### Measured Pressure

This example shows how to determine the correct T.A.B. port reading for the exhaust hoods.

In this example, a design airflow of 1700 cfm is selected from the Airflow axis, and a vertical line is drawn up to the T.A.B. pressure curve for this hood.

A horizontal line is then drawn for the T.A.B. pressure curve to the T.A.B. reading axis on the left-hand side of the chart and the corresponding pressure is read off the chart as 0.19 inches of Water Column.



## Suggested specifications

### General

The front cooking area shall be equipped with an Halton Heavy Duty Jet Extraction System (JES-HD), constructed from AISI 304 stainless steel. It shall be supplied complete with the aerodynamic nozzles, the exhaust plenum, stainless steel tubes and mounting plate. The number of nozzles and shall be as indicated in the drawings.

### Capture Jet™

The hood shall be designed with Capture Jet® technology to reduce the exhaust airflow rate required, and to improve the capture and containment efficiency of the hood, while reducing energy consumption.

### Exhaust Plenum and Exhaust Tubes

Outer casing is constructed from AISI 304 stainless steel in a brushed satin finish, or powder coated Aluminized Steel. The joints of the lower edge shall be fully welded to be liquid-tight, avoiding harmful dripping of condensation. All exposed welds are ground and polished to the metal's original finish.

The exhaust plenum shall be equipped with high efficient KSA grease filters, constructed from stainless steel. The grease removal efficiency is 95% for particles a diameter of 10 microns or larger, as tested by an independent testing laboratory.

The condensate shall be collected with a removable stainless steel grease cup installed below the filter plenum. The condensate collecting tray and the filters shall be easily accessible for periodic cleaning using the door which equips the exhaust plenum. The door shall be mounted on hinges and closed with metallic latch.

The exhaust plenum can be connected to the ductwork directly or by the mean of stainless steel extension tubes equipped of an horizontal connection (300..250x200 mm) and a damper.

### Containment shell and Nozzles

The containment shell shall be provided with an integral capture jet plenum and fan prewired to the junction box. It is provided from factory with the exhaust nozzles and the fire suppression system nozzles.

The nozzles shall have an aerodynamic shape to generate an exhaust cyclonic effect thanks to their association with the low profile shell and capture jet. The nozzles and the exhaust tubes shall be integrally constructed from AISI 304 brushed stainless steel. The tubes shall have an external diameter of 154 mm.

### Testing & Balancing Ports and Air Flow Balancing

The airflows are to be determined via the integral T.A.B.™ port mounted on the JES-HD exhaust plenum. The airflows are to be determined by the pressure vs. airflow curves or coefficients supplied by Halton.

### Fire Suppression System

The JES-HD shall be equipped from factory with a fire extinguishing system. It shall protect the kitchen and prevent the fire from spreading through the building using a completely automatic fire control system of the liquid chemical type. The fire detection system shall be capable of detecting fire and shall automatically discharge extinguishing liquid agent on cooking appliance areas to eliminate the possibility of reignition or re-flash, into the plenum chamber and on the exhaust duct collars.

The system shall include a spring-loaded release mechanism, agent tank nozzles with blow-off caps and stainless steel appliance drops, a fusible link detector, wall-mounted emergency pull stations, a wall-mounted Automan and cabinet. The system's installation shall be performed by an authorised representative of the system manufacturer and conform to UL 300 requirements and local codes.

The company has a policy of continuous product development, therefore we reserve the right to modify design and specifications without notice.

For more information, please contact your nearest Halton agency.

To find it: [www.halton.com/foodservice](http://www.halton.com/foodservice)