



DEDICATED TO DISCOVERY. INSPIRED BY INNOVATION.



HAWKINS
LABORATORY FUME HOODS



**FLOOR MOUNT (WALK-IN)
FUME HOOD – HORIZONTAL SLIDING SASHES**

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| STANDARD FEATURES — FLOOR MOUNT HORIZONTAL SLIDING SASH

HOOD TYPES

Hoods are available as:

- Constant Air Volume (CAV), Full By-Pass
- Variable Air Volume (VAV), Restricted By-Pass
- 1220mm (48"), 1525mm (60"), 1830mm(72"), 2440mm (96") wide

FINISH

- Finish is an electrostatic powder coating applied to all surfaces. Parts are baked in a controlled high temperature gas oven with infrared preheat.
- Resultant finish has a hard and smooth laboratory grade chemical resisting finish.

1 SUPERSTRUCTURE

- Fully framed, self supporting
- Exterior panels fabricated from sheet steel with baked electrostatic powder coating
- Exterior front and upper side panels have hidden fasteners and are removable without tools
- Exhaust collars are round in configuration and do not require rectangular-to-round transitions

2 INTERIOR ACCESS PANELS

- Fully framed, self supporting
- Flush mount
 - Fully framed and air tight
 - No gaskets required

3 SASHES

- 6mm (7/32") laminated safety glass
- Full view type 1880mm (74") high
- Horizontal sliding

4 FRONT FACE OPENING

- Aerodynamically angled top, and side openings reduce turbulence and eliminate reverse flows

5 INTERIOR LINER MATERIALS

- Polyresin
- Stainless Steel
- PVC
- Polypropylene
- Custom materials available to fit specific requirements

6 BAFFLES

- Five section baffle design with side, upper, center and lower exhaust slots
- Baffle plates are fixed and factory set for optimum containment per ASHRAE 110-2016 Tracer Gas Testing

7 LEVELING FEET

- Built in for ease of installation

8 ELECTRICAL

Standard electrical fixtures comprise:

- Two 120V/20A duplex receptacles
- Vapour sealed LED lighting with light switch
- All fume hoods are factory pre-wired to a roof mounted junction box using only CSA/UL certified electrical components

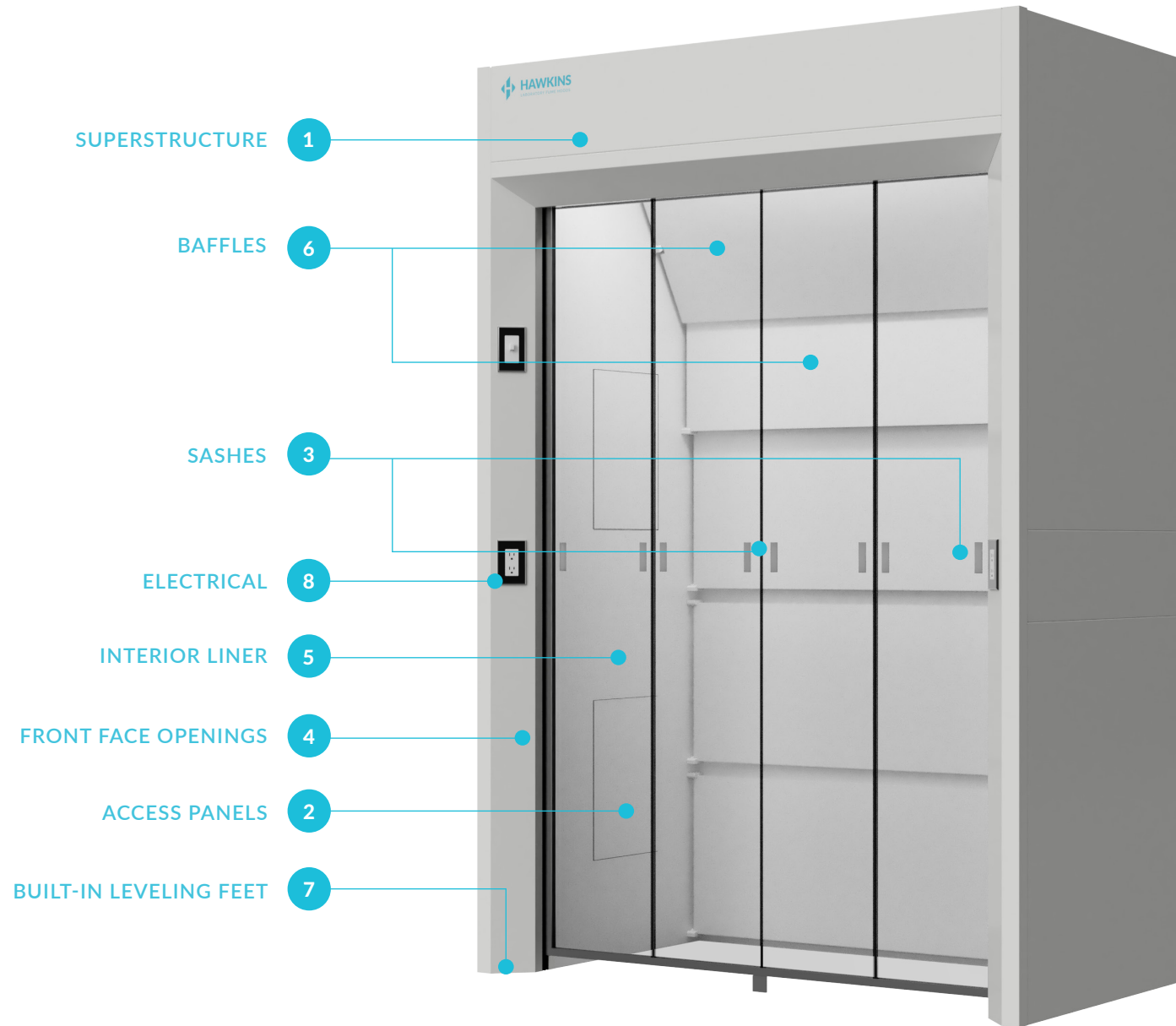
APPROVALS

H.H.Hawkins Fume Hoods have been tested and certified for use in North America by Intertek Canada and designated with the cETLus mark.

Certified to the following standards: CAN/CSA-C22.2 No. 61010-1-12 + UI; U2; AI UL61010-1:2012 Ed. 3+R21 Nov2018 and UL 1805:2002

TRACER GAS TESTING

Fume Hoods are tested to the ASHRAE 110-2016 Method of Testing Performance of Laboratory Fume Hoods and exceed ANSI/AIHA Z9.5, CSA Z316.5-15 and MD15128-2013 recommendations.



OPTIONS OVERVIEW

HORIZONTAL SLIDING SASH

1 CEILING CLOSURE PANEL

- Designed to enclose the top of the hood to the ceiling
- Encloses both sides and front
- Front panel is removable for access to the top of the fume hood
- Fabricated from the same material as the fume hood exterior
- Colour matched to the hood exterior colour

2 MECHANICAL SERVICES FIXTURES

- Remote controlled from the front face of the fume hood
- Front loaded valves
- Factory pre-piped, conforming to applicable codes
- Colour coded handles and interior fittings

3 PRE-PIPING

- Factory installed terminating above or below the hood superstructure
- Burning gas: corrugated stainless steel flexible tubing with connector, conforming to applicable codes
- Water and technical gases: SPX hose with stainless steel braiding and connector termination

4 LOW AIRFLOW ALARM/MONITORS

- Factory Installed
- Built in airflow sensor continuously monitors face velocity
- LED display indicates Safe and Alarm conditions
- Pushbutton calibration and configuration, password protection

5 FLOOR PANS

- To contain spills
- Raised edges 12mm (1/2")
- Liquid tight
- Type 304 or Type 316 18 gauge stainless steel
- Galvanized, 18 gauge
- Polyethylene

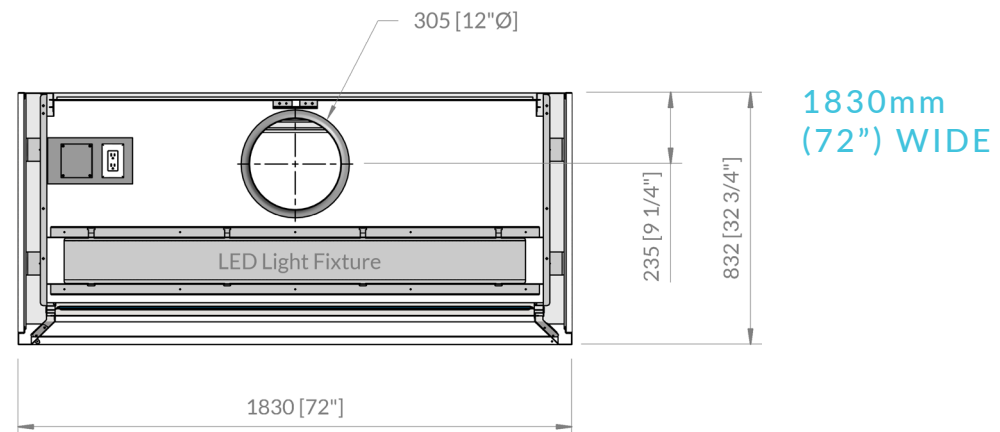
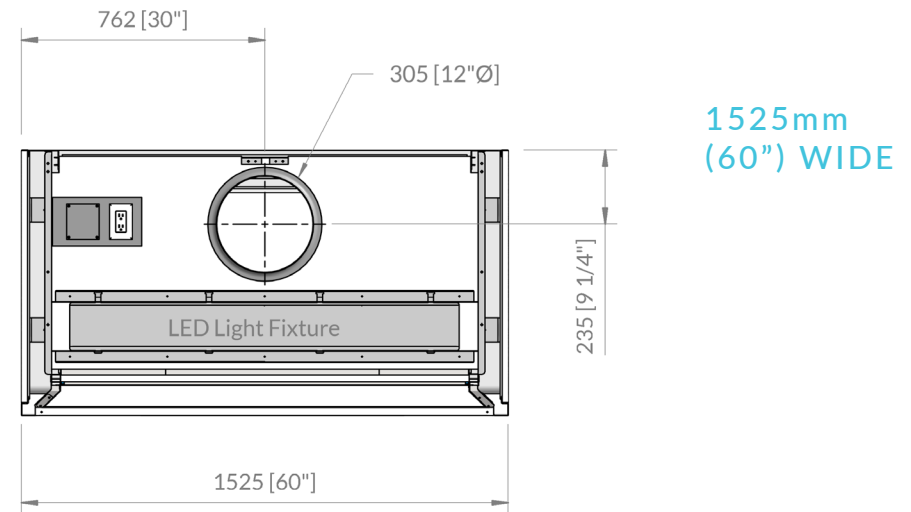
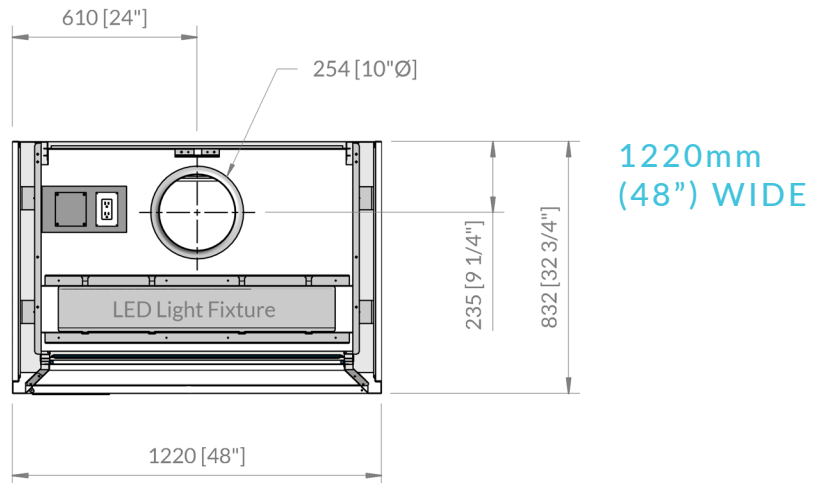
6 FLOOR SILLS

- Type 304 or Type 316 angled sill with floor pan for rolling equipment in and out of hood

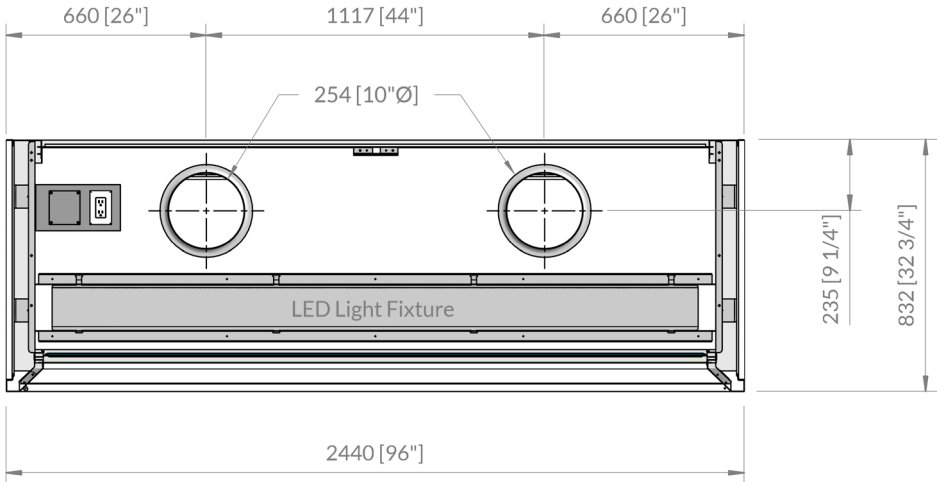
| OPTIONS OVERVIEW
HORIZONTAL SLIDING SASH



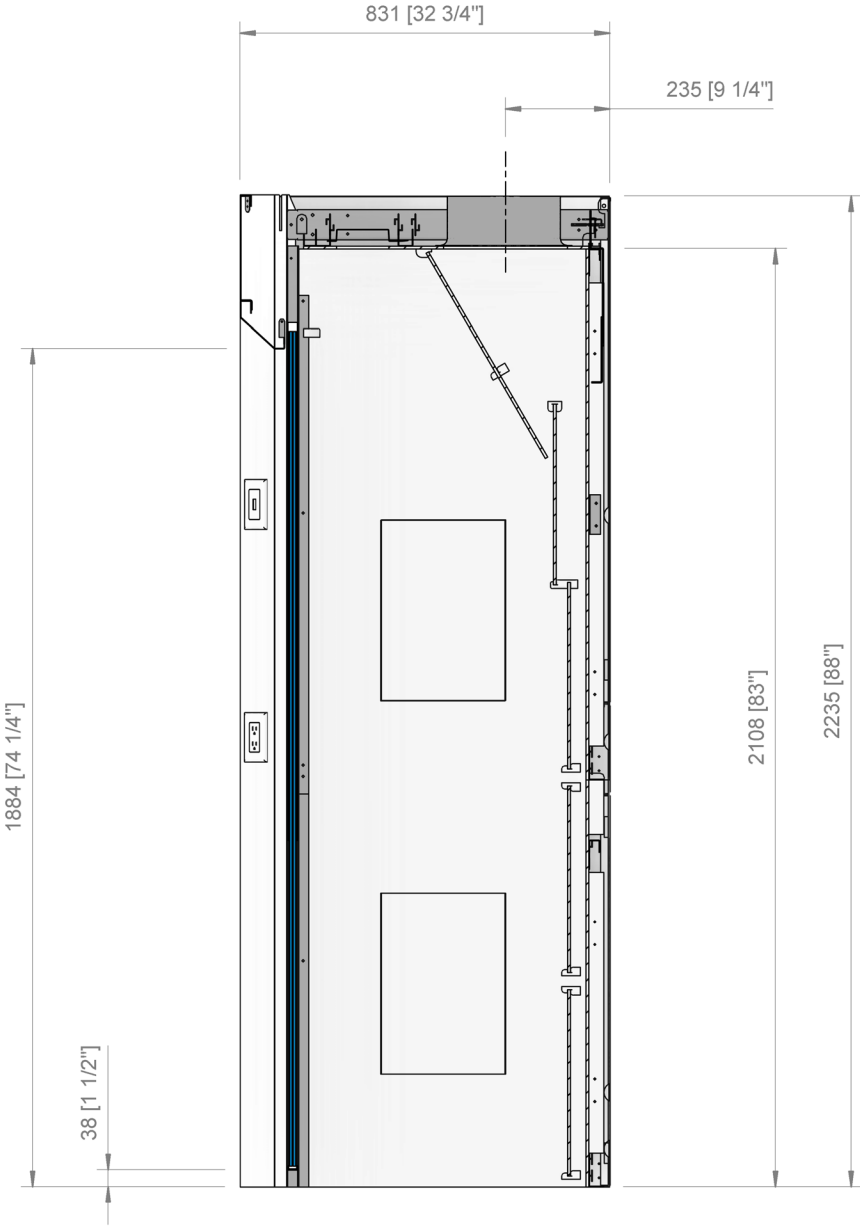
| EXHAUST COLLAR LOCATIONS / DIAMETERS HORIZONTAL SLIDING SASH



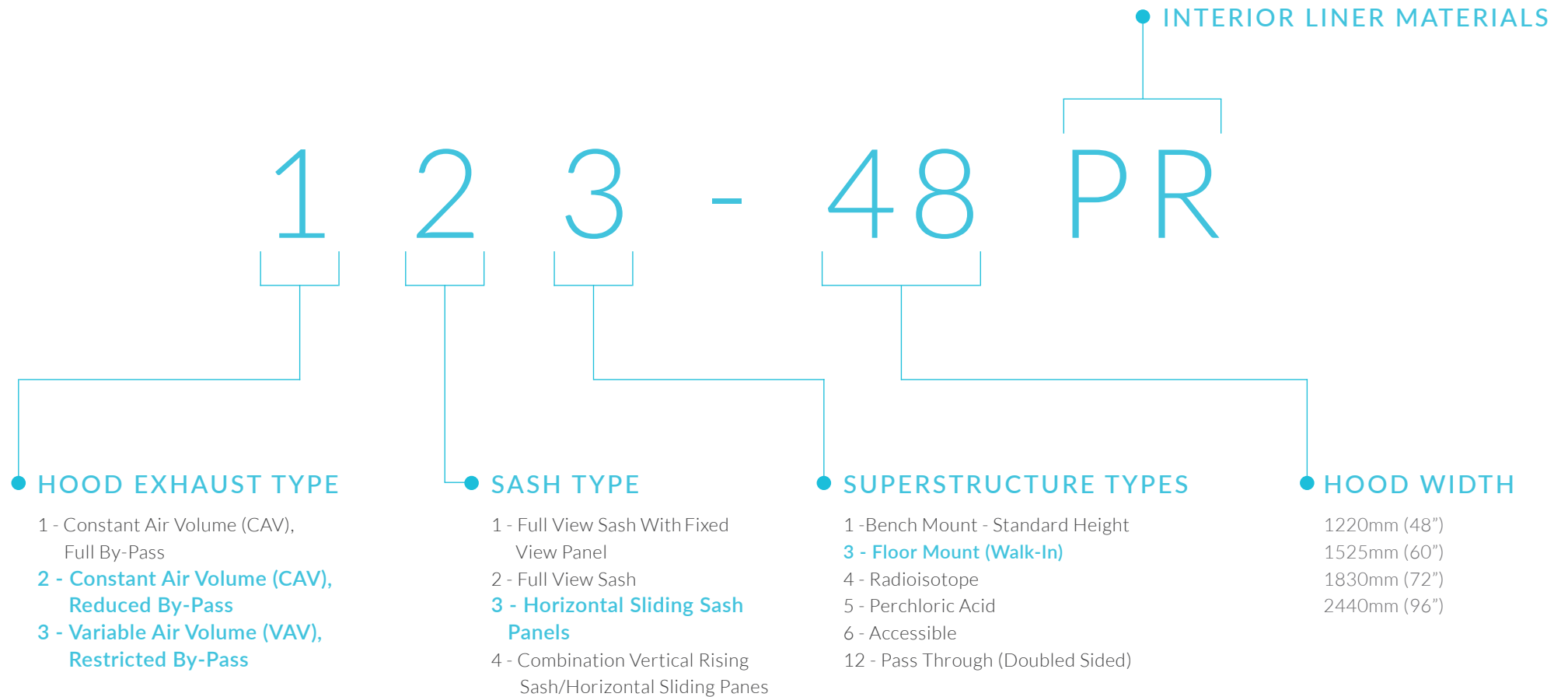
| EXHAUST COLLAR LOCATION



2440mm
(96") WIDE



| CATALOG NUMBER EXPLANATION | INTERIOR LINER MATERIAL
FLOOR MOUNT, HORIZONTAL SLIDING SASH



● INTERIOR LINER MATERIALS

PR Polyresin: 1/4" thick, solid fibreglass reinforced pressed thermoset resin board. Material offers superior chemical, solvent and corrosion resistance, negligible moisture absorption and a flame spread of less than 20 (UL 7231 ASTM E84-80). Flexural strength is a minimum of 19,000 PSI (D790). Material is white in colour throughout its thickness offering superior light levels. Maximum service temperature is 130 C (266 F). Exhaust collar is type 316 stainless steel.

ST Stainless Steel: Type 316 (ST6) or Type 304 (ST4) stainless steel, 16 gauge, number 4 finish. The sides and back of interior liner are formed in one piece with the top of the liner being stitch welded to the back and sides. Upper and lower sections are mechanically fastened together and sealed. Offers excellent heat and solvent resistance and good chemical resistance to most acids. Stainless steel is not recommended for use with chemicals such as Hydrochloric Acid, Hydrofluoric Acid, and Sulphuric Acid to 80% solution. Exhaust collar is stainless steel.

PP Polypropylene: 1/4" thick, solid, flame retardant, self extinguishing and stressed relieved polypropylene sheet. Liner is rigid and self supporting. Interior is metal-free. Material is white in colour throughout its thickness. Offers excellent corrosion resistance to a wide range of acids and solvents. Material has good impact resistance and structural integrity and has little or no water absorption. Maximum operating temperature is 82C (180F). Exhaust collar is PVC.

PV PVC: 1/4" thick, solid, flame retardant poly vinyl chloride sheet. Liner is rigid and self supporting. Interior is metal-free. Material is white in colour throughout its thickness. Offers excellent corrosion resistance to a wide range of acids but is not recommended for use with solvents. It has little or no water absorption and possesses natural flame resistant qualities. Flame resistance is rated at UL94V-O. Maximum service temperature is 60C (140F). Exhaust collar is PVC.

Technical specifications and chemical resistance chart are available upon request.

| CONSTANT AIR VOLUME (CAV), REDUCED BY-PASS HORIZONTAL SLIDING SASH



● Reduced By-Pass Constant Air Volume Fume Hoods incorporate a partial upper by-pass between the roof of the hood and the top of the horizontal sash frame. This by-pass will draw air over the top of the sash assembly reducing the face velocity through the sash openings as the sash panes are being closed.

The horizontal sash panes should not be closed completely as this may force most of the exhaust air through the lower air foil opening reducing the efficiency of the hood.

● Superstructure is fully framed and self supporting with 45° front posts. Exterior panels are 18 gauge cold rolled steel, are attached with hidden fasteners and removable without tools. Finish is an electrostatic baked powder paint for maximum scratch and chemical resistance.

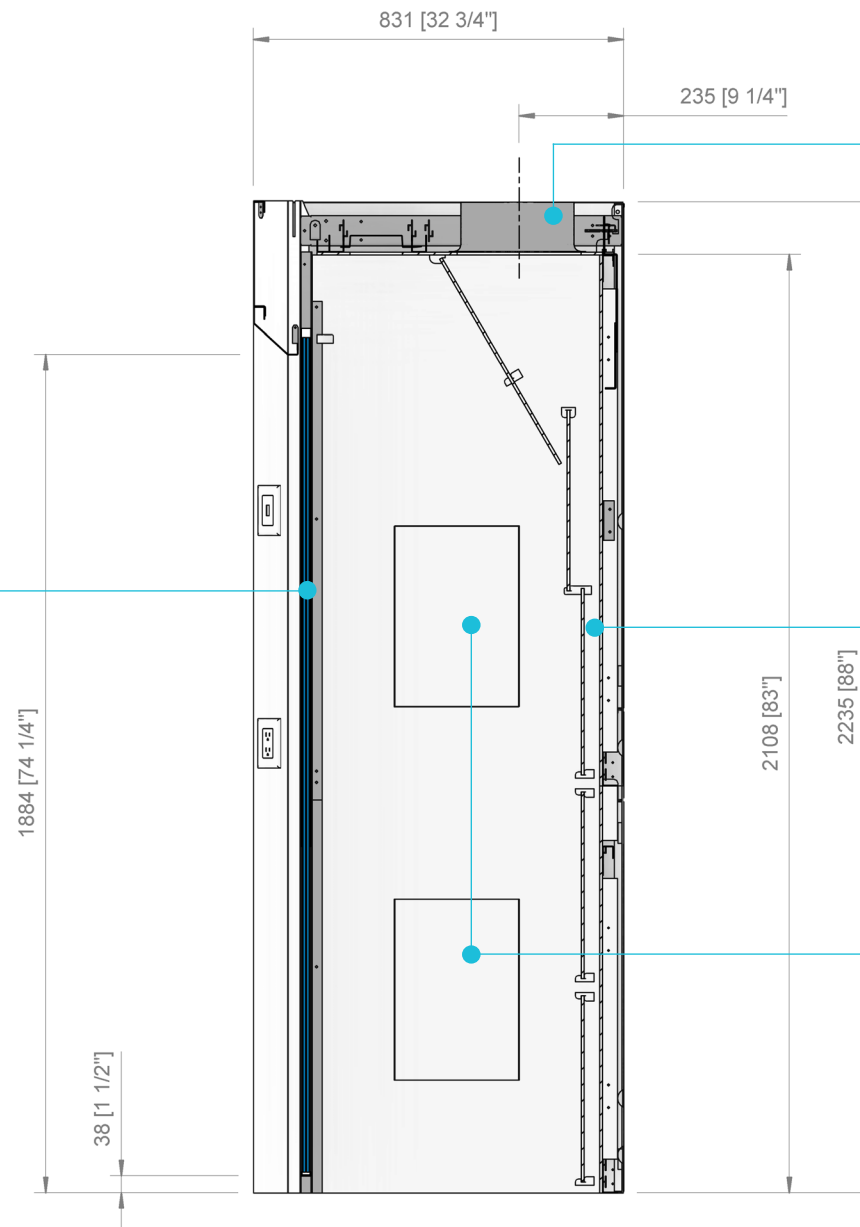
● Standard electrical fixtures comprise two 120V/20A duplex receptacles, vapour sealed LED lighting and light switch. All fume hoods are factory pre-wired to a roof mounted junction box using only CSA/UL certified electrical components.

● Face openings are angled to reduce turbulence and maintain smooth airflow into the hood.

| CONSTANT AIR VOLUME (CAV), REDUCED BY-PASS HORIZONTAL SLIDING SASH

H.H.Hawkins Fume Hoods have been tested and certified for use in North America by Intertek Canada and designated with the cETLus mark. Certified to the following standards: CAN/CSA-C22.2 No. 61010-1-12 + UI; U2; AI UL61010-1:2012 Ed. 3+R21 Nov2018 and UL 1805:2002

Sash assembly is "Full View" type with full height panes set in an 18 gauge, Type 316 stainless steel, number 4 finish full frame. Top hung horizontal sliding panes are unframed 6mm (1/4") laminated safety glass with polished edges. **They are designed so that only a maximum of 50% of the sash can be opened at any one time. Sash panels are designed and sized to be used as a full height safety shield.**



Exhaust collar is bell shaped, round in configuration and does not require a rectangular-to-round transition.

Five piece baffles are factory set and fixed for optimum containment. Removable from interior of hood without tools to facilitate ease of cleaning.

Interior access panels are flush mounted, fully framed and air tight. No gaskets required.

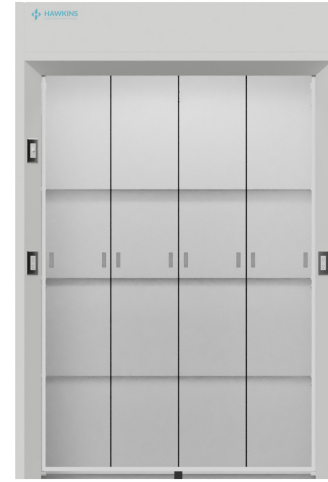
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**| CONSTANT AIR VOLUME (CAV), REDUCED BY-PASS
HORIZONTAL RISING SASH**



**1220mm
(48") WIDE**

Polyresin	233-48PR
Stainless Steel Type 316 (Stitch Welded)	233-48ST6
Stainless Steel Type 304 (Stitch Welded)	233-48ST4
PVC	233-48PV
Polypropylene	233-48PP



**1525mm
(60") WIDE**

Polyresin	233-60PR
Stainless Steel Type 316 (Stitch Welded)	233-60ST6
Stainless Steel Type 304 (Stitch Welded)	233-60ST4
PVC	233-60PV
Polypropylene	233-60P



**1830mm
(72") WIDE**

Polyresin	233-72PR
Stainless Steel Type 316 (All Welded)	233-72SW6
Stainless Steel Type 304 (Stitch Welded)	233-72ST4
PVC	233-72PV
Polypropylene	233-72PP

| **CONSTANT AIR VOLUME (CAV), REDUCED BY-PASS
HORIZONTAL SLIDING SASH**



**2440mm
(96") WIDE**

Polyresin	233-96PR
Stainless Steel Type 316 (Stitch Welded)	233-96ST6
Stainless Steel Type 304 (Stitch Welded)	233-96ST4
PVC	233-96PV
Polypropylene	233-96PP

- Other liner materials can be supplied to meet specific requirements.
- 2745mm (108") wide and 3050mm (120") wide fume hoods also available.
- Custom designs available.

AIR EXHAUST VOLUME (CFM) AND STATIC PRESSURE LOSSES (SP)

HOOD WIDTH		48"	60"	72"	96"
SASH OPENING*		10.4 sq. ft.	13.7 sq. ft.	16.9 sq. ft.	23.2 sq. ft.
HORIZONTAL SASH PANELS 50% OPEN	80 FPM	830 @ .18	1100 @ .28	1350 @ .33	1860 @ .33
	100 FPM	640 @ .23	1370 @ .34	1690 @ .39	2320 @ .45

* Measured off the floor. Includes lower opening and upper reduced by-pass.

VARIABLE AIR VOLUME (VAV), RESTRICTED BY-PASS HORIZONTAL SLIDING SASH



Restricted By-Pass Variable Air Volume fume hoods are used in conjunction with an electronic control system* which will maintain a constant face velocity regardless of sash openings. As the sash panes are opened and closed, the VAV system will vary the exhaust volume of the hood in direct response to the sash opening.

** SUPPLIED BY OTHERS.*

The horizontal sash panes should not be closed completely as this may force most of the exhaust air through the lower air foil opening reducing the efficiency of the hood.

Superstructure is fully framed and self supporting with 45° front posts. Exterior panels are 18 gauge cold rolled steel, are attached with hidden fasteners and removable without tools. Finish is an electrostatic baked powder paint for maximum scratch and chemical resistance.

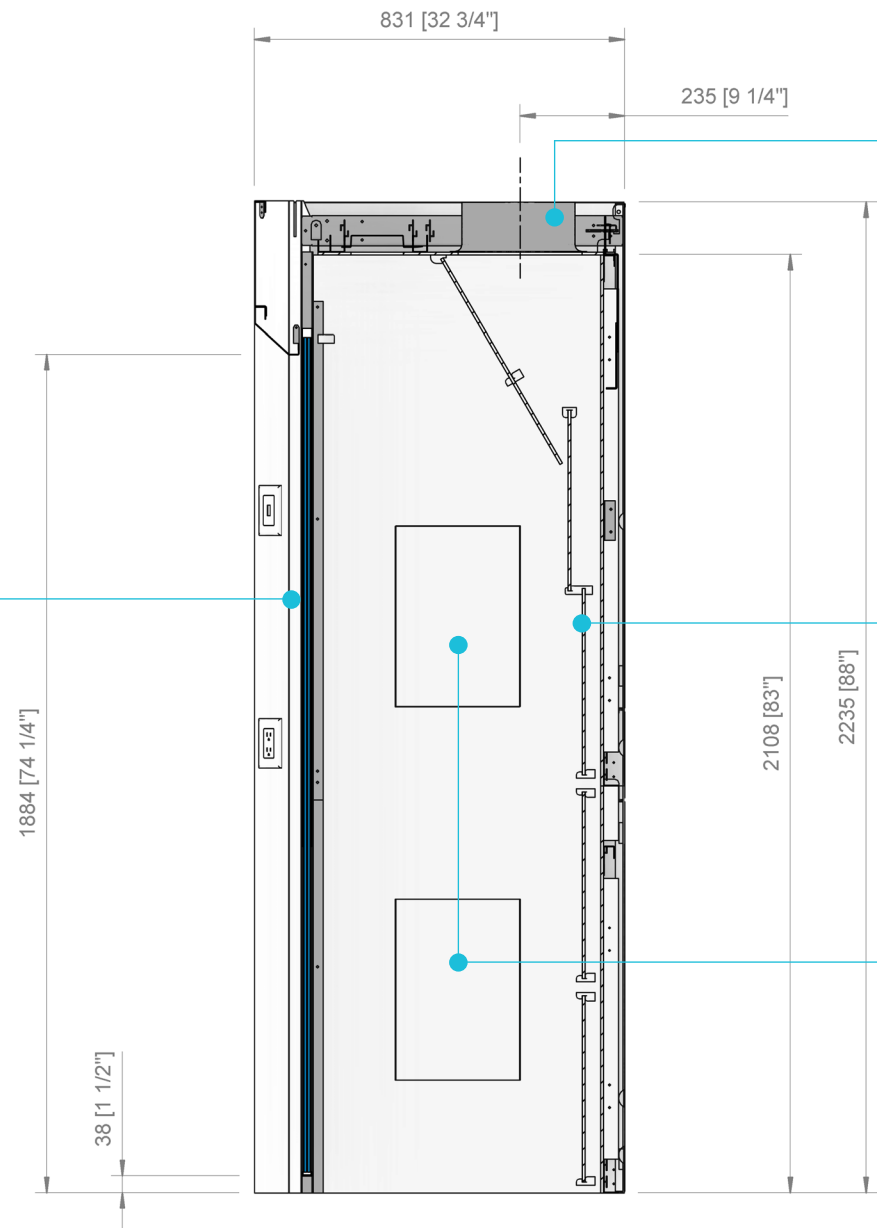
Standard electrical fixtures comprise two 120V/20A duplex receptacles, vapour sealed LED lighting and light switch. All fume hoods are factory pre-wired to a roof mounted junction box using only CSA/UL certified electrical components.

All face openings are angled to reduce turbulence and maintain smooth airflow into the hood.

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HORIZONTAL SLIDING SASH**

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Sash assembly is "Full View" type with full height panes set in an I8 gauge, Type 316 stainless steel, number 4 finish full frame. Top hung horizontal sliding panes are unframed 6mm (1/4") laminated safety glass with polished edges. **They are designed so that only a maximum of 50% of the sash can be opened at any one time.** Sash panels are designed and sized to be used as a full height safety shield.



Exhaust collars are bell shaped, round in configuration and does not require a rectangular-to-round transition.

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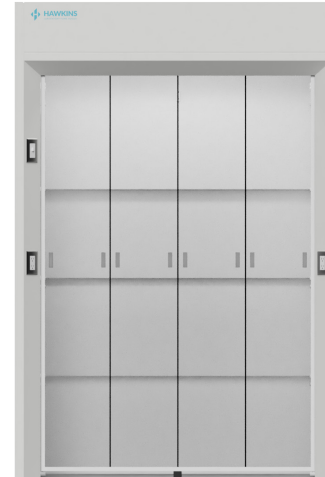
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**| VARIABLE AIR VOLUME (VAV), RESTRICTED BY-PASS
HORIZONTAL SLIDING SASH**



**1220mm
(48") WIDE**

Polyresin	333-48PR
Stainless Steel Type 316 (Stitch Welded)	333-48ST6
Stainless Steel Type 304 (Stitch Welded)	333-48ST4
PVC	333-48PV
Polypropylene	333-48PP



**1525mm
(60") WIDE**

Polyresin	333-60PR
Stainless Steel Type 316 (Stitch Welded)	333-60ST6
Stainless Steel Type 304 (Stitch Welded)	333-60ST4
PVC	333-60PV
Polypropylene	333-60PP



**1830mm
(72") WIDE**

Polyresin	333-72PR
Stainless Steel Type 316 (Stitch Welded)	333-72ST6
Stainless Steel Type 304 (Stitch Welded)	333-72ST4
PVC	333-72PV
Polypropylene	333-72PP

| VARIABLE AIR VOLUME (VAV), RESTRICTED BY-PASS HORIZONTAL RISING SASH



2440mm (96") WIDE

Polyresin 311-96PR	
Stainless Steel Type 316 (Stitch Welded)	323-96ST6
Stainless Steel Type 304 (Stitch Welded)	323-96ST4
PVC	323-96PV
Polypropylene	323-96PP

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**HORIZONTAL SLIDING SASH
BUILD YOUR FUME HOOD**

YOUR RESEARCH DRIVES OUR INNOVATION.





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