



DEDICATED TO DISCOVERY. INSPIRED BY INNOVATION.



HAWKINS
LABORATORY FUME HOODS



**PERCHLORIC ACID
BENCH MOUNT FUME HOOD
CONSTANT AIR VOLUME (CAV)
VERTICAL RISING SASH**

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BENCH MOUNT FUME HOODS

Constant Air Volume (CAV), Full By-Pass
Vertical Rising Sash 12

BUILD YOUR FUME HOOD 16

| PERCHLORIC ACID – CONSTANT AIR VOLUME (CAV) STANDARD FEATURES – BENCH MOUNT VERTICAL RISING SASH

HOOD TYPES

Hoods are available as:

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

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 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 SASHES

- 6mm (7/32") laminated safety glass
- Full view type 930mm (36.5") high with fixed view panel
- Type 316 stainless steel full length sash pull
- Maximum sash opening height 685mm (27")
- Vertical rising

3 FRONT FACE OPENING

- Aerodynamically angled top, bottom and side openings reduce turbulence and eliminate reverse flows
- Lower air foils are fabricated from 16ga type 316 stainless steel, number 4 finish

4 INTERIOR LINER MATERIAL

- Type 316 (SW-PA6) stainless steel, 16 gauge, number 4 finish.
- All welded seamless construction.
- Interior corners have a 3/4" radius with all welds ground and polished.
- Work surface is integrally welded with a 1/2" high anti-spill front lip.
- Interior access panels are not included unless specifically required.

5 BAFFLES

- Three 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
- A full length spray header is factory installed behind the rear upper baffle with a manually operated water control valve.

6 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

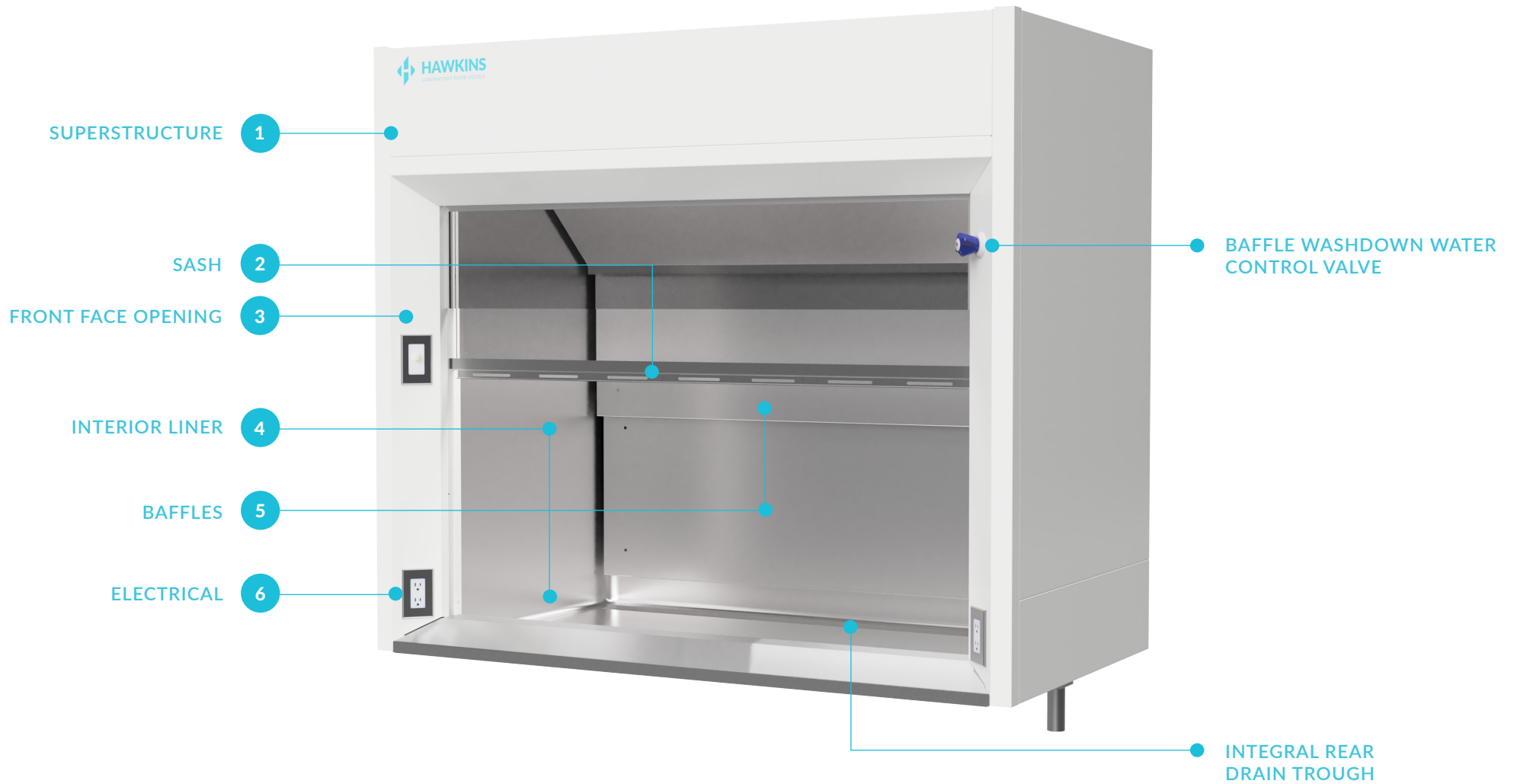
H.H.Hawkins Fume Hoods have been tested and certified for use in North America by Intertek Canada and designated with the cETLus mark.

Certified to the following standards: CAN/CSA-C22.2 No. 61010-1-12 + U1; 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.

| PERCHLORIC ACID – CONSTANT AIR VOLUME (CAV)
STANDARD FEATURES
VERTICAL RISING SASH



| PERCHLORIC ACID – CONSTANT AIR VOLUME (CAV) OPTIONS OVERVIEW VERTICAL RISING 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 BASE CABINETS

- General storage non-lined. Exterior fabricated from:
 - Baked enamel steel
 - SEFA 8M and 8W-2010 certified
- Acid/corrosives storage, polypropylene lined. Exterior fabricated from:
 - Baked enamel steel
- Flammable/solvent storage. All metal double wall construction.
 - FM, UL or ULC approved
- Tubular steel table support frames

| PERCHLORIC ACID – CONSTANT AIR VOLUME (CAV)
OPTIONS OVERVIEW
VERTICAL RISING SASH

CEILING CLOSURE PANEL 1



3 PRE-PIPING



4 LOW AIRFLOW ALARM/MONITOR

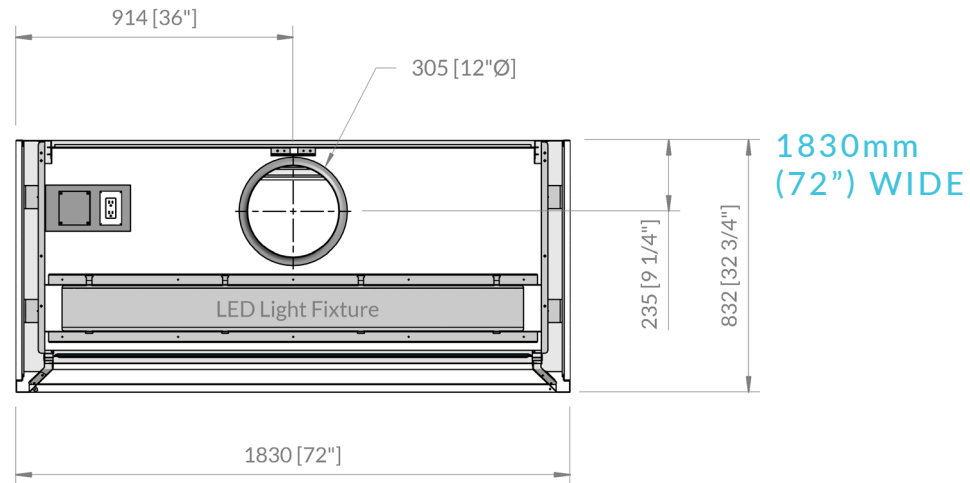
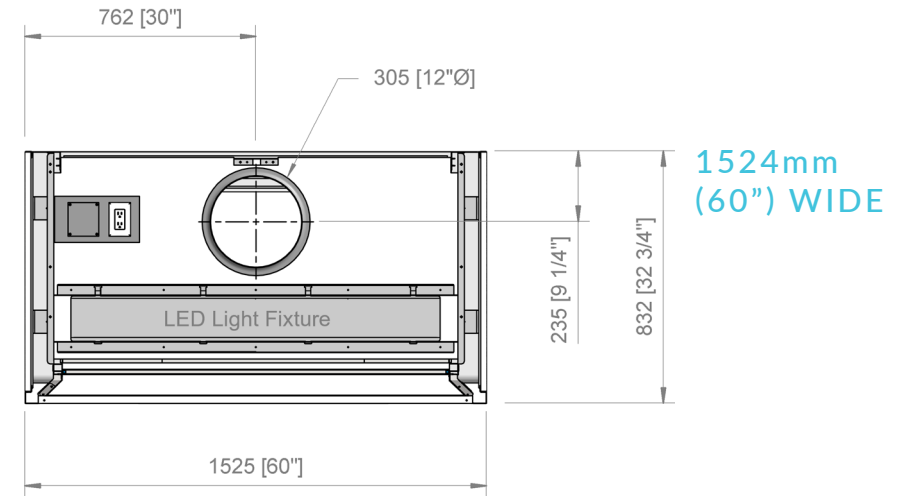
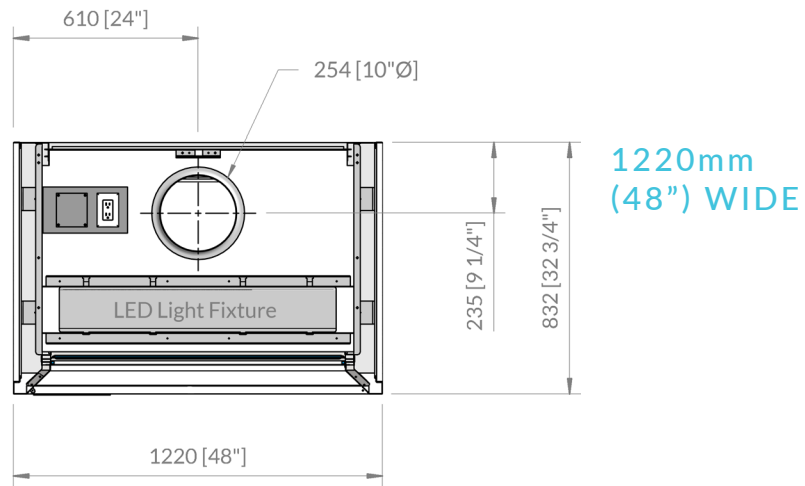
MECHANICAL SERVICE
FIXTURES 2



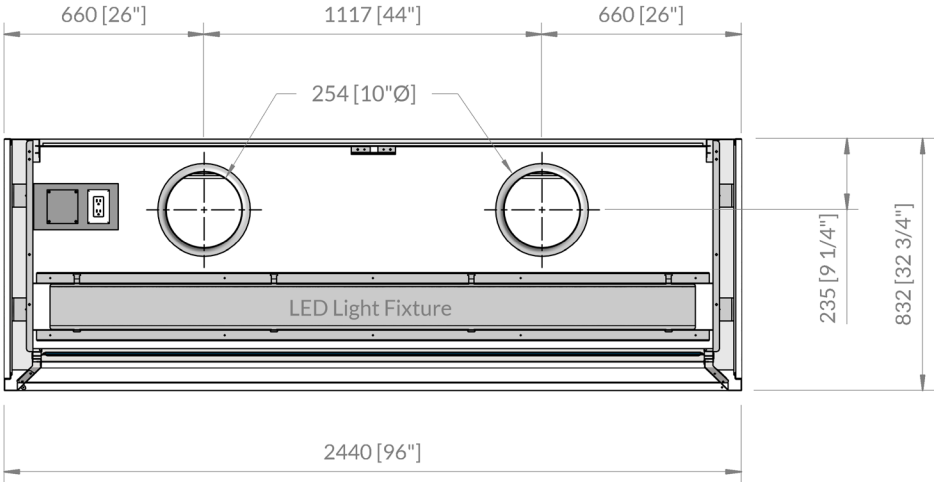
BASE CABINETS 5



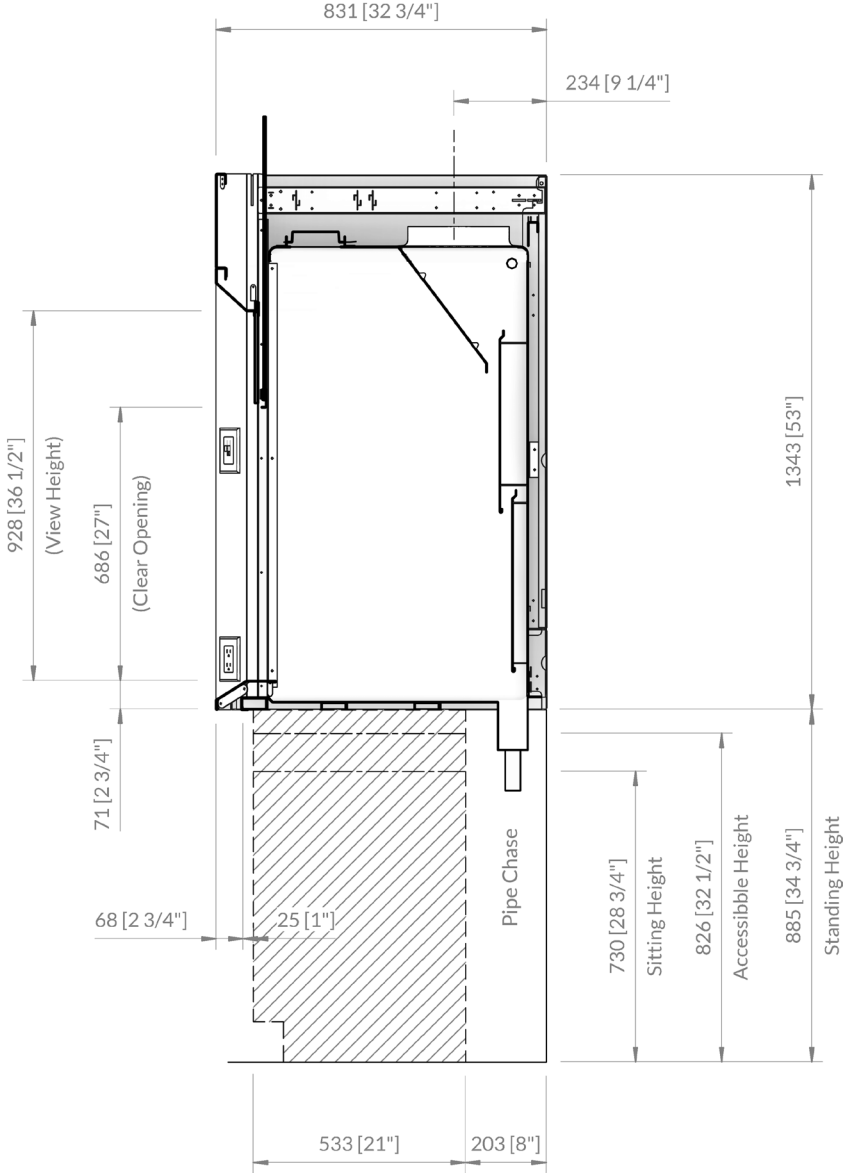
| PERCHLORIC ACID – CONSTANT AIR VOLUME (CAV)
EXHAUST COLLARS | LOCATIONS / DIAMETERS
VERTICAL RISING SASH



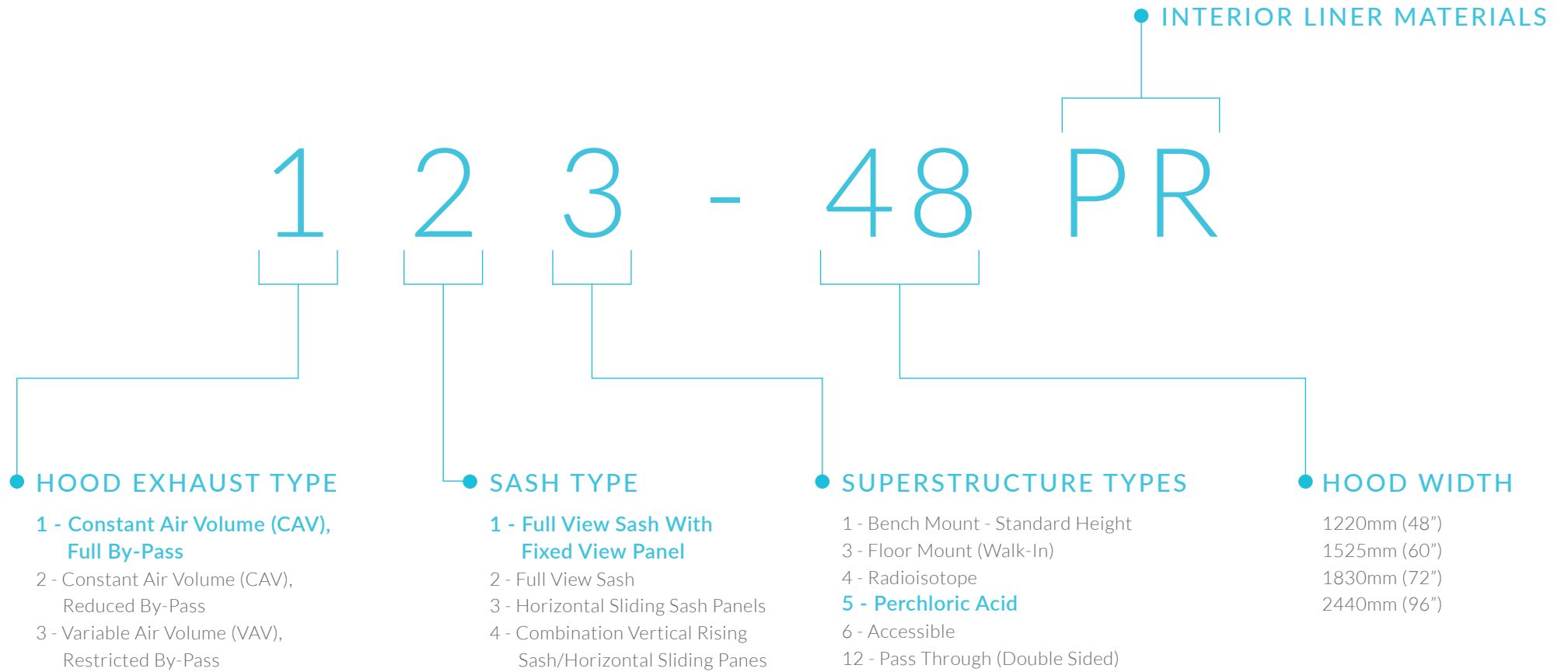
**|PERCHLORIC ACID – CONSTANT AIR VOLUME (CAV)
EXHAUST COLLARS | MECHANICAL PIPING ROUGH-INS
VERTICAL RISING SASH**



**2440mm
(96") WIDE**



| PERCHLORIC ACID – CONSTANT AIR VOLUME (CAV)
 CATALOG NUMBER EXPLANATION | INTERIOR LINER MATERIAL
 VERTICAL RISING 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.

SW-PA **Stainless Steel: Type 316 (SW6-PA) stainless steel, 16 gauge, number 4 finish, all welded seamless construction. Interior corners have a 3/4" radius and all welds are ground and polished. Liner has an integrally welded work surface with a 1/2" high anti-spill front lip and a full length rear integral drain trough with waste fitting. It is reinforced on the underside with plywood. Exhaust collar is type 316 stainless steel. Interior access panels are not included unless specifically required.**

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. Work surface is factory installed, mechanically fastened and silicone 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.

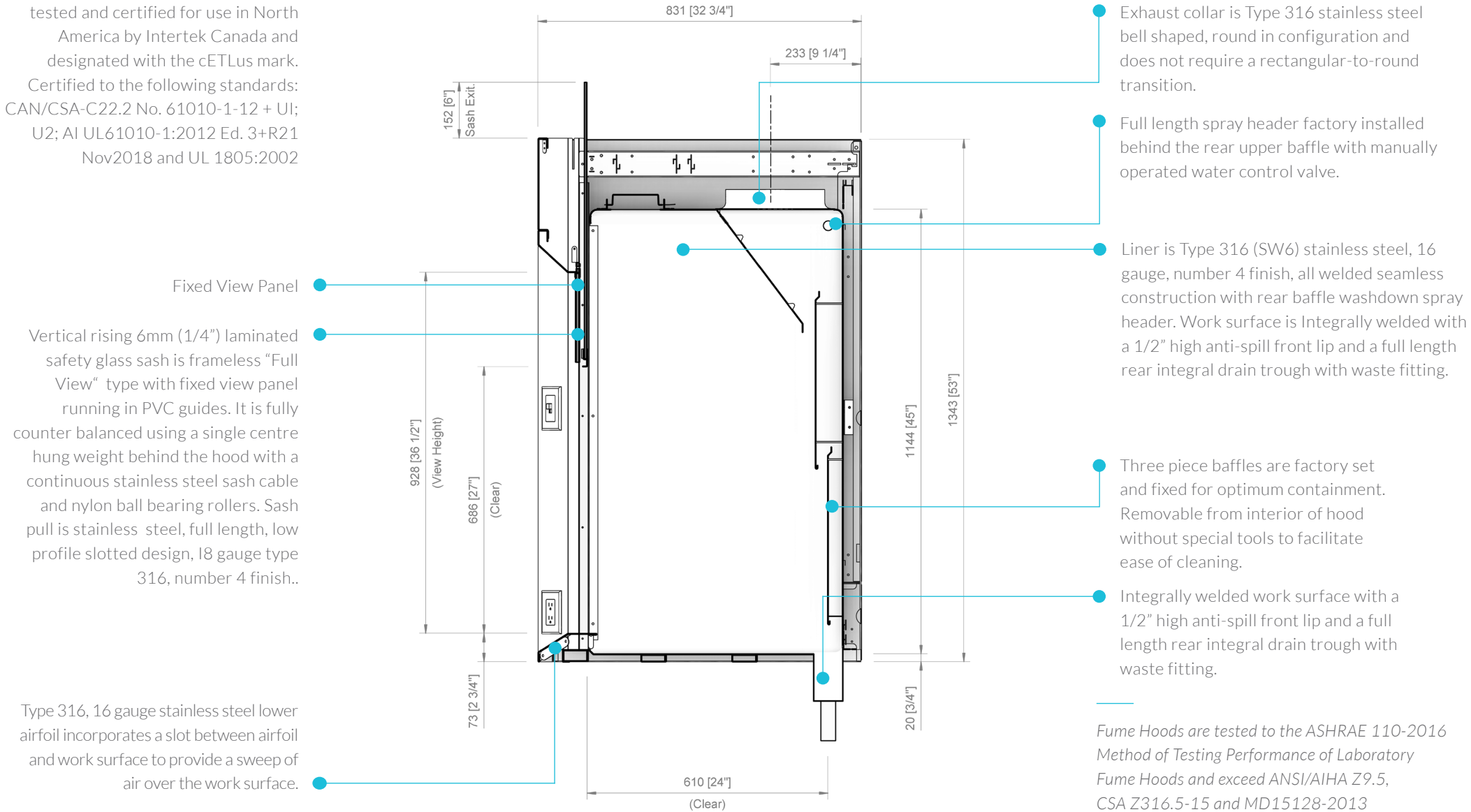
Technical specifications and chemical resistance chart are available upon request.

**| PERCHLORIC ACID
CONSTANT AIR VOLUME (CAV),
FULL BY-PASS VERTICAL RISING SASH**



**| PERCHLORIC ACID
CONSTANT AIR VOLUME (CAV), FULL BY-PASS
VERTICAL RISING SASH**

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**| PERCHLORIC ACID
CONSTANT AIR VOLUME (CAV), FULL BY-PASS
VERTICAL RISING SASH**



**1220mm
(48") WIDE**

Stainless Steel Type 316 (All Welded) 115-48SW6
Stainless Steel Type 304 (All Welded) 115-48SW4



**1525mm
(60") WIDE**

Stainless Steel Type 316 (All Welded) 115-60SW6
Stainless Steel Type 304 (All Welded) 115-60SW4



**1830mm
(72") WIDE**

Stainless Steel Type 316 (All Welded) 115-72SW6
Stainless Steel Type 304 (All Welded) 115-72SW4

| PERCHLORIC ACID
 CONSTANT AIR VOLUME (CAV), FULL BY-PASS
 VERTICAL RISING SASH



2440mm
 (96") WIDE

Stainless Steel Type 316 (All Welded) 115-96SW6
 Stainless Steel Type 304 (All Welded) 115-96SW4

- Base cabinets, work surfaces and plumbing fixtures are optional.

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

HOOD WIDTH		48"	60"	72"	96"
SASH OPENING*		7.30 sq. ft.	9.60 sq. ft.	11.80 sq. ft.	16.30 sq. ft.
SASH FULL OPEN (27")	100 FPM	730 @ .16	960 @ .22	1180 @ .29	1630 @ .23
	125 FPM	910 @ .30	1200 @ .29	1475 @ .35	2040 @ .32
SASH OPENING*		4.9 sq. ft.	6.4 sq. ft.	7.9 sq. ft.	10.9 sq. ft.
SASH 18" OPEN	100 FPM	490 @ .08	640 @ .12	790 @ .17	1090 @ .10
	120 FPM	610 @ .13	800 @ .18	990 @ .23	1360 @ .17

* Measured off the top of the work surface

PROJECT _____

WIDTH _____

QUANTITY _____

1 FUME HOOD AIRFLOW

- Constant Air Volume (CAV)

2 FUME HOOD TYPE

- Perchloric Acid

3 LINER MATERIAL

- S/S All Welded T316 (SW-PA6)

Refer to page 11 of the catalog
for liner material description.

- Ceiling Closure Panels
- Blower Switch (Wiring NIC)
- Sash Stop at 18"

Mechanical Services

Cup Sink

- 6"x3" Internally Welded.
T316 Stainless Steel

Base Cabinets Left Side

- Acid Storage
- Flammable Storage
- General Storage
- Table Frame

Additional Options



Pre-piping

- Above the hood
- Below the hood

Low Air Flow Alarm

- AFA500 (CAV Only)
- AFA1000 (CAV Only)
- AFA4000 (CAV Only)

Mechanical Services

Cup Sink

- 6"x3" Internally Welded.
T316 Stainless Steel

Base Cabinets Right Side

- Acid Storage
- Flammable Storage
- General Storage
- Table Frame

Additional Options

YOUR RESEARCH DRIVES OUR INNOVATION.





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