

DEDICATED TO DISCOVERY. INSPIRED BY INNOVATION.



HAWKINS
LABORATORY FUME HOODS



**PASS THROUGH (DOUBLE SIDED)
FUME HOOD – VERTICAL RISING SASHES
– CONSTANT AIR VOLUME**

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BENCH MOUNT FUME HOODS

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| STANDARD FEATURES

HOOD DESIGN

- Pass-through (double sided) fume hoods are designed to be used for teaching and demonstration where experiments can be observed and performed from both sides of the hood.
- Fume hood can also be used as a pass-through from two classrooms or the prep room to the classroom.

HOOD TYPE

- Fume hood is a Constant Air Volume Restricted By-pass type with two vertical rising sashes.
- Bench Mount
- 914mm (36"), 1218mm (48"), 1524mm (60") and 1829mm (72") 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 hard and smooth chemical resisting high-grade finish.

1 SUPERSTRUCTURE

- Heavy-duty galvanized steel framework, double wall construction, is rigid and self-supporting. Maximum wall thickness shall be 4 3/4".
- Exterior shell: Front 45° posts, side and upper fascia panels fabricated from 18 gauge sheet steel with a baked electrostatic powder coat finish.
- Access to mechanical service valves and electrical fixture boxes is by removable exterior side panels and an interior access panel.

2 INTERIOR ACCESS PANELS

- Fully framed and self-supporting
- Fabricated of the same material as the liner
- Flush mount and air tight
- Do not require gaskets.

3 SASHES

- Vertically rising sashes are 6mm (1/4") laminated safety glass, full view type, 930mm high (36 1/2") with a maximum opening of 710mm (27 1/2").
- They are equipped with a sash interlock which will only allow one sash to be opened at a time.
- Each sash is fitted with a sash stop at 450mm (18") open.
- Each sash is independently counter balanced using a counterweight running on plastic ball bearing pulleys and a stainless steel cable.

4 FRONT FACE OPENING

- Airfoil type, angled to eliminate eddies and promote smooth entry of air into the hood.
- Lower air foils are fabricated from 16 gauge, type 316 stainless steel, number 4 finish.

5 INTERIOR LINER MATERIALS

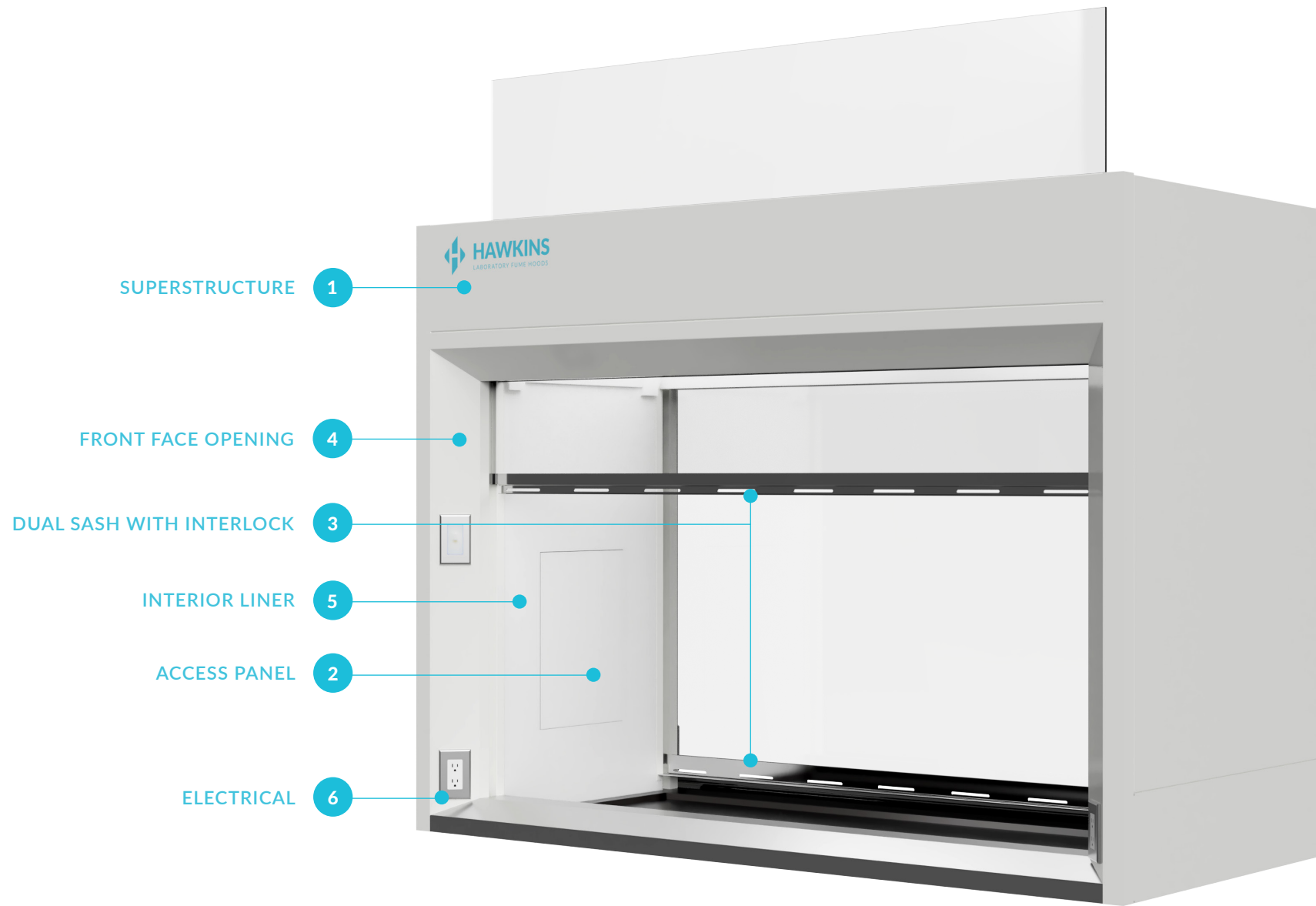
- Polyresin (PR): 6mm(1/4") thick, solid fibreglass reinforced pressed thermoset resin board.
- Material offers superior chemical, solvent and corrosion resistance, negligible moisture absorption.
- Flame spread is less than 20, smoke spread is less than 300 (UL 723/ASTM E84-80). Flexural strength is a minimum of 19,000 PSI (D790).
- Material is white in colour throughout its thickness thereby offering superior light levels.

6 ELECTRICAL

- Vapour sealed LED light fixture is installed on the outside top of fume hood interior with a removable housing for ease of lamp replacement.
- Light fixture is isolated from the fumehood interior by means of a laminated safety glass panel cemented and sealed in place.
- Four 120 volt 20 amp T-slot duplex grounding type receptacles, two on each face of the hood, are factory installed on the front posts of the hoods.
- A three way light switch is factory installed on each face of the hood.
- All fume hoods are factory pre-wired in a single circuit 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



| OPTIONS OVERVIEW

1 CEILING CLOSURE PANEL

- Designed to enclose the top of the hood to the underside ceiling
- 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

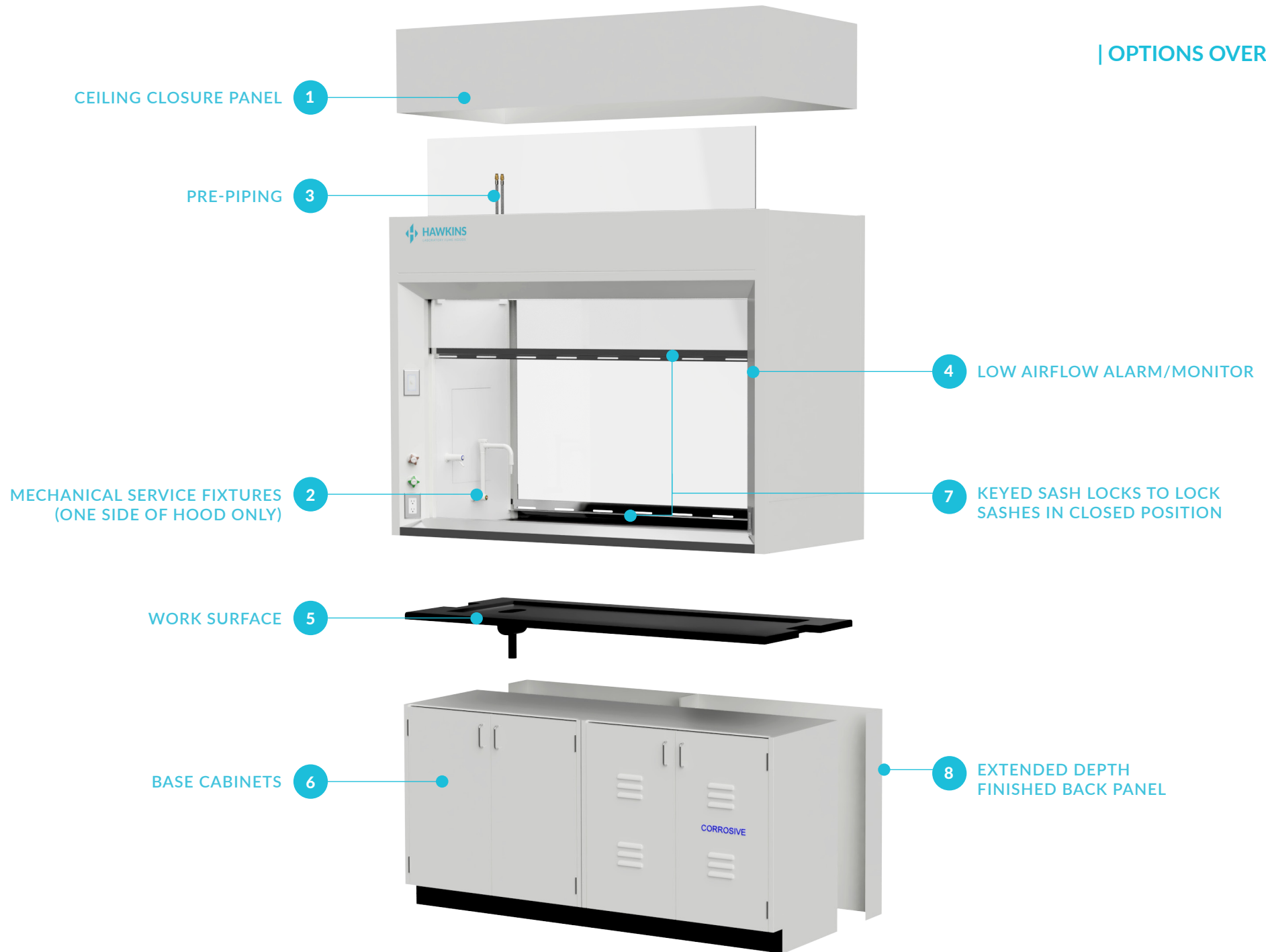
- Factory Installed on one face of hood only
- Built in airflow sensor continuously monitors face velocity
- LED display indicates Safe and Alarm conditions
- Pushbutton calibration and configuration, password protection

5 WORK SURFACES

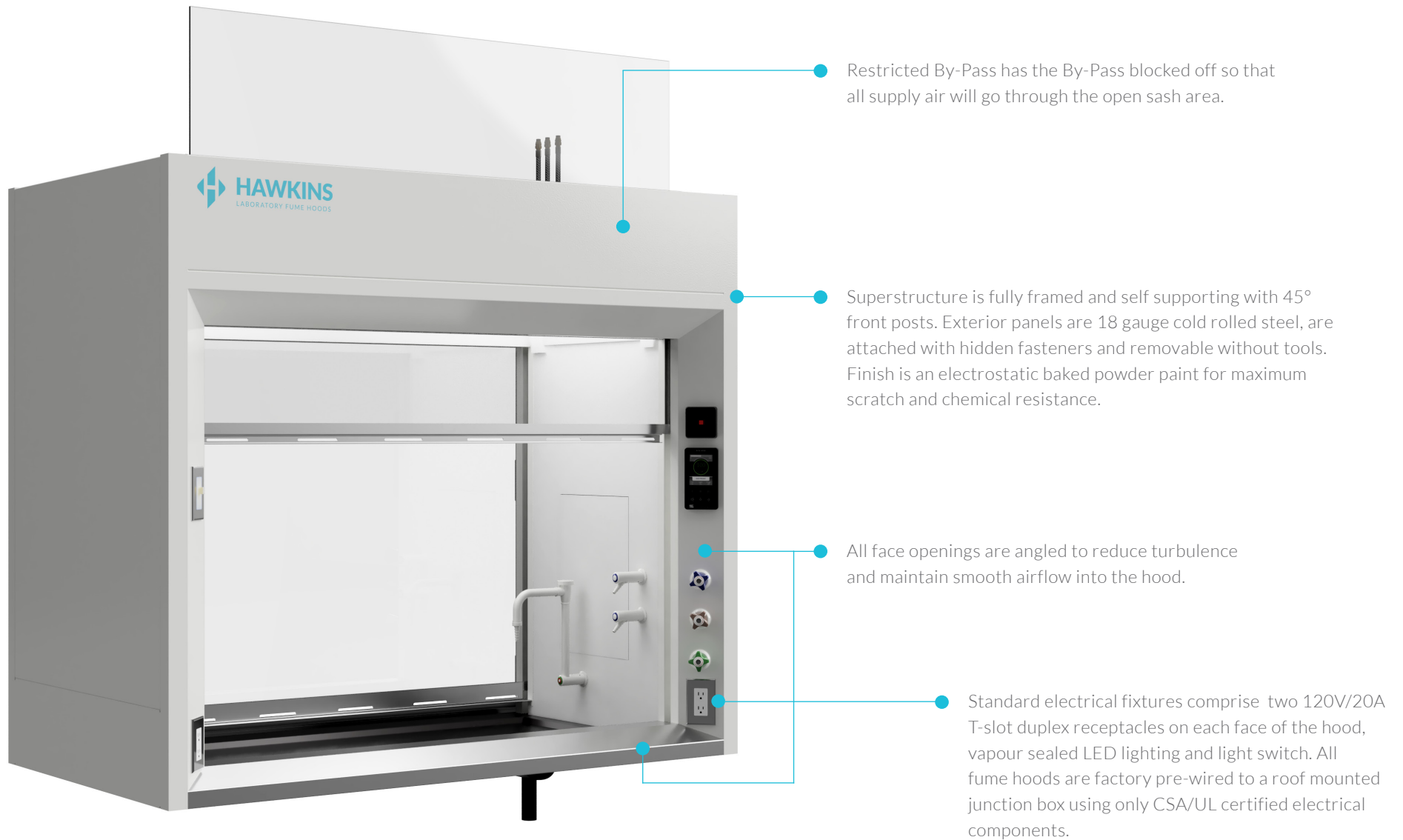
- Molded dished black solid epoxy
- Type 304 or type 316 stainless steel with anti spill edges
- Custom materials to suit specific requirements

6 BASE CABINETS

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



| CONSTANT AIR VOLUME (CAV), RESTRICTED BY-PASS

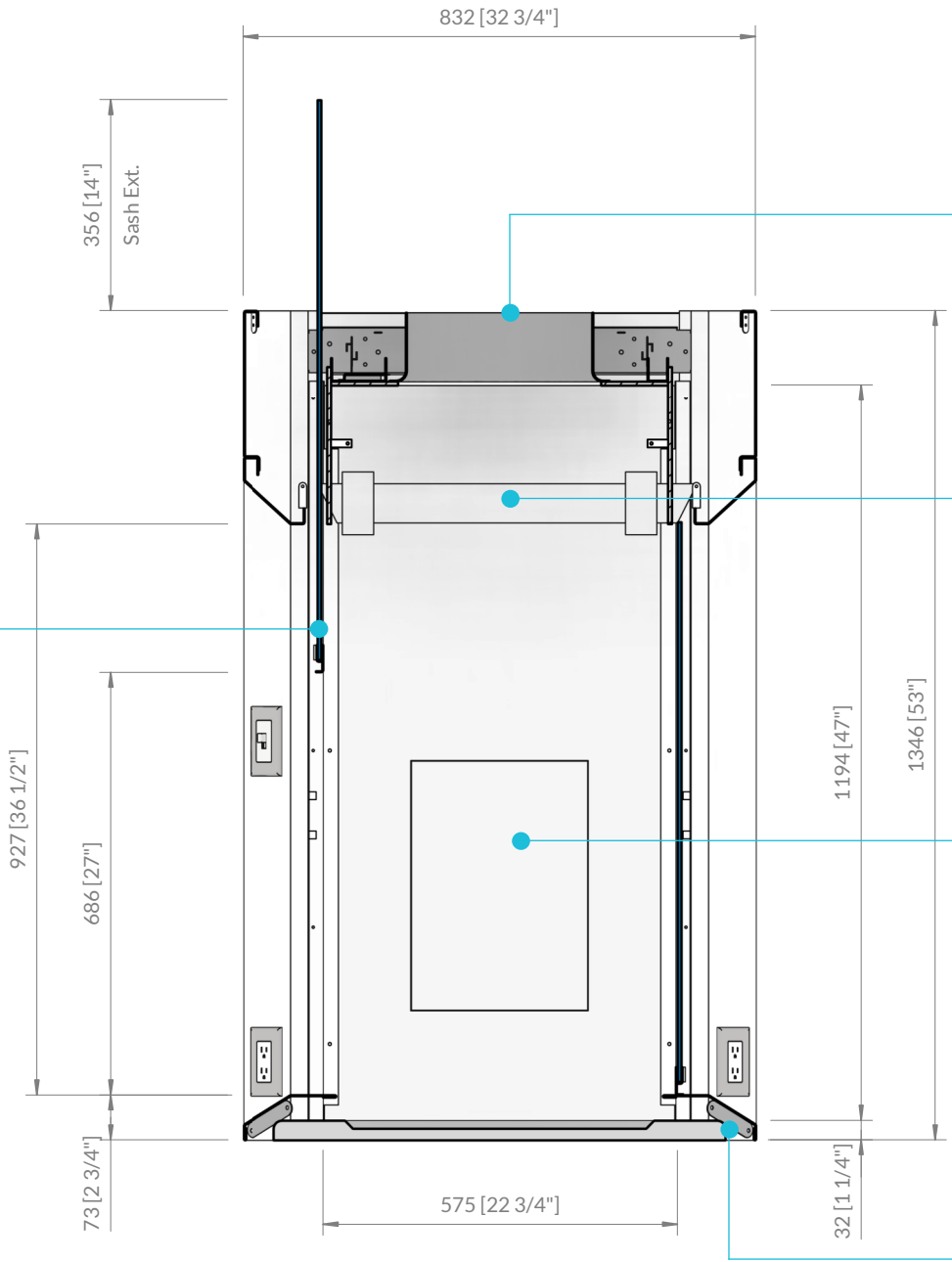


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Dual sashes are 6mm (1/4") laminated safety glass, full view type, 930mm high (36 1/2") with a maximum opening of 710mm (27 1/2"). Each sash is fitted with a sash stop at 450mm (18") open. Each sash is independently counter balanced using a counterweight running on plastic ball bearing pulleys and a stainless steel cable. Sash pull is stainless steel, full length, low profile slotted design, 18 gauge, type 316, number 4 finish.

NOTE : Hood is designed and intended to be used with only ONE sash open at on time



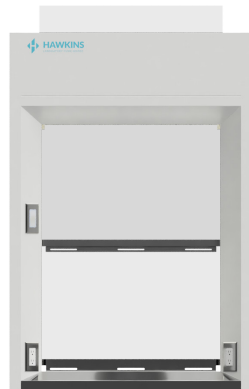
Exhaust collar is bell shaped, round in configuration and does not require a rectangular-to-round transition.

Sash interlock which will only allow one sash to opened at a time.

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

Type 316, 16 gauge stainless steel lower airfoils incorporates a slot between airfoil and work surface to provide a sweep of air over the work surface.

| CONSTANT AIR VOLUME (CAV), RESTRICTED BY-PASS



915mm (36") WIDE

Polyresin 2212-36PR



1525mm (60") WIDE

Polyresin 2212-60-PR



1830mm (72") WIDE

Polyresin 2212-72-PR



1220mm (48") WIDE

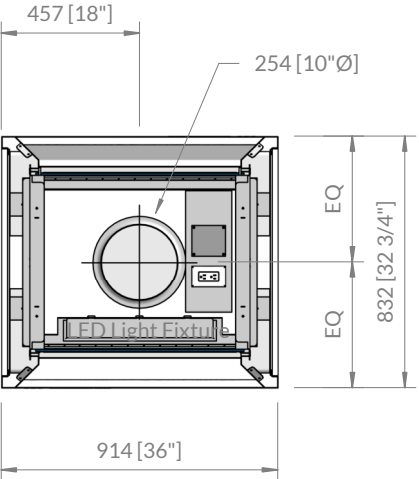
Polyresin 2212-48-PR

HOOD WIDTH		36"	48"	60"	72"
SASH OPENING *		5.00 sq. ft.	7.30 sq. ft.	9.60 sq. ft.	11.80 sq. ft.
SASH FULL OPEN (27")	80 FPM	400 @ .05	685 @ .14	770 @ .15	945 @ .22
	100 FPM	500 @ .08	730 @ .16	960 @ .22	1180 @ .29
SASH OPENING *		3.40 sq. ft.	4.90 sq. ft.	6.40 sq. ft.	7.90 sq. ft.
SASH 18" OPEN	80 FPM	270 @ .02	390 @ .06	510 @ .09	630 @ .13
	100 FPM	340 @ .04	490 @ .08	640 @ .13	790 @ .17

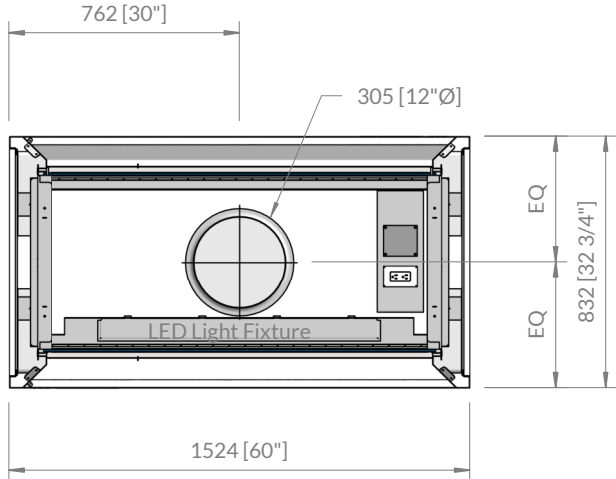
* Measured off the top of the work surface.

* Calculated with one sash fully closed.

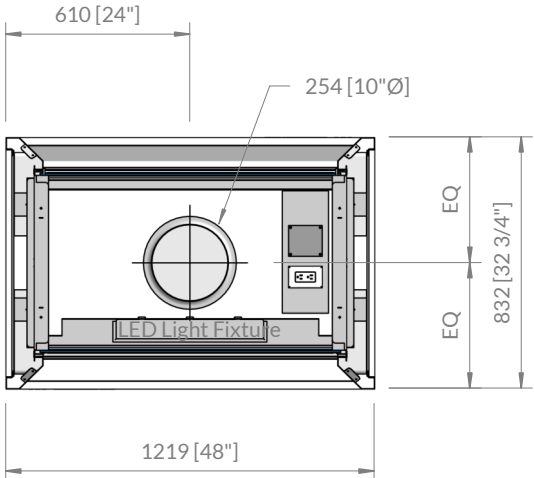
| EXHAUST COLLARS | LOCATIONS / DIAMETERS



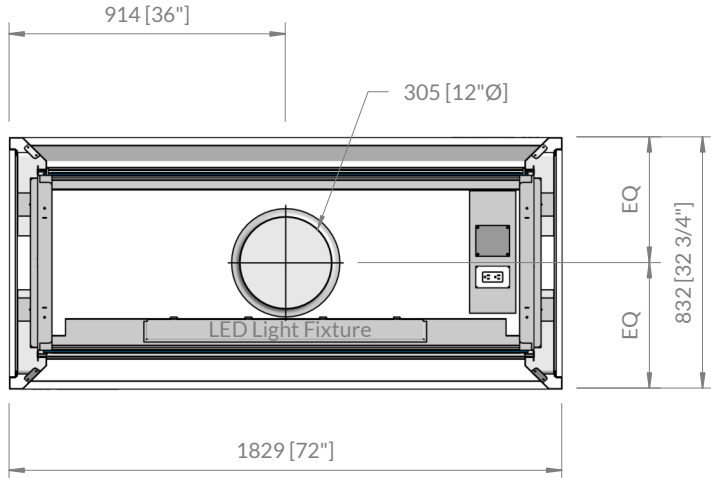
915mm (36") WIDE



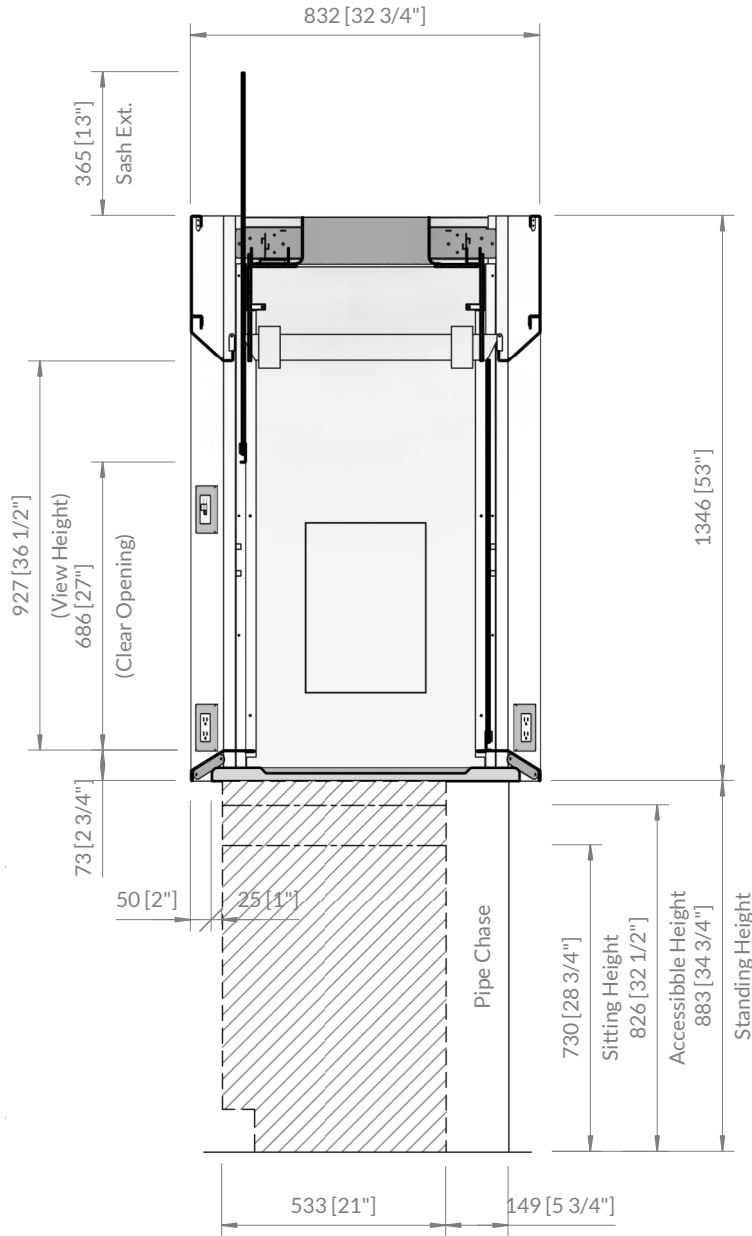
1525mm (60") WIDE



1220mm (48") WIDE



1830mm (72") WIDE



PROJECT _____

WIDTH _____

QUANTITY _____

1 FUME HOOD AIRFLOW

- Constant Air Volume

2 FUME HOOD TYPE

- Pass Through (Double Sided)

3 LINER MATERIAL

- Polyresin (PR)

Refer to page 04 of the catalog
for liner material description.

Pre-piping

- Above the hood
- Below the hood

Low Air Flow Alarm

- (Both Faces of Hood)
- (One Face of Hood Only)
 - AFA500
 - AFA1000

Mechanical Services Operated From

- (Both Faces of Hood)
- (One Face of Hood Only)

Cup Sink

- 6"x3" Polyethylene
- 6"x3" T316 Stainless Steel

Sash Stop at 18"

Base Cabinets Left Side

- Acid Storage
- Flammable Storage
- Standard Storage
- Table Frame

Additional Options



Ceiling Closure Panels

Blower Switch (Wiring NIC)

- (Both Faces of Hood)
- (One Face of Hood Only)

Mechanical Services Operated From

- (Both Faces of Hood)
- (One Face of Hood Only)

Cup Sink

- 6"x3" Polyethylene
- 6"x3" T316 Stainless Steel

Keyed Sash Locks

- (One Face of Hood Only)

Work Surface

- Epoxy
- Stainless Steel, T316

Base Cabinets Right Side

- Acid Storage
- Flammable Storage
- Standard Storage
- Table Frame
- Extended Depth Back Panels

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