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MANUFACTURING

ISO 9001:2015 REGISTERED

NOVAGUARD™ FUME HOODS

High **Performance**



QUALITY BY DESIGN

High Performance

Designed to deliver competitive containment performance and energy efficiency. Tested to both standard and modified ASHRAE 110-2016 procedures at face velocities as low as 50 fpm and has exceeded containment guidelines with levels below 0.01 ppm even with the sash fully raised to 28". Modified tests included hood loading with boxes and cans and simulated walk-by tests.



NovaGuard™ Fume Hoods

Designed for use in either Constant Air Volume (CAV) or Variable Air Volume (VAV) applications and are available with an optional automatic sash closure system and/or an integrated VAV system. We manufacture our NovaGuard™ fume hoods as outlined below. However, today's laboratories often require customization, and to meet your unique needs, we can configure and manufacture to meet your specific requirements. Simply contact us with your needs!



Safety

NovaGuard™ hoods provide the operator with a safe and reliable operating environment while meeting stringent performance requirements: UL Classified to UL1805, CSA Certified to CSA C22.2 No. 61010, UL Standard 61010-1 and tested in accordance with ASHRAE 110. These hoods are performance-ready for your demanding requirements.

Crossover Hood

Designed as a true crossover fume hood for research and teaching spaces. The NovaGuard™ provides your lab the durability, chemical resistance, and high efficiency energy savings of a research hood with the full view of a student hood. This hood builds resilience into your design and helps future-proof the laboratory for whatever the future brings.



Chain Drive Sash - Our heavy-duty chain and sprocket system delivers the easiest and most reliable sash operation available with an exceptionally long life span.

Stainless Steel Type 316 Exhaust Collar - Wide rectangular exhaust duct connection improves airflow distribution across hood width. Transition connection to round duct available.

Sash Design - 6mm laminated safety glass is provided with a stainless steel handle. Tempered glass, or polycarbonate are available for special applications.

Sash Systems - Hoods are available with vertical, combination (vertical/horizontal) and split postless type sashes.

Full Viewing Sash - Provides a clear and unobstructed side to side view of fume hood interior, with a 34" high viewing area.

Plumbing - Both corner posts are pre-punched to accept four service fittings per post. Factory pre-plumbing is available as well as plumbing fixtures from most manufacturers.

Self-Lowering Sash System - Sash latch temporarily secures the sash in the full open position for setup and tear down operations. When the latch is disengaged, the sash automatically returns to the 18" open operational position which offers extra protection to the operator and helps reduce energy consumption. Below 18" the sash is equally balanced and will remain where positioned.

Baffle Design - Downflow rear baffle is biased to the bottom, drawing fumes downward away from the user and counteracts the normal upward flow of vapors and prevents contaminated air build up behind the closed sash.

LED Lighting - All fume hoods have long lasting (50,000 hours) energy efficient UL/CSA approved LED lights separated from the fume hood chamber by 6mm safety glass.

Chemical Resistant Liner - Standard fiberglass reinforced polyester (FRP) has excellent strength, chemical resistance and flame spread. Many additional liner materials are also available to meet special requirements.

Alcoves - Recessed into the hood sidewalls, our alcoves provide extra worktop surface area as well as a space saving location for plumbing service outlets. This maximizes your interior space within the same exterior footprint. Optional shelf and/or glass alcove wall are also available.

Electrical - Two UL/CSA approved duplex receptacles provided for 120 volt service, one on each corner post. There are many additional powering options.

Performance Sash Handle - Powder coated stainless steel handle incorporates an airfoil design providing improved airflow along the lower edge of the sash to prevent turbulence from disturbing the process or user.

Coating Finish & Color - A thermosetting laboratory grade powder coating delivers exceptional chemical and scratch resistance, excellent hardness, adhesion, and a quality luster. The long lasting finish is available with over 20 standard color options, including multiple color schemes, and color matching capabilities.



Flush Sill Airfoil With Containment Trough - Low-profile hinged Type 316 powder coated stainless steel airfoil is moved rearward to allow air to flow into the critical low pressure zone between the user's torso and the hood chamber preventing fumes from building up in that area. Airfoil is flush with the work surface providing unobstructed access to the fume hood interior and includes a built-in containment trough as an additional level of user protection from spills. Power cords can be run through the sill to the electrical outlets on the hood posts.

Enhanced Ergonomics. Full View.

High efficiency fume hoods should be bright, open, and comfortable. Beyond conserving energy, they should be a pleasant working environment for your research. Mott's NovaGuard™ fume hood has been specifically designed to provide you with what's been missing in high efficiency fume hoods until now.

More Room

Alcoves in the sidewalls were created to maximize workspace. Additionally, the rectangular duct collar connection and high performance baffle further increase cubic space and square footage in the chamber without increasing the exterior width. Additional alcove shelving increases the available horizontal surfaces even more.



Energy Saving Options

Automatic Sash Closing System

For increased safety and energy savings our ASO2 Plus is an electronic occupancy sensor system that closes the sash automatically when the operator moves away from the hood.

Integrated VAV System

Make VAV controls and damper components a harmonious part of your fume hood with Mott's Integrated Variable Air Volume System. It includes a controller and a quick and precise actuator.



More Comfort

Sashes have been angled 5° creating a more natural approach and a more comfortable ergonomic posture for looking into the hood. Comfortable flush sills are powder coated corrosion resistant stainless steel and incorporate a trough to help contain spills.



Optional Accessories

Complement your fume hood's functionality with a wide variety of options including: alarms, apparatus rods, hazardous location electrical, pressure regulators, sash stops, sash pockets, pass-throughs, work surfaces, cupsinks, fire suppression and more...

More Light

The vision panel at the top front of the hood provides 44-1/2" of full viewing into the hood.

The side viewing window option brings additional light into the hood, increases sight lines and maximizes the sense of open lab space.

Even without side windows, bright energy efficient LED lighting offers an extremely uniform well-lit interior.



Base Configurations

We offer a full line of cabinets and tables that are designed as perfect base components for your fume hoods: table bases, insulated cabinets for solvents and flammables, corrosion resistant acid cabinets, vacuum pump cabinets or additional storage space.



Products **designed** for your lab.
Explore our **solutions**.

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