



Choosing the Right Laboratory Fume Hood

PROTECT YOUR PEOPLE. OPTIMIZE YOUR LAB. CONTROL YOUR COSTS.

Selecting the right laboratory fume hood isn't just a technical decision—it directly impacts safety, compliance, performance, and long-term operating costs. The right choice ensures your lab operates efficiently while protecting your team and meeting regulatory requirements.

At STX, we simplify the process and help you get it right the first time.

WHY IT MATTERS

- » **Keep Your Team Safe**
Proper containment protects against hazardous fumes, vapors, and particulates
- » **Stay Compliant**
Meet OSHA, ANSI/AIHA, and NFPA standards with confidence
- » **Reduce Energy Costs**
Avoid oversized systems and unnecessary airflow expenses
- » **Ensure Performance**
Match the hood to your specific application for reliable, long-term use

NOT ALL FUME HOODS ARE THE SAME

Choosing the wrong hood and exhaust system can lead to safety risks, inefficiencies, and costly corrections. We help you select the right solution based on:

- » Your chemicals and processes
- » Required performance and airflow
- » Lab layout and HVAC system
- » User needs and ergonomics

KEY CONSIDERATIONS WHEN SELECTING A FUME HOOD

- » Ducted vs. Ductless Systems
- » Constant Volume vs. Variable Air Volume (VAV)
- » Materials of Construction (e.g., steel vs. polypropylene)
- » Specialty Applications (perchloric acid, HF, High temperature, radioisotope, etc.)
- » Base Cabinets and Storage
- » Work Surfaces
- » Fixtures and Monitoring Devices
- » Ductwork Design
- » Blowers and Exhaust Systems

INSTALLATION CONSIDERATIONS

Proper installation is critical to performance and compliance:

- » Confirm HVAC capacity
- » Verify structural support for hood weight
- » Identify ceiling height
- » Ensure access to water, waste, and gas services
- » Confirm clear exhaust routing from hood to building exterior
- » Verify blower specifications (airflow + static pressure requirements)
- » Ensure proper blower mounting and vibration isolation
- » Confirm duct and stack configuration, including clearances and penetrations
- » Meet code requirements for exhaust stack height and location (e.g., typically 10 feet above the roofline and 25 feet from air intakes)

Use qualified professionals:

- » Experienced Lab Professionals (hood, duct, blower installation)
- » Licensed roofer (roof penetrations, curbs, and sealing)
- » Licensed electrician (power connections)
- » Licensed plumber (water, waste, and gas connections)

BUILT FOR EFFICIENCY

Modern fume hoods can significantly reduce operating costs when designed correctly:

- » Low-flow, high-performance designs
- » Variable Air Volume (VAV) systems
- » Smart airflow controls and monitoring

WORK WITH A PARTNER, NOT JUST A VENDOR

At STX, we take a consultative approach—helping you avoid common pitfalls while delivering a solution that performs from day one.

We don't just supply equipment – we ensure it performs as intended:

- » Application review and recommendations
- » Coordination with your design and engineering team
- » Proper installation and commissioning
- » Performance verification (ASHRAE 110 testing)

We guide you through your options, recommend the right system, and support you through installation and beyond.

LET'S GET STARTED

Planning a new lab or upgrading an existing one? Let's talk.

1-877-522-7927