

# HVFAA

## Horizontal Vertical Flame Chamber



Atlas' HVFAA Horizontal Vertical Flame Chamber accurately determines the flammability of aircraft cabin compartment materials and electric wire. The chamber is designed to perform Tirrill Bunsen burner tests in accordance with FAA's Aircraft Material Fire Test Handbook, Revision 3, DOT/FAA/TC-17/55, chapters A1, C1, D1, D2, and D8 (FAR 25.853, 25.855, 25.1359).

# HVFAA Capabilities and Details

The Atlas HVFAA Horizontal Vertical Flame Chamber provides the most accurate means for determining the flammability of aircraft cabin and cargo compartment materials, liners and waste stowage compartment materials, and electric wire. The large volume chamber prevents oxygen depletion during tests. Three digital timers with remote control make specimen event timing precise and convenient.

To ensure accurate and repeatable tests, an optional burner flame temperature verification kit is available. The HVFAA is the optimal instrument for conducting repeatable FAA flammability tests.



## Standard Features

- Gas control system
- Local gas pressure regulator and gauge
- Gas flow indicator lamps
- Three digital specimen event timers with remote control
- Automatic gas shut off during power failure
- Burner positioning apparatus
- Sliding tempered glass viewing window
- Hand access openings with doors for closed window access
- Interior light
- Meets or exceeds CE safety requirements
- High Temperature Exhaust Blower with Variable Speed Control

## Optional Features

- Flame Confirmation Kit (meets requirements of ASTM D5207)
- Specimen holder kits:
  - Horizontal Holder - for Horizontal Bunsen Burner Test for Cabin and Cargo Compartment Materials Chapter 3.0, DOT/FAA/AR-00/12
  - Vertical Holder - for Vertical Bunsen Burner Test for Cabin and Cargo Compartment Materials Chapter 1.0, DOT/FAA/AR-00/12
  - 45° Holder - for 45° Bunsen Burner Test for Cabin and Cargo Compartment Materials Chapter 2.0, DOT/FAA/AR-00/12
  - 60° Holder - for 60° Bunsen Burner Test for Electric Wire Chapter 4.0, DOT/FAA/AR-00/12

Some materials are not suitable for testing in Atlas flammability chambers due to the release of corrosive gasses when burned. Please contact your local Sales Representative for more information.

## Advantages

- Conforms to Aviation Fire Test Standards:  
Meets DOT/FAA/CT-89/15, Aircraft Material Fire Test Handbook (FAR 25.853, 25.855 and 25.1359) & others
- Easy Setup and Operation:  
Sliding/tilting burner mount, remote controlled timers
- Flexible Specimen Testing:  
Four easily interchangeable specimen holders available
- Large Volume, Draft-free Test Chamber:  
Large chamber (>0.5 m<sup>3</sup>) prevents oxygen depletion, draft-free side air vents
- Accurate Gas Control:  
Precision flowmeter and gas pressure regulator/gauge
- Flame Confirmation Kit:  
Allows accurate verification of test flame height and color
- Chamber Exhaust Blower System:  
Rapidly clears chamber of combustion byproducts between tests

## Technical Specifications

- Physical dimensions (W x H x D):  
Interior: 122cm (48") x 114cm (45") x 51cm (20")  
Exterior: 122cm (48") x 140cm (55") x 51cm (20")
- Weights: Bench: 129kg (285lbs) Shipping: 181kg (400lbs)
- Electrical: 120V, 60Hz, 1.5A or 230V, 50Hz, 0.75A
- Testing requires customer-supplied technical grade methane (minimum 98% purity) at 20-40 PSI