

SHELTERS, LABORATORIES, AND ENCLOSURES

The CAS Team believes that focusing on the details without losing sight of the goal is the integral piece of a successful project. With a combined 70 years of industrial client and regulatory support, we understand the challenges from design to operation. Our passion stems from our desire to provide a turnkey solution for our customers. This approach ensures a precise, cost-effective, and properly implemented project. The CAS Team is ready to serve you with commitment, integrity, and dedication.

Shelters/Enclosures

- Fixed
- Mobile

Ambient Air Gas Chromatographs

- BTEX
- PAMS
- TO-14
- Sulfurs
- VOCs

Industrial Gas Chromatographs

- VOCs
- Sulfurs
- Impurities

Support/Integration

- Manifolds
- Consumables
- Regulators
- Training
- Commissioning
- Installation
- Integration
- Maintenance
- Tubing, etc.

Simplicity in Engineering

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CAS designs and manufactures a complete range of standalone Laboratories, Shelters, Mobile Systems, and Enclosures for a wide variety of applications including process control, ambient air monitoring, and industrial fence line monitoring. This product line provides customers with LEED designed, energy-efficient, cost-effective solutions for any application where a stable environment is required. CAS products work in all applications, require minimal maintenance, and withstand nearly any environment. Optionally, our enclosures can be integrated with all instrumentation and support equipment, tested in advance at our manufacturing facility, and optimized for rapid deployment into the field.

CONTAINER STYLE SHELTER

For this style shelter, we utilize a 20' x 8' recycled sea-shipping container as the shell. This style shelter provides optimized environmental control with the safety, security, and strength for the harshest of environments.

The container shelter limits the initial cost of site development by limiting the infrastructure expenses required with traditional built structures.



Container Shelter designed for Near Road Monitoring



CAS Shelter showing stairs and roof railing

MOBILE SYSTEMS

CAS designs and builds a variety of mobile systems for multiple applications. Whether it is a trailer or fully integrated vehicle, CAS has an excellent solution for you.

Applications:

- Stack Testing
- Mobile Ambient Air Stations
- Research
- Mobile Laboratory

MONITORING SHELTERS

CAS Monitoring Shelters are designed specifically to house precision instrumentation. CAS understands how the slightest swing in temperature can affect crucial data. The shelters are constructed utilizing studless walls to provide maximum energy efficiency by reducing thermal bridging. The CAS shelters provide R-25 equivalent insulation.



18' Stack Testing Mobile Trailer constructed by CAS

CAS delivers the performance you need at the price you want.

Technical Specifications

All specifications standard unless otherwise noted



Shipping Container (applies only to container style shelters)

- Shipping containers are manufactured in accordance with:
 - International Organization for Standardization (ISO)
 - ISO – 1CC type steel dry containers
 - International Maritime Organization (IMO)
 - International Convention for Safe Containers (CSC) 1972-2007
 - CSC Article IV(2)
- Robust
- Weather-tite
- Manufactured with recycled material
- Standard 36" side door
- Double doors storage area
- Paint Color (selectable)

HVAC System (applies to all style shelters)

- Self-contained heating and cooling system
- 1.0 Ton (10,800Btu) with 3kW heating capacity
- 1.5 Ton (18,000Btu) with 5kW heating capacity (optional)
- 2.0 Ton (24,000Btu) with 5kW heating capacity (optional)
- Aluminum Finned Copper Coils
- Quiet Twin Blowers
- High Efficiency Rotary Compressor
- Green Refrigerant – R-410A Refrigerant-non ozone depleting (HFC)
- Galvanized zinc coated steel enclosure
- Automatic Condensate Disposal System
- Programmable Thermostat with auto-switch over
- Programmable HVAC Control Center with alarm outputs (Lag/Lead Controller) (optional)

Additional Options (applies to all style shelters)

- Mount for mast directly on container
- Telescoping Mast
- Pneumatic Telescoping Mast
- Windows
- Exit lights
- Gas Bottle Mounts

Roof Features (applies to all style shelters)

- Aluminum Modular Safety Railing (optional)
- Aluminum Railing Gate (optional)
- Galvanized Metal Roof Grating (optional)
- Fiberglass Roof Grating (optional)
- External Access Ladder (optional)
- Roof Access Stairs (optional)
- Internal Roof Access Hatch w/ Stairs (optional)
- Anti-climb protective cover (external ladder only) (optional)
- Roof penetrations (selectable) (optional)

Interior Features (applies to all style shelters)

- 8'x12' control room w/ 8'x8' storage area
- 8'x16' control room w/ 8'x4' storage area (optional)
- 8'x20' control room w/ no storage area (optional)
- Client customized control room and storage area available upon request (optional)
- Seamless Vinyl Flooring
- 8' workbench
- Instrument Rack
- Sampling Manifold (optional)
- Exhaust Manifold (optional)
- FRP finish interior walls
- R-25 Equivalent Insulation

Electrical System (applies to all style shelters)

- Electrical System meets or exceeds NEC Regulations
- Premium SquareD Electrical Components (major components)
- 100A 120/240V 1PH Electrical System
- 100A 120/240V 1PH Load Center, 20 circuit capacity, surface mount
- 100A 120/240V 1PH External Disconnect Box, NEMA 3R
- Metal Electrical Raceway, Surface Mount
- Fluorescent Light Fixtures, 2 bulb, T8
- LED Light Fixtures, 2 bulb, T8 (optional)
- Motion Sensor Flood Lights (optional)
- High Pressure Sodium Flood Lights (optional)
- Internal 120V 20A Duplex Outlets
- Internal 240V 20A Outlets (optional)
- External 120V 20A Outlets (optional)
- >100A, 3PH, Transformers, Switches, Panel Boards, Power Conditioners (optional)
- Off the grid systems (optional)