

One Source Environmental LLC Cleanroom Consulting/Testing

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They will expand, change or reconfigure easily to accommodate evolving requirements.

They adapt to a variety of filtration systems and lighting configurations.

They accept a wide variety of wall materials including soft clear vinyl, colored and anti-static vinyl, rigid ABS sheets, acrylic, screens and even aluminum panels.

Our cleanrooms can be completely disassembled and stored, expanded or reconfigured by adding or subtracting latch-together, lightweight modular sections.

modular cleanrooms meet the ISO 14644-1 classifications for ISO Class 8 (Class 100,000) to ISO Class 4 (Class 10) and can be custom designed to meet your particular application.



you can assemble a functional 10' x 10' cleanroom in less than one hour.



### Offers Many Uses

**Hospitals and Health Care** - Use for infectious disease control, inhalation and treatment rooms, in both positive and negative pressure environments. ultra-violet vinyls protect light-sensitive laboratory experiments.

**Semiconductor Manufacturing** - From mini-environments to large, self-contained cleanrooms, can provide a room of any size and classification. is designed to keep assembly areas free of contaminants and dust. Static-free and non-outgassing materials are also available.

**Industrial and Manufacturing** - Use to create machinery enclosures. Excellent for welding operations, laser procedures, paint operations and sound booths.

Medical Device and Pharmaceutical Manufacturing - Use for process isolation to prevent cross contamination and control humidity and temperature. can be adapted for ISO Class 8 (Class 100,000) to ISO Class 4 (Class 10) cleanrooms with positive or negative pressure.

**Hazardous Materials** - Set up area isolation for emergency toxic waste cleanup and HazMat handling.

Food and Beverage Preparation - adapts to virtually any configuration, including assembly lines and packaging. walls and anodized aluminum frames wash down quickly and easily.



Hospitals and Health Care



Medical Device/ Pharmaceutical Manufacturing



Hazardous Materials



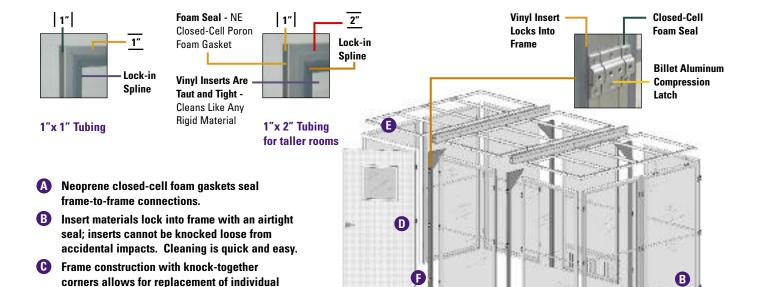
Semiconductor Manufacturing



Industrial and Manufacturing



Food and Beverage Preparation



cleanrooms assemble quickly with minimal use of tools! Many applications can be assembled in less than one hour. The latch-together system provides strong, positive connection at walls, corners, ceilings -virtually every connection. Because of the modular design, enclosures are equally effective in both permanent and temporary applications. They can be easily expanded or reconfigured to meet ever-changing demands.

**Basic Construction Features** 

# Wall Panel Insert Options



parts.

and lighting units.

frames are available.

Numerous door options to accommodate

individual uses; pre-hung for quick assembly.

Ceiling frames with integrated 2" T-grid in 2'x4'

standard openings latch into position in the same manner as the walls. The 2'x 4' openings can accommodate various types of filtration

Lightweight aluminum frames are available in

anodized clearcoat. Epoxy powder-coated

**simple locking system** means that panels install and remove easily.

wall panels are available in many types of materials in many combinations.

#### **OPTIONS:**

- 50-50 walls feature clear tops with opaque color bottoms.
- Thicknesses include .040, .060, .080 and .120 mils.
- Panel options include standard vinyl, static dissipative and non-outgassing, static dissipative vinyl.
- Colors include clear, frosted, amber tint, grey smoke tint, and opaque colors - blue, grey, white, black and tan.
- 1/8" thick acrylic and polycarbonate panels available in clear and many colors, as well as scratch resistant and anti-static coatings.
- Rigid PVC and ABS panels in various textures and colors.
- Laminated aluminum panels come in 1/8" and 1/4" thicknesses with various coating options.
- Polycarbonate thermo-insulated 1/4" insulated panels.
- insulated vinvl panels.

**doors** are pre-hung in their frames for quick and easy installation and are available in the same material as the walls.

Single and Double-framed ABS and Vinyl Swing Doors - Features include continuous airtight gear hinges for effortless movement, lever door handles, and foam seals to ensure complete closure. Options include handles with locking mechanisms and hydraulic closers.

**Sliding Doors** - Available in single and double panels with anodized aluminum roller track, and magnetic and vinyl sweep seals. Option includes automatic closing device.

**Strip Door** - Available in many widths, thicknesses and colors, clear/frost non-stick design for easy personnel and equipment passage.

**Bi-folding Curtain** - Available with anodized aluminum or stainless steel track. Options include various thicknesses and materials and a choice of magnetic or dual lock closers.



**ABS Single Swing Door** 



**Vinyl Single Swing Door** 



**Double Swing Door** 



**Sliding Door** 



**Strip Door** 



**Double Sliding Door** 

### Venting Options

**several different types** of air venting and exhaust systems for either positive or negative pressure rooms.



ABS Adjustable Sliding Grill - Can be adjusted to accommodate air flow requirements.



**Screen Mesh** - Vinyl coated, non-particulating. screen mesh, as an option on vinyl inserts only.



Open Air Space - Framed open air space available with vinyl flap to seal opening when room is not pressurized.



Floor Cleats secure cleanroom structures firmly to the floor and ensure a proper seal. These are installed at all joints of the walls.

To insure a proper seal and safe operation of your cleanroom all walls should be attached securely to the floor. features several different attachment systems, all of which can be installed temporarily using structural adhesive foam tape or permanently by bolting to existing floors.

#### FLOOR, WALL & CEILING ATTACHMENTS



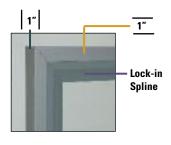
**U-track** - Installs on walls, holding panels in place.



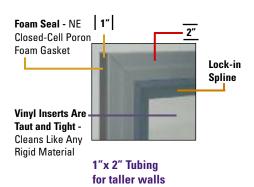
Angle Fasteners - Can be installed on inside or outside of walls, or both if desired.



Angle and Face Plate - Allows wall to be fastened to existing wall with face plate covering gaps for cleanliness.



1"x 1" Tubing



wall panels can be used to divide existing rooms or create rooms utilizing existing suspended ceilings. They attach easily and secure to existing ceilings, floors and walls with various wall fastening systems. This system offers an economical and attractive alternative to high cost construction that often requires permits. walls can also be designed as permanent or moveable walls for use as safety or privacy screens.



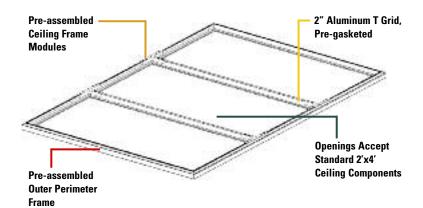
Free-stand panels can serve as privacy screens or safety dividers. Black panels confine laser procedures. Amber confines welding procedures.



**Wall divisions of any size panel** can be easily moved or added for future expansion.

### **Greater Strength, Larger Rooms**

The standard ceiling is a fully integrated 2" T-bar. When assembling prefabricated modules, simply set the ceiling assembly onto the room and latch it down. Ceiling accepts standard 2' x 4' ceiling tiles and components. Ceiling options include all-vinyl ceilings in both clear and colored materials, as well as framed openings for HEPAs and lights.



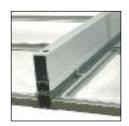


The standard suspended ceiling structure can accommodate limited, medium and heavy ceiling load needs. The module frame components are structurally designed for easy assembly and able to adapt to various room configurations.

# Ceiling Support Options



Medium-duty aluminum support struts measuring 2"x 4" are integrated between ceiling panels for room widths up to 16 feet wide with limited ceiling loads.



Stiffeners can be added to aluminum struts measuring 2" x 4" to accommodate larger rooms up to 18 feet wide with larger ceiling loads.



Heavy-duty truss systems can be added to standard struts to accommodate spans up to 21 feet wide and heavier ceiling loads.



Threaded rod suspenders support ceiling frames or struts from any existing structure above for larger rooms of any size. Ceiling loads are limited only by the number of attachments and the strength of the existing ceiling.



Ceiling to Strut Connector is used to connect existing ceiling frames to standard struts.



Ceiling Tile Hold Down is used to keep ceiling tiles from lifting and breaking the seal from the ceiling frames.



**Dual-Pane telescoping windows** allow you to build a quality cleanroom in a minimal amount of space.

Standard Sizes: Height 7'-9', 8'-12'

Width 2', 3', 4', and 5'

Door Modules With Strips, Bi-fold Curtains and Frame Swing Doors are available.



The Dual-Pane telescoping panels expand from seven to as large as nine feet in seconds, using a compression latch locking mechanism. Custom widths and heights are also available.

### **Telescopes Easily To Fit Existing Ceilings.**

**telescoping walls** are designed for temporary isolation enclo-sures and dividers. They are ideal for maintenance work within functioning cleanrooms. They are lightweight and set up in seconds. Double-sweep seals between sliding frames and closed-cell gasketing ensure additional seals. Custom heights, frame finishes, gasketing and latches are available for different applications.

#### **FEATURES:**

- Quarter-inch closed-cell foam conforms to ceiling for airtight fit.
- Chemical resistant neoprene seal creates airtight seal on sides.
- Vinyl sweep maintains seal between panes.
- Easy-to-operate compression latches secure panes.
- A simple twist of locking knobs adjusts panels from 7' to 9' high in seconds.
- Vinyl panels snap into frame for an airtight seal (other materials available).
- Durable, lightweight, anodized aluminum frame.



Corner Seal



**Foot with Leveler** 



C-Channel Ceiling Attachment



T-Grid Ceiling Attachment

# Options And Accessories For Projects



Flange glove or exhaust ports can be easily adapted to system.

#### **WALL ACCESSORIES OPTIONS:**

- Glove ports
- Pass-throughs
- Sliding or swinging access panels
- Shelving
- Equipment access ports
- Portable transportation carts
- Strip conveyor openings
- Epoxy powder-coated framing



transportation carts, designed for safe and easy transportation of panels, can be custom sized to fit your factory doorways.

**rooms and enclosures** can be designed in all shapes and sizes, configured with internal and external anterooms or dividers. The possibilities are endless!







Mini-environments



**Industrial Applications** 



Production Showrooms, Tradeshow Displays

### **Architectural Specifications**

#### **Wall and Ceiling Panels**

Panels shall be fabricated for fast, clean installation; modular and interchangeable for future expansion. Frames are extruded 1" tubing clear finished anodized aluminum or epoxy powder-coated white. Frame shall interconnect using compression tongue latches unless otherwise specified.

Panel inserts are standard .040 mil, optically clear flexible vinyl, installed using a fully gasketed bonded hook-bead system to provide an airtight seal. Other types of wall inserts available. Refer to page 2 for additional information.

Flame retardancy meets UL 94 V-0 and NFPA 701 flame test criteria. Some insert panel materials will meet more stringent flame tests. Consult with factory for your requirements.

#### **Structural Posts**

Shall be extruded 6063-T5 clear finished anodized aluminum. Posts function as corner connectors for wall panels and as supports for ceiling joists. Posts also designed to serve as raceways for electrical, computer and telephone cable lines.

#### **Doors and Frames**

Shall be pre-hung in frames extruded from 6063-T5 clear finished anodized aluminum and/or epoxy powder-coated finishes. Many types of doors are available. Refer to door section on page 3.

### Warranty

#### Warrant

warranty for products to be free of manufacturing defects and against product failure of any kind for a period of one year from date of ship-ment. This includes premature yellowing or curling of strips (excluding those components that do not have UV protection - see sales rep for details). This warranty is limited to the repair or replacement of vinyl strips, vinyl panels or softwall materials and/or attaching hardware, and does not include damage resulting from accident or malicious misuse. This warranty further applies only when the recommended material thickness and width are used for the originally specified application. Further, it applies only to doors, softwalls or frame systems which are properly installed in accordance with Simplex installation instructions. Additional extended warranty may be avail-able on certain applications. See individual application sheets or ask your representative. lifetime guarantee applies to first 3 inches of strip where stress is the greatest and attaches to the mounting hardware. Remainder of strip applies to 1 year warranty.



**Expect a Full Measure of Quality.**