

Softwall Cleanroom

Specification

FRAMING:

Extruded aluminum posts with leveling foot under each post attached directly to an aluminum box beam acting as a rim joist. Between the rim joists, box beams are placed four feet on centers and attached to the rim joist using double locking devices. The maximum span for the box beam is 20 feet.

Between the box beam joists, cross runners are attached nominally 25" on centers. Each cross runner connects to the box beam using a locking connector. Ledge extrusions are installed on each box beam to form a supporting ledge for placement of filters, tile, and light fixtures.

FILTERS:

The self-powered ceiling grid module (ENVIRCO Model MAC 10 2 ft. x 4 ft. XL) will be of modular design, allowing fit in a standard 2 ft x 4 ft T-bar ceiling grid geometry. (2ft. x 2ft., 2ft. x 3ft., and 2ft. x 3.5ft. sizes also available.) Total height of the complete unit (excluding optional accessories) shall be less than 13.00 in. (330 mm). Voltage shall be 120 (277 optional). Full load amps shall not exceed 2.8 amps.

Envirco Mac 10 IQ units may also be used.

FIXTURES:

Light fixtures shall be cleanroom rated, sealed to the grid system, four lamp, and provided with electronic ballasts.

SOFTWALL CURTAINS:

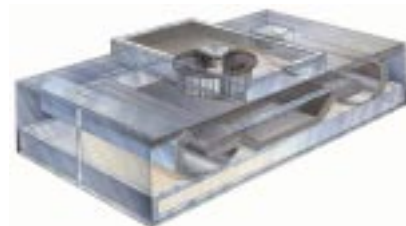
Standard clear 40 mil vinyl shall be attached to rim joist box beam without tools.



HARDWALL:

Hard walls shall be composed of aluminum vertical support members attached to the box beam rim joist and 1/4" panels. Panels shall be: a) clear acrylic sheet or b) Melamine coated medium density fiber (MDF) or c) aluminum panel with polyurethane finish.

Hardwalls shall be removable at any point by removing one vertical member allowing for an eight foot clear opening.



Envirco MAC 10 IQ

Fan Filter Units	size	nominal cfm	hp	120v FLA
Envirco MAC 10 IQ	23 5/8 x 47 5/8	650	1/3	3.4
Envirco MAC 10 XL	23 5/8 x 47 5/8	650	1/5	2.8

For more information on Envirco filters, visit www.envirco.com

Lighting

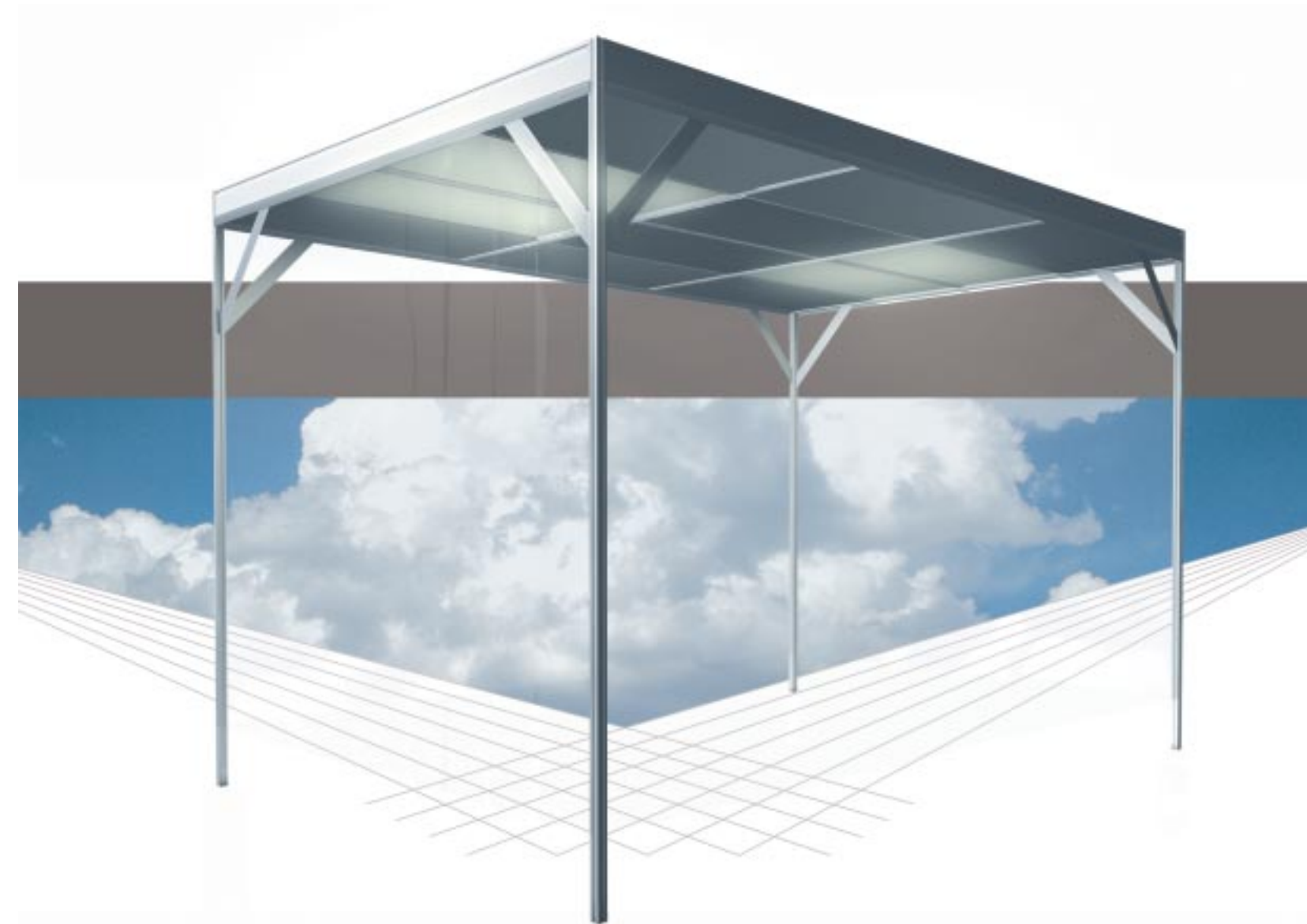
- 2x4 Lay-in fixtures with electronic ballasts are common with softwall systems

Size

- 18' width by any length
- Ceiling height to 10'

Options

- walk-on ceiling
- seismic code bracing
- curtain options
- reverse airflow system for dust contamination
- caster mount on smaller size units



Call us at **(651) 628-0056** or visit us at www.gerbig.com to discuss the specific requirements of your project or to learn more about our products and services.

catalog SW103

SINCE 1985

WE OFFER CLEANROOM DESIGN ♦ MODULAR CLEANROOM DESIGN & MANUFACTURE ♦ FACILITY QUALIFICATION



AIRECELL® SYSTEMS

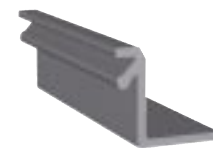
MODULAR CLEANROOMS
SOFTWALL SYSTEMS
MICRO ENVIRONMENTS
CLEAN WORKSTATIONS
CLEAN WARDROBES

CLEAN STORAGE CABINETS
CUSTOM DESIGNS
PASS-THRU
CEILING SYSTEMS
CERTIFICATION

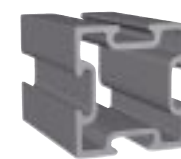
Low cost
Quick installation
Simple, inexpensive modification
Energy cost savings



Expansion is made easy with Airecell® extrusions



Ledge Extrusion



Post Extrusion



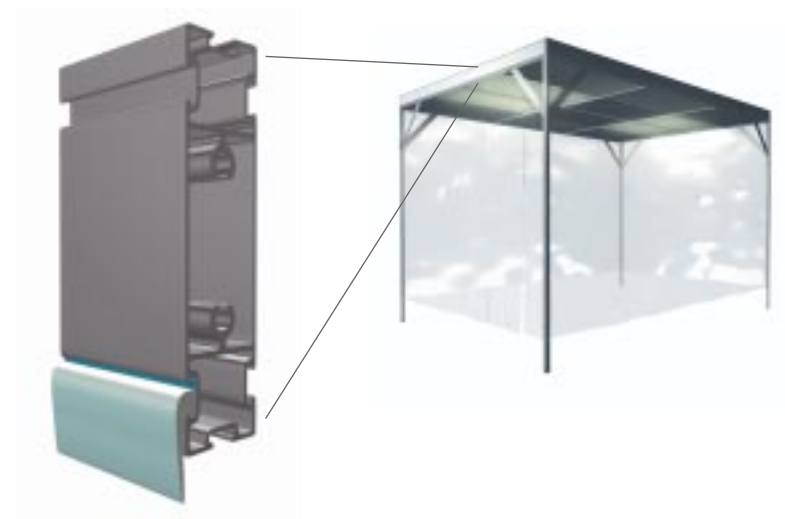
Cross Tee Extrusion



Box Beam Extrusion



Vinyl curtain fits all AireCell® extrusions.



Gerbig Engineering Company designs and manufactures AireCell modular cleanrooms. These cost-effective, energy-saving systems are engineered for fast installation and easy, inexpensive modification.

EASY INSTALLATION

The new AireCell softwall system is composed of a frame built with only four aluminum extrusions. These four extrusions are: the box beam, ledge, cross tee, and post. All extrusions attach to one another with only an Allen wrench. Knee braces, attached with standard bolts, are used with posts to prevent swaying.

After the framing is constructed, curtains are then attached to the aluminum box beam and held in place with a polyurethane cord retainer. No tools are required. If desired, the corners may be attached to the posts with grommets and bolts.

FLEXIBILITY

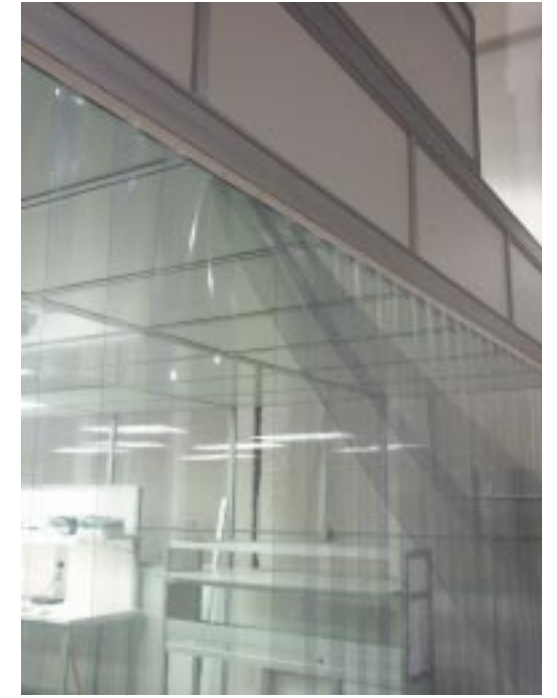
The Airecell softwall system offers total flexibility because it can be configured many ways. After laying out a simple floor plan design (using Airecell box beams as the perimeter) complete the ceiling grid pattern using ledges, beams, and cross tees.

EASY EXPANSION

At any time, Owners may expand the softwall room in any direction because the perimeter beam is symmetrical, allowing simple addition of beams, ledges, cross tees and posts.



This AireCell® Softwall cleanroom features plenum and fan system for fluid seal filtration. This unit is on display at Gerbig Engineering Company location.



This cleanroom features a strip curtain wall on one side, one of several wall options.

HARDWALL MATERIAL OPTIONS

With the AireCell softwall system, it's easy to change any or all walls to hardwall construction. The Curtain wall is simply removed, leaving no holes or other markings. All ceiling components have the exclusive AireCell extruded profile for attachment of additional AireCell extrusions. The AireCell hardwall system can use any 1/4" panel material. Common wall materials are: aluminum pre-coated panels; acrylic or polycarbonate sheeting; or Melamine over medium density fiber (MDF).

SOFTWALL MATERIAL OPTIONS

Several types of curtains are available for the AireCell system. The most commonly used material is 40 mil clear vinyl attached to a custom extrusion designed with the AireCell profile. Other softwall materials include: ESD safe vinyl, ultra low out-gassing materials, yellow and black vinyl.

Strip curtains are used for door ways and access, and come in 6", 8", and 12" strips. More information on curtains can be obtained at www.traxindprod.com.

FAN POWERED HEPA FILTERS

AireCell softwall systems use fan-filter units by Enviroco. We offer two types; MAC-10 IQ and MAC-10 XL. Both are nominally 2' by 4' and deliver about 650 cfm of HEPA filtered air. HEPA filters for each unit are scanned and guaranteed to be 99.99% efficient at 0.3 microns. Both units are exceptionally quiet and use Enviroco's patented sound reduction technique.

The IQ unit uses a DC motor with integral rectification that allows for constant airflow as the filter loads over time. In addition, the IQ unit has built-in speed adjustment. Power consumption for this unit is extremely low and pays for the price premium in an estimated two years.

The XL unit uses a 1/5 Hp induction motor and comes standard with a three speed switch.