

# A-WALL<sup>TM</sup> BUILDING SYSTEMS



*The Flexible Alternative to  
Permanent Construction*



**Pre-Engineered In-Plant and Outdoor Buildings**

## Common Sense Construction

A-WALL was developed more than three decades ago using a common sense approach to creating a truly “pre-engineered” building system. Modular, in-plant buildings were available then too, but had significant limitations. Wiring could only be installed in hollow posts at the panel connections. These narrow posts limited the number, type and location of wiring devices needed in the building. They also created acoustical voids at the panel connections. This allowed sound to penetrate the wall. Furthermore, all wiring had to be done on-site, with the electrician supplying the wire.

A-WALL panels don't require hollow wiring posts. They are constructed like a permanent wall and allow virtually unlimited wiring flexibility. Switches and outlets can be installed at the factory to reduce assembly time on-site. And without wiring posts, you enjoy a quieter building. These unique benefits earned A-WALL a federal patent... And since, earned the respect of thousands of A-WALL customers worldwide.

## Quiet, Fire Safe Construction

Interior walls have been built using gypsum wall board bonded to studs for nearly a century. Gypsum is durable, fire retardant, has excellent acoustical properties and is easily repaired if damaged. The standard A-WALL panel is built in the same way.

## Design Versatility Without Delays

Throughout this catalog you will see “systems” that represent combinations of standard A-WALL components configured to meet typical in-plant building needs. However, when your project requires a special design or environmental controls, there are infinite ways to integrate these components and accessories to meet your project's specific needs.

## Fast, Trouble-Free Installation

A-WALL Buildings require 20% fewer parts than comparable building systems and arrive with detailed instructions and drawings. Your crew can achieve a professional looking installation using common hand tools. If you prefer, your local A-WALL dealer can provide you with a turn-key project using their experienced installers.

## Total Flexibility

As your needs change, so does A-WALL. Pre-engineered A-WALL panels are interchangeable and 100% reusable. Your building can be expanded, rearranged or relocated to a new location.

## Significant Tax Benefits

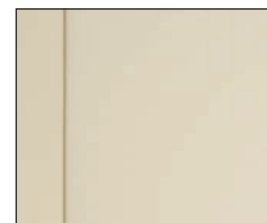
Pre-engineered in-plant buildings are generally considered capital equipment and not a permanent improvement to your facility. As equipment, A-WALL qualifies for 7 year, accelerated depreciation compared to permanent construction's 39 years. This rapid depreciation gives A-WALL a significant price advantage.

**For product updates, design ideas and a gallery of unique project photos, visit [www.a-wall.com](http://www.a-wall.com)**

## Panel Finishes

A-WALL panels are factory-finished for lasting durability. Vertical panel framing components are color coordinated as shown below for a monolithic, permanent appearance. Custom panel and framing colors are also readily available. Window, door and accent trim is bronze for easy maintenance and aesthetic definition.

### Vinyl Clad Gypsum



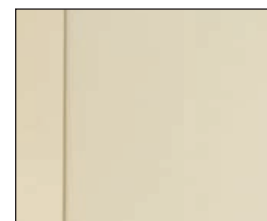
6 mil., Class A fire rated, stipple textured vinyl. Bone and white are standard.

### FRP Clad Gypsum



Pebble textured, Class C fire rated, Fiberglass Reinforced Plastic. Khaki and white are standard. Smooth and Class A also available.

### Steel Clad Gypsum



Smooth, 24 gauge, galvanized, painted steel. Almond and white are standard.

**Choose A-WALL unfinished gypsum panels for field painting to your specific corporate color scheme.**

## Electrical Devices

Standard A-WALL panels are equipped with three independent wiring cavities. This allows you to choose the locations of your switches and receptacles, as well as phone and data boxes. In fact, several devices can be installed in a single wall panel when necessary. If additional devices are required after the modular office is installed, these cavities facilitate concealed wiring using common, “off-the-shelf” boxes and conduit.



Light Switch



Duplex Receptacle



Phone and Data Boxes



2-Gang Light Switch



Quad Receptacle

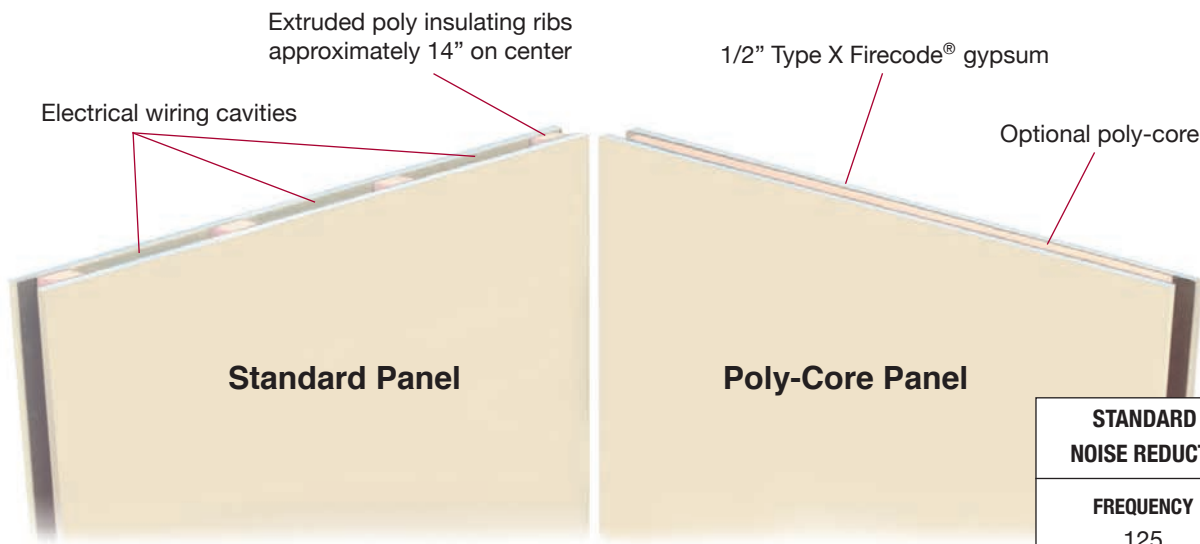


Low Voltage Boxes



## Panel Construction

# PANELS



STANDARD A-WALL PANEL NOISE REDUCTION IN DECIBELS	
FREQUENCY	DECIBELS
125	27
250	27
500	37
1000	39
2000	48
4000	48
STC = 32	

A-WALL panels are 2-5/8" thick, 4' wide and either 8' or 9' high. They can be cut to specific widths or stacked to meet the dimensional needs of your project. The standard panel is constructed of Type X, Firecode® gypsum board with a specially formulated core. It is a superior fire barrier compared to regular core board. The gypsum panel surfaces are "decoupled" by insulating ribs which reduce sound transmission from one side of the wall to the other. These ribs also create three, independent wiring cavities which are sized to accept standard electrical boxes. With A-WALL, you can specify ganged switches and outlets, as well as phone and data boxes, all in the same panel.

STC = 36 can be achieved with 24 gauge steel finish on one side of the panel.

An optional Poly-Core is available for buildings being located in severe environments such as refrigerated warehouses or next to production furnaces. Poly-Core increases the panel's insulating value to R-9.

A-WALL EPS Core (expanded polystyrene) panels can be used outdoors or in wet environments such as food processing plants. They provide an insulating value of R-12. Wiring is surface mounted in conduit or Wiremold to maintain the wall's thermal properties. EPS Core panels are available with fiberglass reinforced plastic (FRP) or aluminum surfaces.



EPS Core Panel

## Factory Wired Wall Panel Options

Two "factory wired" panel options are available to eliminate the need for field installation of your receptacles and switches. This significantly reduces assembly time. Prefabricated receptacle and switch wiring assemblies are UL listed/labeled and factory installed in the wall panels in accordance with the National Electrical Code.



### Factory Pre-Wire

The MC cables from the prefabricated wiring assemblies are equipped with box connectors. Your electrician connects them to junction boxes and rigid or flexible conduit he provides above the ceiling. The electrician also installs conduit and wire for the light fixtures, with all devices terminating at the breaker panel.

### FLEX-4 Modular Wiring

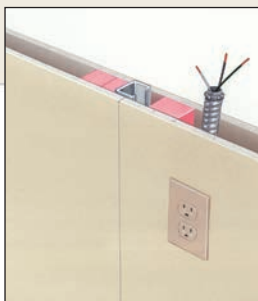
The MC cables from the prefabricated wiring assemblies are equipped with Flex-4 modular connectors. The light fixtures are also prepared for Flex-4 cables so all of the electrical components "snap together". An electrician is only required to wire the breaker panel.



# A-WALL 200™

## Single Story

- Hidden steel stud eliminates visible panel framing
- Provides a full wall thickness for excellent sound control
- Available with vinyl or unfinished panel surfaces
- Panel heights up to 9 feet



No other in-plant building system looks or acts more like conventional construction than A-WALL 200. Concealed, galvanized steel studs are friction-fit at panel connections without the use of fasteners or tools for a fast, trouble free installation. A-WALL 200 uses either unfinished or durable, vinyl wrapped gypsum panels with beveled edges. The result is a “fine-line” panel seam with the appearance of a permanent wall.

You don’t have to sacrifice form or function with A-WALL 200. Although it looks permanent, this system is pre-engineered for flexibility. The panels are demountable, interchangeable and relocate just as easily as they assemble. Windows are factory installed and glazed in the panels with mitered frames and concealed fasteners. Aluminum window, door and building accent trim is finished with a contrasting, architectural bronze, baked enamel for a “front office”, professional appearance that hides dirt and hand prints.

The standard ceiling height in A-WALL 200 buildings is 7’-6”, with 8’-6” available for larger rooms. Building lengths and widths are most cost-effective when designed in even 2’ dimensions but readily available pre-engineered to any size your specific application requires.



Unfinished compressor enclosure field painted to match plant color scheme.



Vinyl finished shipping office.



Engineering office with larger, surveillance windows and thru-the-wall A/C-Heat unit.

### Forkliftable Buildings

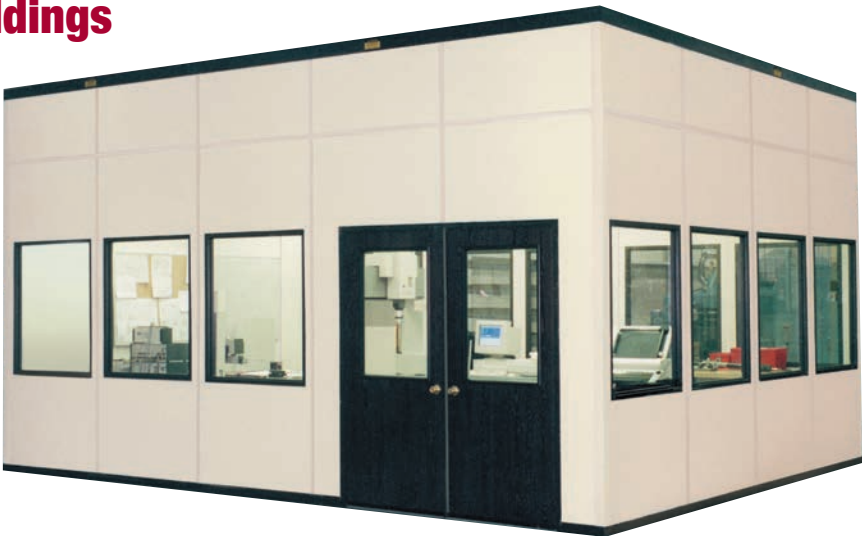
A-WALL 200 and 300 can be provided with an optional steel forklift platform. These models are available K-D for field assembly or factory assembled and wired.



**A-WALL In-Plant Buildings are**

800.345.4400

# Buildings



Like A-WALL 200, the 300 building system offers total flexibility and a full panel thickness at corners and panel connections for excellent sound control. However, a narrow, aluminum I-Stud is used to join the panels allowing a wide choice of building finishes. The I-Stud is color coordinated and conceals the edges of FRP, steel, aluminum and Melamine facings... Without creating an unattractive, "hollow post" appearance. Installations are simplified because like the A-WALL 200 hidden stud, the I-Stud is a friction fit component that doesn't require fasteners.

A-WALL 300 offers higher ceilings using stacked panels and the I-Stud as a horizontal panel connection. Ceiling heights up to 11'-6" are standard, with unlimited, custom room sizes available when your application dictates.

Both A-WALL 200 and 300 buildings are available with an optional raised base track that resembles a conventional 3" vinyl cove base. It allows up to 1-3/4" panel leveling capability and elevates the panels above the floor in wet environments. It also provides an additional low voltage wiring raceway around the perimeter of the building for even greater wiring flexibility.



### Interior Partitions

When equipped with 2-piece ceiling track, A-WALL 300 becomes a truly flexible, demountable wall system.

# A-WALL 300™

- Color coordinated, aluminum I-Stud for fast, simple assembly
- Provides a full wall thickness for excellent sound control
- Available with any combination of A-WALL panel finish
- Panels can be stacked for higher, interior ceilings



Vinyl finished ante room with painted steel doors and steel reinforced, impact doors.



CMM room with hi-speed roll-up door.



Vinyl finished, 2,100 sq. ft. training room.

**Backed by a 10 Year Warranty**



# A-WALL<sup>TM</sup> 400

## Two-Story Buildings

- Two story design utilizes wasted, overhead space
- Meets or exceeds all major building codes governing floor loads
- Available with any combination of A-WALL panel finish
- Color coordinated, aluminum Channel Studs offer a “monolithic” appearance



The A-WALL Channel Stud is a versatile component used for both two-story and custom, single story buildings. It accepts standard “strut” spring nuts and fittings and is compatible with most slotted channel, metal framing systems.



Improve your view of the plant and release valuable, productive floor space with A-WALL 400 pre-engineered, two-story buildings. This system takes advantage of wasted overhead space yet requires less than 18 feet of clear height. It uses standard gypsum panels which are interchangeable with A-WALL 200 and 300 buildings for total flexibility throughout your facility. Stairs and landings are available in unlimited sizes and configurations with many different tread and handrail options.

A-WALL 400 was designed using stringent safety factors. Channel Studs are rated at up to 17,000 pounds column load capacity and standard A-WALL gypsum panels support up to 6,000 pounds each. Lightweight, galvanized steel floor joists conform to A.I.S.I. standards and install using simple hanger bracket assemblies. Unlike bar joists and I-beams, A-WALL floor joists are easily field cut to new lengths when you reconfigure your building to meet changing needs. A-WALL 400 structural components are “in-stock”, require no additional production time and arrive pre-engineered, ready to install.

## Mezzanine Building Systems

When combined with pre-engineered, steel mezzanines, A-WALL single story buildings offer you the same advantages of the 400 system, but with even more flexibility. There is no limit to the size, span or floor load capacity offered by mezzanines.



A-WALL buildings can be elevated above limited floor space, or integrated with the mezzanine to create a custom, two-story structure. Mezzanine two-story buildings allow changes to either level without effecting the other. When your needs change, all three structures can be relocated together, or utilized independently in different parts of your facility.



800.345.4400

## Exterior Buildings

Unit shown includes optional A/C-Heat unit and factory installed work surface.



A-WALL 500 exterior buildings are ideal for guard houses, attendant's booths, equipment enclosures... Any application where you require a durable, environmentally controlled building. Shipped fully assembled, A-WALL 500 buildings are manufactured using white, embossed aluminum EPS wall and roof panels that will survive rain, snow, wind and the blazing sun. Outlets, lights, switches and the breaker box are surface mounted and factory wired using EMT conduit in conformance with the National Electrical Code. Outswinging doors are steel clad, durable and insulated, with an operable window, screen and keyed lockset.

The welded, structural steel base is equipped with fork pockets for ease of handling and a 3/4" tongue and groove plywood floor and sheet vinyl floor covering for easy maintenance. High density, extruded polystyrene insulates and protects the underside of the floor.

Optional accessories include thru-the-wall, air conditioner-heat units, baseboard or fan forced electric heaters, window tinting, outdoor lighting, interior closets and built-in shelves or work surfaces. Sizes range from 4'x4' to 8'x16' (nominal).



Visitor information building with many windows for borrowed light and visibility.

## A-WALL™ 500

- Durable, painted aluminum finish is maintenance-free
- Walls, roof and floor are fully insulated to R-12
- Windows are equipped with insulated glass and screens
- Arrives factory assembled and wired on a welded steel base



Security building with outdoor lighting.



Equipment enclosure with minimal windows.



One man security booth.



# Pre-Engineered, Controlled Environments

A-WALL environmental rooms create the conditions you require to meet today's strict manufacturing standards. Whether you need to increase process yield, decrease quality rejections, comply to a regulatory standard or simply segregate a "dirty" process from the rest of your plant, A-WALL offers a pre-engineered, cost-effective solution.

- Negative Pressure Isolation Rooms
- Positive Pressure White Rooms
- Modular Cleanrooms
- CMM / Metrology Rooms
- Temperature/Humidity Enclosures
- Custom Equipment Enclosures

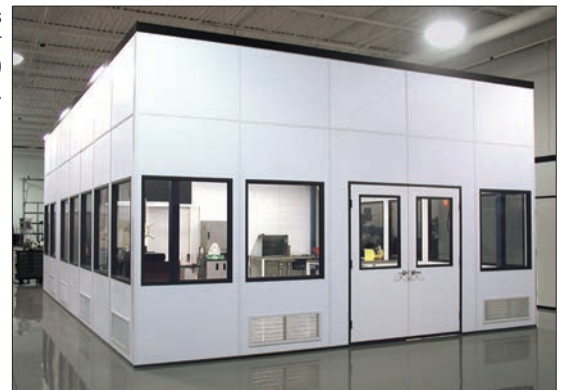
Negative pressure, HEPA filtered, Process Isolation Room with 3'x3' custom loading doors isolates grinding dust from plant ambient air.



Cleanroom recirculates conditioned, plant ambient air and maintains Class 1,000 (ISO Class 6) conditions.

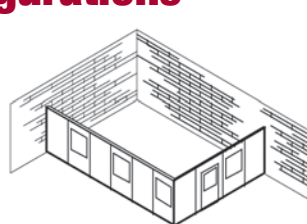


Cleanroom with internal ante room and dedicated HVAC system maintains Class 10,000 (ISO Class 7) conditions.

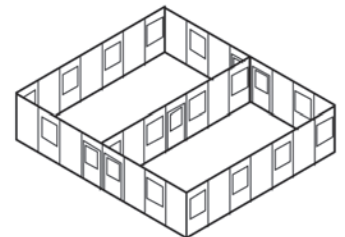
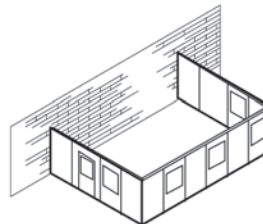


## Standard Building Configurations

Standard, interior buildings are shipped complete with a corrugated steel roof deck, A-WALL panels, aluminum connecting components, a suspended ceiling, one honeycomb core walnut legacy door, fasteners and comprehensive assembly drawings and instructions. Two-story models also include an additional door, structural components and one stair with 4'x4' landing and handrail.



2-Wall and 3-Wall buildings utilize your existing walls and minimize cost. Steel roof deck adaption is provided for support at existing walls.



4-Wall buildings allow total flexibility. All models can be subdivided with interior walls.

# A-WALL<sup>TM</sup> BUILDING SYSTEMS

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