### **CASE STUDY /** MODULAR VS. STANDARD CONSTRUCTION





You're probably here because your business is looking for some type of interior building, office space, or process enclosure. Like most people in your shoes, you may be weighing the pros and cons of standard construction vs. modular construction. Well, we've done your homework for you!

In this case study, we'll give you key insights into how A-WALL's modular construction method gives you **faster** turnaround time, more **flexibility** as your needs change, and lots of **cost savings** along the way.

# Modular Construction vs. Standard Construction

As you know, in standard (or stick-built) construction, all work takes place at the building site, which usually results in a frustrating amount of downtime and loss of productivity in your space. It's difficult to control and trust timelines, quality, and price when dealing with numerous tradespeople—from the carpenter to the drywaller, painter, electrician, and more. With so many trades involved, your timeline and budget tend to increase, quality issues arise, and the finger-pointing begins.

In modular construction (A-WALL's method), the building components are constructed off-site, under factory-controlled conditions. This method adheres to the same codes and standards as conventionally built systems, but in about half the time. Therefore, with A-WALL's modular method, you have one trusted source, and you automatically get factory-controlled quality and cost savings through faster turnaround and less downtime!

# Who Chooses Modular Construction?

Modular construction is a great solution for many scenarios and industries. Here are just a few examples of the types of customers we've worked with:



A plant manager at a consumer products company who needs a twostory, in-plant office building



An engineer at an aviation manufacturing company who needs a temperaturecontrolled CMM room



A commercial realtor who needs to turn an open floor plan into multiple offices at an affordable price

# Top Reasons to Choose A-WALL's Modular Construction Method

1

## **Lower Costs**

Standard construction costs can be double or nearly triple the costs of modular construction due to material alone. And that's not even factoring in the loss of productivity in your space! Just look at these cost comparisons for a 12' x 12' office.

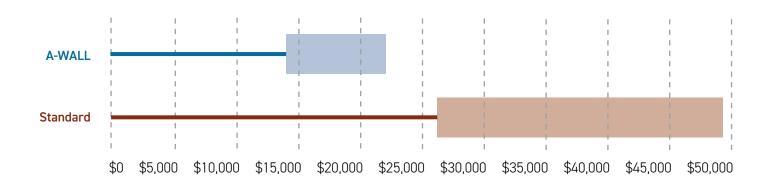
In addition to lower material costs, A-WALL's manufacturing method of constructing the building components offsite has a shorter timeline, which results in faster installation and involves a much smaller team of laborers. All of that goes miles toward reducing costs.

## How Big Is the Cost Difference?

We did some legwork and got two standard construction quotes for you. They revealed that a 12' x 12' stick-built office will cost you anywhere from two to three times as much as a 12' x 12' modular office from A-WALL.

## **Types of Rooms We Build**

- » In-plant buildings and offices
- » Breakrooms
- » Conference rooms
- » Training rooms
- » Storage rooms
- » Bathrooms
- » Machine enclosures
- » Control rooms
- » Cleanrooms
- » Test labs
- » Dust isolation rooms
- » Office pods for open-office settings
- » Classrooms
- » Study rooms
- » And more



A-WALL

#### 12' X 12' A-WALL 300 MODULAR OFFICE

#### Panels & Framing

- A-WALL 300 Vinyl Finish Wall Panels: 8' High
- Vertical Framing Members, H-Cap, Base Track, Window and Door Frames (Gray)

#### Roof Deck & Ceiling

- Galvanized Steel Roof Deck
- Acoustic Ceiling and Commercial Steel Grid
- Roof Deck Sound and Dust Seals

#### Doors & Windows

- Painted Steel Door (Factory-Painted Gray) with Tempered Door Glass; Entry Lever Lockset
- Tempered Window (Factory Glazed)
- Single Steel Door Sweep and Heavy-Duty EPDM Door Gasket

#### Electrical

- Standard Electrical Flex-4 Package for a 12' x 12' Building
- Cool/Heat Unit 115V 15AMP (Through the Wall A/C Unit)

#### Drawings, Delivery, & Installation

- Detailed Drawings and Assembly Instructions
- Delivery
- Installation of Above Components

#### **STANDARD** CONSTRUCTION

#### 12' X 12' CONVENTIONAL OFFICE STRUCTURE

#### Panels & Framing

- New 20ga Stud Walls with Top/Bottom Track and Hardware
- Drywall, Both Sides of Stud Walls, Hung, Tape, Mud, Sand, Ready
- for Paint

  Sound Bat Wall Insulation in Wall Cavities

#### Roof System & Ceiling

- B-Deck Roof System
- · Acoustical Drop Ceiling and Grid

### Doors & Windows

- Commercial Pre-Hung Door
- Standard Window

#### Paint

Prime/Paint Interior and Exterior of All Wall Surfaces

#### Electrical

- New Outlets on Each Wall, New Lighting, Power for HVAC Split System (Note: Does NOT Include Air Conditioner Unit)
- Drawings, Delivery, & Installation
- Delivery of Materials to Site
- Onsite Installation (Nonunion Labor)
- · Supervision, OH&P

COST

## 2 Fast Turnaround & Minimal Downtime

A-WALL's estimated turnaround time for our 12' x 12' office is two to three weeks. For a standard construction operation, the same office could take up to six weeks to complete.

### How does A-WALL move more quickly than a standard construction company?

- » Quick quotes A-WALL turns quotes around in 24–48 hours, while standard construction companies can take much longer.
- » Material availability With standard construction, material is delivered in multiple shipments that arrive at different times. Unpredictable material shortages can drastically impact the process. In modular construction, the system comes packaged together in just one shipment, and you don't have to worry about material delays.
- » Faster installation An A-WALL modular project typically has just a few days of downtime, which results in substantial cost savings for your business. Standard construction could have weeks of downtime, which causes distractions and can severely impact production.

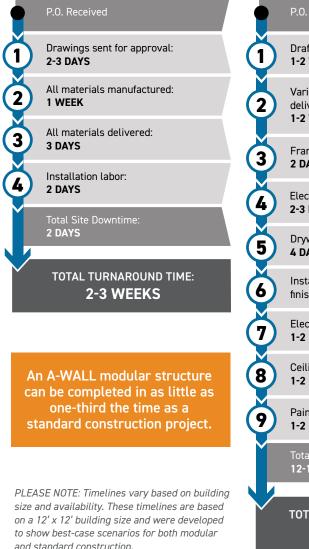




# How Much Quicker Is A-WALL?

Take a look at this breakdown comparing A-WALL's timeline to a standard construction timeline for a 12' x 12' building.

## **MODULAR CONSTRUCTION**



## **STANDARD CONSTRUCTION**

•	P.O. Received	
Ť	Drafting floor plans and elevations: <b>1-2 WEEKS</b>	
2	Various material sourced and delivered to site: <b>1-2 WEEKS</b>	
3	Framing & insulation: <b>2 DAYS</b>	
4	Electrician wiring: <b>2-3 DAYS</b>	
5	Drywalling: 4 DAYS	
6	Installing doors and windows/ finish work: <b>1 DAY</b>	
<b>(7)</b>	Electrical and HVAC hookup: 1-2 DAYS	
8	Ceiling installation: 1-2 DAYS	
9	Painting: 1-2 DAYS	
$\sim$	Total Site Downtime: 12-16 DAYS	
	TOTAL TURNAROUND TIME: 4-6 WEEKS*	

\* Permitting time not included

3



## Why Is A-WALL's Installation So Much Faster?

» Standard construction requires anywhere from four to six trade contractors, and it's rare to get all their schedules to align to meet YOUR deadline. With modular construction, there's no drywall, no mudding, no onsite painting, and no tedious finish work.

It requires just one installation crew before your system is ready for use.

- » A-WALL's systems arrive with preinstalled wiring, outlets, switches, data boxes, and windows. Also, all panels and connecting components are precut. This all takes place at A-WALL's factory before the system is packaged and shipped to your site, making installation that much faster and easier.
- » Lastly, A-WALL saves you time on installation because our systems require 20% fewer parts than comparable building systems.

As a manufacturing company, we know the importance of keeping operations moving and not interrupting any shop workflows or clogging up production space. Weeks of downtime in critical production space would lose our company a tremendous amount of money and possibly future business if we had to turn our clients away, so we understand the implications of downtime."

- MIKE BEVERSTOCK, PRESIDENT, A-WALL BUILDING SYSTEMS

# 3

# Long-Term Flexibility

A modular enclosure or wall system can be rearranged, added on to, or moved to a new location. Standard construction doesn't offer that kind of flexibility—it would require a complete teardown and startover. A-WALL's flexibility is ideal in many scenarios:

- » For growing companies A company needs offices in their plant. They don't have the funds for a two-story, in-plant building this fiscal year, and frankly they don't need that many offices just yet (but with their growth plans, they eventually will). A-WALL can design this enclosure to be load-bearing, so the top level can be utilized for storage for the time being. As the company grows and they hire more employees, they can turn this enclosure into a full two-story building with upper-level offices.
- » For schools that need a temporary solution A library needs to be converted into multiple small study rooms. Eventually, this space will be turned into a computer lab, and the study rooms will move to a new location. A-WALL's freestanding partition walls will be used to make the study rooms; these can be reused when the relocation takes place. And best yet, there won't be any expensive construction damage during the transition.

## A-WALL's Building Options

**Single-story** – Two models are available with ceiling heights up to 11'6". Both rely on friction-fit assembly and feature thoughtful component designs to look like permanent structures.

**Two-story** – This system takes advantage of wasted overhead space, requiring less than 18' of clearance. Stairs and landings come in unlimited configurations and sizes.

**Mezzanine buildings –** Maximize your space by building above or below a mezzanine structure.

**Forkliftable –** A-WALL single-story models include a steel forklift platform. Available for field assembly or factory-assembled and wired.

**Demountable & freestanding wall systems –** Modular walls for offices and plants create defined, rearrangeable spaces. Support is provided through ceiling and floor-mounted tracks or lateral steel stabilizer posts.

# More Benefits of Modular Construction

» There are significant tax savings. A-WALL systems are considered capital equipment and therefore qualify for 7-year depreciation (compared to permanent construction's 39 years). The rapid depreciation gives A-WALL a significant price advantage.

» It's less disruptive and messy.

Drywall dust is a nightmare and leaves its mark for weeks on end. Modular construction is done quicker and with no mess. There's no paint splatters or fumes. You don't have to deal with weeks of loud, disruptive construction. Installation often takes only a few days and requires minimal tools and a small installation crew.

» It's environmentally friendly.

Modular buildings can be designed for energy efficiency and to use green technologies. And because A-WALL's systems are manufactured in a factory, there is greater efficiency and less waste. Transportation and carbon emissions are minimized because your system is delivered in one shipment. As we mentioned, your modular panels can even be reused and repurposed!

» A-WALL is a one-stop shop. In addition to modular offices and buildings, A-WALL can provide you with cabinetry, desks, sound-dampening acoustical panels, flooring, guard rails, HVAC systems, and more. No need to involve another contractor or obtain more quotes.



# **Overcoming Common Concerns**

There is momentum behind modular construction for good reason. Lower costs and convenience are certainly benefits that are hard to ignore. But you wouldn't be doing your due diligence if you didn't dig a little deeper to make sure modular solutions really check all the boxes.

## 1. Will it look like a permanent office space?

Yes. Our standard panel is constructed of two pieces of gypsum board. It is then factory-finished with your choice of three durable, washable surfaces:

- » Stipple-textured vinyl
- » Pebble-textured, fiberglass-reinforced plastic (FRP)
- » Smooth galvanized steel

Each option is available in standard neutral color options, or you can select unfinished gypsum panels that can be painted the color of your choice. Unlike permanent construction, our systems have I-studs, which blend in seamlessly once painted.

# **2.** Does modular construction adhere to the same codes as conventional/standard construction?

Yes, A-WALL adheres to the same sound and fire codes as conventional construction. In fact, A-WALL's Type X Firecode® gypsum boards have a specially formulated core that's a superior fire barrier compared to regular drywall.

# 3. If my system will arrive pre-wired with electrical devices, can I still choose where my switches and receptacles go?

Yes. In the approval drawings, you'll be able to specify where all electrical devices go. You can choose the exact location of your switches, outlets, phones, and data boxes. Several devices can be installed in a single wall panel. We are the only modular company that offers these pre-wiring capabilities and flexibility!

## 4. What if I have my own installer that I want to use?

While we recommend you use our certified installers to make sure your system is installed quickly and correctly, we understand if you need to use your own team of installers. A-WALL systems arrive with detailed instructions and drawings to ensure smooth installation. All pieces and parts are meticulously labeled to match the bill of material packing list. And if you have any questions, we're just a phone call away!

## 5. How do packaging and shipping work?

We've invested significant time and money to develop a secure packaging and shipment process to ensure there's no interference with your project timeline. 99.99% of our systems arrive damage-free.

You're more likely to experience damage with standard construction because there are multiple shipments of material. Because our systems are shipped from one location, in one shipment, our freight costs tend to be cheaper too. Don't worry—we won't try to sneak a last-minute cost on you. A-WALL provides full transparency into the shipment cost on your quote, so there's no surprise freight costs when you purchase your modular system.

# Don't Just Take Our Word for It

When we purchased an additional coordinate measuring machine, we chose A-WALL to create our larger CMM room. The new room was assembled in a matter of days—a fraction of the downtime we would have experienced had we chosen stud-and-drywall construction."

- BRIAN B., ENGINEER/MACHINE MANAGER



What sets A-WALL apart is their commitment to quality. Their modular offices are constructed with the highest-quality materials and attention to detail, ensuring that they not only look great but are also sturdy and durable. As an installer, I appreciate the ease of installation and the flexibility that their modular offices provide."

– STEPHEN BARNES, A-WALL CERTIFIED INSTALLER





# Conclusion

More and more companies are realizing that modular construction is not only an option, but that it provides so many advantages that it's hard to choose standard construction over modular!

When you work with A-WALL, you get a partner. A partner whose sole mission is to design, manufacture, and install a modular system that fits your specific needs while exceeding your expectations every step of the way.



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