



Guide to Modular Classrooms

Everything You
Need to Know



Introduction: Why This Guide?

Whether it's adding new specialized facilities or combating the issue of overcrowding—there are many reasons why schools need to add space to their current buildings.

Sure, you could go the traditional construction route. But here's the problem: Traditional construction methods take a lot of time, and you'll likely have some downtime. In many cases, this is something that schools simply can't afford—especially during the school year.

The solution? **Modular classrooms.**

From permanent vs. temporary modular classrooms to permits and pricing, we've included all of the details you need to start your classroom project on the right foot.



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What are Modular Classrooms?

Modular classrooms are classrooms built **off-site** and assembled **on-site**. They can be standalone buildings or multi-unit buildings, depending on the needs of the school in question.

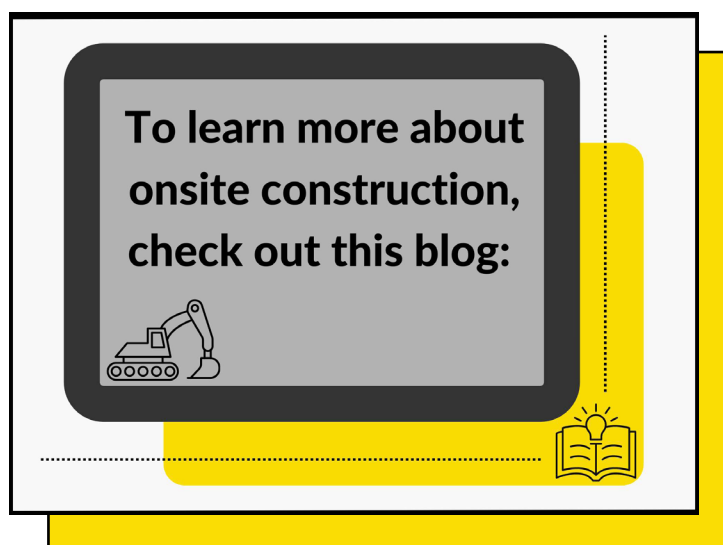
The Modular Process

The modular process starts in a factory setting, where the units are assembled using standardized building practices—this ensures minimal waste and quality builds.

From there, modular classrooms are transported to the site. Because the build takes place off-site, some of the on-site preparation work can be done at the same time. This can greatly reduce the time it takes to have a building up and running.

Some of the on-site work can include:

- Lot preparation
- Foundation work
- Utilities and connections
- Water drainage
- Hardscaping
- Landscaping
- Outside lighting



As important as the off-site nature of the modular process is, the on-site work is equally important.

The Benefits of Modular Classrooms

Why modular classrooms over traditional construction?

Modular classrooms provide many benefits over their traditionally-built counterparts.

Today, modular classrooms are a viable alternative to traditional construction and offer benefits that can make them much more attractive options.

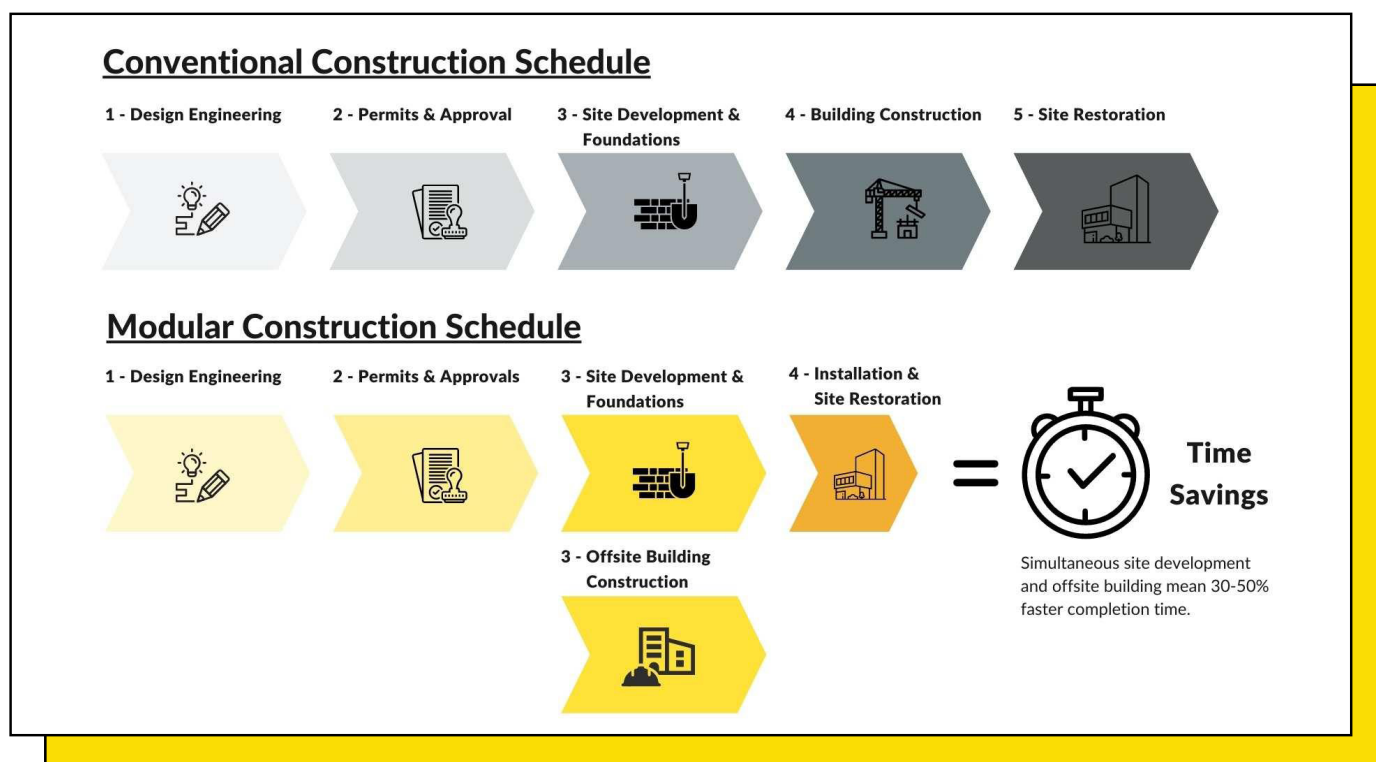
Here are the five biggest benefits of modular classrooms:

Speed to Occupancy

Speed to occupancy is a primary benefit of modular construction. As we mentioned earlier, the modular process involves off-site work and on-site work taking place at the same time.

Compare this to traditional construction, which needs to handle the site preparation before construction can begin.





This graphic perfectly illustrates the differences between the modular construction schedule and the conventional construction schedule. Note how the site development and off-site building construction take place at the same time—essentially removing an entire step from the process!

For schools in need of a building within a short timeframe, the additional speed to occupancy provided by modular classrooms is unmatched.

Lower Site Impact

In a perfect world, *all* construction taking place in an educational setting would happen during the summer months.

However, in some cases, schools need a building quickly.

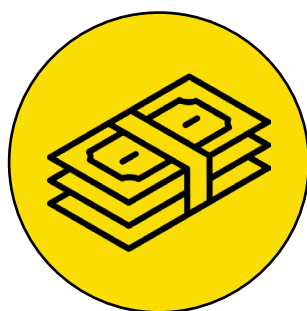
With traditional construction methods, this can lead to disruptions—it's hard for students to learn in an environment with loads of heavy machinery, power tools, and other construction-related distractions.

Since the modular building process largely relies on off-site construction in a factory setting, schools can eliminate much of the site impact by choosing modular classrooms for their projects. There's still on-site work to be done, but it will be far less disruptive than building the entire project on-site.

Flexibility

The needs of schools everywhere are constantly changing.

Modular classrooms, particularly temporary ones, provide schools with a flexible solution as needs begin to shift. Instead of being locked into one specific use case, temporary modular classrooms can be repurposed or relocated elsewhere to tackle new challenges.



Cost Predictability

Schools have tight budgets that need to be met despite needing new buildings or space.

Modular classrooms aren't always the cheapest option. However, what they do offer is cost predictability. As long as design changes are kept to a minimum, costs remain stable, and the quotes provided at the start of the project are accurate.

Compare this to traditional construction: Without a standardized building practice and the controlled environment provided by modular construction, there are many things that can go wrong and move the goalpost. Costs can begin to climb due to the nature of traditional construction.

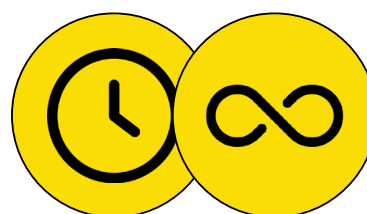
Reduced Waste

Sustainability and environmental impact in construction continue to grow in importance. Schools want to know that their building choices are leaving little impact on the environment.

Modular contributes to eco-friendly construction practices in several ways. For starters, a controlled factory environment means less waste—materials won't be damaged by the elements, and unused pieces can be recycled or reused in future builds.

Also, since most of the build takes place off-site, there's less time where large machinery is on-site and pushing carbon emissions into the air.

Permanent vs. Temporary: What's the Difference?

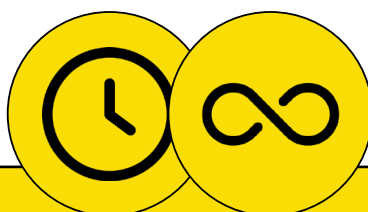


If modular classrooms are your choice for your next school project, the first thing you need to decide is whether you need a permanent modular classroom or a temporary one.

The best way to determine which one is right for you is your use case.

Are you fighting an overcrowding problem that is about to be mitigated by a new school in the area? If so, a temporary modular classroom sounds like the right choice.

Are you looking to install a new science lab for years to come and want to reap the benefits of modular construction? In this case, permanent modular classrooms are the solution.



Most of the time, permanent modular classrooms are purchased, and temporary modular classrooms are leased.

We view the break-even point in the 4-5 year range: If you intend to keep the building for 4-5 years or more, purchasing the building will likely be less expensive than renting.

The level of customization is something else to consider. With permanent modular classrooms, you get more flexibility in your design choices. With temporary, the normal business model is to reuse standard classrooms for other schools in the future.

Whether a portable classroom is purchased new from the factory or remanufactured after previously being leased, the classrooms adhere to the same stringent building codes as traditional school buildings. We provide our clients with high-quality modular classrooms that will satisfy the needs of students and teachers.

Factors to Consider When Choosing Modular Classrooms

After deciding on temporary or permanent modular classrooms, there are some additional considerations to take into account to ensure success.

What the Space is Going to Be Used For

What are your plans for the new modular classroom? Is it a general classroom space to combat overcrowding? Is it a science lab? A new break room for faculty?

What you're using the space for matters and will determine what kind of modular classroom you need. Modular providers, including Triumph Modular, often have many different kinds of modular buildings on hand for both temporary and permanent usage.

Determining your building's purpose is the first step toward choosing the right modular classroom to suit your needs.

Occupancy Load

Who is going to be using the space? If it's a classic classroom space, what age or grade are the kids in? How many students?

The amount of space you need will depend on both the age of the students and the number of students in the classroom.

Per the [International Building Code](#):

- In general, for education coded classrooms (K-12), the requirement is to have **20 square feet per occupant**.
- For colleges and universities, the buildings don't need to be education coded. Instead, they are typically business coded, and the requirement is to have a minimum of **100 square feet per occupant**.
- For a traditional science lab, the requirement is **50 square feet per occupant**.

Where the Building is Going

Finding space to lay the building down is crucial and something that you'll need to take into consideration before choosing your modular classroom.

Is the building standalone? It'll need adequate space and a cleared-out lot for setup. Also, depending on how far away the modular classroom is from the primary building, you'll likely need a modular classroom with a built-in washroom.

Architects

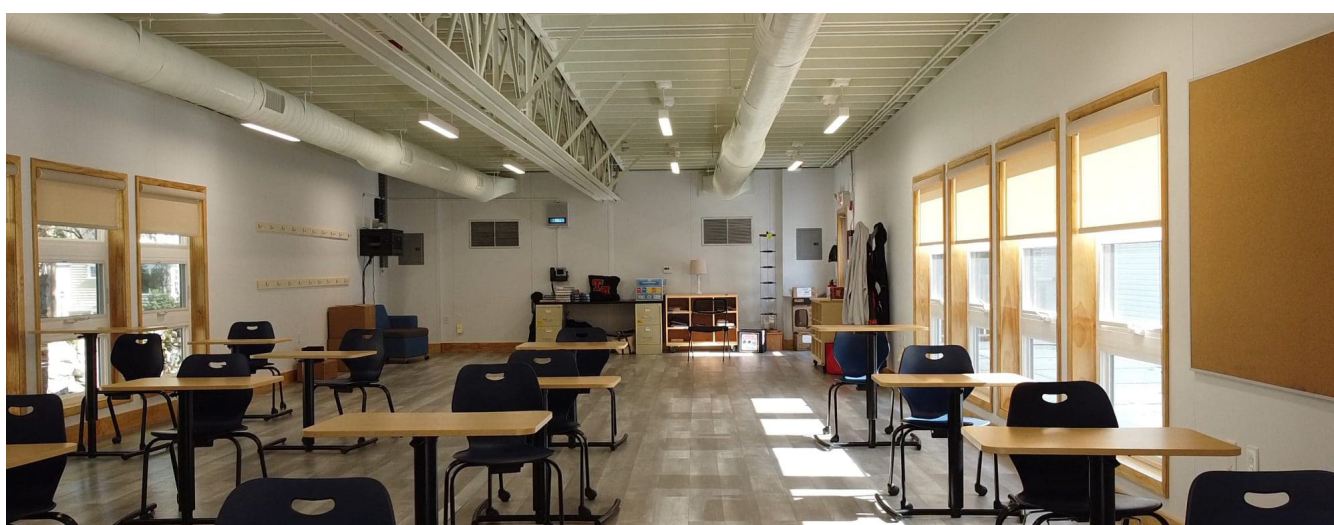
For custom buildings, you'll want to research architects familiar with modular design—this step can often make or break your success with modular classrooms.

For example, Triumph Modular has a list of trusted architects that we work with on a regular basis. We can give you some architect options if you choose a custom project.

The Modular Classroom Timeline How Long Does it Take to Get Your Building?

So you're ready to get your modular classroom to complete your project—great!

The question is: **How long does it take to get your building and put it to use?**

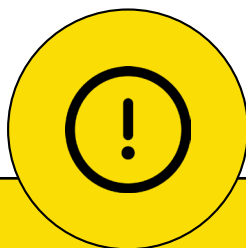


What the Triumph Modular Process Looks Like

Once you've chosen the type of building you need based on the factors we talked about above, the next step is to obtain proposals. For publicly bid projects, the proposals will come after a formal Request For Proposal process through your state agency.

For private schools, clients can reach out to the Triumph Modular business development team for budgetary pricing.

There is some lead time on getting your building. Since buildings for schools are specifically coded for the education sector, it may take some time to get the building you need for your space.



This lead time makes it more important than ever to order your modular classroom buildings as early as possible.

Let's look at an example timeline for projects:

Basic Timeline for Projects:

- Schools will need to get budgets approved, and the town must be aware of the projects. Approval is needed by Conservation, Historical Society, and Planning Board.

- For most public school systems, the fiscal year begins July 1st, and budgets are set by then. The client then submits an RFP (Request for Proposal) in the 4th quarter. If Triumph Modular wins the public bid, we look to get the client under contract in January.
- February would be the Design Phase of the project, and March would be the time period when a factory would begin procurement of materials. In March or April, the buildings will be on line at the factory being built.
- Site work starts in April/May time frame. The building will ship to the site in June. From here, it's best to budget **8 weeks** for installation with a goal of being ready for mid-August
- For private projects, you can expect a similar timeline. However, the main difference is that the project will not go out to bid and is negotiated directly with Triumph Modular. These meetings will take place before January.



What Can Slow it Down?

As is often the case with construction in general, there are a few different things that can contribute to the modular classroom timeline and make it longer.

Review Time for Coding

If you need a brand new modular classroom unit built and brought to the site, you'll need to consider the review time for coding. With many other buildings being reviewed for the same thing, you'll want to budget for a couple of additional months.

Transportation/Delivery Specifics

The delivery area can also add time to the modular classroom process. There are a few things to consider: Is the delivery area out-of-state? If so, there may be some extra processes involved between the two states to ensure a legal delivery.

Integration With Current School Buildings

Integrating a brand new modular classroom, whether temporary or permanent, with existing infrastructure isn't always a seamless process.

Older buildings may have outdated fire or sprinkler systems, security systems, and electrical wiring. If the existing systems can't support a newer modular classroom installation, they'll need to be updated to allow the school to expand. Depending on how much updating needs to be done, this can add a significant amount of time to the modular classroom timeline.

Site Placement

Most of the time, site placement in the educational sector is straightforward. However, there are some sites where placing a modular classroom can be tough. We can often get creative to make it work, but it may require additional planning or site preparation to get you the building you need. All of this will add additional time to the process and is something you should plan for, depending on your timeline.

Permits for Modular Classrooms

In the United States, all modular buildings must meet the [International Building Code](#).

This might seem like a hassle, but don't worry: When Triumph Modular is acting as the general contractor, we pull a **Building Permit** and all of the necessary **Trade Permits**, including:

- Mechanical (heating, duct work, cooling)
- Plumbing (bathrooms, kitchen piping, sewage)
- Electrical (wiring, transformers, lighting)

We also obtain an **Occupancy Permit** from the building department, along with **Road Transportation/Highway Permits**.

As always, we recommend that people check with their local Building Departments, Planning Boards, and local government leaders for Zoning and Environment permit requirements in their region.

For more information on modular classroom permits, here's a list of helpful resources for each state in New England:

- [Massachusetts](#)
- [New Hampshire](#)
- [Maine](#)
- [Vermont](#)
- [Connecticut](#)
- [Rhode Island](#)

Modular Classroom Pricing: What Contributes to the Cost?

We talked about cost predictability and how important it is for schools to remain within their budget. The question is: **How much do modular classrooms cost?**

There isn't a one-size-fits-all answer here—instead, there are several different factors that modify the cost of a modular classroom.

Temporary or Permanent

One of the first choices you need to make for your modular classroom project is whether you need a temporary or permanent building. Costs will vary depending on which one you choose.

For temporary modular classrooms, costs would include a monthly lease, site work, installation costs, and removal costs.

If a permanent modular classroom is necessary, you'll need to pay for the building itself, site work, and installation costs.

If you're looking for more information on how temporary and permanent modular pricing works, our ebook, [Lease vs. Buy](#), can help.

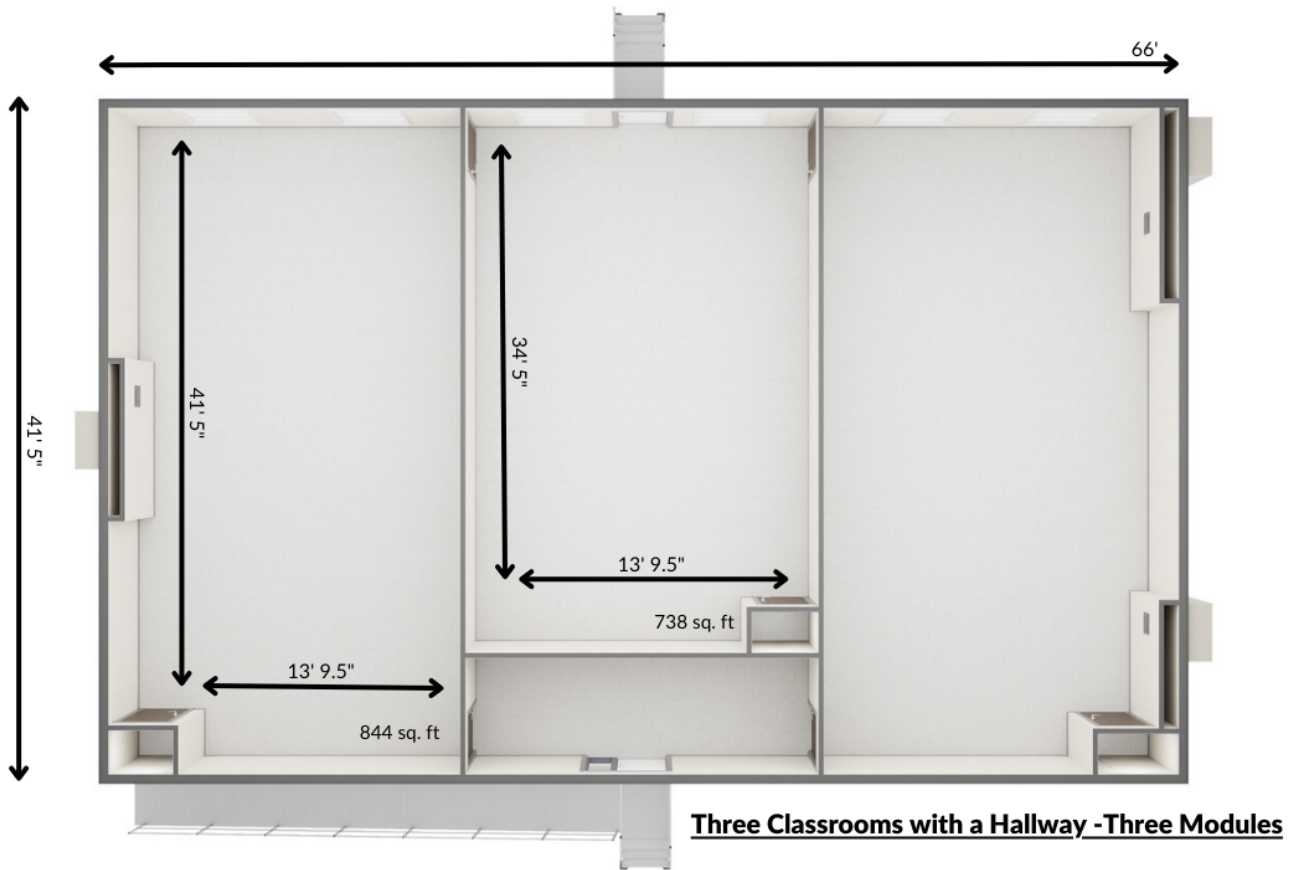
Size

The size of your portable classroom building is one of the most important factors when considering the cost.

Everything works based on modules: In New England, a standard-sized module is 14 feet wide and comes in either 14' x 66' or 14' x 70' box sizes. For example, two modules could create two 775-square-foot classrooms with a center corridor, as shown here:



Meanwhile, three modules could create three classrooms with a hallway:



As you may have guessed, the larger the building, the more modules that are required.

From Triumph Modular, buildings are priced based on square footage. For leased buildings, you can expect a base of around \$275 to \$300 per square foot. Meanwhile, for purchased buildings, expect a base anywhere between \$475 to \$525 per square foot. The price-per-square-foot range includes the cost of the classroom (rent or purchase), delivery, installation, site prep, and site work. It's around a 60/40 split for the cost of the space versus the other costs.

We mention the word “base” because the level of build-out and finishes can increase the price, depending on what’s chosen.

For more custom configurations outside of the standard-sized modules, you’ll likely pay more.

Site Work

The amount of work needed to prepare the site will contribute to the overall cost of your modular classroom project in most cases.

The costs will depend on how difficult it is to prepare. For example, clearing the site for foundations and how far the building is from various utilities (water, sewer, electrical, data, fire alarm, etc.).

Even the state of the delivery area can affect the site work costs—is it difficult to truck in the building? Is a crane required?

Additionally, if you’re choosing Triumph Modular as the general contractor and you’re looking for a turn-key solution, there are some other site work costs that could come into play, including:

- **Foundations** - Foundations can come in three different forms: Pre-cast blocks, grade beams, stem walls, or helical piles. Pre-cast blocks have the least site work involved, grade beams are the next step up, and stem walls are the foundation option that most closely resembles traditional construction. Helical piles can be used if soil conditions are a concern. The corkscrew-style installation causes less earth displacement as the helical piles twist 20-60+ feet downward, finding the proper load-bearing depth.
- **Grading and Paving** - Grading and paving include several items, such as asphalt or concrete walkways, curbs, retaining walls, decorative walls, parking lot line striping, signage, prep work for play areas, and accessibility features.
- **Landscaping** - Landscaping includes elaborate playscapes, special decorative structures, and anything else your project requires to match the necessary aesthetic.

These are all factors that can affect the overall cost of your project.

Setup and Integration With Existing School Systems

Building setup is another factor that can influence how much your modular classroom will cost.

We talked about integration with existing school systems above, such as sprinkler, security, and electrical systems. Integrating your new modular classroom with these existing systems adds some additional costs. If there's additional work to be done to update these systems, that will also add more to the total price of your build.

The Complexity of the Build

As your desired design gets more complicated, you can reasonably expect costs to start climbing.

For example, if all you need is a simple three-classroom layout with a restroom and an office, you pay significantly less than more complicated buildings with upwards of eight classrooms and intricate design elements to match existing aesthetics.

The complexity of site work can also contribute to the cost—turn-key elements such as grading, parking lots, entryways, and landscaping can all drive up the cost as they become more intricate.

The option to customize your building is always there—it's just important to remember that as you get more complex, you'll likely pay more.

Rental Duration

For those who choose to rent a modular classroom instead of purchase, you'll need to take your rental duration into account.

While it's true that renting for longer periods of time will cost more in the long run, there's more nuance to it than that.

Rental prices are susceptible to supply and demand fluctuations—if there are fewer modular classrooms available for rent, prices will climb.

Longer lease terms can help avoid some of the turbulence in pricing - for example, a 3-year lease term versus a 1-year lease term. A longer contract commitment is a criterion used towards a monthly lease rate discount.

Case Studies

Ready to see some examples of modular schools in action?

Most of the time, showing is better than telling. Here are three examples of Triumph Modular projects for schools.

Boston Public Schools



The Boston Public School system has been a long-time customer of Triumph Modular. They found that they had a space shortage as their student population grew. Triumph Modular met the occupancy deadline, and teachers could move in and bring their classrooms to life before the first day of school. The result was a bright and comfortable space that provided a fantastic learning environment for students.

[Read More](#)

Hopkins & Elmwood Elementary Schools



Triumph Modular installed modular additions on two different elementary schools in Hopkinton, MA, in one summer. The new additions needed to match the look of the existing school buildings, and modular was chosen for cost certainty, limiting disruption at the site, and the ability to meet an accelerated schedule.

[Read More](#)

Lexington High School



Triumph Modular provided Lexington High School with 18,000 sq. ft. of classroom space over the summer break. The building was ready for the first day of school, on time, and within budget. The building features a high efficiency HVAC system, corrugated steel siding on the exterior, and expansive floor-to-ceiling glass, which allows the classrooms to be illuminated with natural light.

[Read More](#)

Testimonials

Here are some words from past modular classroom project clients:

“

“I would definitely recommend this space to other scientific faculty. It is nice and spacious, well-lit and comfortable. The facility lent itself to the teaching environment. Thank you for providing this space.”

Elizabeth Oakes, Senior Instructor in Chemistry Laboratory,
WELLESLEY COLLEGE, Wellesley MA

“

“I would recommend Triumph Modular to anyone seeking high-quality temporary classroom space. The building space provided along with the overall service experience exceeded our expectations.”

Jay Bounty, CFO and Director of Operations, BELMONT HILL
SCHOOL, Belmont, MA

“

“It has been an amazing experience to watch your team. Modular buildings have evolved into a viable alternative to traditional construction and there is no question the success of the Newman Elementary School Repair Project hinged on the ability of Triumph to deliver a new school facility over the course of a single summer. That you and your firm delivered the quality of space that is now home to almost 700 students has won over the most hardened skeptics.”

Richard Thuma, Project Manager - PERMANENT PUBLIC BUILDING
COMMITTEE, TOWN OF NEEDHAM, Newman Elementary School,
Needham MA

Next Steps

With all of your modular classroom knowledge, it's time to order your modular classroom and get a head start on your school projects.

Triumph Modular can set you up with a modular classroom that suits your school's needs. Our expert team guides you through the purchasing or rental process to ensure that you get the right building that's up to code and installed the right way.

Request budgetary pricing from our sales team today!

Request Budgetary Pricing

or call 1-800-257-2536



TriumphModular.com