Portables Toolkit:

A toolkit for parents and school administrators in the successful use of portable and relocatable classrooms.

- **CONSIDER** YOUR RESPONSIBILITY
- **CHOOSE** WISELY
- **COORDINATE** FOR SUCCESS
- **CONTINUE** PROPER MAINTENANCE
- **COMMUNICATE** BEFORE AND AFTER

MODULAR BUILDING INSTITUTE

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In the past 5 years, MBI has seen a significant increase in the number of portable and re-locatable classrooms, due to classroom size mandates, funding gaps and a population explosion. In response to this up-surge, MBI has created its own toolkit of materials that are available to any school district purchaser or facility administrator. In this toolkit, you will learn about the 5 C's for securing an optimal learning environment with a temporary building that has already been built to code:

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A 2004 study of environmental conditions in public classrooms by the California Air Resource Board and the California Department of Health Services found that both portable and traditional classrooms were found to have some environmental conditions that need improvement. However, the most serious problems occurred only in a small percentage of classrooms. The study concluded that "Design capacity did not appear to be a common problem in this study. Improved operation and maintenance would go a long way to address many of the problems identified."

Learn about proper maintenance on page 4 ...

Download the toolkit from modular.org

PORTABLES TOOLKIT

CONSIDER YOUR RESPONSIBILITY

Considerations for Specing a Relocatable Classroom

More often than not, the modular building you receive is a result of a good innovative and an educated approach. As a guide, here are five suggestions to help you maximize your opportunity to obtain a temporary classroom facility that exceeds your expectations.

1. Communicate; Research Your Options

Ask questions, meet with potential suppliers to discuss your program in depth, and if you have not already done so, research your options. Look at all the materials, features and finishes available today that are being incorporated into these classrooms to create a healthy, comfortable learning environment and consider how they might work for you.

Understand that, just like traditional construction methods, modular buildings must conform to building code standards. There is no "free license" for design criteria, no exemption from the rules. In fact, the process of modular building is subject to stringent inspection procedures by the manufacturer, and in many cases, a third party inspection agency and/or a state or local official. In most instances, builders must have a quality assurance program in place that has been approved by either the state or third-party agency, or both.

2. Set Your Expectations High!

As the buyer, planner, or specifier, you are in control. You can set the specifications, you can set the standards, and you can drive the results. So set your expectations high! There is no reason to receive "second best" in any learning environment, including relocatable classrooms. In order to ensure that your classrooms and complexes meet or exceed your expectations, communicate your needs clearly to your potential suppliers. There should be no misunderstanding.

3. Outline Your Buying Criteria

This ties in a little with communication. Modular construction offers a multitude of features and benefits. Knowing them and using them to your advantage will assist you in attaining your desired objectives.

Financing options, building features, relocatability, speed of construction, minimized site disruption, and design flexibility are just a few of the motivators that prompt school administrators and planners to look to temporary classrooms for accommodation. Letting your suppliers know what particular motivators are driving your purchase will help them prioritize, make recommendations, and respond with your specific needs in mind.

4. Establish Your Base, Then Look for More

You may have specified your classrooms right down to the fasteners, and unquestionably this is the best way of evaluating your package on an "apples to apples" basis. But consider going a step further. Ask for recommendations. You would be amazed at the breadth and depth of experience and knowledge your modular building suppliers have in house—all looking for an opportunity to apply their innovation.

5. Go For the "Valley" Whenever You Can

Understandably there are external environmental forces at work that can prevent a school board from going out for proposals whenever they choose. Funding is usually at the top of the list. However, wherever possible, try to get a jump-start on the process so that you can be assured of securing regular production time.

Modular building companies look favorably on a steady diet of year-round production, as opposed to the peaks and valleys that tend to be more characteristic of the industry. Find out when the industry slows down in your region. It will vary between locations. Make an effort to slot your requirements into those "valley" time frames. It could be a win-win for you and your builder.

Content for this page provided by MBI member, NRB, Inc.

PORTABLES TOOLKIT

CHOOSE WISELY

Choosing the right vendor

The right vendor can make all the difference between the right and wrong experience. So, it is critical to do research and choose wisely. Factors you should consider are:

Referrals. Ask colleagues who have been through the process for their recommendations. Visit other schools where potential vendors have provided facilities.

Experience. How long has the company you are thinking about working with been in business? How knowledgeable are they on local and state codes?

Reputation. What is the supplier's reputation. You should not work with anyone that is not considered reliable, trustworthy, knowledgeable and timely.

Turn-Key Solutions. Is the vendor flexible and able to provide additional services that you may need, like relocation, parts, refurbishment, etc.

Proposal. This is the most critical portion of the process. You must review every single detail of the proposal to ensure that all specific services are clearly outlined before entering the contract.

References. It goes without saying that any reputable provider can provide you with a list of past customers. It is critical to take the time to actually call these references to see what other schools' experiences have been.

Things to look at when choosing a temporary space provider:

- Referrals
- Experience
- Reputation
- Turn-Key Solutions
- Proposal
- References

Content for this page provided by MBI member, Williams Scotsman

PORTABLES TOOLKIT

COORDINATE FOR SUCCESS

Project Team Coordination: The key to a modular building's success

Coordination of the many interrelated tasks is at the heart of any successful building project. As with site construction, a different independent member of the building team often holds primary responsibility for each phase of a modular building project. The modular building team often includes a dealer, a manufacturer, a transporter, and a site installation (set-up) contractor, and may include additional subcontractors who perform site preparation and install utilities.

Dynamics of the Project Team:

Dealer:
A point position on the team is held by the dealer who holds the contract with the customer.

Manufacturer:
The manufacturer is the foundation of the modular building team. From the customer's perspective, the manufacturer is often hidden from view, but the factory-built modules are the primary component of the finished building.

Transporter:
The transporter delivers the module(s) from the factory to the building site.

Installer:
The set-up contractor, possibly in conjunction with subcontractors sets the modules on the foundation and completes all remaining finish work.

For a Successful Project:
All team members must strive to achieve excellence in performance of their individual role. This, along with close coordination of the activities of every project team member the customer realizes a satisfactory modular building experience.

PORTABLES TOOLKIT

CONTINUE PROPER MAINTENANCE

Making the most of your investment with proper operation and maintenance.

Below are several actionable items that will improve the performance of portables. Although these measures add to the up-front cost of the portable, those extra dollars will quickly provide results in the form of energy savings, increased student and teacher morale, and improved student performance.

Protect Indoor Air Quality. First, specify no- and low-emitting building materials and furnishings to reduce airborne contaminants. The"Collaborative for High Performance Schools" (CHPS) has developed a list of low emitting materials for schools which can be found at: http://www.chps.net/manual/lem_table.htm. Second, install proper drainage systems and control measures to prevent mold. Some areas to consider are landscaping systems that prohibit water from hitting the actual structure and draining off. Also important is providing the proper grading and drainage systems along with mitigation procedures for water leaks.

The US Environmental Protection Agency provides an Indoor Air Quality Tools for Schools Action Kit that details more indoor air quality maintenance and control procedures. You can order the kit from the Agency at http://www.epa.gov/iaq/schools/toolkit.html.

Support Gains in Energy Efficiency. Portable classrooms built today are much more energy efficient than ones built a generation ago. The Northwest Portable Classroom Project conducted by Washington State University in 2003 found that portables built to the 1993 code were 44% more energy efficient than models built 25 years prior. Further, portables built to 2000 codes are 20% more energy efficient than the 1993 models. And there are additional measures you can take to improve on this energy efficiency increase.

First, install programmable thermostats in all existing portables and require programmable thermostats for any new portables. Second, choose site placement of portables to maximize the benefits of day lighting. This measure will not only improve the energy efficiency of the portable, but could lead to improved student performance. Finally, for any portables that utilize a "wall-mount" HVAC system, specify a Seasonal Energy Efficiency Ratio (SEER) of 12 vs. 10. The higher the ratio, the more efficient your unit is and the lower your energy bills.

Improve Room Acoustics. It is important to note that acoustics are problematic in traditional classrooms as well as portables. MBI has several suggestions on how to provide the best acoustics (measures equally positive for traditional classrooms):

-assure seating away from highways and busy roads where possible
-reduce outside noise levels during instruction periods when possible
-use wireless microphone systems for cost-effective resonance

Although some teachers turn off the HVAC unit in an attempt to reduce noise, we advise against this practice. Studies have shown that student comfort and indoor air quality contribute more to a positive learning environment than acoustics. When you turn off the HVAC system, you are actually diminishing the learning environment.

Activate Proper Maintenance and Timely Replacement. There are two points that go father than any of those already mentioned to ensure a positive learning environment in portable classrooms. Retire older portables when they become unserviceable or do not provide an adequate learning environment and properly maintain the portables currently in use. Today's portable classrooms are designed to last up to 30 years. But the length of this timeline is completely dependent on the proper maintenance of the portable in every year of its life. It goes without saying that portables should never be used beyond the recommended life of the unit.

PORTABLES TOOLKIT

COMMUNICATE BEFORE AND AFTER

Communicate with the industry before and after for a smooth and successful process

It goes without saying that the better communicated all factors of a temporary space purchase process are, the better it will be understood by all parties involved. With understanding comes a smooth process, and a positive outcome. At the Modular Building Institute, we strive to inform and educate both School Administrators and Facility Planners before they are faced with the need to purchase temporary space. More importantly, we also have instituted numerous ways for you to communicate with our industry, before, during, and after the purchasing process.

Ways you can communicate with the industry

Call our portables hotline. We are here to answer your questions. You can dial 1.888.811.3288 M-F 8:00 am - 5:00 pm EST. We can also point you to dealers and manufacturers in your area that are available to answer questions you have about the purchasing process.

Did you know that you have a voice in the commercial modular construction industry? MBI takes calls concerning questions or issues with any modular unit that displays the MBI seal, indicating that the unit was manufactured by an MBI member. Learn more about the seals program at modular.org.

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Baton Rouge, LA, January 17, 2006 - This class is being conducted in a new modular building used as a temporary classroom at Audubon Elementary School. FEMA has funded these buildings in several school districts to accommodate students displaced by Hurricane Katrina to alleviate overcrowded conditions in the schools that welcomed the hurricane victims to their community. Robert Kaufmann/FEMA

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