2024 ANNUAL REPORT

KEY FINANCIAL DATA AND METRICS FOR THE **RELOCATABLE BUILDINGS INDUSTRY**

MODULAR BUILDING INSTITUTE

THE MODULAR BUILDING INSTITUTE

The industry's best resource for information about the relocatable building industry in North America

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2024 COMMERCIAL MODULAR CONSTRUCTION **RELOCATABLE BUILDINGS** REPORT

Cover Image: **United Court Transitional Housing.**
Built by CIMC MBS Hong Kong LImited.
First Place, Relocatable Modular Social & Supportive Housing.

The images in this report represent some of the winners of the Modular Building Institute's 2024 Awards of Distinction. To see the complete list of winners and learn more about each project, visit. modular.org/awards.

ABOUT THE MODULAR BUILDING INSTITUTE

Founded in 1983, the Modular Building Institute (MBI) is the only international nonprofit trade association serving the commercial modular construction industry. Members are manufacturers, fleet owners, and contractors of commercial modular building projects, as well as suppliers of building components, services, and financing. Located in 20 countries around the globe, members provide all types of building space, from relocatable buildings to complex, multistory permanent construction projects.

MBI's mission is to grow the industry and its capabilities by encouraging innovation, quality, and professionalism through communication, education, and recognition.

Each year, MBI hosts its World of Modular conference, the largest gathering of professionals in the modular construction industry. For more information about industry events, visit www.modular.org.

MAP

MODULAR ADVOCACY PROGRAM

The Modular Advocacy Program ("MAP") is MBI's multiyear, multi-million dollar campaign to spur investment in, and promote the greater adoption of, the commercial modular construction industry.

In order to meet the growing needs of its members and the greater modular construction industry, MBI's MAP program will drive industry growth in the following areas:

1. Influencing government legislation, regulations, procurement, programs, and codes.
2. Creating new business opportunities for the industry.
3. Expanding outreach efforts to developers, architects, and code officials.
4. Attracting new employees to the industry, including nontraditional workers.

MBI, leveraging its growing international membership, plans to fund this program through a variety of initiatives.

Funding the Modular Industry's Most Important Initiative

Your company can support MBI's Modular Advocacy Program in three ways:

MBI Seals

MBI Seals are 4-inch square stickers that are meant to be affixed inside each module that MBI member manufacturers produce. Each MBI Seal costs $20. These costs are intended to passed along to your customers, which means a net-zero cost to you.

Manufacturers – Order and affix an MBI Seal inside each module you manufacture.

Architects, Contractors, & Developers – Spec the MBI Seal on your future projects.

Fleet Owners – Ensure all new and existing units have the MBI Seal.

Sponsoring the MAP

Annual sponsorships for the MAP program are available for $1,000. If you're not buying Seals, this is an ideal way to show your support of MBI and contribute to MAP funding.

With your annual sponsorship, your company will receive:

- sponsor recognition and logo inclusion in every MBI printed piece (magazines, annual reports, event brochures),
- a dedicated eblast thanking each sponsor, AND
- a special thanks at the next World of Modular annual conference, including logo inclusion in the opening presentation.

Voluntary Donations

- If Seals and MAP sponsorship don't match your company's current objectives, support the MAP by making a voluntary donation in any amount.
- In combination with the revenues from Seals and sponsorships, these donations will be used to grow and protect the commercial modular construction industry through government affairs advocacy, business development, expanding MBI's membership, and industry workforce development.

MBI Needs You to Support the MAP

Full member support of the Modular Advocacy Program will be critical to MBI's goals in 2024 and beyond. And if your company has not yet joined MBI, now is the perfect time. With more resources than ever, the Modular Building Institute is helping to build the future of modular construction. Join us!

ABOUT THE MODULAR CONSTRUCTION INDUSTRY

Unlike the manufactured housing industry, which follows the federal U.S. Department of Housing and Urban Development (HUD) Code, the modular construction industry is regulated primarily at the state, provincial, and local levels by code officials and agency administrators. As with site-built structures, modularly constructed facilities must meet local codes where the buildings are to be located. There is no special "modular building code," and there are no exceptions for a building constructed utilizing the modular construction process—it is simply a different, more efficient manner of assembling the materials and components of a building at an offsite location. Modular construction can be utilized for commercial, residential, institutional, or industrial applications.

Commercial modular buildings are nonresidential, factory-built structures designed to meet provincial, state, and local building codes. Commonly, these buildings are constructed in accordance with the International Building Code (IBC) or some code modeled after the IBC.

The commercial modular building industry is comprised of two distinct divisions, both represented by MBI:

Permanent Modular Construction (PMC): PMC is an innovative, sustainable construction delivery method utilizing offsite, lean manufacturing techniques to prefabricate single-story or multistory whole building solutions in deliverable module sections. PMC buildings are manufactured in a safe, controlled setting and can be constructed of wood, steel, or concrete. PMC modules can be integrated into site-built projects or stand alone as a turnkey solution, and can be delivered with mechanical, electrical, and plumbing (MEP); fixtures; and interior finishes in less time and with less waste and higher quality control than projects utilizing only traditional site construction.

Relocatable Buildings (RB): Relocatable buildings are defined in the International Existing Building Code (IEBC) as partially or completely assembled buildings constructed and designed to be reused multiple times and transported to different building sites.

This report focuses on relocatable buildings in North America.


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Performances begin
MAY 5, 2023
in THE BROADWAY TENT
A THEATRICAL EVENT
2000 YEARS
IN THE MAKING
COMING TO GRANDSCAPE IN 2023
HIS STORY
HIS STORY

OVERVIEW

While consolidations and acquisitions continue and the number of companies owning and leasing relocatable buildings declines, the total number of relocatable buildings in use remains fairly constant at around 500,000.

Public school districts across North America collectively own and operate about 200,000 relocatable classrooms, while the relocatable building industry owns and leases about 300,000 buildings, amounting to more than $5 billion in assets. Additionally, many construction companies own fleets of construction offices that move from site to site—those buildings are not included in this data. These figures also do not include noncoded units such as personal storage units, although those units typically make up about 15 percent of a provider's fleet.

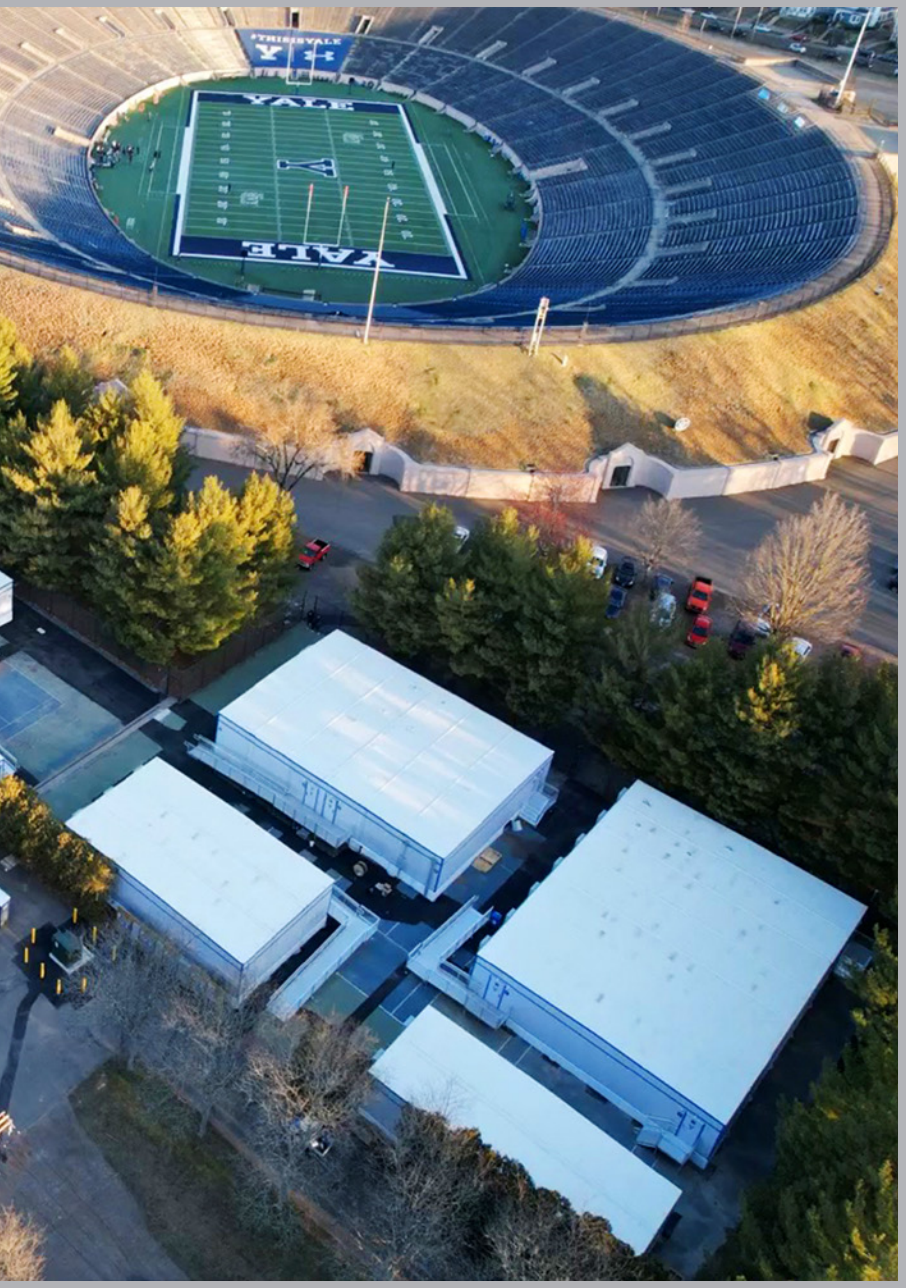
While we have made every effort to obtain relevant data from all available sources and to make appropriate currency conversions, when necessary, we caution that this report is based on the best available data and may not be representative of specific company activities. The data obtained for this report is only accurate to the extent that the data provided by member companies is accurate.

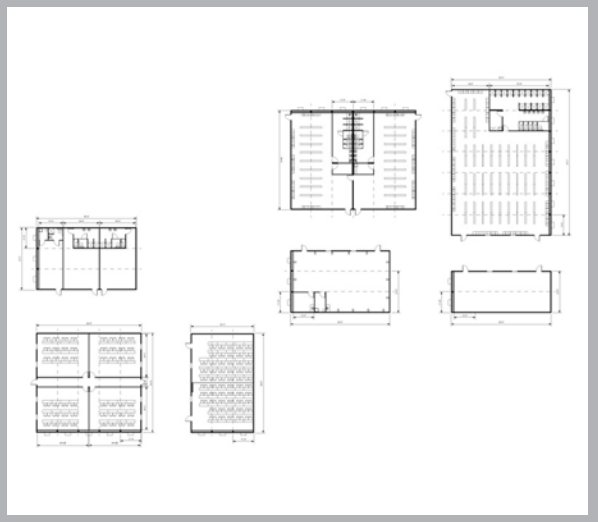
Yale University (Athletic Department). Built by Mobile Modular Management Corporation and Titan Modular Systems, Inc. First Place, Relocatable Modular Education.

Location: New Haven, CT

Gross Size of Project: 18,368 Square Feet

Days to Complete: 90


YALE
YALE



MARKETS SERVED

Customers of relocatable buildings include a diverse client base of general contractors, real estate developers, manufacturers, commercial businesses, education providers, financial institutions, government agencies, and companies involved in the resource industry. Common product offerings include single-wide office units, storage units, large multiunit office complexes, and classroom facilities.

Education

Relocatable buildings have become a critical factor in managing student demographics and increasing enrollments, and relocatable classrooms are ideal for "swing space" during new school construction or renovation. Some single-unit buildings can be delivered and operational in as little as 24 hours. These classrooms are measured for quality and code compliance by state or third-party agencies through routine and random inspections, testing, and certification services.

Customers may choose single classrooms or arrange multiple buildings in clusters to create a campus feel. MBI members supply steps, decks, ramps, and even furniture. Members also offer lease, purchase, and lease-to-purchase financing for a variety of public and private school needs. These classrooms are sometimes referred to as temporary, portable, or mobile classrooms.

School districts across North America are collectively the largest owners of relocatable classrooms, with about 200,000 total units. California schools own nearly 90,000 units, Texas schools own about 20,000, and Florida schools own about 17,000. Typically, larger school districts with high growth rates are more likely to own the units, which explains why schools in California, Texas, and Florida have so many. Schools in Georgia, North Carolina, Virginia, and Maryland own and operate about 3,000 units each.

MBI analyzed 10 educational projects completed in 2022. The average size of these relocatable education facilities was 24,743 square feet, and they consisted of an average of 32 modules. The average project cost was $1,755,586, with the modular portion of the project making up approximately 80 percent of the total cost (design, permits, and site work make up the balance). On average, projects built from relocatable units were completed in 190 days.

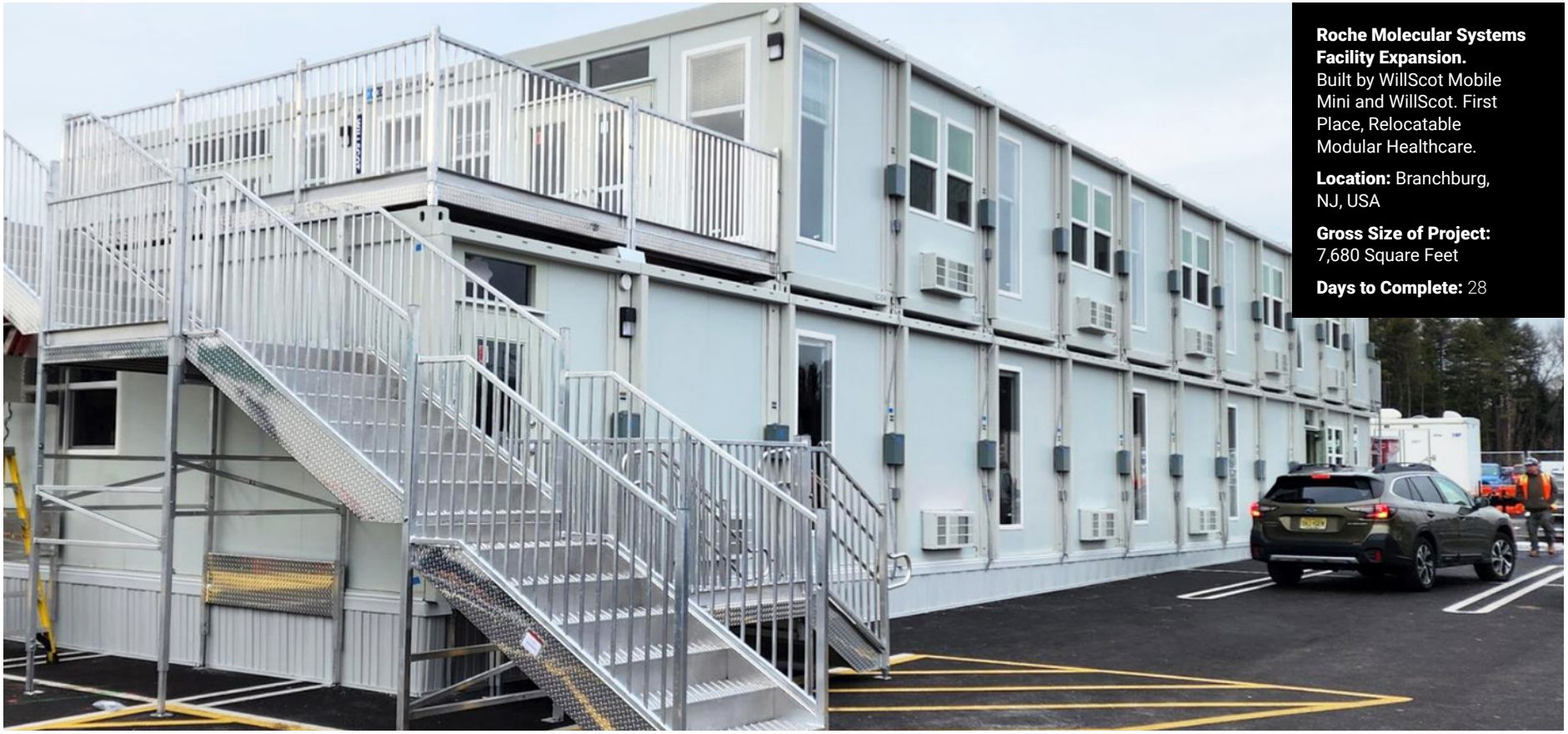
Construction Sites

Relocatable buildings have their roots in trailers for construction sites, where speed, temporary space, and relocatability are important. Used as standard field offices, construction site and in-plant buildings are available for immediate delivery. The standard construction is wood, but steel units are available when needed to meet noncombustibility requirements. In-plant buildings are available as single-story or two-story units with noise-reducing insulation for industrial environments. They are typically movable by forklift and include electrical and communications wiring, heating, air conditioning, and even plumbing.

Healthcare

Although healthcare was not historically a large market for the relocatable building sector, the global COVID pandemic exposed a great need for temporary medical facilities. While some localities chose to convert hotels and convention centers into COVID triage facilities, many opted to utilize relocatable buildings to fit their pressing needs.

Relocatable buildings for healthcare applications are designed and constructed to uncompromising standards of quality. A customer's new

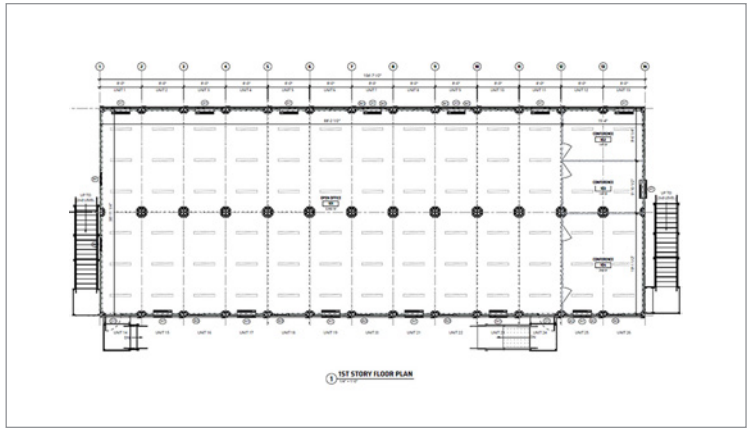


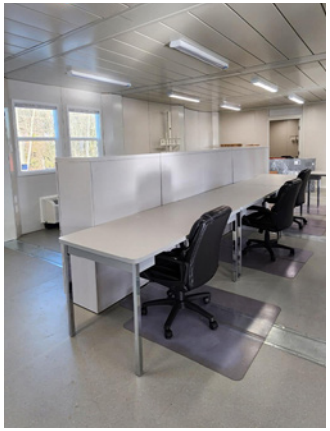
Roche Molecular Systems Facility Expansion. Built by WillScot Mobile Mini and WillScot. First Place, Relocatable Modular Healthcare.

Location: Branchburg, NJ, USA

Gross Size of Project: 7,680 Square Feet

Days to Complete: 28





MARKETS SERVED

clinic, hospital extension, laboratory, diagnostic center, MRI unit, dentist office, or other medical facility can be open for business and serving communities in as little as a few days. These facilities offer quick, quiet, safe, clean buildings with unlimited choices for interior decor, as well as furniture and equipment leasing.

To help expedite the use of temporary facilities going forward, MBI worked with the Facility Guidelines Institute on the development of a new resource titled "Guidance for Designing Health and Residential Care Facilities that Respond and Adapt to Emergency Conditions." This guide contains information to help healthcare facility planners better utilize modular construction to meet short-, intermediate-, and long-term needs.

General Administrative and Sales Office

When production demands increase, relocatable buildings can temporarily enlarge a facility without permanent alterations to the site. Also, since the space is not permanent, many companies are able to expand without the budget approval process required for traditional capital expenses. Relocatable offices can be single-story or multistory buildings configured to include independent offices, conference rooms, and large open spaces for cubicles or other partition systems. Large and small businesses, as well as local and state governments, are typical users of relocatable office space.

Commercial/Retail

Earlier occupancy means quicker return on investment, and this can mean significant cash flow advantages for retail occupancies. Standard floor plans are available for immediate delivery, and custom buildings are built to specifications in weeks, not months. Unique to the modular process is concurrent construction, a process in which site work takes place at the same time buildings are being put together in a quality-controlled factory.

Typical retail applications include new home sales centers, banks, golf pro shops, automobile fleet ownerships, college bookstores, and concession stands. If a client's emerging business needs are short-term, temporary space will accommodate their financial situation, space requirements, and deadlines.

Security

Relocatable buildings can be custom built for a variety of access and control situations. Toll booths, ticket sales offices, guard stands, and weigh stations are common applications. One- and two-story wood and steel buildings can have straight walls or walls that are tilted to improve views and reduce glare. MBI members supply a full line of portable storage containers for either short- or long-term use. Heavy-duty storage units feature ground-level entry with double-swing doors for easy accessibility and are ideal for construction site storage, equipment storage, warehousing, record-keeping, industrial manufacturing, retail, and other uses.

Equipment and Storage

Economical, convenient relocatable equipment and storage buildings offer onsite protection from theft and inclement weather, providing durability and strength day in and day out. Equipment shelters for construction sites, chemical storage buildings, temporary generator housing, and other applications are designed and built by MBI members to guard the client's investment. These buildings can be simple steel containers or more complex units that are heated and air conditioned, and can feature exteriors of brick, stone aggregate, or stucco.

Emergency and Disaster Relief

There is simply no other means of providing fast, transitional shelter and basic community needs following natural disasters than relocatable buildings, which can be quickly and efficiently deployed for emergency shelter, medical, and educational needs, or to accommodate relief workers. MBI members provide quick, safe

spaces following natural disasters like wildfires, hurricanes, and tornadoes, and in response to COVID-related needs. During the COVID pandemic, MBI reached out to hundreds of federal, provincial, and state emergency management agencies to share information about the advantages of rapidly deployable relocatable buildings and available inventory.

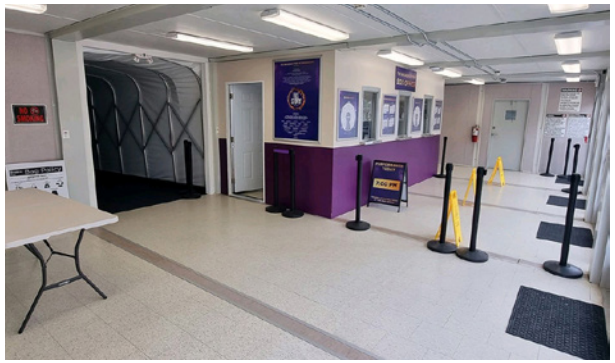
Recently and for the first time, the Federal Emergency Management Agency issued an RFP specifically for modular providers to help with disaster-rebuilding efforts, following the devastating fires in Lanai, Hawaii. In that effort, modular construction is being utilized for temporary school classrooms and housing.

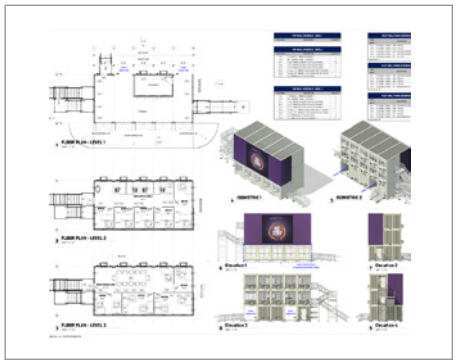
His Story Broadway Theater.
Built by WillScot Mobile Mini and WillScot. First Place, Relocatable Modular Retail.

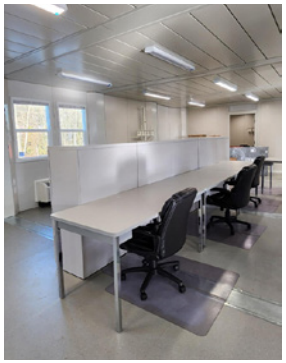
Location: The Colony, TX, USA

Gross Size of Project: 2,400 Square Feet

Days to Complete: 31







PROJECT DATA

MBI analyzed specific data for 50 relocatable building projects in North America in 2023. On average, those projects were approximately 11,000 square feet in size, took 160 days to complete, and had a project cost of $1.7 million. The modular portion of the total project cost was 63 percent, compared to just 43 percent for permanent modular projects. Of these projects, 43 were single-story, but only 13 were single-unit/single-module projects. The average number of modular units per project was 17, with 10 projects containing 25 or more modules. This data demonstrates the growing complexity and adaptability of utilizing relocatable buildings for a variety of needs.

Business Operations

Each year MBI compiles data about the modular construction industry, and each year there is a greater desire for more detailed data. One of the challenges in gathering this data is the diversity among industry participants. Modular construction itself is not a North American Industry Classification System (NAICS) category, but falls under several NAICS categories, including:

321992: Prefabricated Wood Building Manufacturing
332311: Prefabricated Metal Building and Component Manufacturing
236220: Commercial and Institutional Building Construction
531120: Lessors of Nonresidential Buildings (except Miniwarehouses)

In general, relocatable buildings have useful lives comparable to those of any other building type, if property maintained and operated. As well, capital improvements like HVAC and roof replacement are frequently made to these units, which can extend their useful lives for several additional years. Total reported capital expenditures for new lease fleet investment in 2023 was nearly a half-billion dollars.

A typical relocatable building will be moved an average of seven times over its life, but this figure varies based on the size and type of the unit. For example, a smaller building made up of one or two modules may move a dozen or more times over its life (construction site offices are good examples of this type of building). A larger complex, on the other hand, may only move three to five times over its life.

Average Lease Term

These terms varied, depending on the product leased (single-wide, double-wide, complex). Our findings indicate that in order to recoup the initial capital investment in a unit, a fleet owner typically needs to have the unit on lease for 35-50 months (see “Monthly Rental Rate of Return,” below). Once the initial investment is recouped, fleet owners continue leasing their units until sold, typically after 10 years.

Monthly Rental Rate of Return

The average monthly rental rate of return (also referred to as “return on investment” or “lease rate factor”) is calculated by dividing the averages of monthly rental revenues by the cost of rental equipment on rent for the period. For example, if a company has an average monthly rental rate of 2 percent, it is generating revenue equal to 2 percent of the total cost of the equipment on lease each month, or 24 percent of the unit’s cost per year. In this case, renting the unit for 50 months would generate revenue sufficient to cover 100 percent of the unit’s original cost. A company with an average monthly rental rate of 3 percent would require just 34 months of rental income to recover initial costs. Historically,

the industry average has been approximately 2.5 percent, requiring 40 months of rental to recoup the original equipment cost. This benchmark takes into account all company sizes and all product lines (single-wides, double-wides, etc.).

Sales Price to Original Cost Ratio

Over the past 10 years, the average sale price of a relocatable building has exceeded 100 percent of its original cost, demonstrating that these units retain value well.

Many factors contribute to value and sale price, including:

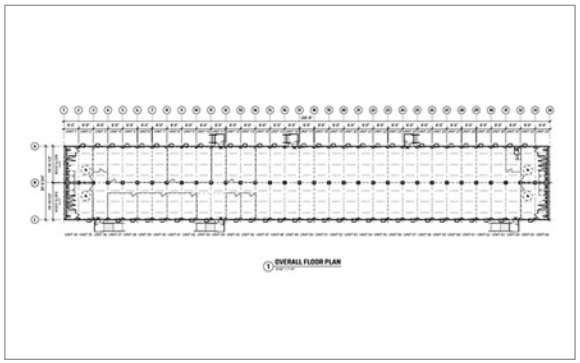
- Escalating costs of constructing new units to meet newer versions of building codes
- Increasing material costs and labor shortages

Hyundai Engineering America Electric Vehicle and Battery Plant. Built by WillScot Mobile Mini and WillScot. First Place, Relocatable Modular Office.

Location: Bellville, GA, USA

Gross Size of Project: 45,000 Square Feet

Days to Complete: 91



PROJECT DATA

- Proper operation and maintenance of the unit over its life
- Number of times the unit is relocated

Refurbished existing units hold their value very well due to higher construction costs for new units (those higher costs occur due to material price increases, increased code requirements, and reduced labor availability). However, the more a unit is relocated, the greater the wear and tear and subsequent increased maintenance and repair costs.

Revenue Sources

Companies engaged in the relocatable building sector continue to derive a majority of their revenue from the lease of units. Other sources of revenue include the sale of new and used units, the lease of ancillary products such as ramps and stairs, and revenue from services such as transportation and installation of units.

Regional Competition

Despite the growing control of the industry fleet by a handful of larger companies, the day-to-day operations of the industry are still very much regional in nature. Typical clients include general contractors and school districts seeking temporary, cost-effective solutions for space needs. In any given market, larger companies must still compete with several smaller fleet owners serving the region. Drivers of competition in the relocatable building market often include product availability and quality, as well as price and service.

The percentage of units owned varies by region, as some of the larger players are more heavily concentrated in certain regions and less in others, while some of the midsized companies are state- or region-focused. For example, a company with 1,000 units in a smaller region may have a greater local market share than a large fleet owner that is less active in that region. Additionally, there are very few large customers for relocatable buildings. Regionalization of markets and diversity of customers keep the market competitive, despite mergers and consolidations.

Differences in state building codes also prevent larger players from "flooding the market" and shipping in excess product from other regions. Given that all relocatable buildings must meet the wind, snow, and seismic conditions where they are to be located, it is not practical for any company to build one type of building that will meet every possible local condition. For example, a relocatable building that meets wind zone requirements in Florida may not be suitable for seismic conditions in California or snow loads in New York.

Depreciation

Lease fleet responses about depreciation and residual values vary based on condition and capital improvements to the fleet, market use of the fleet, and composition of the types of units in the lease fleet (construction offices, classrooms, etc.). Many of the units in the industry lease fleet are depreciated over a 20-year period with a 50 percent residual value (residual value is understood to be the anticipated value of the building at the end of the lease). Mean annual depreciation has been 5-6 percent for the past several years.

Utilization

Utilization indicates the percentage of a company's assets that are currently on lease and generating revenue at a given time. MBI obtained fleet utilization data from companies collectively owning 185,921 units. Of those units, 130,680 were on lease at year-end 2023, for a weighted industry utilization rate of 70.3 percent, which is down from 72.7 percent at year-end 2022.

Key Findings

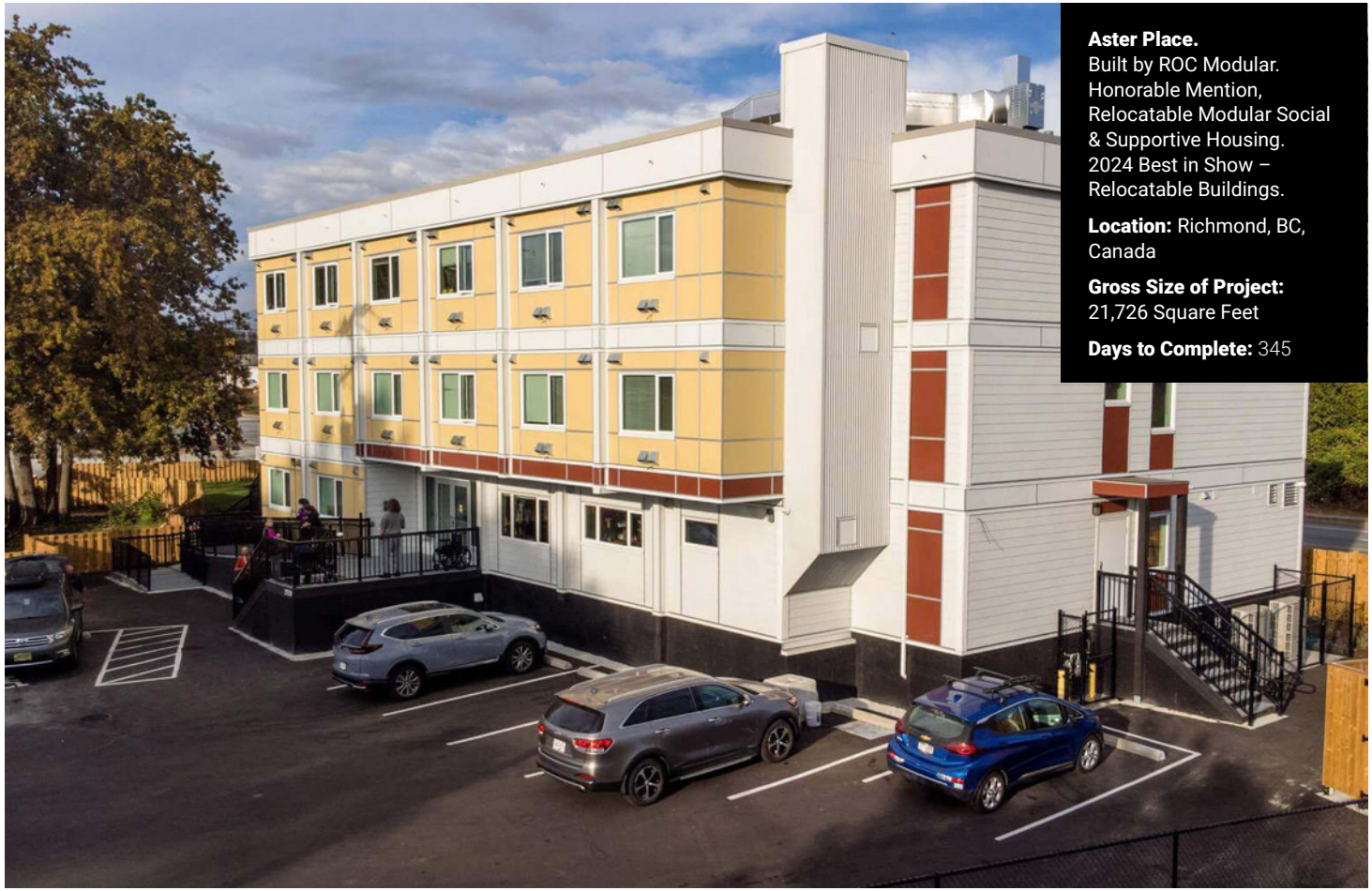
Overall demand in North America for relocatable buildings was down in 2023, with 70.3 percent of all units reported on lease as of December 31, 2023.

Total industry revenue reported to MBI exceeded $4 billion in 2023.

A reported $500 million was invested in capital expenditures for new inventory, with total industry assets in excess of $5 billion.

Revenue mix was generated from roughly the same market segments, with about two-thirds of industry revenues coming from relocatable classrooms and construction site offices.

Mergers and acquisitions continue, with 91 percent of all industry units owned by four companies.

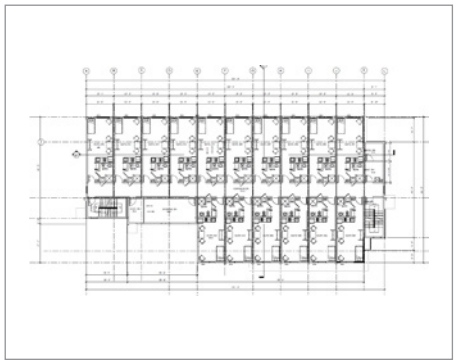


Aster Place.
Built by ROC Modular.
Honorable Mention, Relocatable Modular Social & Supportive Housing.
2024 Best in Show – Relocatable Buildings.

Location: Richmond, BC, Canada

Gross Size of Project: 21,726 Square Feet

Days to Complete: 345



GUIDE FOR CODE COMPLIANCE FOR RELOCATABLE BUILDINGS

All newly constructed relocatable buildings must be constructed in accordance with the building codes in effect at the time of the building's construction—most commonly the IBC. These buildings are constructed offsite, and many elements are concealed when the building arrives to the site (this process is known as closed construction).

As such, 35 states have a statewide administrative program in place to determine if buildings have been constructed in accordance with all applicable codes. The terminology varies across state programs, with many referring to these buildings as "industrialized buildings" or even "manufactured buildings." The latter term is not preferred, as it tends to imply that these buildings are constructed to the same federal HUD Code as manufactured housing products, which is not the case.

These state programs require manufacturers of relocatable buildings to be approved with the state agency, have a quality assurance program approved, and submit regular reports. Additionally, each floor plan the manufacturer intends to build must be reviewed and approved by a licensed third-party design professional in the state. These professionals are sometimes referred to as compliance assurance agencies (CAA) or third-party inspection agencies (TPIA).

Once the manufacturer and plan are approved, every manufactured section or module of an industrialized building shall be marked with a label supplied by the TPIA that includes the name and address of the CAA and the certification label number.

The relocatable building will also have a manufacturer's data plate that is permanently attached or adjacent to the electrical panel posted in the location noted on the drawings, and includes information such as:

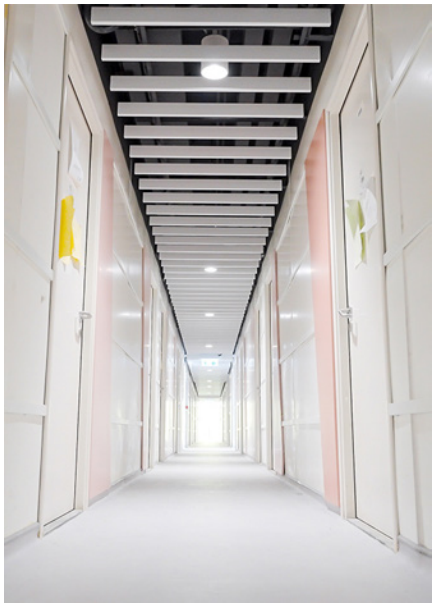
1. Occupancy group
2. Manufacturer's name and address

United Court Transitional Housing. Built by CIMC MBS Hong Kong LImited. First Place, Relocatable Modular Social & Supportive Housing.

Location: Hong Kong

Gross Size of Project: 370,935 Square Feet

Days to Complete: 332



GUIDE FOR CODE COMPLIANCE

3. Date of manufacture
4. Serial number of modules
5. Design roof live load, design floor live load, snow load, wind, and seismic design
6. Approved quality assurance agency or approved inspection agency
7. Codes and standards of construction
8. Envelope thermal resistance values
9. Electrical service size
10. Fuel burning equipment and size
11. Special limitations, if any

Following this process, the building is ready to be permitted and placed on its first location, and is considered approved or "registered" in the state. Registered buildings should be accepted in all localities as meeting the requirements of the codes for the building itself. The label affixed by the TPIA is the indication for the local building code official that the unit does in fact comply with codes. The local official, therefore, has no jurisdiction over what is "inside the box." However, local requirements affecting buildings, such as local land-use and zoning, local fire zones, site development, building setback, side and rear yard requirements, property line requirements, and subdivision regulations, are within the scope of the local authority.

Existing Relocatable Buildings

A unique feature of relocatable buildings is that they are designed and constructed with the explicit purpose of being relocated and used multiple times, possibly at multiple locations and in multiple states.

Once relocated from its original site, a building is considered an "existing building" (per IBC, one for which a legal building permit has been issued). Prior to 2015, Chapter 34 of the IBC contained compliance information for existing buildings. Beginning with the 2015 IBC, Chapter 34 has been removed in its entirety and replaced with a "pointer" to the IEBC (IBC 2015 Section 101.4.7).

In Chapter 14 of the 2018 IEBC, "Relocated or Moved Buildings," Section 1401.1 Scope states that "this chapter provides requirements for relocated or moved structures, including relocatable buildings as defined in Chapter 2." Those requirements address various life safety issues such as wind loads, seismic loads, and snow loads. Any existing relocatable building moved into a new jurisdiction must meet these load conditions. The local code official can find this information from the manufacturer's data plate affixed to the building.

Aside from specific site and zoning issues, a local building code official needs only to locate the third-party label and the manufacturer's data plate on the relocatable building to determine compliance. If the building is missing either the label or the data plate, the building is subject to approval by the local code official.

It is important to note that there is no expiration date for these approval labels, provided that the relocatable building has not been modified and has not experienced any structural damage over time

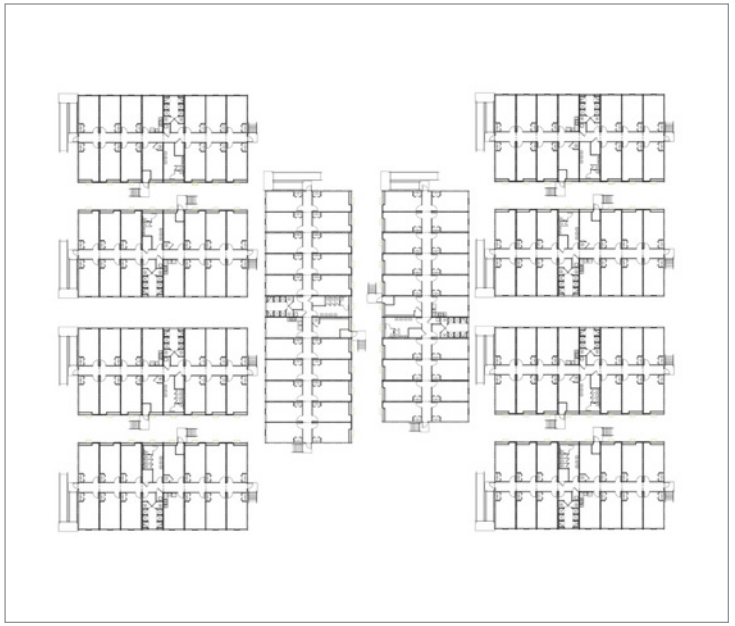
Parapan American Games.
Built by Tecno Fast S.A.
First Place, Relocatable Modular Special Assembly.

Location: Santiago, Santiago Metropolitan Region, Chile

Gross Size of Project: 95,906 Square Feet

Days to Complete: 115


JUEGOS PANAMERICANOS Y PARAPANAMERICANOS
Santiago 2023
CENTRO DE BIENVENIDA
WELCOME CENTER



DEFINITIONS

MBI adopted the definitions contained in the ICC/ANSI standard 1200 and 1205 for consistency. Sources for other terms not used in the standard include state administrative programs and the National Institute for Building Sciences.

Accessory dwelling unit (ADU). A smaller, independent residential dwelling unit located on the same lot as a stand-alone (i.e., detached) single-family home. (Source: American Planning Association).

Authority Having Jurisdiction (AHJ). Organization, political subdivision, office, or individual charged with the responsibility of administering and enforcing the provisions of the applicable building code. The authority having jurisdiction shall include a state agency or local building department.

Building Envelope. As the physical separator between the interior and exterior environments of a building, the building envelope serves as the outer shell to help maintain the indoor environment (together with the mechanical conditioning systems) and facilitate its climate control. Building envelope design is a specialized area of architectural and engineering practice that draws from all areas of building science and indoor climate control.

Building Site. A lot, the entire tract, subdivision, or parcel of land on which industrialized housing or buildings are sited.

Building System. The design and/or method of assembly of modules or modular components represented in the plans, specifications, and other documentation, which may include structural, electrical, mechanical, plumbing, fire protection, and other systems affecting health and safety.

Certification Label. A decal, insignia, or alteration decal.

Closed Construction. A building, component, assembly, subassembly, or system manufactured in such a manner that all portions cannot be readily inspected at the installation site without disassembly or destruction thereof.

Commercial Structure. An industrialized building classified by the building codes for occupancy and use groups other than residential for one or more families.

Compliance Assurance Program. Procedures that state the guiding principles and define the framework for ensuring that construction documents approved by a design review agency, or that modular buildings inspected by a third-party inspection agency, comply with the applicable building codes.

Compliance (or Quality) Control Program. The manufacturer's system, documentation, and methods of ensuring that industrialized housing, buildings, and modular components, including their manufacture, storage, handling, and transportation, conform with this chapter.

Component. A subassembly, subsystem, or combination of elements for use as a part of a building system or part of a modular component that is not structurally independent, but may be part of structural, plumbing, mechanical, electrical, fire protection, or other systems affecting life safety.

Data Plate. A plate attached by the manufacturer or installer to a modular building or modular component that contains identifying information, allowing code officials or end-users to determine if the structure is suitable for installation in their jurisdiction, location, or project.

Decal. The approved form of certification issued by the authority having jurisdiction, to be permanently attached to the modular building, modular component, or panelized system, indicating that it has been constructed to meet or exceed the applicable building code requirements.

Deconstruction. The process of taking apart a building or structure, or a portion thereof, with the intent of repurposing, reusing, recycling, or salvaging as many of the materials,

products, components, assemblies, or modules as possible.

Design Package. The aggregate of all plans, designs, specifications, and documentation required by these sections to be submitted by the manufacturer to the design review agency or required by the design review agency for compliance review, including the compliance control manual and the onsite construction documentation. Unique or site-specific foundation drawings and special onsite construction details prepared for specific projects are not a part of the design package.

Erection/Installation/Set. The process of blocking, leveling, and anchoring a modular building unit on the building site upon delivery.

Industrialized Building. A commercial structure constructed in one or more modules, or constructed using one or more modular components, that is built at a location other than the commercial site and designed to be used as a commercial building when the module or modular component is transported to the commercial site and erected or installed.

Industrialized Housing. A residential structure designed for the occupancy of one or more families that is constructed in one or more modules or constructed using one or more modular components, and is built at a location other that the permanent site and designed to be used as a permanent residential structure when the module or modular component is transported to the permanent site and erected or installed on a permanent foundation system.

Insignia. The approved form of certification issued by the authority having jurisdiction to the manufacturer to be attached to the modular building, modular component, or panelized system, indicating that it has been constructed to meet or exceed the applicable building code requirements.

Manufacturer. The entity responsible for the manufacturing of assemblies, panelized systems, modular buildings, or modular components.

Manufacturing Plant. The location, other than the building site, at which modular buildings, modular components, modules, panels, or tiny houses are assembled or manufactured prior to transport to the final construction site.

Marriage Wall/Crossover Connections. The joint between the modules in a complex, commonly called a mate-line or mod-line.

Modular Component. A subassembly, subsystem, or combination of elements, including panelized systems, building shells or bathroom pods, for use as a part of a modular building that is not structurally independent, but is a part of structural, plumbing, mechanical, electrical, fire protection, or other systems affecting life safety.

Offsite Construction. The planning, design, fabrication, and assembly of building elements at a location other than their final installed location to support the rapid and efficient construction of a permanent structure. Such building elements may be prefabricated at a different location and transported to the site or prefabricated on the construction site and then transported to their final location. Offsite construction is characterized by an integrated planning and supply chain optimization strategy. (Source: National Institute of Building Science)

Open Construction. A modular building, modular component, panelized system, or tiny house manufactured in such a manner that all portions can be readily inspected at the building site without disassembly, damage, or destruction thereof.

Permanent Modular Construction (PMC). An innovative, sustainable construction delivery method utilizing offsite, lean manufacturing techniques to prefabricate single- or multistory whole building solutions in deliverable module sections. PMC buildings are manufactured in a safe, controlled setting and can be constructed of wood, steel, or concrete. PMC modules

DEFINITIONS

can be integrated into site-built projects or stand alone as a turnkey solution, and can be delivered with mechanical, electrical, and plumbing (MEP); fixtures; and interior finishes in less time, and with less waste and higher quality control than projects utilizing only traditional site construction.

Prefabricated. The manufacture or fabrication of sections of a building at an offsite location that are delivered to and assembled at the building site.

Quality Control. Controls and inspections implemented by the manufacturer, as applicable, to ensure that the material provided and work performed meet the requirements of the approved construction documents and referenced standards-applicable building codes.

Registered Design Professional. An individual who is registered or licensed to practice their design profession, as defined by the statutory requirements of the professional registration laws of the state or jurisdiction in which the project is to be constructed.

Relocatable/Industrialized building. A partially or completely assembled building that complies with applicable codes and state regulations and is constructed in a building manufacturing facility using a modular construction process. Relocatable modular buildings are designed to be reused or repurposed multiple times and transported to different sites.

Site or Building Site. A lot, the entire tract, subdivision, or parcel of land on which industrialized housing or buildings are sited.

Third-Party Inspector. An approved person determined by applicable statutory requirements to be qualified by reason of experience, demonstrated reliability, and independence of judgment to inspect modular buildings, and portions thereof, for compliance with the construction documents, compliance control program, and applicable building codes. A third-party inspector works under the direction of a third-party inspection agency.

Virginia State University Temporary Dormitories. Built by Modular Genius and Diamond Builders. First Place, Relocatable Modular Dormitory.

Location: Ettrick, VA, USA

Gross Size of Project: 58,600 Square Feet

Days to Complete: 82

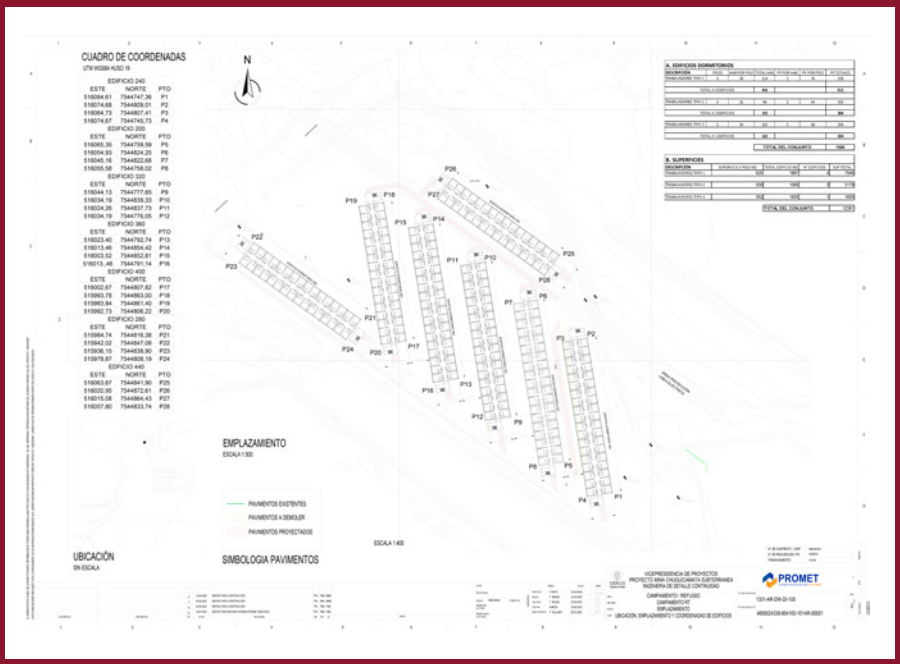

CERRO MISCANTI
PROMET

Temporary Rental of VPZN Buildings.
Built by PROMET SERVICIOS SPA. First Place, Relocatable Modular Workforce Housing.

Location: Calama, Antofagasta, Chile

Gross Size of Project: 42,447 Square Feet

Days to Complete: 171



2024

COMMERCIAL MODULAR CONSTRUCTION **RELOCATABLE BUILDINGS REPORT**

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