

TRIMO



EFFICIENT, INNOVATIVE, SUSTAINABLE

TRIMO MODULAR SPACE SOLUTIONS



Conhouse 2+ Weekend House, Slovenia

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EFFICIENT, INNOVATIVE, SUSTAINABLE

Trimo is one of the leading providers of modular solutions, with over 25 years of experience and almost 100,000 units manufactured and supplied worldwide. Starting from the company's first and very basic modular office, Trimo's experience has grown through continued investment and development to allow today's offerings, which can meet almost any customer need.

Our engineering, production and sales teams provide efficient, innovative and sustainable solutions including complete camps with kitchens and dining rooms, multi-storey office complexes, shower and toilet complexes, schools and kindergartens, exhibition stands, and special solutions. Long lasting, Trimo's modular solutions offer exceptional price/performance value for virtually any use as required.

Modular units can be shipped assembled or to keep transport cost to a minimum supplied flat-packed for on-site assembly with just the minimum of tools. Units can also be easily disassembled after use and transferred to a new location.

Trimo modular units are made of natural materials and are almost 100% recyclable. They deliver great environmental benefits (thermal insulation, sound reduction) to present an adaptable, versatile, and sustainable modular solution. Trimo's modular units can be found in many environments around the world including Maasdar City, UAE - The first CO₂ neutral city in the world.



Faculty of Medicine, Ljubljana, Slovenia

SPACE SOLUTIONS

Commercial

The business environment must be flexible and innovative whilst also efficient and sustainable and Trimo's modular units offer the perfect blend of these qualities making them ideal for use as offices, showrooms, retail stores, exhibition showrooms or for any other commercial application. From basic, comfortable solutions to high-end versatile modular units, incorporating high end materials Trimo's modular units allow you to build a business specifically to your unique needs.

Hospitality

Easy to set up, Trimo's modular units offer innovative solutions for all hotel and leisure requirements as well as specialized buildings for use in marinas and campsites etc. Highly adaptable and customizable, they offer investors and architects almost limitless possibilities to create bespoke solutions in terms of design, space efficiency and wellbeing as well as being a cost effective construction.



Al Wasita remote site camp, United Arab Emirates

Government

Trimo has built an enviable reputation as one of the leading providers of complete camp solutions to support military and relief operations, non-government organizations and other customers that demand a rugged, re-locatable building for use in remote areas across the globe. Trimo offers specialized, reinforced products that help keep occupants safe in some of the most dangerous locations.

Trimo's modular solutions are also used extensively by public and private investors as permanent, easy to set up and efficient hospitals, senior citizen accommodations, public infrastructure buildings and other social building applications.

Industrial

Sometimes industry requires factories or operations to be located in remote locations and this can mean sending the workforce to some of the harshest environments for extended periods. Typically this may be mining, oil exploration, telecommunications and energy installations, which may need to be located in hot deserts to northern cooler climates and it is here where Trimo's complete camp solutions excel. Safe, comfortable and inviting places to live and work, they offer the ultimate solution. Trimo also offers a wide range of modular units that have been optimised for use as telecom installations, industrial applications and other bespoke applications and its engineers work with the best materials to adapt to any specific customers requirements.



Education

Where additional space is required quickly and efficiently, Trimo's modular units are the perfect solution for creating larger classrooms, complete schools, kindergartens, playrooms and many other educational applications. The units are flexible in dimensions and materials so that the perfect environment can be created for children.

Living conditions in Trimo's buildings are in compliance with all standards and regulations, and the use of top-quality contemporary materials and advanced manufacturing procedures guarantee long life-span. With the highest fire ratings and load bearing (earthquake and wind loads) capacities Trimo's modular units are always safe and secure.



BENEFITS & ADVANTAGES

Best products and materials

- No. 1 in the industry in terms of quality.
- Excellent thermal insulation over the complete life span of the unit due to special panel joints and high density rock wool core.
- Non-flammable and environmental friendly materials.
- Windows and doors to the highest European quality standards.
- Panel joints designed to stop the ingress of desert sand and other environmental elements.

Flexible and cost effective

- Flexible design to meet individual requirements.
- Strong steel metal frame allows side-by-side and stacking of units in two or more storeys.
- Can be assembled and disassembled multiple times.
- Assembled unit designed to allow relocation of units from site to site without damage.
- Quick and on-time supply from our factories in EU to any destination around the globe.
- Flat-packed delivery minimises transportation costs.



Easy to assemble

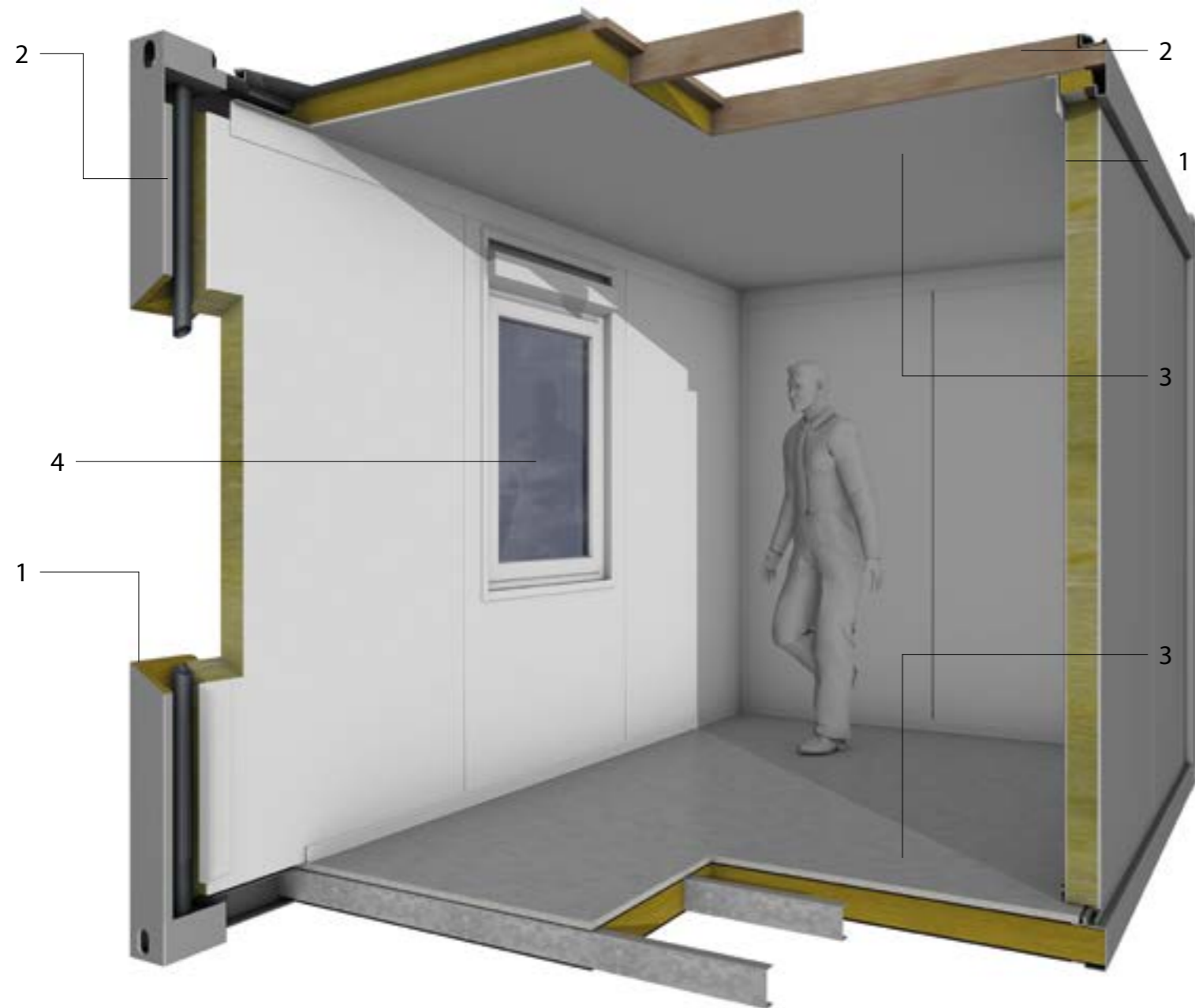
- Easy and very fast assembly with minimal tools.
- No constructional waste.
- Significantly shorter construction times compared to traditional build.
- Simple foundations.

Support and consulting

- Complete engineering and project management support.
- Technical team of architects, experts in statics, civil and mechanical engineers make design plans with an ear to the customer.
- Free technical and after sales support.
- Detailed knowledge of the technological design processes, steel and modular construction assemblies.

High standard of living environment

- 30+ years life span with the correct maintenance.
- Sustainable and durable materials create a healthy and pleasant living environment.
- Strict quality control of all prefabrication process assures the very best final product.
- Numerous and global certificates for safety, quality and sustainability endorse our solutions.
- Excellent sound and heat insulation.



Standardised 20' modular space unit; exploded perspective



TRIMO MODULAR UNIT

1. Steel framework

Designed as a light construction Trimo modular units enable easy handling and linking of individual modular units in both longitudinal and transverse directions without any limitations. Top steel quality and different types of corrosion protection allow them to be used in toughest climatic conditions.

2. Drainage

A rainwater channel incorporated in the roof frame, enables water drainage from the roof through PVC rainwater downpipes, located within every corner column.

3. Floors and ceilings

Completely pre-assembled and insulated with mineral wool. Exterior surfaces are protected with steel sheet, which are inclined towards rainwater channels at the roof. Various interior finish materials are available.

4. Windows & doors

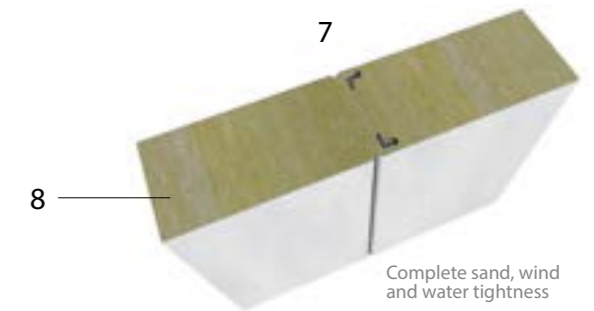
Standard or highly insulated, top quality windows and doors with wide range of additional equipment.

5. Easy to transport and re-locate

Solid enough to enable handling by any ISO means (crane, forklift, spreader etc.) and can be transported by all kind of vehicles. Produced fully factory assembled or flat-packed to reduce transportation costs.

6. Long term economic benefits

Easy to build and install, they can be assembled and dissembled several times allowing them to be used on many consecutive projects over a long time period.



TRIMOTERM FAÇADE WALL PANELS

7. Thermal and sound insulation

Using various Trimo FTV fireproof panels of 60 to 240 mm thickness, thermal conductivity values (U) as low as 0.17 W/m²K can be guaranteed as well as an Rw sound reduction of 32 dB.

8. High density rock wool

100-120 kg/m³ assures vertical consistency and prevents heat bridges during the whole life span of the product.

9. Completely fire proof solution

Walls are made of "A1" class non - combustible materials, are completely recyclable and environmental friendly. EI Fire resistance class certified (EI30 - EI240).

10. Various profiles and custom colours

Various faced profiles are available to meet customers' demands and any colour from the RAL colour-chart.



TECHNICAL DATA

Dimensions

Type of Unit	external LxW [mm]	internal LxW [mm] ¹
10'	2989 x 2435	2809 x 2255
16'	4880 x 2435	4700 x 2255
20'	6055 x 2435	5875 x 2255
24'	7325 x 2435	7145 x 2255
30'	9125 x 2435	8945 x 2255

Standard unit heights are 2591 mm (int. 2326 mm) and 2765 mm (int. 2500 mm). Other non-standard modular units sizes can be manufactured; length up to 40'; width up to 12'; height up to 12'.

Loadings

	Standard	Optional
Floor load	2.00 kN/m ²	3.00 kN/m ²
Roof (snow) load	1.00 kN/m ²	2.00 kN/m ²
Wind load	0.50 kN/m ²	1.00 kN/m ²

U Thermal transmittance

	Standard	Optional
Floor	0.34 W/m ² K	0.24 W/m ² K
Roof	0.33 W/m ² K	0.18 W/m ² K
Walls	0.61 W/m ² K	0.26 W/m ² K
Windows	1.60 W/m ² K	1.30 W/m ² K
Doors	1.90 W/m ² K	1.60 W/m ² K

¹ Valid for wall thickness 60 mm





EQUIPMENT

Windows & doors

Standard or high insulated PVC or aluminium windows of different sizes, furnished with PVC rolling shutters and glazed with insulation double-layer glass. Standard, security or fire resistant aluminium and steel metal doors, single or double fold, equipped with mortise locks, upper door closers, panic bars and glazed vision panels.

Electrical

Standard IEC 60364; voltage 230/400V, 50Hz; CEE-connection plug/socket, 5-pole 5x32 A, 400 V, IP-44 recessed into top frame, el. Connection cables 5x6mm² between units. Standard equipment: one main el. box per unit, flush-mounted cables, switches 230 V, sockets 230 V, fluo- lights, ceiling lights.

Sanitary

Cold water entry 1/2" or 3/4", sewage exit PVC 50 mm or 110 mm; surface-mounted Polypropylene water pipes 1/2", 3/4" and PVC sewage pipes diam. 50 mm, 110 mm. Standard equipment: ceramic sinks, toilets, urinals, acrylic shower cabins, el. water heaters and floor drains. Equipment for handicapped persons also available.

Additional equipment

- forklift pockets,
- metal frame reinforcements for increased load,
- premium internal floor, wall and ceiling claddings,
- HVAC,
- stairs, platforms, railings,
- decorative metal elements,
- secondary roofs and facades,
- internal equipment, furniture.



TRANSPORT & ASSEMBLY

Standard unit dimensions are adapted to meet all means of transport that are used for the transportation of ISO containers.

Transportation through land (road, railway), sea (in 40' HC shipping Containers, on flat racks, platforms) or air is possible.

Trimo modular units can be supplied fully factory assembled or flat-packed. Flat-packs are more cost-efficient and assembly at the desired location is fast and simple.

Trimo can deliver turnkey solutions including assembly on site by providing qualified instructors, engineers or supervisors for optimal project completion.



Cemetary building, Domžale, Slovenia

SPECIAL SOLUTIONS

TRIMO modular units are designed in a way that they can be easily modified, which enables us to fulfil a wide range of customers' requests and needs. Over 25-plus years of experience, numerous special solutions were made.

Technical modular units

Reinforced units with high load-bearing capacity, allows for large dimensions. These are ideal for industrial purposes, boiler rooms, sorting rooms, hoppers, etc.

Telecommunication cabins

Units specifically designed for housing electronic equipment for operational management they are also suitable for use in remote areas where low-maintenance and high security is required.

Highly insulated modular units

Designed for extreme weather conditions (high/low

temperatures, moisture, sand storms) they have top quality insulation, construction materials and sealings to provide comfortable living conditions around the globe.

Kitchen and laundry modular units

Standard units can be transformed in fully equipped kitchen/laundry units, which are compliant with sanitary regulations and standards.

False floors

Raised final floor level provides extra room for installations, cables or other equipment.

Additional façade (wooden, Qbiss One, Trimoterm, ...)

Are a great way to mask steel framework, in order to fit in with different surroundings and to present a warmer architectural design style.



REFERENCES

Commercial

- Accommodation Units, Snake Island, Lagos, Nigeria
- Art Shops, Zürich, Switzerland
- Office Units, Tengiz, Kazakhstan
- Accommodation Units, Järfälla, Sweden
- BMW Car Showroom, Friedrichafen and Heilbrunn, Germany
- Office / Accommodation Units, Luanda, Angola
- Office and Accommodation Units, Juba, Sudan
- Office Units, Billund, Denmark
- Office Units, Masdar City, UAE
- Exhibition Pavilion RogLab, Ljubljana, Slovenia
- Research Center, Butare, Rwanda
- Office Units North Greenwich, London, United Kingdom
- Biathlon Stadium, Rasen - Antholz, Bolzano, Italy

Hospitality

- Motel Pelikan, Dettelbach, Germany
- Eurohotel, Pettenbach, Austria
- Sports Facility, Alpbach, Austria
- Hotel, Hemsedal, Norway
- Chapel, Oslo, Norway
- Family House, Nürnberg, Germany
- Sanitary Block and Shop, Marina Kornati, Biograd na moru, Croatia

Education

- Faculty of Medicine, Ljubljana, Slovenia
- Kindergarten Biba, Škofja Loka, Slovenia
- Kindergarten Ajda, Ravne na Koroškem, Slovenia
- Kindergarten, Wien, Austria
- School, Ilinden, Macedonia
- School and Kindergarten, Norway
- School, Bolzano, Italy
- School, Port au Prince, Haiti
- School and Kindergarten Montessori, Köln, Germany

Government

- Accommodation and Medical Facility, Gym and General Store, Novi Travnik, BIH
- Medical Facility, Doboj, BIH
- Detention Unit, Sarajevo, BIH
- Accommodation Units OSCE, Girevi, Georgia
- UN Special Court, Freetown, Sierra Leone
- Hospital, Kandahar, Afghanistan
- Military Camp, Mazari Sharif, Afghanistan
- Field Hospital, Phuket, Thailand
- Police Station, Port au Prince, Haiti
- Municipality, Šmarje pri Jelšah, Slovenia

Industrial

- Remote Site Camp Medco, Doha, Qatar
- Remote Site Camp, Al Wasita, UAE
- Oil Rig Field Camp Support, Hassi Messaoud, Algeria
- Remote Site Camp, Libya
- Waste Treatment Center, Ptuj, Puconci, Račje selo, Slovenia
- Accommodation Camp, Iceland
- Accommodation Camp, Majnoon Oil Field, Iraq
- Remote Site Camp, Sendje Village, Equatorial Guinea
- Telecommunication Stations, Panama City, Panama
- Telecommunication Stations Mobitel, SŽ, Slovenia
- Japanese Navy Camp, Djibouti



Sales Kiosk, Novo mesto, Slovenia

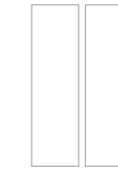


SALES KIOSK

Area around General Hospital Novo mesto needed temporary object with commercial services.

Trimo modular units the demands regarding fast production and erection. Two units were connected together, creating a space that contained shop, bakery and toilet room. Modern design caused surrounding location to be more vibrant and eye-pleasing.

This building is also a great display of compatibility between modular units and other elements, such as glazings, secondary facade walls and roofs.



Location: Slovenia
Building type: Commercial



"MINI" Showroom Ljubljana, Slovenia



MINI SHOWROOM

The client was in the process of building a new car showroom but needed a temporary solution in the short-term that would present and personalize the concept and values of the Mini brand. The architecture of building was developed using the values and image and vehicle design as a foundation for the construction.

Trimo modular units were flexible, elegant and rapid in construction to fulfill needs and demands for this temporary showroom for the new Mini car. Six units were connected into one promotional area with glass walls and Mini banners arranged around the top.

The final result was an astonishing solution incorporating the concept of the Mini brand and its design simultaneously.



Location: Slovenia
Building type: Commercial



Marina Biograd, Croatia

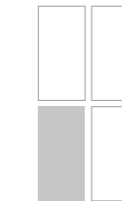


MARINA BIOGRAD

Marina Kornati made the right choice ten years ago when they were faced with the challenge of how to solve space problems for their marine business in what is a harsh seaside environment. Trimo prefabricated buildings have been chosen as the main solution for building the lobby, doorman, office, sanitary facilities and storage facilities for various purposes.

Simple and eye-pleasing design, the compounds were effectively incorporated into the existing marine space. Special protection and technical solutions ensures the long-term survival of the compound in aggressive marine conditions.

Flexibility in defining, contracting and fast performance compounds contribute to the good balance of quality and price.



Location: Croatia
Building type: Hospitality



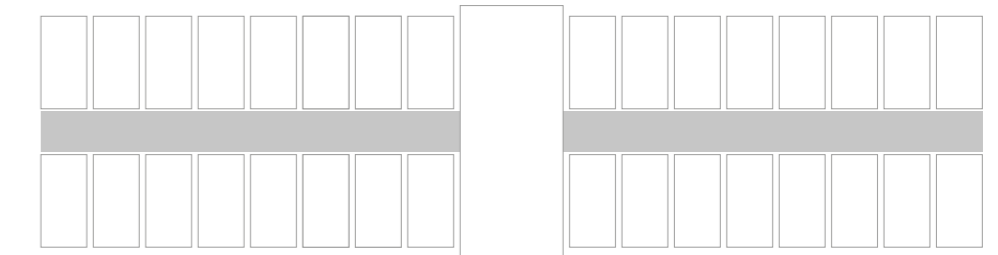
Motel Pelikan, Dettelbach, Germany



MOTEL PELIKAN

This motel is a wonderful example of innovative but yet simple generic architecture.

It lies on the motorway junction in the Dettelbach / Mainfrankenpark motorway services. Designed as a 2-star motel, the complex offers modern, practical rooms, ideal for a rest from the road.



Location: Germany
Building type: Hospitality



Faculty of Medicine Ljubljana, Slovenia



FACULTY OF MEDICINE

The old Austro-Hungarian building, which has had many owners over the years, is the location of the Faculty of Medicine in Ljubljana. Due to its unique architecture and need for expansion a modular solution for the extension within the already spacious atrium was chosen.

The extension was implemented in three storeys and connected to the faculty building via a bridge. The modern minimalistic secondary façade coating ensures an aesthetic upgrade to the existing architectural environment and provides a contrastive connection of both stories.



Location: Slovenia
Building type: Education



Prof. Dr. Dušan Šuput, Dean of Faculty of Medicine University of Ljubljana

"We were pleasantly surprised by the options offered by Trimo's modular construction systems. The extension was built quickly (60 days) and it contrasts well with the existing architecture surroundings."



Kindergarten Ravne na Koroškem, Slovenia

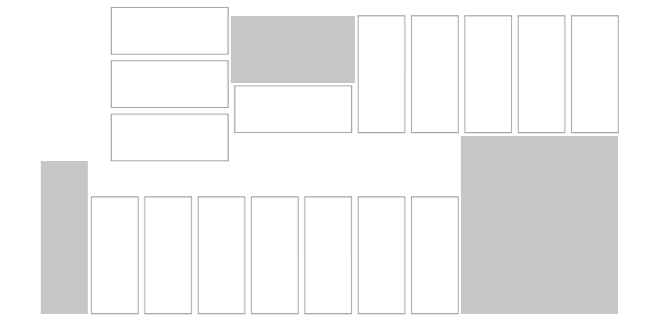


KINDERGARTEN AJDA

Kindergarten Ajda is an extension of a kindergarten in Ravne na Koroškem. Since modular construction proved to be a quick, flexible, energy and price efficient solution, the local authorities commissioned the new, permanent kindergarten extension to be built out of containerised modules.

The execution of the project took only 45 days and today children enjoy the pleasant playing environment within spacious classrooms (a height of more than 3 m) and terraces dressed in wood. The secondary façade envelope proved to have low energy building characteristics too. Also of benefit, the kindergarten was constructed to a budget lower than is typical for an average Slovene kindergarten.

An innovative approach by designers uses the façade interface as a large creative board with magnetic labels. The appearance of the kindergarten dynamically changes every day and combines modern design with the creativity of a child.



Location: Slovenia
Building type: Education



Jure Kotnik, Architect & autor of a Container Architecture book

"Good container architecture is useful, spacious, energy efficient, and made from environmentally friendly materials. The Kindergarten Ajda combines comfortable surroundings with bright and spacious playrooms as well as ensuring large and expansive play areas in outdoor covered terraces. The kindergarten is also home to the first magnetic educational façade anywhere in the world."



Kindergarten Brezovica, Slovenia

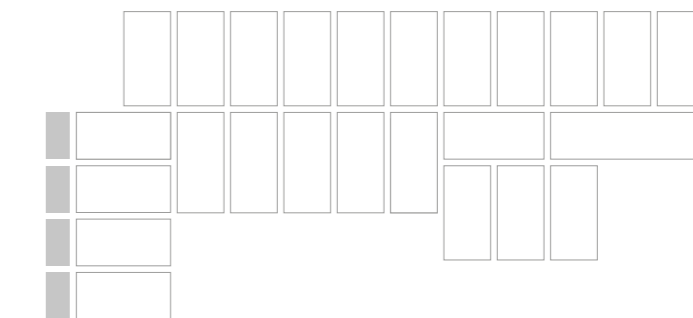


KINDERGARTEN PODPEČ

Brezovica municipality has been facing the challenge of solving a room shortage issue within kindergartens. The challenge was to find a fast, high quality, durable and cost-effective solution, which would provide quality and safe living space for about 75 children.

Trimo has designed and provided a mobile solution which meets all standards and regulations, using top-quality contemporary materials and advanced manufacturing procedures as well as having a guaranteed long life-span. Safety and comfort of the living area are in compliance with all current kindergarten-related regulations and standards for the Republic of Slovenia: an ensured minimum interior height of 3 m; and the compliance with, or rather exceeded required safety and living standards.

Multi-functionality and a favorable price were the main advantages that were recognized by investors when selecting Trimo's modular solutions are the best option for their problems. Cost reductions are assessed on a monthly basis because the energy efficient design brought even greater savings than was expected at the start of the project.



Location: Slovenia
Building type: Education



Kindergarten Škofja Loka, Slovenia

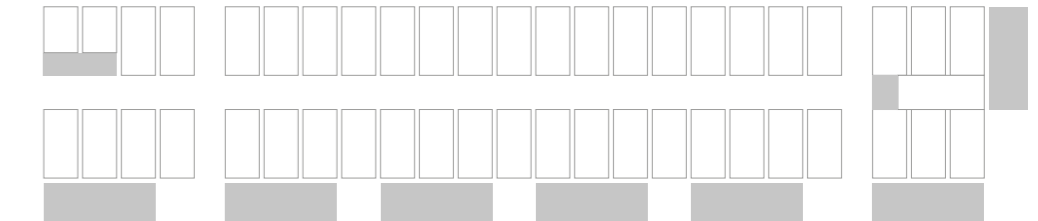


KINDERGARTEN

The new building for the modular kindergarten is the result of excellent cooperation between the municipality of Škofja Loka, project designers, and Trimo. In the shortest of time Škofja Loka was faced with the problem of having to secure space for more than 150 children. Choosing modular construction enabled quick planning and implementation, which allowed the kindergarten, with 9 playrooms, to be built in just 60 days.

The well-furnished kindergarten has spacious playrooms with terraces as well as all the necessary auxiliary rooms. The additional façade coating provides energy efficiency and an ideal climate without having to install air conditioning.

The initial reservation of parents and kindergarten staff towards a modular solution was quickly replaced by enthusiasm as now all parents from Škofja Loka would like to take their children to attend the newly built kindergarten.



Location: Slovenia
Building type: Education

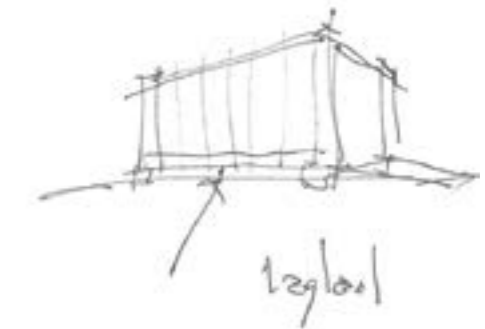


ModSpace HQ™ ground - level office, USA



GROUND - LEVEL OFFICE

Reinforced modular unit is a tough, durable and efficient field head-quarters. Trimo and Modspace R&D team of highly qualified experts developed a unit based on feedback from top industry professionals. It's the ultimate office for remote operations, no matter where the business takes place.



Location: United States of America
Building type: Industrial



Marc Boily, SVP & General Manager at ModSpace

"It was a pleasure to work with Trimo. Together we have achieved a product that exceeds the industries' highest standards. We have developed a really exemplary example of a modular unit - extremely strong, quiet, energy efficient, expandable and comfortable."



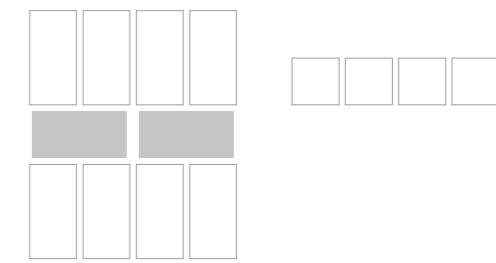
Al Wasita remote site camp, United Arab Emirates



AL WASITA REMOT SITE CAMP

Al Wasita working camp was built as a long-term occupancy camp for workers and their equipment in Suwaihat region. This is a remote site in the UAE where quite a considerable amount of important industrial and energy infrastructure for the country is being built and Trimo has built a camp for accommodating up to 3000 men.

Facilities included gym, mosque, restaurant, kitchen and accommodation buildings and all of Trimo's modular buildings met the necessary certificated standards and fire ratings, as defined by the Civil Protection Agency.



Location: United Arab Emirates
Building type: Industrial

Basel T.C. Yagham, Chief Operating Officer, Al Wasita Emirates for Services & Catering LLC

"We have provided a high quality and cost-effective camp solution that exceeded all customer' needs and requirements. The customer expressed that in his opinion, "this is one of the best remote site camps in region" of which we are very pleased."



Oil field pilot Camp, Southern Algeria



OIL FIELD PILOT CAMP

This remote site camp was built for a client who needed accommodation for workers in the remote site of an oil field in Algeria. Harsh desert conditions required a solution with high quality of panel isolation and panel joints to prevent sand penetration into the building. Trimo has supplied VIP high quality modular units that exceeded all client's requirements and expectations.



Location: Southern Algeria
Building type: Industrial



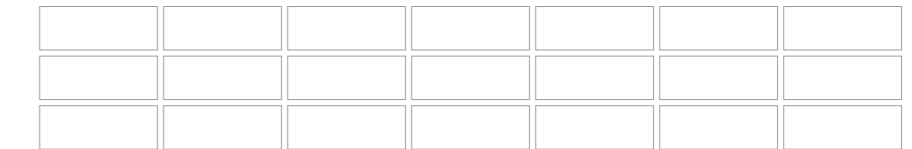
Work facilities, Libya



WORK FACILITIES

A camp facility in Libya was required as a remote base unit for a construction company that was tasked with building about 400 km of roads.

The camp was built for 200 workers and has living, office, sanitary, kitchen and laundry facilities and shelters. Trimo was selected to complete the project due to the high quality of the product, and the ability to offer a complete end-to-end solution from project definition to the production of the units, delivery on site and assembly. All this within the required time frame demanded for the completion of the camp. A total of 207 containers with all equipment were finished in 2009.



Location: Libya
Building type: Industrial



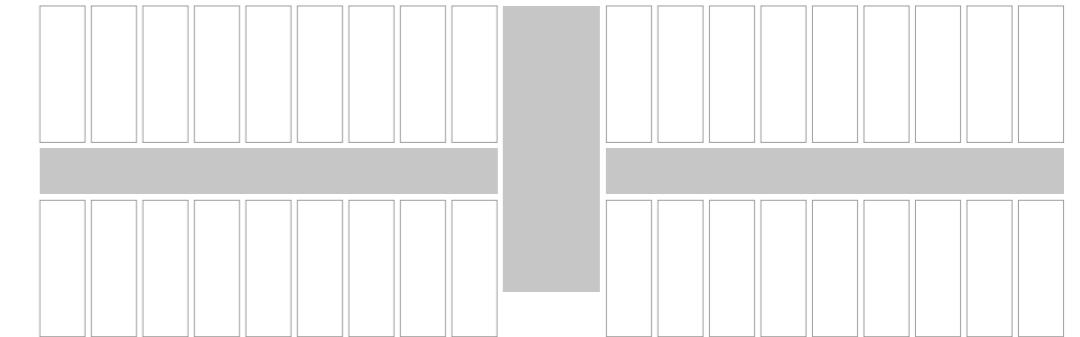
Free zone Authority, United Arab Emirates



FREE ZONE AUTHORITY

Fujairah Free Zone is a growing business hub for investors across the globe. As a part of their service expansion, our client Fujairah Free Zone authority decided to erect three G+2 office buildings at its main entrance.

A total of 350 Trimo modular units, with approximately 5200 m2 area has been used to make 150 spacious offices in 3 buildings arranged in a "U" shaped. Our client was so happy with the modular concept and fast track assembly of Trimo's modular buildings they have subsequently given us an order for another two buildings, again in the Free Zone. Phase one of the construction used 36 Trimo Modular units, with a further 24 Trimo Modular Units being used for phase 2.



Location: United Arab Emirates
Building type: Government



Sharief Habib Al-Awadhi, Director General, Fujairah Free Zone Authority

"Our experience with Trimo UAE FZE, across several Projects, demonstrated Trimo's high level of commitment to providing excellence in job performance, and to ensuring the complete satisfaction of its customers."



Military camp, Bosnia and Herzegovina



MILITARY CAMP

The Dutch Ministry of Defense (MOD) needed residential facilities for their forces on missions in the former Yugoslavia at the end and start of this century. High quality product, professionalism and reliability were the reasons why Trimo was recognized as a capable and the only partner for delivering more than 1000 units that were located in different camps across Bosnia, Macedonia and Kosovo.

The units passed all climatic and environmental conditions over the years and after SFOR's mission was completed over 250 of the units were disassembled and moved to a new camp location in Afghanistan where they still serve military purposes today.



Location: Bosnia and Herzegovina
Building type: Government



Qbiss Air, Glass Curtain Wall System



Trimoterm, Fireproof Roofs and Facades



Qbiss One, Metal Modular Facade System



Trimo Modular Space Solutions



Qbiss One with ArtMe, Design Solution



Trimo Steel Construction

TRIMO GROUP PROFILE

Trimo modular unit is a product brand of Trimo Group. Trimo Group is one of the leading providers of building envelope solutions and modular space solutions. With over 50 years of experience and worldwide realized projects, its engineering, production and sales teams provide efficient, innovative and sustainable solutions to meet your demands. Trimo Group sells its products and services under its own brand across more than 50 countries worldwide. Trimo Group has a sales network in more than 25 countries.



Trimo MSS d.o.o.
Prijateljeva cesta 12,
8210 Trebnje, Slovenia
t: +386 (0)7 34 83 500
trimo.mss@trimo-group.com
www.trimo-mss.com