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TRIMO
OFFERS
REWARDS

for most
creative solutions
for roofs
or façades,
performed by
fireproof
panels
Trimoterm.

You are
kindly invited
to participate.

More information
are available
on our website
www.trimo.si

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Hello!

Holidays and vacation are in full swing. You are receiving greetings from all over the world and we have decided to send you a very special greeting.

Despite the holiday fever we are not resting in Trimo, for we have prepared a jubilee number 10 of the Informa. Three years ago we issued the first Informa, a magazine, meant to stir up your imagination. With each issue we brought up something new and interesting you could have made of steel and panels. We hope that with the help of Informa you managed to find new, creative or simply practical solutions for yourself as well.

In Trimo we are developing in accordance with the world trends, therefore we are intensively preparing ourselves for the beginning of operation of a new line for production of fireproof facades, which shall bring up some novelties for our buyers. These novelties shall give your imagination a full scope, for a combination of variegated colours, profile shapes and decorative

elements assures even greater individuality of objects. This presents a challenge to you as well. In the Informa editorial board we are impatiently waiting for your new ideas.

All the architects and designers are invited to enter a competition for awarding prizes for creative solutions for roofs and façades, performed by fireproof panels Trimoterm. The purpose of prize giving is to encourage the use of Trimo products in modern architecture. Solutions, assured by Trimo products should distinguish themselves by their design and rounded up entirety. They should present designing advantages and economical use in modern architecture. More on this topic you will find on our web site www.trimo.si.

At the end: enjoy your summer reading of Informa No. 10 and we promise you that in autumn we shall delight you with some new ideas from the area of steel and panels.

Editorial Board of Informa



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Trimo in architecture

Roof system, made of long spanning roof elements

We are living in a world, full of differences. What is beautiful for someone, is anaesthetic for another one, what is a quality for someone, is unacceptable for others... Individuality of people, customers is becoming a bigger and bigger challenge in a construction world as well. Individual companies have developed their own perception of beautiful, good, preferential, competitive... Searching for appropriate solutions and answers is becoming less feasible in the frame of standard concepts. An individual approach is needed, often in tight cooperation with partners. This is the best way to enable faster development till we reach final mutual satisfaction.



Trimo complete solutions concept is at the same time a concept of individual approach. An eloquent proof is a development of a roof system, which basic requirement is the promptness of assembly, or as short time as possible spent for roofing, from the beginning till the complete conclusion. Besides the erection speed, other starting-points are important as well: functionality, economy, quality, aesthetics...

The system had been planned together with a partner for quite a while, until it was ready for realisation of the first project. The roof system is based on the long spanning elements - cassettes. They are sized within limits, enabling road transport and loading truck width. Each element is designed for a specifically determined position on the roof. Therefore it is important that logistics is well organised; order in precedence in production, loading, unloading, and assembly. The roof elements are pre-prepared for minimal completion at the construction site. The supporting part, thermal-insulating part as well as water resistant foil are installed during manufacture. Elements have pre-prepared cutouts for simple installation of light elements. At the



construction site a long spanning roof needs mere joint performance between separate "cassettes". For this reason it is necessary to connect the vapour barrier, insert the missing thermal insulation, manufactured in the required size and finally to weld edge joints of waterproof foil. The system of elements presents a perfect solution for making good use of loading volume.

The system itself enables optimisation and adaptation to specific cases. It is foreseen in a form of single-span and double-span static system. The variation of distances, optimising of supporting elements - "cassettes" for useful loads, any thermal insulation thickness according to the requirements of legislation or investor in sense of an energy efficient construction, is possible.

Tight partner cooperation, knowing and respecting culture differences and company strategies, in most cases bring very good results. And this is also true for the introduced roof system. It has been proved, once again, that success, irrespective of nature and size of the project, depends mostly on people.

Andrej Novak, B.Sc. (Civ. Eng.)



Future now

IKEA Shanghai

In order to progress with any project, a clear and defined understanding of the Client's requirements in terms of project delivery and handover must be recognised. For this to be achieved, a combination of pre-requisites need to be understood by all parties, in particular governmental practises related to construction, understanding the Client's concept, procurement of suppliers/packages subcontractors timously and progressing the works to an agreed programme. For the IKEA project, considerations of all these factors were taken into account for the delivery and subsequent opening the store in China - Shanghai.

The IKEA development in the XuHui area of Shanghai is the first IKEA concept shop in Asia and the sixth in their current portfolio. The project was built under a design and build mode of contract undertaken between September 2002 - April 2003. The building itself was developed on an extensive brown field site and comprise of warehouse, sales area, canteen and restaurant in addition to a 5 storey commercial office block with an underground car park over the full plot area.

A key feature of the project was the manner in which the team incorporated IKEA's specification and met local requirements, while adhering to a strict construction programme. The fast track techniques of overlapping the design, procurement and construction phases aided to the completion of the programme coupled with an understanding of statutory procedures in China.

In September 2002, the design was undertaken to comply with the conceptual requirement of IKEA, which was then transposed, to a PRC format for submission and approval by the local authorities. On approval of the design in March 2002 construction commenced with the installation of 2000 pre-cast piles. The excavation of the basement began in May 2003 and the superstructure was complete in November 2003. The key element of the programme was to achieve water tightness and hand over of specific areas to allow the Client to

commence their own retail build up requirements. With the use of modulated external building fabric (Trimo) the control of the internal environment was achieved with relative speed, allowing access of the Mechanical and Electrical contractor and subsequent Client access. The importance of the external fabric to the concept is paramount; as by its mere size and the distinctive colour (which is a visible trait of the shopping experience in itself). To meet this strenuous requirement the fabrication of the panels was carried out in



Project Data

Country: China, Shanghai
Investor: IKEA Property Development Co. Ltd.
Architect: Shanghai Light Industry Design Institute & KPA partners
Design and Build Contractor: Gammonsanska Ltd.
Construction: Piled foundation/Concrete Structure
Façade: Trimoterm FTV 7,800 m²
Gross Floor area: 68,820 m².
Retail: 32,668 m²,
Commercial: 8,100 m²

Slovenia and support provided for installation which was carried out by a local installation company. Local contractors were used through out the construction phase, with the education process carried out on the concept that IKEA were portraying, this was required to ensure that the quality could be maintained and the shopping experience enhanced. The Client began accessing areas in mid December 2002, with a total ten milestone dates that required to be met progressively. This was in conjunction with the construction process, which carried on in parallel too non-critical areas. The store was opened to the public in April 2003.

The overall success factor for this project was the fast track nature of the programme and overcoming potential delay factors by mitigation and a lateral approach strategy. The importation of the IKEA concept was well received by the local populous by the demonstration of having one of the largest opening day head count in IKEA history to date - 80,000 Nos. The management of the project demonstrated a combined partnering approach with the Client and the subcontractors making the communication paths very short. With the retail element complete, the next phase was the office structure, which was fitted out, from April to July 2003 to a north European style complementing the cooperate image of IKEA.

Allan Paton, Project manager

宜家家居



Complete solutions

MERCATOR Belgrade - the biggest Mercator shopping centre in the Balkans

When the object is placed into the environment, giving an impression that it could not exist anywhere else, the relation between the object and the environment has been established. The shopping centre Mercator in Belgrade presents an environmental friendly architecture.

It has been built on a very attractive location in a district of Novi Beograd. Construction of such an object with all its architectonic-constructive attributes and commercial content represents a large enrichment for the Belgrade district, which used to be called "a big sleeping room of the city".

In the Belgrade shopping centre, with its total area of 52.400 m², besides Mercator hypermarket 50 different shops and bars have found their place. All the requirements of such objects, mostly in the

sense of realising consumers' wishes and comfortableness have been considered while designing the project. So the Serbian consumers acquired the biggest shopping centre, enabling shopping at one place, which is a shopping novelty in Serbia. Trimo participated in its building with over 23,000 m² of roof panels SNV 150 and 2,500 m² of profiled metal sheet TPF 850.

On the ground level of the entire object base, the parking is arranged, and above it two floors of shopping premises - hyper-

Project data:

Country: Serbia and Montenegro

Investor: Mercator d.o.o.

Elements:

Roof: Trimoterm SNV 150; 23,000 m²

Profiled metal sheet: TPF 850; 2,500 m²

market, various shops, bars and business premises for commercial personnel. A vertical communication is arranged by lifts and elevators. Within the object the closed warehouse premises are situated as well.

The object design has been based on the investor's requirement for a functional place, enabling great designing possibilities and for fast erection. The fast erection of this object has been a result of professional work of the projecting department, which managed to submit all the technical solutions to the constructing site in a very short time.

By construction of a shopping centre Mercator Beograd, Trimo has gained a new reference, introducing the system of prefabricated building in a very short time, flexibility and aesthetic perfectiveness.

Dragan Brzaković, B.Sc. (Civ. Eng.)





Containers

Blue-white liveliness in marina Biograd na Moru

Last year we concluded a contract on erection of service premises in marina in Biograd na Moru, with Ilirija d.d., our customer from Biograd na Moru. The project demanded fast object erection and at the same time enabled meeting the investor's requirements in the sense of formal and architectonic harmony with the environment.

The objects are located on the marina coast, near the old town and they represent a very sensitive intervention in the environment. By the previous computer animation, which plastically presented placement of the object into the environment, the investor gained consent to start the construction. Our next challenge was an assembly performance, which due to its shape specialty and the choice of façade and frame colour contributed to the likable placement of the objects into the environment.

The shape of the windows and colour selection gives the objects a touch of the sea and shows its connection with it. The containers are exposed to the maritime climate, which is known for its high salt

content in the air, so on the external side they are protected by special coats, resistant to such climate conditions. The objects were built-up in record time, what is undoubtedly possible with such constructing system.

A special treatment of the inner side by more resistant materials makes the objects being able to serve its purpose for a long period and assures the marina users and employees, working in these objects,

Project data:

Country: Croatia
Investor: Ilirija, d.d., Biograd na Moru
Objects comprise 34 containers

a proper standard.

The objects of the marina in Biograd na Moru are a nice example of constructing a demanding project, performed by accommodation containers, where an apparently simple concept manages to assure the investor's satisfaction, which was approved also by a special praise, uttered by the investor after the works were concluded.

Bruno Čibej, B.Sc. (Mech. Eng.)





Gallery



TOLAK, Jancezewice koło Warszawy, Poland



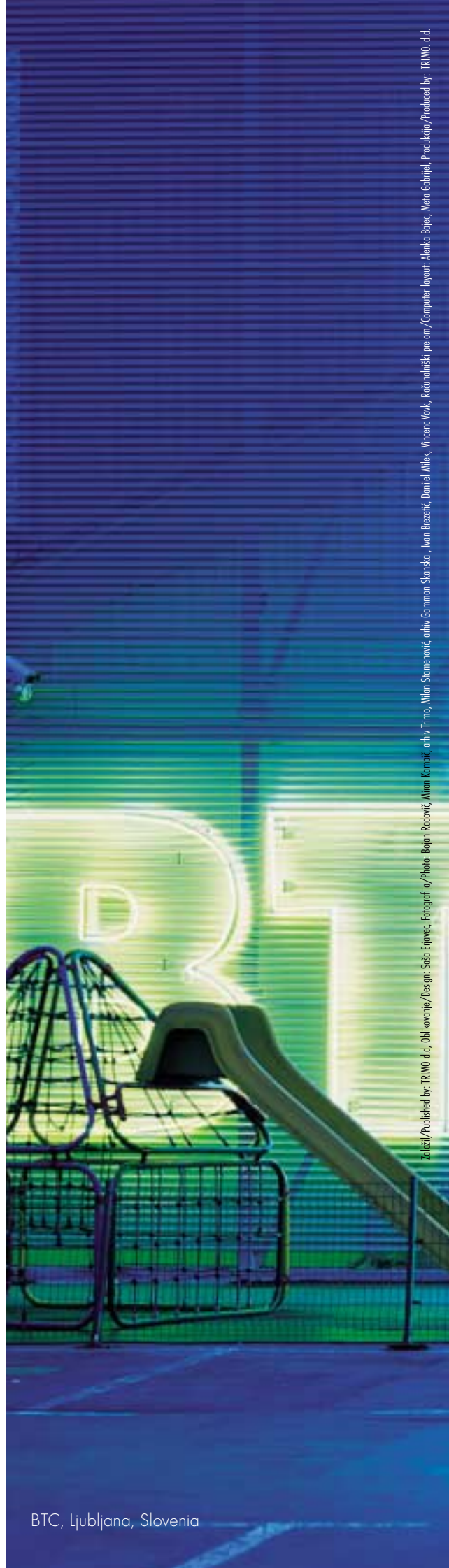
MERCEDES ŠKOJO, Osijek, Croatia



SAVA AVTO, Sevnica, Slovenia



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