

# do■co\_mo■mo\_

international working group for  
**documentation and conservation**  
of building, places and schemes  
of the modern movement

## Minimum Documentation Fiche 2003

composed by national/regional working party of:  
Do.co.mo.mo Serbia

### 0.1 Picture of the building



0.1. **Depicted item**

Blocks 1 and 2, in New Belgrade

0.2. **Source**

Experimental blocks 1 and 2 in New Belgrade immediately after construction, photo I. Eterović (<http://serbianarchitects.yolasite.com/> [March 10, 2014])

0.3. **Date**

1963.

Local data base code  
URB-RS-011-b-0011

## 1. IDENTITY OF THE BUILDING

- 1.1. **Current name** 3  
Block 1 and block 2, New Belgrade
- 1.2. **Variant or former /original name** 4  
Experimental housing blocks 1 and 2 in New Belgrade (1958 - 1963)
- 1.3. **Street name and number** 5  
Block 1, bordered by the streets of the Youth Brothels, the Paris Commune, Narodni heroji and Bul.Zoran Djindjic.  
Bloc 2 is bordered by the streets of the Paris Commune, Boulevard Mihailo Pupin, Oton Zupancic and Goce Delcev.
- 1.4. **Town** 6  
Belgrade
- 1.5. **Region** 7  
City Municipality of Novi Beograd
- 1.6. **Zip code** 8  
11070
- 1.7. **Country** 9  
Republic of Serbia (made in FNRJ/ SFRY)
- 1.8. **National grid reference** 10  
Blok 1: 44° 82' 36.47" N, 20° 40' 98.73" E  
Blok 2: 44° 82' 74.52" N, 20° 41' 00.01" E
- 1.9. **Classification/typology** 11  
Housing blocks
- 1.10. **Protection status and date** 12  
Inscribed in the register of goods under protection, Pre-Draft GUP of Belgrade in 2021, JP Urbanistic Institute of Belgrade, 2001, Belgrade, p. 241-225.  
Spatial cultural and historical heritage under previous protection Blocks 1 and 2 in New Belgrade.

## 2. HISTORY OF THE BUILDING

- 2.1. **Original purpose/draft** 13  
The residential complex that is the subject of the analysis is in the row of post-war facilities established for cultural monuments (Mišić 2010: 196.)  
Experimental residential blocks 1 and 2 in New Belgrade were designed and implemented as part of a major construction campaign in New Belgrade. The long-term goal was the realization of 100,000 apartments on an annual basis throughout the country.  
(-, (1960), Consultation on industrialization of housing construction, Federal Construction Chamber, 19-21 October, (Belgrade).)  
On this occasion, by adopting the General Plan of 1950 and equipping the ground with

the necessary communal infrastructure, involving a large number of people, New Belgrade on the left bank of the Sava soon became the largest construction site in the country, where labor brigades from all of Yugoslavia were engaged, and where The conditions of a higher standard of living have been created, which, according to the concept of modern urbanism, "provided all the necessary conditions for the daily life of the inhabitants" (Petričić, B. et al., 1958: 363).

The location where the realization of blocks 1 and 2 was envisaged is formed by the fact that it is surrounded by frequent roads of New Belgrade. Block 1 is basically a square shape, and here are dominated by residential buildings shaped like towers or soliters and buildings that are two-way long.

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| 2.2. | <b>Dates: order/completion:</b><br>1958 – 1963.  | 14 |
| 2.3. | <b>Architecture and other designs</b><br>Urban project, 1959: Arh. Branko Petricic, Tihomir Ivanovic and Dusan Milenkovic.<br>Architecture and Technology Project: project bureau of the company "RAD" "Bureau for studies".   | 15 |
| 2.4. | <b>Others related to the building</b><br>Josip Broz Tito (President of the FNRJ Presidency);<br>Igor Blumenau and Slobodan Tomić, prof. Ivan Antic.  | 16 |
| 2.5. | <b>Significant alliterations in dates</b><br>There is no information available in significant changes on the date of the available sources.  | 17 |
| 2.6. | <b>Current purpose</b><br>Housing block<br>With a partial percentage share of the function of trade and business in the ground floor of the buildings.   | 18 |
| 2.7. | <b>Current condition</b><br>The original look of the building from 1963 was preserved. From construction to date, the buildings are well maintained, although there were no major sanitation or restoration works on them. It is necessary to clean the facade and repair the roof and restore all elements of the architecture. | 19 |

### 3 DESCRIPTION

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|------|--|----|
| 3.1. | <b>General description</b><br>Together, housing units in blocks 1 and 2 have about 3600 apartments, and were designed in 1958. Given the scope of this housing construction, their realization lasted from 1959 to 1963. The architects were Branko Petričić (author of the urban design solution), Tihomir Ivanović, and Dušan Milenković. The authors of the projects planned apartments that would be meant for on average families of three members. Of course, considering the financial circumstances and the context of the environment, all the time it was considered that it was saving space and material, and that each room was rationally designed, and especially small areas occupied by bathrooms and kitchens. In residential blocks 1 and 2, five types of residential buildings have been used, which have ten types of apartments in total. | 20 |
|------|--|----|

(A detailed overview of the concept of the architecture of the experimental blocks can be found at the source: Blagojević 2005)

Those are

1. Housing tower, square cross fences (23mx23m), floors P + 13 + Pk. The author was Branko Petričić. In this building there is only one type of apartment, and it is two-bedroom.

Then, a residential building in the form of a two-tier, 63 meters long (which includes 15 fields of constructive range of 4.20 meters), floors P + 8 + Pk, architect Branko Petricic. The apartments in this building are one-bedroom, two-bedroom and three-room;

1. Residential building in the form of a two-section length of as much as 84 meters) which includes 20 fields of constructive range of 4.20 meters, floors P + 8 + Pk, and whose architect was also Branko Petricic. The dwellings are designed here as in a shorter two-tier with the same room organization in both one-bedroom and two-bedroom apartments and three-room apartments.

2. Then, a 63-meter residential building (covering 15 fields of a constructive range of 4.20 meters), the floors P + 8 + Pk, architect Dusan Milenkovic, and which contains three types of apartments - one, two and three-room apartments; I

3. Residential building with three two-sided lamellas, floors P + 8 + Pk, designer Tihomir Ivanovic, where two types of apartments, studios and three-room apartments are located.

The design process took into account the efficiency of the assembly, and the economy of the space as a whole.

It should be noted that the flats in these blocks have a two-way orientation that contributes to their quality. Duplex apartments are organized corridor, so apartments on the corners, i.e. On the edges of the corridor have even three-sided orientation. Architect Tihomir Ivanović tried to break the long circuit in order to avoid the monotony of volume on two separate blades in order to provide apartments with three-sided orientation. Spatial organization of apartments in prefabricated industrialized systems, especially in the case of those types of flats where there are passage rooms, dining areas in the extended communication zone, or circular connections ... in this way correspond with the traditional ways of organizing the space of the "Belgrade apartment" from the interwar period.

In the analyzes and analyzes concerning residential buildings in these two blocks, Oliver Minić emphasizes that it is remarkable that the high-rise tower is placed in the block along with housing units, and emphasizes that such a solution is in itself a compositional failure and uncleaned, so (It was considered to be a failure) (it was aimed at the movement of plastics of the entire settlement, so that high buildings were in the form of towers and long blocks of eight floors. However, compositional unity was achieved in the architectural sense, The paper, whose architecture did not achieve purified forms, does not seem to be most favorable ", Minić 1996: 61)

### 3.2. Construction

All objects are constructed as reinforced concrete skeletal structures. In some sources, it is stated that all facilities in this block were built in the IMS system, which is an innovation of engineer Branko Žeželja, in a raster of 4.20m x 4.20 m.

As an example of an object built in a prefabricated system, the residential building "Soliter No.15" in block 1, in New Belgrade, stands out. This facility is often interpreted in literature as an example of prefabricated construction.

From the period in which it was created, to date, a number of flats have experienced different degrees of adaptation, reconstruction and other forms of transformation.

The basic architectural concept is the foundation of the architect Branko Petricic, the "soliter D1", since the urban design demanded a building of this type in that place.

The project documentation, and the entire preparation and realization were done by the

company "Rad", or its "Bureau for studies".

However, the elaboration of the project "D-15 Solitair" and other buildings is also attributed to the architects Igor Blumenau and Slobodan Tomić.

### 3.3. Context

Slobodan Giša Bogunović, on the architecture of the New Belgrade blocks, states: "The new draft, done at the team of the then director of the Urban Planning Institute, Branko Petričić, will also mean the development of the previous GUP and serve as the basis for the early New Town's urban and architectural achievements. This will primarily relate to the realization of the so-called experimental blocks 1 and 2 (1958-1963) according to the Petricic project. From a conceptual standpoint, these blocks will prove to be emblematic, precisely because of the beginning of the practice of industrialized construction, the adoption of the principles of prefabrication and typification, which will later become the *conditio sine qua non* of the entire New Belgrade residential building. " (Bogunović 2005: 295-296.)

It further states: "From the standpoint of style, the architectural structure of the original blocks, and what will be embodied in it, will mark the beginning of a period of uncompromising affirmation of the modernist method and suggest that New Belgrade, after only a few decades of its existence, will reach the level of its own" theatricalization ", In fact, in fact, in the right stage of almost all the previous" temptations "of Modern in this region". (Ibid., .296.)

As in the previous case, where the attitude of the "Bureau for Studies" with the architect Ivan Antic was considered, another topic is being set here, which helps to clarify and familiarize the work of "that office, which is the attitude of the author, urbanist and architect Branko Petricic , And project bureaus, interactions, compromises, and solutions. The question arises to which front is the solution "authoritative", and from where it is "typical", and - is "author" and "typed" opposed? In response, the following observation of the conception is imposed - that in either case, these towers have only one type of apartment, which rotates within the standard floor, and for which only the position in the architectural structure is different.

In the text Biljana Misić, "On evaluation and protection of the postwar architecture of Belgrade", as one of the illustrations, a photograph of housing blocks 1 and 2 was presented. The authors are Branko Petricic, Tihomir Ivanovic and Dusan Milenkovic. (Mišić 2010: 198th)

It would not be superfluous, in addition to them, to include the names of Igor Blumenau and Slobodan Tomić, architects whose names are on the project documentation!

Unlike Ivan Antic, who was professionally connected with the company "Rad", and spent a period of his career in it, architect Branko Petricic was professionally engaged in the Urban Planning Institute of Belgrade. Its impact, ie. Relationship with the "Study Room" could be compared with the relationship that we meet many years later, in the case of building a residential complex in blocks 61, 62, 63, 64 in New Belgrade.

The given urban concept was also a kind of project task for architects.

Practically, most architects in Serbia, especially in the period after the Second World War, until the breakup of the SFRY in the 1990s, have been projected within large bureaus and companies "in state / social ownership, or within specific self-governing studios, such as for example Shut down Projectbureau.

(Jovanović, J. (2013), The puzzling lady of our modern, [the Internet], available at [Http://www.cab.rs/blog/zagonetna-dama-nase-moderne](http://www.cab.rs/blog/zagonetna-dama-nase-moderne) [retrieved 20 March 2014])

## 4. EVALUATION

### 4.1. Technical value

The design of residential buildings in Blocks 1 and 2 in the post-war period has outstanding technical values.

Soliters that were referred to were one of the first objects where the slip formwork method was applied.

In the considered period, traditional modes of construction were still largely present, and during the period, they increasingly gave way to technologically advanced construction methods. By the end of 1960, Yugoslavia continued to dominate the traditional way of building residential buildings. Little progress was made in the selection of materials, and instead of bricks, slag blocks, or some semi-prefabricated reinforced concrete prefabricates, were used more and more. Prefabricated systems that were patented until then, and especially within construction companies, were not a permanent system for building these companies, so by 1960 they still did not get enough mass. Research in the field of prefabrication primarily dealt with the issues of rough works, while the finishing process paid less attention.

A project designed for traditional construction is done by an architect, studied by a statician, and fitting by installers. A project aimed at industrialized construction had to be run by parallel complex groups of experts, most closely associated with the operative.

The work began with the elaboration of a technological study - a study of materials and their technology.

(Svetozar Pejanović, "Role and tasks of scientific research in the industrialization of housing construction", Consultation on industrialization of housing construction, Federal Construction Chamber, 19-21 October, Belgrade, 1960, p. IIX-4).

After that, prototype elements were designed. From such elements, switching elements and constructions, which are called prefabricates, are assembled, which must further be aligned with the capacities and characteristics of the machinery. Only from such elements the system was made so that the first prototype of the system was obtained. This is the first final product to check the technical and economic characteristics of the system. Such a study included the installations, the solution of production technology, the construction organization and the project of mechanization with the exact paths of horizontal and vertical transport. In the further steps of designing in the system, already completed parts of the prototype system project were used. The typification of elements in the system leaves wide possibilities for further creation of architectural forms. On the other hand, system technology almost always allows the creation of modification of elements while retaining the advantages of the industrial series.

In the meantime, the problem of the division of industrialized construction into three sectors appeared - light, medium and heavy assembly. Why is this significant? This knowledge, gained through years of experience in various projects, contributes to the further advancement of the technology of prefabricated industrialized systems.

Specific for this object is that installations are pre-installed or are installed in parallel with basic work. For this purpose, several basic types of structures were formed, which were expressed in the serial out of the construction site and mounted as an integral part of the building or concreting. These constructions are:

1. sewage wet nozzle made according to the type of bathroom solution, lay before concrete
2. The ventilation block of the bathroom, lay as a wall for the stairs walls and supplied fresh air, each floor separately from the collection channel in the basement.
3. evacuation of dumps with zippers that prevent the penetration of polluted air and the possibility of cleaning
4. vertical type distribution of water supply in the bathroom with a mixing tank that

supplies both the bath and the washbasin  
5. collecting chimney which, if necessary, serves as ventilation of gas installations.  
6. lightweight closets and built-in kitchen block according to JUS.

The later development of prefabricated industrialized systems will contribute to the emergence and production of elements related to finishing craftwork.

Studying the construction work of the "Bureau for Studies" through the research of their activities and contributions, is also a type of contribution to making some less visible occurrences more accessible, and more visible in the professional public.

#### 4.2. **Social value**

24

The objective of the prefabricated construction, with the representatives of experimental blocks 1 and 2 in New Belgrade reflecting the complex problems of housing construction and housing.

In order to accomplish this complex task, the gradual elimination of flats and the construction of flats that suited the needs, it was necessary to persevere efforts of all those who worked in the area.

These important issues were discussed in several aspects:

Legal relations in the field of housing; Social management of the housing fund; From the aspect of financing housing construction; Aspects of construction and production of building materials; And, of course, the aspect of urbanism and architecture.

One of the key social values is the scientific and research work that followed the design and construction of experimental blocks 1 and 2 in New Belgrade.

#### 4.3. **Cultural and aesthetic value**

25

Experimental blocks 1 and 2 in New Belgrade were built in the period from 1958 to 1963.

At that time, significant changes in the discourse of Yugoslav architecture took place, and so this urbanistic architectural unit represents a testament to the changes in the main direction of the modern movement in architecture and urban planning.

From the phase of the strong influence of so-called Soviet models in the early post-war years, through the period of creative stagnation, caused by the great economic and political crisis of the 1950s, to the final complete shift towards the concepts and influences of Western European models, which dominated the artistic work of the sixties.

#### 4.4. **Historical value**

26

Urban blocks of New Belgrade are generally accepted as the most important example of Yugoslav post-war architecture. In almost all major reviews of the post-war Yugoslav architectural creation, experimental blocks 1 and 2, a special place has been given.

#### 4.5. **General assessment**

27

Experimental blocks 1 and 2 in New Belgrade represent one of the major achievements of the post-war Yugoslav planning, architecture and technology, and are generally significant architectural project in a wider context.

Special architectural values smatrju the characteristics of the object with technical and technological, engineering but also cultural, social aspects, which marked the transition period in Yugoslav post-war architecture.

As the object against which have been consistently conducted postulates prefabricated industrialized construction of modern architecture, as in the external design, but also in the internal structure, the objects within the blocks 1 and 2 have an important place in

the creative work architect Branko Petričevića, Tihomira Ivanovića, Dusan Milenkovića, Igor Blumenau And Slobodan Tomić, as the leading Belgrade and Yugoslav creators of this period.

By establishing a good relationship between building technology and architectural design of the building and its immediate natural environment, as well as a distinctive urban location, which affected the spatial concept of the whole future of New Belgrade, urban and architectural ensemble has exceptional urban values and imposes itself as the dominant visual motif and toponim Modern Belgrade.

Soliter D-15 is allocated as an object of the exceptional technical, technological, craft and aesthetic values. The building is a testimony to the extraordinary technology step forward in the construction industry in the fifties and sixties of the 20th century in Yugoslavia in relation to the interwar period.

## 5. DOCUMENTATION

### 5.1. Principal reference

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30. Blocks 1 and 2, *Ubranstvo Beograda*, no.30, year VII, Bureau of Planning of the City of Belgrade, Belgrade, 1975, p.28.
31. Consultation on industrialization of housing construction, Federal Construction Chamber, 19-21 October, Belgrade, 1960.

5.2. **Visual material in the attachment**

29

- Appendix 1: Modular basis of solitaire number 15 in New Belgrade (Blumenau 1960: Ild-9)  
 Attachment 2: Detail of the steppe tower of the soliter no. 15 (Blumenau 1960: Ild-11)  
 Attachment 3: Experimental blocks 1 and 2 in New Belgrade during construction, photo I. Eterović (<http://serbianarchitects.yolasite.com/> [10 March 2014])  
 Attachment 4: Experimental blocks 1 and 2 in New Belgrade during construction, photo I. Eterović (<http://serbianarchitects.yolasite.com/> [March 10, 2014])  
 Attachment 5: Experimental blocks 1 and 2 in New Belgrade immediately after construction, photo I. Eterović (<http://serbianarchitects.yolasite.com/> [March 10, 2014])  
 Attachment 6: Personal Photography, Experimental Blocks 1 and 2 in New Belgrade, taken on March 30, 2014

5.3. **rapporteur/date**

30

PhD Dragana Mecanov, *Bach. in Arch.* / November 2016.