

ROWHOUSE ON SENJAK IN BELGRADE: RECONSTRUCTION CASE STUDY

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Summary: *This paper presents a case study of reconstruction and interior design of the rowhouse located in Temišvarska Street No. 27a, on Senjak in Belgrade. The rowhouse (with basement, ground floor, first floor and attic) is reconstructed and new interior space (190 m²) is created. Ground floor is one-room space, children's room is on the first floor, and parents' bedroom is in the attic. The reconstructed interior represents functional unit, which satisfies all family needs.*

Keywords: *rowhouse, reconstruction, interior, case study, Belgrade*

1. INTRODUCTION

Each house project is different. An architect has to create appropriate environment that matches site and functions. Therefore, the architect has to study all aspects, evaluates pro et contra arguments and generate functional and agreeable project. In countries of Eastern Europe, a political change has also caused urban changes. Interior space reconstruction has become available to wealthier owners.

Different rowhouse types are described in foreign books, journals, and magazines. In Belgrade there are districts with row houses (e.g. Dedinje, Senjak, Šumice, Cerak, Višnjicka banja, Bežanijska kosa). Examples of rowhouse interior reconstruction in Belgrade, however, are rare in domestic literature and that gave a stimulus to following writing.

This paper presents the case study of reconstruction and interior design of the rowhouse in Temišvarska Street No. 27a. The solution of the client's demands is, after several attempts, created on basis of a study of rowhouse function, volume, shape, and cost. The house interior ambience produces purposeful space reconstruction, pragmatic design, purified lines, materials selection, colors and lighting. This paper summarizes concisely a part of architectural and engineering considerations achieved during design and construction process.

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2. APPROACH: ARCHITECTURAL SPACE

Architectural analysis is a path to creative and innovative design. If *architecture* is "all around us" and represents "the frame of our lives" [1:5], architecture, as a "bright and delight shadow of human life" [2:12], can be analyzed "from an aspect of permanence and change of its ideas and its forms"[3:11].

Zdenko Strižić (1902-1990), an eminent Croatian architect engaged internationally, states that "essential components of *architectural idea* are: *base, space, and plastic*" [4:13]. As habitation is a problem diverse and dependent of many influences [4:154], residential architecture relates closely to physical and psychological requirements of man [5:11]. Architectural unity represents whole of a *building*, a *plot* that belongs to it and a *space* in which it is located [5:11]. The building with a *rational base* is the most closely aligned with an environment [5:161].

Bruno Zevi (1918-2000), a famous Italian architect and theoretician, argues in his famous book "*Saper Vedere L'Architettura*" (1948) [6], translated as "*Architecture as Space - How to Look at Architecture*" (1957), that *space* is essential for both the definition and appreciation of architecture. According to *Zevi*, architecture arises when we surround the space with a shell, which is alive and positive carrier of the humanity and integrity of reality.

An *interior space* design presents a multifaceted architectural activity, because creation involves integration of artistic, rational and cultural aspects in sustainable solution. The spaces are formed using materials, textures, and lights. The way people feel interior space depends of *form, light, colors, materials, and furniture* [7]. Response to the space beyond the door is a result of psychological reaction to stimuli (sight, sound, smell, touch).

Interior architecture identity distinguishes the following ideas [7]. The enclosing structure and its context are initiators of design strategy. Three-dimensional space manipulation is involved. The sensory stimuli are essential parts of interior experience. Light is a medium for defining space. Materials and colors are integral components of designed environment.

3. LOCATION: SENJAK

Belgrade, an antique city formed at the confluence of the Sava in the Danube, occupies a central place in the Balkans. As an administrative, economic and cultural center of Serbia, Belgrade offers benefits to residents, as well as to visitors from the country, region, and further abroad.

Topčidersko Brdo (Topčider Hill), the hill above Topčider Park, is located about 4 kilometers south-east of downtown Belgrade, to which it is directly connected through Vojvoda Putnik Boulevard and Kneza Miloša Street.

Senjak and *Dedinje*, vineyards [8:145] on the western and eastern slopes of Topčidersko Brdo in the 19th century (*Figure 1*), became prestigious residential districts during the 20th century (*Figure 2*).

Today Dedinje and Senjak are, by Belgrade citizens, considered the richest districts in the city. In these two districts, there are many large building plots sunk into greenery of

Topčider Hill. On some plots, there are family houses, luxury villas, state and diplomatic residences, embassies.

Exclusive locations on Senjak and Dedinje are the subject of great interest of potential investors. Large plot allows a formation of residential complex [9] drowned into natural green environment of Topčidersko Brdo. Urban planning and architectural design of facilities in these settlements represents a special professional challenge [10], which in practice does not occur frequently.

4. ROWHOUSE CASE: TEMIŠVARSKA STR. NO. 27a

A *rowhouse* (or: row-house, row house) is one house in a row of similar houses having uniform plans, fenestration (arrangement of windows) and architectural treatment. The rowhouse house has at least one lateral wall in common with a neighboring dwelling.

The main advantage of row house in comparison to detached house is *lower price* not only of plot, which is usually smaller, but also of construction. As rowhouse is on two sides attached, it consumes less energy. A rowhouse is somewhat expensive in comparison to an apartment. But rowhouse is surely much cheaper than a luxury villa. In addition, row house provides considerable privacy to its residents.

In Topčidersko Brdo, in Senjak district, on the western slope of the Hill which sharply ends above the Sava River, in steep *Temišvarska Street* (Figure 3) there are rowhouses.

The rowhouse in *Temišvarska Street No. 27a* (Figure 4), which has basement, ground floor (Figures 5-9, 13), first floor (Figure 10) and attic (Figures 11-12, 14), is reconstructed and its interior space (190 m²) is designed.

Senjak is an elite urban settlement nowadays. However, existing rowhouse in Temišvarska Str. No. 27a does not meet modern housing requirements and the client's request was to reconstruct the house completely and design new interior space. This task is complex because reconstruction and upgrading must not violate authentic row of houses and existing environmental ambience.

5. RECONSTRUCTION - INTERIOR DESIGN - FURNITURE

The rowhouse in Temišvarska Street No. 27a (Figure 4) reconstruction aim is to get continuous and functional internal space. Existing structural system is entirely respected. Facade original composition is reinterpreted and interior space vertical functional organization is developed.

The basement is expanded and connected to garage. So the house is underground linked to the garage. Ground excavation is done in a safe way compatible with house supporting structure and foundations.

Original facade composition is reinterpreted with forming a terrace in all floors and repetition of terrace fence masonry and metal parts. Such facade reconstruction and upgrading does not disturb authentic row of houses and the existing street ambient.

Built rowhouse internal architectural conditions limit possible design solutions spectrum. The client has requested chief architect to improve quickly, simply and economically the rowhouse functionality and to revitalize existing interior space. The house interior is

designed in accordance with client's needs, taking into account functional space organization, quality materialization and aesthetic criteria.

Design solution is realized by an iterative process. The rowhouse interior solution is created as a compromise between client's demands and, on the other hand, architectural analysis of space, function, appearance and economy. The client has accepted proposed preliminary solution and the final design is made.

All elements of rowhouse space are designed for a man as scale and objective. The elements are designed according to standards of the unprecedented "*Neufert's Bible*" (Ernst Neufert, 1900-1986) [11]. This "*Architectural Bible*", it is worth mentioning here, during latest 83 years (1936-2019) has 40 original editions and numerous translations into other languages.

Interior is built with carefully selected materials, equipment and furniture having concordant form, texture, and color. Installations distribution and surfaces finish are adapted to the interior space purposes.

Ground floor is *one-room space* (Figures 5-8), for living (Figures 5-7), dining and cooking (Figure 8). The *living room* sitting area (Figures 5-7), besides large window (Figure 5) and modern fireplace (Figure 6), extends (Figure 7) to dining table in open space *kitchen* (Figures 8, 13) with decorative stone walls.

Internal wooden *stairs* (Figure 9), carefully designed and discretely illuminated, connect floors - ground floor, first floor, and attic.

On the first floor is *children's room* (Figure 10) with cheerful furniture and blackboard for writing on with chalk.

In attic there is *parents' room* (Figures 11, 14), and appropriate *bathroom* (Figure 12).

In every room, the appearance of floor, walls and ceiling is harmonized with their surfaces proportions by selecting material texture and color tone. The realized interior design of the rowhouse (Figures 4-12) illustrates possibilities of using standard materials, modern equipment and simple furniture.

All construction and craft works are completed in quality, according to the budget and on time.

All furniture of the rowhouse is designed in detail. As two examples, *kitchen furniture* (Figure 13) and *attic furniture* (Figure 14) are presented in this paper.

6. CONCLUSIONS

The paper presents reconstruction and interior design of the rowhouse in Temišvarska street No. 27a located on Senjak in Belgrade. This rowhouse has basement, ground floor, first floor and attic. Its interior space (190 m²) is reconstructed into functional unit appropriate to the client's family needs. House basement is underground connected with the garage. Interior ambient is designed applying suitable choice of materials, textures, colors, lights, furniture, and equipment.

The rowhouse reconstruction is performed with quality, within budget, and on time. The client was very pleased with new house internal space.

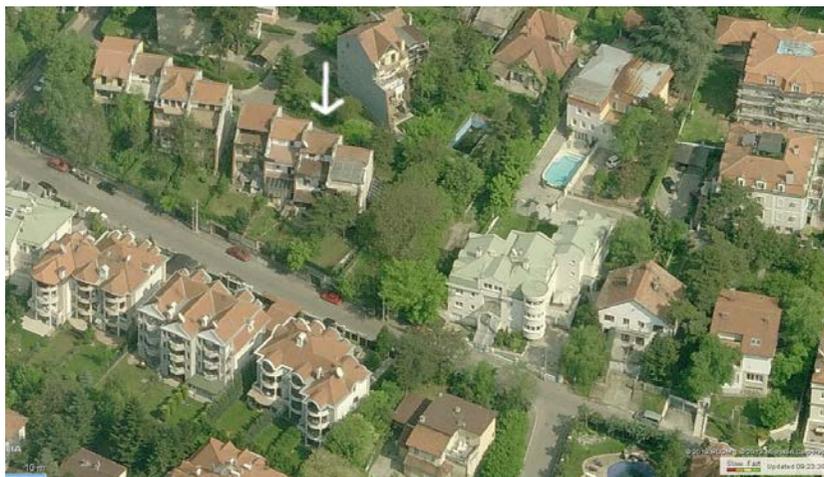


Fig.3. Temišvarska Street - on Senjak in Belgrade



Fig.4. Rowhouse in Temišvarska Street No. 27a



Fig.5. Living room



Fig.6. Living room



Fig.7. Living room



Fig.8. Kitchen



Fig.9. Stairs



Fig.10. Children's room

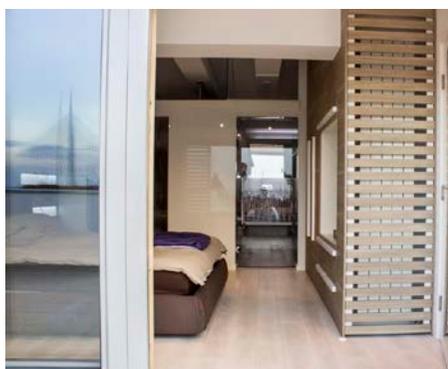


Fig.11. Parents' room in attic



Fig.12. Bathroom

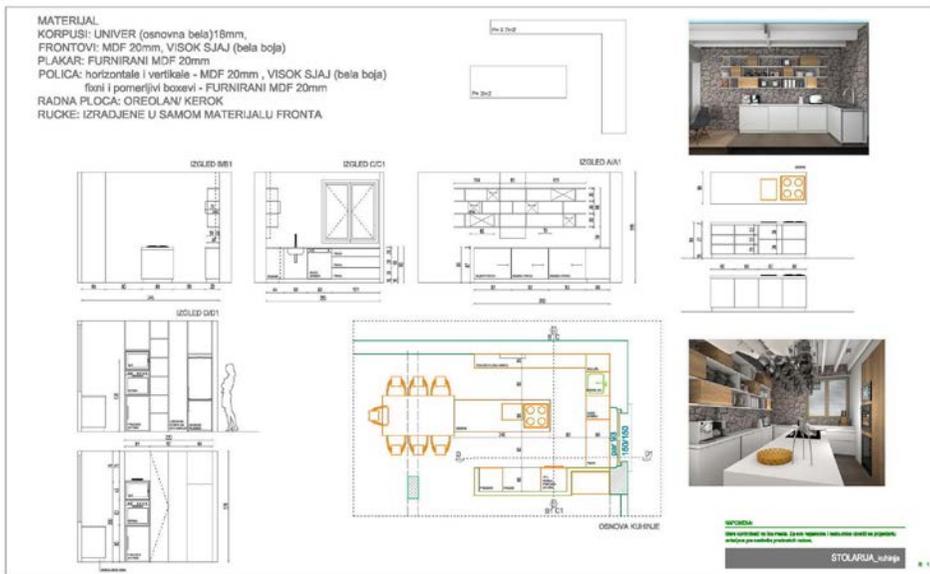


Fig.13. Kitchen furniture

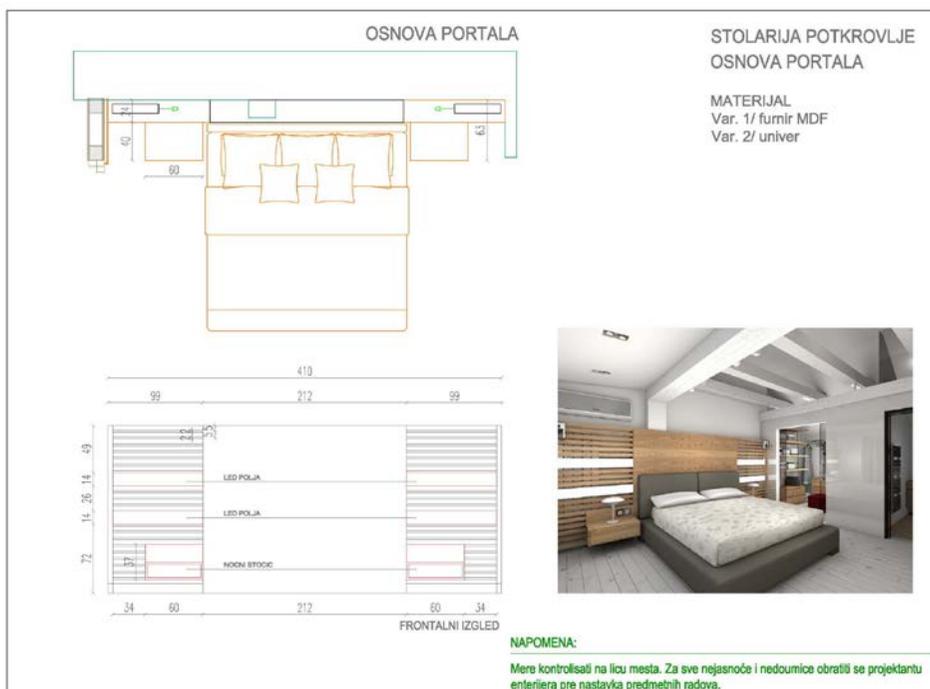


Fig.14. Attic furniture for parents' room

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КУЋА У НИЗУ НА СЕЊАКУ У БЕОГРАДУ: ПРИМЕР РЕКОНСТРУКЦИЈЕ

Резиме: Овај рад приказује студију случаја реконструкције и дизајна ентеријера куће у низу лоциране у Темишварској улици број 27а, на Сењаку у Београду. Кућа, која има подрум, приземље, спрат и поткровље, реконструисана је и нов унутрашњи простор (190 m²) је дизајниран. Приземље је јединствен простор, дечија соба је на првом спрату, а родитељска соба у поткровљу. Ентеријер куће представља функционалну целину, која задовољава све породичне потребе.

Кључне речи: кућа у низу, реконструкција, ентеријер, пример, Београд