



ANALYSIS OF THE MOST DETERMINING FACTORS FROM ROMANIAN URBAN REGULATION, AT THE STATE LEVEL, IN RELATION TO SANITATION, HYGIENE AND HEALTH THROUGHOUT RECENT HISTORY

Ch. CAZACU, C. CHITONU, R. MUNTEAN










LA VIVIENDA COMO ESTRATEGIA PARA LA PROMOCIÓN DE LA SALUD DESDE UN ENFOQUE INTERSECTORIAL Y MULTIDISCIPLINARIO
2019-1-ES01-KA203-065060

1. INFORMATION OF THE PROJECT [6]

Project title: Housing as a strategy for the promotion of health from an intersectoral and multidisciplinary approach
Coordinator: Fundación Univeritaria San Antonio, Spain
Call: Erasmus+ 2019. Strategic Partnerships (KA203)
Reference: 2019-1-ES01-KA203-065060
Start date: 01-10-2018 End date: 30-09-2020

- P01. Universitatea Transilvania din Brasov. Romania www.unitbv.ro
- P02. Instituto de Investigación Sanitaria y Biomédica de Alicante. Spain www.ucam.edu
- P03. Politehnika Warszawska. Poland www.pw.edu.pl
- P04. Asociación Empresarial de Investigación Centro Tecnológico del Mármol, Piedra y Materiales. Spain www.ctmarmol.es
- P05. Datacomp sp. z o.o. (Datacomp). POLAND www.datacomp.com.pl

The main results of the project are:

- O1: Presentation of common learning outcomes for methodologies that relate architecture to health and social services
- O2: BIMHealthy Educational Software
- O3: BIMHealthy Open Educational Resource (OER)

2. INTRODUCTION

Construction represent an important branch of the Romanian economy. The construction sector must be characterized by flexibility and diversity, attributes that favor change, through generation, continuous development and rapid transposition into practice of new ideas. The demands of society are becoming more and more severe throughout the all countries of the world [1]. Expectations and needs are becoming increasingly explicit for issues such as: health and safety of the place where we live or work, environmental protection, operational safety.

3. THE PURPOSE OF THE DOCUMENT

The purpose of this document is the study and analysis of the most determining factors in relation to sanitation, hygiene and health throughout recent history within Romanian State regulations. This section analyses the urban regulations, parameter values for Romanian cities, which sometimes are freely established in each City Council, but also the most representative parameters that regulate the interior of the homes to be built in our country.

4. HISTORICAL DATA and REGULATION

For the period 1935 - 1938 we present indicators of the construction activity, in the form of the built surfaces and of the number of authorizations issued at national level. Number of building permits issued throughout the country

Year	No.auth.	sqm per unit
1935	10728	165
1936	10018	147
1937	10370	131
1938	7776	127

Between 1950 and 1968, the development of constructions was characterized by a rapid dynamics, the production of this branch has been developed in 1968 nine times compared to 1950. If in 1938, the construction branch achieved 5.4% of the social product, 4.4% of the national income, being on the last place within the material production branches, in 1968 its share increased to 10.1% and respectively 9.2% [2].

DECREE No. 144 of March 29, 1958 [3]

- Number of room in the house, provisions between them and minimum dimensions.
- Minimum dimensions of rooms.
- Insulation and waterproofing conditions.
- Quality of the materials.

Decision no. 1650/1968 [3]:

Example:

- the apartments could have 1..4 rooms;
- a normal apartment could contain the following rooms: Kitchen with sleeping area (10-11 sqm), room with cooking space (10-11 sqm), sleeping room, bathroom or shared bathroom on the landing;
- for a 1 to 4 room apartment, the kitchen had to have 3..4 sqm;
- common areas like: technical basement, laundry, drier;
- the sanitary objects: W.C. with water, washstand, shower, bath shower;
- the apartments could be centrally heated, or with one or two terracotta stoves;

Decision no. 585/1971

Urban dwellings that are built from centralized state funds and put into use since 1972 were differentiated by the first number of rooms, comfort, endowment and price [4].

In the past, those who lived in block apartments, had their homes connected to a national gas network and very few used personal apartment heating plant. The rooms were equipped with standardized and pre-dimensioned ceramic radiators, depending on the size of the rooms. For those who lived in private homes, the options were more varied because they could opt for heating with gas or wood stoves, and their size was not limited or special required.

Regulation NP 016 96

This normative establishes the location and compliance conditions corresponding to the housing constructions in Romania, as well as the technical conditions, criteria and performance levels corresponding to the quality requirements, to which the housing constructions must meet, in accordance with the provisions of Law 10 / 1995 on quality in construction. From the NP 016 96, we study the following topics:

- Height regime of buildings;
- Choosing the location of residential buildings ;
- Sunshine;
- Natural or artificial lighting of buildings;
- Hygrothermal hygiene of the indoor environment in homes;
- Acoustic hygiene of the indoor environment;
- Water hygiene;
- Air hygiene and natural or artificial ventilation;
- Ensuring the quality of finishes in rooms, in terms of protection against poisoning with toxic substances;
- Hygiene of sewage and manure.

5. CONCLUSIONS

In the past and also now, financial resources, physical condition and socio-economic circumstances can affect the technical design choices for buildings. However buildings can present a great number of possible risks both in construction and operation. There are many duties placed on those designing, constructing and operating buildings to control health risks.

For a new construction, the hygiene and health of the occupants must become a priority strategy, and needs to be considered early on in the project because it is key to securing a safe construction. The client's role is fundamental to this, to establish and maintain a health and safety approach. The health and safety strategy should set clear health and safety objectives.

Recommendations for a hygiene and health construction [5]:

- Provide designs that eliminate or reduce hazards in the work or living place;
- Prevent occupational injuries and illnesses;
- Prevent slips, trips and falls;
- Eliminate exposure to hazardous materials;
- Provide good indoor air quality and adequate ventilation;
- Provide ergonomic workplaces and furniture to prevent work-related musculoskeletal disorders;
- Perform proper buildings operations and maintenance.

6. REFERENCE

- [1] Andrei T 2018, *Romania, a century of history*, statistical data, Bucharest , National Institute of Statistics;
- [2] Petrața BLAGA, 2016, *Research on production management and human resources in organization*, University of „Petru Maior” from Tîrgu-Mureș;
- [3] *National housing strategy*, 2017, authors Ministry of Regional Development, Public Administration and European Funds, 9.11.2017;
- [4] *Statistical Yearbook of Romania*, 1990, National Institute of Statistics, page 540;
- [5] <https://www.wbdg.org/design-objectives/secure-safe/occupant-safety-health>;
- [6] Task O1/A1.2, 2019, *Comparative study of health, sanitation and hygiene regulations in the construction sector in the participating countries*, BIMhealthy, Erasmus +. Strategic Partnerships for Higher Education .