

# High-Rise Construction in Densely Dwelled Cities: Requirements for Premises Insolation and Consequences of their Violation in Russian Law and Jurisprudence

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**Abstract:** The issues of constructing high-rise, primarily residential, buildings have a great social significance. Not every plot of land, acquired in the Russian Federation is suitable for high-rise construction. Therefore, every construction company that plans to erect a multi-apartment building, a high-rise office building, or a skyscraper must take into account not only technical norms but as well sanitary legislation regulations that set obligatory requirements about insolation of apartments. The article includes a short study of several norms in the Russian legislation regarding insolation of dwellings; analyses the problems of judicial interpretation of the statutory limitations. In this aspect it researches the debatable questions arising in practice of state arbitration courts dealing with the lawsuits on allocation of land-plots by the local administration. The analysis of the judicial practice is followed by description of the difficulties facing the developers of land-plots, concerning the project and territorial planning documentation.

## 1 Introduction

The cities differentiate between each other in many aspects, starting from their geographical position and ending with their area and population. The cities with a high density dwelling are standing out, because their planning, architecture and height of building have to be correlated with the so-called “infill development”. The city of Ekaterinburg, situated in the Sverdlovsk region of Russia is one of them. The intensive construction in the city leads to some unavoidable issues of providing comfortable and safe living and working there. The construction of high-rise buildings is stimulated by the rocky ground underneath Ekaterinburg. High-rise buildings become, up to a point, a “visiting card” of the city and will continue to be built in the future.

Every type of multi-apartment house satisfies one or another requirements of population and has its own advantages and disadvantages. Therefore, they have their certain shares in the structure of urban dwelling. The structure of municipal housing fund is formed by the centuries of the city’s history and depends on traditions, mentality, economic and political realities, existing legislation etc. [1] At the same time, arises the question of the ways to

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observe all rights of citizens, living in the buildings next to skyscrapers, including their right for necessary insolation.

## 2 Methods

The current research uses the methods of observation, comparative legal studies, formal logic, description and interpretation. The goal of research is to show that the problems of insolation have systemic nature and can not be isolated from the issues of urban development, economics of high-rise building and personal intangible interests of population. The research aims at finding solutions for problems of high-rise construction.

Insolation is the solar irradiance by direct sunbeams of different objects, including developed territories, fencing constructions and rooms of the building. Placing and orientation of residential and public buildings must provide continuous insolation for apartments - at least 2,5 hours per day between April 22 and August 22 for the Northern geographical zone (to the north of 58° of northern latitude), or 2 hours per day between April 22 and August 22 for the Central geographical zone (between 58° and 48° of northern latitude), or at least 1,5 hours per day between February 22 and October 22 for the Southern geographical zone (to the south of 48° of northern latitude) [2]. It may seem that buildings with panoramic windows may be the solution for this problem. For the first time this solution was proposed by the French Architect Le Corbusier in his article "The Five Points of the New Architecture" published in the journal "L'Esprit Nouveau" in the 20-ies of the last century. As the fourth point of the new architecture he proposed elongate shape window. Pileases with the intermediate beams form the rectangular opening in a facade, through that light and air pass into the room anliberal amount. A window stretches from a bar to the bar, becoming, thus, by the extended window. An apartment is identically lighted up in all places - from a wall to the wall. It is well-proven, what an apartment is illuminated in 8 times more intensive, than the same apartment with vertical windows. All history of architecture runs around exceptionally round the window opening. And the reinforced concrete opens possibility of maximal illumination through the extended windows" [3].

The sunlight is vital for the human being's feeling and mood, it acts as an antiseptic, keeps rooms dry etc. The right for the sunlight is one of inalienable rights of a person, which can be limited only under federal law (like in case of imprisonment) or insurmountable circumstances (like polar night). The personal unproperty relations are folded concerning the non-material blessing that is inherent to any individuals from birth (life, health, favourable natural environment) or acquired by virtue of pointing of law (name, inviolability of place of inhabitation etc.). In obedience to Russian legal tradition, the non-material (spiritual) blessing are the object of the personal unproperty rights. Most in detail the scientifically reasonably personal unproperty rights, including, right on a health, are considered by L.O. Krasavchikova [4] and M.N. Maleina [5].

According to Charter of Worldwide organization of health protection, "ahealth is the state of complete physical, heartfelt and social prosperity, rather than absence of illnesses or physical defects" [6]. In accordance with the first point of the 150 articles of the Civil code of Russian Federation (further on text - civil code), a right on a health is attributed to the personal unproperty rights for a citizen (individuals). This right belongs to all individuals regardless of age, sex, citizenship and other differences. Studying a current legislation, it is possible to distinguish the basic types of health of individual that it is possible in this context to quality a man, such, as: physical and psychical health. There are factors, that influence on a physical health: terms of residence, quality of feed, drinking-water, air, condition of work and other. It is necessary to include some factors? That qualify the psychical health of man:

absence of stress situations, quality of mutual relations with other people, correct estimation of itself in the society, etc.

At the same time, there are such violations of life quality, that simultaneously influence on physical and psychical health of man. To such harmful factors it is necessary to take violation of terms of insolation of dwellings apartments.

In obedience to the article 22 of the Federal law on 30.12.2009 No. 384-FZ "Technical regulation about safety of building and structures" [7], (point 1) building must be projected so that sufficient duration of insolation or sun protection was provided in dwellings apartments, for creation of safe terms of residence, regardless of his term; (point 2) implementation of these requirements, it must be provided with measures on the orientation of dwellings apartments on compass point, and also by the measures of structural and plan character, including on equipping with modern amenities of adherent territory. In accordance with Article 23 of the Federal Law from 30.03.1999 No. 52-FZ (as amended) "On Sanitary and Epidemiological Welfare of the Population" [8], (point 1) dwellings apartments (area of a room planning, luminosity, insolation, microclimate, ventilation, sound-levels, vibration, ionizing and unionizing radiations) must comply with sanitary and epidemiological requirements in order to ensure safe and harmless terms of residence regardless of his term; (point 2) settling of the dwellings apartments confessed in accordance with the sanitary legislation of Russian Federation useless for a residence is equal, as well as grant to the citizens for the permanent or temporal residence of non-residential premises, shut out.

The requirements for insolation are also determined at the level of by-laws. Point 14.21 of the JV on 42.1333.2011. Set of rules. Town planning. Planning and construction of urban and rural settlements, updated version SNiP 2.07.01-89 \* [9] envisaged, that placing and orientation of dwellings and public building must provide duration of insolation of apartments and territories in accordance with the Sanitary norms and rules the "Hygienically requirements to insolation apartments of dwellings and public building and territories. SanPiN 2.2.1 / 2.1.1.1076-01 ratified by the Main state health-officer on 19.10.2001 [10].

In accordance with a point 2.1 of requirements, to irradiation of surfaces and spaces by direct sunlight (insolation) are made when placing objects, in planning and building projects for neighborhoods and quarters, for the construction and reconstruction of individual buildings and structures, and for supervising the construction and operating facilities. Point 2.2 of this Regulations is set that implementation of requirements of norms of insolation is arrived at by placing and orientation of building on compass point, and also by volume of-plan decisions.

In a point 2.3 this act underline, that insolation is an important factor rendering revitalizing influence on the habitat of man, and must be used in dwellings, public building and on territory of dwelling building. By a point 3.1 duration of insolation in dwellings building must be provided no less then in one room of 1 - 3 room apartments and no less then in two rooms of 4th and more room apartments, and point 3.3 talks that irregularity of duration of insolation at that one of periods must be no less than 1,0 hour is assumed. Setting of norms of insolation for every zone is set in a division 2 normative acts indicated higher.

Some authors suggest to simplify exposition of this concept, adopting analogues from a pre-revolution right: the designed building ignores belittling light, if distance from him to the nearby estate there is a more height of the designed structure "on a compass point, considering from a top to the terrene" or if "meantime et al the street of the first or second digit of legal width"(Article 603 of the Civil Code of the Zurich Canton.

Edition of the Editorial Commission for the Drafting of Civil Code. printing house, 1887. P. 108) [11]. More short suggestion: a person, who has a right on light, "cannot oppose, if access of light will be covered no more than  $\frac{1}{2}$  of the height of direct corner, considering from a window-sill to up" [12].

### 3 Results

Duration of insolation is regulated by normative acts only as it applies to next structures: to dwellings building (to the apartments); to child's preschool establishments; to educational establishments of general, primary, middle, additional and professional education, to boarding-schools, child's houses and other; to medical and preventive, sanatory-health and resort establishments; to establishments of public welfare (boarding houses for the disabled and the elderly, hospices, etc.).

A failure to observe of requirements to insolation of dwellings apartments can bring to confession of dwelling apartment unfit for a residence (see "Regulations on the recognition of a dwelling, a dwelling unfit for living and an apartment building as emergency and subject to demolition or reconstruction", approved by RF Government Decree on 28.01.2006 No. 47) [13].

The most common consequence of the violation of insolation, educed at planning of dwellings or unoccupied building is a violation of insolation in next dwellings doors as a result of realization of building. In this case, a positive opinion of the state construction expertise will not be obtained, that will lead to the refusal to issue a building permits (Articles 49, 51 of the Town Planning Code of the Russian Federation [14]).

In one of the cases, building company appealed to the court with a lawsuit about nullification negative conclusion of state examination on project documentation of object of capital building. The position of a court is that company's project documentation on the object of capital building "dwelling-house with built-in non-residential premises on a ground floor and underground garage down Roshinskaya Street in city Ekaterinburg" falls short of to the requirements of technical regulations and normative technical documents.

In obedience to project documentation, after placing of the designed dwelling-house on a contiguous area with an already present house, it will result in the complete exception of insolation of north-eastern facade of new house (Decree of the Federal Antimonopoly Service of the Urals District on February 24, 2014 No. Ф09-186/14 in case No. А60-18408/2013) [15].

There can be another situations, when a high-rise building can not be located on a land plot provided for construction, because of parameters of the permitted construction do not correspond to the actual construction parameters, and the land plot is not suitable for the construction of a residential house, taking into account the requirements of all regulatory and legal acts, compliance with which is necessary for the design, construction and commissioning of this building. In another case, the construction company appealed to the court with the lawsuit about nullification the contract with the city district administration about the termination of the land lease for the design and construction of a high-rise 10-storey residential building and recovery of damages in the amount of 1,117,200 rubles. Lawsuit requirements were satisfied. The court found that on the basis of the resolution of the administration, an auction was held to sell the rights to conclude lease contracts for land plots, for housing needs for the design and construction of a residential building, for a period of 3 years. When the preliminary design was coordinated with the management of the city administration architecture, it was established that it was impossible to construct a residential building above four floors on the given land plot, due to the lack of space for children's playgrounds, parking for cars, and the insolation of the kindergarten adjacent to the northern side to the disputed land. Guilt of building company is absent.

In case of assumption of errors at planning, when they were not found out by examination, the construction of a building or structure that violates insolation in the existing dwelling – house, building can be forbidden, the given permission on building is confessed by invalid in the judicial order (Article 1065 of the Civil Code), and also another methods of protection of rights (Article 12 of the Civil Code of the Russian Federation) are applied.

In case of impossibility of demolition of the constructed building, the developer may be obliged to move citizens of flats that do not receive sufficient sunlight to other living quarters or with their consent to apply other compensatory measures, for example, to install on the facade of a building under construction a fluorescent lamp, apply mirror facades, etc. At the same time, all these requirements deal with the proprietors of dwellings apartments only, and also row of public building, for example, of sanatoriums. It is suggested to enter the concept of insolation for non-residential premises, as many people during a light day are at work, and, a sunlight is also required them for maintenance of the health. In this connection, it is suggested also to forbid using apartments in that people spend a lot of time, if in such apartments there are not windows or corresponding compensative events are not conducted, in particular, as setting of lamps of daily illumination of high quality.

Suggestion about the necessity of distribution of requirement to insolation on non-residential premises is caused by the circumstance, that citizens can live in such apartments that in accordance with the current Russian legislation is not subsumed dwellings, they are unoccupied. In the number of such apartments it is necessary to include the suites of rooms, lofts [16], apartments in dormitories, office apartments.

## 4 Discussion

World practice of planning and construction of high-rise buildings in cities with dense building, and also in cities with dense building of center applies requirements to insolation to the dwellings apartments. Practice of application of the same norms to the apartments, where citizens, probably, live temporarily, for example, in hotels, is not uniform.

Authors of researches of the legal mode of suites of apartments, loft-apartments, studios are convinced, that the norms of insolation do not spread to these apartments. Does developer can to ignore the norms of insolation of apartments in existing next to the new construction of the building if he knows this circumstance?

And in theory, and practically, on this question it is necessary to answer in the affirmative. In addition, it be possible to say, that physical persons, acquiring a studio or loft for a permanent residence, already beforehand show the unreasonableness of the behavior, as they must suppose that many requirements that is produced to the dwellings apartments (to the individual dwelling-houses, apartments in condominiums, apartment dwellings houses) do not spread to such apartments.

In particular, one of such situations was considered the arbitration (state) courts of the Ural region in regard to requirements to the building company (Decree of the Federal Arbitration Court of the Urals District on 14.05.2008 Case No. A60-28553/2007) [17]. To present tense business data are considered the "classics" of permission of dispute on insolation.

This building company got the positive conclusion of state examination, and then permission on building of two high-rise dwelling-houses in city Ekaterinburg (the Aston Plaza project).

But later, in connection with the appeal of deputy of Regional legislative Body and citizens, resident in a next door, public supervisory body, pulled out to person building a requirement about stopping of building in order of the article 1065 Civil Code, and also brought a building company to the administrative account. Violations of legislation were educed in area of providing of sanitary and epidemiology prosperity of the population expressed in violation of operating sanitary rules and hygienically norms.

That is, actions of building company, on building of new housing estate worsened, and in a row case fully eliminated insolation and natural luminosity of apartments of north and north-western orientation of already existent dwelling-house, that violates a current legislation. A building company appealed the actions of public body in an arbitration court.

The dramatic effect of situation consisted of requirements of public body, to settle out of lodgers of 30 apartments from home in that citizens lived in the own apartments that located next to new building, in accordance with the Russian legislation. Building company, understanding, what losses it draws, contested bringing to administrative responsibility, because this act was set his guilt as a developer. And guilt is one of four necessary elements of bringing to responsibility as reimbursement of losses. If person building had to resettle the tenants of lodgers 30 apartments, then he, firstly, would so rise the price building of the high-rise residential buildings, that hardly acquisition of such apartments was expedient from the side of potential customers, and, secondly, would tighten a building process on long years, that would do building unprofitable, and person building forced to appeal to the court with a requirement about confession by his bankrupt.

It would be desirable to underline that a requirement to insulation is so meaningful and considerable, that can result in the most different economic and legal unprofitable consequences for person building, projector and even for the state because of the lack of the proper supervision after planning during realization of state examination of building project.

Originally, courts of first and second instances decided that the requirements of declarant were not subject satisfaction. It was set that reason of delivery of positive calculations and conclusions on insulation, executed in 2006 by organization by a designer, was wrong establishment of orientation of apartments (a dwelling-house has a not north and north-western orientation).

At establishment of guilt of building company, a court came to the conclusion, company realized possibility of violation of legislation about health and epidemiological prosperity of population at building of new dwelling-house and foresaw the offensive of harmful consequences as worsening of terms of insulation of apartments of north and north-western orientation of already existent dwelling-house. By virtue of parts 11, 15 of articles 48 of the Town Planning Code of the Russian Federation, a building company is a person responsible for authenticity of project documentation.

The court of the third instance abolished previous decisions, specifying that an already existent dwelling-house, insulation in that could be broken, was originally built and used as a house with apartments, having status of official. The house was considered originally not suitable for a permanent residence the result was built not three high-rise dwelling-houses and only two. This was the cost of failure to observe of requirements of insulation already on the stage of choice of lot land for building and at the subsequent planning.

The contradiction of right and practice, related to all non-residential premises, is that status of house confesses primary, and secondary is a fact of permanent residence in him physical persons constantly, by families, with children. It would be desirable to underline that the main culprit of such losses is local self-government body, giving such problem area for building, and also public state body giving out positive conclusions without realization of the real deep researches. To date reimbursement of such losses maybe on the basis of articles 15, 1064, 1069 of the Civil Code of the Russian Federation.

## 5 Conclusions

In place of the indicated person building there can be any other, including foreign. On another-strange individual and legal persons the national mode, that is expressed not only in the grant of rights but also in an incumbency, spreads, including, on reimbursement of losses.

It is necessary to mark the following. Judicial practice of Russian Federation is oriented to satisfaction of requirements in regard to dwellings apartments, but not always. Such requirements that touch are mainly satisfied, so-called, neighborly spores, when the question is not about erection of sky-scraper in the courtyard of ordinary "Khrushchev" five-storey houses. Examining the lawsuits of lodgers of such houses, court, as a rule, acknowledge them

not interested in the serve of such lawsuits. These facts are marked in literature. In publications on this question, a legislation over is brought and practice of other countries, acknowledging lodgers resident in apartments in a house, located with the site area of the high-rise building interested in challenging of documents accompanying new building. In particular, experience of the USA is analyzed, where disputes about building of new building next to already existing always requires the presence of locals as the third persons [18]. The same position must accept the Russian courts that try to find a necessary parity between development of city on the whole, the construction of new high-rise buildings that will decorate a city and "save" many hectares, and interests of physical persons, in particular, by their right on the necessary amount of sunlight in apartments, where they constantly or temporally live and work, after those exceptions that must be set forth at the level of law, equal as and a self right on a sunlight must get a due settlement.

The questions considered in the real research are actual for world practice of building high-rise buildings and other meaningful objects that confirms a followins fact.

When this article was about ready, many world mass medias passed the report of BBC's radio and television that family from Great Britain appealed to the court with a requirement to forbid building of stadium of Stamford Bridge for FC "Chelsea" in London because of fears, that a sunlight will cease to fall in the windows of their house. [19].

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