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**NATIONAL STANDARD OF THE
PEOPLE'S REPUBLIC OF CHINA**

GB 55038-2025

Project code for residential building

住宅项目规范

Issued on: March 13, 2025

Implemented on: May 1, 2025

**Issued by: State Administration for Market Regulation;
Standardization Administration of the PRC**

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2.3 Clause 2.3, provisions 2.3.2 to 2.3.8 (the heading of 2.3 falls on a page outside those examined)

2.3.2 The common parts of a residential building, its common entrance halls, common corridors, common staircases and roof among them, shall not be demolished, altered or occupied without authorisation.

2.3.3 The load-bearing structure, the main functions of use and the external appearance of a residential building shall not be altered without authorisation.

2.3.4 The seismic members, the isolation trenches, the isolation joints and the seismic isolation and damping devices of a residential building, and their marking, shall not be altered, damaged or removed without authorisation.

2.3.5 The water supply and drainage, heating, gas, electricity supply and communication installations serving common purposes in a residential project shall not be demolished or altered without authorisation.

2.3.6 The common spaces and grounds and the common equipment and facilities of a residential project shall be maintained, inspected and managed at regular intervals, and the common equipment and facilities shall be kept in normal operation.

2.3.7 The fire protection facilities of a residential project shall be kept intact and effective, and the escape routes and the fire engine access routes shall be kept clear.

2.3.8 Heavy objects that affect structural safety shall not be piled on the floors or the roof of a residential building.

3.1 Spatial environment

3.1.1 A residential project shall provide residents with a liveable living environment, and the

spatial environment control indicators of its residential block shall comply with Table 3.1.1-1. Where the residential buildings adopt a low-rise or a multi-storey high-density layout, the spatial environment control indicators of the residential block shall comply with Table 3.1.1-2. Table 3.1.1-1 fixes, for each building climate zone and for each class of average number of storeys of the residential buildings, the plot ratio of the residential land, the maximum building density as a percentage, the minimum green space ratio as a percentage and the maximum controlled height of the residential buildings in metres; the classes of storeys run from low-rise, one to three storeys, through multi-storey class I, four to six storeys, multi-storey class II, seven to nine storeys, and high-rise class I, ten to seventeen storeys, to high-rise class II, eighteen to twenty-six storeys. Table 3.1.1-2 fixes the same quantities for low-rise and multi-storey class I buildings in a high-density layout and adds the residential land area per person in square metres per person. The values of the two tables are not reproduced here.

3.1.2 The spacing between residential buildings shall be controlled according to the insolation standard set by Table 3.1.2. The insolation standard for newly built residential buildings inside an old-area redevelopment project shall not be lower than 1 h of insolation on Great Cold day. Table 3.1.2 fixes, for the building climate zones and for the permanent population of the urban district or town district, the standard insolation day, the number of hours of insolation, the effective insolation time band expressed in local true solar time, and the point from which the calculation starts; a note states that the sill of a ground floor window means the position on the external wall 0.9 m above the indoor floor. The numerical values of that table are not reproduced here.

3.2 Site

3.2.1 The site of a residential project shall be safe and shall comply with the following: on a plot affected by noise pollution or light pollution, corresponding protective measures shall be taken and the acoustic environment and light environment quality requirements for residential land shall be met; on a plot with soil contamination, effective measures shall be taken to render it harmless and the soil environment quality requirements for residential land shall be met; and the site design shall satisfy the requirements of emergency evacuation.

3.2.2 Concentrated green space shall be provided inside the residential block, and shall comply with the following: the concentrated green space per person shall not be less than 0.50 m² in a newly built project and not less than 0.35 m² in an old-area redevelopment project; the width of the concentrated green space shall not be less than 8 m; and within the concentrated green space the area of green space lying outside the standard building shadow line shall not be less than one third of the whole, and grounds for the activities of elderly people and children shall be provided there.

3.2.3 A residential project shall be provided with ancillary roads, which shall comply with

the following: they shall connect with the urban or town road system and shall satisfy the passage requirements of emergency, fire-fighting and transport vehicles; they shall connect without barriers with the pedestrian entrances of the residential project site, with the entrances of the residential units and with the grounds for the activities of elderly people and children, and shall connect with the footways of the urban or town roads so as to form a barrier-free pedestrian system; and the pedestrian paving shall meet the anti-slip requirements.

3.2.4 Where the natural slope of the site of a residential project is steeper than 8.0 %, a terraced layout shall be adopted, and it shall comply with the following: retaining structures such as slope protection or retaining walls shall be provided between the terraces; and where the slope protection or retaining wall is more than 2.0 m high, the horizontal clear distance between its top edge and a building on the upper terrace shall not be less than 3.0 m, and the horizontal clear distance between its bottom edge and a building on the lower terrace shall not be less than 2.0 m.

3.2.5 The vertical design of the site of a residential project shall favour the control of rainwater runoff and the use of rainwater as a resource, and shall meet the requirements of flood control and waterlogging drainage. The design slope for surface drainage of the site shall not be less than 0.2 %.

3.2.6 Where a residential building is more than 10 m high, the minimum distance from its external wall face to the edge of the road shall comply with Table 3.2.6. That table gives, for each relation between building and road, the distance from an urban or town road and the distance from an ancillary road, both in metres: where the face of the building towards the road has no public entrance, 3.0 and 2.0; where the face of the building towards the road has a public entrance, 5.0 and 2.5; and where the gable wall of the building faces the road, 2.0 and 1.5. The notes state that the edge of an urban or town road means the road boundary line, and that the edge of an ancillary road means the edge line of the carriageway.

3.2.7 The night-time lighting illuminance values and the general colour rendering index of the outdoor public areas of a residential project shall not be lower than the limits set by Table 3.2.7. That table gives, for each place, the average horizontal illuminance, the minimum horizontal illuminance, the minimum vertical illuminance, the minimum semi-cylindrical illuminance, all in lux, and the general colour rendering index: main ancillary roads, 15, 3, 5, 3 and 60; other ancillary roads, 10, 2, 3, 2 and 60; fitness footpaths, 20, 5, 10, 5 and 60; and activity grounds, 30, 10, 10, 5 and 60. A note states that the reference plane for horizontal illuminance is the ground, and that the calculation point or measuring point for vertical illuminance and semi-cylindrical illuminance is 1.5 m high.

3.3 Supporting facilities

3.3.1 The supporting facilities of a residential project shall be determined jointly from the

resident population size and the service radius of the facilities, and shall be provided and built at the same time as the project, in accordance with the graded configuration standard of the residential area in which it lies.

3.3.2 A residential project shall be provided with domestic waste collection points, which shall comply with the following: they shall meet the requirement of separate waste collection; they shall carry signs that are easy to recognise; and the containers collecting kitchen waste shall be capable of being closed.

3.3.3 A residential project shall be provided with parcel boxes or lockers, or the conditions for installing them shall be reserved.

4.1 Space inside the dwelling unit

4.1.1 The usable floor area of a bedroom shall comply with the following: the usable floor area of a bedroom shall not be less than 5 m²; the usable floor area of a bedroom that doubles as a living room shall not be less than 9 m²; and the clear width of the short side of a bedroom shall not be less than 1.80 m.

4.1.2 The storey height and the indoor clear height of a newly built residential building shall comply with the following: the storey height shall not be less than 3.00 m; the indoor clear height of bedrooms and living rooms shall not be less than 2.60 m, the local clear height shall not be less than 2.20 m, and the area whose local clear height is below 2.60 m shall not exceed one third of the indoor usable floor area; where the space inside a pitched roof is used as a bedroom or a living room, the usable floor area with an indoor clear height not less than 2.20 m shall not be less than one half of the indoor usable floor area; and the indoor clear height of kitchens and bathrooms shall not be less than 2.20 m.

4.1.3 Bedrooms, living rooms and kitchens shall not be placed in a basement. Where they are placed in a semi-basement, the layout shall be reasonable and the necessary measures for ventilation, damp-proofing, drainage and safety protection shall be taken.

4.1.4 The usable floor area of a kitchen shall not be less than 3.5 m².

4.1.5 A kitchen shall be fitted with a sink, a tap, a worktop, a cooker and a range hood, or the positions for installing them shall be reserved.

4.1.6 The bathroom of each dwelling unit shall be fitted with at least the three sanitary appliances of water closet, bathing appliance and washbasin, or the positions and conditions for installing them shall be reserved. The door of a bathroom containing a water closet shall not open directly into the kitchen. Where the water closet, the bathing appliance and the washbasin are placed together, the usable floor area of the bathroom shall not be less than 2.5 m².

4.1.7 A bathroom shall not be placed directly above the bedroom, living room, kitchen or dining room of another household.