

# Regulations on the Administration of Earthquake Resistance of Construction Projects

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## Chapter I — General Provisions

Article 1 — These Regulations are formulated in accordance with the Construction Law of the People's Republic of China, the Law of the People's Republic of China on Protecting Against and Mitigating Earthquake Disasters and other laws to improve the earthquake resistance and disaster prevention capability of construction projects, reduce the risk of earthquake disasters, and protect the safety of people's

lives and property.

Article 2 — These Regulations apply to activities such as survey, design, construction, appraisal, reinforcement and maintenance concerning the earthquake resistance of construction projects within the territory of the People's Republic of China, and the supervision and administration thereof.

Article 3 — The earthquake resistance of construction projects shall adhere to the principles of putting people first, comprehensive fortification, and highlighting key points.

Article 4 — The housing and urban-rural development authority of the State Council shall exercise unified supervision and administration over the earthquake resistance of construction projects nationwide. The transport, water resources, industry and information technology, energy and other relevant authorities of the State Council shall, in accordance with the division of duties, be responsible for the supervision and administration of the earthquake resistance of the relevant specialized construction projects nationwide. The housing and urban-rural development authorities of local people's governments at or above the county level shall exercise supervision and administration over the earthquake resistance of construction projects within their respective administrative regions. The transport, water resources, industry and information technology, energy and other relevant authorities of local people's governments at or above the county level shall, within their respective scopes of duties, be responsible for the supervision and administration of the earthquake resistance of the relevant specialized construction projects within their respective administrative regions. Other relevant authorities of people's governments at or above the county level shall, in accordance with these Regulations and other relevant laws and regulations, be responsible for the earthquake resistance-related work of construction projects within their respective scopes of duties.

Article 5 — Units and personnel engaging in activities related to the earthquake resistance of construction projects shall be responsible for the earthquake resistance of construction projects in accordance with law.

Article 6 — The state encourages and supports the research, development and application of earthquake resistance technologies for construction projects. People's governments at all levels shall organize publicity and popularization of knowledge on earthquake resistance of construction projects and raise the public's awareness of earthquake resistance and disaster prevention.

Article 7 — The state establishes an earthquake resistance survey system for construction projects. People's governments at or above the county level shall organize the relevant departments to conduct surveys on the earthquake resistance performance of construction projects, the application of earthquake resistance technologies and industrial development, comprehensively grasp the basic situation of earthquake resistance of construction projects, and promote the improvement of the management level of earthquake resistance of construction projects and scientific decision-making.

Article 8 — Construction projects shall avoid dangerous sections determined in the special planning for earthquake resistance and disaster prevention. Where avoidance is genuinely impossible, seismic fortification measures conforming to the functional requirements of the construction project and adapting to earthquake effects shall be taken.

## **Chapter II — Survey, Design and Construction**

Article 9 — Newly built, expanded or renovated construction projects shall comply with the mandatory standards for seismic fortification. The relevant authorities of the State Council and the standardization administrative authority of the State Council shall, in accordance with their duties, formulate and publish mandatory standards for seismic fortification in accordance with law.

Article 10 — Construction units shall be responsible for the whole process of survey, design and construction of construction projects, clearly specify the mandatory standards for seismic fortification to be adopted in the survey, design and construction contracts, verify the survey and design result documents in accordance with

the contract requirements, organize project acceptance, and ensure that construction projects comply with the mandatory standards for seismic fortification. Construction units shall not expressly or impliedly require survey, design, construction and other units and practitioners to violate the mandatory standards for seismic fortification or reduce the earthquake resistance performance of projects.

Article 11 — Survey documents of construction projects shall state the seismic site category, analyze the seismic effect of the site, and put forward suggestions on project site selection and the treatment of unfavorable geology. Design documents of construction projects shall state the seismic fortification intensity, the seismic fortification category and the seismic fortification measures to be adopted. For construction projects adopting seismic isolation and energy dissipation technologies, the design documents shall put forward clear requirements on the technical performance, inspection and testing, construction and installation, and use and maintenance of the seismic isolation and energy dissipation devices.

Article 12 — For the following construction projects located in high-intensity fortification areas and key seismic monitoring and defense areas, the design units shall, at the preliminary design stage, prepare a special chapter on seismic fortification of the construction project in accordance with the relevant state provisions as an integral part of the design documents: (1) major construction projects; (2) construction projects that may cause serious secondary disasters during earthquakes; (3) construction projects whose functions cannot be interrupted or need to be restored as soon as possible during earthquakes.

Article 13 — For super-limit high-rise building projects, the design units shall state this in the design documents, and the construction units shall, at the preliminary design stage, submit the design documents and other materials to the housing and urban-rural development authority of the people's government of the province, autonomous region or municipality directly under the Central Government for seismic fortification approval. The housing and urban-rural development authority shall organize expert review and grant approval where the seismic fortification measures adopted are reasonable and feasible. The seismic fortification approval opinions for super-limit high-rise building projects shall serve as the basis for construction drawing design and review. For the purposes of the preceding paragraph, "super-limit high-rise building projects" means high-rise building projects that exceed the applicable heights and applicable structural types prescribed by the current national standards, as well as high-rise building projects with particularly irregular forms.

Article 14 — General contracting units, construction units and project supervision units shall establish quality responsibility systems for construction projects and strengthen the management of the construction quality of seismic fortification measures for construction projects. The state encourages general contracting units and construction units to use information technology to collect and preserve construction quality information for concealed works. Construction units shall carry out construction in accordance with the mandatory standards for seismic fortification.

Article 15 — Construction units shall record the specific circumstances such as the design service life, structural system, seismic fortification intensity and seismic fortification category of the buildings, as well as the use and maintenance requirements, in the operation manuals, and deliver the operation manuals to the users or purchasers.

Article 16 — Building projects are divided into special fortification, key fortification, standard fortification and moderate fortification categories according to factors such as their functions and their role in earthquake relief. Buildings such as schools, kindergartens, hospitals, elderly care institutions, child welfare institutions, emergency command centers, emergency shelters, radio and television buildings shall adopt seismic fortification measures not lower than the requirements of the key fortification category. Newly built schools, kindergartens, hospitals, elderly care institutions, child welfare institutions, emergency command centers, emergency shelters, radio and television buildings located in high-intensity fortification areas and key seismic monitoring and defense areas shall adopt seismic isolation and energy dissipation and other technologies in accordance with the relevant state provisions, ensuring that they can meet the requirements

of normal use when a fortification earthquake occurs in the area. The state encourages the adoption of seismic isolation and energy dissipation and other technologies in construction projects other than those prescribed in the preceding paragraph to improve earthquake resistance performance.

Article 17 — The relevant authorities of the State Council and the standardization administrative authority of the State Council shall, in accordance with their respective duties, promote the formulation of technical standards related to seismic isolation and energy dissipation devices and clarify the general technical requirements. Enterprises producing seismic isolation and energy dissipation devices are encouraged to formulate enterprise standards stricter than national standards and industry standards. Enterprises producing and operating seismic isolation and energy dissipation devices shall establish a unique coding system and a product inspection qualification seal system, collect and store information on the production, operation and testing of seismic isolation and energy dissipation devices, and ensure the traceability of the quality information of seismic isolation and energy dissipation devices. The quality of seismic isolation and energy dissipation devices shall comply with the provisions of the relevant product quality laws and regulations and the relevant national technical standards. Construction units shall organize survey, design, construction and project supervision units to establish a quality traceability system for seismic isolation and energy dissipation projects, use information technology to collect and store information and materials on the whole process of procurement, survey, design, incoming inspection, installation and construction, and completion acceptance of seismic isolation and energy dissipation devices, and incorporate them into the construction project archives.

Article 18 — Before seismic isolation and energy dissipation devices are used in construction projects, construction units shall, under the supervision of the construction unit or the project supervision unit, take samples and send them to institutions entrusted by the construction unit with the corresponding construction project quality testing qualifications for testing. The use of unqualified seismic isolation and energy dissipation devices is prohibited. Where construction general contracting is implemented, the construction of seismic isolation and energy dissipation devices belonging to the main structure of the construction project shall be completed by the general contracting unit itself. Engineering quality testing institutions shall establish recording and retention systems for construction project process data and result data, testing image materials and testing reports, be responsible for the truthfulness and accuracy of the testing data and testing reports, and shall not issue false testing data and testing reports.

### **Chapter III — Appraisal, Reinforcement and Maintenance**

Article 19 — The state implements a system for the appraisal of the earthquake resistance performance of construction projects. For construction projects that shall undergo earthquake resistance performance appraisal in accordance with Article 39 of the Law of the People's Republic of China on Protecting Against and Mitigating Earthquake Disasters, the owners shall entrust institutions with the corresponding technical conditions and technical capabilities to conduct the appraisal. The state encourages the appraisal of earthquake resistance performance of completed construction projects, other than those prescribed in the preceding paragraph, that have not adopted seismic fortification measures or do not meet the mandatory standards for seismic fortification.

Article 20 — The results of earthquake resistance performance appraisal shall determine whether there are serious hidden dangers to the earthquake resistance safety of construction projects and whether seismic reinforcement is needed. The results of earthquake resistance performance appraisal shall be true, objective and accurate.

Article 21 — Owners of construction projects shall conduct safety monitoring of construction projects with serious hidden dangers to earthquake resistance safety, and take measures such as stopping or restricting use before reinforcement. For completed construction projects whose earthquake resistance performance appraisal results determine that seismic reinforcement is needed and which have reinforcement value, the

owners shall carry out seismic reinforcement. When carrying out seismic reinforcement of completed buildings such as schools, kindergartens, hospitals, elderly care institutions, child welfare institutions, emergency command centers, emergency shelters, radio and television buildings located in high-intensity fortification areas and key seismic monitoring and defense areas, seismic isolation and energy dissipation and other technologies shall be adopted after full demonstration, ensuring that their earthquake resistance performance complies with the mandatory standards for seismic fortification.

Article 22 — Seismic reinforcement shall be carried out in accordance with the Regulations on Quality Management of Construction Projects and other provisions, and comply with the mandatory standards for seismic fortification. After passing completion acceptance, information such as the time of seismic reinforcement and the subsequent service life shall be publicized through information technology means or by setting up permanent signs at conspicuous locations of the construction projects.

Article 23 — Owners of construction projects shall, in accordance with provisions, inspect, repair and maintain the earthquake resistance components, seismic isolation trenches, seismic isolation joints, seismic isolation and energy dissipation devices and seismic isolation signs of construction projects, and promptly eliminate hidden dangers. No unit or individual may change, damage or remove the earthquake resistance components, seismic isolation trenches, seismic isolation joints, seismic isolation and energy dissipation devices or seismic isolation signs of construction projects without authorization. Any unit or individual discovering acts of changing, damaging or removing the earthquake resistance components, seismic isolation trenches, seismic isolation joints, seismic isolation and energy dissipation devices or seismic isolation signs of construction projects without authorization has the right to stop them and report to the housing and urban-rural development authority or other relevant supervision and administration authorities.

## **Chapter IV — Seismic Fortification of Rural Construction Projects**

Article 24 — People's governments at all levels and the relevant departments shall strengthen the management of seismic fortification of rural construction projects and improve the earthquake resistance performance of rural construction projects.

Article 25 — People's governments at or above the county level shall give necessary policy support to the seismic reinforcement of rural villagers' residences and rural public facility construction projects whose earthquake resistance performance appraisal fails to meet the mandatory standards for seismic fortification. In implementing the renovation of rural dilapidated housing, resettlement, post-disaster recovery and reconstruction and the like, it shall be ensured that construction projects meet the mandatory standards for seismic fortification.

Article 26 — Local people's governments at or above the county level shall compile and distribute practical earthquake resistance technical drawing collections suitable for rural areas. Rural villagers' residence construction may select earthquake resistance technical drawing collections, or entrust design units to carry out design, and construct in accordance with the requirements of the drawing collections or the design.

Article 27 — Local people's governments at or above the county level shall strengthen guidance and services for the earthquake resistance of rural villagers' residences and rural public facility construction projects, strengthen technical training, organize the construction of earthquake-resistant demonstration housing, and promote the application of structural forms and construction methods with good earthquake resistance performance.

## **Chapter V — Safeguard Measures**

Article 28 — People's governments at or above the county level shall strengthen the organizational leadership of the management of earthquake resistance of construction projects, establish a working mechanism for the management of earthquake resistance of construction projects, and incorporate the

relevant work into the national economic and social development plans at the same level. People's governments at or above the county level shall include the funds needed for the earthquake resistance work of construction projects in their budgets at the same level. Local people's governments at or above the county level shall organize the relevant departments to conduct seismic risk analysis in light of local actual conditions and implement classified management according to the degree of risk.

Article 29 — Local people's governments at or above the county level shall give necessary policy support to the seismic reinforcement of old houses that have not adopted seismic fortification measures or do not meet the mandatory standards for seismic fortification. The state encourages owners of construction projects to carry out seismic reinforcement in combination with elevator installation and energy-saving renovation, and improve the earthquake resistance performance of old houses.

Article 30 — The state encourages financial institutions to develop and provide financial products and services, promote the improvement of the earthquake resistance and disaster prevention capability of construction projects, and support the development of earthquake resistance-related industries of construction projects and the application of new technologies. Local people's governments at or above the county level encourage and guide social forces to participate in earthquake resistance performance appraisal and seismic reinforcement.

Article 31 — The state encourages scientific research and educational institutions to establish earthquake resistance technology laboratories for construction projects and talent training bases. People's governments at or above the county level shall, in accordance with law, give policy support to the land use and financing of industrialization projects for new earthquake resistance technologies of construction projects.

Article 32 — The housing and urban-rural development authorities of people's governments at or above the county level or other relevant supervision and administration authorities shall formulate promotion catalogs for new earthquake resistance technologies of construction projects and strengthen training for earthquake resistance management and technical personnel of construction projects.

Article 33 — After the occurrence of an earthquake disaster, the housing and urban-rural development authorities of people's governments at or above the county level or other relevant supervision and administration authorities shall carry out safety emergency assessment of construction projects and earthquake damage investigation of construction projects, and collect and preserve the relevant materials.

## **Chapter VI — Supervision and Administration**

Article 34 — The housing and urban-rural development authorities of people's governments at or above the county level and other relevant supervision and administration authorities shall, in accordance with the division of duties, strengthen the supervision and inspection of the implementation of the mandatory standards for seismic fortification of construction projects. The housing and urban-rural development authorities of people's governments at or above the county level shall, together with the relevant departments, establish and improve databases of seismic fortification data of construction projects, and share data with the emergency management, earthquake and other departments in real time.

Article 35 — When performing their duties of supervising and administering the earthquake resistance of construction projects, the housing and urban-rural development authorities of people's governments at or above the county level or other relevant supervision and administration authorities have the right to take the following measures: (1) conducting supervision and inspection of construction projects or construction sites; (2) investigating and inquiring about relevant circumstances from relevant units and personnel; (3) consulting and reproducing documents and materials of the inspected units concerning the earthquake resistance of construction projects; (4) conducting sampling tests of earthquake resistance structural materials, components and seismic isolation and energy dissipation devices; (5) sealing up construction sites suspected of violating the mandatory standards for seismic fortification; (6) ordering relevant units to conduct

necessary testing and appraisal upon discovering problems that may affect earthquake resistance quality.

Article 36 — When the housing and urban-rural development authorities of people's governments at or above the county level or other relevant supervision and administration authorities carry out supervision and inspection, they may entrust professional institutions to provide technical support such as sampling tests and earthquake resistance performance appraisal.

Article 37 — The housing and urban-rural development authorities of people's governments at or above the county level or other relevant supervision and administration authorities shall establish credit record systems for enterprises and practitioners responsible for the earthquake resistance of construction projects, and incorporate the relevant credit records into the national credit information sharing platform.

Article 38 — Any unit or individual has the right to report illegal acts violating these Regulations. The housing and urban-rural development authority or other relevant supervision and administration authority receiving the report shall conduct investigation, handle the matter in accordance with law, and keep the reporter confidential.

## **Chapter VII — Legal Liability**

Article 39 — Where, in violation of these Regulations, staff members of the housing and urban-rural development authorities or other relevant supervision and administration authorities neglect their duties, abuse their power or practice favoritism and fraud in supervision and administration work, sanctions shall be imposed in accordance with law.

Article 40 — Where, in violation of these Regulations, construction units expressly or impliedly require survey, design, construction and other units and practitioners to violate the mandatory standards for seismic fortification or reduce the earthquake resistance performance of projects, they shall be ordered to make corrections and fined not less than 200,000 yuan and not more than 500,000 yuan; where the circumstances are serious, they shall be fined not less than 500,000 yuan and not more than 5 million yuan; where losses are caused, compensation liability shall be borne in accordance with law. Where, in violation of these Regulations, construction units carry out construction without seismic fortification approval for super-limit high-rise building projects, they shall be ordered to stop construction, make corrections within a time limit, and fined not less than 200,000 yuan and not more than 1 million yuan; where losses are caused, compensation liability shall be borne in accordance with law. Where, in violation of these Regulations, construction units fail to organize survey, design, construction and project supervision units to establish a quality traceability system for seismic isolation and energy dissipation projects, or fail to collect and store information and materials on the whole process of procurement, survey, design, incoming inspection, installation and construction, and completion acceptance of seismic isolation and energy dissipation devices and incorporate them into the construction project archives, they shall be ordered to make corrections and fined not less than 100,000 yuan and not more than 300,000 yuan; where losses are caused, compensation liability shall be borne in accordance with law.

Article 41 — Where, in violation of these Regulations, design units commit any of the following acts, they shall be ordered to make corrections and fined not less than 100,000 yuan and not more than 300,000 yuan; where the circumstances are serious, they shall be ordered to suspend business for rectification, have their qualification grade lowered or their qualification certificates revoked; where losses are caused, compensation liability shall be borne in accordance with law: (1) failing to carry out construction drawing design in accordance with the seismic fortification approval opinions for super-limit high-rise building projects; (2) failing to include the special chapter on seismic fortification of the construction project as an integral part of the design documents at the preliminary design stage; (3) failing to carry out design in accordance with the mandatory standards for seismic fortification.

Article 42 — Where, in violation of these Regulations, construction units fail to carry out construction in accordance with the mandatory standards for seismic fortification during construction, they shall be ordered to make corrections and fined not less than 2% and not more than 4% of the project contract price; where construction projects are caused to fail to comply with the mandatory standards for seismic fortification, they shall be responsible for rework and reinforcement and compensate for the resulting losses; where the circumstances are serious, they shall be ordered to suspend business for rectification, have their qualification grade lowered or their qualification certificates revoked.

Article 43 — Where, in violation of these Regulations, construction units fail to take samples of seismic isolation and energy dissipation devices for testing or use unqualified seismic isolation and energy dissipation devices, they shall be ordered to make corrections and fined not less than 100,000 yuan and not more than 200,000 yuan; where the circumstances are serious, they shall be ordered to suspend business for rectification, and fined not less than 200,000 yuan and not more than 500,000 yuan, have their qualification grade lowered or their qualification certificates revoked; where losses are caused, compensation liability shall be borne in accordance with law.

Article 44 — Where, in violation of these Regulations, engineering quality testing institutions fail to establish recording and retention systems for construction project process data and result data, testing image materials and testing reports, they shall be ordered to make corrections and fined not less than 100,000 yuan and not more than 300,000 yuan; where the circumstances are serious, their qualification certificates shall be revoked; where losses are caused, compensation liability shall be borne in accordance with law. Where, in violation of these Regulations, engineering quality testing institutions issue false testing data or testing reports, they shall be ordered to make corrections and fined not less than 100,000 yuan and not more than 300,000 yuan; where the circumstances are serious, their qualification certificates and the practicing qualification certificates of the registered practitioners bearing direct responsibility shall be revoked, and their directly responsible person in charge and other directly responsible personnel shall be prohibited from engaging in engineering quality testing business for life; where losses are caused, compensation liability shall be borne in accordance with law.

Article 45 — Where, in violation of these Regulations, earthquake resistance performance appraisal institutions fail to conduct earthquake resistance performance appraisal in accordance with the mandatory standards for seismic fortification, they shall be ordered to make corrections and fined not less than 100,000 yuan and not more than 300,000 yuan; where the circumstances are serious, they shall be ordered to suspend business for rectification and fined not less than 300,000 yuan and not more than 500,000 yuan; where losses are caused, compensation liability shall be borne in accordance with law. Where, in violation of these Regulations, earthquake resistance performance appraisal institutions issue false appraisal results, they shall be ordered to make corrections and fined not less than 100,000 yuan and not more than 300,000 yuan; where the circumstances are serious, they shall be ordered to suspend business for rectification and fined not less than 300,000 yuan and not more than 500,000 yuan, the practicing qualification certificates of the registered practitioners bearing direct responsibility shall be revoked, and their directly responsible person in charge and other directly responsible personnel shall be prohibited from engaging in earthquake resistance performance appraisal business for life; where losses are caused, compensation liability shall be borne in accordance with law.

Article 46 — Where, in violation of these Regulations, anyone changes, damages or removes the earthquake resistance components, seismic isolation trenches, seismic isolation joints, seismic isolation and energy dissipation devices or seismic isolation signs of construction projects without authorization, they shall be ordered to stop the illegal act, restore the original state or take other remedial measures, fined not less than 50,000 yuan and not more than 100,000 yuan in the case of individuals and not less than 100,000 yuan and not more than 300,000 yuan in the case of units; where losses are caused, compensation liability shall be borne in accordance with law.

Article 47 — Where a fine is imposed on a unit in accordance with these Regulations, the directly responsible person in charge and other directly responsible personnel shall be fined not less than 5% and not more than 10% of the amount of the unit's fine. The administrative penalties of lowering the qualification grade or revoking the qualification certificate prescribed in these Regulations shall be decided by the authority issuing the qualification certificate; other administrative penalties shall be decided by the housing and urban-rural development authority or other relevant supervision and administration authority in accordance with their statutory powers.

Article 48 — Where a violation of these Regulations constitutes a crime, criminal liability shall be pursued in accordance with law.

## Chapter VIII — Supplementary Provisions

Article 49 — For the purposes of these Regulations, the following terms have the following meanings: (1) "construction projects" mainly include civil engineering projects, building projects, and line, pipeline and equipment installation projects; (2) "mandatory standards for seismic fortification" means the mandatory standards for engineering construction that include content such as seismic fortification categories, seismic performance requirements and seismic fortification measures; (3) "construction projects whose functions cannot be interrupted or need to be restored as soon as possible during earthquakes" means construction projects that, after the occurrence of an earthquake, provide emergency medical, water supply, power supply, transportation, communication and other guarantees or emergency command, refuge and evacuation functions; (4) "high-intensity fortification areas" means areas with a seismic fortification intensity of 8 degrees or above; (5) "key seismic monitoring and defense areas" means areas and cities where there is a risk of destructive earthquakes occurring or being affected by destructive earthquakes within the next 5 to 10 years, which may cause serious earthquake disaster losses.

Article 50 — These Regulations do not apply to emergency rescue and disaster relief and other temporary construction projects. For the seismic management of military construction projects, where the Central Military Commission provides otherwise, such provisions shall apply.

Article 51 — These Regulations shall take effect on September 1, 2021.

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