

# **Notice from Guangzhou Municipal Housing and Urban-Rural Development Bureau regarding the Optimization of Quality and Safety Management of Small-Sized Construction Projects**

Sui Jian Zhi [2020] No. 4

To all parties concerned:

In order to further improve the business climate of our city and optimize the quality and safety supervision for small-sized construction projects, our bureau will simplify the supervisory process for the quality and safety management of construction projects, strengthen the fulfillment of quality and safety responsibilities for each main responsible party, enhance the risk management for the quality and safety of construction projects. The relevant matters are specified as follows:

## **1. Scope of Implementation**

The small-sized construction projects that are referred to in this Notice are defined as those newly built, rebuilt and expanded housing construction projects within the administrative region of this city; projects with single function and simple technical requirements and its building height does not exceed 24 meters; the total construction area for a single building should not exceed 5,000 square meters; and its gross floor area should not exceed 10,000 square meters. Projects such as indoor children's playground, elderly care facilities and factories or warehouses that produce or store flammable and explosive dangerous goods are excluded from this scope.

## **2. Strengthening and Improving the Qualification Requirements of Design Review Supervisory Practitioners**

According to the relevant requirements under the *Decision by the State Council on Amending Certain Administrative Regulations* (Order No. 714 of the State Council of the People's Republic of China), the professional construction design review practitioners for small-sized construction in our city must hold a Grade I Registered Architect's Certificate and a bachelor degree or above. On-site supervisory engineer for small-sized constructions must have the qualification of Registered Supervisory Engineer and a bachelor degree or above.

## **3. Strengthening and Improving the Academic Requirements for Quality and Safety Inspection and Management Personnel at Construction Site**

In addition to required length of working experience and professional qualification requirements set out by the Ministry of Housing and Urban-Rural Development's *Regulations on the Quality Supervision for Housing Construction and Municipal Infrastructure Engineering* (Order No.5 of the Ministry of Housing and Urban-Rural Development of the People's Republic of China), quality and safety inspection and management personnel at small-sized constructions sites also need to obtain the

administrative law enforcement certificate issued by the provincial government and fulfill the academic requirement of a bachelor degree or above.

#### **4. Implementation of an Inspection System Based on Risk Control**

For small-sized projects, an inspection system based on risk control is implemented to strengthen the fulfillment of quality and safety responsibilities for each main responsible party.

##### **4.1 The Project Developer Is Primarily Responsible for the Quality and Safety of Small-sized Projects**

During the construction of small-sized projects, the project developer shall organize the participating construction contractor and construction supervision firm to carry out quality and safety risk technical inspections (hereinafter referred to as technical inspections) separately on important items such as pile foundation, main body, decoration, curtain wall, and energy saving. The project developer is primarily responsible for the quality and safety of the construction. The construction contractor and the construction supervision firm shall bear their corresponding responsibilities in accordance to their respective division of duties.

##### **4.2 Risk Classification of Small-Sized Construction Projects**

A grading control and management method is implemented for small-sized construction projects. The quality and safety risk levels at each stage are classified as primary risk or secondary risk (see **Attachments 1 and 2** for more details). Technical inspection should be carried out based on quality and safety risks at each stage of the project. Specifically, quality risks should be determined according to the key parts and key processes of the project; safety risks should be determined based on the partitioned projects and subdivisional works with greater risks. Technical inspection can be carried out simultaneously with a self-inspection conducted by the construction contractor and on-site inspection conducted by the construction supervision firm.

##### **4.3 Procedure for Technical Inspection**

The inspection process for areas of risks includes risk assessment, inspection implementation and inspection summary. Specific requirements are listed as follows:

###### **4.3.1 Risk Identification**

Risk identification should be completed before the commencement of the construction project. The responsible technical personnel from the construction contractor should identify quality and safety risk level of each stage of the construction according to the quality and safety risk list and risk level. The results should be confirmed by the project's chief supervisory engineer and the person in charge of the project from the project developer.

###### **4.3.2 Inspection Implementation**

According to the quality and safety risk list and risk level identified for the project, the project developer organizes the construction contractor and the construction supervision firm to carry out technical inspections. For primary risks of quality and safety at each stage of the construction, the person in charge of the project from the project developer should organize technical personnel from the construction contractor and the construction

supervision firm to carry out the inspections; for secondary risks of quality and safety, the person in charge of the project from the project developer should organize the person in charge at the construction contractor and the person in charge at construction supervision firm to carry out the inspections.

#### 4.3.3 Inspection

After the completion of technical inspections at each stage, the project developer should work with the construction contractor and the construction supervision firm to generate an inspection report. This inspection report should truthfully record the technical inspection results and rectification of any problems discovered. At the completion acceptance stage of the project, each responsible party should check and examine this technical inspection report.

### **5. Implementation of Standardized and Differentiated Supervision and Inspection**

While implementing supervision and inspection of small-sized construction projects, construction administrative authorities at all levels and the quality and safety supervisory organization entrusted by them shall implement differentiated management in accordance with engineering risk situations such as the nature, scale and technical difficulty of the construction; focus on inspecting partitioned projects and subdivisional works with greater risks that could affect engineering structure safety; implement primary responsibility on the project developer; supervise according to the circumstance of quality and safety control measures taken by the construction contractor onsite.

#### 5.1 Examine the Implementation of Review Opinion by Design Inspection Agency during Supervision Clarification

If the construction design review agency finds out a problem with the construction design document during its review process, the project developer shall organize the modification of the construction design document according to the review opinion. The quality and safety supervisory agency shall check the implementation of the review opinion during supervision clarification.

#### 5.2 Construction Projects that Require Only A Single Supervision and Inspection Check

- 1) Factories or warehouses with a gross floor area not exceeding 5,000 square meters;
- 2) Public construction projects with a structural height not exceeding 12 meters with no basement, including shopping malls, office buildings, guesthouses, hotels, cultural, sports, and tourism related projects.

A single supervision and inspection of this type of small-sized construction shall be implemented after completion of the main structure and before decoration.

#### 5.3 Construction Projects that Require At Least Two Supervision and Inspection Checks

- 1) Housing projects;
- 2) Education and medical related public construction projects;

- 3) Projects consist the partitioned projects and subdivisional works with greater risks which exceed a certain scale;
- 4) Projects that will not be held by the project developer after its completion and being put into use.

At least two supervision and inspection checks shall be carried out for the above-mentioned types of projects. One inspection check should be conducted after completion of the main structure and before decoration, and one inspection check shall be conducted at random.

Where engineering quality and safety supervisory agencies are established separately, the quality supervisory agency should take a leading role and the safety supervisory agency should cooperate to carry out the quality and safety inspection jointly during the construction process.

#### **6. Implementation of Closed-loop Management and Strengthening the Accountability of Parties that Violate Relevant Laws and Regulations.**

If construction administrative departments at all levels and the engineering quality and safety supervisory agencies entrusted by them find any violation of regulations or laws, such as the parties involved in the project fail to implement technical inspections, quality and safety accidents occur or breach of mandatory standards, they should increase the frequency of supervision and the intensity of random checks, order rectification measures, record bad behavior and issue administrative penalties, and seriously investigate the liability in violation of the laws and regulations. The specific requirements for administrative inspection are as follows:

##### **6.1 Standardizing Inspection Method**

The administrative inspection shall be carried out by two or more administrative law enforcement personnel, and on-site inspection record shall be made. The record shall be signed or sealed by the parties involved and the administrative law enforcement personnel. If the parties involved refuse to sign or seal, a note shall be recorded in the transcript.

##### **6.2 Implementing Closed-loop Management**

If a quality and safety problem is found onsite during the administrative inspection, rectification shall be ordered immediately. A notice of the rectification order shall be issued with a deadline for the required rectification. The notice of the rectification order should specify information such as the name of the project, the content of the rectification order, the names and their corresponding article (section, item) number of the law, regulation and rules that have been violated. The responsible construction party should complete the rectification before the deadline specified in the rectification order and notify the administrative inspection enforcement department regarding the details of the rectification in writing.

##### **6.3 Strengthening Accountability of Responsibilities**

If any violation of regulation and law has been found during the administrative inspection, the responsible party should be punished through measures such as recording

irregular or bad behaviors and implementing administrative punishment in accordance with the law.

**Attachments:**

1. **Construction Project Quality Risk List and Risk Levels**
2. **Construction Project Safety Risk List and Risk Levels**

Guangzhou Municipal Housing and  
Urban-Rural Development Bureau

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**Attachment 1**

**Construction Project Quality Risk List and Risk Levels**

<b>Serial Number</b>	<b>Construction Stage</b>	<b>Primary Risk</b>	<b>Yes/No</b>	<b>Secondary Risk</b>	<b>Yes/No</b>
1	Foundation Construction	Simple geological structure		Complex geological structure, with multiple caves, underground rivers, quicksand and complex strata	
2		Construction of earth excavation, support and precipitation structure, that has a foundation pit (base trough) with excavation depth exceeding 5 meters (including 5 meters)		Although the excavation depth does not exceed 5 meters, the geological conditions, surrounding environment and underground pipelines are complicated, or earthwork excavation, support, and precipitation works could affect the safety of adjacent foundation pits (base troughs) of buildings (structures).	
3		Manual digging pile project with excavation depth not exceeding 16 meters		Manual digging pile project with excavation depth exceeding 16 meters	
4		Basic processing for natural foundation		/	
5		Construction of waterproof concrete and detailed structure treatment of waterproof layer		/	
6		Soil backfilling for non-bearing stratum		Soil backfilling for bearing stratum	
7		Rebar construction for beam-column joint		Rebar construction for nodes of stiff structure	
8		Longitudinal rebar connection or cantilever system rebar construction		Longitudinal rebar or cantilever system rebar construction in reinforced areas	
9		General concrete placement		Large volume concrete placement in special and complex environment	

<b>Serial Number</b>	<b>Construction Stage</b>	<b>Primary Risk</b>	<b>Yes/No</b>	<b>Secondary Risk</b>	<b>Yes/No</b>
10	Construction of Main Structure	/		Column head construction when the concrete strength is different at beam and column joints	
11		Prestressed tension		/	
12		Prefabricated structure		Connection points of prefabricated structure	
13		Load-bearing support system		Full support system used for steel structure installation etc., which will bear a single point concentrated load of more than 700kg.	
14		General steel structure installation		Installation of steel structures with a span of more than 36 meters, cantilever structure and first grade weld connection	
15		/		Partitioned projects and subdivisional works with greater risks that use new technologies, new processes, new materials, new equipment and without relevant technical standards	

**Attachment 2**

**Construction Project Safety Risk List and Risk Levels**

<b>Serial Number</b>	<b>Inspection Item</b>	<b>Primary Risk</b>	<b>Yes/No</b>	<b>Secondary Risk</b>	<b>Yes/No</b>
1	Geology Engineering	Relatively complex geological structure		Complex geological structure with multiple caves, underground rivers, quicksand and complex strata	
2	Pile Foundation	Concrete placement pile construction, precast pile construction		Pile foundation works near important facilities such as subways, underground pipe corridors, protected buildings and dangerous buildings	
3	Foundation Construction	Construction of earth excavation, support and precipitation that has a foundation pit with excavation depth exceeding 3 meters (including 3 meters)		Construction of earth excavation, support and precipitation that has a foundation pit with excavation depth exceeding 5 meters (including 5 meters)	
4	Construction of Main Structure	Concrete formwork support construction (with erecting height of 5 meters and above, or erecting span of 10 meters and above, or total construction load of 10kN/m <sup>2</sup> and above, or concentrated line load of 15kN/m and above, or height greater than the horizontal projection width of support and relatively independent)		Concrete formwork support (erecting height of 8 meters and above, or erecting span of 18 meters and above, or total construction load of 15kN/m <sup>2</sup> and above, or concentrated line load of 20kN/m and above)	
5		Load-bearing support system (full support system such as steel structure installation)		Load-bearing support system (full support system such as steel structure installation, bearing a single point load of 7kN and above)	
6		Hoisting and lifting engineering (using unconventional hoisting equipment and method with the single piece hoisting weight being 10kN and above)		Hoisting and lifting engineering (using unconventional hoisting equipment and method with the single piece hoisting weight being 100kN and above)	

<b>Serial Number</b>	<b>Inspection Item</b>	<b>Primary Risk</b>	<b>Yes/No</b>	<b>Secondary Risk</b>	<b>Yes/No</b>
7		Installation works using hoisting machinery		/	
8		Installation and demolition work of hoisting machinery		Installation and demolition work of hoisting machinery (elevating capacity of 300kN and above)	
9		Cantilever scaffolding work		Cantilever scaffolding work (segmented frame body with a height of 20 meters or above)	
10		Gondola for working at height		/	
11		Installation works for unloading platform and operating platform		/	
12		Abnormally shaped scaffolding work		/	