



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

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**Code for acceptance of construction quality of roof
(English Translation)**

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1 General

1.0.1

In order to strengthen the quality management of building roofing projects, unify the quality inspection of roofing projects, and ensure their function and quality, this specification is formulated.

1.0.2

This specification is applicable to the quality inspection of building roofing works.

1.0.3

The design and construction of the roofing project shall comply with the relevant provisions of the current national standard "Technical Specifications for Roofing Engineering" GB 50345.

1.0.4

The construction of the roof project shall comply with the relevant national regulations on environmental protection, building energy conservation and fire safety.

1.0.5

The quality acceptance of the roofing project shall not only comply with this specification, but also comply with the current relevant national standards.

2.0.1 Vapor barrier vapor barrier

The construction layer that prevents indoor water vapor from penetrating into the insulation layer.

2.0.2 Thermal insulation layer

A structural layer that reduces the heat exchange effect of the roof.

2.0.3 Waterproof layer waterproof layer

A layer of construction that is capable of preventing water from penetrating into the interior of a building.

2.0.4 Isolation layer isolation layer

A structural layer that eliminates adverse effects such as bonding force, mechanical interlocking force, and chemical reaction between two adjacent materials.

2.0.5 Protection layer protection layer

The construction layer that protects the waterproof layer or insulation layer.

2.0.6 Insulation layer

A structural layer that reduces the transfer of solar radiant heat to the interior.

2.0.7 Composite waterproof layer compound waterproof layer

A waterproofing layer composed of a combination of compatible membranes and coatings.

2.0.8 Additional layer additional layer

Coiled material or coating film reinforcement layer arranged on the parts prone to leakage and damage.

2.0.9 Bushing surface

The outermost layer of the roof is paved with block tiles or asphalt tiles, which is a structural layer with waterproof and decorative functions.

2.0.10 Board running surface

The outermost layer of the roof is covered with metal plates or glass plates, which have waterproof and decorative functions.

2.0.11 Waterproof cushion layer waterproof leveling layer

Set under tiles or metal plates, it is a structural layer that acts as a waterproof and moisture-proof function.

2.0.12 Nail-supporting layer

Tile roof construction layer that can hold nails.

2.0.13 Fiber material fiber material

It is a plate-shaped or felt-shaped fiber product made by melting molten rock, slag, glass and other raw materials at high temperature and adopting centrifugal method or gas injection method.

2.0.14 Spraying polyurethane foam

With isocyanate and polyol as the main raw materials, foaming agent and other additives are added, and special spraying equipment is used on site to continuously spray foaming polyurethane on the base layer for multiple times to form a seamless rigid foam.

2.0.15 Cast foam concrete

The aqueous solution of foaming agent is prepared into foam by physical method, and then the foam is added to the slurry made of cement, aggregate, admixture, and water, etc., and it is formed by mixing, on-site pouring and natural curing lightweight porous concrete.

2.0.16 Glass lighting roof

A roof composed of glass light-transmitting panels and a support system. 3 Basic Regulations

4.1.2 The construction of the roof concrete structure layer shall comply with the relevant provisions of the current national standard "Code for Construction Quality Acceptance of Concrete Structure Engineering" GB 50204.

4.1.3 Roof slope finding should meet the design drainage slope requirements, structural slope finding should not be less than 3%, material slope finding should be 2%;.200mm.

4.1.4 The protection and pavement construction of the upper roof or other functional roofs shall not only comply with the provisions of this chapter, but also comply with the relevant provisions of the current national standard "Code for Construction Quality Acceptance of Building Ground Engineering" GB 50209 and so on.

4.1.5 The number of random inspections for each inspection batch of each sub-item of the grassroots and protection works shall be based on the roof area of 100m², and each

location shall be 10m², and shall not be less than 3 locations. 4.2 Slope layer and leveling layer

4.2.1 The slab joint filling construction of prefabricated reinforced concrete slabs shall meet the following requirements.

1 When filling concrete, the inside of the slab gap should be cleaned and kept moist;

2 When the width of the slab seam is greater than 40mm or narrow at the top and wide at the bottom, steel bars shall be arranged in the slab seam according to the design requirements;

3 The strength grade of the concrete embedded with fine stone should not be lower than C20, the embedded depth should be 10mm-20mm lower than the slab surface, and it should be compacted by vibrating and watered for curing;

4 Anti-crack construction measures shall be added to the plate end joints according to the design requirements.

4.2.2 Lightweight aggregate concrete should be used for the slope finding layer; the slope finding material should be laid in layers and compacted properly, and the surface should be flat.

4.2.3 Cement mortar or fine stone concrete should be used for the leveling layer; the smoothing process of the leveling layer should be completed before the initial setting, and the calendering process should be completed before the final setting, and maintenance should be carried out after the final setting.

4.2.4 The vertical and horizontal spacing of the grid joints in the leveling layer should not be greater than 6m, and the width of the grid joints should be 5mm to 20mm.

I Master Control Item

4.2.5 The quality and mix ratio of the materials used for the slope layer and the leveling layer shall meet the design requirements.

Inspection method. check the factory certificate, quality inspection report and measurement measures.

4.2.6 The drainage slope of the slope layer and the leveling layer shall meet the design requirements.

Inspection method. Slope ruler inspection.

II General Items

4.2.7 The leveling layer should be smoothed and calendered, and there should be no looseness, sanding or peeling.

Inspection method. observation inspection.