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Technical code for slope roof engineering

坡屋面工程技术规范

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Table of Contents

- 1 General
- 2 Terms
- 3 Basic rules
 - 3.1 Materials
 - 3.2 Design
 - 3.3 Construction
 - 3.4 Project acceptance
- 4 Slope roof engineering materials
 - 4.1 Waterproof cushion
 - 4.2 Thermal insulation materials
 - 4.3 Asphalt shingles
 - 4.4 Tiles
 - 4.5 Corrugated tiles
 - 4.6 Metal plate
 - 4.10 Mechanical Fixings

1 General

1.0.1

In order to improve the technical level of sloping roof engineering in my country and ensure the quality of the project, this specification is formulated.

1.0.2

This code is applicable to the design, construction and quality inspection of new construction, expansion and reconstruction of industrial buildings and civil buildings with sloping roofs.

1.0.3

The design and construction of the sloping roof project shall comply with the national regulations on environmental protection, building energy conservation and safety, and corresponding measures shall be taken.

1.0.4

Mature new materials, new technologies and new techniques should be actively adopted in slope roof engineering.

1.0.5

The design, construction and quality acceptance of the sloping roof project shall not only comply with this specification, but also comply with the current relevant national standards.

2.0.1 Slope roof

Roofs with a slope greater than or equal to 3%.

2.0.2 Roof boarding

The load-bearing plate used for supporting the thermal insulation layer and waterproof layer of the sloping roof.

2.0.3 Waterproof underlayment

Waterproofing material usually laid under tiles or metal panels in pitched roofs.

2.0.4 Lock layer of nail

The structural layer that can hold the fixing nails in the tile roof, such as fine stone concrete layer and roof panel, etc.

2.0.5 Vapor barrier

Block water vapor from entering the structural layer of the thermal insulation material.

2.0.6 Flat ridge

The ridge formed by the horizontal intersection lines of the pitched roof.

2.0.7 Slope ridge

The ridge formed by the oblique line of the sloped roof intersecting the convex angle.

2.0.8 Slope cullis

The gutter formed by the oblique line of the slanted roof intersecting the concave angle.

2.0.9 Lapped cullis

Lay asphalt tiles on the inclined gutter, and the gutter formed by lapping tiles on both sides.

2.0.10 Knitted cullis

Asphalt tiles are laid on the sloped gutter, and the gutter formed by weaving tiles on both sides.

2.0.11 Open gutter open cullis

The tiles are laid to the edge of the gutter, and the bottom of the gutter is formed by coiled material or metal plate structure.

2.0.12 Overhang

The eaves structure of the outer wall or verandah is protruded from the roof towards the drainage direction.

2.0.13 Tiles

A block-shaped rigid roof tile made of materials such as clay, concrete, and resin.

2.0.14 Corrugated bitumen sheets

Corrugated tiles made of plant fibers impregnated with asphalt.

2.0.15 Corrugated resin sheets

Corrugated tiles made of synthetic resin and fiber reinforced materials as the main raw materials.

2.0.16 Photovoltaic tile

A complex of solar photovoltaic cells and tiles.

2.0.17 Photovoltaic waterproof sheet

A complex of solar photovoltaic thin film cells and waterproof membranes.

2.0.18 Mechanical fastener

Fixing nails, gaskets, beading and other accessories for mechanically fixing thermal insulation materials and waterproof membranes.

2.0.19 Metal plate roof

Building roofs with profiled metal panels or metal-faced insulating sandwich panels.

2.0.20 Assembly-type light sloping roof

The sloping roof system is composed of cold-formed thin-walled steel trusses or wooden trusses as the load-bearing structure, light-weight thermal insulation materials, light-weight tiles, etc.

2.0.21 Wind uplift resistance

A measure of resistance to upward loads on the roof caused by wind forces.

2.0.22 Ice dam

The water-retaining ice body formed by icing on the eaves of the roof.

3.1 Materials

3.1.1

For sloping roofs, the roofing materials should be selected according to the structural level, environmental conditions and functional requirements. Materials should be reasonably configured, safe and reliable.

3.1.2

The materials used in the sloping roof project shall meet the following requirements.

1. The variety, specifications, performance, etc. of the materials shall comply with the relevant national product standards and design regulations, and meet the requirements of the service life of the roof design, and the product qualification certificate and test report shall be provided;
- 2 The design documents shall indicate the type, model, specification and main technical performance of the material;
- 3 Energy-saving and environment-friendly materials should be used for sloping roof projects;
4. After the materials enter the site, samples should be re-inspected according to the regulations, and a test report should be submitted;
- 5 The materials used for sloping roofs should be stored in a cool, dry, and ventilated place, away from sunlight, rain, and moisture, and are strictly prohibited from approaching fire sources; transportation should comply with relevant standards.

3.1.3

It is strictly forbidden to use unqualified materials in the slope roof project.

3.1.4

The materials used for the sloping roof shall comply with the provisions of relevant building fire protection codes.