

ICS 91.020
CCS P 50



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

GB/T 50445-2019

Technique code for village rehabilitation

Issued on: August 27, 2019

Implemented on: January 1, 2020

**Issued by: Ministry of Housing and Urban-Rural Development of the
People's Republic of China;
State Administration for Market Regulation**

Table of Contents

- 1 General
- 2 terms
- 3 Safety and Disaster Prevention
- 3.1 General provisions
- 4 Snow disaster risk C...

1 General

1.0.1 In order to implement the strategy of rural revitalization, standardize the technical requirements of village improvement work, improve the production and living conditions of farmers, improve the quality of living environment in rural areas, guide a new way of modern life in rural areas, and promote the comprehensive and coordinated development of rural society, economy and environment, develop this standard.

1.0.2 This standard applies to the improvement of human settlements in existing villages across the country.

1.0.3 Village improvement projects should include safety and disaster prevention, roads, bridges and traffic safety facilities, water supply facilities, drainage facilities, garbage collection and treatment, sanitary toilet renovation, public environment, village greening, pits, ponds and rivers, village buildings, historical culture Heritage protection, inheritance of local characteristics, energy supply, etc.

1.0.4 The village renovation should comply with the following basic principles.

1 Adapt measures to local conditions and advance in an orderly manner. According to the local economic and social development level of the village, farmers' production methods and living habits, combined with the long-term trend of the village's population and economic development, scientifically formulate the annual plan for village renovation. Prioritize the rectification of poor villages and the most urgent needs of villagers and the most basic facilities and related projects in rural areas.

2 Pay attention to protection and retain nostalgia. Protect the natural ecological environment and historical and cultural heritage of villages, inherit and carry forward traditional culture, and reshape the relationship between rural farming and civilization in the original ecology.

3 The villagers are the main body and stimulate motivation. To respect the wishes of the

villagers and protect the rights and interests of the villagers, it is advisable to establish a mechanism of collusion, joint construction, joint management, joint evaluation, and sharing of all parties through the combination of government assistance, villagers' independent participation, and social forces' intervention, so as to jointly promote the improvement of rural human settlements. Improvement in remediation.

1.0.5 In addition to complying with this standard, the village renovation shall also comply with the current relevant national standards.

2.0.1 Village renovation

Improve the production and living conditions of villagers' settlements and the quality of living environment.

2.0.2 Secondary induced disasters

Natural disasters cause chain disasters caused by damage to engineering structures and natural environment. The common ones are secondary fires, explosions, floods, spills or leaks of toxic and harmful substances, infectious diseases, geological disasters, etc.

2.0.3 minimum service head minimum service head

The minimum water head that should be maintained by the distribution network at the point of connection to the consumer.

2.0.4 artificial wetland, constructed wetland

A method of using land for natural treatment of sewage. Artificially build pools or trenches, plant reed-like vascular plants or aquatic plants with well-developed roots, and the sewage will fully contact dissolved oxygen on the surface of the medium covered with biofilms in a push-flow manner to purify the water.

2.0.5 Decomposed garbage biodegradable waste

Refers to biodegradable organic waste, such as food residues, plant waste (leaves, grass), etc.

2.0.6 other waste

Household garbage other than rotten garbage, waste products, hazardous garbage, and household garbage that cannot be collected by classification are collectively referred to as other garbage.

2.0.7 Informal garbage dump site

Garbage dumping sites where urban and rural garbage is piled up indiscriminately but does

not meet the requirements for harmless treatment.

2.0.8 composting

Fertilizer is produced through the biological decomposition process of sorted and collected organic waste under aerobic and controlled conditions through the action of microorganisms.

2.0.9 night soil harmless treatment night soil harmless treatment

Effectively reduce the number of biological pathogenic factors in feces, make pathogenic microorganisms lose their infectivity, and control the process of disease transmission.

2.0.10 biological filter biological filter

Sewage treatment structures have built-in fillers as carriers, and the sewage is fully contacted with microorganisms on the carrier and air flowing from bottom to top during the spraying process from top to bottom to obtain purification.

2.0.11 stabilization pond stabilization pond, stabilization lagoon

Sewage ponds with dikes and anti-seepage layers after proper manual repairing can naturally treat sewage through the physical and biological effects of aquatic ecosystems.

2.0.12 surface hydraulic load hydraulic surface loading

The volume of sewage passing through per square meter of surface area per unit of time.

2.0.13 Biomass briquette

Biomass such as crop stalks, agricultural and forestry waste, and energy crops are compressed under high pressure at high temperature or normal temperature into high-density rod-shaped or granular fuels with a calorific value of 11932kJ/kg-18840kJ/kg.

3.1 General provisions

3.1.1 The impact of disasters such as earthquakes, fires, floods (waterlogging), geological disasters, wind disasters, lightning strikes, snow disasters, and freeze-thaw disasters should be comprehensively considered for village renovation, and the policy of focusing on prevention and combining prevention, resistance, avoidance, and rescue should be implemented. Adhere to the principles of comprehensive disaster prevention, group prevention and group governance, regional coordination, and people-oriented principles to ensure the safety of people's lives and the sustainable development of villages.

2 Villages should fully assess the impact of earthquakes on flood control works, and the design of flood control works should comply with the relevant provisions of the current

industry standard "Code for Seismic Design of Hydraulic Structures" SL 203;

3 For secondary disaster sources caused by earthquakes that may cause fires, explosions, and spills of highly toxic, bacteria, and radioactive substances in production and storage units, move out of the village or take measures to prevent the spread of disasters.

3.4.3 The improvement of wind disaster prevention and mitigation in villages should be carried out according to the overall arrangement of the impact of wind disaster hazards, and the following regulations should be met.

1 The site selection of village construction land in areas with risk of wind disasters of category C and D should avoid areas that are prone to wind disasters, such as valley passes and mountain passes that are in line with the wind direction;

2. The selection of tree species for greening inside the village shall meet the requirements of resisting the frontal attack of wind disaster;

3 Wind prevention and disaster mitigation measures should be based on the impact of wind disasters, according to the requirements of wind disaster prevention and engineering wind protection measures, and make overall arrangements for construction land, construction projects, rural infrastructure, and non-structural components. For villages in areas at risk of typhoon disasters, comprehensive consideration should be given Disaster prevention requirements such as strong winds, wind waves, storm surges, rainstorms and floods that may be caused by typhoons;

4 For villages in areas with risk of wind disasters of Class C and Class D, according to construction and development requirements, measures such as planting dense shelterbelts or setting up windbreaks on the edge of the windward direction should be taken to reduce the threat and damage of snowstorms to villages;

5. Renovation plans should be formulated for dangerous houses in D-category wind disaster risk areas, and overall arrangements should be made for residents' risk avoidance and resettlement, and emergency shelters should be set up;

6. During the renovation of construction projects in areas prone to wind disasters, it is advisable to arrange village buildings with high rigidity in the area facing the wind. Such as light-weight roofs and maintenance walls should have the ability to resist wind and collapse.

3.4.4 Village snow disaster prevention renovation should meet the following requirements.

1 Villages in severe snowstorm areas should uniformly consider the remediation requirements for wind protection and disaster reduction in Article 3.4.3 of this standard; the roof of buildings should adopt steep slope roof forms, and buildings should not be equipped with high and low roofs;