



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

GB 50057-2010

Replacing GB 50057-1994 (2000)

Code for design protection of structures against lightning

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People's Republic of China;
General Administration of Quality Supervision, Inspection and
Quarantine of the People's Republic of China**

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- 1 Chapter "Terms" is added;
- 2 Measures of contact voltage protection and pace voltage protection are changed;
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- 7 More specific requirements are made for partial Items.
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Foreword

In accordance with the requirements of "Notice on Printing and Publishing 'Development and

Revision Plan on Engineering Construction Standards and Codes (Batch 1) in 2005" (Jian Biao Han

[2005] No. 84), this code is revised from "Design Code for Protection of Structures Against Lightning"

GB 50057-94 (2000 edition) by China IPPR International Engineering Corporation jointly with the

organizations concerned.

In the revision of this code, the code drafting group seek advices by internet and contacting with

the organizations and individuals concerned after completing the exposure draft hereof; and finally

finalize it upon review after completing the draft for examination on the base of the advice gained.

This code comprises 6 Aapters and 9 Appendixes, and the main contents cover. general provisions,

terms, classification of structures to be protected against lightning, protection measures for structures

against lightning, lightning protection system, protection against LEMP, etc ..

The following contents are revised in this code.

3 The requirements for external lightning protection system adopting different metal objects

are added;

5 The requirements for electrical system and electronic system selecting SPD are provided in

detail;

6. The annual mean density calculation Formula of lightning stroke to ground is simplified, and

the value of predicted lightning stroke times for judging lightning protection classification of structures

is adjusted;

7 More specific requirements are made for partial Items.

The provisions printed in bold type are compulsory ones and must be enforced strictly. The Ministry of Housing and Urban-Rural Development is in charge of the administration of this code and

the explanation of the compulsory provisions; China Machinery Industry Federation is responsible for

routine management, and China IPPR International Engineering Corporation is responsible for the

explanation of specific technical contents. All relevant organizations are kindly requested to sum up

and accumulate your experiences in actual practices during the process of implementing this code.

The relevant opinions and advice on modification or supplement, whenever necessary, can be posted

or passed on to China IPPR International Engineering Corporation (Address. No.5, W. 3rd Ring Rd

North, Haidian District, Beijing 100089, China) for future reference.

Organization Units, Chief Development Organizations, Participating Development Organizations,

Chief Drafting Staffs and Chief Examiners of this code.

Organization Units. China Mechanical Industrial Exploration and Design Association

Chief Development Organization. China IPPR International Engineering Corporation

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1 General Provisions

1.0.1 This code is Formulated in order to adopt lightning protection measures by adjusting measures

to local conditions for lightning protection design of structures (including construction), prevent or

reduce personal injury, cultural relics and property loss arising from lightning stroke of structures, as

well as damage or error operation of electrical and electronic systems triggered by lightning

electromagnetic impulse, and thereby achieving safety and reliability, advanced technology, and

economy and rationality.

1.0.2 This code is applicable to the lightning protection design of newly-built, extended and rebuilt

structures.

1.0.3 For the purpose of the lightning protection design of structures, the type of lightning protection

system and its layout shall be researched in detail and determined based on earnestly