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THE PEOPLE'S REPUBLIC OF CHINA**

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Design Code for City Heating Network
城镇供热管网设计规范

Issued on July 23, 2010

Implemented on January 1, 2011

**Issued by the Ministry of Housing and Urban-Rural Development of the People's
Republic of China**

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Announcement on publishing the professional standard of
"Design Code for City Heating Network"

"Design Code for City Heating Network" has been approved as the professional standard with a serial number of CJJ 34-2010 and will be implemented since January 1, 2011. Therein, Articles 4.3.1, 7.4.1, 7.4.2, 7.4.3, 7.4.4, 7.5.4, 8.2.8, 8.2.9, 8.2.20, 8.2.21, 8.2.22, 8.2.23, 10.4.1, 12.3.3, 12.3.4, 14.3.11 are compulsory provisions and must be enforced strictly. The original professional standard "Design Code of District Heating Network" CJJ 34-2002 shall be abolished simultaneously.

This code is organized by Research Institute of Standards and Norms (RISN) and published by China Architecture and Building Press.

**Ministry of Housing and Urban-Rural Development of the People's Republic of
China**

July 23, 2010

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Foreword

According to the requirements of Document Jian Biao [2004] No. 66 issued by Ministry of Construction-“Notice on Printing the Development and Revision Plan of Professional Standard on Urban Construction and Engineering in 2004”, the drafting group revised this code on the basis of making extensive investigation, carefully summing up the practical experience, referring to relevant international standards and foreign advanced standards, and holding counsels widely.

The main technical contents of this code are: 1. General provisions; 2. Terms and symbols; 3. Heat consumption; 4. Heating medium; 5. Heating network types; 6. Heat supply regulation; 7. Hydraulical analysis; 8. Network layout and bury method; 9. Calculation of stresses and actions; 10. Booster pump station and substation; 11. Insulation and anticorrosion; 12. Power supply and lighting; 13. Thermal monitoring and control; 14. Block hot water heating network.

The main content of this revision is adding the contents of block hot water heating network and listed as the Chapter 14 of this code.

The provisions printed in bold type in this code are compulsory 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 and the Beijing Gas and Heating Engineering Design Institute Co., Ltd. is responsible for the explanation of specific technical contents. Any opinion or suggestion may be sent to Beijing Gas and Heating Engineering Design Institute Co., Ltd. (Address: A, No. 40, Xiaojiangfang Hutong, Xidan North Street, Beijing City, 100032, PRC) during the process of implementing this standard.

Chief Development Organization of this code: Beijing Gas and Heating Engineering Design Institute Co., Ltd.

Participating Organizations of this code: Tianjin Thermoelectric Design Institute
Luoyang Ship Material Research Institute of China Shipbuilding Industry Corporation

Beijing HTN Pipeline Equipment Co., Ltd.

Beijing Cqv Trading Co., Ltd.

Shenyang Taiyu Machinery & Electronic Equipment Co., Ltd.

Chief drafting staffs: Duan Jieyi, Feng Jibei, Jia Zhen, Sun Lei, Liu Peng, Guo Younong, Gao Shaodong, Han Tiebao

Chief examining staffs: Di Hongfa, Cai Qilin, Yao Yuehan, Wu Yuhuan, Cao Yue, Wang Wei, Dong Yibo, Li Qingping, Yang Jian, Dong Leyi, Li Guoxiang

1 General Provisions

1.0.1 This code is formulated with a view to save energy, protect environment, promote production, improve people's lives, develop district heating services of cities and towns, improve the level of engineering design and achieve advanced technology economic rationality, safety and usability.

1.0.2 This code is applicable to the design of the following city heating network with heating hot water in design pressure of less than or equal to 2.5MPa and in design temperature of less than or equal to 200°C; or heating steam in design pressure of less than or equal to 1.6MPa and in design temperature of less than or equal to 350°C:

1 The heating network based on heating source of heat power plant or boiler room, which is connecting from the heating source to the building heating;

2 The process system of newly-build, extended or reconstructed pipeline, booster pump station and heating station of heating network.

1.0.3 The city heating network design shall comply with the requirements of urban planning, and the esthetic appearance therein shall be noticed.

1.0.4 When designing city heating network in the earthquake, collapsible loess and expansive soil regions, not only shall this code be carried out, but also shall current "Code for Seismic Design of Outdoor Water Supply Sewerage Gas and Heating Engineering" GB 50032, "Code for Seismic Design of Outdoor Wwater Supply Sewerage Gas and Heating Engineering" GB 50032, "Technical Specifications for Construction Ground in Expanding Soil Areas" GBJ 112 and relevant national compulsive standards be met.

1.0.5 The design of city heating network shall not only comply with this code but also current relevant national standards.

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