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Technical Code for Building Pile Foundations

建筑桩基技术规范

Issued on: April 22, 2008

Implemented on: October 1, 2008

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

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Approval Department: Ministry of Housing and Urban-Rural Development of the People's
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NOTICE

This is the English translation of *Technical Code for Building Pile Foundations*. In case of any inconsistency between the Chinese version and the English version, the Chinese one shall prevail.

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

No. 18

**Announcement of publishing the Professional standard “*Technical Code
for Building Pile Foundations*”**

Approve the issuance of “*Technical Code for Building Pile Foundations*” is Professional standard, numbered JGJ 94-2008, with implemented on October 1, 2008. Where articles 3.1.3, 3.1.4, 5.2.1, 5.4.2, 5.5.1, 5.5.4, 5.9.6, 5.9.9, 5.9.15, 8.1.5, 8.1.9 and 9.4.2 are compulsory provisions and must be enforced strictly. At the same time, it is abolished for “*Technical Code for Building Pile Foundations*” JGJ 94-94 which the primitive professional standard.

The code is published by the Plan publishing company, which is organized for the Institute of standard and quota of Ministry construction.

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

April 22, 2008

Foreword

According to the requirements of Document Jian Biao [2003] No.104 issued by Ministry of Construction (MOC), this code is revised from "Technical Code for Building Pile Foundations" JGJ 94-94 by China Architecture Scientific Research Institute together with relative design, investigation, construction, research and teaching organizations.

Special research and comprehensive diagnosis are taken out during the revision process. The revision sums up design and construction experiences of our country's pile foundation in recent years, absorbs scientific research achievements in this field, and solicits ideas from related organizations throughout the country in various ways. Trial design and repeated revisions on key points are taken out. Based on the above, the code is reviewed and finalized.

The code contains following key technical contents: provisions on pile foundation basic design, pile foundation structure, calculation or checking computations for bearing capacity limiting state and limiting state on normal condition of pile foundation, pile foundation construction, pile foundation engineering quality examination and acceptance, and relative appendixes.

The code is supplemented with following contents: Optimized Design of Pile Foundation Stiffness to Reduce Differential Settlement of reduced differential settlement and cushion cap internal force; provisions on pile foundation durability; bearing capacity calculation and construction process of post-grouting filling pile; composite foundation with settlement reducing piles for soft soil foundation; calculation of settlements for single pile, single-row and thinned Pile Foundations; Calculation for bearing capacities of compressive pile and uplift pile; construction scheme of long auger drilling guncreting inserted with reinforcing cage filling pile; bearing capacity calculation and pile-sinking of prestressed concrete hollow pile etc. The regulated contents are as: taking-value and calculation of foundation pile and composite foundation pile bearing capacities; empiric parameters of individual pile side resistance and end resistance; comprehensive coefficient of rock-socketed piles rock-socket section side resistance and end resistance; calculation for empirical coefficients of pile foundation settlement through equivalent acting layerwise summation method; drilled and grouted pile hole toe sediment thickness control standard etc.

The Ministry of Construction is in charge of the management of the code and the explanation of compulsory provisions. And China Architecture Scientific Research Institute is responsible for the explanation of specific technical contents.

This specification is mainly drafted by the China Architecture Scientific Research Institute (Address: No. 30, Beisanhuang East Road, Beijing, China 100013).

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1 General Provision

1.0.1 The code is established to enable pile foundation engineering and construction to comply with national technical economy politics, and to be of safety and usability, state-of-art technology, economic feasibility, quality guaranteeing and environment protection.

1.0.2 The code is applicable to design, construction and acceptance for pile foundations of all sorts of buildings (including structures).

1.0.3 For engineering and construction of pile foundation, engineering geological and hydro geological conditions, topside structure type, functions of use, load characteristics, and construction load condition and envelopment shall be considered comprehensively; and local experiences and conceptual design shall be highly valued, the design shall adapt to local conditions, and pile type, pile-making process and cushion cap type shall be adopted reasonably to optimize the pile arrangement and save the resources; construction quality control and management shall be reinforced.

1.0.4 Besides this code, the engineering and construction of pile foundation shall comply with provisions of relative current standards.



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