

## 湿陷性黄土地区倾斜建筑物的膨胀法纠偏加固理论分析与实践

朱彦鹏, 王秀丽, 周 勇

(兰州理工大学 土木工程学院, 甘肃 兰州 730050)

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**摘要** 湿陷性黄土地区往往由于地基处理不当, 造成建筑物地基的不均匀沉降和上部结构的偏移, 给建筑物的安全使用带来了很大的安全隐患, 通过研究和多项工程实践, 在理论分析及工程实践经验的基础上, 提出了一种膨胀法纠正湿陷性黄土地区建筑物倾斜的技术, 并用孔隙挤密原理推导出了膨胀材料使用量的计算公式, 将经验的膨胀材料顶升技术上升到了理论高度, 通过多项工程的实践, 并运用控制监测技术使膨胀法纠偏和加固地基技术在多项工程中得到了成功的应用, 实现了建筑物的纠偏与加固。

**关键词** [土力学](#); [湿陷性黄土](#); [建筑物](#); [不均匀沉降](#); [纠偏](#); [加固](#); [技术](#)

分类号

## THEORETICAL ANALYSIS AND PRACTICE OF RECTIFYING REINFORCEMENT USING EXPANSIVE METHOD FOR INCLINE BUILDING ON COLLAPSIBLE LOESS

ZHU Yan-peng, WANG Xiu-li, ZHOU Yong

(College of Civil Engineering, Lanzhou University of Technology, Lanzhou 730050, China)

### Abstract

Incline buildings can be always found in collapsible loess regions because of the improper ground treatment. Differential settlement of the foundation and inclination of the upper-structure bring the building greatly potential danger. Through research and practice of many projects, an expansive rectifying method that the quicklime piles may be used for the rectifying and reinforcement of foundation is proposed on the basis of theoretical analysis and practical experience, and the computational formula for application amount of expanding material is deduced by using pore extruding principle. This method is to drive mixture quicklime piles into the soil under the foundation by applying control monitoring technology and the expansive slaking lime can extrude the loess under the foundation, lift-up the original foundation and increase the compactness of foundation soil, then the purpose of rectifying and reinforcement of foundation is realized. This method was used in many projects and satisfactory results were obtained.

**Key words** [soil mechanics](#); [collapsible loess](#); [building](#); [differential settlement](#); [rectifying deviation](#); [reinforcement](#); [technology](#)

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