

摘 要

本文主要分为两个部分，第一部分为徐州市观澜假日酒店的工程设计；第二部分为一篇与本专业相关的外文文献翻译。

第一部分的工程设计包括建筑设计和结构设计两个部分。建筑设计根据相关资料和现行国家标准以及徐州当地的工程地质、水文地质条件、防火要求、抗震要求和采光要求等，满足所设计建筑的使用要求。本设计对徐州市观澜假日酒店进行了合理的功能分区，同时对建筑的外观和内部空间关系进行了较为合理的设计。在结构设计中，以第 5 轴线的一榀框架为例，进行了梁柱尺寸预估、荷载计算、竖向与水平内力计算、内力组合、梁柱截面尺寸设计、楼板设计、楼梯设计和独立基础设计等模块。并对其进行 PKPM 建模分析，用 PKPM 软件建立模型，输入荷载，分析计算结果，导出结构施工图。

第二部分为外文文献翻译，题目为《Effects of Using Coconut Fiber-Insulated Masonry Walls to Achieve Energy Efficiency and Thermal Comfort in Residential Dwellings》，中文译为《使用椰子纤维隔热的砌体墙在住宅中实现能源效率和热舒适性的效果》。这篇文章主要研究了使用椰子纤维材料隔热来实现住宅中的能源效率和热舒适性。

关键词：框架结构；建筑设计；结构设计；软件分析

Abstract

This article is mainly divided into two parts. The first part is the engineering design of the Guanlan Holiday Hotel in Xuzhou; the second part is a translation of a foreign language document related to this major.

The engineering design of the first part includes two parts: architectural design and structural design. The architectural design is based on relevant information and The current national standards as well as the local engineering geology of Xuzhou , hydrogeological conditions, fire protection requirements, earthquake resistance requirements and lighting requirements, to meet the requirements for the use of the designed buildings. This design makes a reasonable functional division of the Guanlan Holiday Hotel in Xuzhou City, and at the same time makes a more reasonable design of the appearance and internal space of the building. In the structural design, taking a frame on the fifth axis as an example, beam and column size estimation, load calculation, vertical and horizontal internal force calculation, internal force combination, beam and column section size design, floor design, staircase design and Basic design and other modules. And carry on PKPM modeling analysis, use PKPM software to establish the model, input the load, analyze the calculation result, and export the structure construction drawing.

The second part is the translation of foreign literature, entitled "Effects of Using Coconut Fiber–Insulated Masonry Walls to Achieve Energy Efficiency and Thermal Comfort in Residential Dwellings". This article focuses on the use of coconut fiber insulation to achieve energy efficiency and thermal comfort in residential buildings.

Keywords: Framework; architectural design; Structural design; Software analysis;

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