



# Building Foundations to Future





# **Building Foundations to Future**

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Here is the translation of the given text into English:

# **General Construction T-1 Latest Edition**

## **Part I: Foundations of Construction**

### **• 1.1. History of Construction**

- 1.1.1. Construction in Antiquity
- 1.1.2. Construction in the Middle Ages
- 1.1.3. Construction in Modern Times

### **• 1.2. Definitions and Terminology**

- 1.2.1. Definition of Construction
- 1.2.2. Division of Construction into Branches
- 1.2.3. Meaning of Building Terms

### **• 1.3. Basic Elements of Construction**

- 1.3.1. Roofs and Foundations
- 1.3.2. Walls and Roofs
- 1.3.3. Windows and Doors

## **Part II: Designing Buildings**

### **• 2.1. General Design**

- 2.1.1. Objectives and Assumptions of Design
- 2.1.2. Selection of Materials and Technologies
- 2.1.3. Planning of Space and Functions

### **• 2.2. Architectural Design**

- 2.2.1. Architectural Concept
- 2.2.2. Exterior Appearance of the Building
- 2.2.3. Interior Design

### **• 2.3. Technical Design**

- 2.3.1. Structural Design
- 2.3.2. Design of Installations
- 2.3.3. Design of Communication Systems

## **Part III: Construction and Renovation of Buildings**

### **• 3.1. Preparing for Construction**

- 3.1.1. Preparing the Site
- 3.1.2. Marking the Construction Boundaries

- 3.1.3. Preparing Documentation

## • 3.2. Construction of Structures

- 3.2.1. Construction of Foundations
- 3.2.2. Construction of Roofs and Walls
- 3.2.3. Construction of Roofs

## • 3.3. Construction of Installations

- 3.3.1. Design of Installations
- 3.3.2. Construction of Electrical Installations
- 3.3.3. Construction of Hydraulic Installations

# Part IV: Economy and Management of Buildings

## • 4.1. Cost Estimating and Budgeting

- 4.1.1. Fundamentals of Cost Estimating
- 4.1.2. Budgeting of Construction
- 4.1.3. Managing Costs

## • 4.2. Building Management

- 4.2.1. Planning Maintenance of the Building
- 4.2.2. Managing Renovation Works
- 4.2.3. Managing Building Safety

## • 4.3. Environmental Protection and Energy Efficiency

- 4.3.1. Environmental Protection in Construction
- 4.3.2. Energy Efficiency in Construction
- 4.3.3. Utilization of Renewable Energy Sources

# Part V: Modern Technologies in Construction

## • 5.1. Computer-Aided Construction

- 5.1.1. Computer-Aided Design
- 5.1.2. Analysis and Simulation
- 5.1.3. Building Management

## • 5.2. Energy-Efficient Construction

- 5.2.1. Energy-Efficient Construction
- 5.2.2. Renewable Energy Sources
- 5.2.3. Heating and Cooling Systems

## • 5.3. Ecological Construction

- 5.3.1. Ecological Construction
- 5.3.2. Environmental Protection
- 5.3.3. Material Utilization

The book can be purchased at

<https://readolla.com/building-foundations-to-future>

