STRUCTURAL LOAD DETERMINATION

2018 IBC® and ASCE/SEI 7-16

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Contents

Preface . . . . . **vii**

Chapter 1: Introduction **1**
1.1 Overview 1
1.2 Scope 2
1.3 References 4

Chapter 2: Load Combinations **5**
2.1 Introduction 5
2.2 Load Effects 5
2.3 Load Combinations Using Strength Design or Load and Resistance Factor Design 6
2.4 Load Combinations Using Allowable Stress Design 10
2.5 Load Combinations with Overstrength 14
2.6 General Structural Integrity 16
2.7 Extraordinary Loads and Events 18
2.8 Examples 18
2.9 References 28
2.10 Problems 29

Chapter 3: Dead, Live, Rain and Soil Lateral Loads **31**
3.1 Dead Loads 31
3.2 Live Loads 31
3.3 Rain Loads 46
3.4 Soil Lateral Loads 51
3.5 Flowcharts 52
3.6 Examples 56
3.7 References 73
3.8 Problems 73

Chapter 4: Snow and Ice Loads **75**
4.1 Introduction 75
4.2 Snow Loads 75
4.3 Ice Loads 100
4.4 Flowcharts 105
4.5 Examples 115
4.6 References 140
4.7 Problems 141

Chapter 5: Wind Loads. **145**
5.1 Introduction 145
5.2 General Requirements 153
5.3 Main Wind Force Resisting Systems 166
5.4 Components and Cladding 190
5.5 Wind Tunnel Procedure 201
5.6 Flowcharts 203

5.7 Examples 235
5.8 References 322
5.9 Problems 323

Chapter 6: Earthquake Loads 327
6.1 Introduction 327
6.2 Seismic Design Criteria 332
6.3 Seismic Design Requirements for Building Structures 343
6.4 Seismic Design Requirements for Nonstructural Components 385
6.5 Seismic Design Requirements for Nonbuilding Structures 389
6.6 Flowcharts 391
6.7 Examples 425
6.8 References 469
6.9 Problems 470

Chapter 7: Flood and Tsunami Loads 473
7.1 Introduction 473
7.2 Flood Loads 474
7.3 Tsunami Loads and Effects 490
7.4 Examples 514
7.5 References 534
7.6 Problems 534

Chapter 8: Load Paths 537
8.1 Introduction 537
8.2 Load Paths for Gravity Loads 538
8.3 Load Paths for Lateral Loads 541
8.4 References 559

Index 561

Preface

This edition updates this publication to the 2018 *International Building Code*® (IBC®) and the 2016 edition of *Minimum Design Loads and Associated Criteria for Buildings and Other Structures* (ASCE/SEI 7-16).

Like previous editions, this edition is an essential resource for civil and structural engineers, architects, plan check engineers and students who need an efficient and practical approach to load determination under the 2018 IBC and ASCE/SEI 7-16 standard. It illustrates the application of code provisions and methodology for determining structural loads through the use of numerous flowcharts and practical design examples. Included are the following major topics:

- Load combinations for allowable stress design, load and resistance factor (strength) design, seismic load combinations with vertical load effect and special seismic load combinations, and
- Dead loads, live loads (including live load reduction), rain loads, snow loads, ice loads, wind loads, earthquake load effects and flood loads and tsunami loads.

Problem sections are included at the ends of most of the chapters. Solutions to these problems, which are available in a companion document to this publication, further illustrate the proper application of the code provisions.

Major changes occurred in the wind load provisions in going from the 2010 to the 2016 edition of ASCE/SEI 7. These changes are covered in detail in Chapter 5. A new chapter on tsunami loads and effects is included in ASCE/SEI 7-16, and these requirements are covered in Chapter 7.

Structural Load Determination: 2018 IBC® and ASCE/SEI 7-16 is a multipurpose resource for civil and structural engineers, architects and plan check engineers because it can be used as a self-learning guide as well as a reference manual.

Acknowledgments

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