Revit® Structure 2013 Basics

Framing and Documentation

Elise Moss

Supplemental Files

Tutorial files on enclosed CD

SDC PUBLICATIONS
Schroff Development Corporation

Better Textbooks. Lower Prices.
www.SDCpublications.com

Visit the following websites to learn more about this book:

TABLE OF CONTENTS

Preface i

Acknowledgements i

Table of Contents ii

Lesson 1
Structural Columns and Walls
Exercise 1-1
Load a Structural Column 1-2
Exercise 1-2
Modify a Structural Column Family 1-4
Exercise 1-3
Create an Opening in a Structural Column 1-8
Exercise 1-4
Use AutoCAD Profile to Create a Structural Column Family 1-10
Exercise 1-5
Add and Modify Structural Columns 1-20
Exercise 1-6
Edit a Wall Profile 1-25
Exercise 1-7
Add an Opening in a Wall 1-28

Lesson 2
Framing
Exercise 2-1
Add Structural Framing 2-3
Exercise 2-2
Create an Assembly 2-13
Exercise 2-3
Create a Beam System 2-17
Exercise 2-4
Create a Moment Frame 2-25
Exercise 2-5
Adding Braces 2-28
Exercise 2-6
Adding Openings in Beams 2-36
Exercise 2-7
Sloped Beams 2-41
Exercise 2-8
Curved Beams 2-47
Exercise 2-9
Truss 2-54

Lesson 3
Boosting Productivity - Setting up Your Project
Exercise 3-1
Browser Organization 3-2
Exercise 3-2
Recover and Use Backup Files 3-8
Exercise 3-3
Create a View Template 3-13
Exercise 3-4
Transfer Project Standards 3-19

Lesson 4
Foundations and Slabs
Exercise 4-1
Creating a Sloped Floor Slab 4-2
Exercise 4-2
Create a Shaft Opening 4-12
Exercise 4-3
Attach Columns to a Floor 4-15
Exercise 4-4
Add Slab Edges 4-17
Exercise 4-5
Define Slab Edge 4-19
Exercise 4-6
Add Footings 4-21
Exercise 4-7
Add Wall Foundations 4-25
Exercise 4-8
Add Ramp 4-27
Exercise 4-9
Parking Structure Ramp 4-31

Lesson 5
Tags, Symbols, Legends, and Schedules
Exercise 5-1
Create and Use Notes 5-2
Exercise 5-2
Create and Use Legends 5-4
Exercise 5-3
Use Schedule to Change Types 5-11
Exercise 5-4
Export a Schedule 5-12
Exercise 5-5
Create and Use a Sheet List 5-14
Exercise 5-6
Create a View List 5-17
Exercise 5-7
Create a Custom Tag 5-20
Exercise 5-8
Using a Custom Tag 5-23

Exercise 5-9
Framing Schedule 5-24
Exercise 5-10
Parts List in Assemblies 5-34
Exercise 5-11
Material Take-Offs 5-43
Exercise 5-12
Graphical Column Schedule 5-50
Exercise 5-13
Custom Level Symbol 5-53

Lesson 6
Sections, Elevations, Details, and Drafting Views
Exercise 6-1
Use of Cropped Views 6-2
Exercise 6-2
Create a Gusset Plate Detail 6-4
Exercise 6-3
Challenge Detail Views 6-21
Exercise 6-4
Create a Wall Section 6-26
Exercise 6-5
Save a Drafting View 6-37
Exercise 6-6
Import a Drafting View 6-38
Exercise 6-7
Use of Scope Boxes 6-40
Exercise 6-8
Assembly Views 6-45

Lesson 7
Collaboration
Exercise 7-1
Import a CAD File 7-2
Exercise 7-2
Export to DXF 7-5
Exercise 7-3
Check Coordination Views 7-8
Exercise 7-4
Interference Checking 7-16

Lesson 8
Structural Analysis
Exercise 8-1
Analytical Views 8-3
Exercise 8-2
Analytical Adjust 8-15
Exercise 8-3
Load Take-down 8-17

Exercise 8-4
Static Analysis of Slabs 8-22
Exercise 8-5
Static Analysis of Beams 8-27
Exercise 8-6
Analytical Checks 8-34
Exercise 8-7
Boundary Conditions 8-37

Lesson 9
Roof Project
Exercise 9-1
Link an AutoCAD Drawing 9-2
Exercise 9-2
Adding Beams 9-10
Exercise 9-3
Create an Elevation View 9-18
Exercise 9-4
Add Columns 9-26
Exercise 9-5
Create a 3D Model View Template 9-29
Exercise 9-6
Add Cross Beams 9-33
Exercise 9-7
Modifying Columns 9-50
Exercise 9-8
Adding a Scope Box 9-51
Exercise 9-9
Create a Framing Elevation 9-55

About the Author