

Essentials

Autodesk Official Training Courseware (AOTC)

Revit[®]

Architecture 2009

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Published by:
Autodesk, Inc.
111 McInnis Parkway
San Rafael, CA 94903, USA

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Introduction

Welcome to the *Revit Architecture 2009: Essentials* Autodesk Official Training Courseware (AOTC), a training course for use in Authorized Training Center (ATC®) locations, corporate training settings, and other classroom settings.

Although this courseware is designed for instructor-led courses, you can also use it for self-paced learning. The courseware encourages self-learning through the use of the Revit® Architecture 2009 Help system.

This introduction covers the following topics:

- Course objectives
- Prerequisites
- Using this courseware
- CD contents
- Installing the exercise data files from the CD
- Imperial and metric datasets
- Notes, tips, and warnings
- Using this courseware to prepare for Autodesk Certification exams
- Feedback

This courseware is complementary to the software documentation. For detailed explanations of features and functionality, refer to the Help in the software.

Course Objectives

After completing this course, you will be able to:

- Describe building information modeling, bidirectional associativity, and parametric relationships in Revit.
- Describe the user interface, and explain parametric objects and families.
- Create a basic floor plan, and work with levels and grids.
- Add and modify walls and compound walls, use editing commands, and work with doors and windows.
- Add and modify component families.
- Duplicate and manage views, control object visibility in views, and create elevation, section, and 3D views.
- Use dimensions and constraints.
- Create floors and ceilings, add roofs and curtain walls, and work with stairs and railings in a building model.

- Create callout views and work with text and tags, detail views, and drafting views.
- Create schedules, rooms and room schedules, legends, and keynotes.
- Present the building model using rendering, walkthroughs, and sun and shadow settings.

Prerequisites

This course is designed for new users of Revit Architecture. No previous CAD experience is necessary.

It is recommended that you have:

- Architectural design, drafting, or engineering experience.
- Microsoft® Windows® 2000 or Microsoft® Windows® XP.

Using This Courseware

The lessons are independent of each other. However, it is recommended that you complete these lessons in the order that they are presented unless you are familiar with the concepts and functionality described in those lessons.

Each chapter contains:

- **Lessons**
Usually two or more lessons in each chapter.
- **Exercises**
Practical, real-world examples for you to practice using the functionality you have just learned. Each exercise contains step-by-step procedures and graphics to help you complete the exercise successfully.

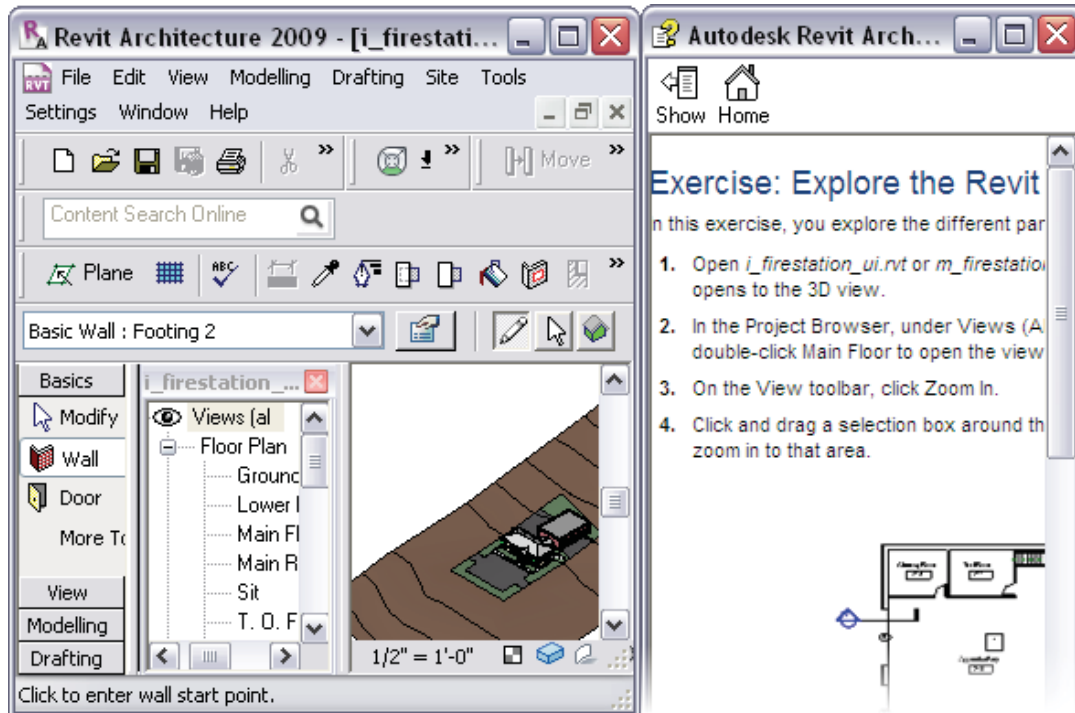
CD Contents

The CD attached to the back cover of this book contains all the data and drawings you need to complete the exercises in this course.

Completing the Exercises

You can complete the exercise in two ways, using the book or on screen.

- **Using the book**
Follow the step-by-step exercises in the book.
- **On screen**
Click the AOTC - Revit Architecture 2009: Essentials icon on your desktop, installed from the CD, and follow the step-by-step exercises on screen. The onscreen exercises are the same as those in the book. The onscreen version has the advantage that you can concentrate on the screen without having to glance down at your book.



After launching the onscreen exercises, you might need to alter the size of your application window to align both windows.

Installing the Exercise Data Files from the CD

To install the data files for the exercises:

1. Insert the courseware CD.
2. When the setup wizard begins, follow the instructions on screen to install the data.
3. If the wizard does not start automatically, browse to the root directory of the CD and double-click *Setup.exe*.

Unless you specify a different folder, the exercise files are installed in the following folder:

C:\Documents and Settings\All Users\Autodesk Learning\Revit Architecture 2009\Essentials

After you install the data from the CD, this folder contains all the files necessary to complete each exercise in this course.

Imperial and Metric Datasets

In exercises that specify units of measurement, alternative files are provided as shown in the following example:

- Open *i_export_ifc.rvt* (imperial) or *m_export_ifc.rvt* (metric).

In the exercise steps, the imperial value is followed by the metric value in parentheses as shown in the following example:

- For Length, enter **13'2" (4038 mm)**.

For exercises with no specific units of measurement, files are provided as shown in the following example:

- Open *c_boundary_conditions.rvt* (common).

In the exercise steps, the unitless value is specified as shown in the following example:

- For Length, enter **400**.

Notes, Tips, and Warnings

Throughout this courseware, notes, tips, and warnings are called out for special attention.



Notes contain guidelines, constraints, and other explanatory information.



Tips provide information to enhance your productivity.



Warnings provide information about actions that might result in the loss of data, system failures, or other serious consequences.

Using this Courseware to prepare for Autodesk Certification Exams

This book supports preparation for Autodesk Certification Exams. If you are planning to become Autodesk Certified on Revit Architecture 2009 this book can help you prepare. The learning objectives of the lessons and exercises in this book map directly to the objectives and questions on the Autodesk Certification Exams. For more guidance on how to use this book to prepare for the exams, visit www.autodesk.com/certification.

Feedback

We always welcome feedback on Autodesk Official Training Courseware. After completing this course, if you have suggestions for improvements or if you want to report an error in the book or on the CD, please send your comments to AOTC.feedback@autodesk.com.