

AutoCAD

Features

What's New in AutoCAD 2007

Create and explore your ideas with these new features:

Create the design of your dreams, or your client's, with creation, editing, and navigation tools that take your vision to a new level of precision and aesthetic presentation.

Visualise your ideas like never before with lighting effects, materials libraries, walk-through animations, and stunning rendering capabilities.

Document your design quickly and easily with sectioning and flattening tools, dynamic blocks, and enhanced tables to create clear and accurate sets of construction documents.

Share design information across extended teams with powerful tools for exchanging data.

Migrate easily with tools that help you upgrade while preserving customisation of toolbars and menus.

AutoCad 2007 Student Edition (2 year licence)

From conceptual design through drafting and detailing, AutoCAD 2007 enables you to explore ideas like never before. Create, edit, and develop design alternatives using realistic solids and surfaces in an updated design environment. Communicate your ideas with powerful sketch, shadow, and rendering tools, including intuitive walk-through animations. Then turn your concepts into a set of documents with the new section and flatten functionality. It's all here, whether you're creating, exploring, managing, or communicating, AutoCAD keeps you on time, on budget, and on track.

Features include:

Design

Makes the creation, editing, and navigation of solid and surface models simple and intuitive. It brings the power and flexibility of AutoCAD lines, arcs, and circles to cubes, surfaces, and spheres. It enables even an occasional AutoCAD user to quickly and easily create a model of a design. Designers can explore design alternatives with a client, and then, after the contract has been won, reuse that model data as a basis for the drawings needed to build the design.

Design Environment

AutoCAD 2007 introduces the new design "dashboard." This interface element consolidates all solid and surface modeling tools into a single place and enables users to see at a glance the tools and workflow available in AutoCAD. AutoCAD 2007 also takes the intuitive, grip-based editing features introduced for drafting in previous AutoCAD versions such as Dynamic Input, ortho, and tracking and integrates them into solid and surface modeling.

Solid Modeling

New tools in AutoCAD 2007 make it much easier to create solid and surface models. The redesigned interface uses a single, easy-to-learn environment for creating both solids and surfaces. Creation and editing of surfaces (as opposed to mesh objects)

have been added, and users can now create solid objects that have faces defined by more complex surfaces.

Model Navigation

AutoCAD 2007 software expands existing tools by allowing transparent pan or zoom while in perspective mode and by allowing editing during use of the Orbit command. It also introduces several new tools such as "walk" mode, which enables designers to walk through a model in the intuitive manner used in computer games. A new camera function enables designers to take a quick "snapshot" of how their design will look from a specific point of view in the design.

Visualize

Improvements significantly enhance existing visualization tools, making them much easier to both learn and use. This release also simplifies the process of modifying images after they have been created. In addition, several new tools that complete the suite of AutoCAD visualization tools, have been added. These improvements make it unnecessary for AutoCAD users to spend extra time and money to learn additional software tools.

Visual Styles

The AutoCAD 2007 visual styles tools relate to all elements of the 3D display, including the creation of new face styles, edge line effects, materials display, shadow display, lighting display, perspective, and parallel/orthographic views. Designers can use these new tools to easily create a visual style that fits their needs.

Animation

Using the AutoCAD 2007 Walk and Path animation tools, a designer can identify points of interest in a model, and then create a path or simply walk past the points of interest to create an animation file for distribution. Designers can use different visual styles for the animation to get just the right visual effect. The designer can also use these tools dynamically to take the client on an "over the shoulder" tour of the design.

Lights, Materials and Rendering

The new interactive light tool in AutoCAD 2007 enables users to quickly and accurately place distance, point, and spot lights in a drawing. After the light has been placed, designers can use the light target grips to shine the light precisely where they need it. By placing the lights, designers can see the effect of lights on shadows in real time, with no need to render the image first.

In AutoCAD 2007, applying materials to a model is as easy as applying hatch patterns in 2D. Users drag materials from a predefined library onto any solid face or surface defined in their model. The material then scales automatically; there's no need to manually adjust scaling parameters based on the size of the model. If the material library does not have the proper materials, designers can use the new materials editor to edit the material and create a customized library.

AutoCAD 2007 incorporates the latest in rendering technology, the mental ray rendering engine. This powerful technology (incorporated into other Autodesk products such as Autodesk 3ds Max) has been integrated into a new user interface that

makes accurate and realistic renderings as easy as possible. Capabilities include a slider control that graphically displays the trade-off between time and rendering quality.

Section and Flatten

Use the new Section and Flatten tools In AutoCAD 2007 to quickly and easily extract drawing information from the conceptual model. The Section tool allows the movement of a dynamic, adjustable plane through the solid or surface model. Use this cutting plane to create an elevation or plan view that is ready to be dimensioned and annotated as part of the drawing creation process. Use the Flatten tool to represent the 3D model as a 2D illustration.

Dynamic Blocks

With AutoCAD software, blocks are dynamic. With the block authoring tools, designers can add dynamic behavior to existing block libraries□simplifying use of block libraries and reducing time spent manipulating blocks in a drawing. The Dynamic Block authoring environment provides an easy, graphical way to create Dynamic Blocks from existing block libraries. It does not require any programming experience. The new Block Authoring palette enables designers to add parameters and actions by dragging them directly onto the block. To help realize the power of Dynamic Blocks, AutoCAD includes sample Dynamic Blocks with tutorials that show how to create and use them.

Tables

The Table command in AutoCAD 2007 streamlines the process of creating tables and controlling their properties so designers can focus on content. Predefined table styles control elements such as border properties (grid visibility, lineweight, and colour), cell properties (text style, height, colour alignment, and background fill), location of headings, and more. Use existing table styles to create new tables that inherit all the defined style properties. Change any property of any table element or apply a new table style in seconds.

Publish to PDF

Many companies have standardized on PDF format as their corporate document viewing tool. Many government agencies also mandate submittals in PDF. Solution AutoCAD 2007 now has the ability to write drawings in the Adobe PDF file format.