AutoCAD®

2008

Features and Benefits

Innovative improvements to the AutoCAD you know and trust.

Meticulously refined with the drafter in mind, AutoCAD® 2008 software propels day-to-day drafting forward with features that increase speed and accuracy while saving time. Annotation scaling and control of layers by viewport minimize workarounds, while text enhancements, multiple leaders, and improved tables help deliver an unmatched level of aesthetic precision and professionalism.

Autodesk provides a complete set of tools to help designers clearly convey their design vision to clients and then quickly and accurately document that vision so projects are completed on time and within budget. AutoCAD® 2005 built on the dramatic productivity gains of AutoCAD® 2004 software by adding tools that help designers efficiently manage sets of drawings. AutoCAD® 2006 enabled designers to work even faster and smarter on a wide range of day-to-day tasks with powerful new drafting features such as Dynamic Blocks and Dynamic Input. AutoCAD® 2007 focused on improving designers' ability to create, navigate, and edit a conceptual design, clearly present the design to a non-technical audience, and then easily document it using all the powerful AutoCAD drafting tools.

Now, AutoCAD 2008 focuses on improving designers' ability to quickly and easily document their designs, with a level of control that helps ensure that their drawings look as professional as they require. AutoCAD 2008 focuses on solving common customer problems in a way that respects current workflows, so that little or no retraining is required to obtain significant time savings.

This Features and Benefits guide outlines the key features of AutoCAD 2008 by presenting the problems designers might currently encounter when creating and editing annotation in drawings, and by outlining the solutions provided in AutoCAD 2008. This guide also details the bottom-line benefits of this new release of AutoCAD to designers and organizations.

This guide is not intended as an exhaustive list of the new AutoCAD 2008 features. To view a comprehensive list of new features, visit *www.autodesk.com/autocad-features*.

Autodesk

Contents

Autodesk

Annotation Overview

AutoCAD® software provides powerful tools for the creation, management, and sharing of design documentation. Companies around the world use these documents and drawings to create buildings, landscapes, sheet metal parts, and much more. When we typically think of a set of drawings, the focus is usually on the actual lines, arcs, and circles that define the geometry of the design. There is another key component to any drawing, and that is what is referred to as the *annotation*. Annotation consists of the dimensions, text, tables, hatch patterns, and so forth that annotate or describe the information shown in the drawing itself. Annotation is crucial to the clear and accurate definition of a design. Customer-requested enhancements to annotation have driven the creation of AutoCAD 2008.

AutoCAD 2008 makes the creation, editing, and management of annotation scale, tables, text, and leaders simple and intuitive. This means that drawings are easier to create and maintain to the standards required in your business. These new and enhanced tools avoid duplication of information so that errors caused by design revisions are kept to a minimum and time spent on workarounds is significantly reduced.
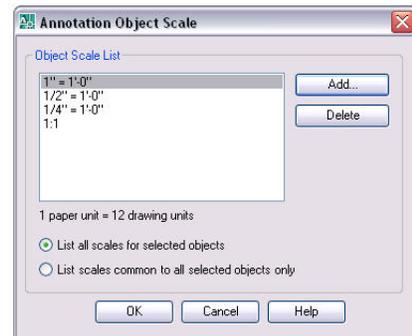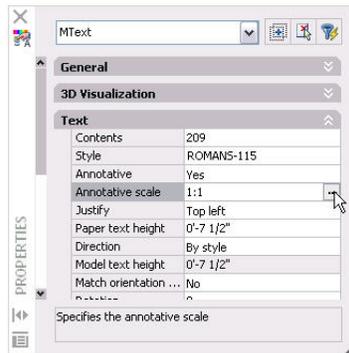
Annotation Scaling

Problem

The scale at which a drawing is plotted has a direct correlation to the size and placement of annotation within that drawing. For example, a note with a leader may need to be repositioned and nearby text moved to plot at a scale that is different from that of the base drawing. Currently, designers must handle this change in scale by placing multiple notes on multiple layers that are then turned on or off depending on what scale the drawing is plotted at. This requires work to set up and maintain as the drawing is created and represents a potiential source of error as the geometry is revised over time.
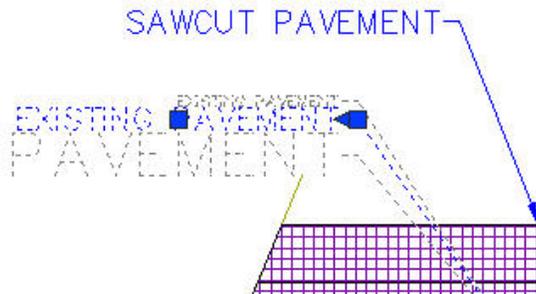
Solution
AutoCAD 2008 introduces the concept of annotation scale as an object property. A new control on the status bar enables designers to set the current scale of a viewport or model space view. Designers can then apply that scale to each object and specify its size, placement, and appearance based on the scale set for the viewport. In other words, annotation is now automated.

Benefit

The addition of annotation scale in AutoCAD helps users avoid the creation and management of multiple text, leaders, hatch patterns, blocks, linetypes and multi-line leaders across multiple layers. It avoids duplication of information that can lead to errors as the drawing is updated over time.

Layer Properties per Viewport

Problem

Viewports are frequently used to illustrate a particular portion of a design, for example, the the heating and ventilation system in a building. To highlight that aspect of the design, designers can choose to use a different line thickness or color for the walls in that viewport. Currently, that requires a duplicate version of the floorplan geometry in the viewport, because a change to line thickness or color is reflected in the entire drawing, not just in the specifc viewport used to highlight that aspect of the design.


Solution

In AutoCAD 2008 the layer manager has been enhanced to allow users to specify color, line weight, linetype, or plot style as an override for an individual viewport. These overrides can be easily turned on or off as viewports are added or removed.


Benefit

Setting layer properties in a viewport enables users to present a design anyway you choose. Avoiding geometry duplication minimizes not only the work of creating and editing the duplicate geometry, but also a potential source of error as the geometry is modified.
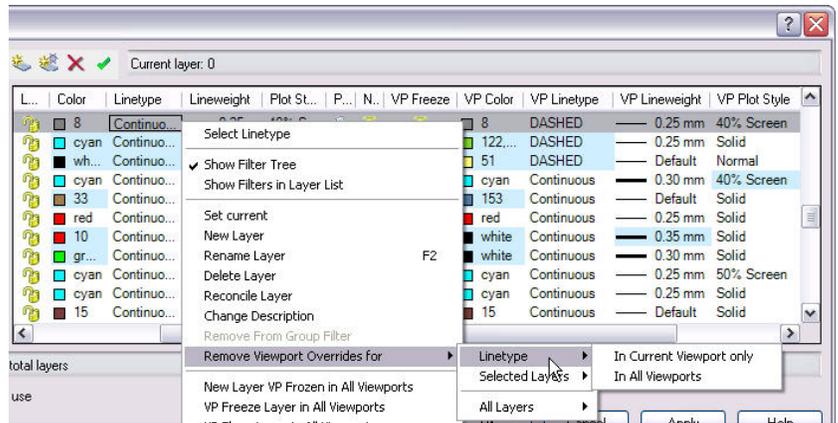
Enhanced Tables

Problem

Much of the tabular information in AutoCAD software (parts lists, schedules, bills of materials, and so forth) is created from information that comes from information in the drawing as well as from external files. For instance, a window schedule could contain window quantity, size, and manufacturer information extracted from blocks in the
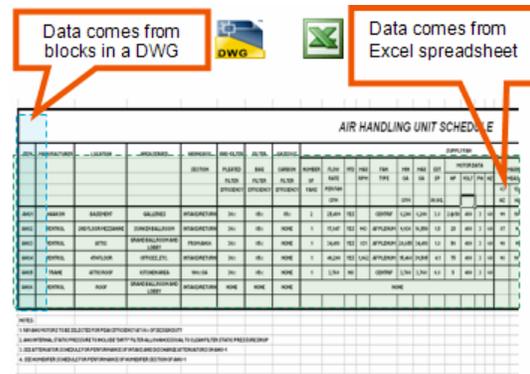
drawing and the cost information contained in an external Microsoft® Excel® spreadsheet. Currently, it is difficult to combine this information into a single table and then to update the information as information in either the drawing or Excel spreadsheet changes.

Solution

Enhanced tables now give users the option to combine AutoCAD and Excel tabular information into a single AutoCAD table. This table can be dynamically linked so that notifications appear in both AutoCAD and Excel as data is updated. Users can then select these notifications, allowing instant updating of information in either source document.

Benefit

Lack of data synchronization is a key source of error in AutoCAD tables. By making it a more automated process, users can help to decrease costs caused by errors and omissions in the final set of drawings.
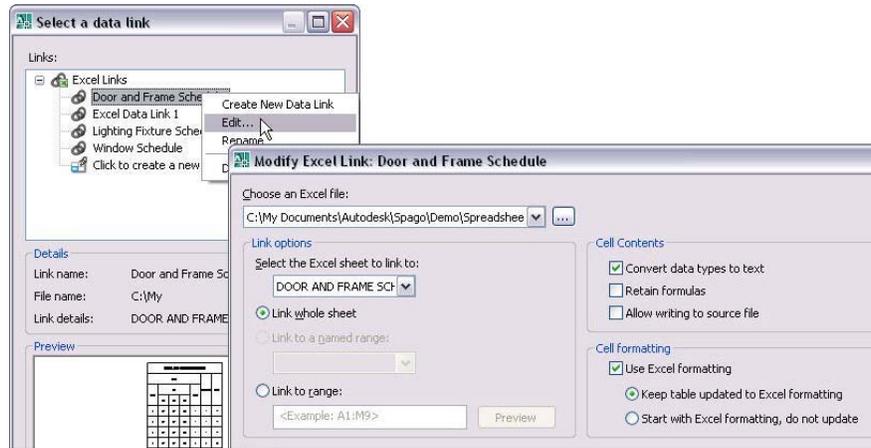
Text Formatting

Problem

Many of the standard notes in AutoCAD software are created and stored in external word processing formats, and then cut and pasted into AutoCAD on an as-needed basis. This process allows reuse of standard content. Currently, pasting large blocks of text into AutoCAD can cause formatting problems. The text can flow off the bottom of the drawing in one large block, requiring users to break it manually into chunks that fit in that particular drawing. These "chunks" are difficult to edit and maintain as the notes change over time.

Solution

The enhanced Mtext editor now provides the ability to specify the number of columns users require and flows new text between those columns as users edit the text. Specify the space set between each column of text and the edge of the paper. All of these variables can be adjusted to specific values in the dialog box, or adjusted interactively using the new multicolumn text grips.
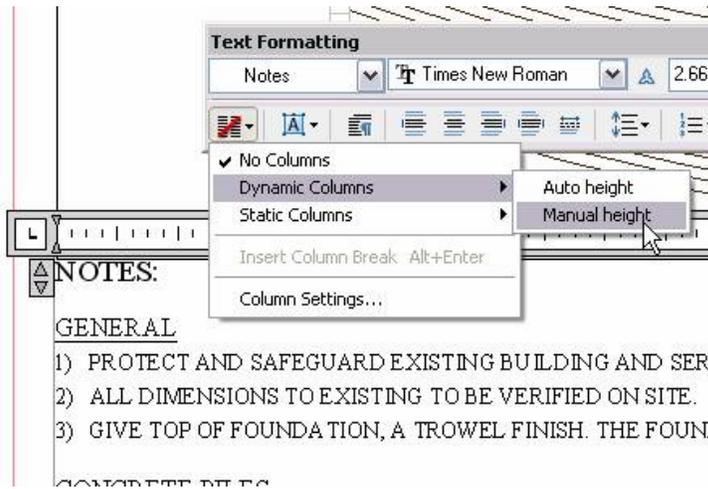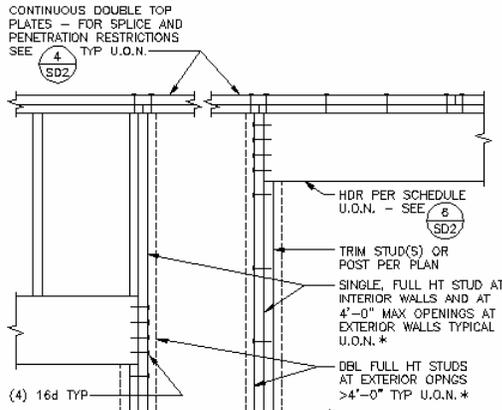
Benefit

The new text editing tools enhance the use of standardized notes, making both their creation and editing faster and easier.

Multiple Leader Creation

Problem

To create multiple leaders from a single note requires that the leaders be added as individual lines with arrowheads. Frequently, a single note can point at two or three design

elements, with the angles and locations of the leaders changing depending on where the elements are in relationship to the original note. Creating, editing, or adding notes requires large amounts of hand editing to ensure that the position of notes and leaders is clear and unambiguous.

Solution

The new multiple leader panel on the dashboard has enhanced tools that automate the creation of multiple leaders and the orientation of the leaders (tail or content first) with the notes.
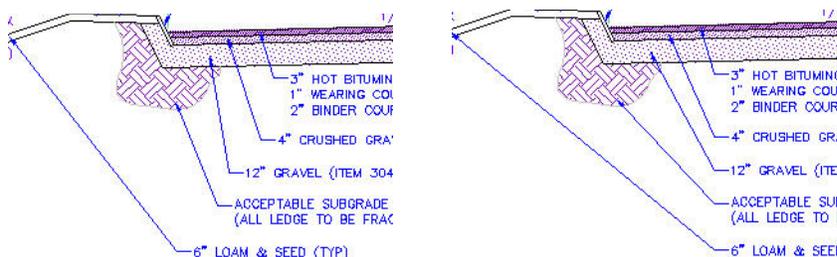
Benefit

By having more flexibility in the creation of multiple leaders, users can avoid the use of hand-drawn leaders. Using a standard dashboard

tool makes the creation and editing of multiline leaders much easier and more efficient.

Multiple Leader Alignment

Problem

Creating and editing multiple notes in AutoCAD had to be done on an individual basis. Once the notes had been added to the drawing, users had to align them manually. If notes were added at a later design revision, the entire note had to be realigned.

Solution

AutoCAD 2008 introduces the new Multiple Leader Align tool. This tool enables users to work with a set of notes and their leaders as a group, setting their type of alignment and spacing quickly and easily.

Benefit

Alignment of existing or new notes is dramatically faster. The new Mleader command provides a new level of aesthetic accuracy and ultimately gives users the tools to make notes with leaders look the way they want them to look.