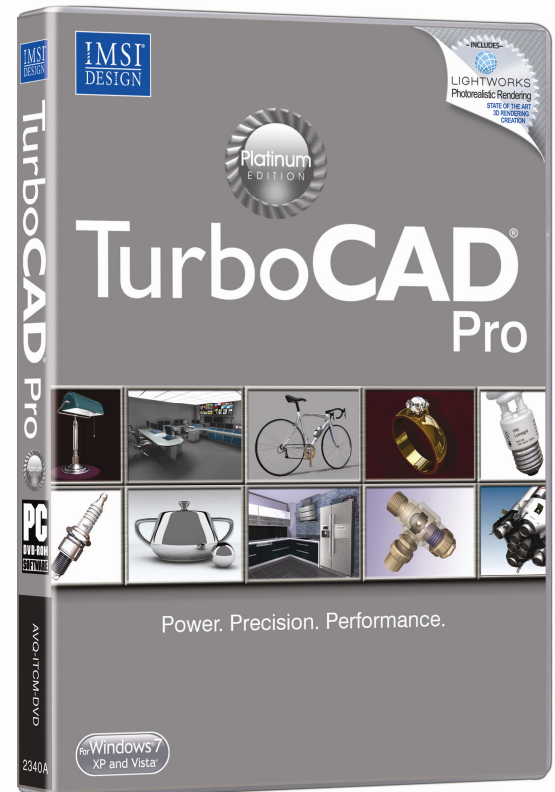


TurboCAD Pro Platinum 17 (Competitive Upgrade)

TurboCAD Pro Platinum is comprehensive, professional architectural and mechanical CAD software for drafting, detailing, and modelling. Robust, powerful tools provide greater control and flexibility.

- All the tools found in TurboCAD Pro plus additional **advanced mechanical and architectural design tools**
- Complete Set of **2D/3D Drafting, Design, and Modelling Tools**
- **Perfect for professionals** including engineers, architects, technical designers etc.
- **Powerful tools for 2D or 3D design** including 2D parametric constraints, 3D solid and surface modelling, robust photorealistic rendering ray tracing, lighting and materials, and extensive CAD and graphics file interoperability.
- **Advances productivity** with tools that allow for design, modification, presentation, and documentation in an integrated fashion.
- **Excellent workflow** to and from other applications to ease collaboration.
- **Open, insert, or embed up to 35 file formats and export up to 28**, including .DWG, .DXF, .SKP (Google™ SketchUp™), etc. Plus, reads and writes .DWG and .DXF files from R14 through 2010 including AutoCAD® Architecture extensions.

IMSI/Design, LLC, is the global leader in retail CAD (Computer Aided Design). IMSI/Design products include the award-winning TurboCAD®, TurboFLOORPLAN™, TurboSketch™, and DesignCAD™ families of precision design applications.



Competitive Upgrade Price: £529 inc. VAT
Product RRP: £995 inc. VAT

"TurboCAD is undoubtedly the most powerful CAD program available"

"not only a remarkable business tool, but the software that I have come to know as my trusted business partner. TurboCAD's 3D capabilities are second to none."

Source: Customer Profiles available for download

TurboCAD Pro Platinum 17 (Competitive Upgrade)

If you already own another CAD or graphic design product, then you can benefit from the full power and productivity of TurboCAD® 17 at a special price – it's a great way to add the latest in precision 2D/3D design power to your current CAD library. To see if you qualify for exclusive upgrade pricing and to view file format compatibility and features lists, see the following pages.

Why upgrade to TurboCAD Pro Platinum 17?

- Add the latest in precision 2D/3D design power to your CAD library.
- Get the complete 2D drafting and 3D surface and solid modelling toolset including many of the most advanced technologies in the industry:
 - GPU-accelerated wireframe display with the Redway3d® rendering engine
 - Solid modelling with the 3D ACIS® Modeller
 - 2D dimensional and geometric constraints with the Seimens PLM Software group's D-Cubed 2D DCM constraint engine
 - LightWorks photorealistic rendering with the Lightwork Design rendering engine
 - Powerful Drafting Palette & Part Tree features using Spatial, Inc. technologies
 - Advanced mechanical, architectural and woodworking design tools
 - The latest .DWG 2010 compatibility with Open Design Alliance OpenDWG technology
- Affordable CAD - TurboCAD® provides you all the professional features you demand at a great price, allowing faster ROI.

**Upgrade from
another CAD or
graphic design
product for just
£450 ex. VAT**

Compare the costs!		
	TurboCAD® Pro Platinum 17	Market-leading CAD Software
1 User Licence	£846 (RRP ex. VAT)	£3,900 (RRP ex. VAT)
5 User Licence	£3,600 (RRP ex. VAT)	£19,500 (RRP ex. VAT)

Please contact your reseller for further information, competitive upgrade pricing and a FREE TRIAL!

TurboCAD Pro Platinum 17 (Competitive Upgrade)

Why upgrade to TurboCAD Pro Platinum 17 (continued)?

- CAD & Graphic Compatibility – Supports dozens of the most popular industry-standard file formats including AutoCAD® and Google® SketchUp™.

TurboCAD Pro 17 and TurboCAD Pro Platinum 17 Supported File Formats		Import	Export
3DM	Rhino 3D	3D	✓
3DS ¹	Autodesk 3D Studio format	3D	✓
3DV	VRML Worlds	2D/3D	✓
ASAT	Assemble SAT format	3D	✓
BMF ²	FloorPlan format	3D	✓
BMP	Bitmap format, TurboCAD for Windows	2D	✓
CGM	Computer Graphics Metafile	2D	✓
DAE	COLLADA MODEL	3D	✓
DC ³	DesignCAD	2D/3D	✓
DCD ³	DesignCAD	2D/3D	✓
DGN	Intergraph Standard file format	2D/3D	✓
DWF ⁴	Drawing Web format	2D/3D	✓
DWG	AutoCAD native format	2D/3D	✓
DXF	Drawing eXchange format	2D/3D	✓
GEO	VRML Worlds	2D/3D	✓
GIF	Raster graphic format (w/ alpha-channel suport)	2D	✓
IGS	iGES format.	2D/3D	✓
JPG	JPEG image compression standard	2D	✓
EPS	Encapsulated Post Script format	2D	✓
FCD	FastCAD DOS	2D	✓
FCW	FastCAD Windows	2D/3D	✓
FP3	FloorPlan format	2D	✓
MTX	MetaStream format	3D	✓
OBJ	Wavefront Object	3D	✓
PDF	Portable document format	2D	✓
PLT	Hewlett-Packard Graphics Language	2D	✓
PNG	Raster graphic format (w/ alpha-channel suport)	2D	✓
SAT	ACIS solid modeling	3D	✓
SHX	Shape File Format	2D	✓
SKP	Google SketchUp	2D/3D	✓
STEP	Step format	3D	✓
STL	Stereo Lithography	3D	✓
STP	Step format	3D	✓
SVG	Web graphic format	2D	✓
TCW	TurboCAD	2D/3D	✓
TCX	TurboCAD	2D	✓
TCT	TurboCAD	2D/3D	✓
WMF	Windows MetaFile	2D	✓
WRL	VRML Worlds	2D/3D	✓
WRZ	VRML Worlds	2D/3D	✓
XYZ	Terrain Data	2D/3D	✓

Footnotes

1 2D objects are partially displayed, but only their appearance. Objects themselves are converted into TC Surface

2 Import – compatibility with FloorPlan v 4 – 11 – IMSI Design product

3 Import from DesignCAD - IMSI Design product

4 Format is either 2D or 3D – there is an Export option " DWF 3D" in the Setup dialog; when imported, 2D or 3D is recognized automatically

5 TurboCAD Deluxe only supports SketchUp (.SKP) file import

TurboCAD Pro Platinum 17 (Competitive Upgrade)

Why upgrade to TurboCAD Pro Platinum 17 (continued)

- Award-winning software, recommended by the press and customers.
- Outstanding competitive feature set.

Feature	TurboCAD Pro 17	TurboCAD Pro Platinum 17	AutoCAD 2010
<i>USABILITY & INTERFACE</i>			
Blazing Performance (wireframe & 2D) via Integrated Redway Drawing Engine	✓	✓	
Fully Customisable User Interface and Preferences	✓	✓	✓
Advanced Handle-Based Editing	✓	✓	
Transparent and Bit-mapped Fills	✓	✓	
Draw Order by Layer	✓	✓	
Layer Filters	✓	✓	✓
Object SNAP Prioritisation	✓	✓	
Brush Style Editor	✓	✓	
Embed Image Files in Drawing	✓	✓	
Explode Viewport	✓	✓	
<i>Architectural</i>			
Intelligent (Parametric) Attribute-rich Architectural Objects	✓	✓	
Windows, Doors, and Walls (Straight and Curved)	✓	✓	
Multi-Component Walls	✓	✓	
Muntins - both Doors and Windows	✓	✓	
Roofs/Stairs	✓	✓	
Railings/Slabs	✓	✓	
Schedule	✓	✓	
Self-Healing Walls and Self-Aligning Blocks	✓	✓	
Architectural Sections and Elevations (3D-to-2D documentation)	✓	✓	
Style Manager	✓	✓	
<i>2D Drafting and Editing</i>			
2D Drawing, Editing and Modifying	✓	✓	✓
Drafting and Detailing Palette - create associative sections and cut planes	✓	✓	
Auto Tools (for Scaling, Sizing, Positioning, Rotating, and Movement)	✓	✓	
Index Color Support	✓	✓	✓
Layer Properties Manager	✓	✓	✓
Bezier Curves	✓	✓	
Smart and Quick Dimension Tools	✓	✓	✓
Xclip Support	✓	✓	✓
<i>3D Modeling</i>			
3D Solid Modeling and Editing	✓	✓	✓
3D Terrain Modeling	✓	✓	
3D Shelling, Lofting and Surfaces	✓	✓	✓
3D Deformable Modeling	✓	✓	
3D Pattern Copy Tools	✓	✓	
History Tree with Editor	✓	✓	
<i>Mechanical</i>			
2D Geometric and Dimension Constraints	✓	✓	✓
Branched, Face-to-Face Lofting	✓	✓	
Thread tool		✓	
Twisted Extrude, Extrude to Face tools		✓	✓
Unbend and Unfold tools		✓	
<i>Photorealistic Rendering</i>			
Advanced Rendering -Sketch rendering, depth of field	✓	✓	
Photorealistic Rendering and Materials	✓	✓	✓
OpenGL (Draft) Rendering	✓	✓	✓
Radiosity	✓	✓	
Material Library	✓	✓	✓
Ray Tracing	✓	✓	✓
<i>Programmatic Support & Content</i>			
Xref, Block, and Block Editor Support	✓	✓	✓
Macro Recorder	✓	✓	✓
Programmable SDK	✓	✓	✓
<i>Interoperability</i>			
AutoCAD (.DXF, .DWG, and .DWF) File Compatibility	✓	✓	✓
Google SketchUp (.SKP) Import (geometry, views, materials, components) & Export	✓	✓	
Open and Save 3DM (Rhino), IGS, OBJ, SAT, STL, STP mechanical drawings	✓	✓	
Terrain Data (XYZ) File Import & Export Support	✓	✓	
Import and Open File Formats	40	40	28
Export, Save As, and Publish File Formats	31	31	21

For further information and pricing, please contact your reseller.

TurboCAD Pro Platinum 17 (Competitive Upgrade)



Do you qualify for Competitive Upgrade pricing?

If you own a copy of any of the products below, then you can install TurboCAD® Pro/Platinum 17 Competitive Upgrade on the same system. Please be advised that this software does check to verify the competitive product is on your system in order to install:

- Alibre – Alibre Design
- ART – Chief Architect
- Ashlar-Vellum® - Velium, Graphite, Cobalt, Xenon, Argon
- AutoDesk® - Quick CAD, AutoSketch®, AutoCAD LT®, AutoCAD®, AutoCAD® Architecture, AutoCAD® Mechanical, Inventor Suite
- Bentley – MicroStation
- BricSys – BricsCAD
- CADopia – various IntelliCAD®
- CADKEY® Corp – CADKEY
- Corel® - CorelDRAW®, Corel DESIGNER
- Google™ - Google SketchUp™ Pro
- Graphisoft – ArchiCAD
- Integraph – SmartSketch®
- IronCAD® - IronCAD
- Kubotek – KEYCREATOR
- Microsoft® - Visio®
- Nemetschek/Graphisoft – VectorWorks®, VectorWorks Architect, VectorWorks Landmark, VectorWorks Spotlight, AllPlan
- progeSOFT – progeCAD
- PTC – Pro/ENGINEER
- Punch! Software – ViaCAD™ 2D/3D, ViaCAD™ Pro
- Robert McNeel Associates – Rhinoceros®
- Sigma Design – Arris CAD, Arris Architectural Studio
- SoftSource – Virtual Drafter
- SolidWorks – SolidWorks
- Siemens – SolidEdge
- VC Corp – VX Corp
- ZWCAD Software - ZWCAD

“Most CAD packages are extremely cost prohibitive... TurboCAD is undoubtedly the most powerful CAD program available in its price range.”

“I have no experience with other CAD software due to the high costs and have never really found a need to look further. . . . a priceless and indispensable creative tool for me and my business.”

“The software that I have come to know as my trusted business partner. TurboCAD's 3D capabilities are second to none.”

Please contact your reseller for further information, competitive upgrade pricing and a FREE TRIAL!

TurboCAD Pro Platinum 17 (Competitive Upgrade)



What's Extra in the Platinum Edition?

The Platinum product includes all of the advanced features necessary for both architectural design and more specific mechanical design tasks. In prior years the TurboCAD product series included specific Mechanical and Architectural Editions. With the release of version 17, we have combined those advanced features into a single product — Platinum, as many of these tools' capabilities were applicable to a variety of tasks.

Because of the breadth of mechanical and architectural tools, the Platinum Edition is also perfectly flexible for users whose projects cross disciplines:

- Designer-builders and Contractors
- Electricians and Plumbers
- Structural and HVAC Engineers
- Plant Designers
- and more!

TurboCAD Pro Platinum functionality can of course be extended through one of the many plug-ins for TurboCAD such as Animation Lab, CAM, Furniture Maker, or the Beam Analysis Tool.

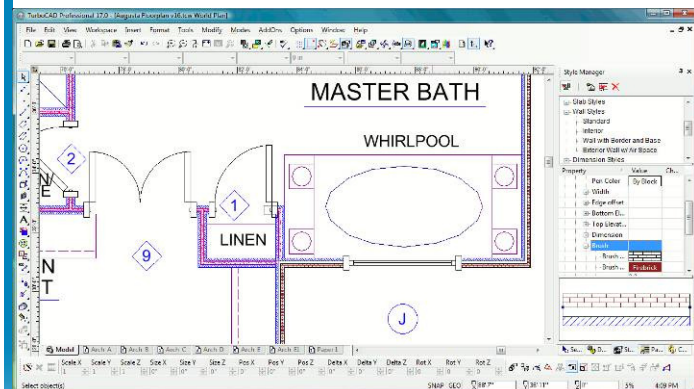
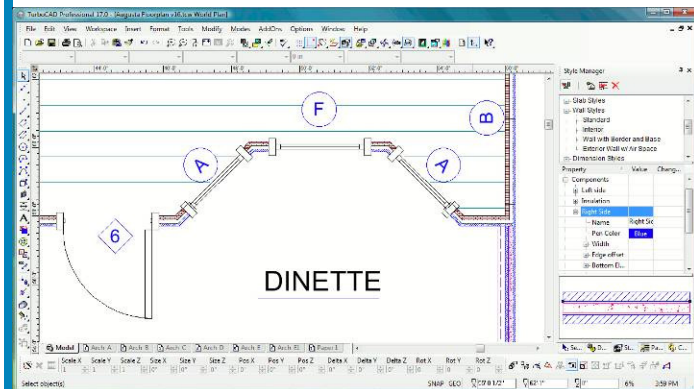
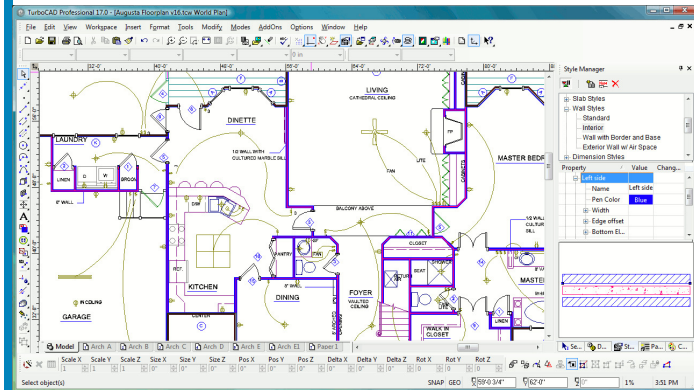
Architectural Tools

TurboCAD® Pro Platinum includes an integrated suite of architectural tools that accelerate productivity in design, documentation, and drafting of architectural models. The TurboCAD AEC objects are AutoCAD® Architecture (ACA) compatible so that .DWG models with ACA extensions also may be read, modified, and documented as needed.

Using self-healing walls is dramatically faster than designing with standard double line tools. The TurboCAD Pro Wall tool includes compound wall definitions to generate multiple-component walls with separate design parameters such as width, offset, and the hatches to represent each material within the wall. Because AutoCAD includes object enablers for AEC wall objects, a design from TurboCAD will keep its self-healing properties even when modified in the basic AutoCAD, or AutoCAD LT®, neither of which includes the tools necessary to create the architectural objects.

The integration of the tools facilitates productivity: create a roof automatically by selecting the walls; add a railing to stairs with a click; drop in a schedule and see all the elements generated on the fly.

And all the architectural objects have both 2D and 3D representations, so that elevations, floorplans, and ISO views are easier to document. There are many other improvements to the tools including door and window muntins, a bottom wall modifier, new Rail tool improvements, and others. Many of the standard templates were also modified to provide better default settings for each of the tools.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Walls & Compound Walls

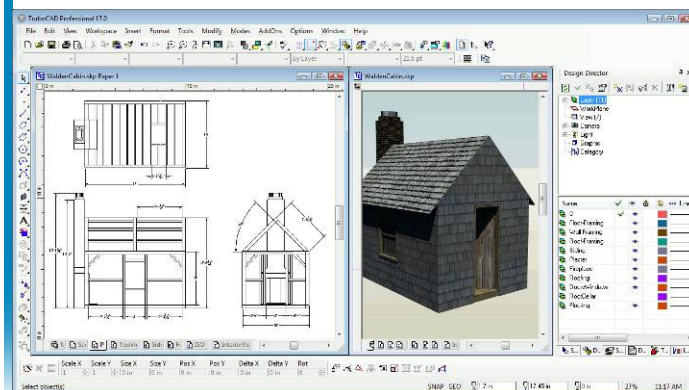
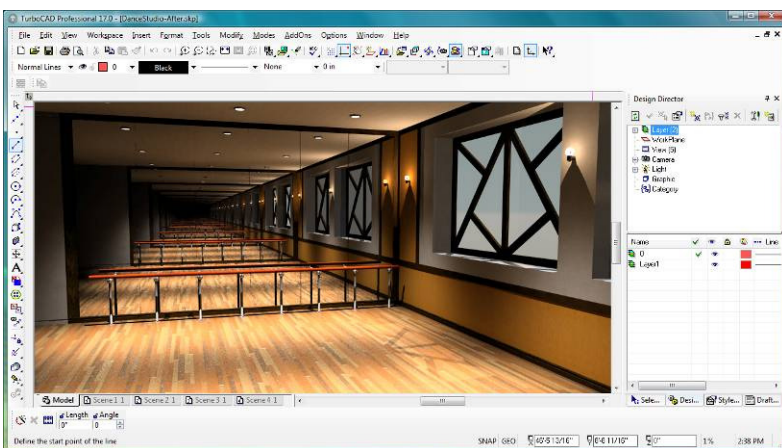
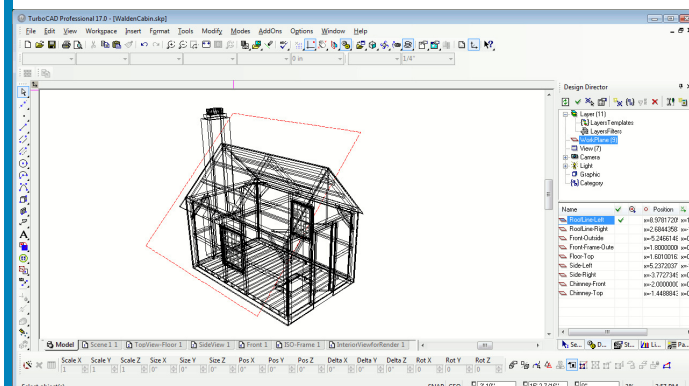
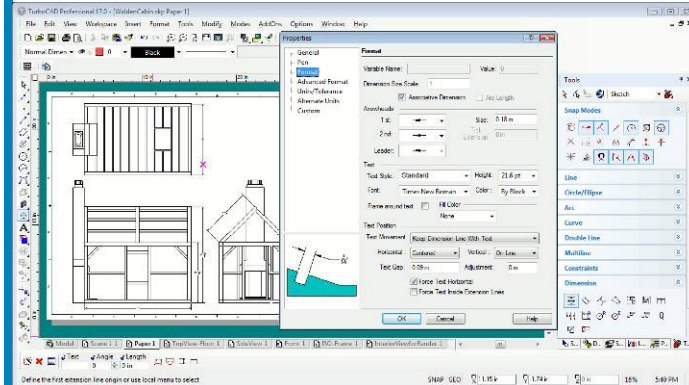
TurboCAD® Pro Platinum provides the tools to quickly design floorplans by using the wall tool. Self-healing straight or curved walls speed design over conventional drafting tools. Cleaning up intersections, moving walls, adding columns, windows, doors, and more is tedious with standard double lines, but not with the Wall tool. And because the walls have height, and with both bottom and top wall modifiers for custom shapes, the full 3D design is quickly underway.

Not only do walls heal properly and automatically at intersections, but they may be easily moved, cut, have openings inserted, and through the styles manager, may be made into compound walls with different wall styles selected. This adds appropriate hatches and fills, line weights, colours, and more for each layer of the wall. Different styles may be made for interior, exterior, load-bearing, non-load-bearing, or any other type of wall you design.

Polylines may be converted to walls, and then styles applied, to quickly modify or start a project. Blocks, whether standard, imported, or created on-the-fly, may be inserted into walls, and the walls will heal and automatically align the blocks.

As an integrated set of architectural tools, the walls also treat parametric AEC Door and AEC Window objects accurately and heal correctly, and the walls share information with the Roof and Slab tools for auto-generation of correct dimensions and roof lines.

Because the walls are AEC objects recognised by AutoCAD® object enablers for AutoCAD Architecture, a project with self-healing walls started in TurboCAD Pro will continue to be self-healing in AutoCAD, making even the AutoCAD experience better as well.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Parametric Doors and Windows

TurboCAD Pro Platinum provides parametric AEC door and AEC window objects. They are style driven, and multiple door and window styles may be created. These TurboCAD AEC objects are AutoCAD® Architecture (ACA) compatible so that .DWG models with ACA extensions may be read, modified, and documented as needed.

There are numerous door and window types and shapes available for use in creating your architectural drawing. These existing types and shapes can all be edited in the Style Manager to create an unlimited number of new door and window styles. Custom profiles may also be used for unique shapes. And with version 17, door and window muntins may be added well. Click on the Video tab above to see a demonstration of customising a window design using muntins.

Window Types include: Picture, Single Hung, Double Hung, Awning Transom, Double Casement, Glider, Hopper Transom, Pass Through, Single Casement, Single Hopper, Single Awning, Vertical Pivot, Horizontal Pivot, Uneven Single Hung, Uneven Double Hung.

Window Shapes for each of these Window Types include: Rectangular, Round, Half Round, Quarter Round, Oval, Arch, Trapezoid, Gothic, Isosceles Triangle, Right Triangle, Peak Pentagon, Octagon, Hexagon. And using the Profile Manager, custom shapes can be made as well.

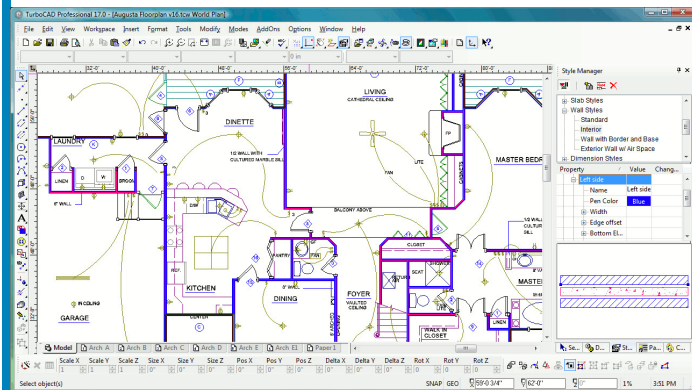
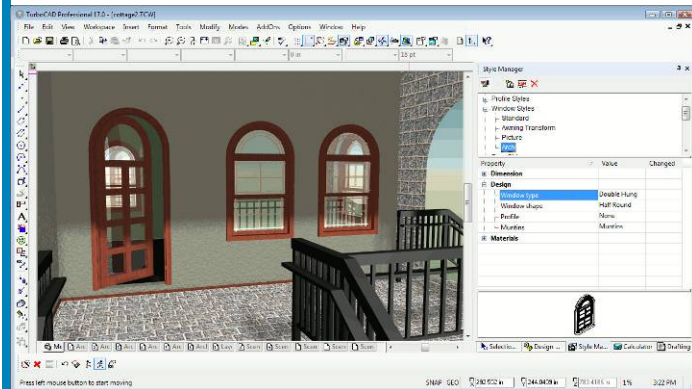
Door Types include: Single, Double, Single-Dhung, Double-Dhung, Double Opposing, Uneven, Uneven-Dhung, Uneven Opposing, Bifold, Bifold-Double, Pocket, Double Pocket, Sliding Double, Sliding Triple, Overhead, Revolving, Pass Through, Accordion, Panel, and Communicating.

Door Shapes include: Rectangular, Half Round, Quarter Round, Arch, Gothic, and Peak Pentagon. Also using the Profile Manager, custom shapes can be made.

These items are intelligent as well as parametric. This means they work well with other architectural tools — doors and windows communicate with the auto-generated Schedule tool, and they understand how to interact with walls.

AEC doors and windows that are inserted into self-healing walls are also recognised by AutoCAD object enablers, so they will be accurately represented in AutoCAD, AutoCAD LT®, or AutoCAD Architecture even though neither AutoCAD, nor AutoCAD LT have the tools necessary to create them (for that you need ACA, DoubleCAD XT Pro, or TurboCAD Pro).

This is yet another productivity advance over simply using standard blocks, double lines, and tables in AutoCAD LT.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Stairs, Rails, Slabs & Roofs

TurboCAD Pro Platinum can automatically generate roofs or slabs from wall objects. It understands the wall definitions and shapes, including arc walls, and generates the right rooflines based on object property settings for overhangs, pitch, and more. Roofs can be easily modified for different slopes on different faces as well.

Slabs such as concrete spandrels or others can be created in a variety of shapes and sizes. Holes can be added in different shapes and dimensions based on closed polylines to accommodate columns, elevator shafts, or stair wells.

Stairs may be added and managed parametrically, whether straight, curved, spiral, u-shaped, multi-landing, or another configuration. Their properties can be managed to determine the specific riser height, width, number of steps, and easily define landing styles and turns.

Rails can be added to one or both sides of stairs with a click, and can even be placed without stairs for use along the edge of balconies, or in a basic configuration for fences. Object properties that can be defined include rail locations, post locations, rail extensions, and styles may be created for those rails to be applied elsewhere.

Markers & Schedules

TurboCAD Pro includes industry standard architectural marker tools. These markers can be easily further edited to assist with proper annotation.

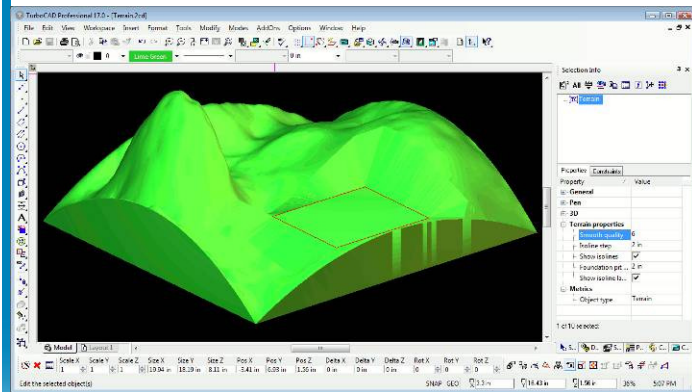
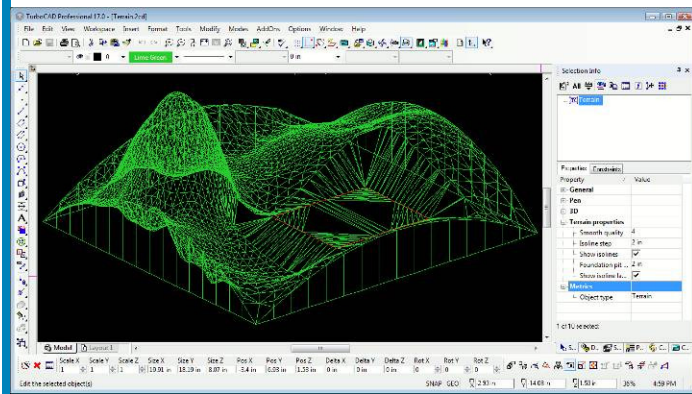
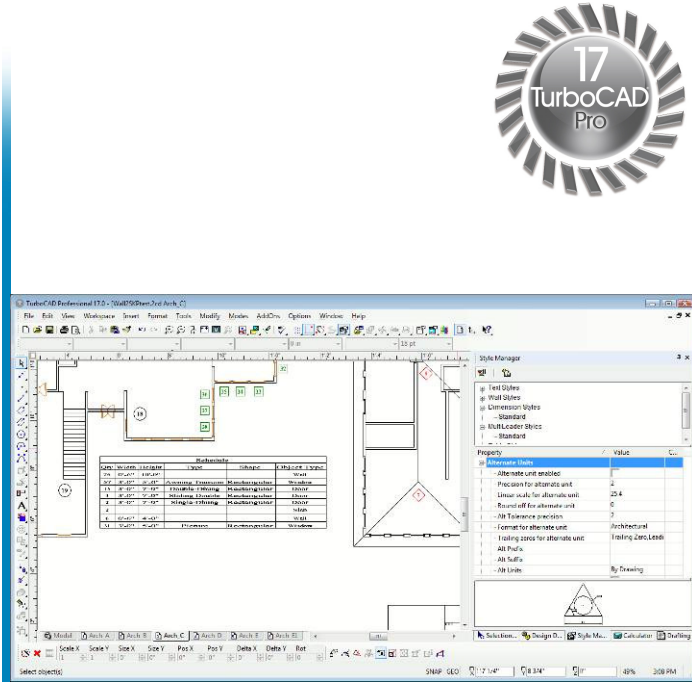
The product also includes a Schedule Wizard and tool that generates a table that includes all doors, windows, slabs, and walls used in the drawing. Each object type has its properties listed by style, and quantity by style. The Schedule can be inserted directly into the layout (paper space) and saves valuable time in the creation of your design documents. The Schedule may also be exported as a CSV file for inclusion in job costing calculations.

Terrain

The TurboCAD Pro Platinum Terrain tool lets you create a topographical terrain, represented by a triangulated network. You can create a terrain from scratch, or import coordinates from a file. There is also a smoothing function that allows you to automatically increase the triangulation, creating a smoother surface area. Each node in the triangulated mesh can be edited individually, and it is very easy to add or remove nodes as needed.

The Terrain Modifier tool allows for sections of terrain to be levelled, and slopes to be created around those shapes. This quickly simulates the grading of sites within a terrain for a proper view of site plans.

The Import Terrain function works with terrain data in a .txt or .xyz file. The format for each coordinate is presented with X, Y, and Z values, separated by commas or spaces. All values are relative to the origin of the terrain you specify during the import function, whether 0, 0, 0, or another location.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Styles Management

TurboCAD Pro architectural tools are driven by Styles. Each architectural object type (door, window, etc.) comes with a default set of design styles that are stored in the Style Manager Palette. These styles can be used as is or may be modified to your design needs. And of course, additional styles can be easily added to each architectural object in the Style Manager.

Styles can also provide attribute information that appear in Schedules. Many styles also may be read from existing AutoCAD® Architecture .DWG drawings so that information is not lost and your intellectual property is protected.

Changes to doors, windows, and other objects may be made globally at the Style Manager level, or locally through the Selection Info Palette and local Properties menu for complete control over an individual part's properties. This provides tremendous flexibility and productivity in both design and revision.

The Style Manager includes many basic window and door types, shapes, and even a Profile style for creating custom shapes for doors and windows. Wall styles can be created for separate properties on interior or exterior walls, load bearing, or insulated walls.

Rail styles for staircases can be defined with literally dozens of attributes for offsets, profiles, left, right, or centres of stairs, and rails can be used on flat surfaces such as balconies, or even defined with the right height and used as a parametric fence.

The Style Manager allows for the definition of Text, Table, Schedule, Wall, Window, Door, MultiLeader, Profile, Stair, Rail, Slab, Dimension, and AEC Dimension styles.

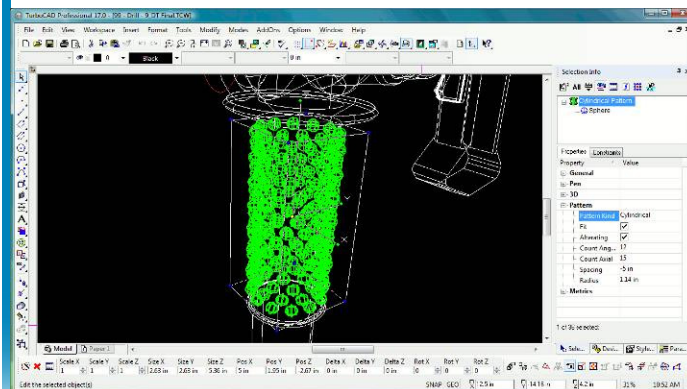
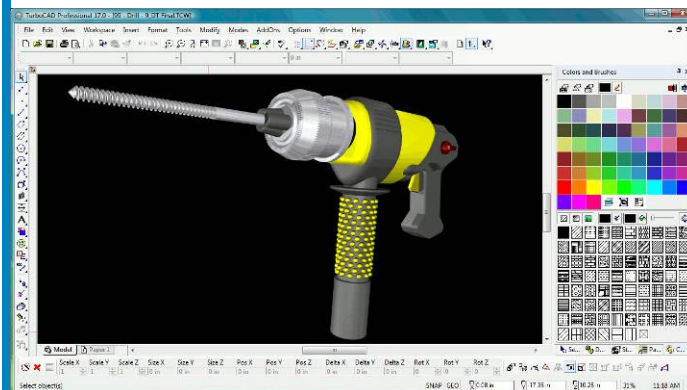
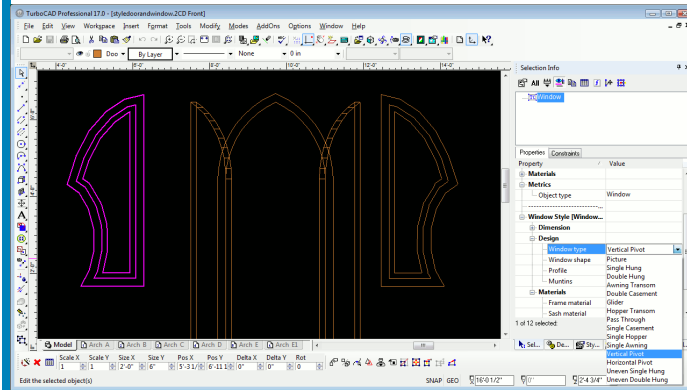
Pattern Tools

One of the most exciting new features of TurboCAD® Pro Platinum 17 is the Pattern Tools collection. Five new tools allow you to design models of incredible complexity.

Patterns are arrays of solid ACIS 3D objects copied in specific arrangements and which are controlled parametrically. Patterns are solid objects and they and/or their elements can be manipulated by 3D tools, like Bend; and patterns can be modified with Boolean operations with other 3D objects.

The five new pattern tools are: Array, On Curve, Radial, Spherical and Cylindrical

When an Array Pattern is created, for example, the number of rows, columns, levels, and the distance between items in the array's x, y, or z axis can be modified at any later time.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Platinum Constraints

TurboCAD® Pro constraints are enhanced in the Platinum Edition through two additional constraints. The first is a Midpoint Constraint, and the second is the ability to create pattern constraints.

Pattern Constraints

Pattern Constraints are not a specifically defined tool, but use the power of constraints, dimensions, and array tools to allow for parametrically defined arrays of drawn objects. What this means is that you can draw any 2D geometry, turn on autoconstraints, and then use any of the array tools to create your array. The relationships between the distances of items, like the dimensions of the items themselves, can be defined by creating variable dimensions. Those variables are then managed by in the Calculator Palette.

The variable dimensions may be used to define offsets, separation, angles of offset, and more. This is most powerful when creating designs for mechanical parts. Patterns appear in keyboards, telephone pads, ventilation gaps, and more. The patterns may also be used for laying out parking strips, cubicle designs, or for indicating where upon a surface to later place windows, ornaments or other architectural elements.

Advanced Design Tools

A number of design tools are available in TurboCAD Pro Platinum for 3D solid and surface modelling. These tools can enable the creation of parts that might not have been entirely possible in some cases, or which would have been far more difficult to create. Among them are:

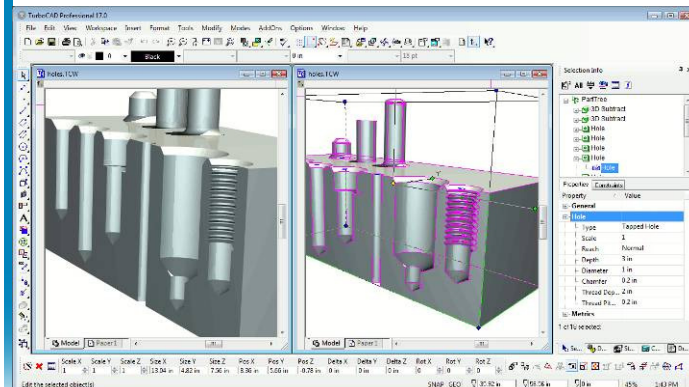
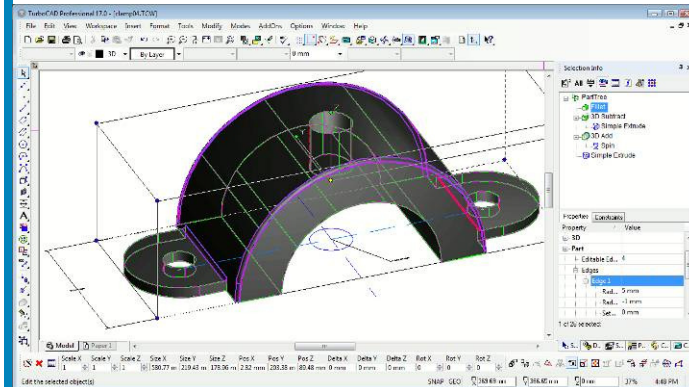
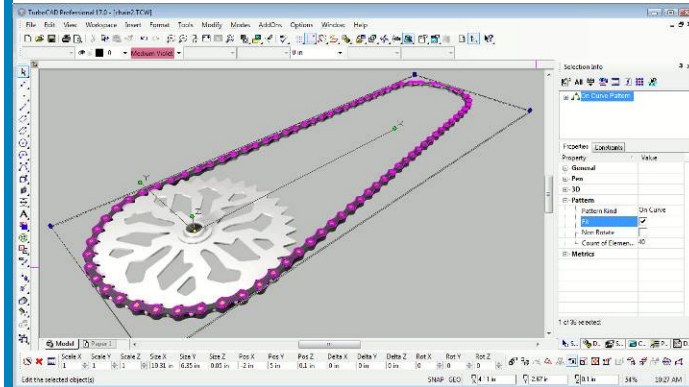
Thread Tool — Easily create threaded 3D objects. The pitch and height of threading are parametrically defined and editable.

Twisted Extrude — Create a wide variety of twisted extrusions with this simple extrude tool that offers added parameters including twist angle, distance type, normal, full height, twist to top, twist start distance, twist end distance, and twist continuity (G0, G1 or G2).

Extrude to Face — Now extrude or subtract a face of a solid to either another face of a solid or to a surface.

Parametric Holes with Boss Hole Type — Create parametric holes in objects in a few easy steps and modify the properties at any time including an option for easy parametric cylindrical bosses.

Imprint — Save up to 3 steps by optionally combining Booleans with the Extrude, Blend, and Chamfer tools in one single procedure. New dimple feature enhancement makes sheet metal work easier with this tool.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Advanced Modification Tools

TurboCAD Pro Platinum includes powerful tools for modifying existing geometry. These include:

Bend — Create accurate bends measuring from a specific distance from the edge. Set the axis, angle, and radius and let TurboCAD do the rest.

Tube Bend Tool — Make cylinders incredibly flexible. Simply choose where you want to bend on the tube.

Unbend — Great for sheet metal and fabrication shops, creates an unfolded object, leaving the original object intact.

Unfold Face — Unfolds faces of various ACIS objects including cone, cylindrical, planar, and NURBs surfaces; even those with a filleted rectangle as the base. This is also known as obtaining the involute of a surface. It's great for working with materials like sheet metal or fabrics.

Facet Offset Tool — Move a facet in or out of its current position while updating all connecting surfaces.

Flange Tool — Rapidly creates flat and bent flanges using the Smart Dimensioning tool for precision.

Tube Flange Tool — Simply extend a tube and bend it in a few clicks. These tools become even more powerful when combined with the Advanced Part Tree.

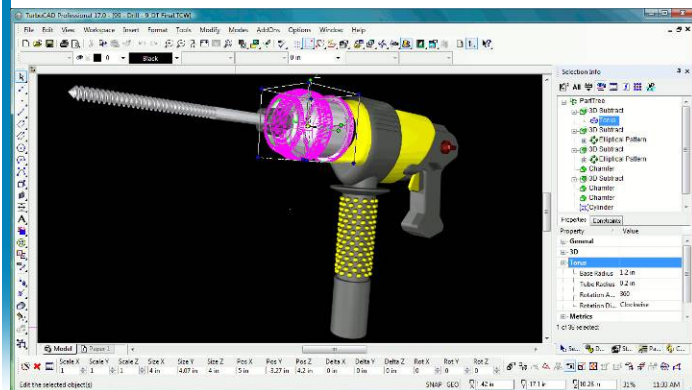
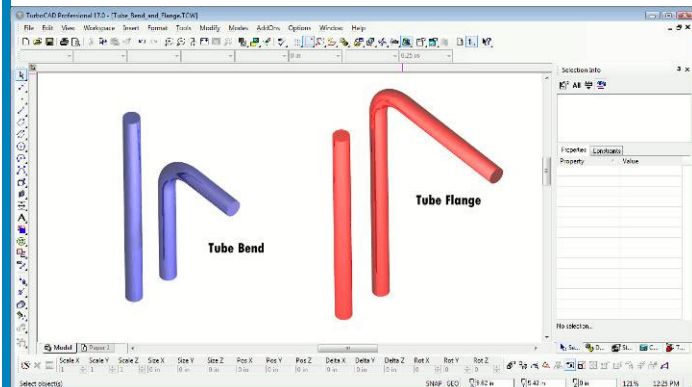
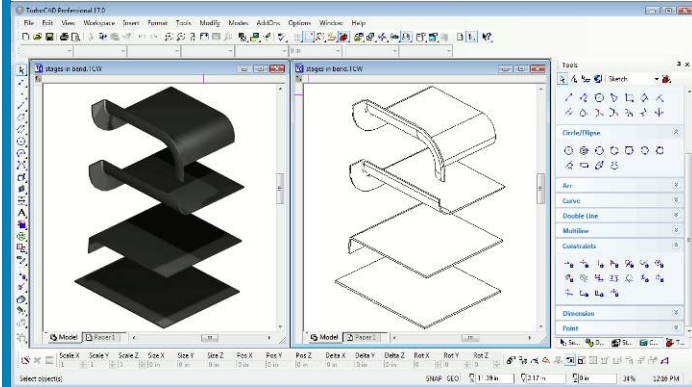
Advanced Part Tree

Although there is a Part Tree capability in TurboCAD Pro basic edition, the capabilities of the Advanced Part Tree are staggeringly more powerful! Each of the Pro Platinum design and modification tools, and most of the 3D primitives, and basic edition 3D design and modification tools may be driven by the Advanced Part Tree.

The Part Tree can be viewed as a selective UNDO/REDO tool: adjust the parameters of a bend, an offset, or a flange without having to UNDO the design steps that have been made to the model since the parameter of that object were originally set. Each subsequent step will be applied correctly on the newly updated geometry.

The TurboCAD Pro Platinum Part Tree includes this critical aspect of parametric design: by adjusting a value of any one action taken at any time during the design phase, the entire part is properly updated.

Another example of the power of the Part Tree is when using Boolean operations on two extrusions of 2D profiles. By moving one, or changing a profile, the entire extruded profile and Boolean operation are automatically updated. This is often referred to as history-based editing.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



TurboCAD Pro Platinum is advanced, general purpose CAD software for 2D design, drafting, detailing, and 3D modelling that appeals to professionals spanning numerous mechanical and architectural disciplines. Included are 2D geometric and dimensional constraints, 3D solid and surface modelling, photorealistic rendering and lighting controls, and extensive CAD and graphics file interoperability. TurboCAD Pro Platinum advances productivity with tools that allow for design, modification, presentation, and documentation in an integrated fashion. And because we know that most people use a number of tools or collaborate with others frequently, TurboCAD Pro Platinum is designed to provide excellent workflow to and from other applications.

2D Drafting & Detailing

TurboCAD includes many tools to aid in drafting and detailing functions, among them all the capabilities for quickly and easily creating views and viewports of any size and shape. There are extensive paper space and printing capabilities, Marker and Schedule tools, leaders, multi-leaders, dimension tools, and symbols content.

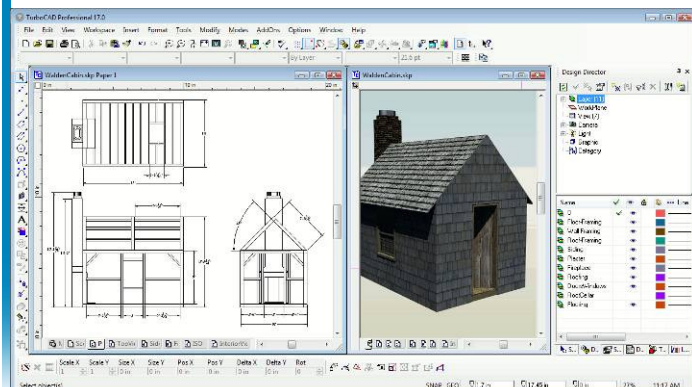
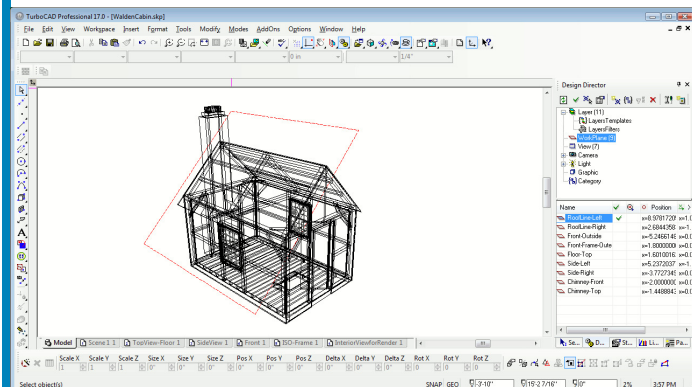
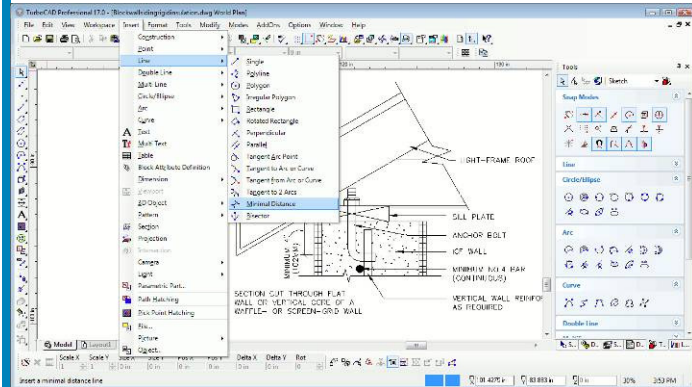
See additional information on the following pages for Drafting Palette, Parametric Constraints, Annotation and Symbols.

Drawing tools include:

- 14 basic line tools including irregular polygons, perpendicular, parallel, and tangent lines
- 8 double line tools (but there are also self-healing architectural wall tools)
- 8 multiline tools including polyline and polygon tools
- 11 circle tools including 3 methods for drawing ellipses
- 13 arc tools including tangencies, point fitting methods, and 3 elliptical arcs
- 5 point tools from dots to crosses and even stars
- 6 curve tools including Bezier, freehand sketch, and convert to curve
- Index colour and true colour support
- custom brush style editor for combining colours, gradients, hatches, and transparency

TurboCAD also includes drawing aides including:

- 13 basic object snaps with controllable Osnap priority including parametric Divide By segment snaps
- extended ortho and apparent intersection for geometric aids
- a fully parametric grid
- easily parameterised ortho angular system
- 9 types of construction line geometry



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Drafting Palette

The Drafting Palette is one of the most powerful features for advanced drafting and detailing in TurboCAD Pro Platinum.

It works with solid or surface models, turning 3D designs into associative 2D manufacturing or construction drawings, even when working on an Xref. This means your sectional views and elevations in Layout (Paper Space) will update automatically as the model changes.

For mechanical design this means parts and assemblies can have all standard views, 2D or 3D sections, and detailed views chosen by selection; or created as a derivative of an existing view.

Dimensions for solid model objects are associative too so they update automatically and scale correctly in Paper Space; and geometry is recognised so that individual parts may be separately hatched or include different line weights and colours.

The solid model engine works with SAT objects in AutoCAD .DWG files, objects created with any 3D ACIS® Modeller, or saved in IGES or STEP format.

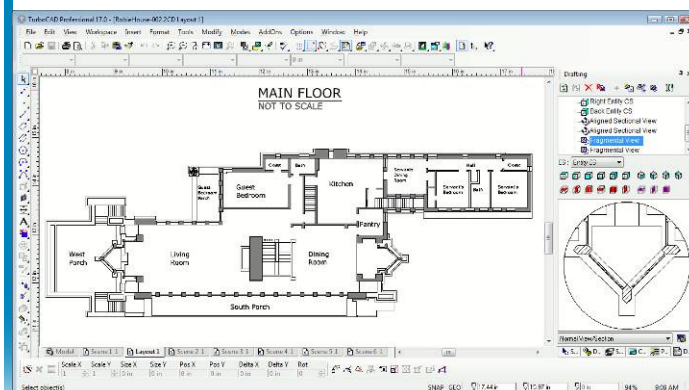
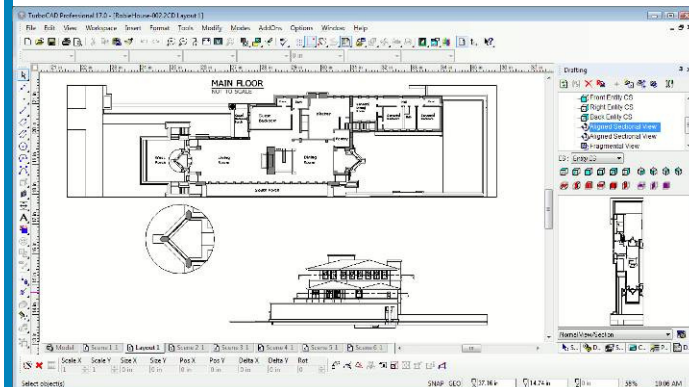
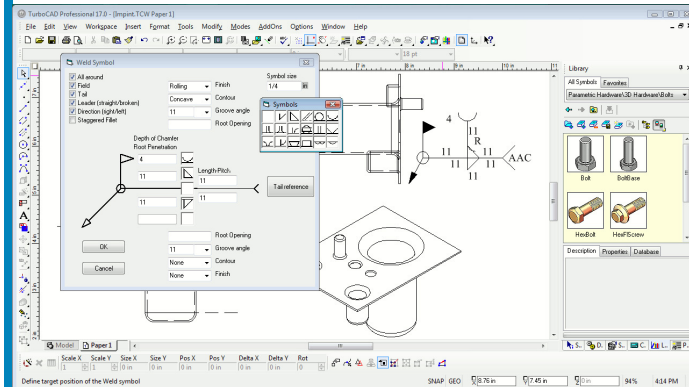
For architectural design, a 3D model from SketchUp (.SKP), Rhinoceros® (.3dm), AutoCAD Architecture (.DWG), or other application may be used to create elevations, floorplans, sections, even detailed views, all of which are associative to changes in the model.

With every section, each element may be hatched, coloured, or have its line weight and style adjusted as needed, with separate controls for visible and hidden line.

A significant productivity enhancement was made with version 17: Drafting Palette items may be locked, essentially caching them until unlocked. This allows modelling to continue at speed – particularly important with larger models that have numerous sections, elevations, and views. Each section may be regenerated individually or all simultaneously.

There are more than 15 file formats for 3D models supported by TurboCAD Pro Platinum that may be opened directly, imported, or included via Xref that the Drafting Palette will recognise.

This makes TurboCAD Pro Platinum a fabulous drafting and detailing companion to numerous other 3D design applications if your work involves collaboration with others using diverse software.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Parametric Constraints

Parametric Drawing - provides precision and productivity. You have greater control to enforce design intent, and may very quickly modify a design by using geometric and dimensional constraints. The Calculator Palette allows you to set values to driving dimensions, including formulaic relationships between objects, and using any of the functions shown in the image at right.

Rapid Revision Productivity - Often referred to as variational sketching, a constraints system allows you to enjoy greater control and productivity, empowering your creativity. You will get more done, create part families faster, incorporate red-line changes more quickly, and have the flexibility to evaluate different designs with ease. This last point is important in 2D design work: look at what-if scenarios the way you would update a spreadsheet. See the movement of linkages simply by changing a driving dimension.

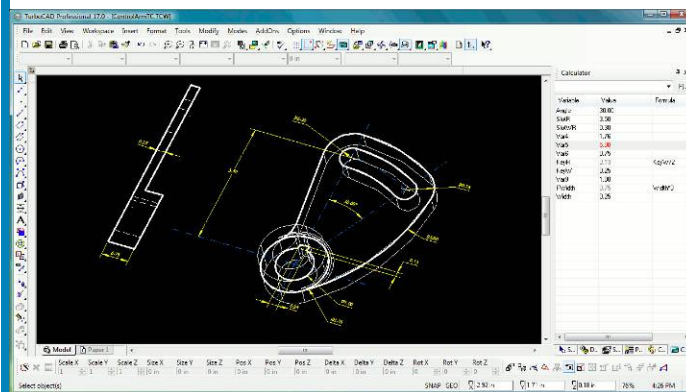
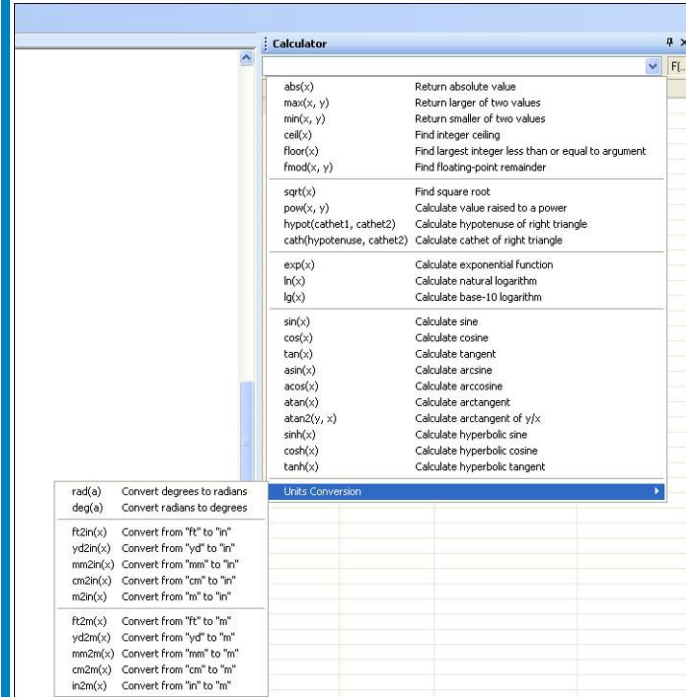
Geometric Constraints - determine the relationship of two pieces of geometry with each other. TurboCAD® Pro Platinum supports the following geometric constraints: point to point coincident, point to line coincident, parallel, perpendicular, tangential, concentric, symmetrical, horizontal, vertical.

Dimensional Constraints - determine the size of geometric entities. TurboCAD Pro Platinum supports the following dimensional constraints: equal radius, equal length, equal distance, distance, length, angle.

The autoconstrain feature will attach all possible constraints to a selection, or set autoconstrain ON while drawing and relationships will be added as you go. All standard dimension types may be used as driving dimensions. These features allow for dramatic productivity gains when drafting or making revisions.

Proven Technology

This valuable TurboCAD Pro Platinum feature includes the D-Cubed™ 2D Dimensional Constraint Manager (2D DCM) from Siemens PLM Software — This is the same trusted engine used by far more expensive design platforms such as AutoCAD® 2010, Autodesk Inventor®; by Dassault Systems for CATIA and SolidWorks®; by Siemens PLM Software for Solid Edge; and by think3® for thinkdesign.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Annotation

The output of any design project in CAD typically involves rendered views, 2D construction drawings, database reports, attribute extraction, and other elements of communication. TurboCAD Pro Platinum includes tools necessary to rapidly create, document, and annotate your designs.

The Drafting Palette accelerates creating Views, Sections, Elevations, Floorplans, and Detail Views in numerous display styles.

Traditional Viewports are also powerful in TurboCAD: associative to the model, easy to align, Visual Styles are easy to manage for separate Hidden Line, Draft, or Quality rendered modes. Custom Viewport shapes may be used: simply create a Viewport and update its boundary using any closed Polyline. Manage Viewport specific properties such as layer visibility and dozens of other properties.

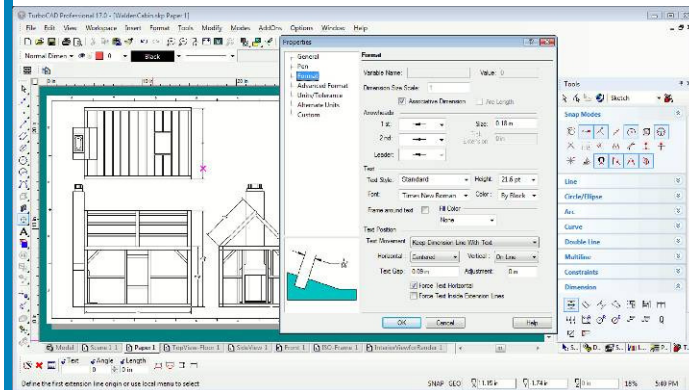
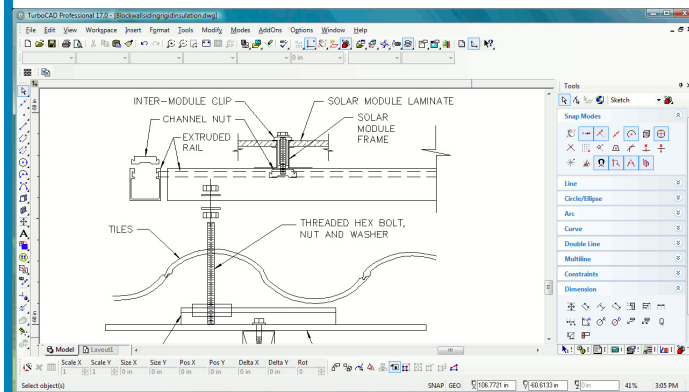
TurboCAD Pro Platinum includes a full range of Dimension types that are style driven. There are also basic Tables, Text, and Multi-Text tools. With TurboCAD Pro Platinum 17 there is new support of multi-leaders that also round-trip with DWG. And tables can be tied to external database sources. Any ODBC supported database may be connected, and reports may be generated with custom fields for bills of material, parts lists, and more. Xref support allows your tables and parts lists to automatically synch with external data sources for added efficiency.

Dimensions have a very large number of properties associated with them including whether they are associative or not, whether leaders should be fixed horizontal, based on splines, use arrowheads, custom arrowheads, and much, much more. Any number of Dimension Styles may be created to provide distinction. Additionally there are separate styles definitions specifically for the AEC Dimension Tool, and for MultiLeaders. Most tools also work on either an end-to-end selection, are one-click based on an object segment, or are defined by a single object like an arc or circle.

Basic dimension types include: Orthogonal, Parallel, Distance, Rotated Datum, Baseline, Continuous, Incremental, Angular, Radius, Diameter, Quick — which adds a collection of dimensions to a selection, and Smart — which chooses the appropriate dimension for the object selected.

The Dimension tool also includes: Leader, MultiLeader and Tolerance.

Dimension scaling in Viewports within a paper space is automatic. The dimension is shown in a paper scaling as it is dragged into position, it is then converted as the mouse is released to place the dimension. Units may be specified in Scientific, Decimal, Engineering, Architectural, Fraction, or Surveyor formats. Alternate units may also be shown providing the dimension for example in both metric and imperial values.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Symbols Library

Symbols and parts, like Blocks and groups, are a valuable part of any CAD application. While Blocks and Groups are internal to a drawing, library items are external files. Generally, symbols are stored in a file, and categories of symbols are stored in Windows directories that can be loaded as separate libraries. Any vector drawing that may be read by TurboCAD can be used as a symbol, not simply .TCW files. This means, for example, that a favourite collection of .SKP components may be used and loaded this way.

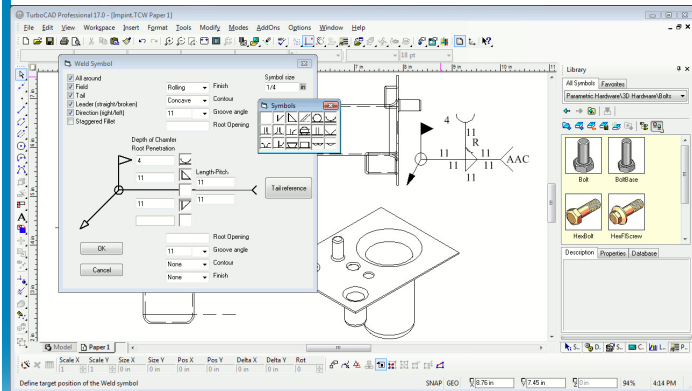
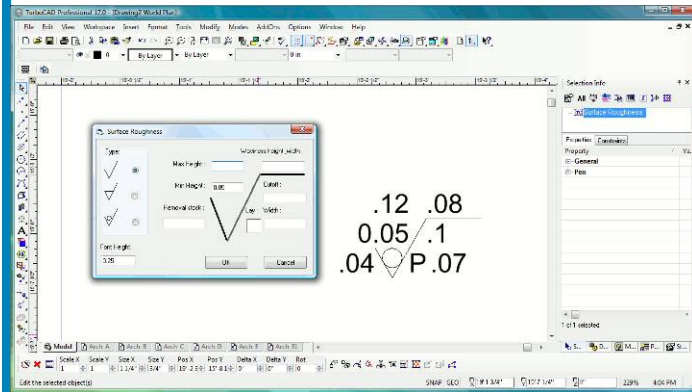
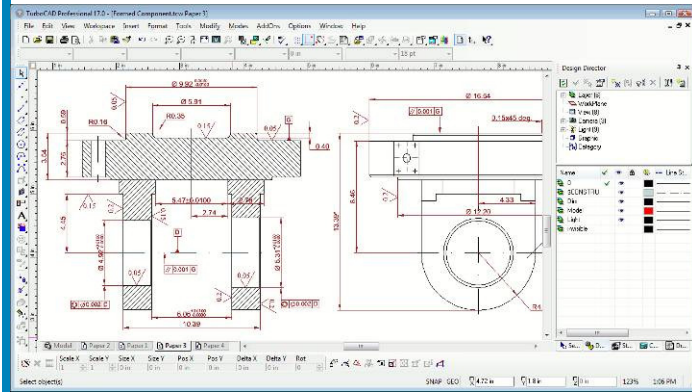
TurboCAD Pro Platinum comes complete with a number of sample symbols as well as a much larger collection of parametric parts. The parts are also kept in libraries and are accessed like symbols. The difference is that these parts are parametrically driven. Those parameters may also be revised after they have been inserted in the drawing. Parametric Parts may be created with the Parametric Parts Manager. Examples of these parts include desks whose length, or number of drawers, can be changed; bookshelves whose height, width, and number of shelves may be changed; and varieties of nuts, bolts, fittings, doors, windows, and more.

Special Symbols

TurboCAD Pro Platinum also includes several special symbols used in certain types of annotation that help in communicating with manufacturers. They include the Weld Symbol, Surface Roughness Symbol, Geometric Tolerance Symbol and Adhesive Symbol. Technically the Weld Symbol, Surface Roughness Symbol, and Geometric Tolerance Symbol are among the Special Tools section, but the output are parametric, editable symbols. The Adhesive Symbol is a parametric part and is therefore also an editable parametric 2D symbol.

The Weld Symbol communicates finish, contour, depth of chamfer root penetration, groove angle and more. The Geometric Tolerance Symbol provides information about allowable deviations of form, profile, orientation, location, and runout of a feature. The Surface Roughness symbol communicates the type of roughness, the minimum and maximum heights, waviness, and more.

The Adhesive Symbol is a fully parametric part that may be adjusted through the Selection Info Palette. It includes dozens of parameters for the Surface Preparation, Application Method, Cure Method, Adhesive Physical Form, and Adhesive Technology Family.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Parametric Parts Manager

The TurboCAD® Pro Parametric Parts Manager allows you to create and consume parts that remain parametrically controlled even after insertion in the drawing. They are a bit like a 3D dynamic block, an AutoCAD® dynamic block, or a SketchUp™ dynamic component.

The key difference is that parametric parts (.PPM files) may be defined using a text description (script). The script defines the structure, editable properties, and outputs that result in a parametrically editable part.

There is also a method to draw variably constrained parts and convert them to parametric parts using a wizard. This dramatically simplifies creating simple .PPM objects that don't need the full power of all the functions available in scripted parts.

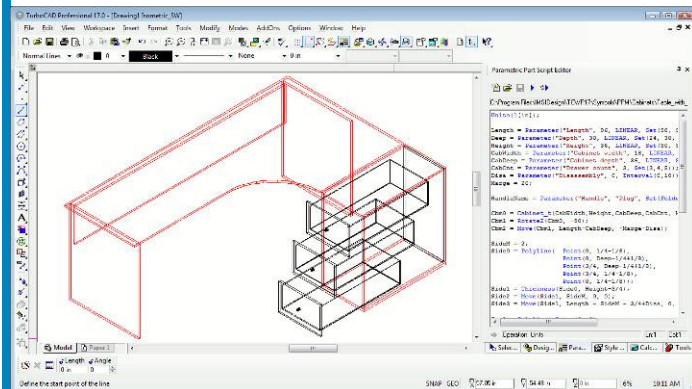
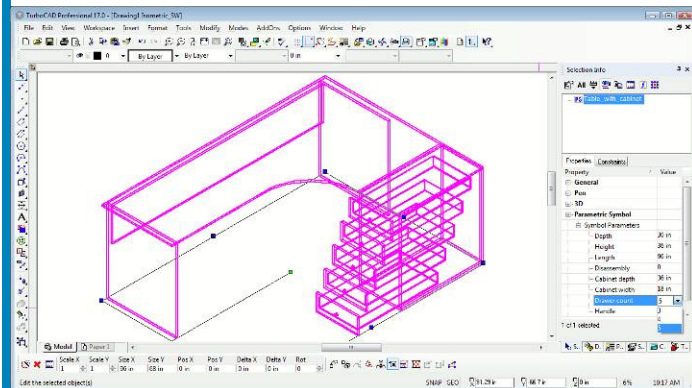
Now with v17 there is even some "beta" functionality to allow you to open a SketchUp file that contains Dynamic Components and have them converted into parametric parts.

Documentation for the Parametric Parts Manager has been greatly enhanced in version 17, with excellent support for creating and using parts on the TurboCAD Community Forums.

Because the parts can be saved individually, like a symbol, libraries of .PPM objects can be created, shared, and reused from project to project.

Simple examples could be to create a dynamic picket fence, or balustrade. Designing furniture of different lengths or seating configurations: chairs with or without arms, couches or tables of 6' or 8' lengths, bookshelves with different configurations. Mechanical parts that come in differing sizes and configurations may also be easy to design.

Another use for .PPM objects is to create 2D symbols. Imagine in landscape architecture if you had plants with a different appearance for different seasons, or for different growth sizes at 1 year, 5 years, and 15 years size. The uses are endless.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



3D Modelling

TurboCAD® Pro Platinum supports both surface and solid modelling, and includes tools built on the 3D ACIS® Modeller (ACIS) from Spatial. It is the same engine used in 350 applications with more than 1.5 million seats worldwide, so you know you will have a standard format for interoperability.

TurboCAD Pro Platinum now uses v20 of ACIS for realistic, complex 3D object creation. This latest update is faster and more reliable than ever.

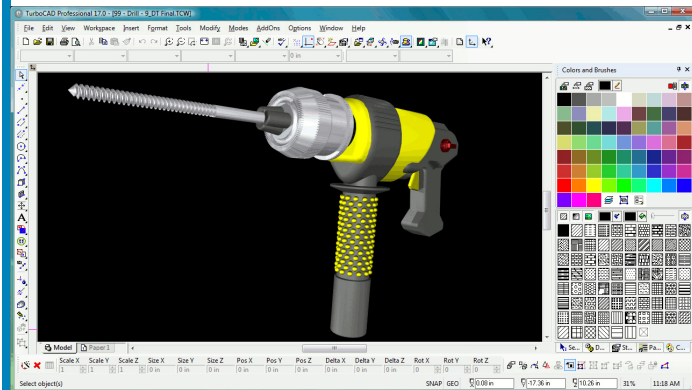
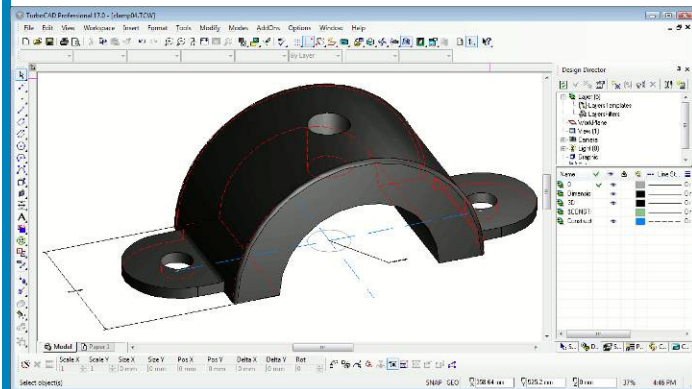
Information for objects include data crucial for engineers, such as Volume, Moment of Inertia, Centre of Gravity, Surface Area, and more.

Solid modelling editing and modification tools include:

- Several Rail, Sweep, and Revolve functions
- Facet and Edge modifiers
- Extrusions and Lofts of Compound Profiles
- Face-To-Face Lofting and Branch Lofting
- Sectioning, Slicing, and Boolean operations

TurboCAD Pro Platinum supports Profile Editing, whereby a 2D profile, once created, can be used to drive the creation of a 3D object. In this way the shape of the 3D object may continue to be driven by the 2D object which may itself be driven by Constraints and Driving Dimensions through the Calculator Palette.

TurboCAD Pro Platinum also maintains a history by enabling the Part Tree. With this feature you may return to any procedural step in your design and make modifications without losing subsequent work. Think of it as a bit like a selective UNDO.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Design Director

The TurboCAD® Pro Platinum Design Director is a palette that provides advanced controls for Layers, Layer Filters, creating Layer Sets, setting and saving Work Planes, controlling Named Views, and more. In particular, it streamlines work, enhancing productivity.

Layer management from the Design Director palette is fast and easy. It can remain always open, and provides numerous powerful tools for managing visibility, colour, line widths, line styles, and more.

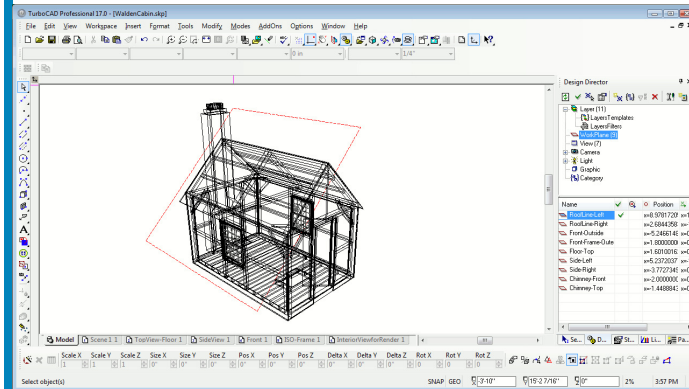
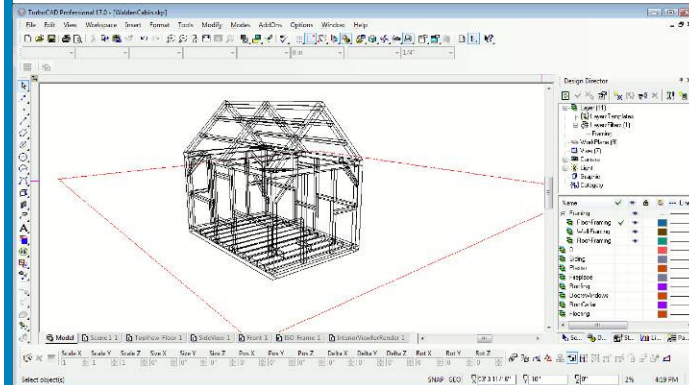
Beyond standard layer management, using Layer Filters allows for quickly selecting all layers with any number of criteria as wild cards. For example, one filter can turn on visibility of only layers with "2ndFloor" included, and another with "Wall" as part of the name. DoubleCAD also reads Layer Filters from other .DWG files so that working across applications is smooth. A powerful element of Layer Filters is that they work beyond file naming to include selecting layers by line style, pen width, print style, and more.

Layer Sets also can be created, and using either of these features lets you quickly change the visibility of large groups of layers with a single click. These filters and layer sets even include layers within Externally Referenced files, such as a .SKP, .DWG, or another .TCW file.

Applications such as TurboCAD and AutoCAD® require an understanding of work planes and how to easily switch between work planes as an import part in productivity. Now you can simply set the User Coordinate System (UCS) by selecting a facet, then save the UCS by name to a table in the Design Director, and from then on you can easily switch between different workplanes by selecting from a named list.

Another setting within the Design Director is control over the Named Views. Easily jump between views with a single click when the design director is open. Combine this with the power of setting the UCS and setting the 3D View by the Current UCS, and you can set perfectly aligned views to any workplane in the model.

These are just a few of the productivity advantages the Design Director palette provides.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Rendering

TurboCAD Pro Platinum provides several render modes in which to work, or present your designs. New to TurboCAD Pro Platinum 17 is technology from Redway3D® providing a wireframe render mode that utilises the power of supported on-board GPU or graphics boards. (Most boards and GPUs should be supported, see system requirements for more information.) This Redsdk render mode provides up to 60x speed improvements on CPU-based rendering when panning, zooming, and orbiting. It also provides smoother movement. It is most noticeable on larger models, whether 2D or 3D as long as they are viewed in wireframe mode. (For more on the Redsdk wireframe rendering mode see our System Requirements).

Render modes available include: Wireframe, GDI, Wireframe, Redsdk — GPU accelerated, Hidden Line — for clean views and annotation, Draft — a shaded mode without materials, but using colours, Quality — high quality photorealistic rendering, and Advanced — all options available including Render Styles

Some of the effects may also be combined, such as adding Hidden Line renders to a Photorealistic Rendering. It is a simple change of render options.

TurboCAD Pro Platinum includes the Lightworks v7.9 rendering engine from Lightwork Design. Because TurboCAD Pro Platinum pre-calculates the rendered geometry (all tessellation calculations are performed as you model), Photorealistic Rendering is significantly accelerated compared to similar ray-traced renderers.

Rendering – Artistic

TurboCAD Pro Platinum includes a Render Styles Manager with preset configurations for many types of renders, including artistic styles and photorealistic styles. The artistic styles are called Sketch Renders.

Among the Sketch Styles are:

Cartoon, Colour Wash, Colour Contour, Gray Contour, Hatch, Hand Drawn, Ink Print, Lines and Colour Fill, Lines and Shadow, Mosaic, Oil Painting, Rough Pencil, Soft Pencil, Stipple

By selecting the Advanced Render view, entering the camera properties, and selecting Sketch, each of the styles listed above are available with a single click.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



Rendering – Lighting

Lights are OpenGL based, are quick to add and use, but are more limited in their options than Luminances. Lights may be added with a click, and their properties adjusted in the Design Director, which also enables creation of light sets that can be turned on or off as a group.

Light types include:

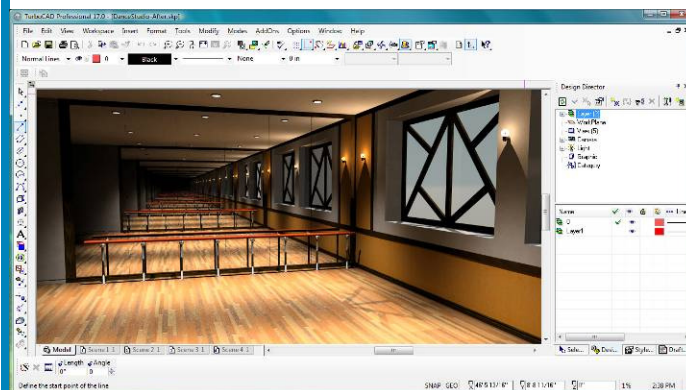
- Ambient
- Directional Light — has an origin and a direction, providing an infinite light that does not fade with distance
- Headlight — provides a Directional Light sourced at the camera source so that it is always illuminating from the user's vantage point
- Point — provides light equally from all directions
- Spot Light — provides a directional light emanating from a point and projecting in a cone
- Sky Light — a simple directional light source that simulates outdoor sunlight

Manage light properties including colour; intensity; fall-off; shadow softness; and more.

Luminances include advanced lighting properties that can be assigned to the whole model, or to specific objects within the model. Any number of lights may be combined, so that an Ambient luminance may be used, then augmented by other lights and luminances. Luminances include:

- Ambient — illuminates all surfaces equally
- Area & mdash simulates a luminous surface
- Area Goniometric — combines both area light and goniometric properties
- Area Sky — limited Sky light covering the light that passes through portals such as a window or door
- Distant — illuminates consistently, is directional and parallel
- Eye — sourced at the view point
- Goniometric — directed light defined by an .ies file (a text-based file) often provided by lighting manufacturers for their bulbs or fixtures
- Point — emanates from a single point in all directions
- Projector — projects a graphic image onto a solid object based on a raster image file, and which is often combined with environmental dust or fog to catch the beam as at the cinema
- Simple Environment — lights a scene based on an environmental map such as an HDR image, or even a .jpg or .png file
- Simple Sky — lights the model based on a uniformly bright hemispherical dome
- Sky — light that simulates a sky light providing soft and natural shadows and is modelled as a hemisphere of infinite radius and positioned above the centre of the model
- Spot — provides directional light that is constrained to a cone
- Sun — projects a spot light from a very distant point to simulate outdoor sunlighting

Create natural lighting for various conditions, artificial lighting to simulate any environment necessary, or mood lighting to emphasise elements of a design and provide an impact.



TurboCAD Pro Platinum 17 (Competitive Upgrade)



External References

All of the file formats that may be opened and imported, with the exception of bitmap images, may be used as an external reference (Xref). More than 15 of the 3D formats that may be used as an Xref also work with the Drafting Palette. This combination means that the model may be designed in one application, and the views, sections, elevations, and floorplans will be updated when the original model is changed. The designer may continue to work in SketchUp, AutoCAD, or SolidWorks®, for example, while the drafting continues in TurboCAD.

In version 17 Xref support has gone further than before, with complete control over layers in the Xref, even when controlled through the new Layer Filter function in the Design Director palette. Support for binding an Xref in the document has been added, so that the geometry is converted into a block within the drawing. Once an Xref has been bound it may then be exploded to create simple geometry.

Another new feature is support for the drawing variable \$VIZRETAIN which defines how changes will be applied when the Xref is reloaded. Drawings can be saved with Xrefs in .TCW, .2CD, or .DWG format, with those Xref properties maintained – although the .DWG will recognise only another .DWG as an Xref if opened in an application other than TurboCAD or DoubleCAD.

The addition of an XClip command makes working with external references much more fruitful. Simply define the boundaries of the region to define the portion of the Xref to incorporate in the drawing.

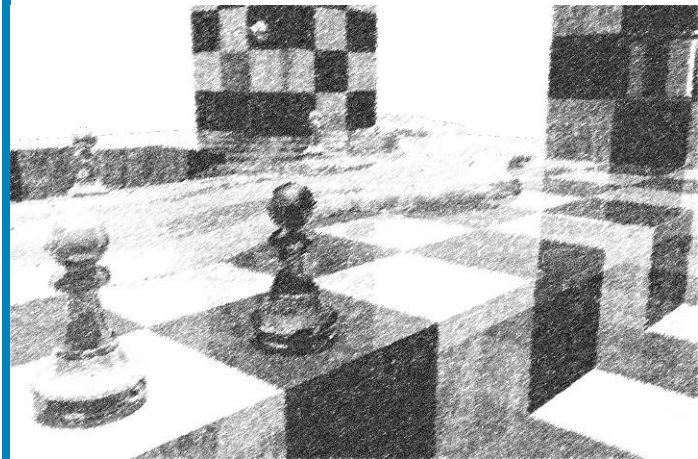
Software Developers' Kit

TurboCAD Pro Platinum includes a Software Developers' Kit (SDK) that provides the capabilities to extend the functionality of the application. This includes the ability to develop new tools, functions, and behaviours for use in TurboCAD Pro Platinum. Custom routines that are performed on a regular basis can now be automated. Specific tools for vertical applications can be created and added. Even commercial plug-in applications may be developed and sold.

TurboCAD Pro Platinum includes a number of special tools that were created as SDK examples. They can be found under the Add-Ons menu.

Documentation for the SDK has been updated. It includes support and samples of functions for the following environments:

- VB Script
- VB6
- VB.net 2008
- Visual C++
- C# 2008
- and Delphi



TurboCAD Pro Platinum 17 (Competitive Upgrade)



File Interoperability

TurboCAD® Pro Platinum includes support for dozens of file formats, making it an excellent part of almost all the most common workflows between partners, contractors, and others. Open, import, or embed up to 35 file formats and export up to 28, including .DWG, .DXF, .SKP (Google SketchUp™), .3DM (Rhinoceros®), .3DS (Autodesk® 3ds Max®), IGES, STEP, .OBJ, COLLADA (.DAE), and .2CD (DoubleCAD™); vector formats include .SVG and a newly updated .EPS; raster formats include .BMP, .GIF, .JPG, .PNG, .TIF, and more. TurboCAD reads and writes .DWG and .DXF files from R14 through 2010 (newly supported in TurboCAD 17) including AutoCAD® Architecture extensions.

This broad range of file formats helps to maintain your intellectual property investment supporting older files, models, and parts. It also makes it easy to access parts from vendors or posted on model exchange sites like the Google™ 3D Warehouse.

In version 17, TurboCAD has improved the .DWG filter as well as the COLLADA (.DAE) export. When saving to COLLADA there is a Setup option to Save Blocks and Layers. If the application that imports the .DAE file supports COLLADA Instancing (currently SketchUp v7.1 does), then block definitions will be maintained. If exporting blocks is selected, then the exporter first turns the entire model into a block, which will also convert all architectural objects into blocks as well. This makes it a great way to bring AutoCAD® Architecture based .DWG files into SketchUp, or to kick-start any SketchUp project by creating the basic architectural geometry quickly and precisely by using TurboCAD parametric architectural tools, such as the walls, windows, doors, and stairs.

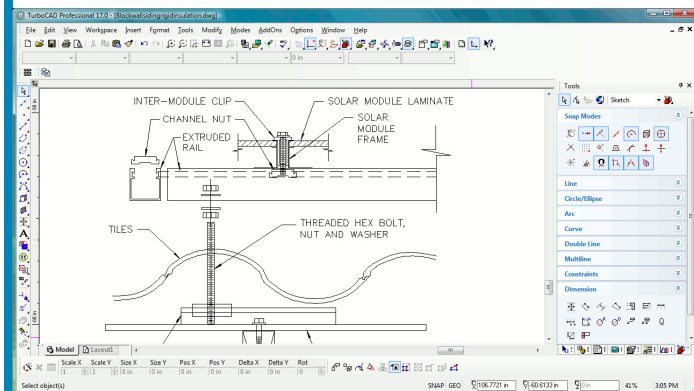
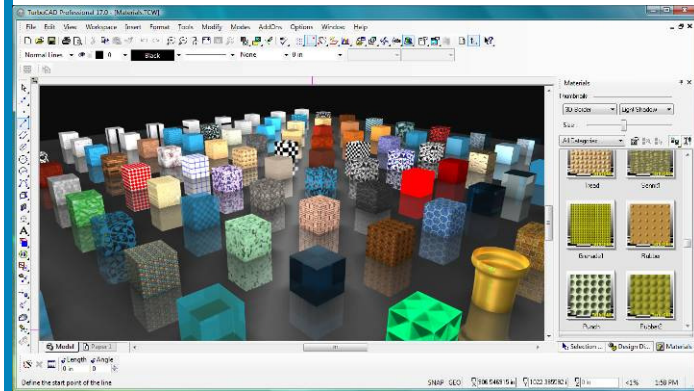
Batch File Converter

TurboCAD Pro Platinum also includes a powerful Batch File Converter utility. With this utility you may select files of one type and convert them to any of the file formats we support for saving. This includes converting a dozen .DWG files to .png, or converting .2CD to .DXF 2003 format files – all in one step.

Database Connect

TurboCAD supports setting up a data link to a data source (ODBC database, Excel, CSV, SQL, Access, Oracle, and more) on either your local machine or company network. Since the data source remains outside of TurboCAD, the drawing file size is not affected which maintains performance.

Reference data in a TurboCAD table as well as data associated to objects. The CAD file automatically updates with changes to the external database. This improves bill of material handling, real time pricing, and more.



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What's New in Version 17?

Improved speed & productivity. Fast ROI from immediate productivity gains. Improved tools with better usability, and new GPU-accelerated wireframe renders.

Fast GPU-Accelerated wireframe rendering. Render up to 60 times faster! The speed increases in wireframe are dramatically better (requires a supported GPU-based graphics card).

Smoother zooming, panning, and orbiting. We've included technology from Redway3D® that provides a GPU-accelerated 2D and wireframe display mode (Redsdk). Your larger files will pan and scroll smoothly. Zooming in and out is dramatically faster on larger files.

Build bigger models. With the speed increases offered by the GPU-accelerated wireframe mode, TurboCAD Pro Platinum 17 now supports working with larger models than previous versions.

Improved tools and better stability. Many improvements to existing features. We listened to our customers and have focused as much on making existing functionality work better as we did on adding new powerful features.

Easier, and more powerful layer management. Design Director simplifies layer management, and new layer filter support (.DWG compatible) lets you manage large, complex drawings with ease.

Better user experience. Fewer clicks than before. Double-click on text, or M-text to enter edit mode. Edit blocks and groups in place.

Less setup to do. New and improved templates set tool default values to more commonly used settings. Paper spaces can be copied with all settings from one drawing to another.

Easily create 2D vector drawings from 3D models. Viewports can be exploded creating flat 2D views.

Powerful Tools. Let your creativity flow, and draw what before you could only imagine. Improved mechanical and architectural tools, better parametric tools, and five new solid pattern tools.

Rapidly create parametric patterns from ACIS solids. New possibilities are available with 3D patterns. Five new pattern tools allow for 3D shapes that couldn't easily be drawn before. These include patterns applied to spheres and cylinders, radial patterns, 3D arrays, or patterns along a curve.

Rapidly design mechanical parts with repetitive structures. Arrayed patterns such as ventilation holes, keypad designs, and more can be designed and merged with other objects.

Architectural design that is more robust than ever. Create any style of door or window easily. AutoCAD Architecture (ACA) compatible Door and Window Muntins expand your options for parametrically creating the exact object types for your design.



Works with
Windows® 7

TurboCAD Pro Platinum 17 (Competitive Upgrade)

What's New in Version 17?

Create precise shapes for your walls. Now with both custom top and bottom wall modifiers.

Floor plan design is faster than ever before. The improved wall tool allows definition of intelligent relationships between walls to link or not link, clean or remain separate, in any combination.

New and improved power tools add specificity. Geometric Tolerances enable precision in communication. The completely rewritten tolerances tool provides specific instructions on production tolerances and is .DWG compatible.

Parametric Parts can be easily created. Drawn parts can be made into reusable parametric parts with a more robust part wizard.

Scripted Parametric Parts have more power. Additional commands and mathematical functions allow for more designs to be parametrically created via script.

Better communication with multi-leaders. One callout for multiple parts provides for clear communication.

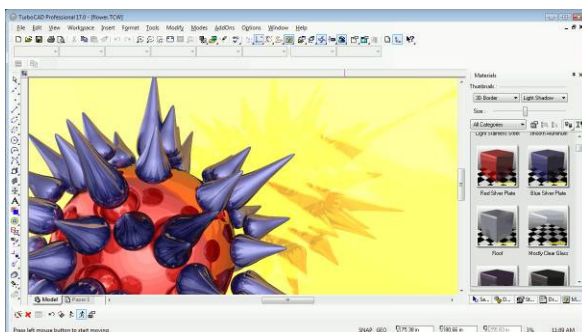
Greater Interoperability. Better data exchange, and protection of your IP. Improved file filters, new versions, and more capabilities.

New versions let you communicate and collaborate with others. Work with the latest AutoCAD® files. We've added support for .DWG 2010 file format so that you can collaborate with people using even the latest Autodesk® software versions.

Better SketchUp™ workflow. Our .SKP import is good, the export has been improved, and now we have added COLLADA (.DAE) export support, and include *instances* so that blocks and architectural objects will be read by SketchUp™ as components. So now you can use TurboCAD as a great way to translate dozens of file formats, including .DWG with ACA extensions, and get them into SketchUp.

Powerful ways to integrate your designs. More powerful Xrefs. We've added Xref clipping for dozens of file formats. We've also allowed binding of Xrefs, which can then be exploded and edited. Xref layers are easier to manage, even with layer filters.

Keep the intelligence of SketchUp Dynamic Components. We've included a development feature that is still in Beta mode: a .SKP import option (off by default) that will convert some dynamic components into TurboCAD Parametric Parts.



System Requirements

Minimum:

Pentium® IV Processor,
Microsoft® Windows® XP with
512 MB RAM, Windows Vista or
Windows 7 with 1024 MB RAM,
300 MB of free hard disk space,
Super VGA (1024 x768) display,
High Colour (16 bit) graphics
support, 4X DVD-ROM drive

Recommended:

Your experience with TurboCAD will be greatly enhanced with a newer generation, higher speed CPU, 2-4 GB RAM, and larger display resolution and graphics support. An optional GPU-accelerated wireframe render mode (based on Redsdk technology from Redway3D®) requires a supported graphic processing unit (either a chip on the board, or on a video card). The latest video drivers are typically required. Newer boards with more power and VRAM generally provide greater performance. To determine if your video card or personal computer uses is likely compatible refer to your System Specifications, or contact the manufacturer of your video card and see if it uses one of the following video chipsets: NVIDIA chipsets, GeForce 8 Series, GeForce 9 Series, GeForce GTX Series, AMD ATI chipsets, R600 family, R700 family, INTEL chipsets GMA 4000 family, Windows Vista and Windows 7 Aero display mode causes interference with the Redsdk GPU-accelerated display mode. If you select this option TurboCAD will turn Aero mode off for that session. It affects only the transparency of the application window border.

Works with
Windows® 7