

TurboCAD v18 New and Improved Features						
Feature	Description	New, Improved	Pro Platinum	Pro Basic	Deluxe	Designer
Drafting/Detailing:						
2D Constraints	Updated D-Cubed v57 DCM engine integrated into TurboCAD.	Improved	✓	✓	✓	✓
Blocks	New button "Sync block attributes" has been added to the Block Palette. At any time, you can select any block(s) and press the Sync button to reset attributes in all block(s) instances. The attribute's value will be stored if the attribute definition with its corresponding tag exists in the block and all attribute properties will be reset from the block attribute definition.	New	✓	✓	✓	✓
Construction Lines	Now use Construction Lines as cutting edge for Trim Tool	Improved	✓	✓	✓	✓
Construction Lines	Edit tool now works with Construction Lines and Rays allowing you to rotate and reposition.	Improved	✓	✓	✓	✓
Construction Lines	Now use the Split tool on Construction Lines to create Rays.	Improved	✓	✓	✓	✓
Copy in Place Tool	Works on all 2D and 3D objects	New	✓	✓	✓	✓
Drafting Palette	Distinction between 'Surface' and 'ACIS Body' removed - simplified operation. New check box 'Lock When Inactive' of Drafting Palette properties window, adds the ability to disable updates of drafting objects when Drafting Palette is not visible on screen. This option turned ON excludes all possible but not necessary drafting recalculations on each step when user changes the model priorities and/or working with another palette. If the model is complex, this option can save a lot of time in redrawing the model.	Improved	✓	✓	✓	✓
Fillet (2D) tool	New ability to fillet bulges (polyline comprised of line and arc segment). Plus new ability of re-filleting previously filleted segments.	Improved	✓	✓	✓	✓
Layers	Layers are more AutoCAD compatible, including having a new layers dialog based upon 'Design Center'.	Improved	✓	✓	✓	✓
Mirror tool	Text or multiline text can be mirrored. Block attributes work with Mirror tool in the same fashion as AutoCAD. Specifically, the objects are not flipped if the drawing variable \$MIRRTXT is 0, and are flipped otherwise. The drawing variable is set in the TCEXplorer palette, under Drawing Defaults	Improved	✓	✓	✓	✓
Measurement	Show measurement history (previous distance, area, etc.)	Improved	✓	✓	✓	✓
Multi-select Drawings	Ability to open multiple drawings with Open command.	New	✓	✓	✓	✓
Ray Tools	New ability to create Rays. Rays can be created from scratch or by using the Split tool on an existing Construction Liner.	New	✓	✓	✓	✓
Stretch tool	Improved Rubber-banding of objects. Improved visualization for more precise control of stretched objects	Improved	✓	✓	✓	✓
Text	Allow Enter key to have text wrap to next line; pick position on screen to start new line.	Improved	✓	✓	✓	✓
Trim tool	Now tool works with Multilines	Improved	✓	✓	✓	✓
3D Modeling:						
3D Fillet	New tool for filleting 3D polylines	New	✓	✓	✓	✓
Graphic on Path	New tool located on Modify/Assemble menu, allows you to place a selected graphic (or graphics) at a clicked point on a path perpendicular to path at point click. Placement of graphic is defined by the matrix of the graphic and its reference point.	New	✓	✓	✓	✓
Multi-Add Tool	New tool that allows user to select by fencing multiple objects to do Boolean adds	New	✓	✓	✓	✓
Simple Extrude	Ability to use a Text object as a Compound Profile with the Simple Extrude tool.	Improved	✓	✓	✓	✓
Sweep tool	Ability to now sweep along any object's Edge or along a Loop (a closure of edges on a 3D surface).	Improved	✓	✓	✓	✓
Sweep tool	Sweep tool now works with 3D curves and the new 3D Fillet tool	Improved	✓	✓	✓	✓
Architectural						
Dimensions	Dynamic dimensions are displayed when doors/windows are inserted (showing distance from door/window to wall ends. Plus, corresponding fields are added to the Inspector Bar	Improved	✓	✓	✓	✓
House Wizard	Time-saving tool used to create a preliminary room-by-room design of a home.	New	✓	✓	✓	✓
Doors and Windows	Ability to attach a block(s) to a selected door or window style. Blocks are added via the Style Manager.	Improved	✓	✓	✓	✓
Roof	New property of Roofs, Roof Components, which allows for application of different Materials to each component of the roof. Components are defined as Top, Bottom, Gable and Fascia	Improved	✓	✓	✓	✓
Walls	Automatic top wall modification when changing roof slope. For instance for a Gable Roof (90 degree Roof Slope)user has to use the Wall Modifier to close the space (freeze) left by the gap created with this move	New	✓	✓	✓	✓
Interoperability, Programmability:						
DWG/DXF Filters	Continued enhancements and bug fixes to 2010/2011 filters.	Improved	✓	✓	✓	✓

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Network License Support	The network-enabled SNAK allows a company to purchase a license for an arbitrary number of copies of TurboCAD. The number of copies is embedded into the activation code for the software, so it must be specified when the activation code is created. Each user installs using the same SNAK. As each copy of TurboCAD starts up, it checks the network to see how many other copies of the program are running. As long as that number is less than the licensed number, the new copy will be allowed to run. If the number of running copies is the same as the licensed number, no more copies will be allowed to run until one of the other copies shuts down.	New	✓	✓	✓	✓
PDF Underlay	Ability to import (raster)PDF and use it as a tracing layer with snaps	New	✓	✓	✓	✓
Ruby Scripting Language	New scripting language compatible with SketchUp Ruby scripts. Use the Ruby Scripting Console for writing program scripts suitable for both mechanical and architectural design	New	✓	✓	✓	✓
SDK	Updated with new samples and .NET support.	Improved	✓	✓	✓	✓
SKP (Google SketchUp) Filter	SketchUp v8 Read and Write support added	Improved	✓	✓	✓	✓
Mechanical:						
ACIS® multi-thread support	Use multi threading abilities to perform ACIS operations with two and more bodies. (like Boolean add, subtract, face to face loft, extrude to face, imprint etc.) so these operations are done much faster now.	Improved	✓	✓	✓	✓
Assembly tools	New assembly modes -Ability to move bodies along an axis by definition of two faces and the distance between them; ability to rotate a body over the axis by definition of two faces to coincide with their normals; rotation of bodies over the axis by definition two additional axes which must be coincidental. These 3 new modes of Assembly By Axis tool makes assembling much faster. Also, new ability to work with Xrefs and insertions. Assembly by Facet was moved into Assembly By Tangents tool as new mode.	New	✓	✓	✓	✓
Bend/Unbend tool	More accurate bending and unbending of objects.	Improved	✓	✓	✓	✓
Imprint tools	Ability to use a Text object as a Compound Profile with the Imprint tool.	Improved	✓	✓	✓	✓
Pattern tools	1 additional Pattern tool have been added - Pattern on Polyline	New	✓	✓	✓	✓
Pattern tools	Pattern tie -pattern can now be associative with the object with which it was set up. Also, placement of objects along a curve on the surface will be normal to the surface.	Improved	✓	✓	✓	✓
Rendering and Visualization:						
LightWorks	Updated LightWorks 8.3 engine integrated into TurboCAD. This will give ability to new progressive, ray-traced rendering, including early preview of the progressive render. Also improved anti-aliasing for geometry and materials. Progressive rendering enables improved workflow by generating a fast approximation of the image, allowing early preview of lighting settings of the render. Multi-threading support (Pro versions only).	Improved	✓	✓	✓	✓
Render Geometry	A new set of properties was added to 3D Properties page to speed up rendering and have more efficient memory use. The section is called 'Render Geometry', and the properties that are there work only in render modes and do not affect wireframe modes.	New	✓	✓	✓	✓
UI/Performance:						
Bi-Directional Selector	Left and Right Drag selection of objects with mouse, comparable to AutoCAD and DoubleCAD. Left drag selects all objects contained completely within the selection fence; while Right drag selects any object partially enclosed within the selection fence.	New	✓	✓	✓	✓
Database	New options to Database tool are Extract Attributes, including Blocks and Xrefs, and Show Visible Properties only.	Improved	✓	✓	✓	✓
Drawing Performance	Redway speed improvement now implemented in both Hidden Line and Draft Rendering Modes	Improved	✓	✓	✓	✓
Multi-threading support	ACIS operations that include two and more objects (i.e. Boolean operations, face to face lofting, extrude to face, imprint, etc.) now support multi-threading, so these operations execute much faster now	New	✓	✓	✓	✓
Purge	New tool to remove unused objects from Model Space and Paper Space	New	✓	✓	✓	✓
Redsdk	Ability to customize the auto regeneration mode for arcs, brush styles, construction lines, curves, line styles, and any other black or white colored objects supported by Redway.	Improved	✓	✓	✓	✓
Redsdk	Support of the visual settings for the selection highlight in Redsdk mode.	Improved	✓	✓	✓	✓
Redsdk	Support of Hidden Line and Draft Render modes with Redsdk engine	Improved	✓	✓	✓	✓