

Civil Design Suite for TurboCAD 2026

Civil Design Suite adds surface modelling and site tools to TurboCAD. It turns survey points and lines into a terrain surface called a **TIN** (triangulated irregular network). From the TIN you can draw contours, profiles and cross-sections, check slopes and water flow, and build a TurboCAD surface or solid. It is a **plug-in that runs inside TurboCAD**.

1. Check you can run it

- **TurboCAD 2026 64-bit (2026.1)**, Deluxe, Professional or Platinum. The same installer (Civil Design Suite x64, version 6.0.0) also installs into TurboCAD 2021–2025 64-bit.
- The **Microsoft Visual C++ 2015–2019 (x64)** runtime. The installer offers to install it. Allow it.
- Your **Civil Design Suite license key** from your order. It starts with the letters **CDP**.

2. Install

1. Close TurboCAD. If you installed this plug-in before, uninstall it first in **Windows Settings** ► **Apps** ► **Installed apps** (your license stays activated).
2. Run the installer, `CivilDesignSuite_TurboCAD_2026.exe`.
3. If Windows asks to install the Visual C++ runtime, allow it.
4. If the installer asks which TurboCAD to use, pick **TurboCAD 2026**.
5. **Enter your license key in the installer's activation step.** Copy and paste it from your order email.
6. Finish the installer, then start TurboCAD.

The plug-in's tools go into your TurboCAD folder. The **Import Points** program, the full **Surface Modeling Users Guide** and a set of **sample data** go into `C:\Program Files\Dynamic Chaos Incorporated\Surface Modeling`.

3. Find it inside TurboCAD

Open a drawing. The ribbon now has a **Civil Design Suite** tab. Its tools, left to right:

Tool	What it does
Create Triangles	Builds a TIN from the selected points, lines or 3D data. Most other tools need a TIN.
Select Triangles	Makes the selected triangles the active surface.
Switch Diagonal	Flips the shared edge of two triangles, to correct the surface.
Create Surface	Turns the TIN into a TurboCAD surface.
Cross Section / Profiles	Draw cross-sections and a ground profile along a selected polyline.
Create Contours	Draws major and minor contour lines from the TIN.
Map Point to Surface / Slope at point / Create Flow line	Drop points onto the surface, read the slope at a point, trace a water-flow line.

Tool	What it does
Create image map	Drapes a colour image map over the surface.
Settings	Defaults for points, profiles, cross-sections, slopes and flow lines.
Create Solid	Creates a 3D solid from the triangles.
Import Points	Imports survey points from a text file.

Tools that need a TIN stay greyed out until you have one.

4. Your first surface: points to contours and a profile

New to the tools? Unzip `SampleData.zip` from the Surface Modeling folder (section 2). Its **Text Files** folder has point files for step 1, and its other folders have DXF, DEM, SDTS, E00 and Shape samples.

1. **Bring in your survey points.** Click **Import Points** and load your point text file.
2. **Select the data:** the points, plus any lines. A line in the selection is used as a break line, so its segments become triangle edges.
3. Click **Create Triangles**. In **Surface Model Properties**, enter a **Name** and **Layer**, leave **Arc Error** as it is, and click **OK**. The TIN is now active.
4. Click **Create Contours**. In **Contour Settings**, choose **Divide Range** and set **Number of levels**, or choose **From Datum** and set the **Interval**. Under **Graphics To Create**, leave **Segments** selected, check the layer names for major and minor contours, and click **Ok**.
5. Draw a polyline across the surface where you want a profile, and select it.
6. Click **Profiles**. In the **Profiles** dialog, set the **Station offset distance**, keep **Create geometry** checked, pick a **Layer** and click **OK**. Check **Plan View** for a plan-view version, or **Copy Data to Clipboard** to paste a **Graph** or a **Station Elevation Table** into another program.
7. Optional: click **Create Surface** to turn the TIN into a TurboCAD surface. In **Surface Type**, choose **Triangles** or **Triangulated Grid**.

Five things worth knowing early

A TIN comes first	Contours, profiles, cross-sections, slopes and flow lines all work on the active TIN. With several TINs in a drawing, use Select Triangles to choose the active one.
Fix a bad triangle	Long, thin triangles along a ridge or valley usually mean the wrong diagonal. Fix them with Switch Diagonal .
Contour accuracy	In Contour Settings , a smaller Length under Segments gives smoother contours. A larger value is faster but less exact.
GIS data	The plug-in adds BIL, DEM, E00, SDTS, ESRI Shape and LandXML to TurboCAD's file types. Open them with File ► Open and pick the type under Files of type .
More tools	Road surfaces, side slopes, cutting a surface with a polygon, cut/fill volumes and contour labels are covered in the full guide.

If something goes wrong

"The installer will not continue." It needs TurboCAD 2021–2026 64-bit already installed. Install TurboCAD first, then run the installer again.

"My key is invalid." A Civil Design Suite key starts with **CDP**. Paste the whole key with no spaces. If it still fails, contact support with your order number.

"A tool is greyed out or does nothing." Most tools need a TIN, and **Profiles** and **Cross Section** also need a polyline selected. Run **Create Triangles** first.

Where to go next

- **The full Surface Modeling Users Guide** (`Surface Modeling Users Guide.chm` in the Surface Modeling folder from section 2) covers TIN editing, break lines, solids, slope arrows, flow lines, image maps, road surfaces, side slopes, road corridors and cross-sections, cutting with a polygon, volumes, and horizontal and vertical curves. `ImportPoints.chm` in the same folder explains the Import Points program.
- **Support:** email support@imsidesign.com with your **order number** and the **exact text** of any error message.