Tekla Structures 2018
Get started with Tekla Structures

March 2018

Contents

1 Tekla Structures configurations

Tekla Structures is available in different configurations that provide specialized sets of functionalities to suit the needs of the construction industry. Tekla Structures can be used to cover the entire building process from conceptual design to fabrication, erection and construction management.

Special student and developer configurations of Tekla Structures are available. Visit the main Tekla website for more information on student configurations for home and classroom use. Visit the Tekla Developer Center for more information on the Tekla Partners program.

The help covers the content of the Full configuration. Note that the configuration that you are using may not contain all the described features.

Feature map

The features included in different configurations are:

Configuration / Feature	Full	Steel Detailing	Precast Concrete Detailing	Rebar Detailing	Engineering	Construction Modeling	Primary	Production Planner - Concrete	Project Viewer	Drafter
Viewing	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Grids, construction lines, points	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Building elements	✔	✔	✔	✔	✔	✔	✔1			
Assemblies	✔	✔	✔	✔	✔	✔	✔			
Precast cast units	✔		✔			✔	✔			
Pour modeling	✔2		✔2	✔2	✔2	✔2	✔2			

Configuration Feature	Full	Steel Detailing	Precast Concrete Detailing	Rebar Detailing	Engineering	Construction Modeling	Primary	Production Planner - Concrete	Project Viewer	Drafter
Pour viewing	✔2	✔2	✔2	✔2	✔2	✔2	✔2	✔2	✔2	✔2
Cast in Place cast units	✔		✔	✔		✔	✔			
Numbering	✔	✔6	✔	✔3			✔			
Assigning control numbers	✔	✔	✔				✔			
Conceptual components				✔	✔	✔				
Steel components	✔	✔					✔			
Concrete components	✔		✔	✔5			✔			
Lotting	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Sequencer	✔	✔	✔	✔	✔	✔	✔	✔	✔	
User-defined attributes	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Project status visualization (4D)	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Multi-user	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Locking	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Clash check manager	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Task manager	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Organizer	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔4
Printing and publishing										
Printing and plotting	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Publish models	✔	✔	✔	✔	✔	✔	✔	✔	✔	
External editors										
Symbol Editor	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Template Editor	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Drawings, plans and reports										

Configuration Feature	Full	Steel Detailing	Precast Concrete Detailing	Rebar Detailing	Engineering	Construction Modeling	Primary	Production Planner - Concrete	Project Viewer	Drafter
Creating general arrangement drawings (plan, section, erection)	✔	✔	✔	✔	✔	✔	✔			✔
Modifying general arrangement drawings (plan, section, erection)	✔	✔	✔	✔	✔	✔	✔			✔
Creating steel fabrication drawings (single-part drawings)	✔	✔					✔			✔
Modifying steel fabrication drawings (single-part drawings)	✔	✔					✔			✔
Creating steel fabrication drawings (assembly drawings)	✔	✔					✔			✔
Modifying steel fabrication drawings (assembly drawings)	✔	✔					✔			✔
Creating precast concrete drawings (cast unit drawings)	✔		✔				✔			✔
Modifying precast concrete drawings (cast unit drawings)	✔		✔				✔			✔
Creating cast-in-place concrete	✔		✔	✔			✔			✔

Configuration Feature	Full	Steel Detailing	Precast Concrete Detailing	Rebar Detailing	Engineering	Construction Modeling	Primary	Production Planner - Concrete	Project Viewer	Drafter
drawings (cast unit drawings)										
Modifying cast-in-place concrete drawings (cast unit drawings)	✔		✔	✔			✔			✔
Anchor bolt plans	✔	✔	✔	✔	✔	✔	✔			✔
Reports	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Interoperability										
Export CNC, DSTV	✔	✔					✔		✔	
Steel MIS links	✔	✔				✔	✔		✔	
Import 2D and 3D DWG, DXF	✔	✔	✔	✔	✔	✔	✔			
Export 3D DWG, DXF, DGN	✔	✔	✔	✔	✔	✔	✔	✔	✔	
Export drawings (DXF, DWG)	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Import and export CAD and FEM packages	✔	✔	✔	✔	✔	✔	✔		✔	
IFC 2x3 export	✔	✔	✔	✔	✔	✔	✔	✔	✔	
CIS/2 import and export	✔	✔	✔	✔	✔	✔	✔		✔	
EliPlan import and export	✔		✔				✔	✔		
BVBS export	✔		✔	✔			✔	✔		
HMS export	✔		✔				✔	✔		
Unitechnik export	✔		✔				✔	✔		
View reference models	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔
Attach reference models (DXF,	✔	✔	✔	✔	✔	✔	✔	✔	✔	

Configuration Feature	Full	Steel Detailing	Precast Concrete Detailing	Rebar Detailing	Engineering	Construction Modeling	Primary	Production Planner - Concrete	Project Viewer	Drafter
DWG, DGN, 3DD, IFC, XML, PDF)										
Analyzing										
Create analysis model	✔	✔	✔	✔	✔		✔			
Analysis and Design interface	✔	✔	✔	✔	✔		✔			
Loads	✔	✔	✔	✔	✔		✔			
Open API										
Open API capabilities	✔	✔	✔	✔	✔	✔	✔	✔	✔	✔4

✔1 = Limitation: 2500 parts, 5000 reinforcing bars + reinforcing bar groups, unlimited number of bolts.

✔2 = Pours are enabled by an advanced option.

✔3 = Numbering is limited to cast-in-place parts, cast units and reinforcing bars.

✔4 = View only.

✔5 = Only Cast in Place concrete components.

✔6 = Numbering is limited to steel parts and cast units.

2 Install and license Tekla Structures

To use Tekla Structures, you need to have a license to use the product, the Tekla Structures installed on your computer and in most cases also a Trimble-supplied or customized Tekla Structures environment that contains many different settings and tools, such as profiles, templates and components.

Click to expand the section relevant to you and follow the links in the text for detailed instructions.

Tekla Structures licenses

Tekla Structures cannot be used without a valid license.

- The full commercial versions of Tekla Structures are licensed by activating an entitlement certificate on your license server. To get an entitlement certificate, you need to buy a license. The entitlement certificate is sent in an email to the contact person your organization has named when purchasing the license. If you have purchased a license but have not received your entitlement, please contact your local Tekla sales office or reseller.

- If you wish to learn how to use Tekla Structures, download and install the Tekla Structures learning edition, which comes with a free license that is connected to your user account at the Tekla Campus site. Note that any model you save in the learning edition cannot be opened in the full commercial version of Tekla Structures.

If someone manages Tekla Structures for you

- You need an account to access Tekla online services. If your administrator has not invited you to your organization, ask to join so that you have access to all Tekla online services:

- In most cases, your Tekla Structures administrator will prepare a customized installation package for you or install the software for you. Ask your administrator for further instructions.

- To be able to use Tekla Structures outside the office, you may need to know how to borrow a license for offline use:

  Borrowing Tekla Structures licenses for offline use

If you are a Tekla Structures learning (Tekla Campus) user

- Create your Trimble Identity (page 12) and login to the Tekla Campus site to access Tekla Campus and activate your learning license.

- Download the installation package for Tekla Structures and at least one of the Tekla Structures environments from the Tekla Campus site.

  When you scroll down the page, there is also a video of how to install the Tekla Structures Learning edition. Tekla Campus user account acts as license key for Tekla Structures Learning configuration: no entitlement certificate is needed.

- Start your learning using the videos and examples available at the Tekla Campus site.

If you manage your own installation of Tekla Structures

- Create your Trimble Identity (page 12) to access all Tekla online services.

- Download the installation package for Tekla Structures, the license server and at least one of the Tekla Structures environments from Tekla Downloads.

- Install the license server software on your computer and activate your license.

  1. Install Tekla Structures license server (page 22)

  2. Activate Tekla Structures licenses (page 23)

  3. Save your Tekla Structures license entitlement certificate (page 22)

  4. Connect Tekla Structures to the license server (page 24)

- Install the Tekla Structures software and at least one of the Tekla Structures environments on your computer:

  Tekla Structures installation (page 12)

If you manage Tekla Structures for other users

The general workflow for a new Tekla Structures deployment can go for example like this:

- Install the Tekla Structures license server.

- Install Tekla Structures for your own use and start customizing it for your organization.

- Deploy Tekla Structures to the users in your organization.

- Continue developing your organization's customizations and redeploy as needed.

Start your journey in Tekla Structures installation for administrators, which introduces you to all of the topics listed above.

2.1 Create your Trimble Identity

You need a Trimble Identity to download Tekla Structures.

Some Tekla online services require that your account is connected to an organization that has a valid maintenance contract with Trimble. If you are the named contact at your organization, Trimble automatically creates an account for you or connects your existing Trimble Identity to your organization. The named contact has administrator status and must add other users into the organization to enable their access to content and services that require a valid maintenance contract.

NOTE Membership in your organization also affects users' access to your organization's cloud-stored data, such as Tekla Model Sharing models.

If you are the named contact, Trimble sends you an email with an invitation to accept membership in the organization group and complete the profile information if you did not have an existing Trimble Identity. You are then responsible for managing the organization group together with other administrators that you assign. See Managing Trimble Identities and Tekla Model Sharing licenses for more information.

If you are not the named contact, you receive an email invitation to join the organization group when an administrator from your own organization invites you. You can also create a new Trimble Identity here.

If you are having problems using your Trimble Identity in Tekla online services, see the troubleshooting information on this page.

2.2 Tekla Structures installation

Tekla Structures installation packages are available for download in Tekla Downloads. In addition to installing Tekla Structures, you need to install and set up a Tekla Structures license server and activate your Tekla Structures license.

Tekla Structures software and environments are available as separate installation packages. The software installation package always contains a blank project (page 30) environment that includes generic content. Other Tekla Structures environments are available as separate installation files.

Environments are region or company-specific settings and information that are predefined in Tekla Structures, or that are defined by the user.

You can install the Tekla Structures license server on the same computer as the Tekla Structures software and environments. The license server can also be installed on a separate server computer if there are many Tekla Structures users and many Tekla Structures licenses in the company. The licenses you can use and their activation IDs are listed in an entitlement certificate you receive via e-mail.

Tekla Structures uses the FlexNet Publisher License Management (FlexNet) licensing system. The FlexNet licensing system is not used with Tekla Structures Learning Edition, and FlexNet licensing instructions do not apply. For more information about Tekla Structures Learning Edition, see Tekla Campus.

Centralized installation

Tekla Structures can be installed across the company network using centralized installation. Installing Tekla Structures centrally across the company network saves time in a large company as the installation is done silently in the background for each user.

Using Tekla Structures with application and desktop virtualization

Tekla Structures can be used with the Citrix application and desktop virtualization. Tekla Structures is installed on a server or on a virtual machine running on the server. Using Tekla Structures from the server ensures that all users in a project are using the same project environment set-up.

Version updates: Service packs

Service packs are version updates that can contain new features, and improvements and fixes to existing features.

Service packs are available in Tekla Downloads for all customers with a valid maintenance agreement. We recommend that all users install the latest service pack.

Borrowing licenses with License Borrow Tool

If you want to work offline and do not have the Tekla Structures license server on your computer, you can borrow an activated license from the license server (page 25) using the Tekla Structures License Borrow Tool. The borrowed license is transferred from the license server to your computer. It is not available for other users during the borrowing. The installer for Tekla Structures License Borrow Tool is available in Tekla Downloads.

Collaboration within a Tekla Structures model

Multi-user mode allows several users to access the same model simultaneously. Multi-user mode is suitable for local teams with projects where the team members do not necessarily have an Internet connection. In the multi-user mode a server computer runs the multi-user server, a file server

computer contains the multi-user master model and client computers run Tekla Structures. The Tekla Structures multi-user server installer is available in Tekla Downloads.

Using the multi-user server requires your company to have more than one Tekla Structures license.

Tekla Model Sharing also allows several users to access the same model simultaneously. With Tekla Model Sharing a global team can work efficiently within one model regardless of the team location and time zone. The model data is shared and synchronized over the Internet, and stored to a cloud-based Tekla Model Sharing service. It is also possible to work offline. Tekla Model Sharing requires a license.

Extensions

Extensions are applications that have been made using the Tekla Open API or custom components. Extensions are not part of the Tekla Structures product release. Extensions for Tekla Structures are available in Tekla Warehouse.

You can import the Tekla Structures extensions that have the `.tsep` (Tekla Structures Extension Package) file extension to the **Applications & components** catalog in Tekla Structures. The extensions are installed when you restart Tekla Structures. Tekla Structures extensions that have the `.msi` file extension have to be installed separately by running the installation file.

Tekla User Assistance

Tekla User Assistance collects all help and support material to one place. By default, all help content is online. You can access Tekla Structures help material in Tekla User Assistance by pressing the F1 button in Tekla Structures. You can also use the help offline. Offline help installation packages are available in Tekla Downloads.

See also

Tekla Structures installation prerequisites

Installing Tekla Structures requires one of the following operating systems: Windows 10, Windows 8.1, or Windows 7 SP1.

The Tekla Structures installer is available as a 64-bit version.

Tekla Structures needs the following redistributable packages that are automatically installed during the Tekla Structures software installation if they, or newer versions of the packages, do not exist on your computer:

• Microsoft .NET Framework 4.5.1

- Microsoft Visual C++ 2010 Redistributable (x64) 10.0.40219
- Microsoft Visual C++ 2010 Redistributable (x86) 10.0.40219
- Microsoft Visual C++ 2013 Redistributable (x64) 12.0.40649
- Microsoft Visual C++ 2013 Redistributable (x86) 12.0.40649
- Microsoft Visual C++ 2015 Redistributable (x64) 14.0.23026
- Microsoft Visual C++ 2015 Redistributable (x86) 14.0.23026

In addition, the following installers are automatically installed during the Tekla Structures software installation:

- Tsep File Dispatcher Launcher
- Tekla Warehouse Service

These installers are needed to get Tekla Warehouse to work properly.

You can include the Tekla Warehouse offline content as `.tsep` packages (Tekla Structures Extension Package) in the Tekla Structures software installation. If you include the offline content, the `.tsep` packages are by default stored in the `C:\ProgramData\Tekla Structures\2018\Extensions\To be installed` folder. You can remove the `.tsep` packages that you do not need by deleting them from the folder.

The `.tsep` installations are run when you start the new version of Tekla Structures for the first time. The `.tsep` package contents are by default installed in the `C:\ProgramData\Tekla\Tekla Warehouse` folder. When you install the `.tsep` packages, you can use the Tekla Warehouse content offline.

Tekla Warehouse offline content `.tsep` packages are available in the Tekla Structures collections in Tekla Warehouse. If you do not include the offline content in the Tekla Structures software installation, you can download the content later from Tekla Warehouse.

Recommended hardware is described in Tekla Structures 2018 Hardware Recommendations.

See also

Install Tekla Structures (page 20)

Tekla Structures installation folders

You can select the Tekla Structures software installation folder in the software installation wizard. By default, the software is installed to a folder under `\Program Files\Tekla Structures\<version>`.

When you install a new Tekla Structures version, for example 2018, make sure that the installation folder does not contain any files from other Tekla
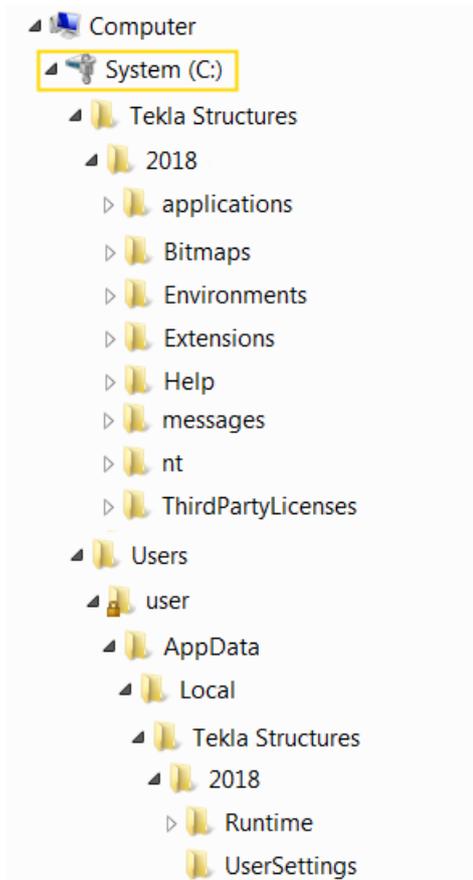
Structures versions. This is to ensure that you get all the files that are included in the installation package.

Note that when you are installing a service pack and you already have the related Tekla Structures version or a previous service pack installed, you cannot select the installation folder. The service pack will be installed to the same folder as the related Tekla Structures version or the service pack that you are updating. The installation folder will contain files from the related Tekla Structures version or the previous service pack. Installing the new service pack will automatically remove the old files before copying the new files. Note that if you have your own files in the installation folder, these files will remain unchanged in the folder.

The location of the environment installation folder depends on where you have installed the software. You cannot select the installation folder for the environments in the installation wizard. For example, when the software is installed under `\Program Files`, the environments are installed in `\ProgramData\Tekla Structures\<version>\environments`.

When you have installed the software and the environments, you can check the installation paths in Windows **Control Panel**.

The image below shows the default installation folder structure under `\Program Files` and `\Program Data`. User settings are stored under `\Users`.

The image below shows the installation folder structure under `c:\`. If you install Tekla Structures software under `c:\`, the environments are also installed and the user settings stored under `c:\`.

NOTE If you need to install Tekla Structures to a folder that has a non-Unicode folder name, for example, in Chinese, Japanese, Korean, or Russian, change the language in XS_STD_LOCALE and the Windows system locale in Control panel to that same language so that Tekla Structures can work normally.

The image below shows the installation folder structure of Tekla Warehouse Content installation under `C:\ProgramData\Tekla\Tekla Warehouse`.
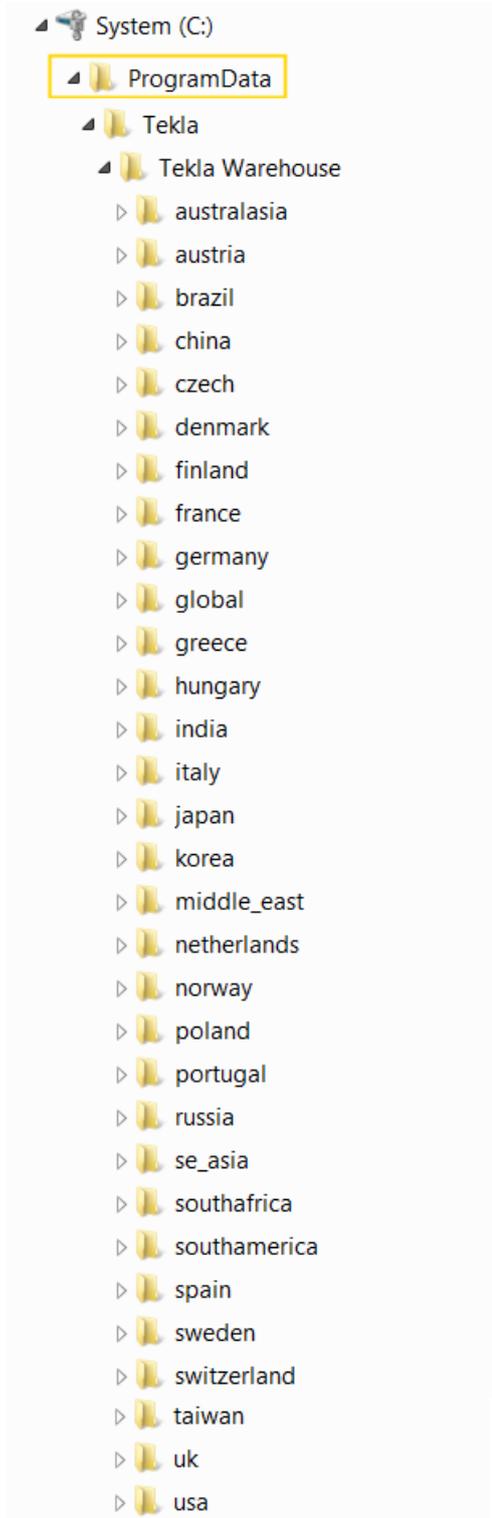
See also

Install Tekla Structures

To use Tekla Structures, install the Tekla Structures software and the Tekla Structures environments that you want to use.

You also need to have the Tekla Structures license server installed, either on your own computer or on another computer, and you need to activate your Tekla Structures license.

NOTE You need to be logged in with administrator rights to install the Tekla Structures software on your computer.

1. Install the Tekla Structures software.

   a. Download the installation file from Tekla Downloads to your computer.

   b. Double-click the installation file to run the installation.

   c. Follow the steps in the installation wizard to complete the installation.

      You can select the installation folder (page 15) and the model folder.

2. Install the Tekla Structures environments.

   Note that the location of the environment installation folder depends on where you have installed the software. You cannot select the environment installation folder in the installation wizard.

   a. Download the environment installation files from Tekla Downloads to your computer.

      Note that you can also later install as many environments as you want to a Tekla Structures version that you are using.

   b. Double-click the installation file to run the installation.

   c. Follow the steps in the installation wizard to complete the installation.

See also

Tekla Structures installation prerequisites (page 14)

Tekla Structures installation folders (page 15)

Tekla Structures settings in Windows registry (page 20)

Tekla Structures settings in Windows registry

Windows registry is a hierarchical database that stores configuration settings and options in Microsoft Windows operating systems. Registry settings are used during a Tekla Structures session and during a Tekla Structures installation.

WARNING	Do not change the registry settings. Changing the settings can cause the operating system to fail. It is possible to view the registry settings using the Registry Editor.

User settings

Some of the Tekla Structures user settings, for example, general options, and dialog box locations and sizes are stored in the registry. The settings are saved in a registry key named after the Tekla Structures version number in the registry branch `HKEY_CURRENT_USER\Software\Trimble\<VERSION>`.

Tekla Structures uses the hardcoded default settings when opened for the first time after the installation. If you change a setting during a Tekla Structures session, Tekla Structures saves the change during the session, or when you exit Tekla Structures. When you open the same version of Tekla Structures again, the changed setting is used.

When upgrading to a newer Tekla Structures version, you can use the Migration Wizard tool to copy the settings you have changed.

Installation settings

The Tekla Structures installation saves information to the `HKEY_LOCAL_MACHINE\SOFTWARE\Tekla\Structures\<VERSION>` registry key.

See also

Tekla Structures installation (page 12)

2.3 Taking Tekla Structures licenses into use

To take your Tekla Structures license server into use, follow the workflow below:

1. Install Tekla Structures license server (page 22)
2. Save your Tekla Structures license entitlement certificate (page 22)
3. Activate Tekla Structures licenses (page 23)
4. Connect Tekla Structures to the license server (page 24)

NOTE	When you set up the Tekla Structures licensing system, you may also need to configure the firewall settings to be able to connect Tekla Structures to the license server. For more information about configuring the firewall, see Allowing Tekla Structures license server to operate through Windows Firewall....
	If you have problems, see Troubleshoot Tekla Structures licensing for more information.

Install Tekla Structures license server

Install the Tekla Structures license server. This is phase 1 in the workflow Taking Tekla Structures licenses into use (page 21).

If you are using other FlexNet licensing services, you need to stop them before you install the Tekla Structures license server. When you have completed installing the Tekla Structures license server, you can restart the other licensing services.

To install the license server:

1. Go to Tekla Downloads and download the latest Tekla Structures license server installation. To check the license server version to use, see Which license server version to use.

2. For standard setup, select the options **Automatic** and complete the installation.

   Tekla Structures license server is installed.

   In automatic license server installation, the license server host name is automatically set to `27007@your_host_name`, where `27007` is the port and `your_host_name` is your computer name.

   Automatic installation is recommended. Use the **Manual** installation only if you are an advanced user of FlexNet or Flexlm licensing, and you need to change something in the default installation, for example, the TCP/IP port. For more information, see Installing Tekla Structures license service - manual installation

Save your Tekla Structures license entitlement certificate

Save your license entitlement certificate. This is phase 2 in the workflow Taking Tekla Structures licenses into use (page 21).

As a preliminary action for transferring license rights from Trimble Solutions license activation server to your license server, you need to save the entitlement certificate, which is sent in an e-mail to the person in your organization who has made the license purchase, or to someone named as the contact person.

To save the license entitlement certificate:

1. In your e-mail application, open the e-mail containing the entitlement certificate.

2. Download the entitlement certificate file
    `EntitlementCertificate.html` to the `..\TeklaStructures
    \License\Server` folder.

The entitlement certificate states the configurations, quantities and activation
IDs of your Tekla Structures licenses. The entitlement certificates are not
computer-specific. This means that you can activate licenses from several
entitlements on one license server and you can activate licenses from one
entitlement (containing several licenses) on several license servers.

Activate Tekla Structures licenses

Activate your Tekla Structures licenses. This is phase 3 in the workflow Taking
Tekla Structures licenses into use (page 21).

You need to activate the licenses on the license server to use Tekla Structures.
When you activate the licenses and notify the server, the license rights are
transferred from the activation server at Trimble Solutions to the license
server. Use **Tekla Structures License Administration Tool** for activating
licenses.

NOTE Do no use the automatic license server notification functionality if you
are using some other FlexNet license and license server
administration tool, such as FlexNet Manager. To use manual
notification, see Activating Tekla Structures licensing using manual
server notification.

To activate your licenses and notify the license server about license changes:

1. Go to **Tekla Structures Licensing** --> **Tekla Structures License
    Administration Tool** through the **Start** menu or **Start screen**, depending
    on your Windows operating system.

2. Enable the automatic license server notification functionality by clicking
    the **Notify Server** button.

3. You saved your entitlement certificate in the `..\TeklaStructures
    \License\Server` folder, and the licenses should now be listed in the
    Entitled Licenses area. If they are not listed, click **Open**, select
    `EntitlementCertificate.html`, and click **Open** again.

4. Select the number of licenses to activate.

5. Click the **Activate** button.

    Your license server contacts the activation server at Trimble Solutions. The
    activated licenses are displayed under the **Activated Licenses** area.

Next, you need to connect Tekla Structures to the license server when you
start Tekla Structures for the first time.

Connect Tekla Structures to the license server

Connect Tekla Structures to the license server. This is phase 4 in the workflow Taking Tekla Structures licenses into use (page 21).

To connect Tekla Structures to the license server when you start Tekla Structures for the first time:

1. Start Tekla Structures.

2. To connect Tekla Structures to the license server, enter the `port@hostname` information in the **Connect to License Server** dialog box, for example `27007@HOST_NAME`.

   The host name and port must correspond with the host name and port found in the `tekla.lic` file on the server computer located at `..\TeklaStructures\License\Server`. The license server administrator informs users about the license server name and port number.
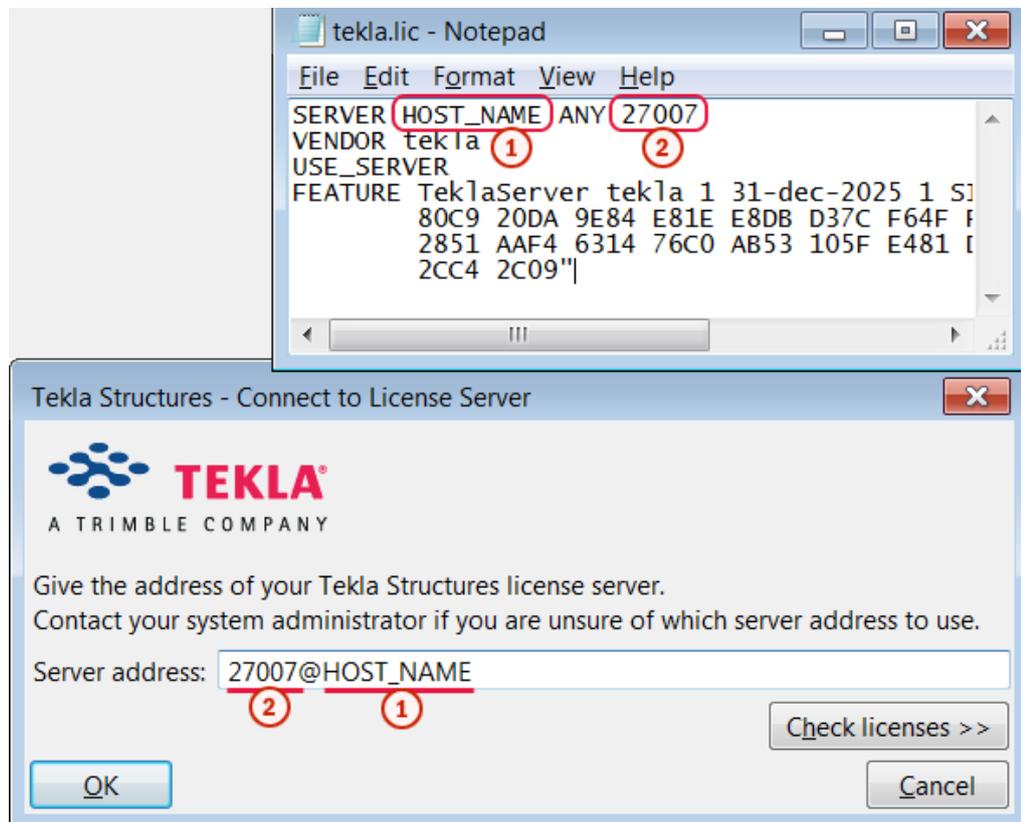
   1. host

   2. port

   If there is more than one license server available with activated licenses, you can define a primary and a secondary server in the **Connect to License Server** dialog box by separating the servers with a semicolon as follows: `27007@HOST_NAME_1;27007@HOST_NAME_2`

3. Click **OK** to start Tekla Structures.

2.4 Borrowing licenses for using Tekla Structures offline

You can borrow an activated license from the license server when you work offline and no license server is installed on your computer. The borrowed license is transferred from the license server to your computer, so it is not available for other users during the borrowing period.

To borrow licenses, follow the workflow below:

1. Install and set up Tekla Structures License Borrow Tool for license borrowing (page 25)
2. Borrow a Tekla Structures license (page 26)
3. Return a borrowed Tekla Structures license (page 26)

Install and set up Tekla Structures License Borrow Tool for license borrowing

Set up **Tekla Structures License Borrow Tool**: install **Tekla Structures License Borrow Tool**, connect Tekla Structures to the license server, and open the product ID file containing all Tekla Structures configurations and their product IDs. You may use the default product ID file (`standard.tpi`) or ask your administrator to send you a new and customized product ID file that contains only the configurations that you are allowed to use. This is phase 1 of the workflow Borrowing licenses for using Tekla Structures offline (page 25).

To install and set up **Tekla Structures License Borrow Tool**:

1. Download and install the latest **Tekla Structures License Borrow Tool** from Tekla Downloads.

   The installer is also available on the Tekla Structures installation DVD.

2. Go to **Tekla Structures License Borrow** --> **Tekla Structures License Borrow Tool** through the **Start** menu or **Start screen**, depending on your Windows operating system.

3. In the **Borrow from License Server** dialog box, enter the port number with the host name (computer name) in format `port@host` in the **Server** text box, for example, `27007@HOST_NAME`.

   You need to use exactly the same port and host name as in the **Connect to License Server** dialog box when starting Tekla Structures.

4. Click **OK**.

5. Click **Open** in **Tekla Structures License Borrow Tool**.

6. Select the product ID file and click **Open**.

    The list of licenses is updated in **Tekla Structures License Borrow Tool**. Now you can borrow licenses.

Borrow a Tekla Structures license

Borrow a license from the Tekla Structures license server. This is phase 2 of the workflow Borrowing licenses for using Tekla Structures offline (page 25).

To borrow a license from the license server:

1. In **Tekla Structures License Borrow Tool**, in the **Products** area, click the **Borrow Until** box and select the expiration date for the borrowing period from the calendar.

    The maximum borrowing period is one month.

2. Click **Borrow**.

    The borrowing progress is displayed. After successful borrowing the **Borrowed Licenses** area shows the borrowed license.

3. Disconnect your computer from the license server and start Tekla Structures with the borrowed license to ensure that the borrowing succeeded.

Return a borrowed Tekla Structures license

Return the borrowed license when you do not need to use it anymore. This is phase 3 of the workflow Borrowing licenses for using Tekla Structures offline (page 25).

A borrowed license is automatically available on the license server one day after the expiration date. However, you need to return the expired license to the license server to update the **Borrowed Licenses** area in **Tekla Structures License Borrow Tool**. You can return a borrowed license any time.

To return a borrowed license:

1. Connect your computer to the network where you can connect to the license server.

2. Close Tekla Structures.

3. Go to **Tekla Structures License Borrow** --> **Tekla Structures License Borrow Tool** through the **Start** menu or **Start screen**, depending on your Windows operating system.

4. Select the **Return** check box in the **Borrowed Licenses** area to select the license to return.

5. Click **Return**.

After successful returning, the **Borrowed Licenses** area is updated.

3 Start Tekla Structures

When you start Tekla Structures, you are asked to choose your Tekla Structures setup. The setup consists of an environment, role, and configuration.

- *Environment* means region-specific settings and information. It defines which profiles, material grades, default values, connections, wizards, variables, reports, and templates you have available.

- *Role* is a user group profile that limits the availability of files and settings in an environment. The user interface has been customized for each role.

- *Configuration* consists of a set of features that the user is entitled to based on the license agreement. Each configuration is meant for a specific user group, to suit the various players in the construction industry.

1. Start Tekla Structures by selecting it from the Windows Start menu or by double-clicking the desktop icon.

The **Tekla Structures - Choose setup** dialog box appears.
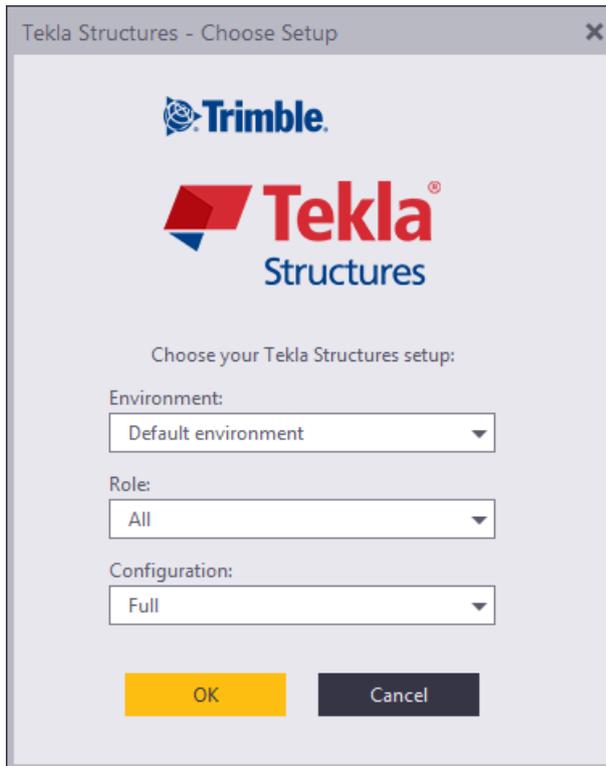
2. Select an environment.

   If you cannot find the desired environment from the list, see Install Tekla Structures (page 20).

   You can also select blank project (page 30) to create a model that contains generic content, such as parametric profiles.

3. Select a role.

   The availability of roles depends on your environment, but typically the following roles are available:

   - All (a combination of all roles)
   - Concrete Contractor
   - Construction Management
   - Engineer
   - Precast Concrete Detailer
   - Rebar Detailer
   - Steel Detailer

4. Select a configuration.

   The configuration you are using may not contain all the features described in the Tekla Structures product guides. For more information on the

features available in each configuration, see Tekla Structures configurations (page 5).

5. Click **OK**.

    The **Welcome** page appears.
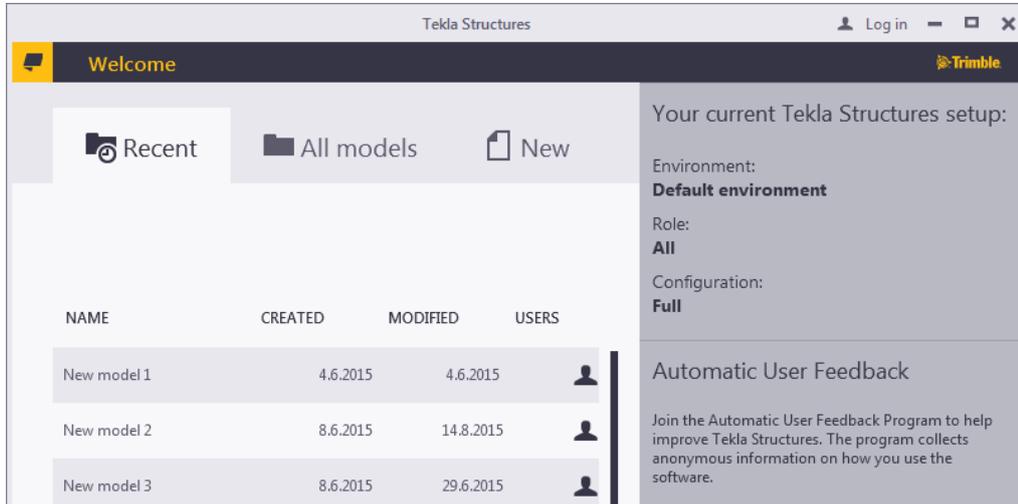
6. Select what you want to do:
    - On the **Recent** tab, you can open a recently used model.
    - On the **All models** tab, you can open any existing model (page 35).
    - On the **New** tab, you can create a new model (page 36).

    See also

    Check or change your Tekla Structures setup (page 31)

3.1 What is a blank project

Blank project is a Tekla Structures environment that includes only generic content, such as parametric profiles and undefined materials. It can be used for gathering region-, company-, or project-specific settings, tools, and information. The blank project is always included in the Tekla Structures installation.
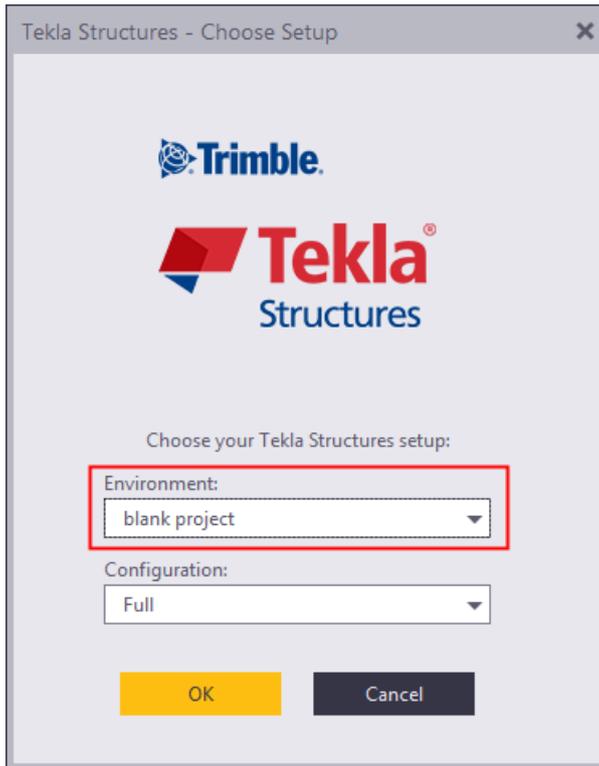
Download and install content

You can use Tekla Warehouse to download and install content to the blank project. For example, you can download profiles, material grades, bolts, reinforcement, components, applications, and templates from Tekla Warehouse across all environment- and manufacturer-specific collections, and make combinations that suit your needs.

You can download and install content from Tekla Warehouse both before and during a project. Before starting a project, you can install content to your project and firm folders. During a project, you can install content to the model folder.

3.2 Check or change your Tekla Structures setup

You can check your current Tekla Structures setup (environment, role, and configuration) at any time without having to close the model.

1. On the **File** menu, click **Settings** and scroll down to the **License** area.

You current setup is displayed.

2. Change the setup if needed.

    You may be required to restart Tekla Structures after the changes.

3.3 Join or leave the Automatic User Feedback program

Join the Automatic User Feedback program to help improve Tekla Structures. This is an easy way to influence the future development of Tekla Structures, because the program collects anonymous information on how you use the software.

The program collects usage patterns and trends of how you use the commands and tools in the software. The program collects this information automatically while you use Tekla Structures. You can view the log file to check the collected data. Your privacy is always a priority - the information we collect cannot be used to identify you, and your data is combined with other people's data to make statistical analysis.

1. On the **File** menu, click **Settings** and scroll down to the **Automatic User Feedback** area.

2. Select one of the options:

    • **Yes, I want to participate in the program:** you accept the collecting of anonymous information

    • **No, I would not like to participate:** you do not accept the collecting of information

3. To check the data that has been collected, click the **review the collected data** link.

You can review the collected data after the program has been active for a while.

Tekla Structures displays the `UserFeedbackLog.txt` file.

4. To send feedback or questions about the program, send e-mail to the address `tekla.usability@trimble.com`.

4 Open, create, and save 3D models

With Tekla Structures, you can create information-rich 3D models of all structures and materials. The model contains all the information that is needed to manufacture and construct the structure: part geometry and dimensions, profiles, materials, and so on.

- Open a model (page 35)
- Create a new model (page 36)
- Save a model (page 40)

Model output

The 3D model is also the single source of information for drawings and other outputs, such as reports and NC data files. This ensures that the information in drawings and reports is always up to date, as they react to modifications in the model.

Collaboration

You can use the multi-user mode or Tekla Model Sharing to work collaboratively within a model.
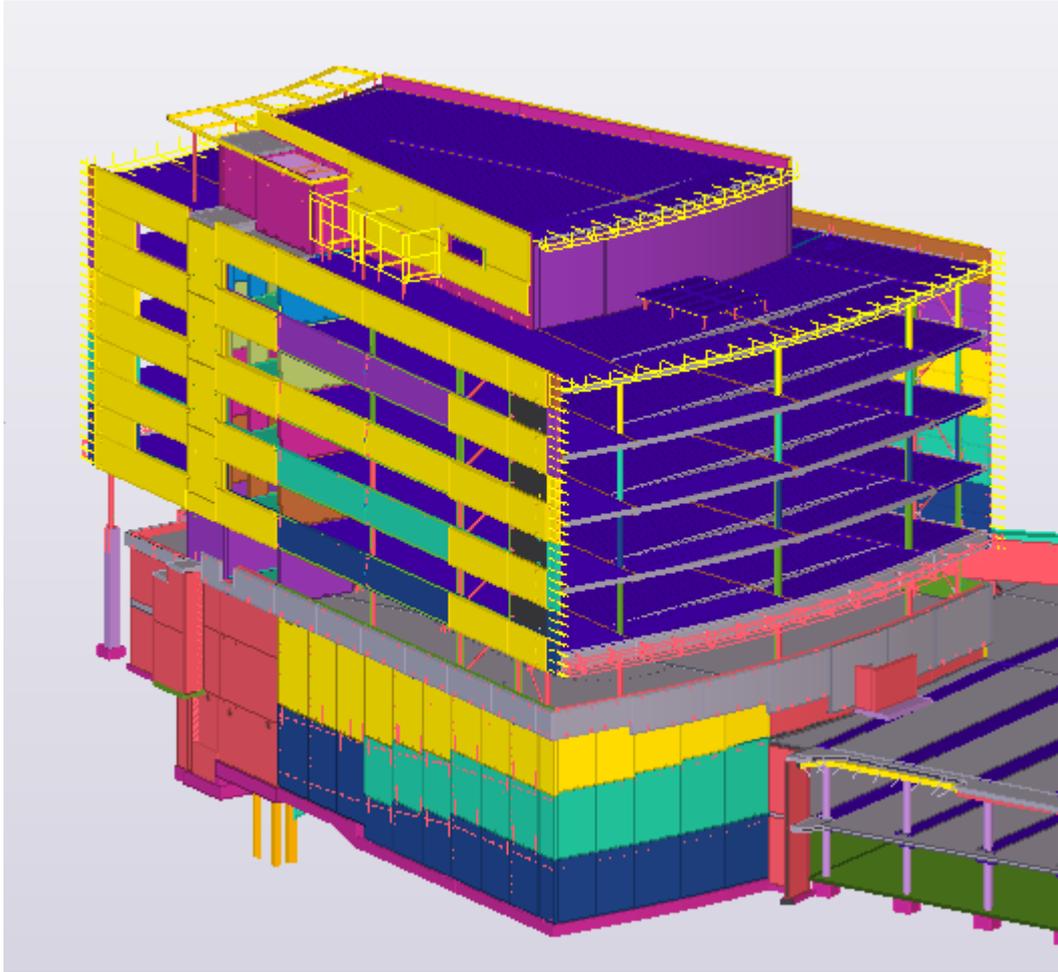
4.1 Open a model

You can have one model open at a time. If you open a model and already have one open, Tekla Structures prompts you to save the first model.

1. On the **File** menu, click **Open**.

   - To open a recently used model, click **Recent**.

   - To open any existing model, click **All models**.

     If you want to search for models in another folder, click **Browse**.

   - To open a model that has been shared using Tekla Model Sharing, click **Browse shared models**.

   To sort models by name, date, or type, click the column titles.

   When the models are sorted alphabetically by their names, you can use the keyboard to select a model. For example, when you type N, Tekla Structures selects the first model starting with an N.

2. Click **Open**.

   If no views are visible in the model, Tekla Structures prompts you to select one.

See also

Create a new model (page 36)

Create a thumbnail image of a model (page 36)

4.2 Create a new model

Create a separate model for each Tekla Structures project. Each model is stored in its own folder under the `TeklaStructuresModels` folder.

1. On the **File** menu, click **New**.

2. In the **Name** box, enter a name for the new model.

   Do not use special characters (`/ \ ; : |`). We recommend that you try to decide on a permanent name at this point. The name of the model can be changed afterwards, but it involves changing several file names.

3. Define where to save the new model.

   By default, the model is saved in the `TeklaStructuresModels` folder that was created during installation. You can change the default folder by clicking **Browse**. You can also select a recently used folder from the **Save in** list.

4. If you want to use a model template, select one.

5. Under **Type**, define whether to run Tekla Structures in single-user or multi-user mode.

   • Single-user: the model will be used by one person at a time.

   • Multi-user: the model is stored on a server and may be used by several people simultaneously. Enter the name of the server in the **Server** box.

6. Click **Create**.

   Tekla Structures creates the model and opens the default model view. The contents of the model view may differ based on the model template you chose in step 4.

See also

Create a thumbnail image of a model (page 36)

Edit project properties (page 37)

4.3 Create a thumbnail image of a model

You can add a thumbnail image to make it easier to recognize your project even when you do not remember the exact name of the model. The thumbnail image is displayed when you browse for existing models.

1. On the **View** tab, click ![camera icon] **Screenshot** --> **Project thumbnail**.

2. Select a view.

    Tekla Structures creates the image and saves it in the model folder with the name `thumbnail.png`.

3. To check the thumbnail, go to the **File** menu, click **Open**, and select the model you created the thumbnail for.

    The image is now displayed next to the model name. For example:

4. If you are unhappy with the thumbnail image, you can repeat steps 1–2 as many times as you need.

    For example, you can zoom the model in and out to adjust what is shown in the thumbnail image. When you create a new thumbnail, Tekla Structures overrides the existing thumbnail image with the new one.

TIP Alternatively, if you want to use a custom image, you can add the image directly to the model folder with the name `thumbnail.png`. The preferred size of the image is 120 x 74 pixels.

4.4 Edit project properties

You will need project information, such as project number and name, many times during a project. Update the project properties at the beginning of each

project to make reports and drawings display the correct information automatically. All of the fields are optional.

1. On the **File** menu, click **Project properties**.

2. Click ✏ **Edit**.

3. In the **Description** box, enter a description that helps you identify the model when you next need to open it.

4. If you want to use another coordinate system for interoperability and collaboration, click **Base points** to define a new base point.

    Once a base point has been defined, you can select it from the **Location by** list.

5. Edit the other project properties.

6. To define project-specific user-defined attributes, click **User-defined attributes**.

    By default, you can define:

    - Project comment
    - User fields
    - Execution class
    - IFC export attributes
    - GEO coordinates
    - Status attributes
    - Unitechnic factory location

    The availability of user-defined attributes depends on your environment (page 28).

7. Click **Apply** to save your changes.

    Now you will get updated project properties in drawings and reports.

Displaying project information in templates and reports

The fields in the image below refer to template attributes, which you can use when designing your own reports and templates. To display project information, add the corresponding template attributes in the templates and reports.

(1) NUMBER#2

(2) NAME

(3) BUILDER

(4) OBJECT

(5) ADDRESS

(6) DESIGNER

(7) DATE_?START

(8) DATE_?END

(9) INFO1, INFO2

4.5 Save a model

You should save your model regularly to avoid losing any work. Tekla Structures also automatically saves your work at regular intervals.

NOTE Tekla Structures versions are not backwards compatible. When you save a model, you cannot open it in older versions of Tekla Structures due to database differences.

Save the current model

To save changes to the current model file, do one of the following:

- On the top left corner of the screen, click **Save** .

- On the **File** menu, click **Save as** --> **Save**.

- Press **Ctrl+S**.

Save a copy with different name or location

You can create a copy of the model with a different name or in a different folder. The original version of the model remains intact.

NOTE When you save the model with a different name, all the GUIDs (globally unique identifiers) of the saved model will change and be different than in the original model. This means that the saved model has no relation to the original model, and the saved model cannot be used as backup.

---

1. On the **File** menu, click **Save as** --> **Save as**.

2. In the **Model name** box, enter a new name.

3. To save in a different location, click **Browse** and define where you want to save the model.

4. Click **OK**.

   Tekla Structures creates a new copy with a different name, but the original version of the model remains intact.

Save a backup copy

You can create a backup copy of the model with the same GUIDs (globally unique identifiers) as the original model.

1. On the **File** menu, click **Save as** --> **Save and create backup copy**.

    Tekla Structures saves a copy of the model in the `.. \TeklaStructuresModels\backup\<model_name>\<date-time>` folder.

2. If you need to take the backup copy into use in place of the current model, move the backup copy from the chosen date to your model folder.

    You can either replace all contents of the current model folder with the content of the chosen backup folder, or you can rename the backup folder (`<date-time>`) to match the original model name.

3. If you want to change the location of the backup folder, use the advanced option XS_MODEL_BACKUP_DIRECTORY.

NOTE To save disk space, you can compress the XS_MODEL_BACKUP_DIRECTORY folder.

Save as a model template

See Create model templates.

Define autosave settings

Use **Autosave** to automatically back up and save your work at set intervals. You can set the autosave interval separately for the model and drawings. Autosave files have the extension `.db1_<user>`.

1. On the **File** menu, click **Settings** --> **Options**, and go to the **General** settings.

2. Under **Autosave**, set the autosave interval.

    a. In the first box, define how often Tekla Structures saves the model or drawing.

        This number represents the number of commands you will have to run before Tekla Structures saves the model or drawing. For example, if you create many steel beams without interrupting the **Create steel beam** command, it only counts as one command.

    b. In the second box, enter the number of drawings after which Tekla Structures saves your work.

        NOTE If you set the interval values to less than 2, autosave is disabled.

        ---

3. Click **OK**.

4. Define where to store the **Autosave** files.

   By default, Tekla Structures stores the autosave files in the `..\TeklaStructuresModels\autosave` folder. To change the folder, use the advanced option XS_AUTOSAVE_DIRECTORY.

5. Define whether to keep old autosave files.

   By default, Tekla Structures deletes the autosave files when you close a model, to save disk space. To keep autosave files even if you exit Tekla Structures without saving the model, use the advanced option XS_KEEP_AUTOSAVE_FILES_ON_EXIT_WHEN_NOT_SAVING.

5 Get familiar with the user interface

When you open a Tekla Structures model, a new window appears. By default, the user interface will look something like this:
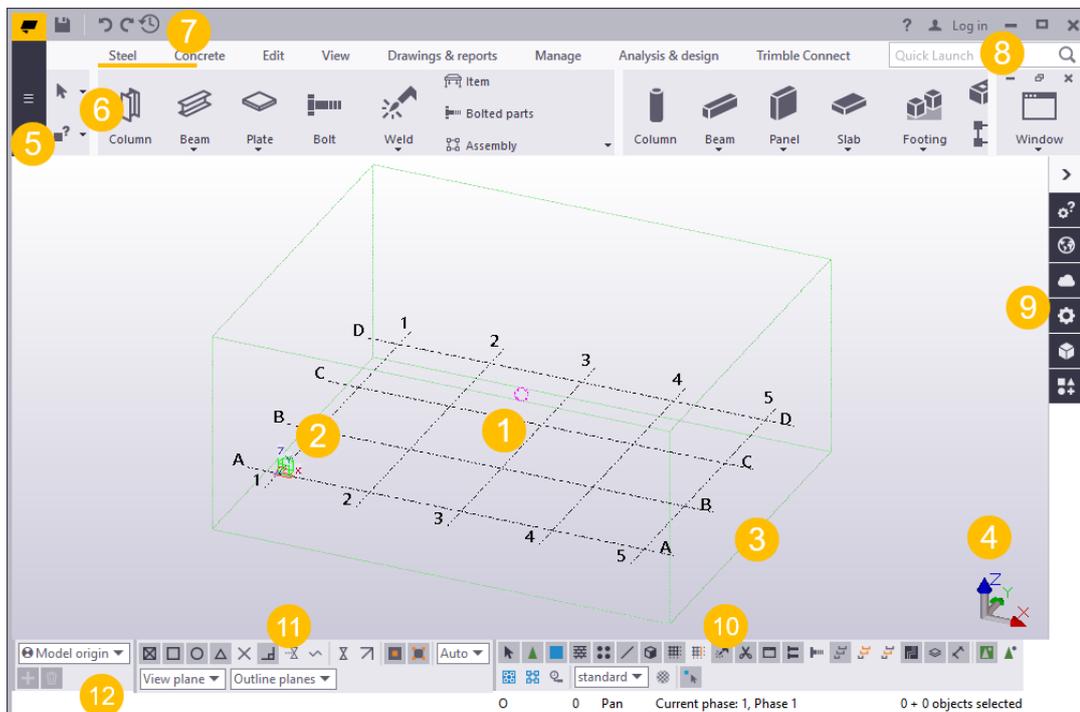
(1) This is your Tekla Structures model. If you are starting a completely new project, you will only see the default model view and an empty grid at this point.

(2) The green cube symbol represents the global coordinate system and it lies at the global origin (x=0, y=0, z=0).

(3) The box around the grid represents the work area. In a view, you can only see the parts that are within this area. Objects that are outside the work area

exist in the model, but they are not visible. You can shrink and expand the work area to suit your needs. You can also hide the work area box.

(4) The coordinate symbol with the three axes x, y, and z represents the local coordinate system. It also indicates the direction of the model.

(5) The **File** menu is where you manage your models. You can save models (page 40), print drawings, and import and export models, among other things.

(6) The ribbon contains all the commands and other functions you will use when building your model. You can customize the ribbon according to your needs.

(7) By default, the Quick Access Toolbar contains the **Save**, **Undo**, **Redo**, and **Undo history** shortcuts icons.

(8) If you cannot find the command or dialog box you are looking for, search with Quick Launch (page 59).

(9) Use the side pane (page 60) on the right side of the screen to view model objects properties, add reference models and components, attach point clouds, use custom inquiry, or to find direct access to Tekla Online services.

(10) The selection switches control which objects you can select.

(11) The snap switches control which positions you can pick when creating objects.

(12) When you create objects, the status bar (page 68) will tell you how to proceed and when to pick points.

5.1 How to use the ribbon and the commands on the ribbon

All the essential commands in Tekla Structures are available on the ribbon. The commands are grouped according to their use. You can modify the appearance of the ribbon, and customize the content of the ribbon, if needed. All commands throughout Tekla Structures work in the same manner.

How to use commands on the ribbon

To	Do this
Find commands	Slide the ribbon right or left with your mouse, or scroll with your mouse wheel.

To	Do this
	Some commands have more options under them. The options become available when you click the command's name:
Activate the command you want to use	On the ribbon, click the command. The command runs until you end it or use another command.
Check which command you need for your current task, if you are unsure	Rest the mouse pointer on a command. A small window called tooltip appears. Tooltips provide more information about commands and also give examples, hints, and tips. For example:
Find more help on the command	Press **Ctrl+F1** when a tooltip is open. To switch the tooltips on or off, click **File menu** --> **Settings** --> **Switches**, and then select or clear the **Tooltips** check box.
End command	Right-click and select **Interrupt**. You can also press **Esc**.
Re-activate the last command	Press **Enter**.
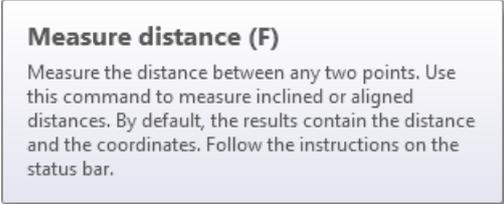
Change the appearance of the ribbon

You can change the order of ribbon tabs, choose how they are aligned, and even hide some parts of the ribbon if you do not need them in your current project. For example, if you are only modeling steel parts, you can temporarily hide the **Concrete** tab.

To	Do this
Change the order of tabs on the ribbon	Drag and drop the tab titles.
Change how the tabs are aligned	Right-click on the top bar of the ribbon, select **Navigation mode**, and then select one of the options. • **Scroll visible**: the ribbon movement is minimal when you switch between the tabs • **Align to left**: the icons start from the left side of the ribbon • **Align to tab**: the icons start from the left side of the current tab
Hide the tabs that you do not need in your current project	1. Rest the mouse pointer on a tab title. A small eye symbol appears next to the tab title: 2. Click the eye symbol . The eye symbol changes and the tab title becomes gray: The **View** tab is now hidden from the ribbon. If you slide the ribbon, hidden tabs appear as: 3. To re-display the hidden tab, click the eye symbol again.

Minimize the ribbon

You can minimize the ribbon to save space on your screen. When the ribbon is minimized, the command buttons are hidden but the tabs are visible.

1. Right-click on the top bar of the ribbon, and select **Minimized**.
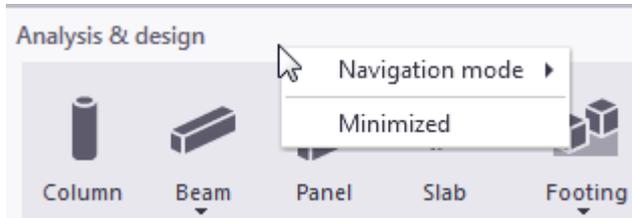
The ribbon is now minimized to save space on the screen:
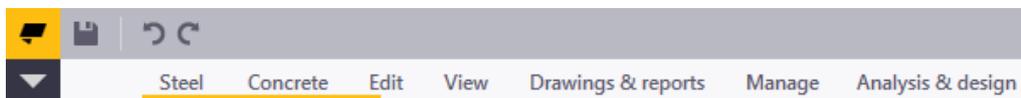
2. To access the commands when the ribbon is minimized, click a tab title. The ribbon becomes visible so that you can select a command.

3. To restore the ribbon, right-click on the top bar of the ribbon, and select **Minimized** again.

See also

Customize the ribbon (page 47)

5.2 Customize the ribbon

You can customize the ribbon according to your needs. You can change the size and shape of any command button, for example. You can add custom buttons and assign commands to them. You can also bring your favorite components and extensions to the ribbon for an easy access.

Company administrators can distribute the customized ribbons with the whole organization, in the same way as customized property pane layouts or customized tabs.

To open the customization tool, click **File menu** --> **Settings** --> **Customize** --> **Ribbon**.

The tool includes two editing modes:

• **Simple mode**: Add, move, and resize command buttons; add, hide, and edit tabs; remove command buttons and tabs from the ribbon.

- **Design mode**: Choose which name and icon is used for each command button; add new buttons and assign commands to them; add vertical and horizontal separator bars.
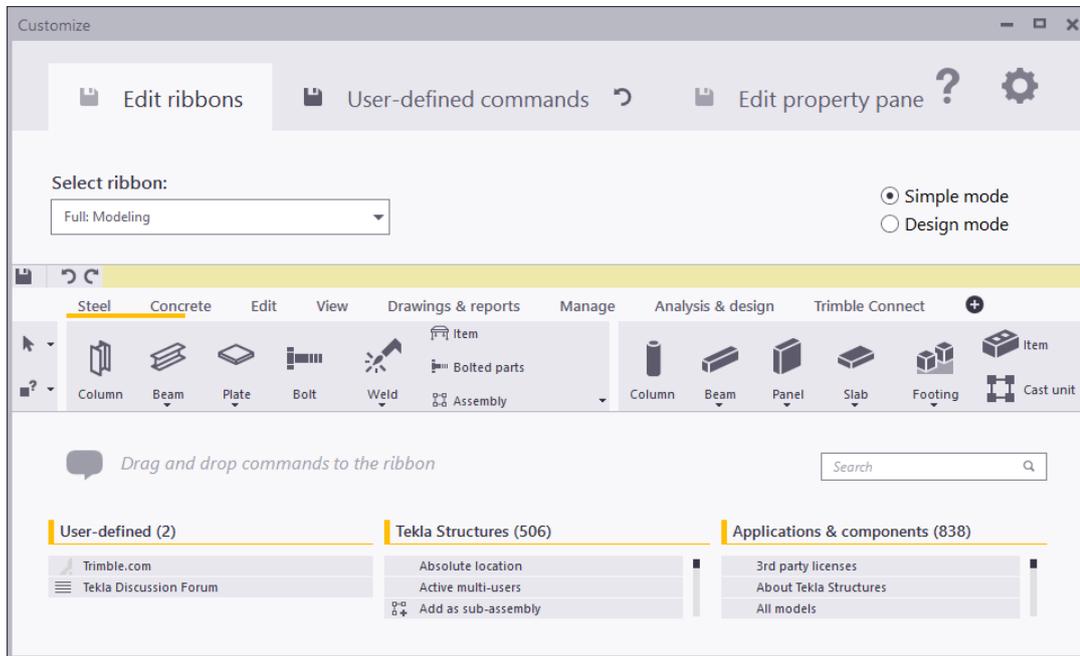
Add a command button
You can add command buttons simply by dragging commands to the ribbon or to the **Quick Access Toolbar**.

1. Ensure that **Simple mode** is switched on.

2. In the **Select ribbon** list, select which ribbon you want to customize.

   For example:

   You can only customize ribbons that are available in your configuration.

3. Search for the command you want to add.

   You can also add components, macros, and extensions. Browse through the lists or use the **Search** box to filter content. For example, type `mesh` to

find the **Create reinforcement mesh** command and other mesh related components:
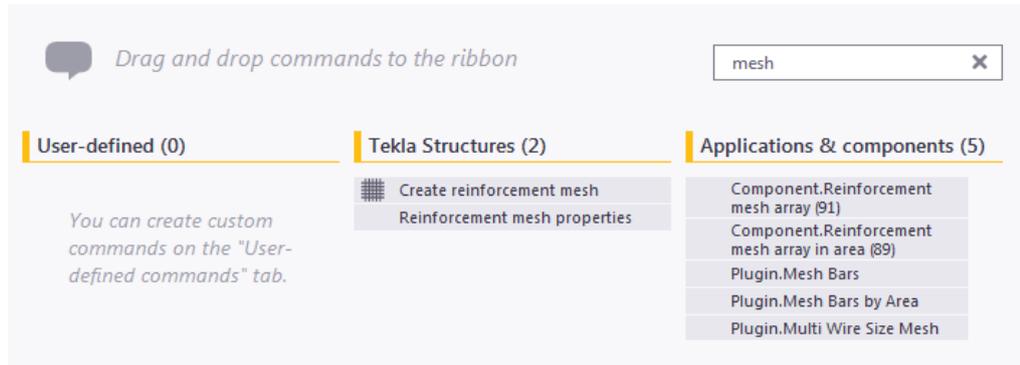
- **User-defined**: commands that you have created on the **User-defined commands** tab

- **Tekla Structures**: all the Tekla Structures commands available in this configuration and mode

- **Applications & components**: components, macros, plugins, and extensions

4. Drag and drop the command to the ribbon.

   The blue color indicates the place where the command button will be inserted. For example:
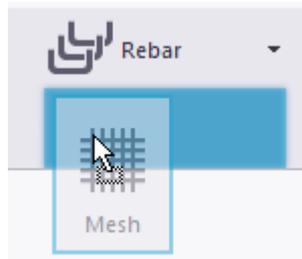
NOTE If you hover over a down arrow, a list will open and you can drag commands to the list. The list will remain open until you click the down arrow again.

You can also drag commands to the **Quick Access Toolbar**, which is located above the ribbon, or to the fixed container on the left side of the ribbon:
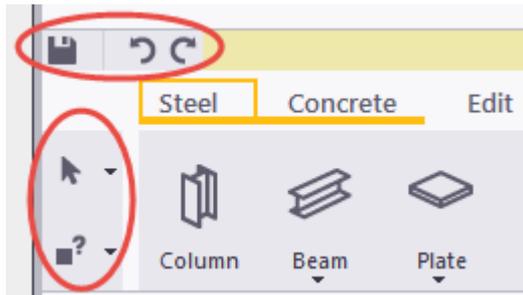
Remove a command button

1. Select the command button.

2. Press **Delete** on your keyboard.

Move a command button

You can rearrange command buttons on the ribbon. Note that you cannot move drop-down buttons underneath each other.

1. Select the command button you want to move.

   The command button becomes highlighted:
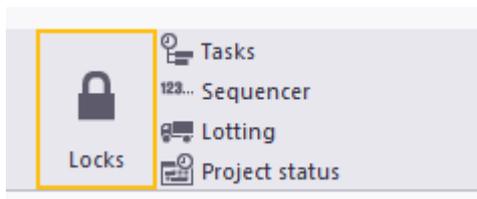
2. Drag and drop the command button to a new location.

   The blue color indicates the place where the command button will be inserted. For example:
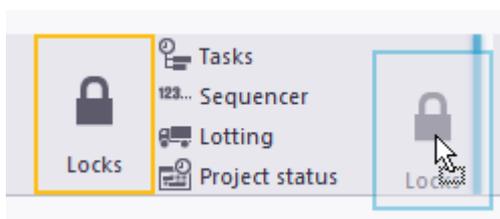
Resize a command button

You can change the size of existing command buttons.

1. Select the command button you want to resize:

2. Move the mouse pointer over any side or corner of the command button to display a white arrow symbol:

3. Drag with the arrow to define a new size:
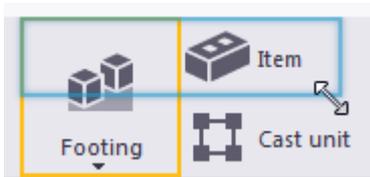
The size of the command button changes accordingly. The other command buttons are automatically moved forward on the ribbon, if needed.

4. Double-click the command button to expand it.

The command button now fully occupies the empty space around it:

Change the appearance of a command button

You can change the appearance of any command button in the **Design mode**.

1. Ensure that **Design mode** is switched on.

2. Select the command button you want to modify.

The current properties of the command button are displayed.

3. To change the name, select one of the options:

    • **None**: no name is used for the command button

    • **Short name**: the default short version of the name is used

    • **Full name**: the default full version of the name is used

    • **Custom**: enter a custom name for the command button

4. To change the icon, select one of the options:

    a. **None**: no icon is used for the command button

    b. **Large icon**: the default large icon (32x32) is used

    c. **Small icon**: the default small icon (16x16) is used

    d. **Gallery**: select an icon from the Tekla Structures icon gallery

    e. **Custom**: define a custom icon by selecting a suitable image file. The recommended size is 32x32 pixels for large buttons and 16x16 pixels for small buttons. If you have problems with your custom image not appearing the right size, check the DPI setting of the image file. A DPI of 96 is recommended.

TIP When you modify a command button which is on a drop-down list, the options may become hidden behind the drop-down list. Slide the ribbon right or left to make the options visible.


Create a user-defined command

You can create user-defined commands and link them to any file or URL.

1. Go to the **User-defined commands** tab.

2. Click **Add**.

3. Enter a unique ID for the command, and then click **Create**.

For example, let's assume you are creating a link to the **Tekla Discussion Forum**. Enter `OpenTeklaDiscussionForum` as the ID of the command.

A new page with more properties appears.
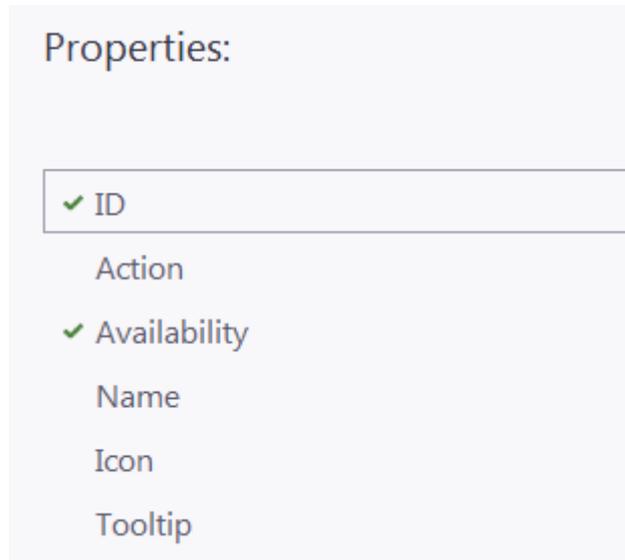
4. Click **Action** and define a file or URL. For example, enter `https://forum.tekla.com`.

5. Click **Name** and enter a name for the command. This name will be visible in the Tekla Structures user interface. You can define two alternative names: a full name and a short version. For example, enter `Tekla Discussion Forum` as the full name of the command, and `Forum` as the short version.

6. Click **Icon** and select a suitable icon from the Tekla Structures icon gallery. You can define two alternative icons: a large one and a small one.

7. Click **Tooltip** and enter a tooltip for the command. For example, enter `Go to the Tekla discussion forum`.

8. Click **Apply** to save the new command.

9. Go to the **Edit ribbons** tab.

   The command you created is available in the **User-defined** list, on the left-hand side of the dialog box:


10. Drag and drop the command to the ribbon:
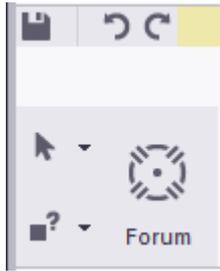
11. To modify a user-defined command, switch to the **Design mode** and edit the command properties just like for any other command.

Add a custom button and assign a command to it

You can add new buttons, split buttons, toggle buttons, and drop-down buttons to the ribbon. These are all empty placeholders for commands. After creating a new button, you can assign a command to it.

1. Ensure that **Design mode** is switched on.

2. On the **Edit ribbons** tab, click the desired button type to select it:
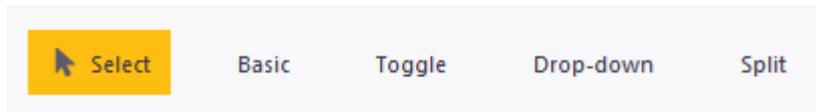
- **Basic**: Add a button for a single command.

- **Toggle**: Add a toggle button that switches a particular command on or off. Use this to add any switch from the **File menu** --> **Settings** --> **Switches** to the ribbon, for example.

- **Drop-down**: Add a drop-down button with a group of commands underneath it. You can define a name and a custom tooltip for the button.

- **Split**: Add a button for a single command, plus a drop-down button with a group of commands underneath it.

3. Using the mouse, draw a rectangular area for the new button.
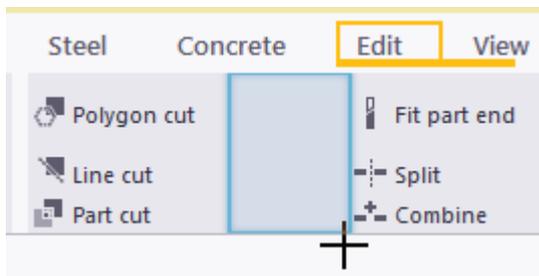

4. To assign a command to the button:

   a. Ensure that the new button is selected.

b. On the **Command** tab, search for the command you want to add.

Browse through the lists or use the **Search** box to filter content. For example:
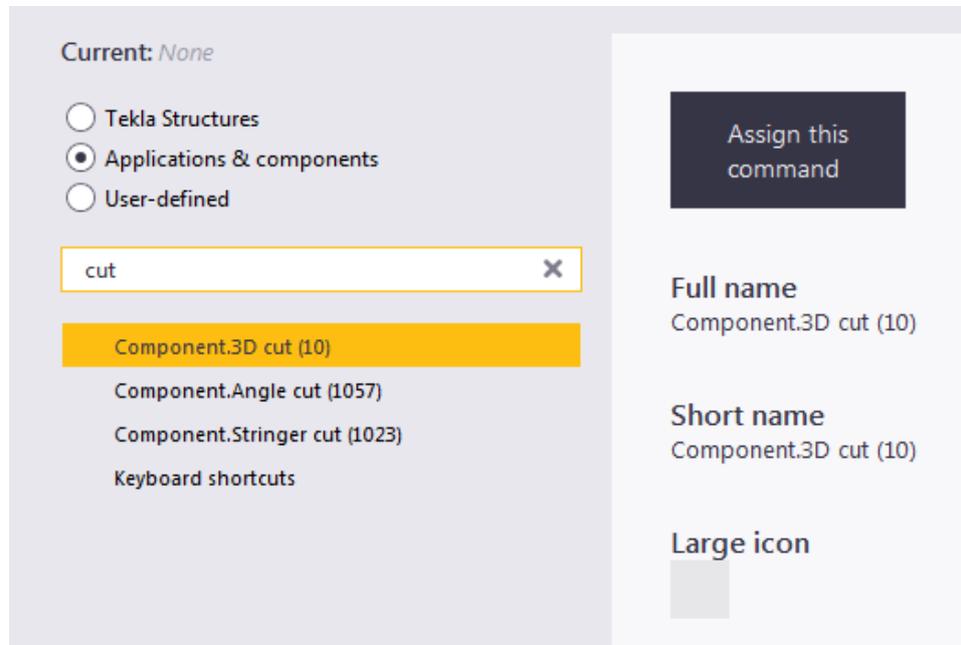
c. Click **Assign this command**. The command is now assigned to the button.

d. On the **Appearance** tab, modify the command's name and icon, if needed.

5. To add commands to a drop-down button:

a. Return to the **Simple mode**.

b. Search for commands.

c. Drag and drop commands to the drop-down button.

If you hover over a down arrow, a list will open and you can drag commands to the list. The list will remain open until you click the down arrow again.
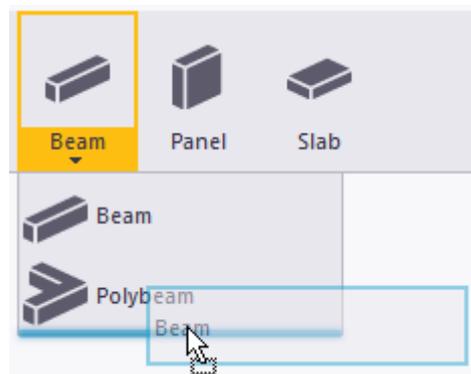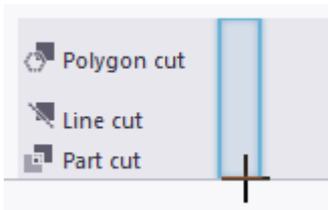
Add a separator bar

You can add vertical and horizontal separator bars to divide command buttons into smaller groups on the ribbon.

1. Ensure that **Design mode** is switched on.

2. Click **Separator** to select it.

3. Using the mouse, draw a rectangular area in the vertical direction.

   A vertical bar appears in the location you defined.

4. Ensure that the bar is selected.

5. Modify the orientation and line thickness of the bar, if needed.

Add, hide, and edit tabs

You can add, move and rename ribbon tabs, choose how they are aligned, and hide some tabs if you do not need them in your current project. For example, if you are only modeling steel parts, you can temporarily hide the **Concrete** tab.

1. Ensure that **Simple mode** is switched on.

2. To add a new tab, click the plus sign ⊕ at the end of the tab row.

3. To rename a tab:

   a. Right-click a tab title and select **Rename...**.

   b. Type a new name.

   c. Press **Enter** to save the new name.

4. To change the order of tabs on the ribbon, drag and drop the tab titles.

5. To change how the tabs are aligned, click and then select one of the options:

   • **Scroll visible**: the ribbon movement is minimal when you switch between the tabs

- **Align to left**: the icons start from the left side of the ribbon
- **Align to tab**: the icons start from the left side of the current tab

6. To hide the tabs that you do not need in your current project:

   a. Rest the mouse pointer on a tab title.

      A small eye symbol appears next to the tab title:

   b. Click the eye symbol .

      The eye symbol changes and the tab title becomes gray:

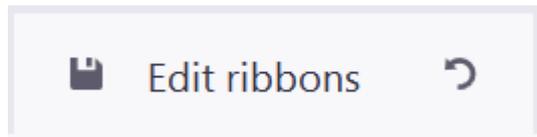   The **View** tab is now hidden from the ribbon. If you slide the ribbon, hidden tabs appear as:

   c. To re-display the hidden tab, click the eye symbol again.

7. To remove a tab, select it and press **Delete**.

Save the ribbon

When you are happy with the changes, save the customized ribbon.

1. On the **Edit ribbons** tab, click the **Save** button .


2. When you return to Tekla Structures and the program asks if you wish to load the new ribbon, click **Yes**. The ribbon becomes updated with the changes you made.

Check the changes

You can compare the original ribbon with the changes you have made. You can check what has been added and removed, and what has been moved to different tabs.

1. Save the customized ribbon, if you have not already done so.

2. Click **Compare**.

3. In the **Compare ribbons** dialog box, check the changes you have made.

   For example:
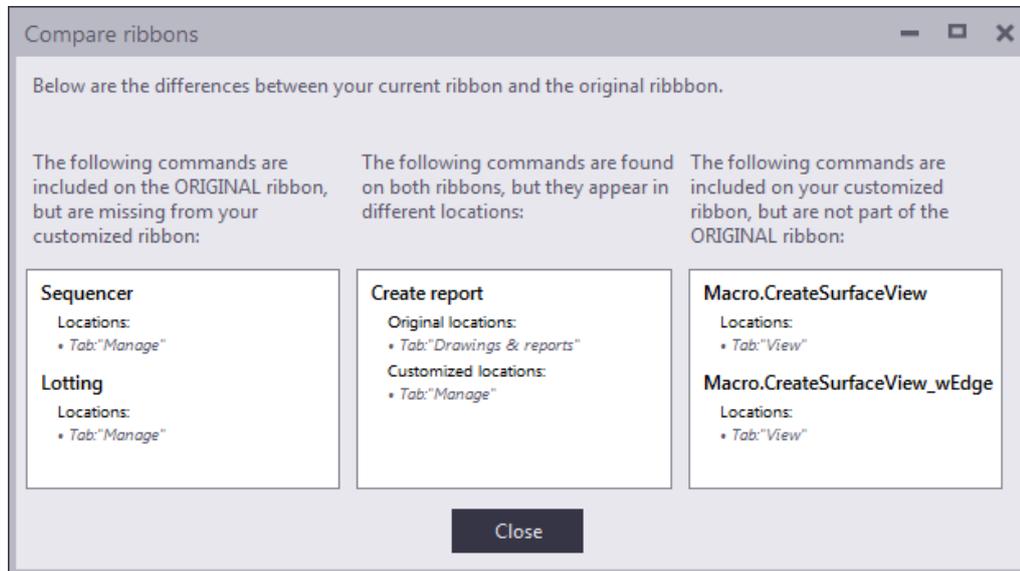
   - **First list**: these commands have been removed
   - **Second list**: these commands have been moved to a new place
   - **Third list**: these commands have been added

   ---

   NOTE **Original ribbon** refers to the ribbon file that came with theTekla Structures installation for your current configuration.

   ---

4. If you have removed a command that you would like to get back, drag it from the **Compare ribbons** dialog box to the ribbon.

5. When you are finished, click **Close**.

Back up and restore ribbons

You can restore the default Tekla Structures ribbons at any time. Before restoring the default settings, make sure to save a backup copy of your customized ribbon, because the customizations will be permanently deleted. You can use the backup file to take your customized ribbon back into use, to copy the ribbon settings to another computer, or to share the customized ribbon with your co-workers.

1. To save a backup copy of the customized ribbon:

   a. On the **Edit ribbons** tab, click the **Save** button 💾.
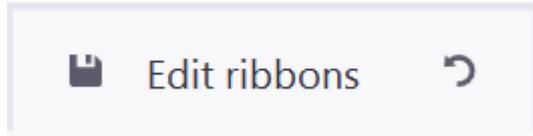
b. Go to the `..\Users\<user>\AppData\Local\Trimble\TeklaStructures\<version>\UI\Ribbons` folder.

c. Make a copy of the desired ribbon file and save it in another folder.

The ribbons are named according to the Tekla Structures configurations. For example, in the **Full** configuration, the name of the **Modeling** ribbon file is `albl_up_Full--main_menu.xml`.

2. To restore the default Tekla Structures ribbons:

a. In the **Select ribbon** list, select which ribbon you want to restore.

For example:
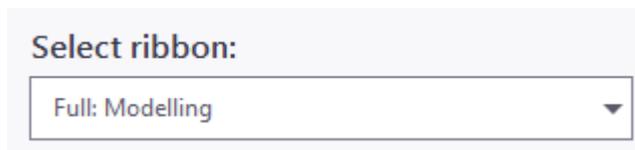
b. Click **Reset to defaults**. The default Tekla Structures ribbons are now in use.

3. To take the customized ribbon back into use:

a. Copy the backup file back to the `..\Users\<user>\AppData\Local\Trimble\TeklaStructures\<version>\UI\Ribbons` folder.

b. When you return to Tekla Structures and the program asks if you wish to load the new ribbon, click **Yes**. The ribbon becomes updated with the changes you made.

5.3 How to use Quick Launch to find commands, dialog boxes, and toolbars

Use the **Quick Launch** box in the upper-right corner of the screen to find commands, dialog boxes, toolbars, and other functions. The shortcut key for **Quick Launch** is **Ctrl+Q**.

1. In the **Quick Launch** box, enter a search term. For example, type `bolt` if you are looking for bolt commands.

2. Wait for a list of search results to appear. For example:
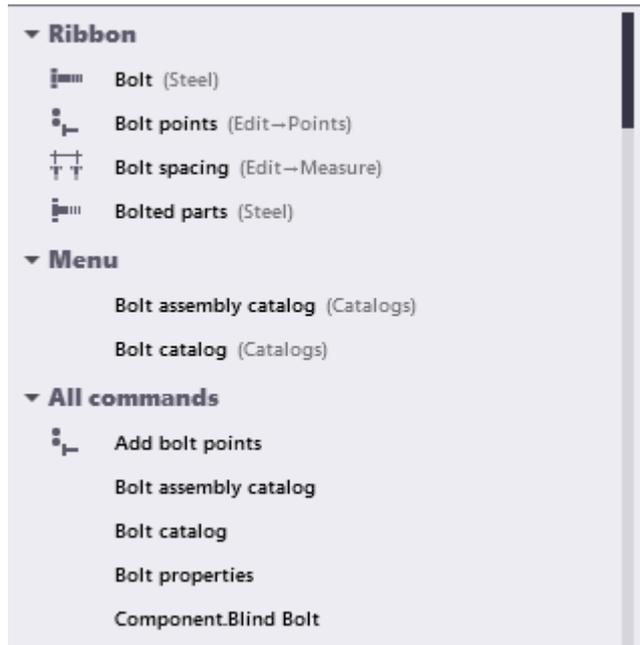
Tekla Structures highlights the commands on the ribbon or on the **File** menu, to help you locate them. For example:
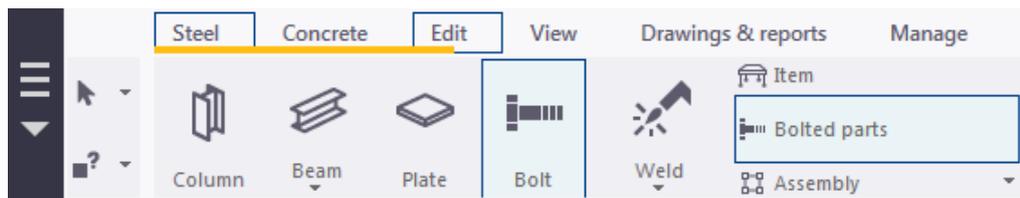
3. To run a command, click its name on the search results list.

Or press **Enter** to instantly run the first command on the list.

For some basic settings (page 68) and toolbars a check box appears in front them in the search results list. Click the command to activate the setting, or to have the toolbar visible.
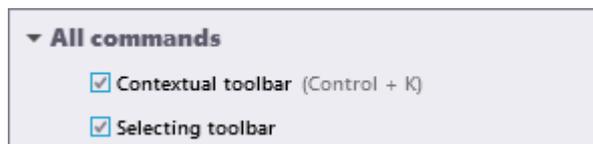
TIP If the list of search results is no longer visible, press **Ctrl+Space** to reactivate it.

5.4 How to use the side pane

Use the side pane on the right side of the screen, for example, to view model object properties, and to add reference models and components.

To	Do this
Open a side pane window	Click a side pane button to open a side pane window.
	• Click to view model object properties using Custom inquiry.
	• Click to find shortcut access to the different Tekla Online services.
	• Click to attach point clouds to a model.
	• Click to show the properties of model objects.
	• Click to show the reference models list.
	• Click to show the Applications & components catalog.
	When you click a side pane button, the side pane window opens and becomes active. Active side pane windows have yellow buttons .
Close a side pane window	You can close one active side pane window at a time, or several windows at one go.
	• Click an active side pane button to close a single side pane window.
	• Click **Ctrl+active side pane button** to close all the other side pane windows expect the selected side pane.
	• Click the button in the side pane window.

To	Do this
Open or close active side pane windows	Active side pane windows have yellow buttons . Click the arrow in the side pane to open or close the active side pane windows at one go.
Keep multiple side pane windows open at the same time	You can have several side pane windows open at the same time. • Click the side pane buttons to open as many side pane windows as needed. The active side pane windows are stacked on top of each other. You can resize the side pane windows and change their order by dragging them. • Alternatively, right-click a side pane button and select **Open below**. Repeat for each side pane button.
Move a side pane window	When you position the mouse pointer on the upper part of the side pane window, the upper part is shown in yellow. Grab the yellow upper part of the side pane window and drag the window to a new location.
Float and dock a side pane window	You can float or dock side pane windows. • To float a side pane window: right-click a side pane button and select **Float**. • To dock a side pane window: right-click an active side pane button and select **Attach to side pane**. Alternatively, you can drag the side pane window back to the docking area on the right or at the bottom of the screen. The docking area is marked with yellow color.

To	Do this
	If you float a side pane window and close Tekla Structures, the side pane window will be opened in its floating position when you start Tekla Structures the next time.
Adjust the size of a side pane window	Resize a floating side pane window by dragging its borders.
Find more help on the content of a side pane window	Click the ? button.

TIP Sometimes a side pane window opens on a second display that is not connected to your computer at the moment. To return the side pane window to the main display, right-click the side pane button and select **Attach to side pane**
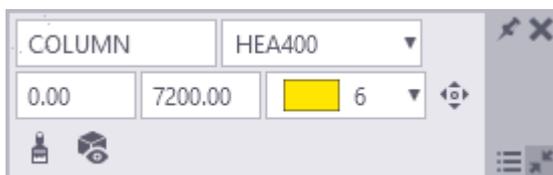
See also

Get familiar with the user interface (page 43)

5.5 How to use the contextual toolbar

When you click an object in a model or drawing, a contextual toolbar symbol

 appears next to the mouse pointer. Click the symbol to open the contextual toolbar. Use the contextual toolbar to quickly view and change some basic properties of an object, view, grid, and so on.

If multiple objects are being selected, the contextual toolbar displays the text `Varies` for any properties that differ.

How to change object properties using contextual toolbar

The changes that you make on the contextual toolbar are immediately applied to the model or drawing.

1. Click an object in a model or drawing.

    A contextual toolbar appears next to the mouse pointer.

2. Change the object properties on the contextual toolbar.

    The changes are applied immediately.

TIP Press the **Tab** key to move between the properties and command buttons on the contextual toolbar.

Show or hide contextual toolbar

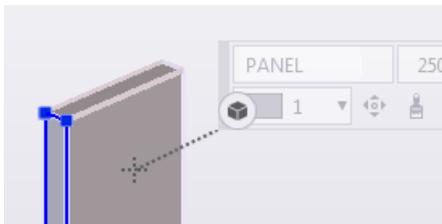You can define whether the contextual toolbar is visible in Tekla Structures.

1. On the **File** menu, click **Settings**.

2. Under **Switches**, select or clear the **Contextual toolbar** check box.

    Alternatively, use the keyboard shortcut **Ctrl+K** to show or hide the contextual toolbar.

Define contextual toolbar's position

You can define the position of the contextual toolbar, relative to an object's reference point.

1. Select an object.

2. Hold down the **Ctrl** key and click the contextual toolbar with the left mouse button.

    A dashed line appears between the contextual toolbar and the object.

3. Drag the contextual toolbar to a new position. For example, you can position the contextual toolbar on the left side of the selected object.

4. Release the left mouse button. The contextual toolbar now appears in the position you defined, for example on the left side of any object you select.

Pin contextual toolbar in place

You can pin the contextual toolbar to a specific location on the screen, so that the position is locked. For example, you could have it appear at the upper left corner of the screen. In the locked state, the position of the contextual toolbar is independent of the individual part's location.

1. Drag the contextual toolbar to a new location.

2. Click ⚲ to pin the contextual toolbar to the new location.

    The pin icon changes when the position is locked.

3. To unlock the position, click ⚲.

Minimize contextual toolbar

You can minimize the contextual toolbar so that it takes less space on your screen.

1. On the contextual toolbar, click ⤢. The contextual toolbar now has the symbol 📦.

2. To restore the contextual toolbar to its original size, click ⤢ again.

See also

Customize the contextual toolbar (page 65)

5.6 Customize the contextual toolbar

You can customize the contextual toolbar by selecting which toolbar elements are visible. You can also adjust the width of the elements, and add icons and additional titles to the elements.

Customize contextual toolbar

1. On the contextual toolbar, click ☰.

2. Select and clear check boxes to define which toolbar elements you wish to show or hide.

The **Preview** area shows what the toolbar will look like. For example:
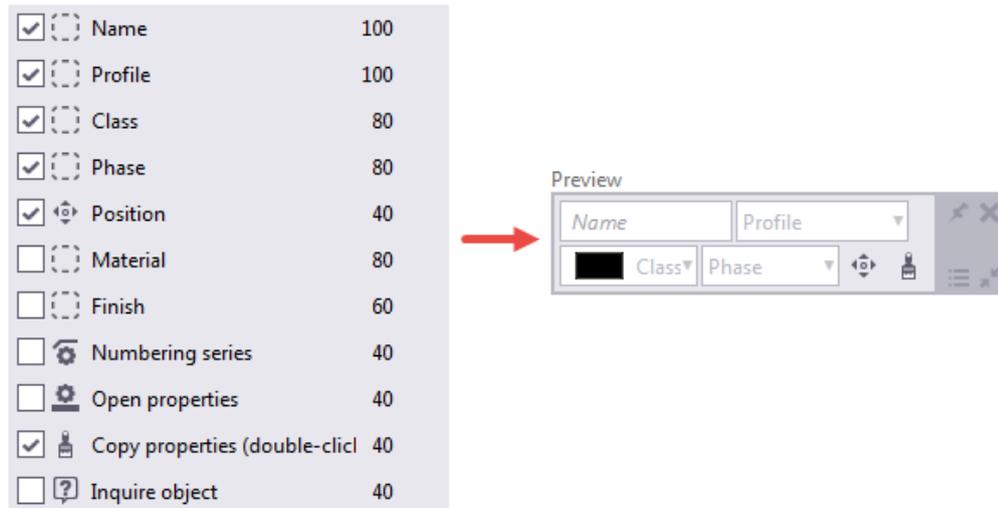
3. To modify the toolbar elements:

   a. Click the toolbar element.

      If the element can be modified, the following box appears:

   b. Use the slider to adjust the width of the toolbar element.

   c. To add an additional title, click the text box and enter a title.

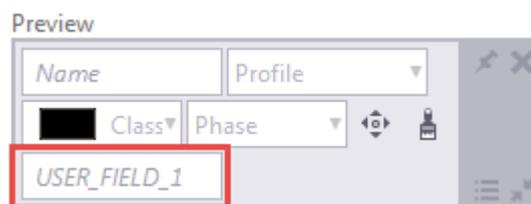   d. To add an icon, click and select an icon from the list.

   e. To remove the icon or title, click .

4. To add macros and user-defined attributes:

   a. Select the desired macro or user-defined attribute from the list.

   b. Click **Add**.

      Tekla Structures adds the macro or user-defined attribute to the list of toolbar elements and to the **Preview** image. For example:

   c. To hide the macro or user-defined attribute, clear the corresponding check box as described in step 2.

5.   Click **OK** to save the changes.

Create user profiles for contextual toolbars

You can create multiple profiles for contextual toolbars. Each profile contains the same contextual toolbars, but with different settings.

1.   On the contextual toolbar, click ☰.

2.   Click **Set profiles**.

3.   Select **New profile** from the list.

4.   Enter a name for the profile.

5.   Click **Save**.

6.   Customize the contextual toolbar.

     For example, remove some elements from the contextual toolbar.

7.   Click **OK** to save the changes.

     The user profile is now active with the settings you defined.

8.   To switch to another profile:

     a.   Click **Set profiles**.

     b.   Select another profile from the list.

     c.   Modify the settings.

     d.   Click **OK**.

          This user profile is now active.

Back up and share contextual toolbars

We advice you to save a backup copy of your customized contextual toolbars. You can use the backup file to copy settings to another computer or to share the customizations with your co-workers.

1.   Save the contextual toolbar under a user profile, with a name that you can easily recognize. For example, `MyContextualToolbar`.

2.   Go to the `..\Users\<user>\AppData\Local\Trimble \TeklaStructures\<version>\ContextualToolbar\Profiles` folder.

3.   Make a copy of your customized contextual toolbar and save it in the corresponding folder on another computer.

4.   To open a customized contextual toolbar on another computer:

     a.   On the contextual toolbar, click ☰.

     b.   Click **Set profiles**.

c. Select the correct profile from the list. For example, `MyContextualToolbar`, if that is the name you used in step 1.

d. Click **OK**. The customizations are now active.

NOTE   Alternatively, you can place the entire `ContextualToolbar` folder to your company's firm folder or in the `system` folder, which is located under your environment folder: `..\ProgramData\Tekla Structures\<version>\Environments\<environment>\system`.

5.7   View status bar messages

Status bar is the area located at the bottom of the Tekla Structures main window. Follow the instructions on the status bar when you use commands. For example, when you are creating a part, the status bar will tell you how to proceed and when to pick points.

1. Instructions and error messages
2. The status of **Smart select** (**S**), **Drag & drop** (**D**), and **Ortho** (**O**)
3. The level in assembly or component hierarchy (0–9)
4. The middle mouse button mode (**Pan** or **Scroll**)
5. The current phase
6. The number of selected objects and handles

5.8 Basic settings in the File menu

Use the switches in **File menu** --> **Settings** --> **Switches** to control some basic modeling and drawing settings.

Alternatively, you can control the switches with **Quick Launch**. Start typing the name of the switch, for example, `smart`, and click the name of the switch on the search results list to activate the switch.

Option	Description
Smart select	Change how drag-and-drop works for object handles.
	When the option is **on**, you can drag from object handles without selecting them first.
	When the option is **off**, you must select the handles before dragging.
Drag & drop	Activate or inactivate the drag-and-drop command.
	When the option is **on**, you can use drag-and-drop when copying or moving objects.
	When the option is **off**, drag-and-drop cannot be used.
Middle button pan	Change the panning mode.
	When the option is **on**, you can move the model using the middle mouse button.
	When the option is **off**, you can move the model using the left mouse button.
Centered zooms	Change the zooming mode.
	When the option is **on**, the center point of zooming is kept in the middle of the view, regardless of the mouse pointer position.
	When the option is **off**, the mouse pointer position determines the center point of zooming.
Basic view auto rotation	Activate or inactivate the auto rotation of part and component 3D views.
	When the option is **on**, Tekla Structures rotates the view once

Option	Description
	whenever you create a new 3D view of a part or component.
	When the option is **off**, Tekla Structures does not rotate the view.
Crossing selection	Change how area selection works.
	When the option is **on**, all objects that fall at least partially inside the rectangular area are selected, regardless of the dragging direction.
	When the option is **off**, the dragging direction affects the selection of objects.
Rollover highlight	Switch the highlighting of objects on or off.
	When the option is **on**, Tekla Structures highlights selectable objects in yellow when you move the mouse pointer on them.
	When the option is **off**, selectable objects are not highlighted.
Select on right-click	Change how objects can be selected.
	When the option is **on**, you can select objects also with the right mouse button. Also the related shortcut menu is displayed immediately.
	When the option is **off**, you can select objects with the left mouse button.
Automatic rotation center	Define how the view point is set.
	When the option is **on**, the view point changes whenever you click the middle mouse button.
	When the option is **off**, the view point stays in a set position.
Ortho	Activate or inactivate orthogonal snapping.
	When the option is **on**, Tekla Structures snaps to the closest orthogonal point on the plane (0, 45, 90, 135, 180 degrees, and so on). The mouse pointer automatically snaps to

Option	Description
	positions at even distances in the given direction.
	When the option is **off**, orthogonal snapping is not used.
DirectX rendering	Switch between OpenGL rendering and DirectX rendering.
	When the option is **on**, DirectX rendering is used.
	When the option is **off**, OpenGL rendering is used.
Contextual toolbar	Show or hide the contextual toolbar (page 63).
	When the option is **on**, the contextual toolbar appears when you select objects.
	When the option is **off**, the contextual toolbar does not appear.
Tooltips	Show or hide the tooltips (page 44).
	When the option is **on**, a small window with examples, hints, and tips appears when you rest the mouse pointer on a command.
	When the option is **off**, no tooltips appear.

The following settings are available only in drawings:

Option	Description
Printer line widths	Show the lines in color drawings with defined thickness on the screen.
	When the option is **on**, the lines in color drawings are shown with defined thickness.
	When the option is **off**, the lines in color drawings are shown with default thickness.
Ghost outline	Show hidden objects in drawings as ghost outlines in color drawings. In grayscale and black and white drawings, hidden objects are not shown even if **Ghost outline** is selected.

Option	Description
	When the option is **on**, hidden lines are shown as ghost outlines.
	When the option is **off**, hidden lines are not shown.
Associativity symbol	Shows which drawing objects are associative and automatically updated. Associativity symbols are shown only when you select a drawing object, for example a dimension.
	Objects that do not have valid association get a ghost associativity symbol and a question mark.
	When the option is **on**, associativity symbols are shown.
	When the option is **off**, associativity symbols are not shown.

5.9 Icons on the Quick Access Toolbar

Quick Access Toolbar provides shortcut icons to the commonly used commands. The toolbar is located on top left corner of the screen.

If needed, you can customize (page 47) the Quick Access Toolbar and add the commands of your choice to it.

Icon	Description
	Save (page 40) changes to the current model file.
	Undo the last action.
	Redo the actions previously undone.
	Open the **Undo history** dialog box. The dialog box lists the commands you have run and the modifications you have done. Use the list to undo or redo several commands or modifications at one go.
	To undo commands, click any row on the list. All the modifications you have done after the selected command are undone. The modifications you have undone have a dark gray background color in the list.
	To redo previously undone commands, click any row with a dark gray background color in the list. The

Icon	Description
	modifications you have done before the selected command are redone.
	Add bookmarks ⊕ to mark important commands or actions. You can later return to these commands or actions if the changes in the model are not satisfactory.
	The undo and redo actions create a hierarchy in the list. The hierarchy is marked with an arrow. You can undo or redo commands at any point in the hierarchy.
	The list is cleared when you
	• save a model
	• open or close a drawing
	• synchronize Organizer with the model
	• read in or write out model changes using Tekla Model Sharing
	• use CIS/2 or SDNF import commands.
	This icon is visible if you use Tekla Model Sharing.
	Read in other users' model changes from the sharing service. Only the changed data is read in.
	This icon is visible if you use Tekla Model Sharing.
	Write out your model changes to the sharing service. Only new or changed data is written out.
	The icon is visible if you use Tekla Model Sharing.
	Show read in changes. After you have read in, a list of model changes is displayed.

See also

Get familiar with the user interface (page 43)

5.10 Default keyboard shortcuts

Tekla Structures contains a large number of keyboard shortcuts that you can use to speed up your work.

If you want to change the default shortcuts, see Customize the keyboard shortcuts (page 77).

Common commands

Command	Keyboard shortcut
Help	**F1**
Help: when tooltip is open	**Ctrl+F1**
Open model	**Ctrl+O**
Create new model	**Ctrl+N**
Save model	**Ctrl+S**
Delete	**Del**
Properties	**Alt+Enter**
Undo	**Ctrl+Z**
Redo	**Ctrl+Y**
Interrupt	**Esc**
Repeat last command	**Enter**
Show/hide contextual toolbar	**Ctrl+K**
Switch direct modification on/off	**Ctrl+D**
Quick Launch	**Ctrl+Q**
Advanced options	**Ctrl+E**
Applications & components catalog	**Ctrl+F**

Rendering options

Command	Keyboard shortcut
Parts wireframe	**Ctrl+1**
Parts shaded wireframe	**Ctrl+2**
Parts grayscale	**Ctrl+3**
Parts rendered	**Ctrl+4**
Show only selected part	**Ctrl+5**
Components wireframe	**Shift+1**
Components shaded wireframe	**Shift+2**
Components grayscale	**Shift+3**
Components rendered	**Shift+4**
Show only selected component	**Shift+5**

Selecting objects

Command	Keyboard shortcut
Rollover highlight on/off	**H**
Select all selection switch	**F2**
Select parts selection switch	**F3**
Select all	**Ctrl+A**
Select previous objects	**Alt+P**
Select assembly	**Alt+object**
Add to selection	**Shift**
Toggle selection	**Ctrl**
Selection filters	**Ctrl+G**
Hide object	**Shift+H**

Snapping

Command	Keyboard shortcut
Snap to reference lines/points	**F4**
Snap to geometry lines/points	**F5**
Snap to nearest points	**F6**
Snap to any position	**F7**
Ortho	**O**
Relative coordinate input	**R**
Absolute coordinate input	**A**
Global coordinate input	**G**
Snap to next position	**Tab**
Snap to previous position	**Shift+Tab**
Lock X, Y or Z coordinates	**X**, **Y** or **Z**

Copying and moving objects

Command	Keyboard shortcut
Copy	**Ctrl+C**
Move	**Ctrl+M**
Drag and drop	**D**
Smart Select	**S**

Viewing the model

Command	Keyboard shortcut
Open the view list	**Ctrl+I**
3D/Plane view	**Ctrl+P**
Switch between views	**Ctrl+Tab**
Updated window	**Ctrl+U**
Zoom original	**Home**
Zoom previous	**End**
Zoom in	**Page Up**
Zoom out	**Page Down**
Rotate using mouse	**Ctrl+R**
Rotate using keyboard	**Ctrl+arrow keys** **Shift+arrow keys**
Set view rotation point	**V**
Rotate once	**Shift+R**
Rotate continuously	**Shift+T**
Pan	**P**
Middle button pan	**Shift+M**
Move right Move left Move down Move up	**arrow keys**
Fly	**Shift+F**
Create clip plane	**Shift+X**

Checking the model

Command	Keyboard shortcut
Inquire object	**Shift+I**
Measure distance	**F**
Create report	**Ctrl+B**

Drawings

Command	Keyboard shortcut
Open **Drawing list** in model	**Ctrl+L**
Open **Drawing list** in drawing mode	**Ctrl+O**
Print drawings	**Shift+P**
Open next drawing	**Ctrl+Page Down**
Open previous drawing	**Ctrl+Page Up**
Associativity symbol	**Shift+A**
Set next drawing color mode	**B**
Ghost outline	**Shift+G**
Add orthogonal dimension	**G**
Add free dimension	**F**
Open any drawing after creating the drawing	**Ctrl+Shift**
In **Drawing list**: Open user-defined attributes	**Alt+U**
In **Drawing list**: Add to Master Drawing Catalog	**Ctrl+M**
In **Drawing list**: Revision handling	**Ctrl+R**
In **Master Drawing Catalog**: Select all	**Ctrl+A**
In **Master Drawing Catalog**: Create drawings for all parts	**Alt+A**
In **Master Drawing Catalog**: Create drawings	**Alt+C**
Set UCS origin	**U**
Set UCS by two points	**Shift+U**
Toggle orientation	**Ctrl+T**
Reset current	**Ctrl+1**
Reset all	**Ctrl+0**

5.11 Customize the keyboard shortcuts

In the **Keyboard shortcuts** dialog box, you can view a list of all shortcuts available in Tekla Structures. You can define new keyboard shortcuts and remove existing ones. After customization, you can export the keyboard shortcuts and share them with your co-workers.

Define new keyboard shortcuts

You can assign keyboard shortcuts to any command, macro, or component. You can even change the default keyboard shortcuts, if needed.

1. On the **File** menu, click **Settings** --> **Keyboard shortcuts**.

   The **Keyboard shortcuts** dialog box opens.
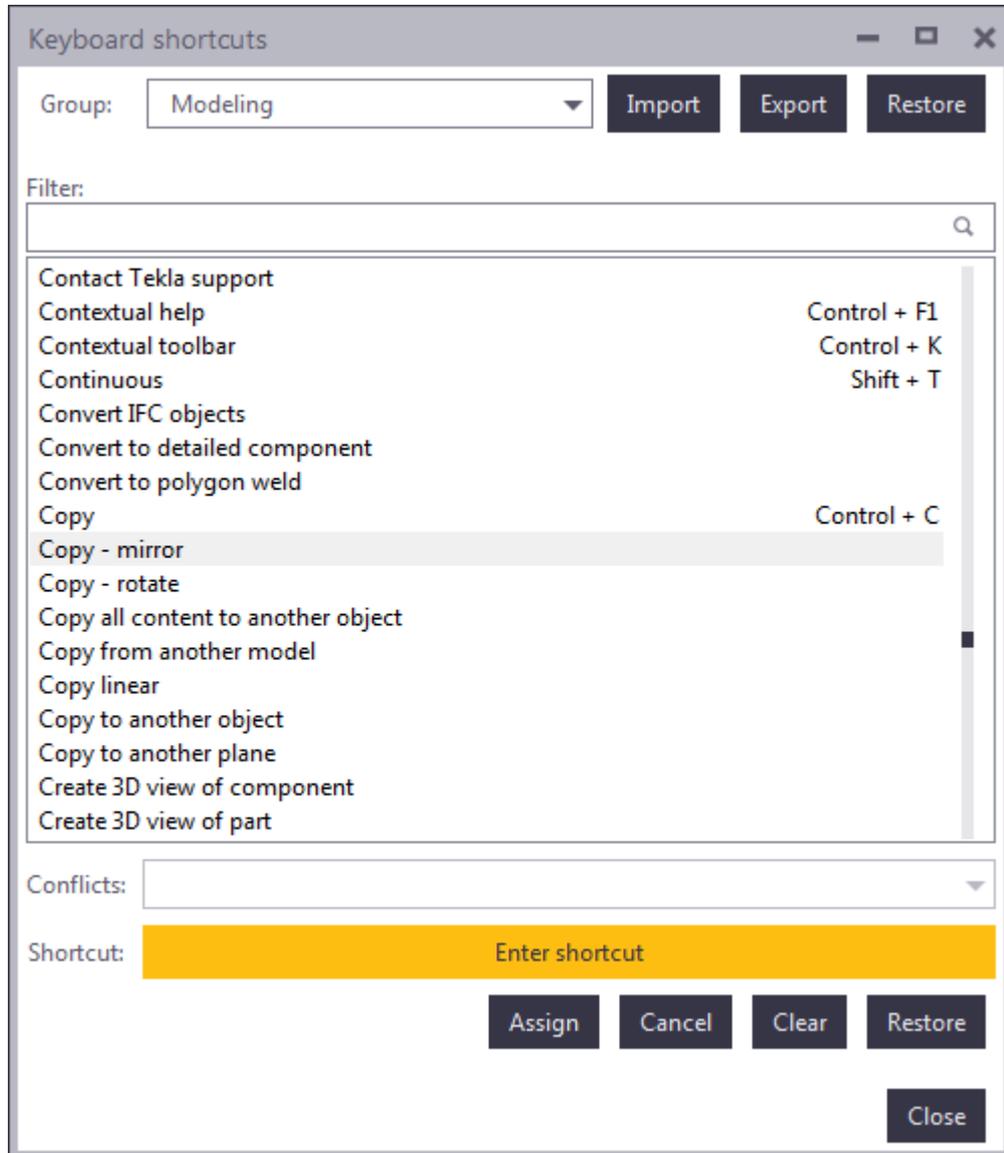
2. In the **Group** list, select the shortcut group you want to modify.

   A list of commands and shortcuts appears.

3. If you want to search for a particular command or keyboard shortcut, enter some text in the **Filter** box.

For example:

- Type `grid` to only see the commands whose name contains the word "grid".
- Type "+" to get a list of shortcuts that consist of two parts (such as **Ctrl +S**).
- Type **", "** to get a list of shortcuts that consist of two consecutive keys (such as **M, N**).

4. Select a command from the list.

5. Click **Enter shortcut**.

6. On the keyboard, enter the combination of keys you would like to use as the shortcut.

7. Check the **Conflicts** box to see if the keyboard shortcut is already assigned to another command.

   If the shortcut is already in use, enter a different combination of keys.

   NOTE If you reassign a keyboard shortcut that is already used, it will no longer be associated with the command it was originally assigned to.

   ---

8. Click **Assign** to save the keyboard shortcut.

Clear and reset shortcuts

You can remove any existing shortcut. You can also reset all shortcuts back to the defaults.

1. On the **File** menu, click **Settings** --> **Keyboard shortcuts**.

2. To remove a keyboard shortcut, select the command from the list and click **Clear**.

3. To reset all the keyboard shortcuts to the defaults (page 73), click the **Restore** button.

Export keyboard shortcuts

You can export your customized keyboard shortcuts and share them with your co-workers.

1. On the **File** menu, click **Settings** --> **Keyboard shortcuts**.

2. Click **Export**.

3. Enter a file name and location.

4. Click **Save** to export the keyboard shortcuts.

5. To share your keyboard shortcuts with other users, send them the exported file.

Import keyboard shortcuts

You can import keyboard shortcuts from a file. Use this method to import keyboard shortcuts from Tekla Structures 2016 or newer.

1. On the **File** menu, click **Settings** --> **Keyboard shortcuts**.

2. Click **Import**.

3. Browse for the shortcuts file you want to import. For example, `..\Users\<user>\AppData\Local\Trimble\TeklaStructures\2016\Settings\KeyboardShortcuts_4.xml`.

4. Click **Open** to import the keyboard shortcuts.

5.12 Learn the common buttons

The following table lists some common buttons that can be found in the Tekla Structures dialog boxes.

Button	Description
OK	Saves the properties and closes the dialog box. Tekla Structures uses these properties the next time you create an object of this type.
Apply	Saves the properties without closing the dialog box. Tekla Structures uses these properties the next time you create an object of this type.
Modify	Modifies the selected objects using the current properties of the dialog box.
Get	Fills the dialog box with the properties of the selected object. If several objects are being selected, Tekla Structures takes the properties randomly from one of them.
☑ / ☐	Switches all check boxes in the dialog box on and off.
Cancel	Closes the dialog box without saving the properties or modifying objects.
Save	Saves the properties in the file shown in the list.
Load	Loads the previously saved properties to the dialog box. Tekla Structures also loads the properties of sub-dialog boxes, even if they are not open. Select the name of the properties file you want to use. For more information, see Save and load object properties.

Button	Description
Save as	Saves the properties with the name given in the box. The **Save as** button also updates the **Load** list. This is important if you add or delete files manually.
	Tekla Structures stores the properties files in the model folder, also including the properties of sub-dialog boxes.
	For more information, see Save and load object properties.

5.13 Change the language

You can change the language of the Tekla Structures user interface at any time.

1. On the **File** menu, click **Settings** --> **Change language**.

2. Select a language from the list.

   You have the following options. The three-letter language codes that are given in parentheses are used in some language-dependent file and folder names.

   • Chinese – simplified (chs)

   • Chinese – traditional (cht)

   • Czech (csy)

   • Dutch (nld)

   • English (enu)

   • French (fra)

   • German (deu)

   • Hungarian (hun)

   • Italian (ita)

   • Japanese (jpn)

   • Korean (kor)

   • Polish (plk)

   • Portuguese (ptg)

   • Portuguese – Brazilian (ptb)

   • Russian (rus)

   • Spanish (esp)

3. Click **OK**.

4. Restart Tekla Structures for the change to take effect.

5.14 Take screenshots

A screenshot is an image of a model or drawing view. You can use screenshots in posters, brochures, or other material to show projects carried out using Tekla Structures.

By default, the screenshots are saved in the `\screenshots` folder under the current model folder with the name `snap_xx.png`.

Take a screenshot of a model

You can take screenshots of model views.

1. Open a model and adjust the model view according to your needs.

    For example, hide the work area box if you do not want to show it.

2. On the **View** tab, click **Screenshot** --> **Screenshot**.

3. If you have multiple views of the model, click **Pick view** and select the view to take the screenshot from.

4. To modify the settings, click **Options**.

    a. Define the width, height, and DPI of the screenshot.

    b. Click **OK** to save the changes.

5. Define a name and location for the screenshot.

    a. Select **Print to file** and enter a descriptive name for the screenshot in the **File name** box.

        You can also change the whole path. If you do not want to do this, you can keep the default values for the path and the file name.

6. Click **Show with associated viewer** to show the screenshot in an application that is by default associated with this file type.

7. Click **Capture**.

Take a screenshot of a drawing

A drawing screenshot is an image of an open drawing with or without borders.

1. Open a drawing and adjust the drawing view according to your needs.

    For example, delete unnecessary marks or dimensions, and hide unnecessary parts.

2.   On the **Views** tab, click Screenshot --> **Screenshot**.

3.   Do one of the following:

   •   Select **View** to take a screenshot of the open drawing with window borders

   •   Select **View without borders** to take a screenshot of the open drawing without window borders.

4.   Under the preselected **Print to file** option enter a descriptive name for the screenshot in the **File name** box.

   You can also change the whole path. If you do not want to do this, you can keep the default values for the path and the file name.

5.   Click **Show with associated viewer** to show the screenshot in an application that is by default associated with this file type.

6.   Click **Capture**.

Save a screenshot in bitmap format

By default, screenshots are created as Portable Network Graphics (`.png`) files. You can also save a screenshot in bitmap (`.bmp`) format to use it, for example, as a custom component thumbnail.

1.   On the **Views** tab, click Screenshot --> **Screenshot**.

2.   Select **Place on clipboard**.

3.   Click **Capture**.

4.   Paste the screenshot in your graphics editor and save it in `.bmp` format.

NOTE   The software that you use to open the screenshot may have a limit for the number of pixels.

Screenshot settings

Use the **Screenshot** dialog box to view and modify the screenshot settings.

The following options are available in model views and in drawings.

Option	Description
View name	Shows the selected view name.
View	Includes the view content and window borders in the screenshot. Not available in model views.

Option	Description
View without borders	Includes only the view content in the screenshot.
	Not available in model views.
Rendered view	For high resolution screenshots from model views. The **Options** button displays the **Screenshot Options** dialog box.
	Not available in drawings.
Place on clipboard	Places the screenshot on the clipboard.
	Not available in drawings.
Print to file	Saves the screenshot to a file.

The following screenshot options are only available in model views:

Option	Description
Final width	The width of the screenshot.
	The units depend on the settings in **File menu** --> **Settings** --> **Options** --> **Units and decimals**.
Final height	The height of the screenshot.
	The units depend on the settings in **File menu** --> **Settings** --> **Options** --> **Units and decimals**.
DPI	The pixel density (DPI) of the screenshot.
	There are limitations to pixel density. You can change the DPI using a graphics editor.
White background	Uses white background.
Smooth lines	Uses smooth lines to decrease jagged edges.
Line width	Sets the line width.

6 Contact Tekla Structures support (Support tool)

The Support tool allows you to contact Tekla Structures support directly. With this tool you can collect the model, related files, and other necessary information in one support request, and safely upload your request to Tekla Structures support.

The Support tool:

- Automatically identifies the open model and includes all files or selected files according to your selection from the model folder as attachments to your request. Some logs and files in other folders are also attached, such as the user feedback log, Tekla Structures logs and user-defined attribute files.

- Automatically gathers application and system information.

- Uploads the problem description, attached model, attached files, and all other gathered information to Tekla Structures support.

NOTE **Confidentiality information**

All files you upload are treated as confidential. Only the recipient can access the files.

6.1 Create a support request

1. On the **File** menu, click **Help** --> **Contact Tekla support** .

   If you are having problems in opening Tekla Structures, you can use the **Start** menu/**Start screen** to start the Support tool. The command to use is **Support tool**.

2. Log in using your Trimble Identity.

   The Support tool opens and automatically fills in user, application and Tekla Structures version information. Support tool reads your name, email

address, company name and support email address from your Trimble Identity profile.

You can switch to another account by clicking **Switch user**.

3. Select a category from the list of predefined categories, or select **Other** and enter the category.

4. Enter the problem description.

5. Click **Next**.

6. Select what you want to attach. The file name, file group, file size, and file location are mentioned for each file.

   - Select the **All** check box, or select specific files from the **Select the files** list.

   - If you want to send some other attachments than shown in the **Select the files** list, click the **Add extra files** button and browse for the files.

   - To add crash dumps, click **Add crash dumps**.

7. Click **Next**.

   The Support tool creates the package and shows the total attachment size. You can also check application information and operating system information before finalizing the support case creation.

8. Click **Create case** to upload your case to Tekla Structures support.

When the upload is complete, you will receive a notification at your email address. After a successful upload, an automatic confirmation message will be sent to you, and then Tekla Structures support will start solving your case.

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