

Tekla PowerFab 2025

Tekla Connector Quick Guide

June 2025

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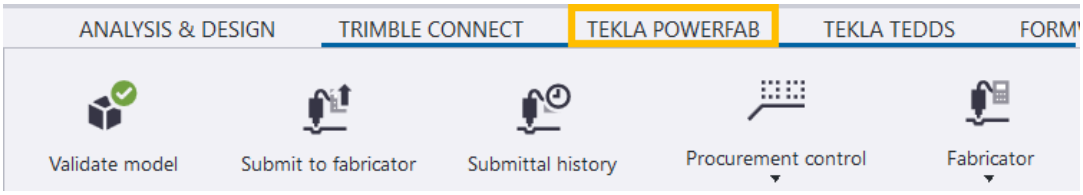
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1 Tekla Connector

Tekla Connector is an integration workflow that connects Tekla PowerFab and Tekla Structures. It is designed to enable seamless and easy cooperation between steel detailers and fabricators using these systems.

In Tekla Structures, "Tekla PowerFab Connector" refers to the tools and functionalities that are primarily accessed through a dedicated **Tekla PowerFab** ribbon tab.



In Tekla PowerFab, the functions related to receiving data from Tekla Structures are collectively referred to as "Tekla Structures Connector". It consists of specific functions related to submittals and integrated software settings within various modules.

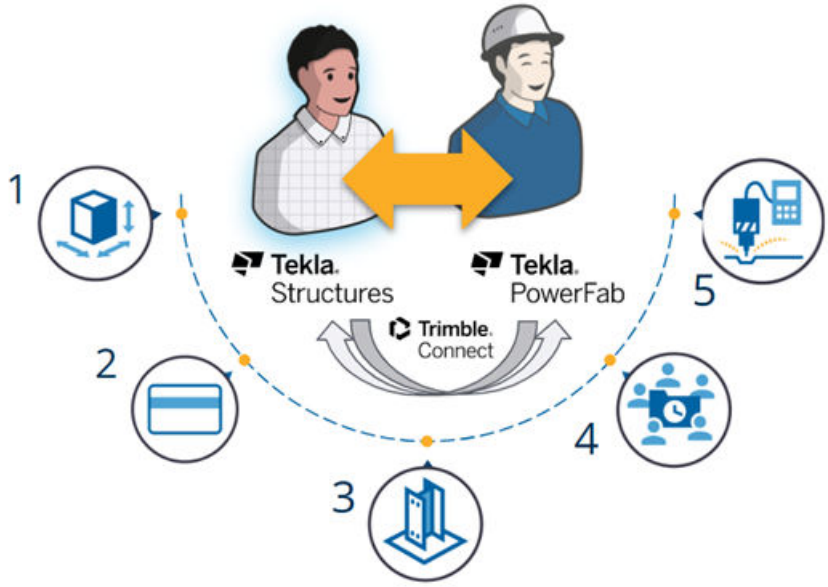
Using Tekla Connector, fabricators can share their up-to-date catalog of profiles, materials, and finishes, and ABM settings, along with real-time statuses, with detailers via cloud storage.

This shared data allows detailers to validate their models against fabricator settings, guiding them to use compatible items and ensuring data accuracy for submittals.

Detailers can submit various model information packages for estimating, procurement, drawings, and fabrication directly from Tekla Structures to Tekla PowerFab at any stage of a project.

Fabricators receive notifications about these submittals in Tekla PowerFab and can accept or reject them.

The workflow is enabled by connecting both parties to the same Trimble Connect project, reducing manual fixes and potential project delays.



(1) Modeling process starts

(2) Submit for purchasing (ABM)

(3) Detailing continues

(4) Release fabrication drawings and other real-life information

(5) Fabrication starts

For details, see the following:

- Tekla PowerFab Connector
- Tekla Structures Connector

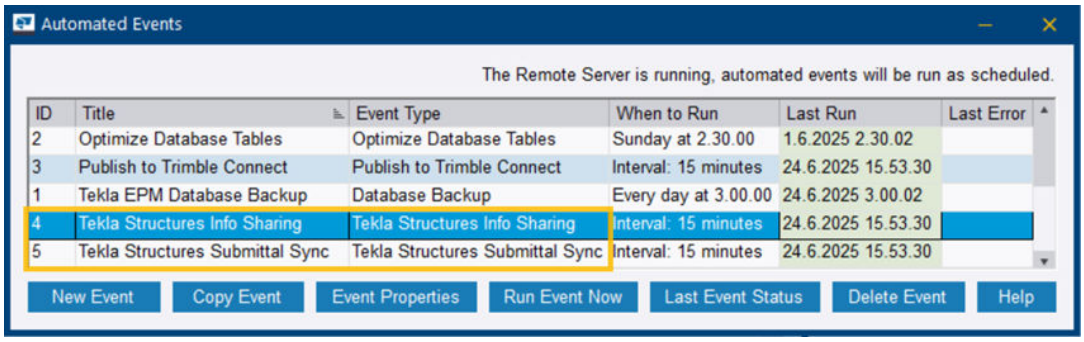
For a video, see Using Tekla Connector between Tekla PowerFab and Tekla Structures.

2 Tekla PowerFab: Share detailing guidelines

For the firm type **Detailer**, you can share the shapes, grades, and sizes, finishes, and ABM settings with this company. This is to ensure that the detailer can use your settings for the submittal process.

2.1 Check automated events

For a successful automated workflow, you need to have two automated events enabled in **Maintenance** --> **Automated Events**.



- To share information with the detailer, ensure that the automated event **Tekla Structures Info Sharing** is enabled in **Event Properties**.



- To import submittals from Tekla Structures to a specific Trimble Connect project, ensure that the automated event **Tekla Structures Submittal Sync** is enabled in **Event Properties**.

2.2 Share info to detailer

Select the detailer and the information that you want to share.

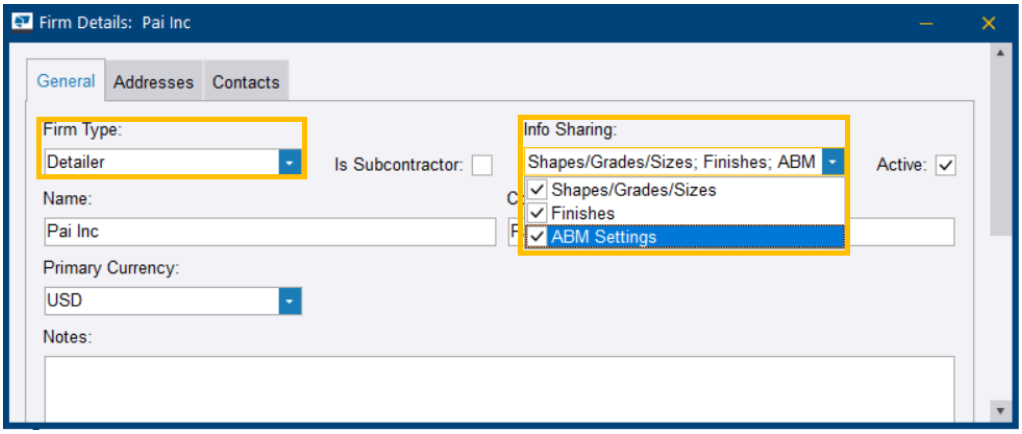
1. Go to **Maintenance** --> **Address Book**.

   The **Address Book** dialog opens.

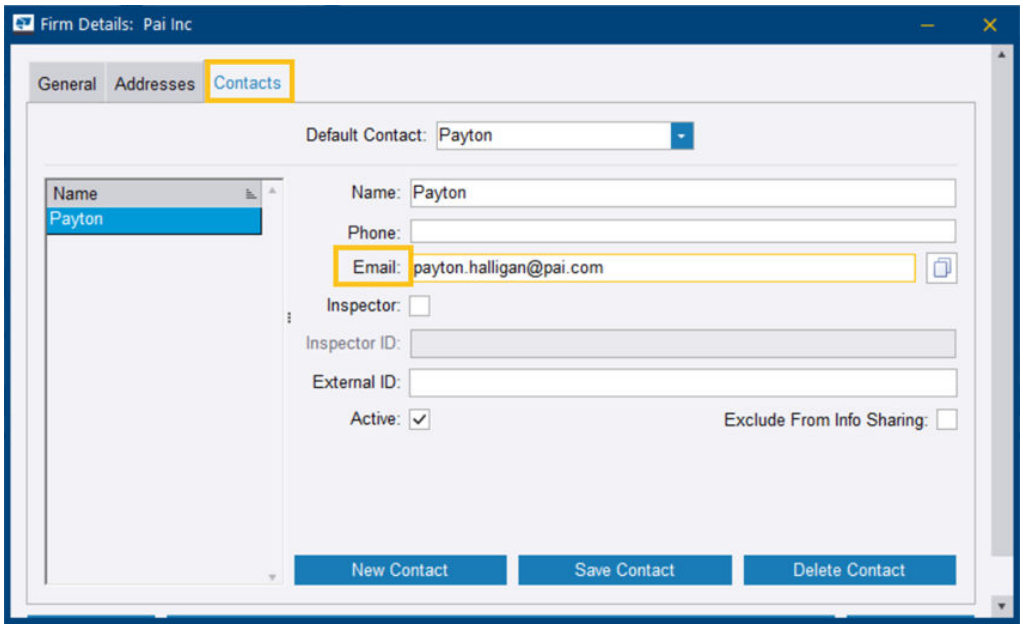
2. Select the detailer with whom you want to share the detailing guidelines.



3. Select the information that you want to share with the detailer.



4. Click **Save**.
5. On the **Contacts** tab, ensure that you have the email of a contact person with a valid Trimble Identity.



Also ensure that you have **Exclude from Info Sharing** unchecked.

After completing these steps, the detailer can find the fabricator in Tekla Structures and information can be shared between the detailer and the fabricator. The Trimble Connect project is automatically created.

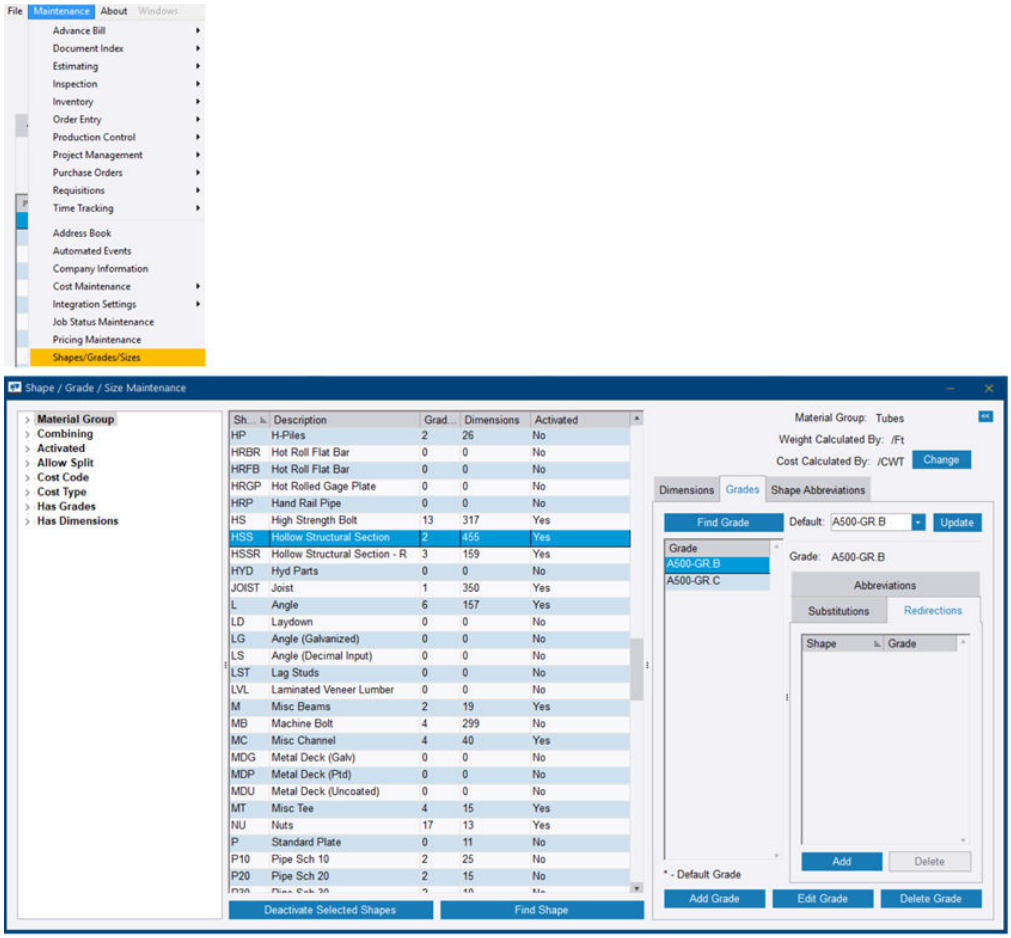
For details, see Add companies to the address book.

2.3 Define finishes and shapes, grades, and sizes

Before you share your detailing guidelines with the fabricator, check that the information you are about to share is valid.

1. To check the shapes, grades, and sizes, go to **Maintenance** --> **Shapes/Grades/Sizes**.

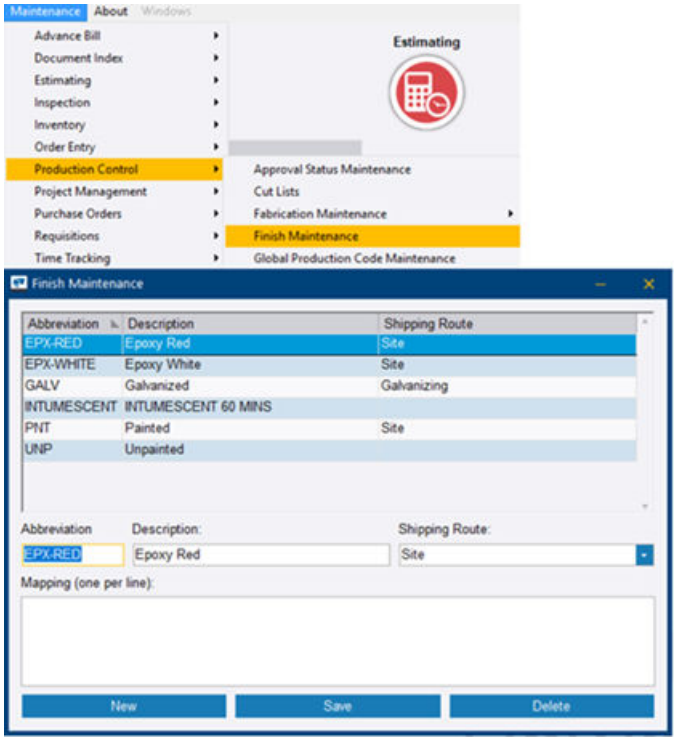
The **Shape / Grade / Size Maintenance** dialog opens.



- Delete any unnecessary material information.

2. To check the finishes, go to **Maintenance** --> **Production Control** --> **Finish Maintenance**

   The **Finish Maintenance** dialog opens.



   a. Delete any unnecessary finishes.

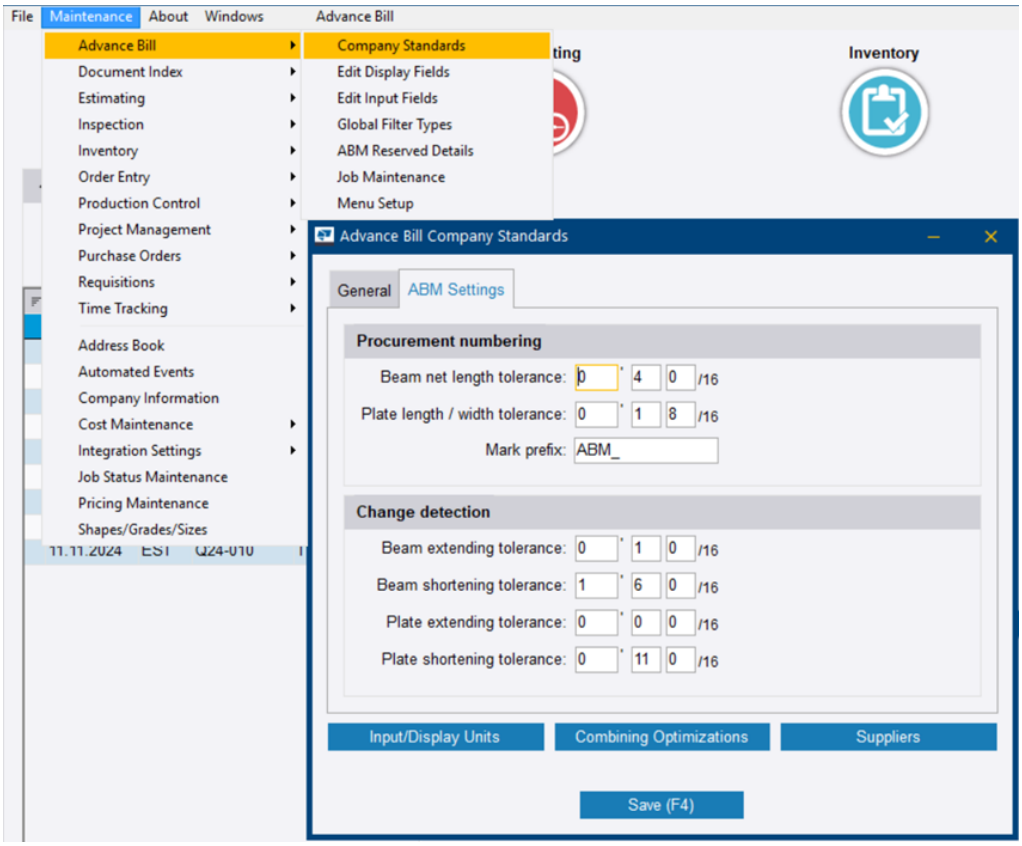
For details, see the following:

- Material database
- Manage material finish options

2.4 Define ABM settings

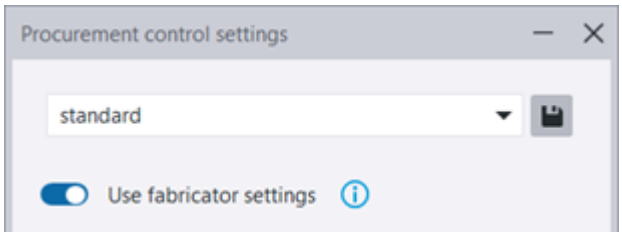
When an ABM is submitted from Tekla Structures, the values in **ABM Settings** determine if any changes made are within the tolerance. This helps identifying the changes that are critical for the ABM stage.

1. Go to **Maintenance** --> **Advance Bill** --> **Company Standards**.
2. Go to the **ABM Settings** tab.



3. Define the values.

The settings for the selected fabricator are visible in Tekla Structures **Procurement control settings** when **Use fabricator settings** is selected.



For details, see the following:

- Define company standard settings for Advance Bill
- Procurement control settings in Procurement control

3 Connect to Trimble Connect

To enable submittals using the Tekla Connector workflow, both the fabricator using Tekla PowerFab and the detailer using Tekla Structures must be connected to the same Trimble Connect project.

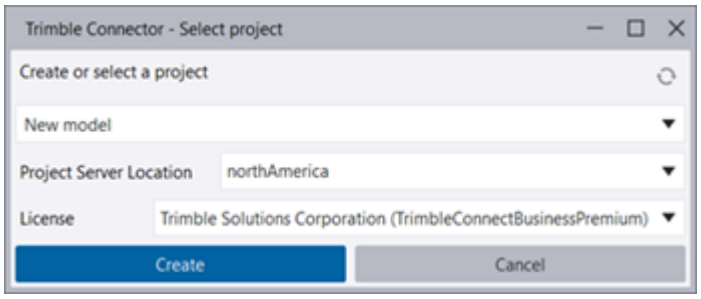
You can create a new Trimble Connect project or connect to an existing one either in Tekla Structures or in Tekla PowerFab.

If a new project is needed, decide which party creates the project and ensure the other party is invited to the project.

3.1 Tekla Structures: Trimble Connector

Use **Trimble Connector** to link a Tekla Structures model to a Trimble Connect project or to create a new Trimble Connect project.

- Do one of the following:
  - On the **Trimble Connect** ribbon tab, click  **Models**.

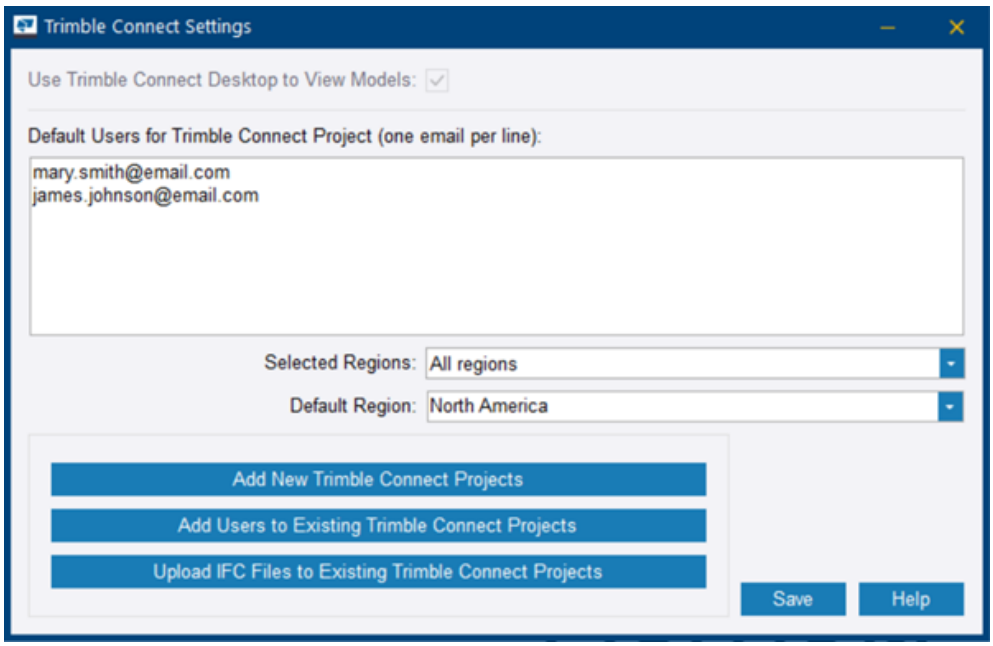


  - On the **File** menu, click **Import** --> **Trimble Connect** to download a reference model from any Trimble Connect project.
  - On the **File** menu, click **Export** --> **Trimble Connect** to publish an IFC reference model of the open model to any Trimble Connect project.

For details, see Trimble Connector.

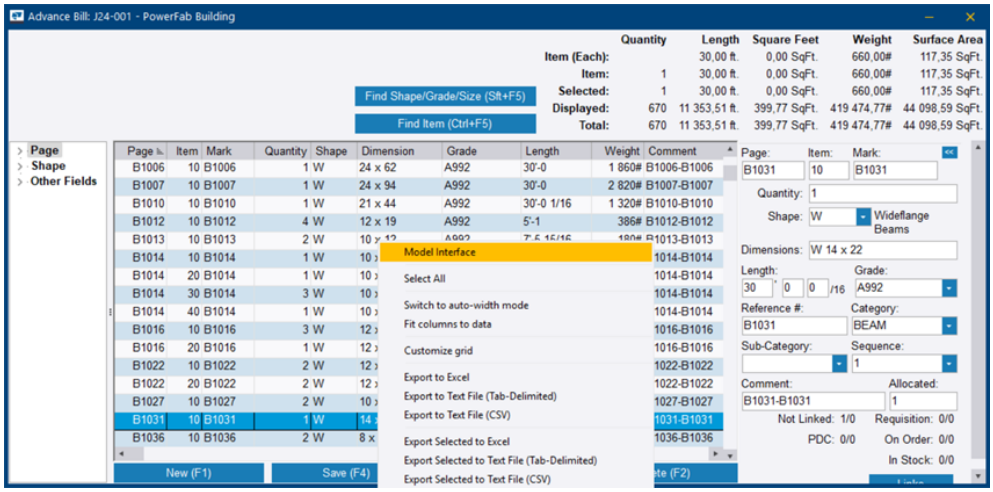
3.2 Tekla PowerFab and Trimble Connect

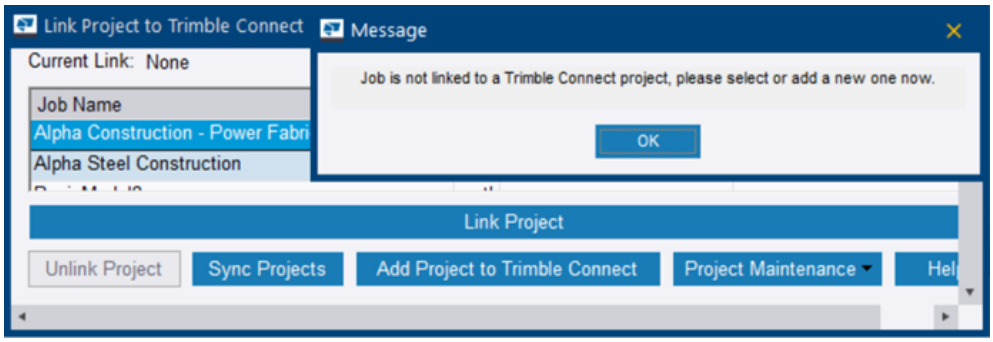
- Do one of the following:
  - Add a new project in **Maintenance** --> **Integration Settings** --> **Trimble Connect**.



  To add detailer users to the project, click **Add Users to Existing Trimble Connect Projects**.

  - To link an existing Estimating, Production Control or Advance Bill job to Trimble Connect, right-click in the display area of the dialog, and in the context menu that opens, click **Model Interface**.

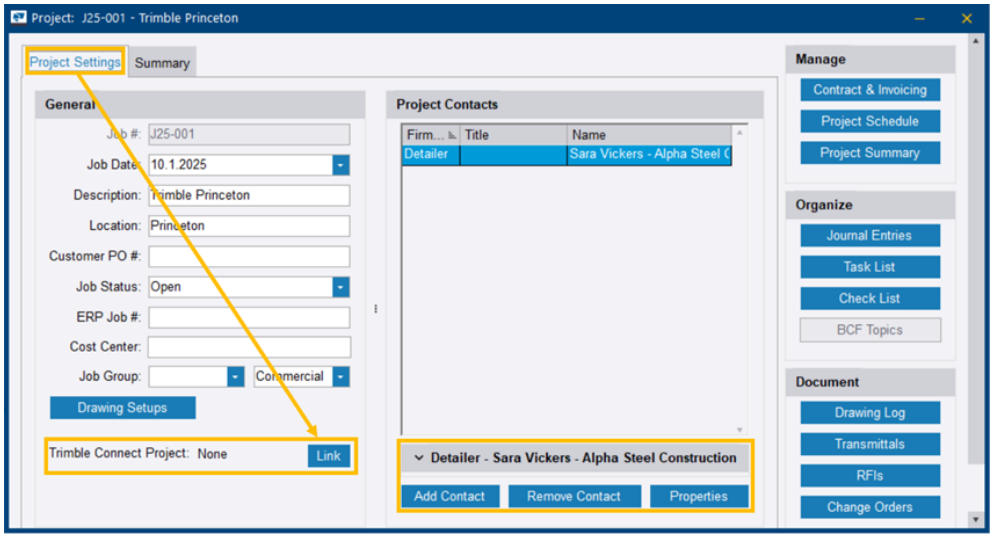




Alternative: In the **Select <Module> Job** dialog, select the job and click **Edit**.



- To link a project to a related Trimble Connect project, click **Link**.



To add detailer users to the project, click **Add Users to Existing Trimble Connect Projects**.

For details, see the following:

- Link Tekla PowerFab to Trimble Connect
- Link an estimating job to Trimble Connect
- Link a production control job to Trimble Connect
- Link a project to Trimble Connect
- Link an Advance Bill job to Trimble Connect
- Add users to Trimble Connect projects

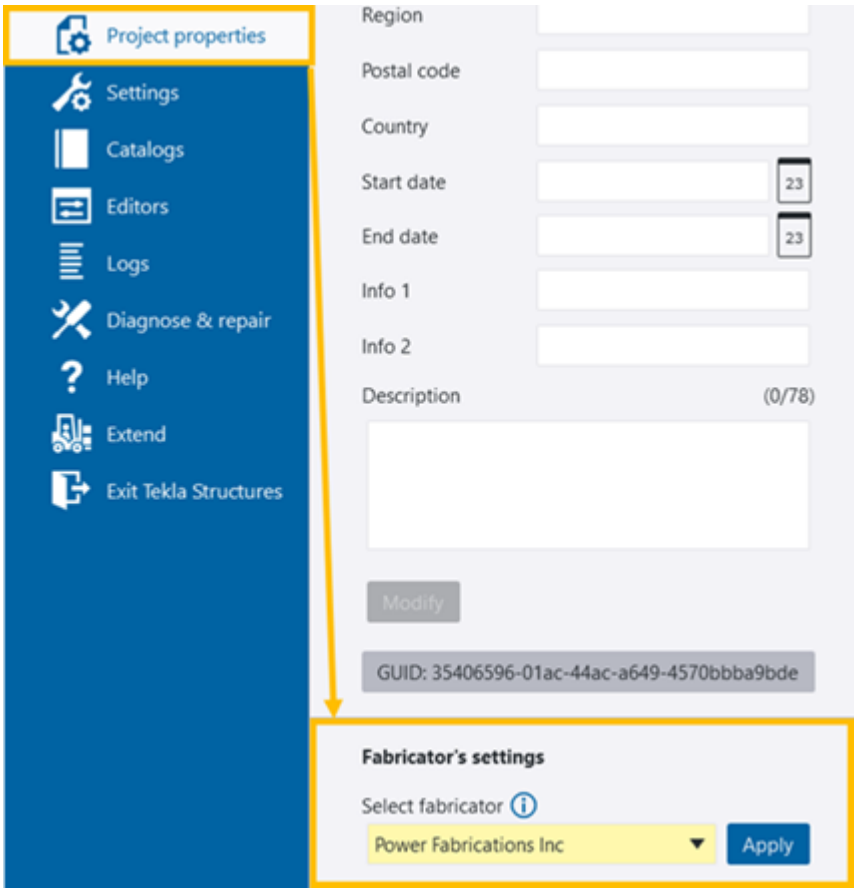
4 Tekla Structures: Select fabricator

When the fabricator has shared their settings with you, you need to restart Tekla Structures before the fabricator is available in Tekla Structures.

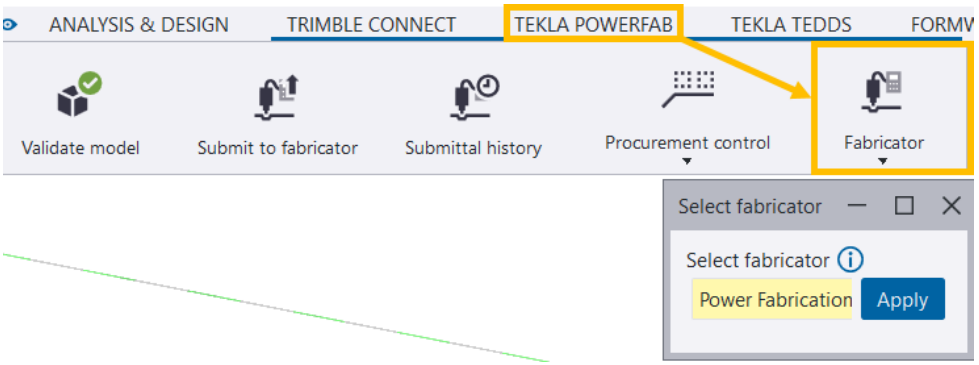
You can select the fabricator who is using Tekla PowerFab. The catalog data of the selected fabricator are then shared with you for your model.

1. Open a model.
2. Do either of the following:

- Select from the **File** menu:



- Select on the ribbon:



Fabricator settings start to download.

For details, see:

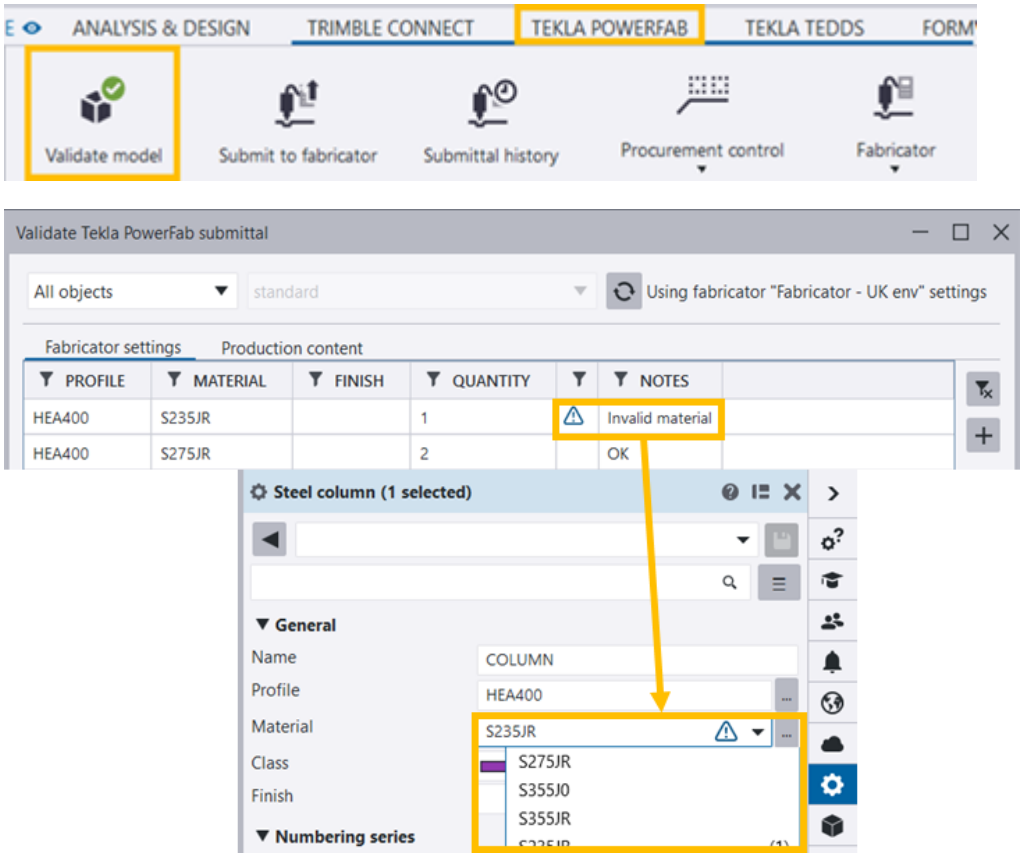
- Fabricator settings

5 Tekla Structures: Validate model

You can validate the model at any phase of the project and ensure that each submittal to the fabricator contains valid and up-to-date information.

You can validate model parts, profiles, materials, and finishes, and the numbering, drawing, PDF file, and NC file statuses of parts and assemblies.

1. On the **Tekla PowerFab** ribbon, click **Validate model**.

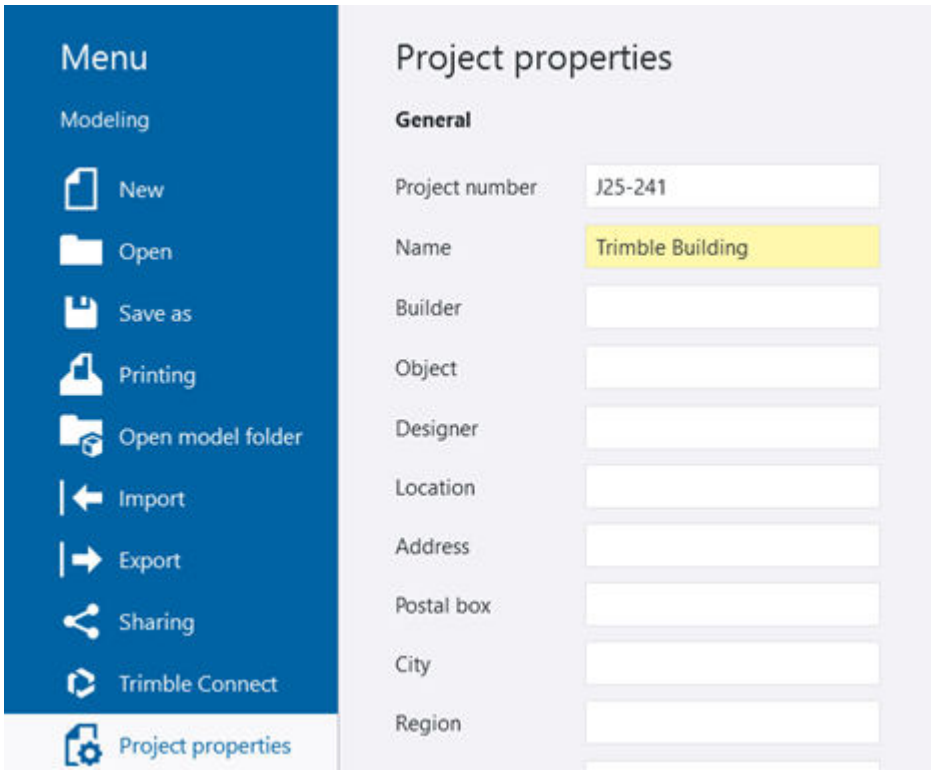


For details, see Validate Tekla PowerFab submittal.

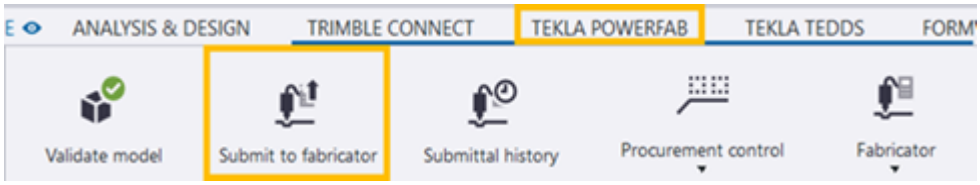
6 Tekla Structures: Submit to fabricator

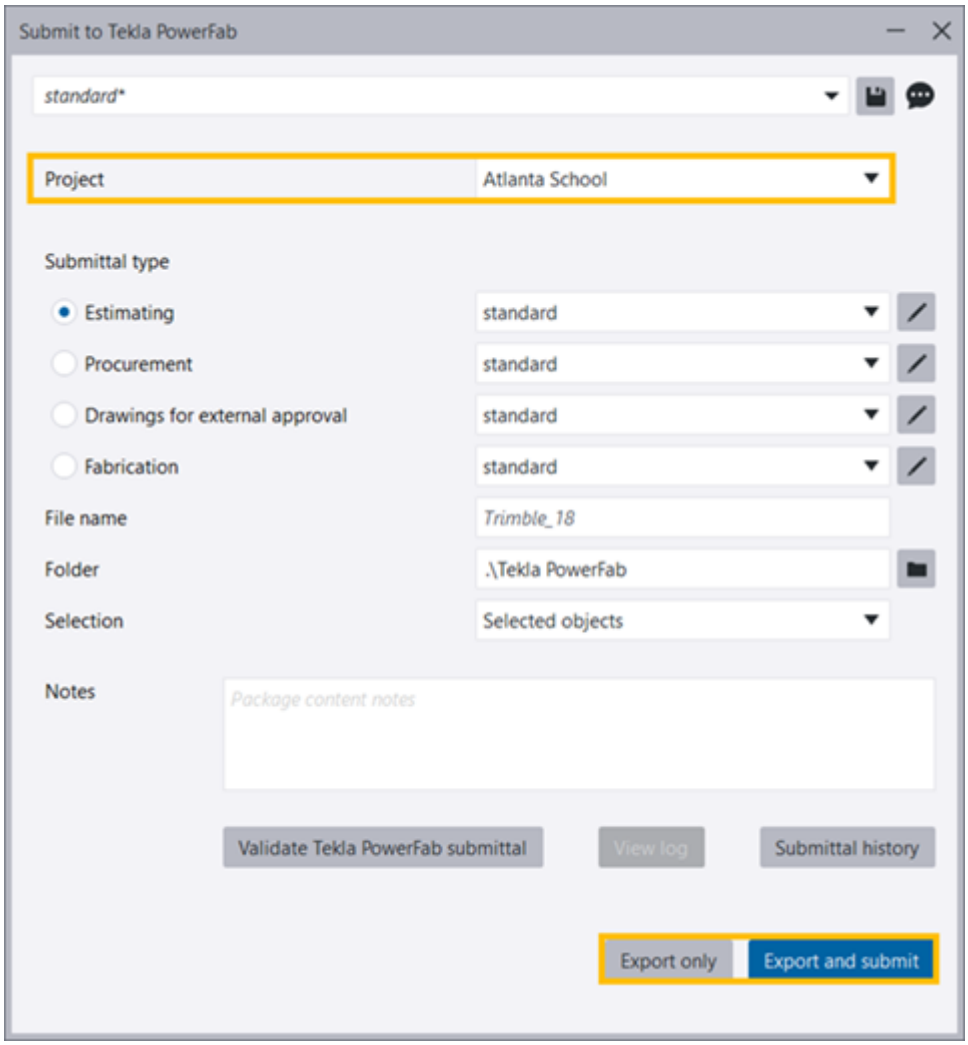
You can export and submit a package for estimating, procurement, external approval, and fabrication directly from Tekla Structures to Tekla PowerFab. You can submit the packages either locally or directly to Tekla PowerFab.

In **Project properties**, define the **Project number** so that you have the same project number as in Tekla PowerFab.



To submit, on the **Tekla PowerFab** ribbon tab, click **Submit to fabricator**.





Export only: You can check the package contents before submitting.

After checking the package, you can submit it in the **Submittal history** dialog.

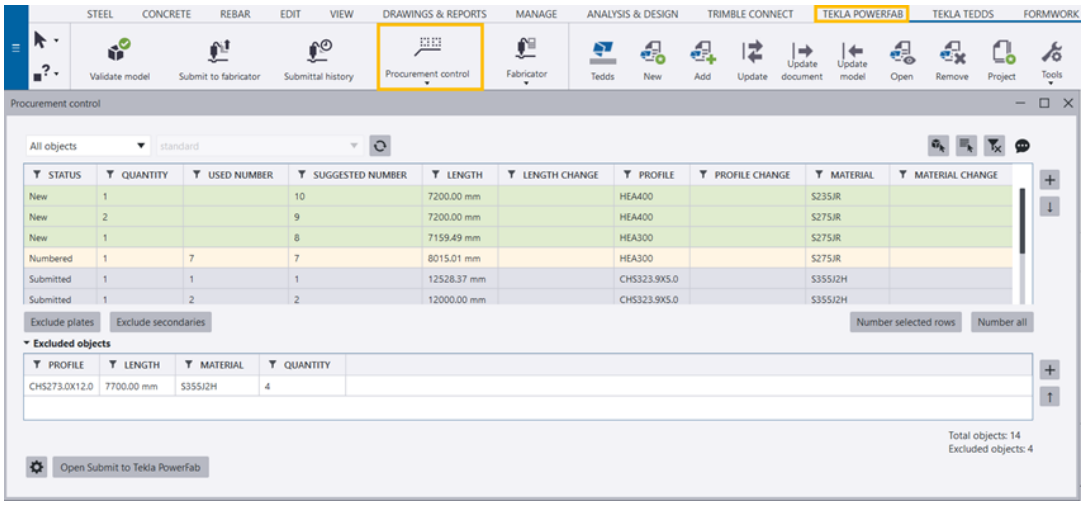
You can also submit from the **Procurement control** dialog.

See .

6.1 Procurement control: Numbering

The **Procurement control** tool is linked with the **Advance Bill** module in Tekla PowerFab.

You can prepare objects to be procured by the fabricator by assigning preliminary numbers to objects and checking their status.



If you do not buy materials before finishing the detailing, skip this step.

For details, see:

- Procurement control

6.2 Submit packages

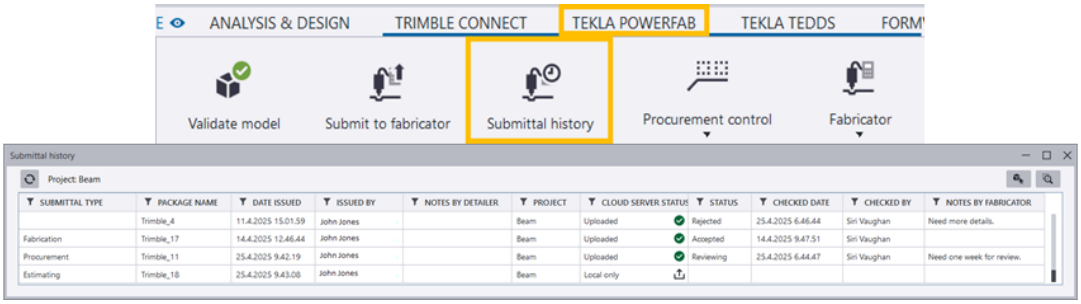
Ensure that you have the correct settings before you submit.

For details, see the following:

- Estimating settings
- Procurement settings
- Drawings for external approval
- Fabrication

To save any changes, click .

6.3 Check submittal history and status



To submit a **Local only** package, click .

For details, see:

- View submittal history

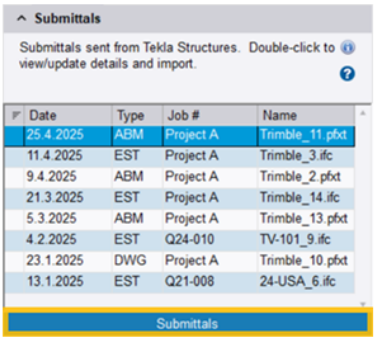
7 Tekla PowerFab: Import submittals

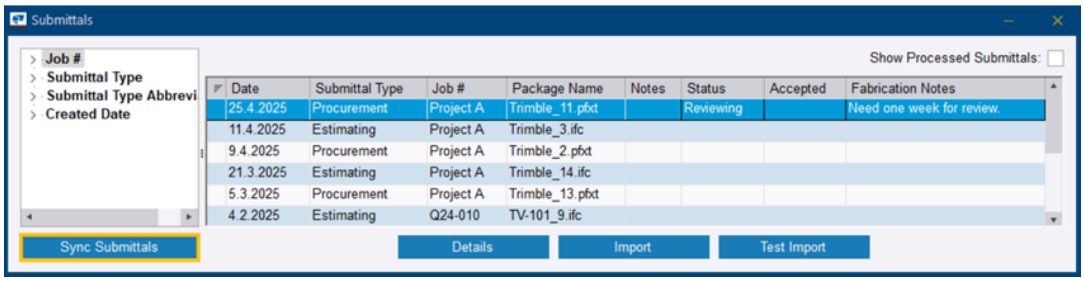
You can view a list of outstanding submittals in the Tekla PowerFab window and in the **Submittals** dialog of each relevant module.

If you want to have the submittal status updated automatically at the desired interval, ensure that the **Tekla Structures Submittal Sync** event in **Automated Events** is enabled.

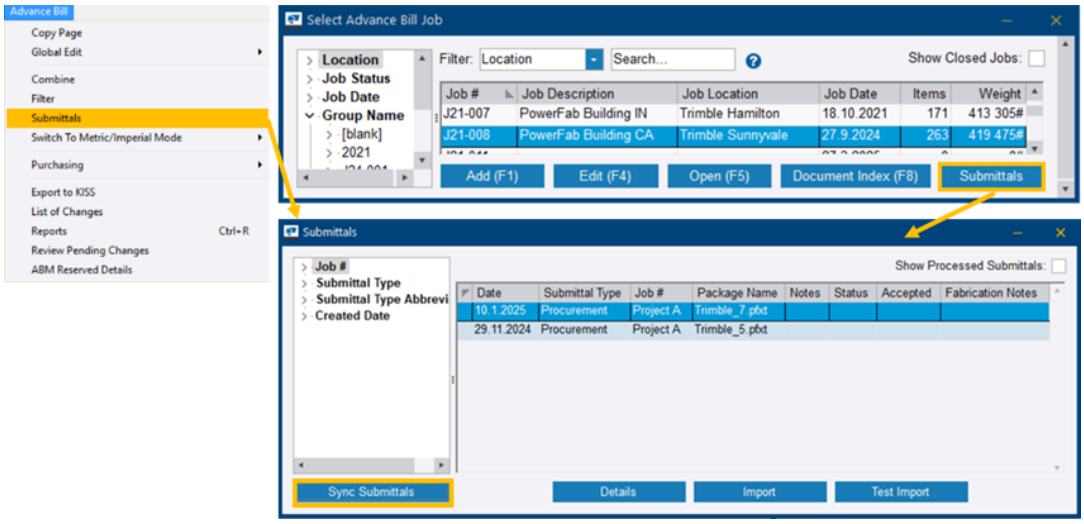
You can synchronize submittals also manually.

Submittals in the Tekla PowerFab window:



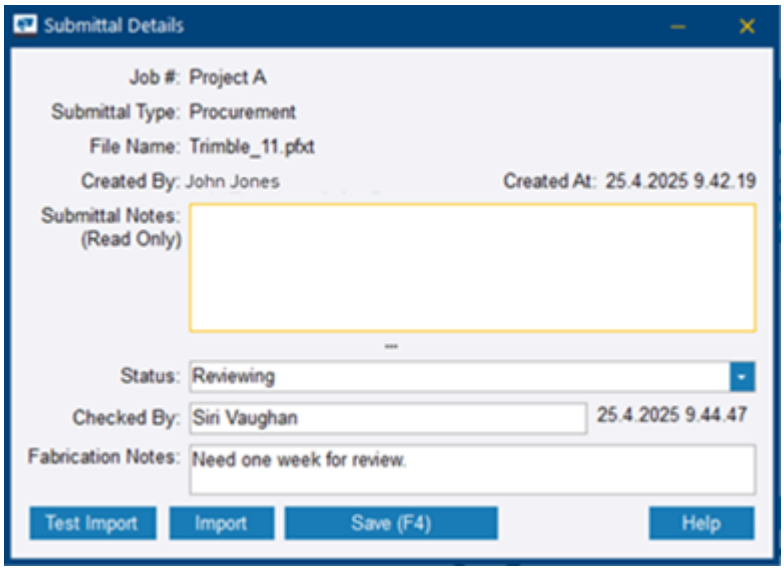


Submittals in modules:



Sync Submittals: You can sync submittals manually or rely on the **Automated Events**.

Details: The information that you save in **Submittal Details** shows in Tekla Structures **Submittal history**.



Import: Start importing a package.

For details, see the following:

- View and import submittals
- Manage changes to an Advance Bill job
- Manage submittals to an Advance Bill job
- Manage submittals to an estimating job
- Manage submittals to a project management job
- Manage submittals to a production control job

- Manage changes to a production control job
- Use Automated Events for Tekla Structures Connector

8 Disclaimer

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