

Basic operating instructions PLUS-Solutions

This manual describes the general basic operation of the new "PLUS" programs of FRILO.

The PLUS programs are characterized by a "+" - in character after the program code (eg S9+).

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Basic Documentation – Overview

In addition to the individual program manuals, you will find basic explanations on the operation of the programs on our homepage www.frilo.com in the Campus-download-section.

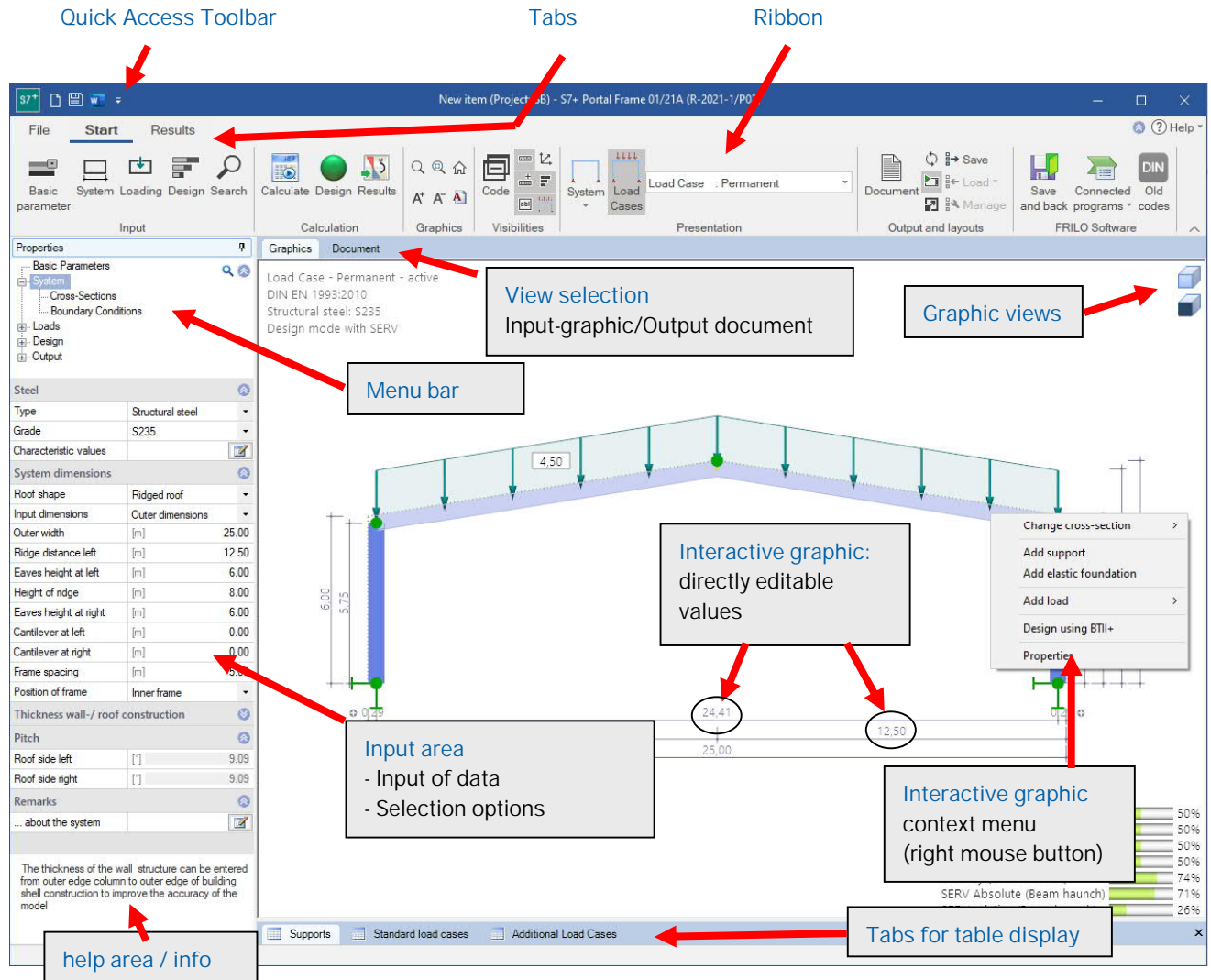
Tip 1: Back in the PDF - e.g. after a link to another chapter/document - use the key combination <ALT> + "Left direction key".

Tip 2: You can find answers to frequently asked questions at www.frilo.eu under ▶ Service ▶ Support ▶ [FAQ](#).

User interface

The central elements of the new PLUS programs are:

- Menu bar and input area (left side beneath Properties): can be faded in and out using the pin-needle symbol.
- [Interactive graphic area](#)
- [Wizard](#)
- [Ribbon](#) (multi-function toolbar)
- Output document (View selection)



Menu bar: Selection area and Input area

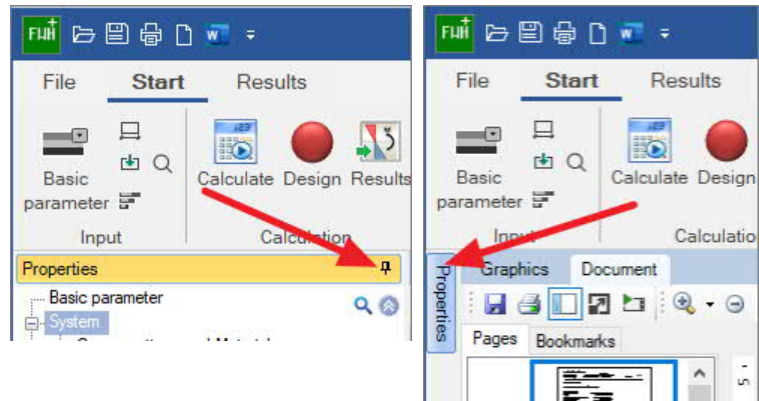
If the menu bar is not displayed on the left side, it can be displayed via the "Properties" tab – see the following section "[Hide / Show menu bar](#)".

All entries are divided into useful areas in the menu, e.g. Basic Parameters, System, Loads, Design and Output. By clicking on a menu item, the corresponding input areas or the individual input parameters are displayed.

Hide / Show the left menu bar

If the menu on the left is not displayed and you want it to show, click on the "Properties" tab on the left side. If you want to hide the fixed menu bar again, click on the pin symbol.

FRILO recommends interactive input in the graphics window as the usual input type.




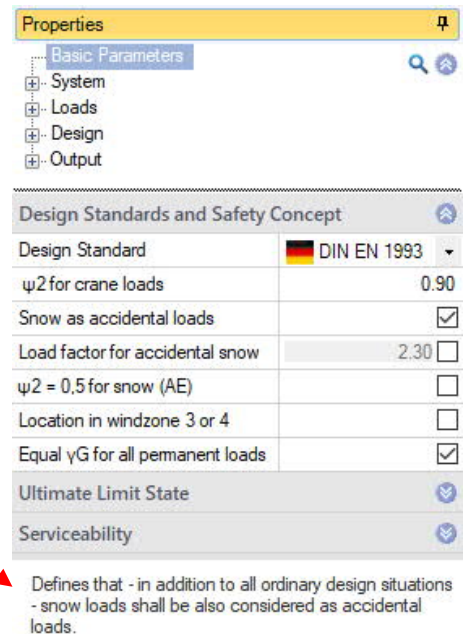
Properties menu and input fields

Use the items or sub-items of the menu to select the entries to be edited in the input area.

Sub-items (recognizable by the preceding "+" sign) open when you click on the "+" sign.

The input area contains the input fields for data as well as options and selection lists.

Individual input sections that are rarely needed are often "collapsed" for reasons of clarity and the space available. These can be accessed by clicking on the  –Unfold icon.



Information area

As soon as you click in an input field, a description of the input value appears in the help and information area (below). The same explanation also appears as a tool tip when the mouse pointer pauses over an input field.

Tip for beginners: Use the ENTER key!

Each ENTER takes you to the next input field. In this way you can go through the item input with the sequence "Input - ENTER - input - ENTER etc. - without having to use the mouse. You can activate/deactivate options with the space bar, you can also open selection lists and navigate in them with the direction keys.

Interactive graphic area

In addition to the customary definition options in the menu/input area, you can also enter particular values in the graphical user interface and edit them there. The GUI allows you to edit data on the spot by simply clicking onto the corresponding value or by use of the contextmenu (right mousebutton).

See also [Interactive-Graphic – Input options](#).

Ribbon bar

The so-called [Ribbon bar](#) is a graphic operating concept known from modern applications (Microsoft Office / Autocad ...) that connects menu control, toolbars and dialogs with one another.

Input

By default, the input begins with the wizard.

The further entries are then mainly made in the [interactive graphic](#) – but you can use the the left menu bar alternatively/simultaneously – see "[Showing and hiding the menu bar](#)".

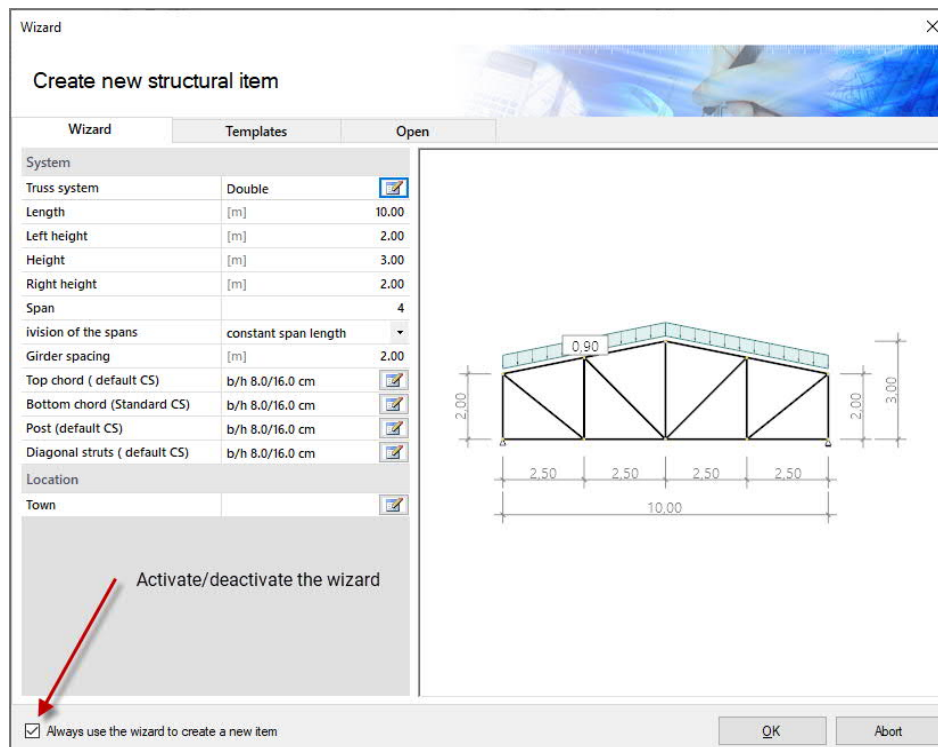
Wizard

The use of the wizard is the fastest way for the initial input of an item.

If the default settings are unchanged, the wizard dialog appears automatically when the program starts.

Only the most important, basic system data is queried in a compact form. Then you can compute this basic system and afterwards you can set up the details.

How to disable the wizard: option in the wizard window or ▶ File ▶ [Program options](#).



Templates: an item template can be chosen as the starting point for a new item. A template can be created via ▶ File ▶ Save as" ▶ Option "Use as template" or via the [item context menu](#) in the FRILO Control Center.

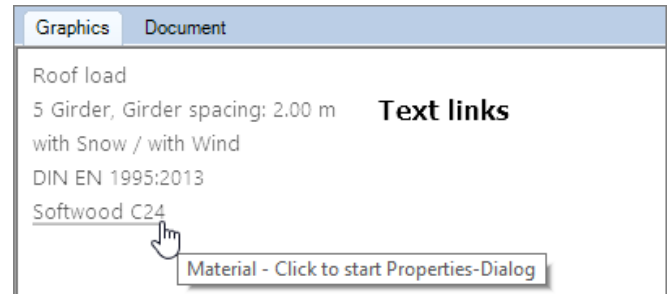
Open selection list with the items last used.
 "Others..." button: Display of a window with the last used project.

Interactive-Graphic – Input options

The interactive graphic is the usual type of input with newer program versions.

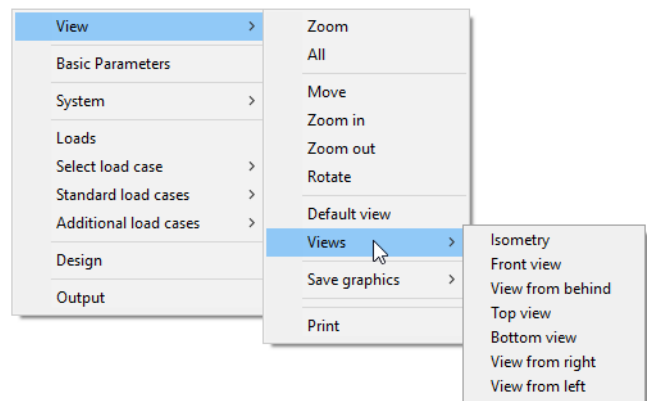
Direct links / Text links

For the most important general information, click on the text links. The corresponding dialog is then displayed. These links also provide information about the essential defined parameters - e.g. the selected standard is displayed - the dialog behind it usually has additional parameters. This gives you an overview of the selected values at a glance.



Context menu (general)

Right-click in an empty area in the graphics window. The general context-menu (see right) offers a number of standard functions.



Context menu of single elements

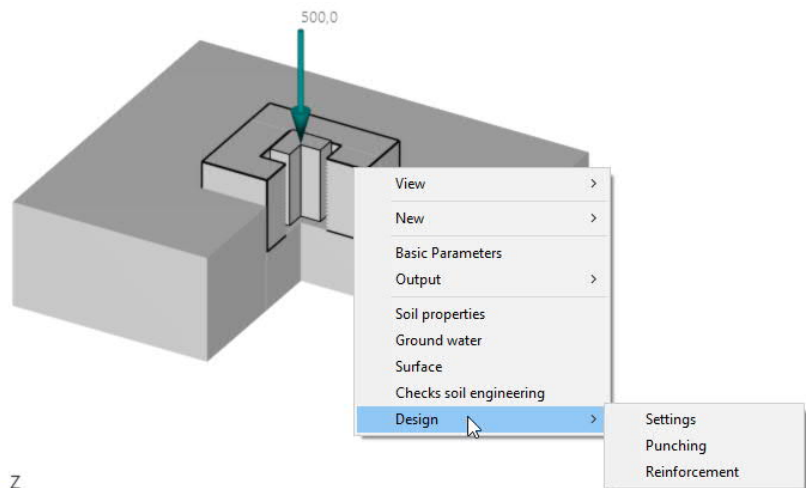
When moving the mouse over the different elements in the drawing the mouse pointer changes his style and the element will be marked in a different color.

When right-clicking the appropriate context menu appears.

Double click on an element: opens the properties dialog of the element directly.

Tooltips

When holding the mouse cursor over individual graphical elements tooltips will show up.



Direct entry of values

Input fields are activated by clicking on the respective value.

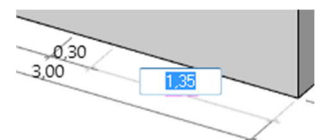
Example: The dimension is interactive, that is you can click on a measure and then change the value. The change is also visible in the leftsided input area.

Zoom, move, 3D-rotation

Use the mouse wheel for zooming in and out.

Move the picture by pressing the right and left mouse button and moving the mouse.

For 3D-rotation hold down the right mouse button and move the mouse.



Graphics / Document – the view selection

Graphics /Document tab: switch between input mode (graphic window) and the output preview (PDF).

Graphics

The interactive input graphic is automatically displayed after the program starts.

Output profile

The scope of the output can be defined via the Output menu item - this output profile can be saved in the toolbar ► Output and layouts section and reloaded if required.

Document

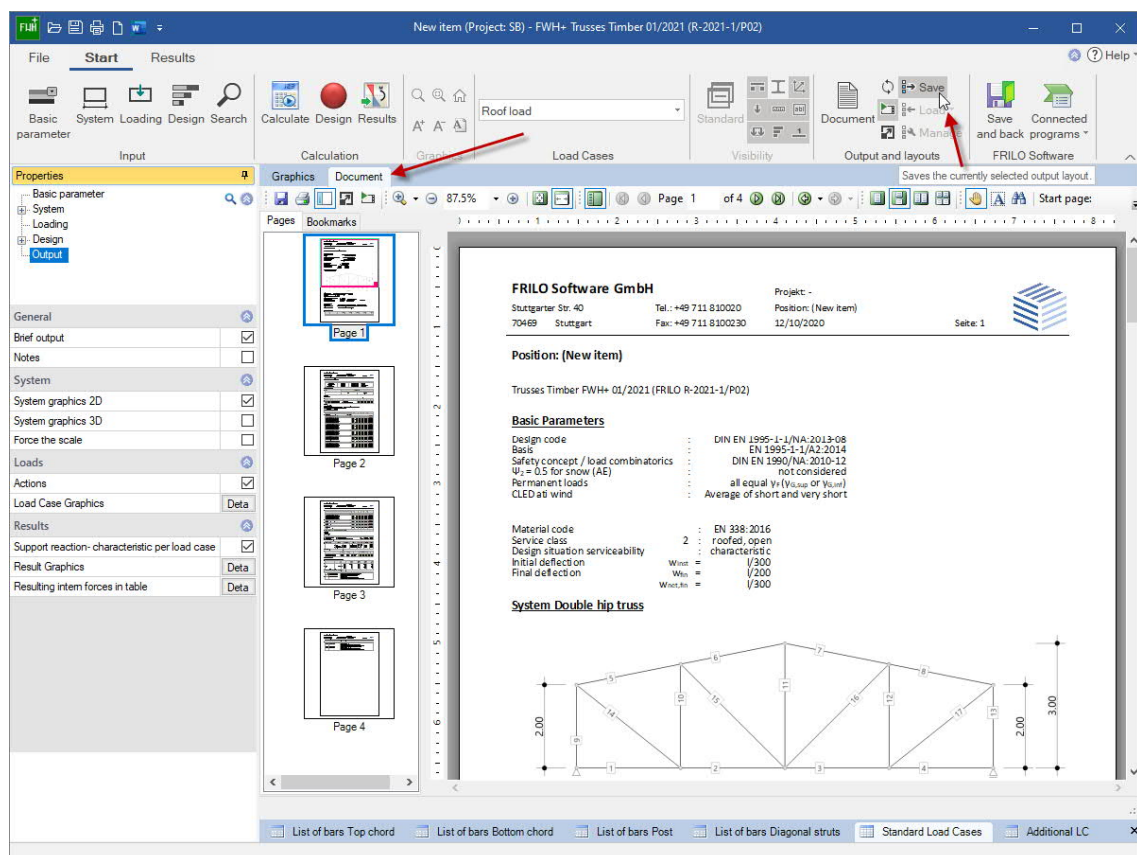
If you click on this tab, the output document is displayed in PDF format.

If the position has not yet been calculated, you will receive a corresponding message.

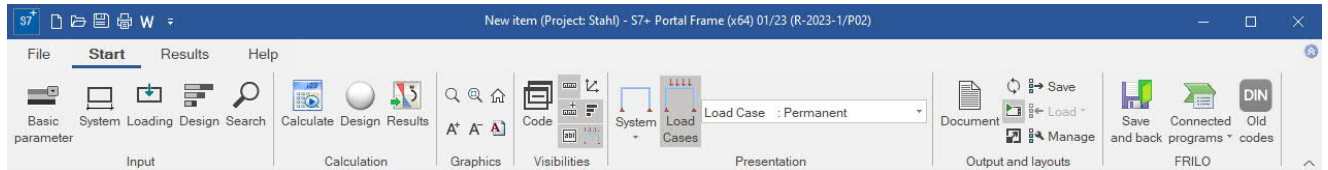
The functions of the symbols for saving, printing, navigating in the document, searching PDF etc. can be shown using tooltips. According to the usual functions of PDF display programs such as Acrobat Reader etc.

Page layout of the output document

See FRILO Control Center ► [Page layout](#)



Ribbon bar



The multi-function toolbar referred to as ribbon was introduced by Microsoft in the Microsoft Office 2007 version.

It is characterised by an operating concept that combines the control via menu items with buttons of a toolbar.

Instead of menu items or menu bars, tabs such as

- [File](#),

- [Start](#) or

- [Results](#)

are available.

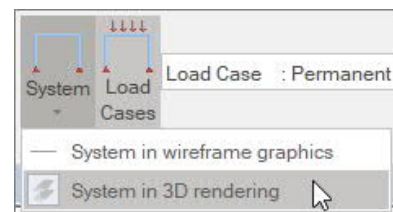
A click on one of these tab options displays the associated function buttons (below), which are arranged in command groups in view of the task to be accomplished.

Split Buttons

By clicking on the small buttons with the ▼ symbol, you can display additional functions.

This is a typical control of new Microsoft interfaces, but in FRILOPrograms it is only used in a few cases.

If you click on the upper half of the symbol, the standard function is called up. The lower half of the icon will become a selection list with more functions displayed.

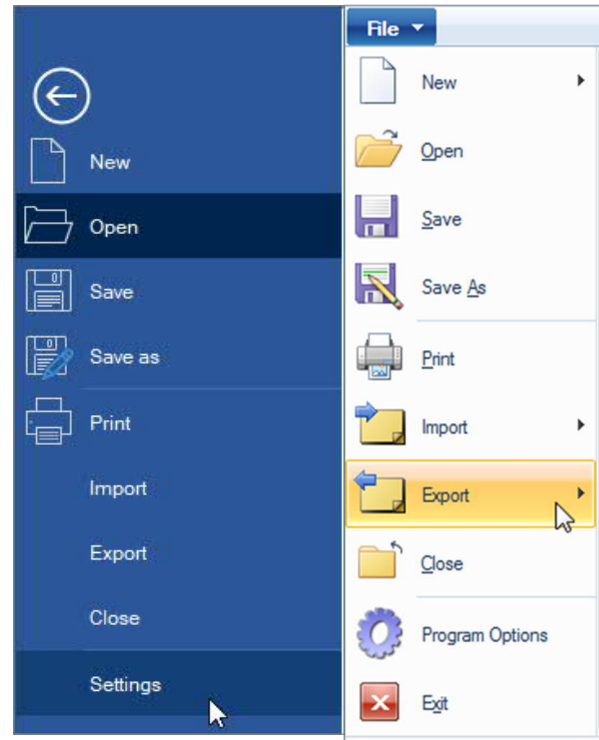


File tab

Usual standard functions.

Ill. right: File tabs in newer / former presentation

New	Create a new item. You usually use this function. already in the FRILO Control Center .
Open	Open an existing item. Projects and items of the project folder last used in the FRILO Control Center are displayed.
Save	Save the opened item under the existing item name. If the item has not yet been named, "Save as" is carried out.
Save as	Like "Save", but with explicit specification of an item name and - if necessary - selection of a project.
Print	Printout of the output document on the set printer. If the calculation has not yet taken place, you will receive a corresponding message from the program.
Import	Import of e.g. ASCII data sets or Frilo XML.
Export	Export of items as e.g. ASCII data sets, Frilo XML
Close	The item is closed.



Settings / Program options

Windows Layout	resets the window settings and restores the default state.
New Item	when setting up a new item, a wizard supporting the user in the basic definition is launched by default. You can optionally disable the wizard. You can also disable the automatic computation which is launched each time you enter or edit a value. Disabling is recommended when you are using a slow computer.
Graphics	allows you select a colour setting (light / dark).
Units	allows you to configure/edit the units/measures (mm, cm, m, kg, kN ...) used in the software.

Start tab

Input

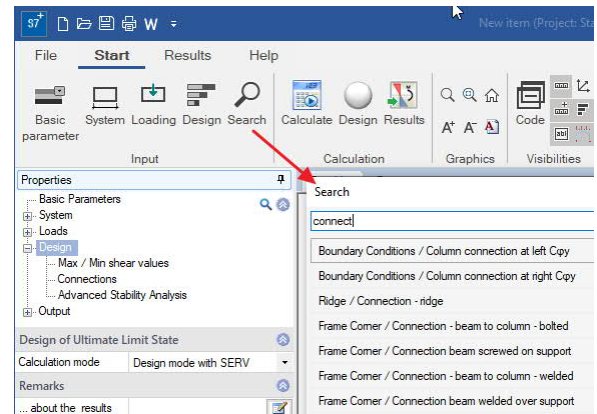
The available functions correspond to the menu items in the left sided menu bar.

Search / Magnifying glass

Input fields can be searched for using the magnifying glass symbol or the F3 key.

Example: Where is the input field for the roof load?

Click on the magnifying glass, enter "roof" and all input fields that contain the word "roof" in their designation are listed. A click on one of the listed entries and the corresponding entry is displayed.



Calculation

You can start the calculation explicitly with "Calculate".

Auto on/off is a switch that enables automatic calculation after every modification (not recommended for processor-intensive systems).

The status of the verification is displayed via a sort of traffic light.

Under "Results" you will find program-dependent functions for the graphic display of the results.

Design button

The button in the ribbon bar (calculation group) indicates with different traffic light colours whether the verifications have been successful.

- Gray indicates that the system is "not yet calculated".
- Green indicates that all verifications have been successful.
- Yellow indicates that permissible values have been exceeded or constructive problems have occurred.
- Red indicates that the verifications of the bearing capacity are not met.

By moving the mouse cursor over the traffic light button, a tool tip with the most important utilizations is displayed. Clicking on the button displays a window that shows tips concerning exceeded limits and warning notes in the corresponding situations.



Graphics

The options for the graphical representations are explained by the tool tips (move the mouse cursor over a button and wait a short time until the tip is displayed).

Visibilities

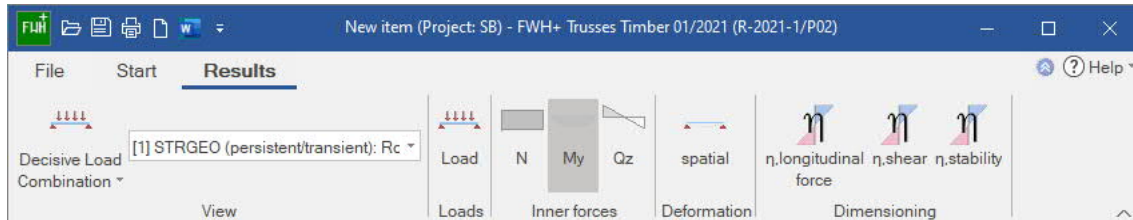
Various program-dependent options for displaying the system, dimensional chains, loads, etc. If these are not self-explanatory, they are explained in more detail in the relevant manual.

FRILO

The interfaces to other FRILO programs are listed and can be called up via the "Connected programs" icon.

Results tab

The Results tab displays the functions for displaying the result graphics. You can display the explanation of the individual functions as a tooltip (briefly persisting with the mouse). If separate explanations are necessary, they are described in the manual for the respective program.



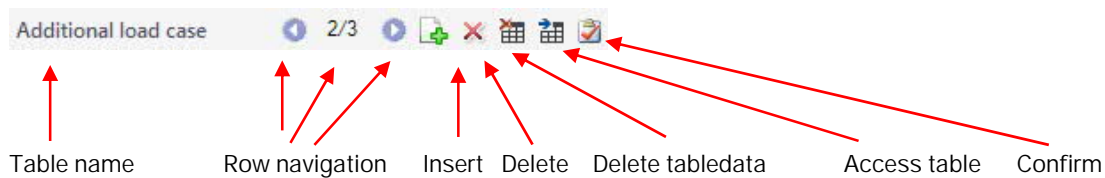
Data entry via tables - alternatives

For the entry of data represented in tables, the following options are available. The load case table is taken as an example to demonstrate the options.

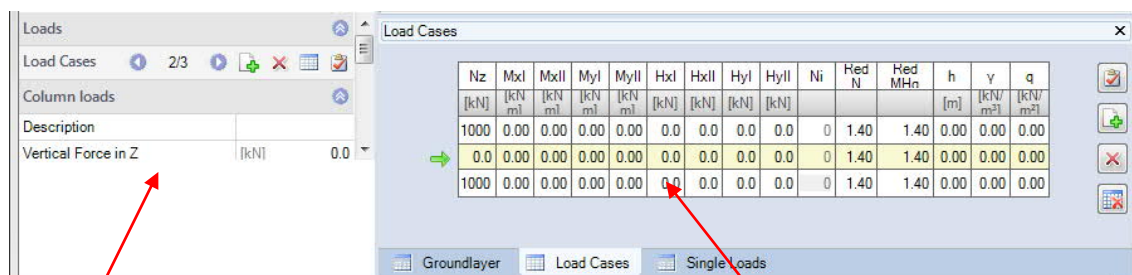
1. Accessing tables via the table button (or the corresponding tab in the graphic window) and entering data directly in the table cells.
2. Entering data in input fields in the FDC area by accessing the individual rows of a table via the table toolbar.

Note: You can also alternate between the two methods of entering your data.

The functions of the table toolbar demonstrated by the example of the load case table:



- indicates the row number: The first number indicates the currently active row, the second one the total number of rows.
- jumps to the next row upwards: the previous row is enabled and the values are displayed in the corresponding cells.
- jumps to the next row downwards: the following row is enabled and the values are displayed in the corresponding cells.
- inserts a new (empty) row below the currently active one.
- deletes the currently active row.
- delete the entire table contents.
- accesses the table, which is displayed in a traditional way and you can enter values directly in the cells.
- confirms the entered values.



Input section showing the values of the currently active table row.

Representation in form of a table (accessible via the table button or the corresponding tab).

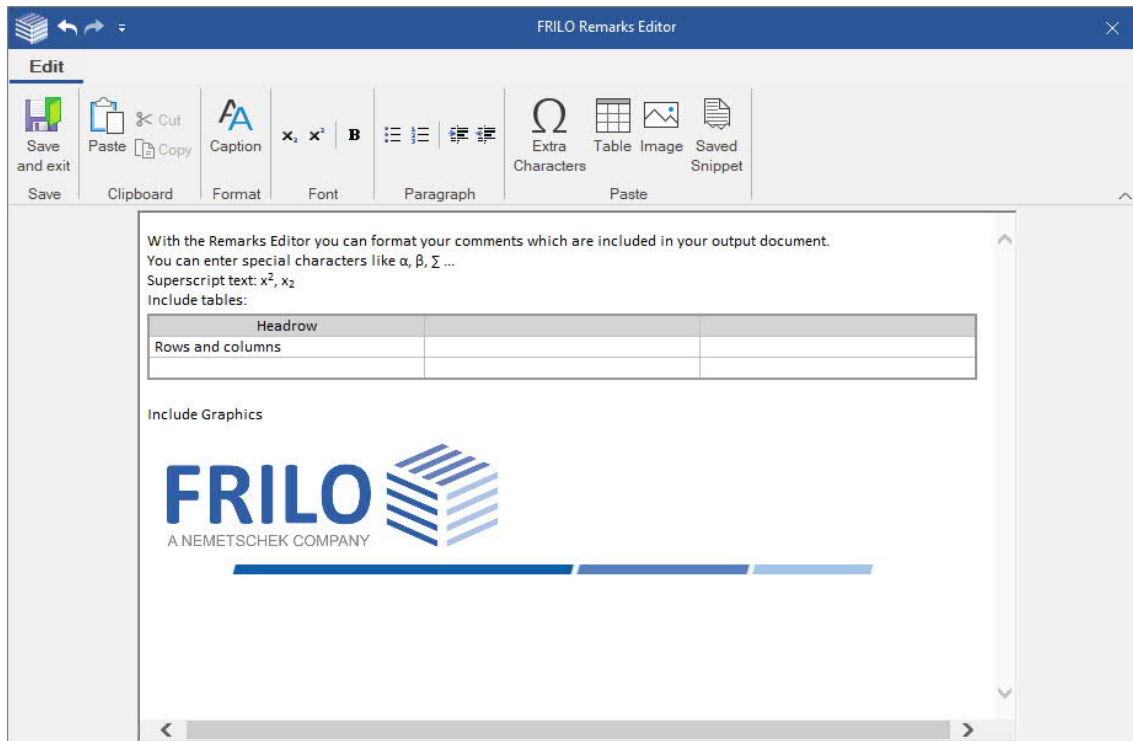
Remarks Editor

Up to the 2020-1 release, remarks on positions, loads, etc. could only be saved as text.

Starting with Release 2020-2, the Remarks Editor can now also be used to carry out various formatting or insert graphics and tables or special characters.

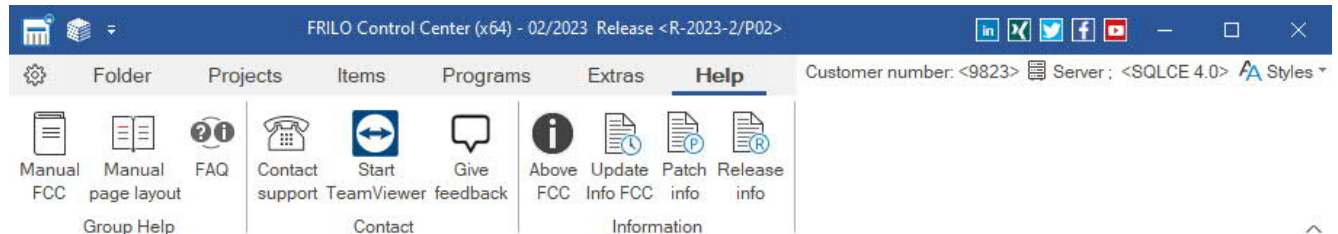
The remarks are inserted in the output document.

The operation is intuitive and takes place as it is usual in word processing programs.



Help - Hotline Service – Tips

Under the menu item "Help" you will find the "Manual"-link and depending on the programme, further supporting functions such as links to suitable video tutorials or a link to our section Frequently Asked Questions (FAQ) on our homepage. You are also welcome to send us ideas, wishes and your personal opinion about our programmes via the "Give feedback" function. In the "Information" section you will find the programme version as well as update, patch and release information on the programme status.



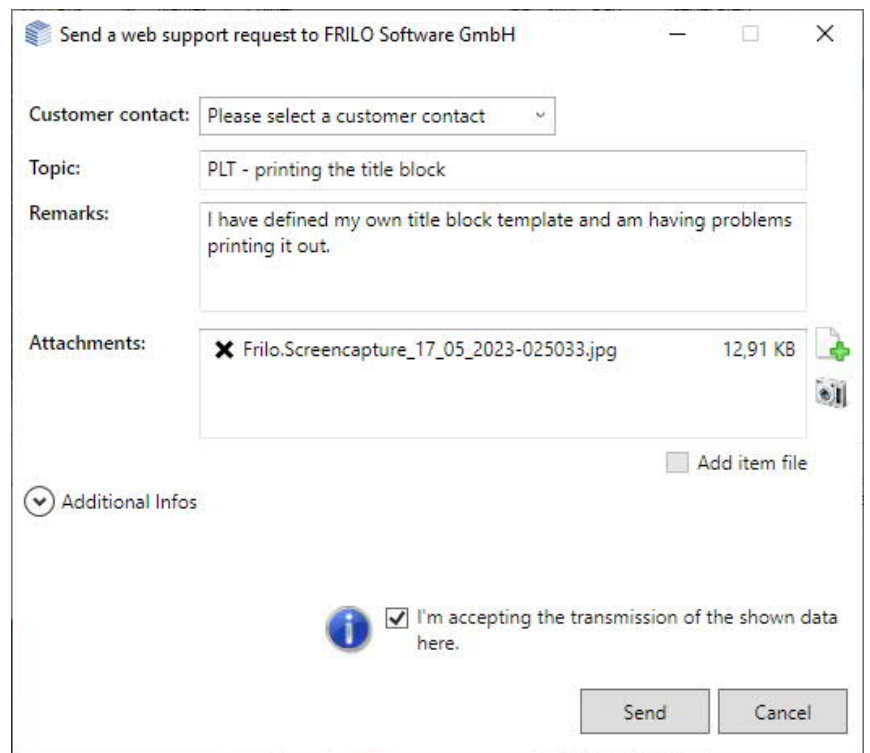
Contact support

Here you can send a support request directly by e-mail. This will save you waiting time on the phone. Please enter the subject of your enquiry (e.g. installation, question about dimensioning in the PLT programme, etc.) and a short, clear description of the problem under "Remarks:".

You can attach a file via the "+" symbol (a corresponding dialogue for selecting the file is displayed) or a screenshot (a short instruction text is displayed when you click on the camera symbol).

Attach an item

In many cases, it is useful to attach the item to the mail so that our support can understand the problem. To do this, right-click on the item in the [FRILO Control Center](#) and select "Contact Support". You will receive the same support request window as described above, but the item file will automatically be added to the mail.



Remote maintenance via TeamViewer

Our hotline can also help you directly on your PC via remote maintenance using the popular TeamViewer software. Of course, this must first be arranged with our hotline on the phone.

