module Side to main joist connection

Wood construction screws: Side to main joist connection

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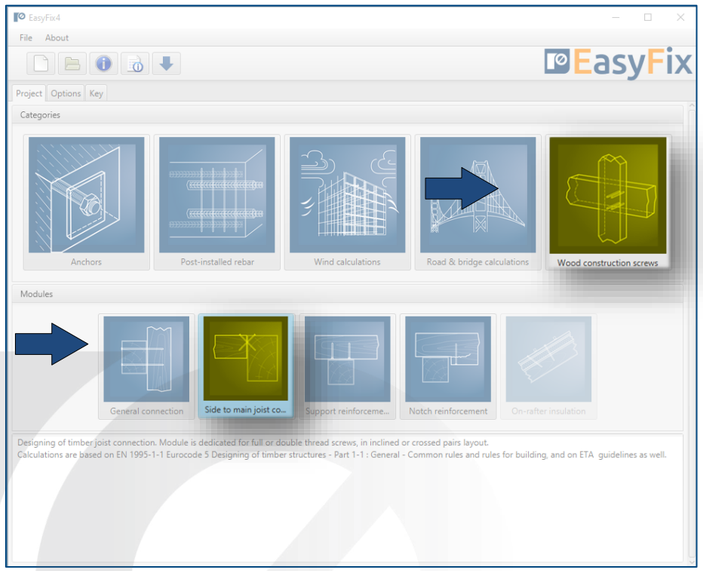
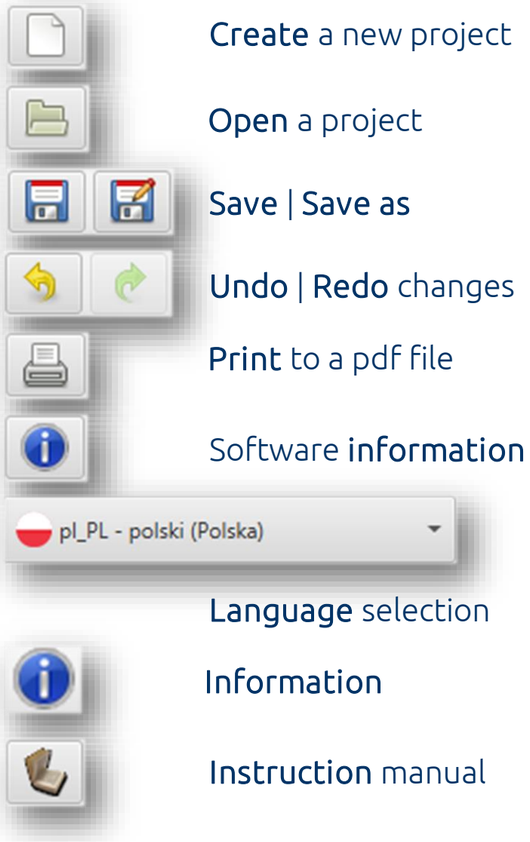
1 General information

Category and module selection:



Icons and symbols meaning:



Create a new project

Open a project

Save | **Save as**

Undo | **Redo** changes

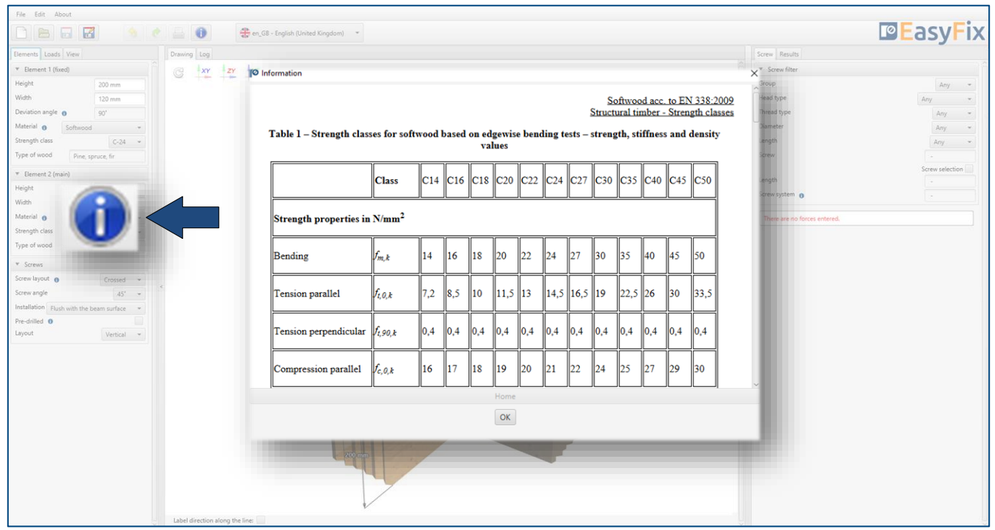
Print to a pdf file

Software **information**

Language selection

Information

Instruction manual



Click to **information icon** to display an additional window containing theory related to a particular issue.

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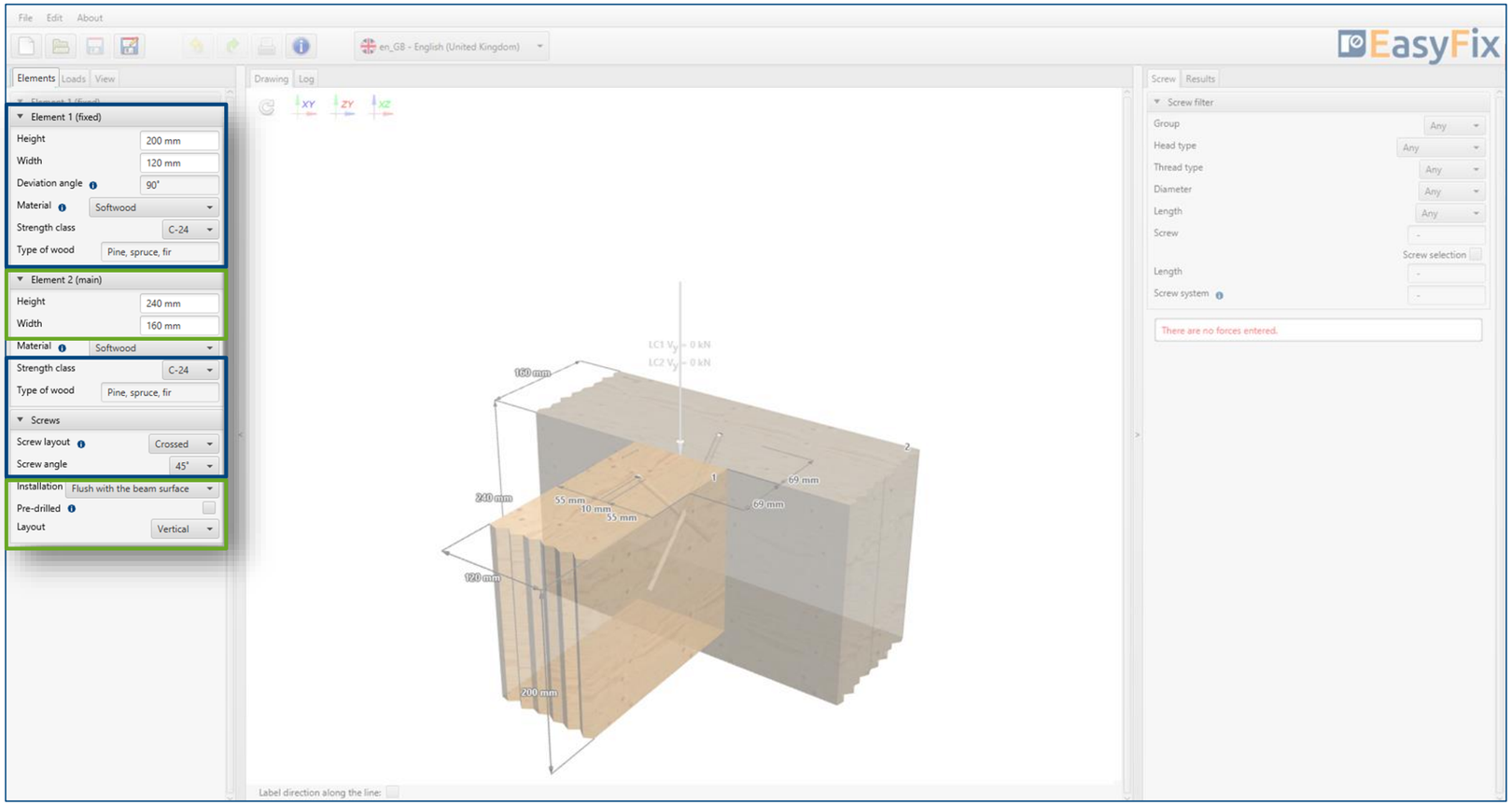
2.1

Data input
Connection elements - wood »

First, define layout of elements as well their dimensions in cross section along with possible distance from their edges. Next, determine the type and strength class of the wooden material.

Geometry and layout of elements::
dimensions can be defined in the side panel and directly on a model as well.

Material:
Inputting data by selection from the list.



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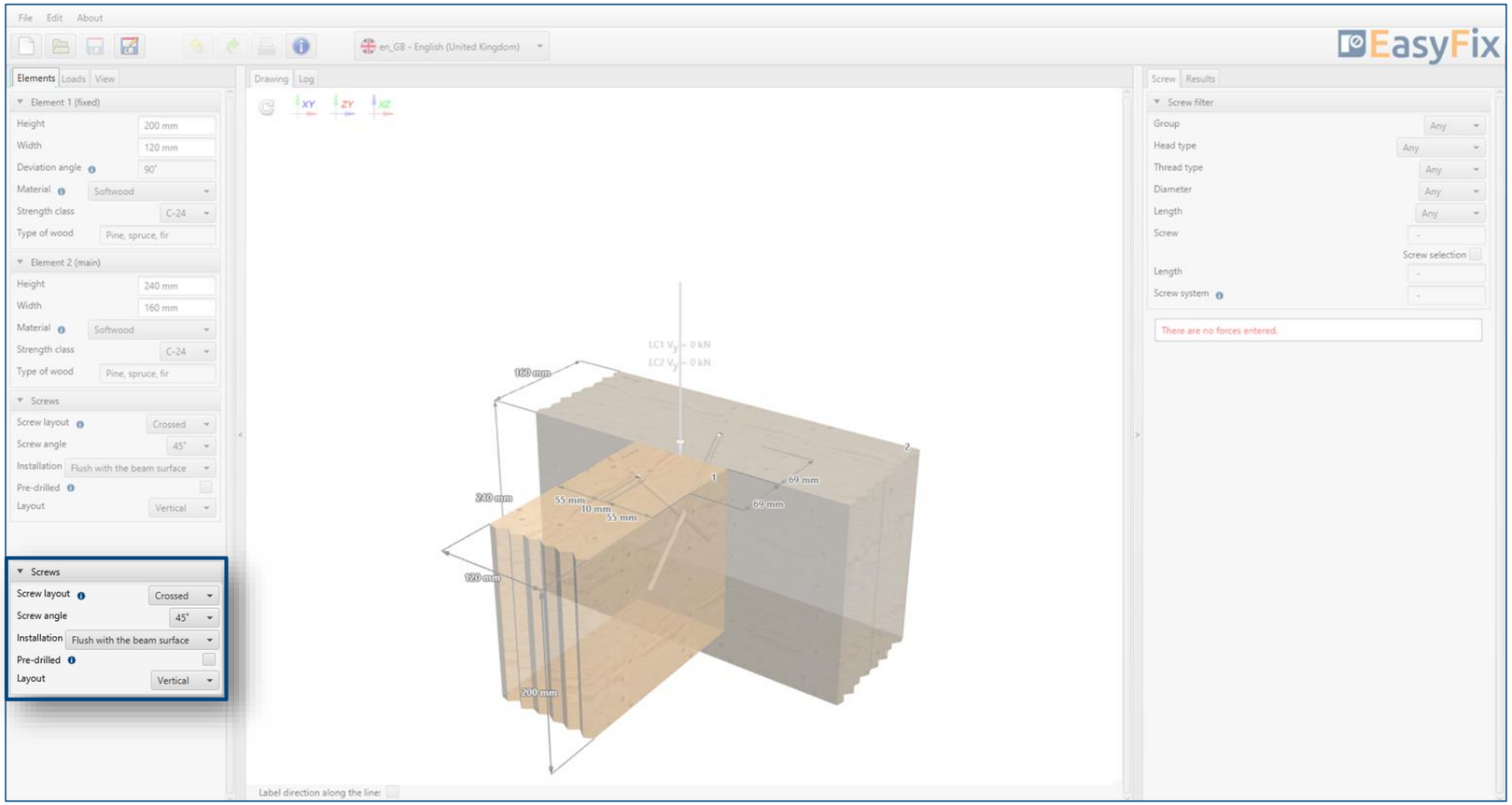
2.2 Data input
Connection elements - screws »

Further stage is defining of screws layout. Note, that selected layouts and installation types are dedicated for particular types of screws. Depending on a selected layout, possibilities of load change as well. Detailed data is available by clicking the information icon.

Installation parameters:
Inputting data by selection from the list or setting additional options.



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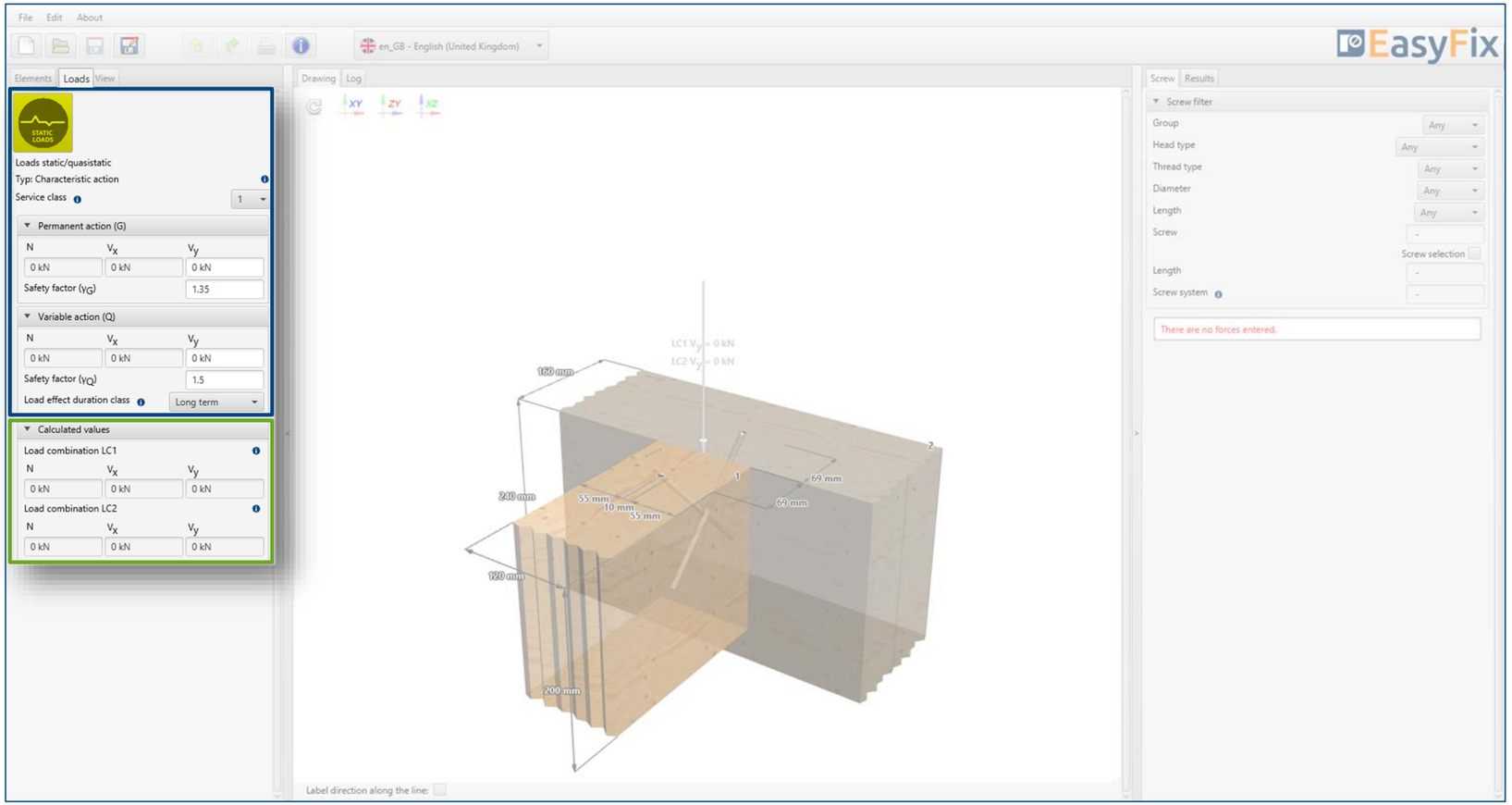
4 Data input
Loads »

The final stage of data input is related to loads. In accordance to intended use, wood construction screws are dedicated for static or quasi static loads only. Define characteristic values of permanent and variable loads, service class and load effect duration class as well.

Loads:
Load values can be defined in the side panel and directly on the model as well.

Load combinations:
Design load values for particular load combinations are presented at the bottom part of the panel.



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5 3D Model »

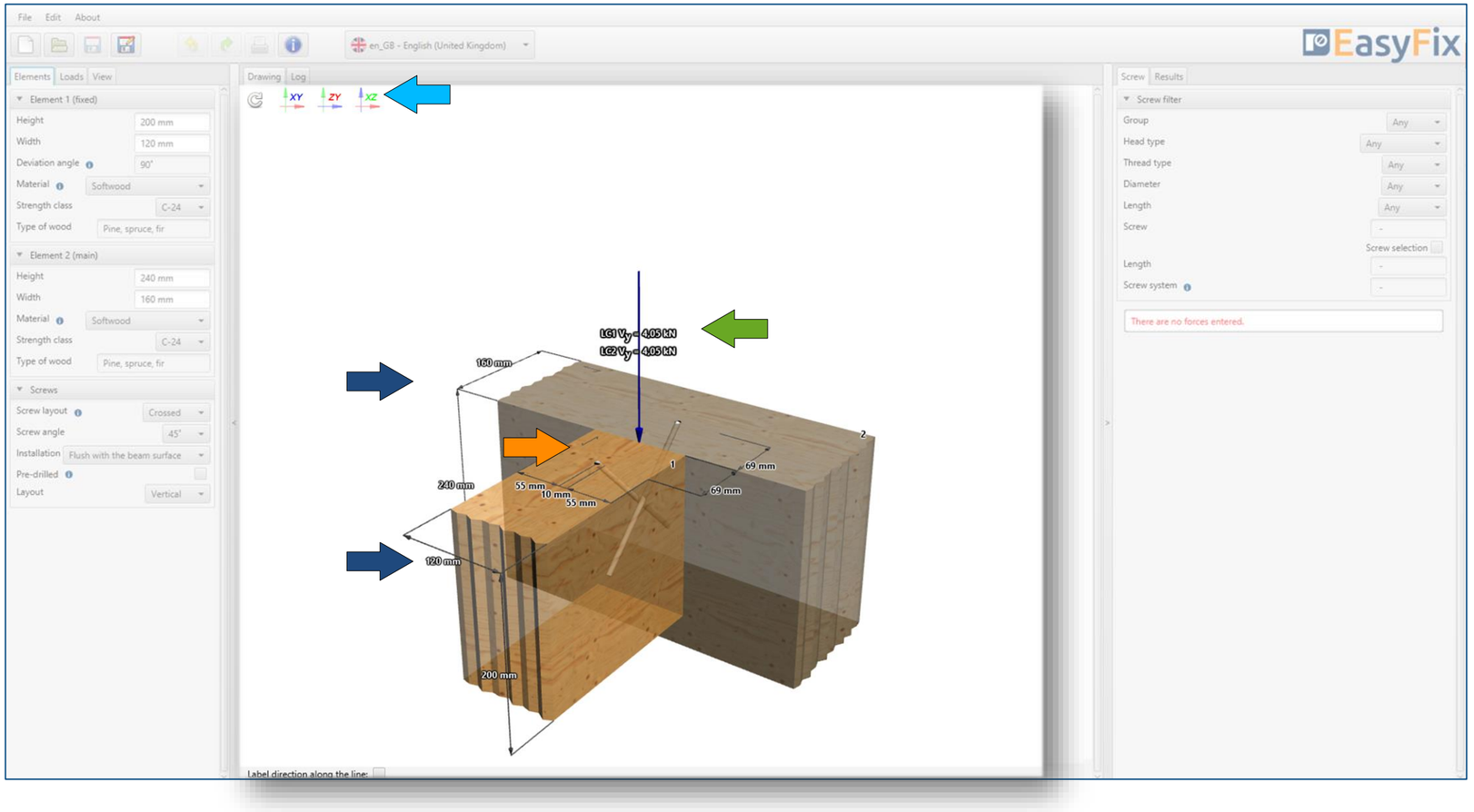
Dynamic 3D model provides a User with a possibility of following results in real time.

Geometry:
Dimensions can be defined in the side panel and directly on a model as well.

Loads:
Load values can be defined in the side panel and directly on a model as well.

Screws layout:
Designed layout is presented on a model with spacings and edge distances.

Model navigation:
Model navigation utilises mouse control or default views.



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6 Results
Screw filter »

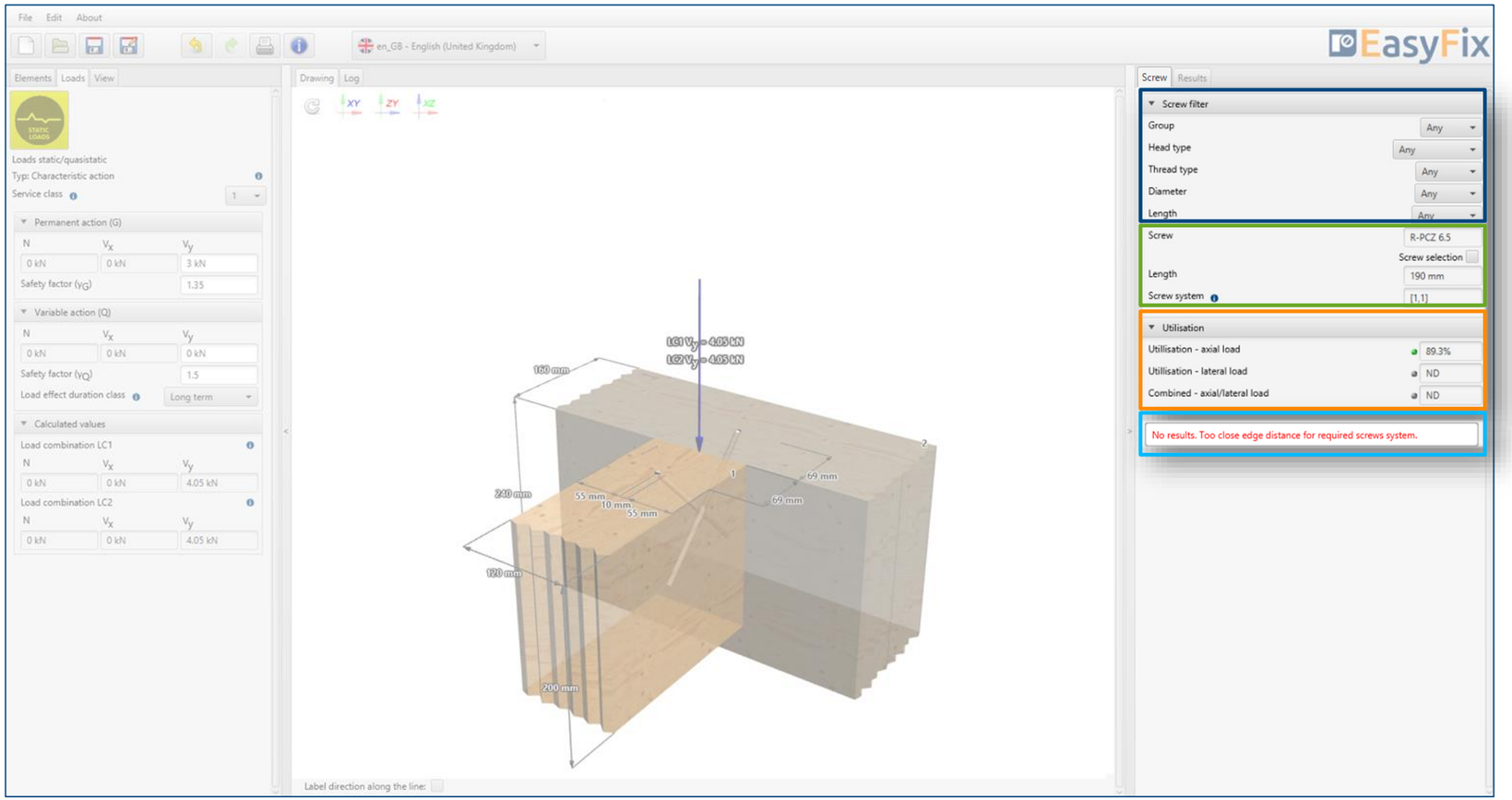
General connection module is ment to select optimised number of the fasteners, their sizes and arrangement as well. Result can be managed by available filters. In case of no result, a comment with information about the reason is displayed. In such situation modification of the filters should be considered.

Screw filter:
Using available filters allows to pre-define screws.

Designed product / Screw system:
Information about design solution are presented in the middle part of the panel.

Utilisation:
Basic data of utilisation of design solution is presented at the bottom part of the panel.

Comments:
In case of no result, a comment with information about the reason is dispalyed.



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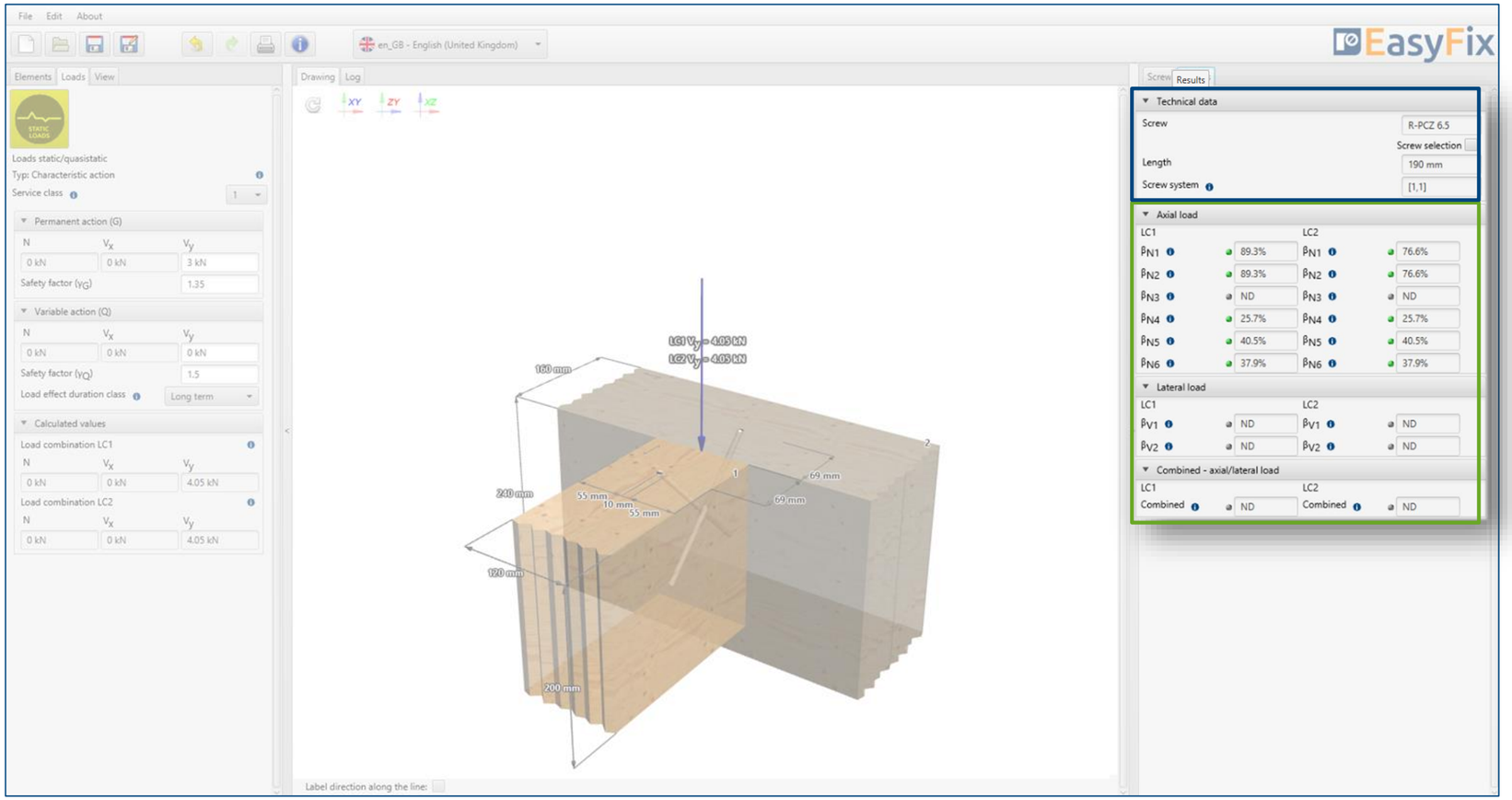
6 Result
Detailed analysis »

Detailed analysis allows to check utilisation level for particular failure modes. Defining crucial element helps analysing a case. Detailed information related to all failure modes are available via information icon.

Designed product / Screw system:
Information about design solution are presented in the upper part of the panel.

Utilisation:
Detailed data of utilisation of selected failure modes are presented at the bottom part of the panel.



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7 Results
Calculation report »

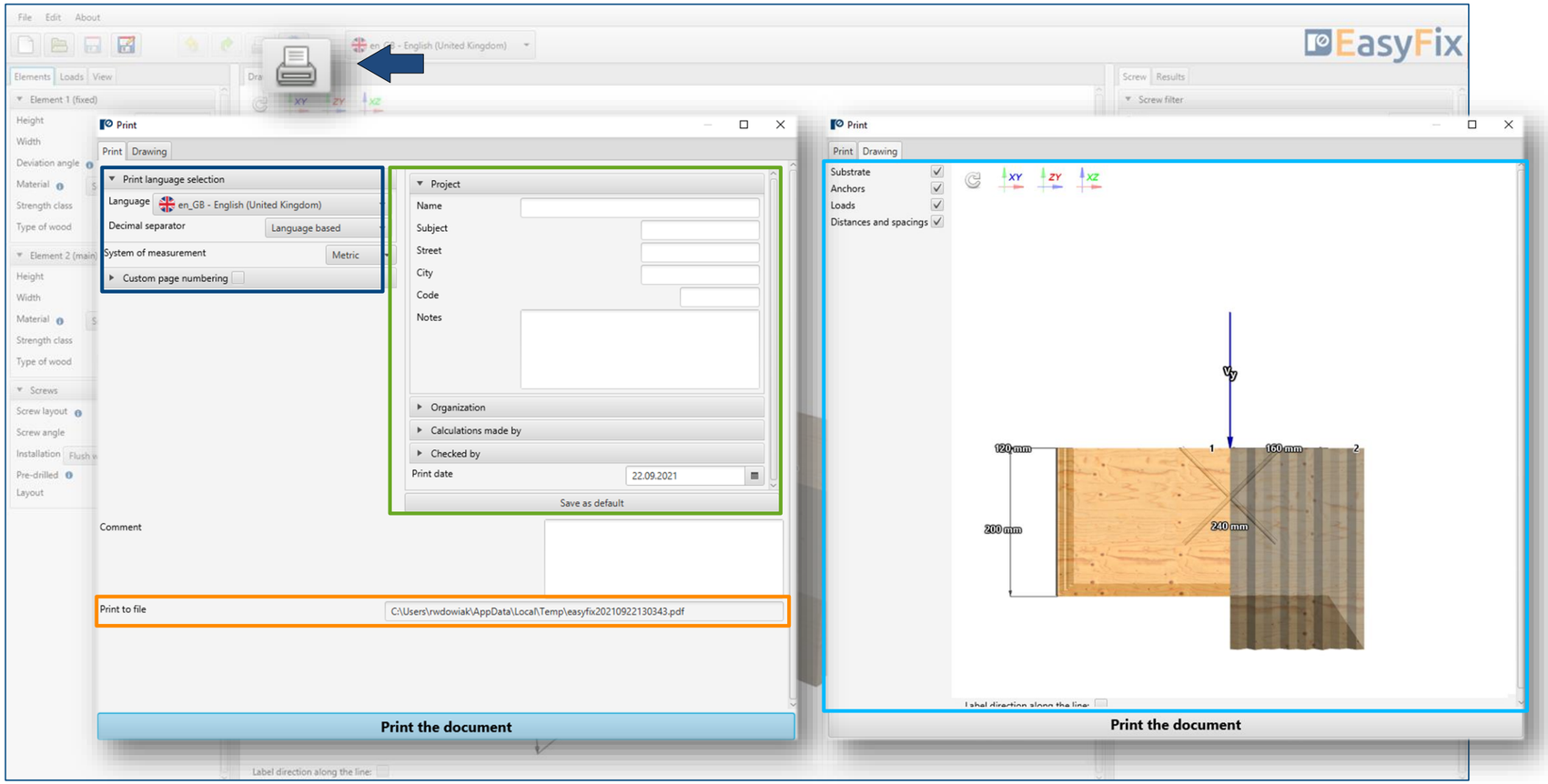
Generating a project report is started by clicking on the Print icon. Next, specify the language of the report along with a possible description. The report is printed to a pdf file, in a destination selected by a Customer.

Print option:
Report language can be defined independently of software language that had been used for calculation process.

Print description:
Detailed description helps to identify the calculation at a later stage of work. This information is visible on the header of each report page.

File path:
Selecting the print file save destination.

Drawing:
In the Drawing panel, it is possible to modify the final model view, that is presented in the printed version of the report.



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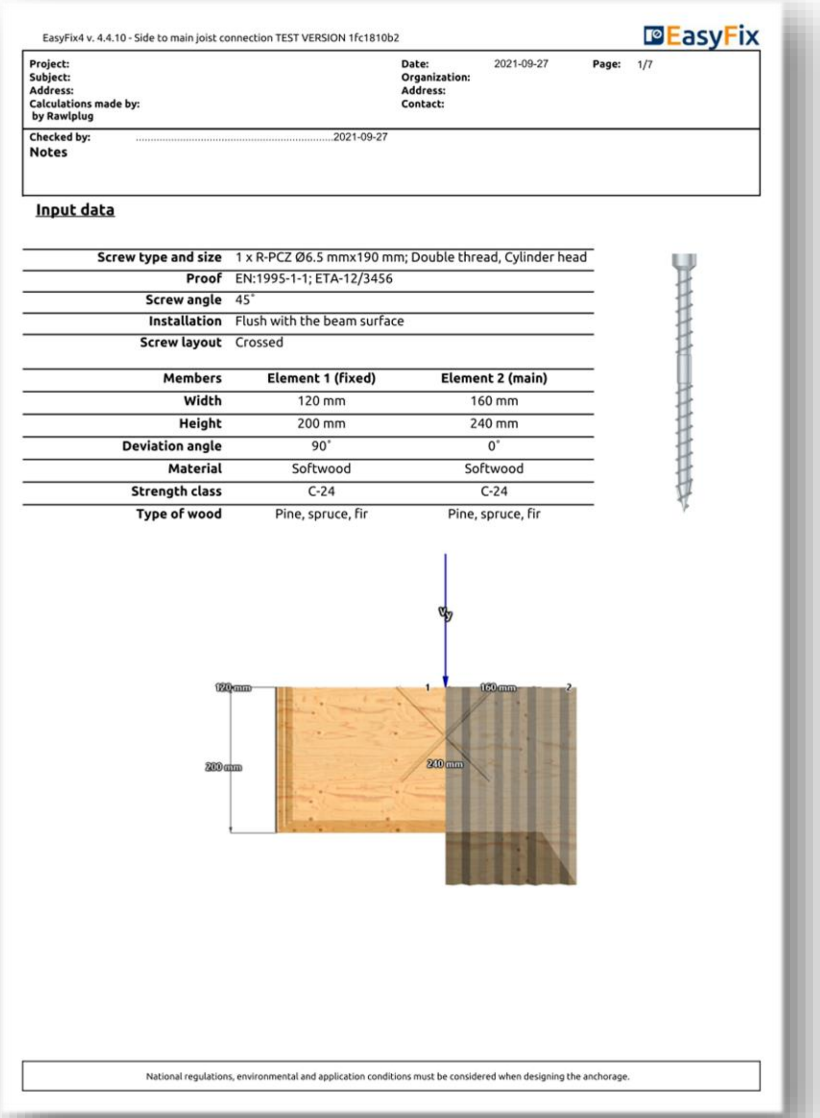
7 Result
Calculation report »

Calculation report includes all information concerning selected design, input data, loads, spacings and edge distance requirements. There are full calculation logs presented along with references to paragraphs concerning appropriate design guidelines.


EasyFix4 v. 4.4.10 - Side to main joist connection TEST VERSION 1fc1810b2

EasyFix

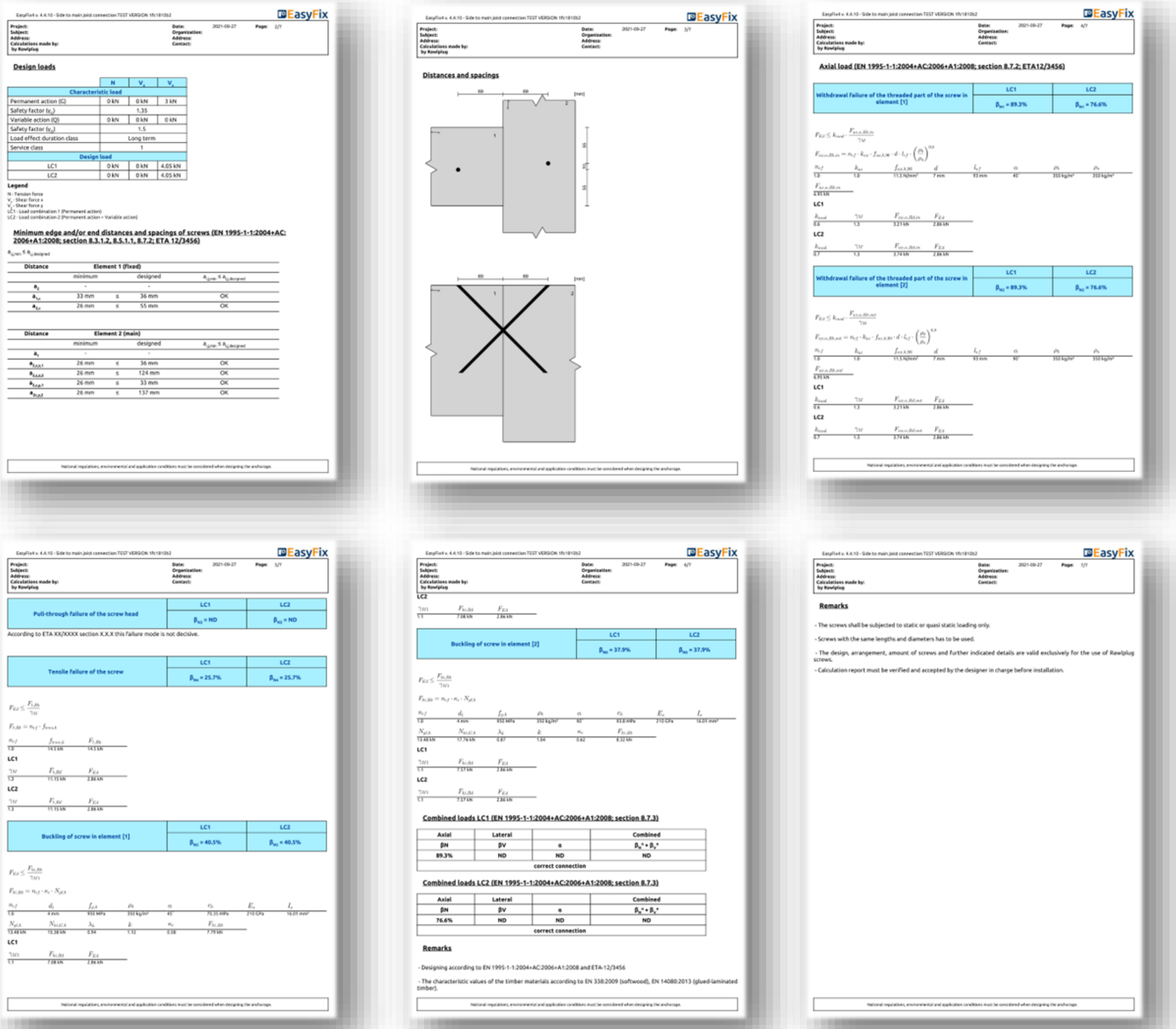
Project:		**Date:**	2021-09-27 **Page:** 1/7
Subject:		**Organization:**	
Address:		**Address:**	
Calculations made by: by Rawlplug		**Contact:**	
Checked by:	2021-09-27		
Notes			

Input data

Screw type and size	1 x R-PCZ Ø6.5 mmx190 mm; Double thread, Cylinder head
Proof	EN:1995-1-1; ETA-12/3456
Screw angle	45˚
Installation	Flush with the beam surface
Screw layout	Crossed

Members	Element 1 (fixed)	Element 2 (main)
Width	120 mm	160 mm
Height	200 mm	240 mm
Deviation angle	90˚	0˚
Material	Softwood	Softwood
Strength class	C-24	C-24
Type of wood	Pine, spruce, fir	Pine, spruce, fir

National regulations, environmental and application conditions must be considered when designing the anchorage.



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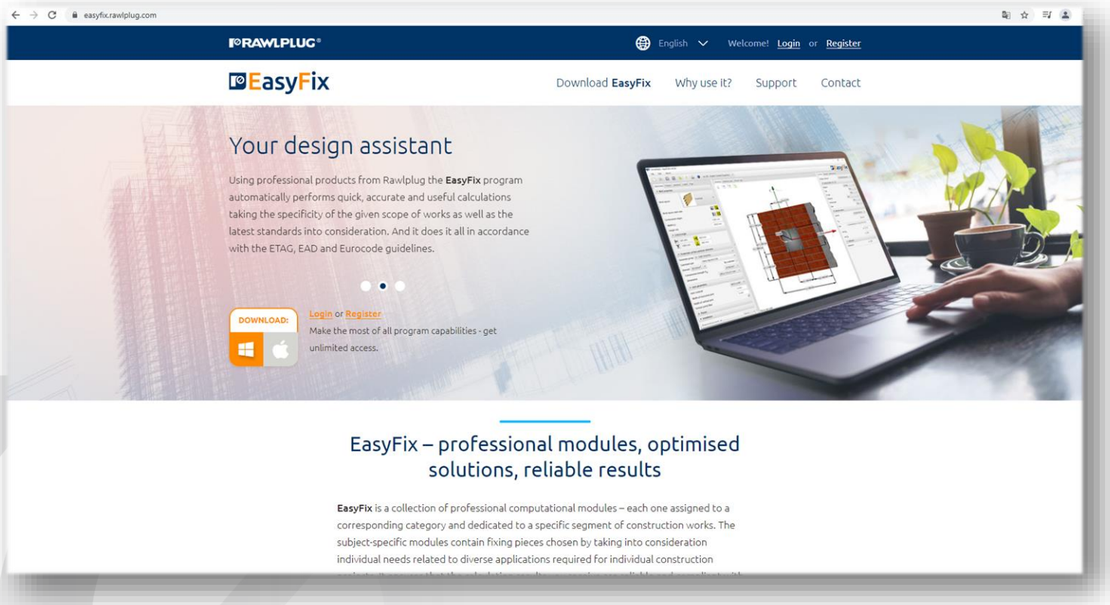
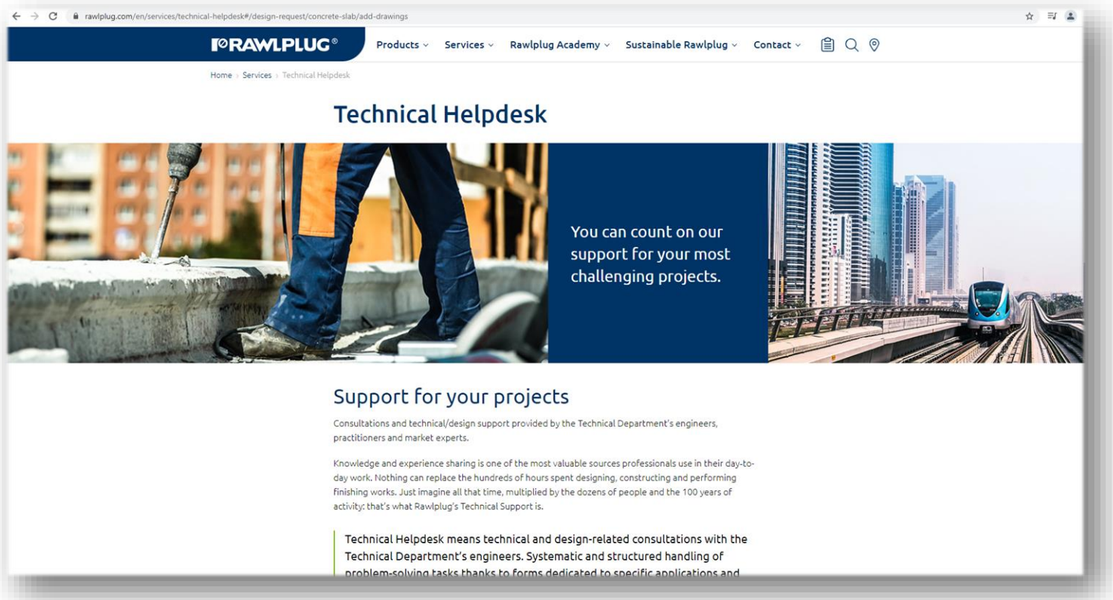
Have you got any questions?

Visit **EasyFix website** or contact directly with Rawlplug Technical Department via **Rawlplug Technical Helpdesk**.



https://easyfix.rawlplug.com/



https://www.rawlplug.com/en/services/technical-helpdesk#/