FASTENER CALCULATION SOFTWARE
VERSION 2.02 HELPFILE

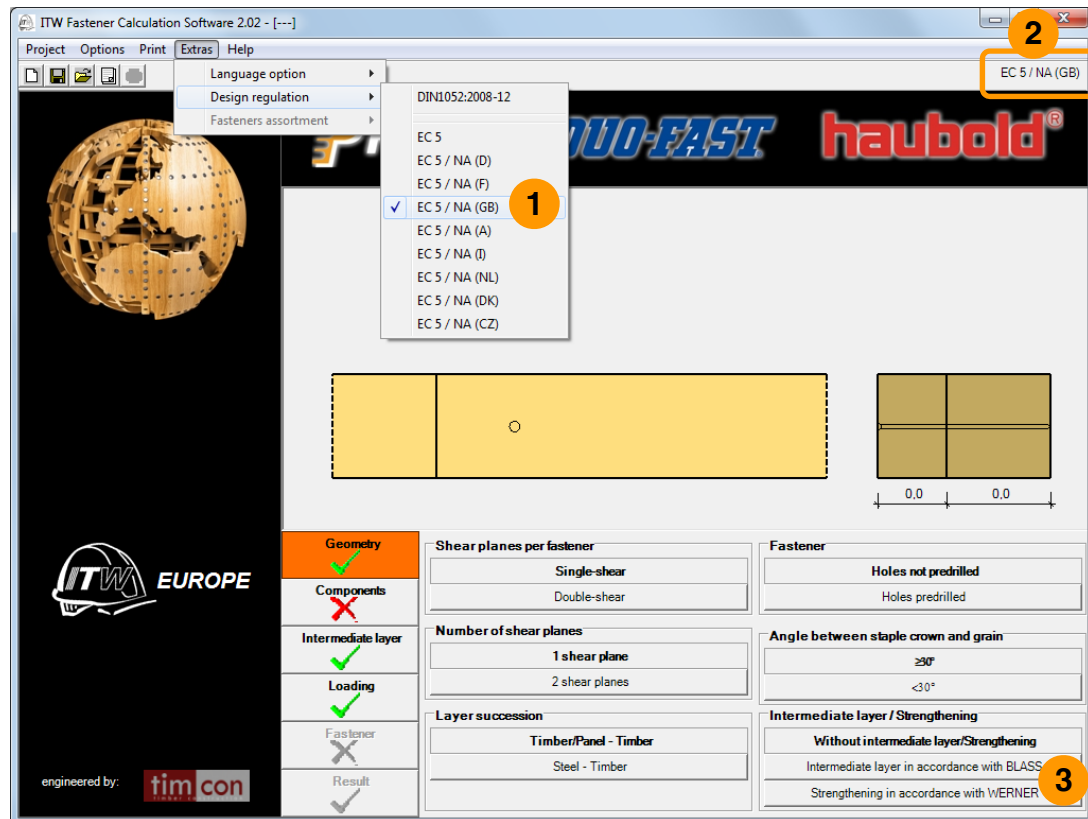CE marked fasteners according to EN 14592

Introduction
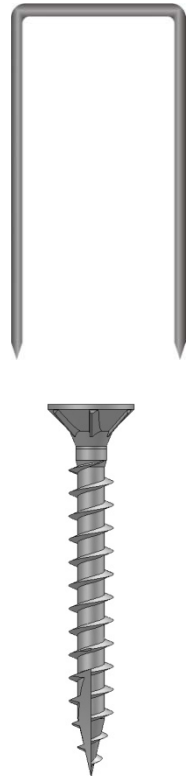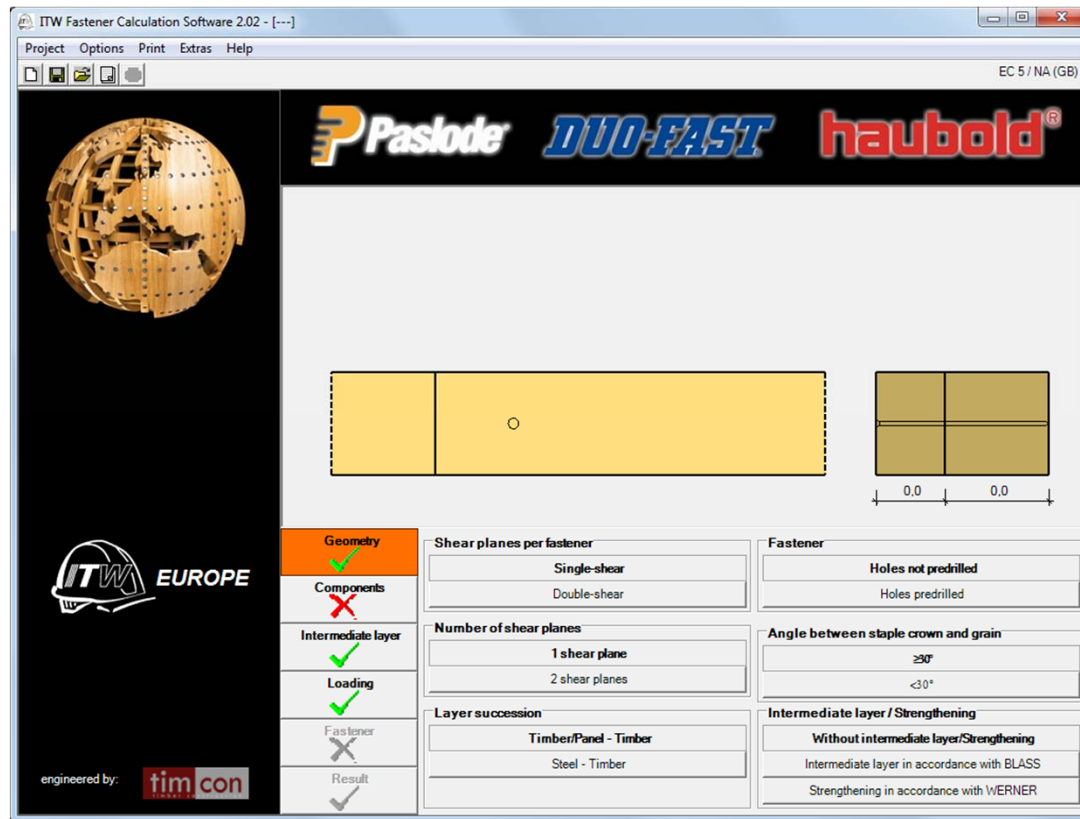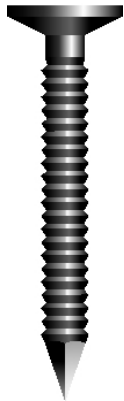
This software program is designed to aid the calculation of various timber connections according to EN 1995-1-1 (EC5).

It enables design with all ITW nails, staples and screws which are CE marked in accordance with the product standard EN 14592.

Step 1: Select appropriate NA

1 Select the appropriate National Annex (NA) for where the project is located. If EC5 only is chosen, the recommended standard definitions are set.

2 Note: The interface always shows the currently selected standard.

3 There are options to select an intermediate layer that is either bonded to the structure or not bonded. The calculations for bonded materials are in accordance with the work of H. Werner, University of Karlsruhe. The calculations for non-bonded materials are in accordance with the practical test work of H. J. Blass, developing the theories of Johansen.

Step 2: Component input
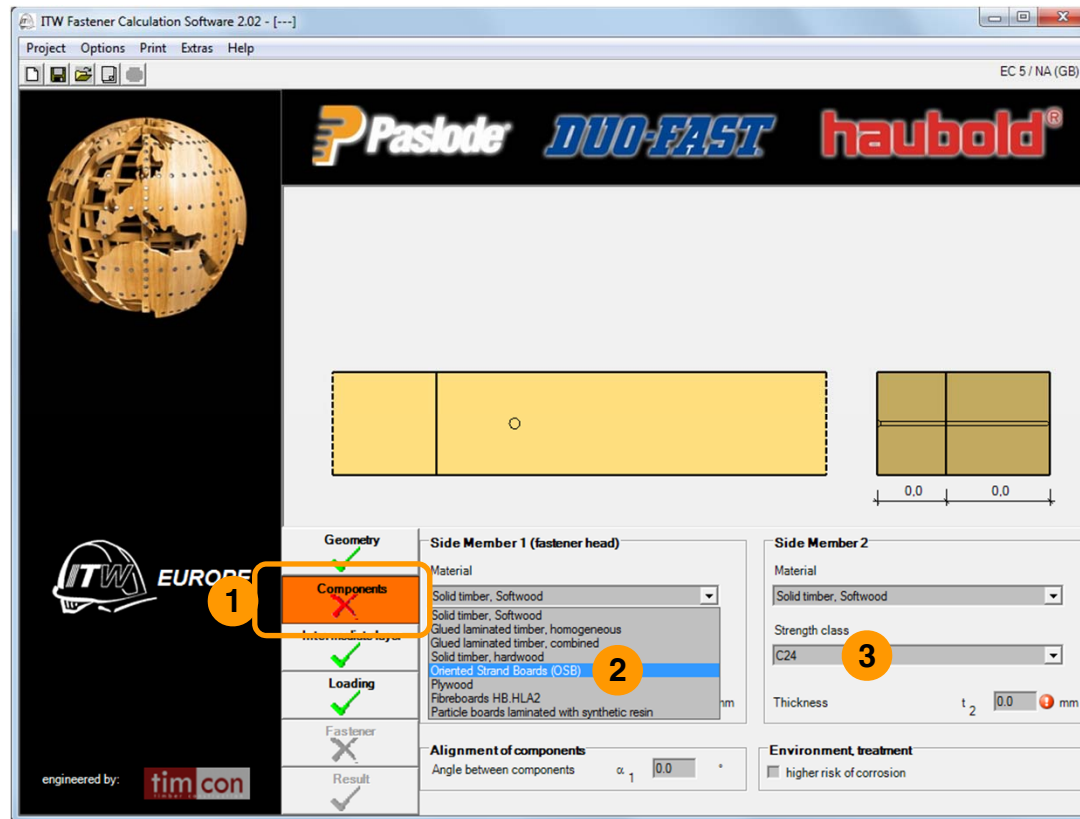
1   Select *Components* to access the component input fields to the right

2   Choose the required material from the menu.

3   Choose the required strength class from the menu.

Note: The software only permits minimum timber thicknesses of 18mm

Enter the thickness of the chosen material. In this example…

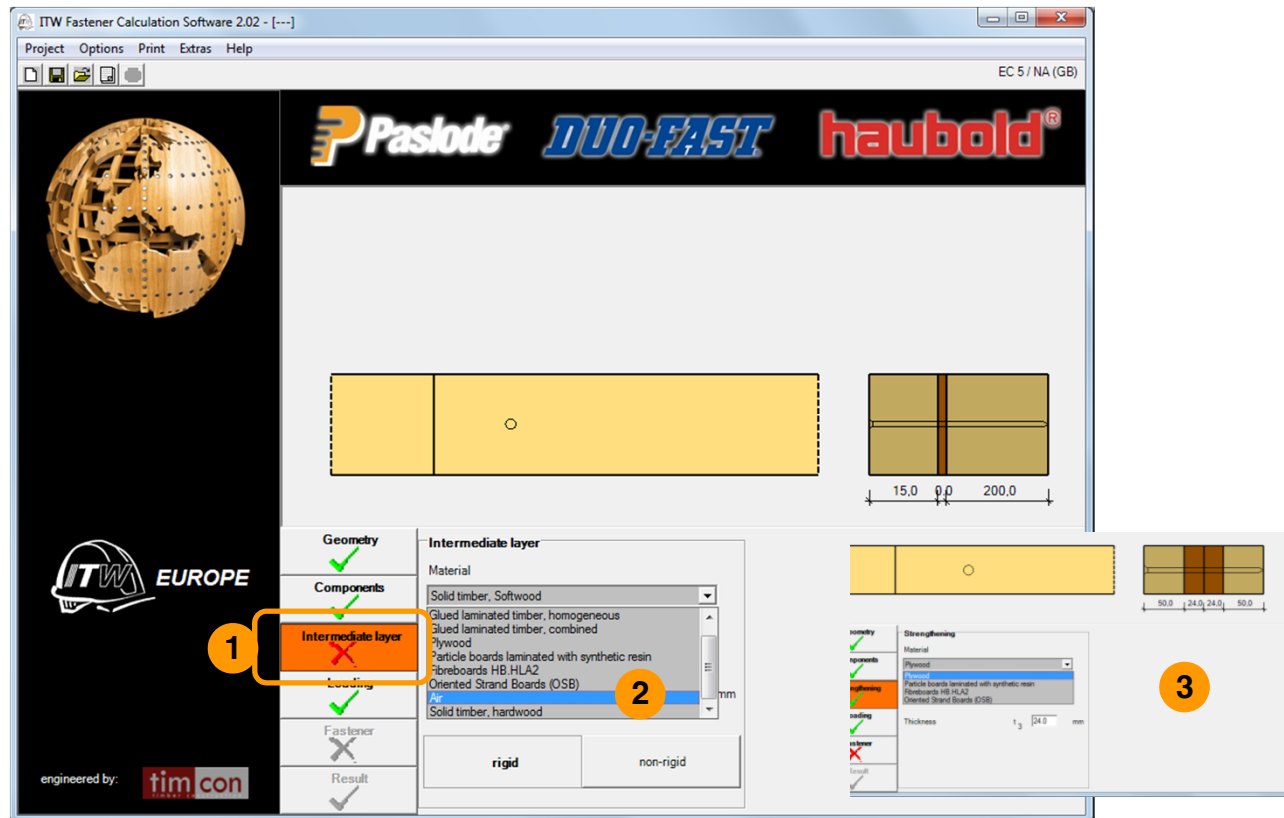**1** 15mm OSB is fastened to…

2 200mm timber.

3 Note: The diagram changes to reflect your input.

4 Note: If there is a high risk of corrosion (e.g. through timber treatment, polluted environment or timber type) the *higher risk of corrosion* box should be ticked.
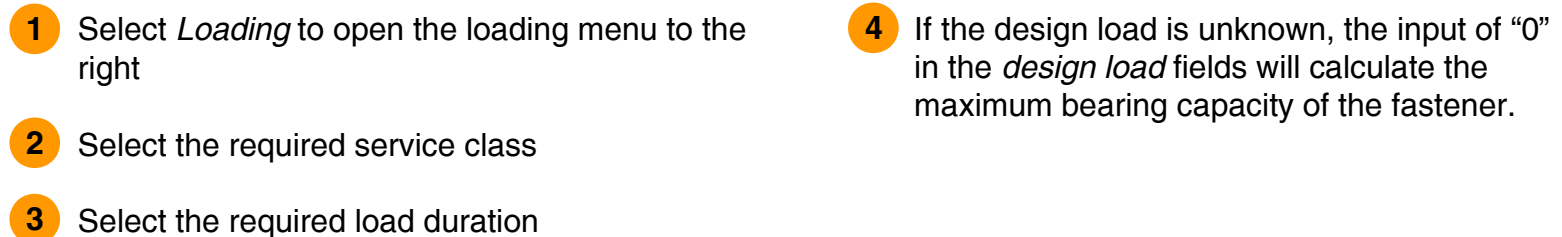
1 The *Intermediate layer* screen needs to be completed if the options of BLASS or WERNER were selected in step 1.

2 The BLASS version for non-bonded intermediate layers allows any material including an optional air gap. In general these layers are non-rigid.

3 The WERNER version allows only the selection of a limited amount of materials which is bonded to the timber members.
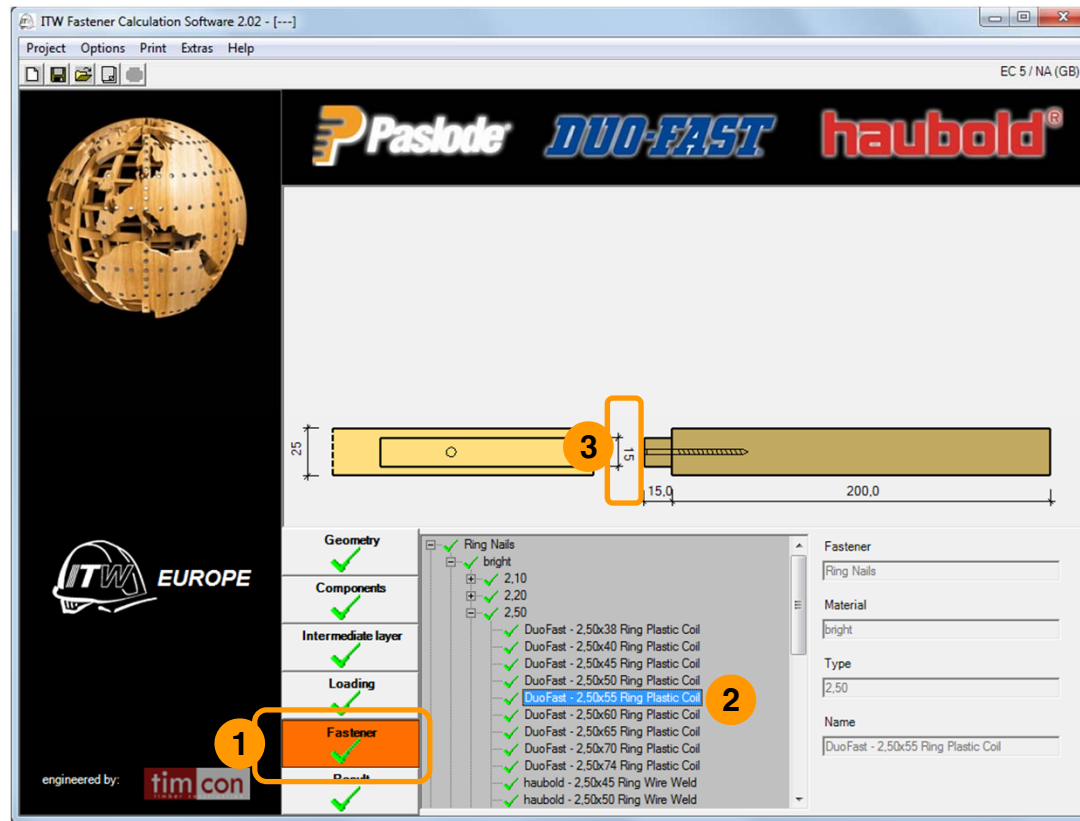
In both versions it is necessary to enter the thickness of the chosen material.

Step 3: Loading input

1 Select *Loading* to open the loading menu to the right

2 Select the required service class

3 Select the required load duration

4 If the design load is unknown, the input of "0" in the *design load* fields will calculate the maximum bearing capacity of the fastener.

PASLODE / DUO-FAST / HAUBOLD | ITW FASTENER CALCULATION SOFTWARE 2.02 HELPFILE
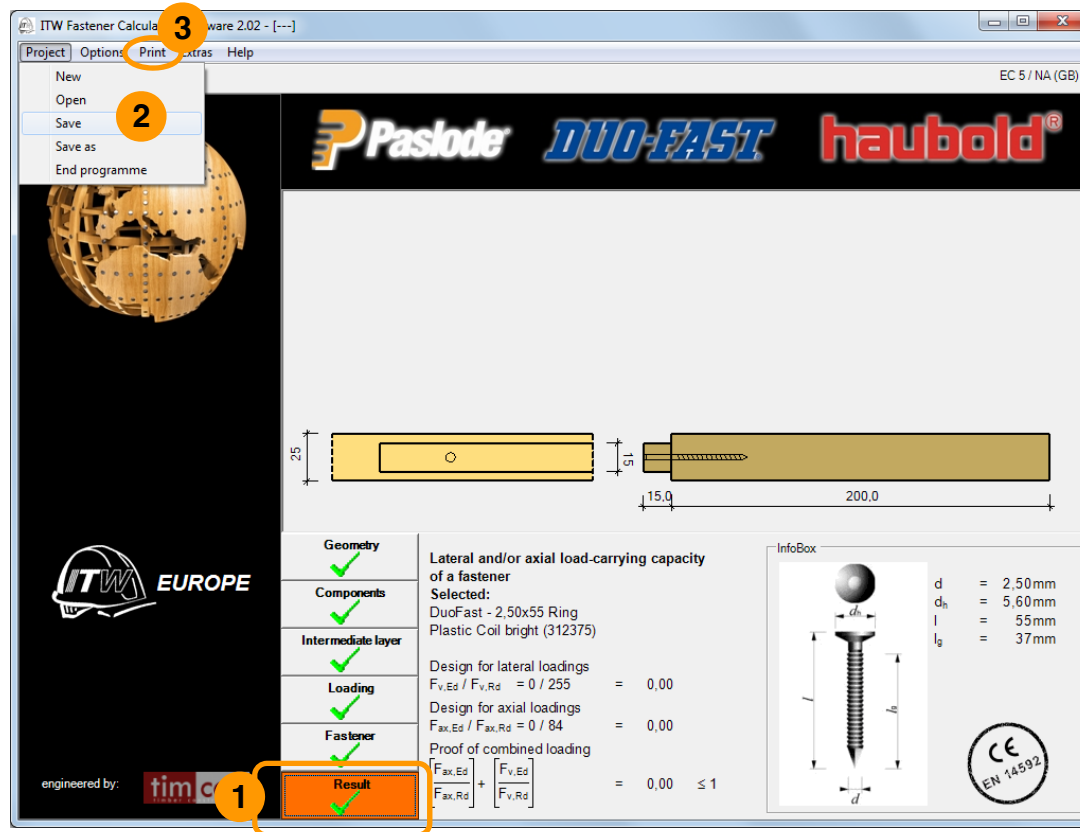
Step 4: Fastener selection

1 Select *Fastener* to open the fastener menu to the right

2 Use the menu tree to navigate to your preferred fastener. In this example we have selected "DuoFast – 2,50x55 Ring Plastic Coil".

3 The diagram shows the minimum required width of the previously selected material calculated from 2 x the edge distance.
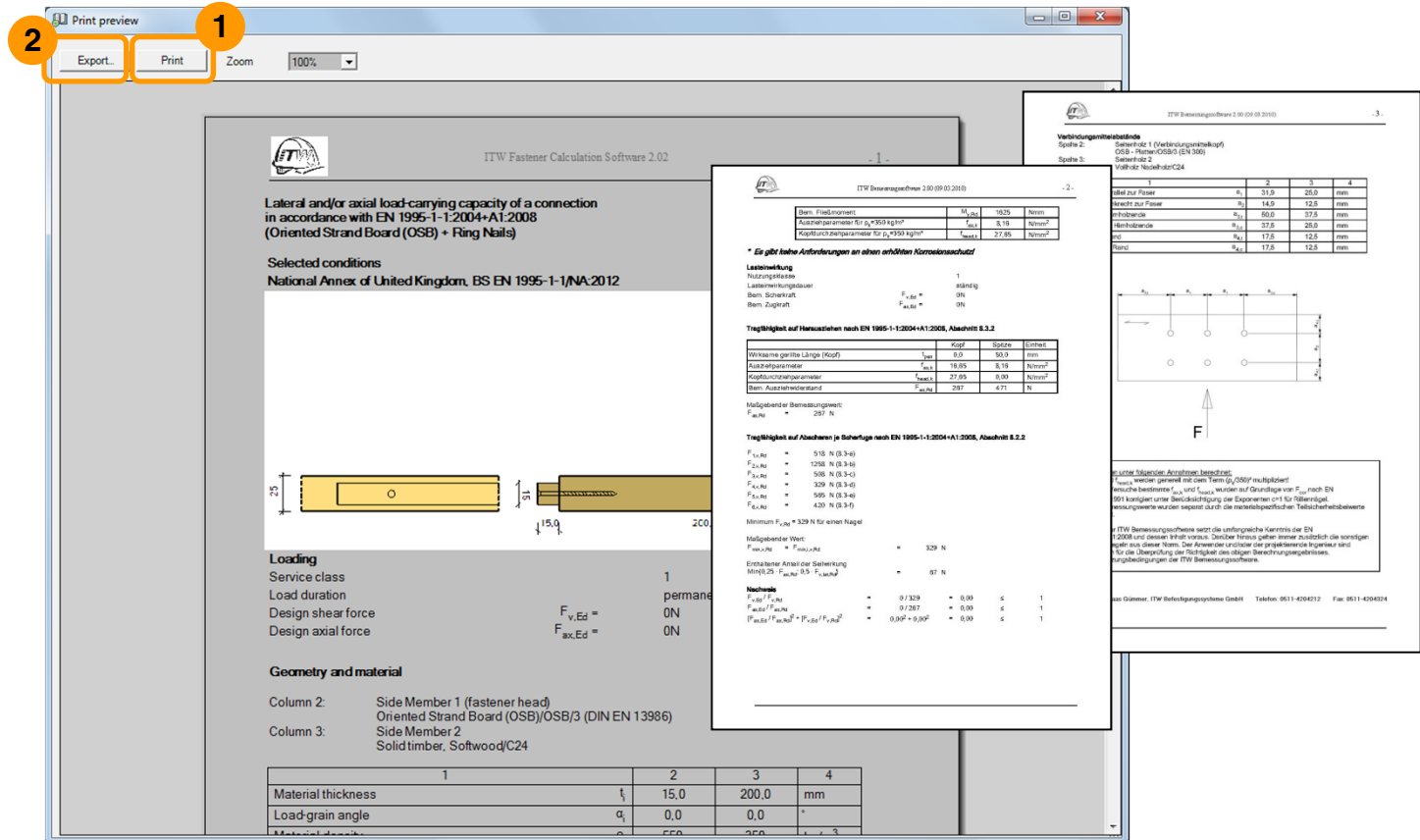
Step 5: Result summary

1 Select *Results* to show a summary of the selected fastener and loadings. Design loads are shown as a factor of the fastener's loading capability.

2 There is an option to save this calculation

3 There is an option to print this calculation

Step 6: Print & export

Click on the print button to open the print preview window. This window provides further valuable information such as detailed descriptions of the axial / lateral behaviour of the fastener and spacing information.

1 Click *Print* to print

2 Or click *Export* to export to Acrobat PDF, Microsoft Word, or rich text. The latter two formats allow for editing of text.

Other features

Tooltips are shown when some information is moused over.
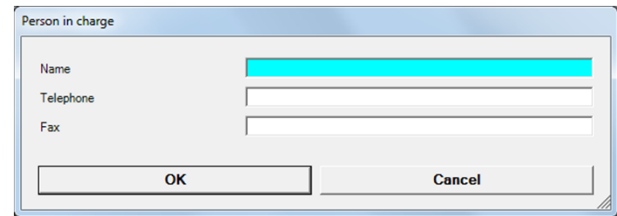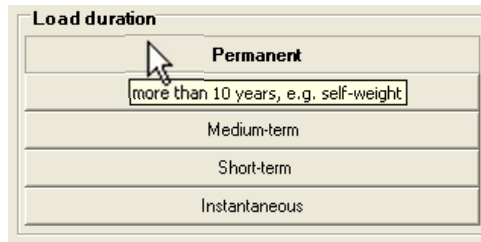
Under "Options" the *Person in charge* can be entered for the printout.

The interface can be switched between English, German, Dutch, French, Italian and Danish languages.

A "default" button resets settings to default.

A help file in PDF format can be accessed under the "Help" menu option or by pressing F1.