

New features and updates in Calculatis 2022

The new release of Calculatis by Stora Enso

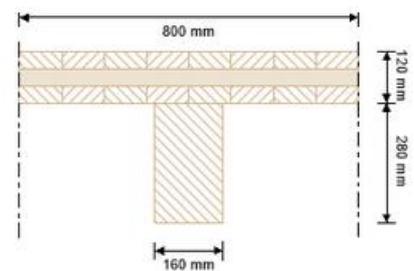
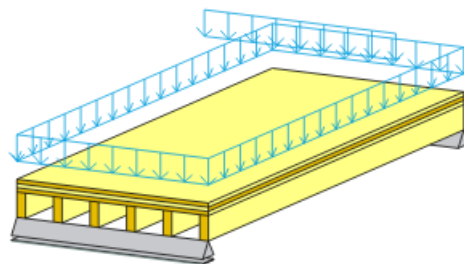
Since the last update of Calculatis by Stora Enso, some new features were added. Additionally, some adaptations and improvements were made.

CLT Rib panel module with new ETA

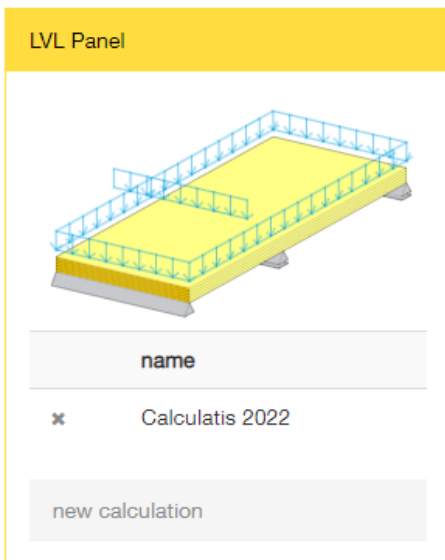


European Technical Assessment ETA-20/0893 of 2020/12/01 I General Part Technical Assessment Body issuing the ETA and designated according to Article 29 of the Regulation (EU) No 305/2011: ETA-Danmark AS	
Trade name of the construction product:	Stora Enso CLT Rib Panels
Product family to which the above construction product belongs:	Prefabricated wood-based loadbearing stressed skin panels
Manufacturer:	Stora Enso Wood Products Oy Kivonkatu 1 FI-00100 Helsinki Internet: www.storaenso.com stora.Enso.Wood.Products
Manufacturing plant:	
This European Technical Assessment contains:	23 pages including 4 annexes which form an integral part of the document
This European Technical Assessment is issued in accordance with Regulation (EU) No 305/2011, on the basis of:	EAD 140622-00-0004 for Pre-fabricated wood-based loadbearing stressed Skin Panels
This version replaces:	

In 2020, a new ETA for *CLT rib panel by Stora Enso* was published. Compared to the first edition from 2017, this new technical assessment contains many changes that make *CLT rib panel by Stora Enso* more efficient. Some of these changes relate to features, that are not reflected in Calculatis, as they are not relevant to the structural design itself. All other changes that are essential to the structural design have been picked up in the new release of Calculatis. Therefore a new module was created, that relates to [ETA-20/0893](#). One of the most important changes relates to fire design. As the designer can apply sections that were tested in large scale fire tests, the efficiency in fire design will be top notch. The design module that relates to the superseded ETA-17/0911 is to be found in the section of superseded modules in Calculatis. Calculations that have been made, applying the old ETA are to be found here. All new *CLT rib panel by Stora Enso* calculations from now on should be done in the new module.



LVL module and LVL G material addition



The new update includes a totally new module for LVL panels for out of plane loading (e.g. a simple roof or floor panel). If a floor/roof shall be designed using either one LVL panel or a reglued LVL panel, the design can be done using this new module. The design of such panels is very similar to the one for CLT panels, looking at the input and workflow. However, the design is customized for LVL panels and LVL G, making the design more efficient and intuitive to engineers.

The materials LVL and LVL G are now also available in the modules of Timber Column and Wooden Beam.

system data

*name

*inclination [°]

material ▾

*section height

panel

LVL G-S flatwise

LVL G-X flatwise

LVL S flatwise

LVL X flatwise

system data

*name

material ▾

*section width

*section height

*column height

*support top Y

*support bottom Y

Note for PDF output

LVL

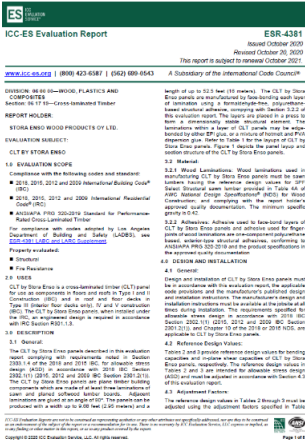
LVL G-S edgewise

LVL G-S flatwise

LVL G-X edgewise

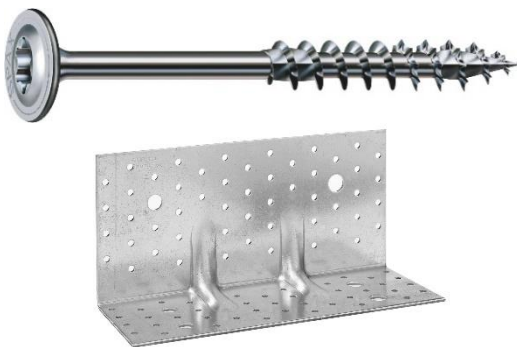
LVL G-X flatwise

Floor and Roof module for the United States



Since October 2020 Stora Enso holds two technical certifications for its CLT through the International Code Council ICC, based on PRG 320: [ESR-4381](#) and [ESL-1170](#). As the design procedure according to regulations in the USA are fundamentally different compared to Europe, a new design module was created for CLT floor and roof design in the USA. The module uses imperial dimensions and applies US standards, such as the National Design Specifications NDS from the American Wood Council AWC and the International Building Code IBC.

Connection design



Calculatis 2022 is now supporting material from SPAX International and angles from Simpson Strong-Tie. These were newly added. All connector brands that were available so far are still available.